

UNITED STATES ARMY IN WORLD WAR II

The War Department

GLOBAL LOGISTICS AND STRATEGY 1943–1945

by
Robert W. Coakley
and
Richard M. Leighton



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UNITED STATES ARMY IN WORLD WAR II

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. . . to Those Who Served

Foreword

This volume examines how and how well the United States Army overcame the tyranny of logistics in the major operations of World War II against Germany and Japan. As in the companion work to which it is a sequel, the authors stress the interrelationship and interdependency between strategic aims and logistical means. By spring 1943 the United States and its allies had achieved clear superiority over the Axis Powers both in manpower and in war production. How to bring the weight of this superiority to bear across oceans and invasion beaches was the problem, and, as this work reveals, transport and assault shipping came very near to being the principal factor in its solution.

Much more was involved than the deployment and support of American troops. The Army had also to support Allied forces, including those of the Soviet Union, in huge measure, and it had to provide minimum sustenance to civilian populations in order to maintain stability behind the fighting fronts. Writing from the point of view of the high command in Washington, the authors trace the intricacies of balancing resources in a massive two-front war, and in the process provide a unique account of the Army's logistical support of the war against Japan.

Both military and civilian students of war should find this volume a worthy source of information and guidance, as they have already found its predecessor of similar title, *Global Logistics and Strategy, 1940–1943*. Its appearance also marks completion of the War Department subseries of the UNITED STATES ARMY IN WORLD WAR II.

Washington, D.C.
15 June 1967

HAL C. PATTISON
Brigadier General, USA
Chief of Military History

The Authors

Robert W. Coakley received the degree of Doctor of Philosophy in History from the University of Virginia. He has taught at that university, and at Tulane University, the University of Arkansas, American University, the University of Maryland, and Fairmont State College, West Virginia. After serving as a noncommissioned officer in the field artillery in World War II, he became a member of the Historical Division of ETOUSA and USFET. Except for a brief period when he served as historian of the Defense Supply Agency, Dr. Coakley has been with the Office of the Chief of Military History since 1948. In 1965 he was appointed Chief of the Current History Branch, OCMH.

Richard M. Leighton, who received the degree of Doctor of Philosophy in History from Cornell University, has taught at Brooklyn College, the University of Cincinnati, and The George Washington University. Commissioned in the Quartermaster Corps during World War II, he served as a historical officer in the Control Division, Headquarters, Army Service Forces, writing various studies of the organization and administration of that command. In 1948 Dr. Leighton joined the Office of the Chief of Military History where he was engaged in the preparation of this volume and its predecessor (published in 1955) and other historical projects. Since 1959 he has been a member of the faculty of the Industrial College of the Armed Forces.

Preface

This volume, like its predecessor, *Global Logistics and Strategy, 1940–1943,* treats the logistical problems of the U.S. Army in World War II from the point of view of the high command and staffs in Washington. Its attention is focused on the myriad problems connected with the division of resources among nations and theaters of war in a global conflict, on the delicate relationship between logistics and strategy, and on the logistical organization and processes involved in the formulation and execution of strategy during the last two years of World War II. This broad approach results in the same omissions that characterized the first volume—the book does not cover detailed logistical operations at lower levels, it does not treat internal logistics in overseas theaters except as necessary to establish the context for decisions at the center, and it is primarily concerned with ground force logistics. The omitted areas, we believe, have now been almost fully covered in other volumes in the UNITED STATES ARMY IN WORLD WAR II Series, in the seven volumes of the *Army Air Forces in World War II,* and in various publications sponsored by the Office of Naval History. We have drawn heavily on these volumes in preparing our own and owe a large debt to them.

Chronologically, the book picks up where *Global Logistics and Strategy, 1940–1943* left off, just before the TRIDENT Conference in May 1943, with only a moderate amount of overlap. It ends with the surrender of Japan. With a manuscript already too bulky, it was impossible to extend it to treat the various logistical issues involved in repatriation, occupation, and disposal of surplus in the aftermath of war.

In this second volume, we have adopted a topical approach to a greater degree than in the first. Supply organization and procedures, and lend-lease and civilian relief, have been treated in sections separate from the main narratives covering the relationship of logistics and strategy. These narratives also move for the most part in separate compartments in covering the two main spheres of the war, that against Germany and that against Japan, though we hope we have succeeded in showing the essential interconnection. This arrangement seemed most logical to us, since after long consideration we could arrive at no satisfactory and meaningful pattern for weaving all these diverse elements into one single chronological narrative.

We cannot deny that this organization also owes something to the dif-

ferent conditions of collaboration that existed in the final stages of the preparation of this second volume. It has been long in fruition. We began work on it many more years ago than we now like to contemplate, and much of the basic draft was completed in April 1959 at the time that Dr. Leighton left the Office of the Chief of Military History for the Industrial College of the Armed Forces. Since that time the main burden of completing the volume has fallen on Dr. Coakley, though he too has been able to devote only a fraction of his time to it and was also absent from the Office of the Chief of Military History for fourteen months in 1962–63 while serving as historian of the Defense Supply Agency.

Physical separation of the authors has prevented the same kind of day-to-day consultation in the preparation of the final draft that characterized the first volume. It is still, however, a work of collaboration and we have freely exchanged criticism and suggestions, editing, and substantive data to the extent that circumstances permitted. Though Coakley performed most of the work of condensation, revision, and rearrangement in preparing the final draft, the portions of the book treating Anglo-American strategic planning, merchant ship construction and allocation, and the vital landing craft problem—that is, Chapters I–III and VII–XV—are in substance and in their final writing the work of Leighton. The sections dealing with supply organization and procedures (Chapters IV–VI), the war with Japan (Chapters XVI–XXII), the logistical problems of the last stages of the war (Chapters XXIII–XXV), lend-lease and civilian supply (Chapters XXVI–XXXI), and the concluding chapter (XXXII), as well as the tables in the appendix were all written by Coakley. Since he was responsible for the final chapter organization, Coakley also shoulders the responsibility for whatever defects may have arisen from his efforts to meld the work of his coauthor with his own.

The volume has benefited greatly from the assistance of a large number of persons over the long years it has been in preparation. During the early years, Dr. Kent Roberts Greenfield, then Chief Historian of the Army, patiently encouraged our labors. Since his retirement in 1958, his successor, Dr. Stetson Conn, has persevered in pushing the volume to publication in the face of discouraging delays. During the preparation of basic drafts, two research assistants, Dr. Mae Link and Mr. Charles Owens aided in gathering materials for, respectively, the chapters on the invasion of Sicily and the war in the Pacific. Our editor, Mrs. Frances R. Burdette, and copy editor, Mrs. Stephanie B. Demma, have assisted greatly in the attempt to make this a readable book, in standardizing our footnotes, abbreviations, and other terminology, and in preparing a glossary of the mass of alphabetese without which some parts of the text and certainly the footnotes would be incomprehensible to the lay reader. Our index is the painstaking work of Mrs. Muriel Southwick. Miss Ruth Phillips selected our photographs, and our maps were prepared by Mr. H. C. Brewer, Jr., working under the supervision of Mr. Elliot Dunay. Personnel of various federal records centers

have been of immeasurable assistance in helping us to sift through the voluminous masses of logistical records. The specific contributions of our colleagues in the Office of the Chief of Military History, past and present, during the long years this book was in preparation have been shown in the footnotes and bibliographical note. In particular, we owe much to Dr. Maurice Matloff's special competence in the field of strategic planning, though his tenacity in argument has not prevented us from drawing independent conclusions that differ in some respects from his own. Many others have given generously of their time in reading and criticizing large sections of the manuscript; we would like especially to thank Maj. Gen. Patrick H. Tansey (Ret.), Dr. Theodore Ropp, Col. Leo J. Meyer (Ret.), the late Dr. John Miller, jr., Dr. Harold F. Underhill, Col. Louis G. Mendez, Jr., and Col. Paul P. Hinkley, and again Dr. Matloff and Dr. Conn, for the care with which they read the manuscript and the helpful suggestions they made. Errors of fact and interpretation, however, remain the responsibility of the authors.

Washington, D.C.
15 June 1967

ROBERT W. COAKLEY
RICHARD M. LEIGHTON

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PART ONE

BACKDROP

CHAPTER I

Logistics and Strategy Spring 1943

The three-year period from June 1940, when American rearmament began in earnest, to the spring of 1943 was, in the logistical sphere, essentially one of preparation for the mass application of American military power in the last two years of World War II. This period, treated in the authors' earlier volume,[1] saw the development of the American war production base and the emergence of the logistical machinery with which the successes of the later war years were to be won. By the spring of 1943 American factories and shipyards had completed the long process of tooling and conversion, and were approaching peak rates of mass production. Both the general limits of American productive capacity and the general direction of the production effort were plainly visible.

During this preparatory period, it had proved impossible to foresee with any exactness the shape of future Allied strategy. Therefore, because of the long lead time required for the design, production, and distribution of weapons, logistical planning had to be shaped along general lines rather than in terms of any specific strategy. The aim, perforce, had to be to create a fund, or pool, of multipurpose ingredients—finished munitions, supplies, ships, organized and equipped manpower—along with the capacity to replenish or enlarge it. From the pool, it was hoped, specific needs could be met as they arose. To create a pool of troops and supplies took time. And even as it grew it had to be repeatedly drained of trained units and of matériel for the support of operations overseas.

The year 1942 was one of emergencies and *ad hoc* decisions. Although both Secretary of War Henry L. Stimson and Chief of Staff General George C. Marshall ardently wished to keep other commitments to a minimum and concentrate resources for an early invasion of the Continent of Europe, the march of events defeated their purpose. First, defensive positions in the Pacific had to be manned and supplied, and British and Russian Allies provided with matériel under lend-lease. Then, the whole strategic concept of concentration for invasion was abandoned for the time being when President Franklin D. Roosevelt forced upon the War Department the decision to invade North Africa late that same year. As a concomitant, more resources were committed to the Pacific to support limited offensives there, and to the Middle East to support British operations

[1] Richard M. Leighton and Robert W. Coakley, *Global Logistics and Strategy, 1940–1943*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1955).

and establish a secure supply line to the USSR through the Persian Gulf.

This "scatterization" of American resources to various parts of the globe undermined the Army's best efforts to plan its operations and requirements at long range, and to provide an orderly system for training, equipping, and deploying its forces overseas. Since, by decision of the Combined Chiefs of Staff (CCS), theaters of operations had first call on supplies and equipment, there was a chronic shortage of matériel for the growing pool of troops in training, who as late as spring of 1943 still had only half, or less, of their full allowances of equipment.

At the same time, uncertainties created by a shortage of shipping played their part in unsettling strategy. During 1942 capacity to deliver fighting power overseas set the primary limitation on every proposed Anglo-American strategic move. In the Atlantic German submarines continued until late in the year to send Allied ships to the bottom faster than shipyards could build new ones; thereafter the balance began to shift, but the drain on shipping and the consequent uncertainties continued. Surface and air protection had to be provided on the sea-lanes, and the system of convoys and circuitous routing developed in the Atlantic to counter the submarine menace constituted a bottleneck for overseas deployment as restrictive as the shortage of shipping itself. In the Pacific, though the submarine threat was inconsequential, the length of supply lines and the lack of facilities at the end of them imposed even greater limitations upon the size of military forces that could be supported. The high logistical cost involved in bringing large forces to bear against Japan provided one of the most crushing arguments against the oft-considered proposal to shift the main American effort from Europe to the Pacific.

Still, the uncertainties and improvisations of the year following Pearl Harbor should not be allowed to obscure the real achievements of this preparatory period. By the end of 1942 resources sufficient to launch great offensives were in sight. The pool of trained manpower was growing rapidly and there was every reason to believe that the long equipment famine would soon end. If the shipping prospects were not yet bright, at least American shipyards were reaching peak rates of production. In the autumn of 1942 long-range goals for mobilization of manpower and matériel had been cut back to realistic limits, providing a more balanced and certain, if less generous, basis for planning. In Europe the enemy threat to the Allies' most important base, the United Kingdom, had all but disappeared, and the Russians by dint of their hard-won victory at Stalingrad had established as a reasonable certainty that the Axis would not be able to turn its full power against the western Allies. In the United Kingdom preliminary steps were under way to begin the build-up of air forces for a strategic bombing offensive against German-occupied Europe. The build-up of invasion forces for the drive across the Channel lagged far behind earlier expectations, but only because for the present it had been sacrificed to the capture and development of bases in the Mediterranean and Pacific. In all the overseas bases supply reserves were rapidly being built up and supply pipelines filled. Many of the wasteful practices of early 1942 had been eliminated, and the procedures for moving troops and ma-

tériel overseas were becoming more orderly and efficient.

To Allied strategic planners at the beginning of 1943 the future looked bright. The United States, with a powerful military machine already in being and mobilization in full swing, possessed not only the potential but also the assured capacity, bolstered by detailed plans and programs, to immensely expand its military power in the year to come. If the limits of the expansion were clearly visible, particularly in terms of manpower, they still offered no cause for great uneasiness. The United States and its allies soon would have the sinews to support an offensive and victorious strategy.

Forging that strategy in the year to come would very largely be a matter of deciding how resources already in being or planned for—thus far without the guidance of a long-range strategic blueprint—could be most effectively and quickly applied to the defeat of Germany, Italy, and Japan. The main outlines of the U.S. military machine, both in size and composition, had been irrevocably determined, but within those outlines there was considerable room for maneuver. The exact number and types of Army divisions to be created, for example, or the precise amounts of Army equipment of various kinds to be produced, were susceptible to some adjustment within the broad limits of available manpower and productive capacity. Shipbuilding and aircraft programs could be modified to absorb changes in types and models. But the long lead time required both for production of equipment and for training men ruled out, for the most part, program adjustments dictated by the needs of particular military operations, which required a far shorter planning lead time. This basic fact had been underlined when the North African operation, decided upon only three and a half months before it was launched in November 1942, had to be mounted with landing craft designed and produced for operations in the Pacific and the English Channel.

The limitations thus imposed on the military machine were flexible enough to give the strategic planners a wide range of choice in the areas and timing of operations. The pool of trained men, munitions, aircraft, and ships was to prove sufficiently abundant to meet most demands placed upon it. Strategists would be able to plan and carry out offensives on many fronts against enemies who did not have the strength to defend themselves at all points. Yet limitations were implicit in the very character and distribution of this abundance and in the rate at which particular critical items became available in the general pool. Merchant shipping, for example, would never become so abundant as to permit redeployment of either troops or supplies from one theater to another at will; or, for that matter, to permit movement of troops to any active theater as rapidly as they could be trained. Nor for a long time to come would equipment be so plentiful as to permit prestockage in overseas theaters while meeting the minimum needs of troops in training and claimants under lend-lease. Again, because of limitations on American manpower, overwhelming air power could be created only by placing a perilously low ceiling on the number of ground divisions, with ominous implications for the time when the U.S. Army would finally come to grips with the Wehrmacht and the troops of Japan on their

own soil. The immense U.S. battle fleets that came into being in 1943—the magnified products of pre-Pearl Harbor "two-ocean" planning—were destined by their nature and capabilities to provide their own argument for accelerating the primarily seaborne war against Japan. Finally, failure to make provision in 1941 and 1942 for a large and versatile fleet of amphibious shipping would, until late 1944, constitute the most persistent and restrictive single limitation on a war in which all the principal avenues of advance lay over water.

The Aftermath of Casablanca

At the Casablanca Conference in January 1943 the British and American leaders tried to mark out the main directions of the effort of the western Allies in the period of relative plenty ahead. Under the general principle of imposing "unconditional surrender" on Germany and Japan, announced by President Roosevelt at Casablanca, the Allied leaders reaffirmed the decision made at the conference in Washington in December 1941 (ARCADIA) that Germany was to be defeated before Japan, together with the corollary principle that "unremitting pressure" should be maintained against Japan. Other than the continuing antisubmarine campaign, which was assigned a "first charge" priority, the only specific operations approved for the European theater at Casablanca were completion of the campaign in North Africa, the invasion of Sicily (HUSKY), and immediate initiation of a bombing offensive against Germany from the British Isles. The assembling of an Allied invasion force in Great Britain, a key objective of U.S. strategy, was to proceed as rapidly as possible, but was to be subject to several prior claims—operations in the Mediterranean, the Pacific, and the Far East, as well as an enlarged program of aid to the Soviet Union. In consonance with the strategy of unremitting pressure on Japan, the United States also secured from its allies a tentative commitment to attempt the reconquest of Burma late in 1943 in combination with offensive operations by U.S. forces in the Pacific aimed at reducing Rabaul, ejecting the Japanese from Attu and Kiska in the Aleutian Islands, and opening a new drive across the Central Pacific.

In these ambitious programs the Allies were reaching, as events proved, too far and too fast. Abundance was in prospect, but not yet in hand; and plans were still at the mercy of contingencies. Particularly rash were the assumptions as to availability of merchant shipping. The Casablanca Conference was held during a lull in the war at sea while most of the U-boats were refitting or waiting the abatement of winter weather, and the decisions of the conference reflected the short-lived optimism inspired by this circumstance. Ship sinkings had diminished during December and January after record losses in November, only to multiply again in February 1943. The U-boats now hunted in packs, concentrating in the north Atlantic on the mid-ocean gap that lay beyond the reach of existing shore-based aircraft. By March more than a hundred U-boats were again constantly at sea, and in that month ship sinkings reached an appalling total of over a million dead-weight tons, just short of the November 1942 record.

Under the impact of shipping losses and military reverses in North Africa

the Casablanca program was soon in the process of dissolution. In mid-February Field Marshal Erwin Rommel took the offensive in Tunisia and held the initiative well into March, disrupting and delaying Allied preparations for a spring offensive. During February, March, and April U.S. troops and supplies had to be poured into the theater at an accelerated pace to meet the immediate emergency, while mounting requirements for the impending Sicilian operation presaged a still greater influx in the weeks to come. The already lagging build-up in the British Isles received the brunt of these unforeseen drains, and dwindled to almost nothing.

Meanwhile, at the Pacific Military Conference held in Washington during March, theater representatives assessed the cost of continuing the advance toward Rabaul so high that hopes of reaching that objective before the end of 1943 had to be abandoned despite substantial increases in planned deployment of both ground and air forces to the South and Southwest Pacific. The Navy's plans for a parallel advance through the Central Pacific were still undefined. Symptomatic of the general lull in the Pacific war was the fact that the major project under way in spring 1943 was the final assembly of forces for the reoccupation of Attu, essentially a mop-up operation at the far northern edge of the theater.

At Japan's back door in southeast Asia, prospects of launching a major offensive in Burma (ANAKIM) in accordance with the Casablanca plan were also receding. In March the British campaign on the Arakan coast bogged down short of its objective at Akyab, and the British decided to cancel the Chindwin Valley offensive, to which it was to have been a prelude. By the beginning of April it was plain that Prime Minister Winston S. Churchill and the British Chiefs of Staff wished to write off ANAKIM, at least for 1943. President Roosevelt, attracted by Maj. Gen. Claire L. Chennault's promises to produce greater results at smaller cost through the use of air power in China, seemed to be leaning in the same direction. The U.S. civilian shipping authorities were reluctant to commit more merchant tonnage to so distant a theater, thus leaving the U.S. Joint Chiefs of Staff (JCS) and their theater commander, Lt. Gen. Joseph W. Stilwell, as the only convinced defenders of ANAKIM.

In the midst of the general deterioration, the British Chiefs on 12 March 1943 submitted new estimates of the amount of additional American merchant shipping that would be needed to carry out their share of approved operations in the Mediterranean and Burma and to arrest an alarming decline in their domestic imports. This British *démarche*, insofar as import requirements were concerned, was backed by a commitment President Roosevelt had made to Churchill the preceding November. Its implications had been grossly underestimated by the American staff at Casablanca, where it was only briefly alluded to, and awareness of them dawned on the staff only slowly in the weeks that followed. So massive were the tonnages now requested that, as the alarmed staffs hastily assessed the cost, meeting the British requirements could very well reduce planned American deployment in 1943 by almost half. Since this in turn could virtually suspend active operations until the latter part of the year, the military staffs took a strong stand against meet-

ing the British requirements for domestic imports. In the crisis President Roosevelt, acting on the advice of Harry Hopkins and Lewis Douglas, Deputy War Shipping Administrator, decided otherwise.[2] On 29 March, without consulting the Joint Chiefs of Staff, he assured Anthony Eden, Great Britain's Secretary of State for Foreign Affairs, that British import requirements would be met. The question of operational needs had still to be threshed out between the military staffs and the civilian shipping authorities.[3]

Thus, at the end of March 1943 the Allied military program for 1943 seemed on the brink of disaster. Reflecting a widespread sense of accumulating misfortunes, the Joint Strategic Survey Committee (JSSC) late that month gloomily concluded: "the overall strategic situation, or more exactly the capability of the Allies to control that situation," had badly deteriorated, mainly because the planners at Casablanca had "overestimated prospective resources, particularly shipping, and underestimated the demands on them."[4] Because of the shortage in shipping, the committee thought, the planned invasion of Sicily would have to be reconsidered, possibly even canceled, and no further ventures could be undertaken in the Mediterranean. The main effort in Europe in 1943 would go into the bomber offensive against Germany, if necessary at the expense of preparations for a cross-Channel invasion.

This gloomy outlook brightened perceptibly in April when the war against the submarines took a decided turn for the better. Following the recommendations of the Atlantic Convoy Conference, in April U.S. Army Air Forces (AAF) B–24's began to cover the exposed segment of the convoy route northeast of Newfoundland, and increased numbers of Royal Air Force Liberator bombers plus two U.S. Navy escort carriers joined the Battle of the Atlantic. The results were spectacular. Even with 111 U-boats continuously at sea, shipping losses in April dwindled to less than half those in March. In May they dropped below the December level, while the U-boats suffered heavy attrition. Meanwhile, the production of new merchant ships in U.S. yards was setting new records.[5]

Even before the effect of these developments could be reflected in shipping schedules, it had begun to appear that

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[2] Lewis W. Douglas was a deputy administrator (there were two other deputies) for the War Shipping Administration, and in effect the head of that organization, under Rear Adm. Emory S. Land, Chairman of the Maritime Commission and War Shipping Administrator.

[3] The British import crisis is covered in detail in Richard M. Leighton, "U.S. Merchant Shipping and the British Import Crisis," in Kent Roberts Greenfield, ed., *Command Decisions* (Washington, 1960), pp. 199–223. See also Leighton and Coakley, *Global Logistics 1940–43*, chs. XXV–XXVII.

[4] JSSC 11, memo by JSSC for JCS, 22 Mar 43, title: Survey of Present Situation, ABC 382 (9-24-41) Sec 4.

[5] (1) Wesley F. Craven and James L. Cate, eds., "The Army Air Forces in World War II," vol. II: *Europe: TORCH to POINTBLANK, August 1942 to December 1943* (Chicago: University of Chicago Press, 1949) (hereafter cited as Craven and Cate, *AAF II*), pp. 384–95. (2) Samuel Eliot Morison, "History of United States Naval Operations in World War II," vol. I, *The Battle of the Atlantic: September 1939–May 1943* (Boston: Little, Brown and Company, 1947), ch. XIV and app. I. (3) Frederick C. Lane and others, *Ships for Victory: A History of Shipbuilding Under the U.S. Maritime Commission in World War II* (Baltimore: Johns Hopkins Press, 1951) (hereafter cited as Lane, *Ships for Victory*), p. 203.

the gloomy predictions by the military staffs of the impact of British shipping demands had been exaggerated. Civilian shipping authorities had always contended that statements of military requirements were inflated, that they reflected both wasteful scheduling and loading practices and excessive margins of safety. The President's decision of 29 March had been taken on Douglas' assurance that the actual needs of military operations for the next few months, with the exception of the Burma operation, could in fact be met, even though the full number of cargo ship sailings demanded could not be provided. Under orders from the President to meet British military needs as far as practicable, the shipping authorities were able to work out schedules of cargo shipments (including those to Burma) that, for April and May at least, did not fall far short of stated requirements. The volume of outbound troop movements showed little indication of being undermined by diversion of cargo shipping to nonmilitary programs and support of British forces. Movements to England picked up; those to the Mediterranean climbed to record heights; and deployments to the Pacific proceeded more or less as planned, including the large task force to Alaska for the landings on Attu. Encouraging manifestations of the improved situation were also emerging in Tunisia, where the long-prepared Allied offensive had finally gotten under way. By mid-April Axis forces had been driven back into a tight perimeter less than 50 miles deep in the northeastern tip of the country. On the 19th the Germans began to evacuate troops by air to Sicily, and by the end of the first week of May their debacle was complete.

Each of these signal victories—over the *Afrika Korps* and over the U-boats—carried its own portents for the future. The Allied victory in North Africa broke the German hold on Britain's historic lifeline through the Mediterranean, and in May 1943 the first through cargo convoy from Gibraltar since early in the war arrived at Suez. Only one further step—the conquest of Sicily—had to be taken before troop and cargo shipping would be able to move freely through the Mediterranean to destinations in the Red Sea, Persian Gulf, and Indian Ocean area, a route 8,000 miles shorter than the long trip around Africa. This achievement promised immense savings in shipping. To break the Axis hold on North Africa had required a tremendous investment in men, supplies, and shipping, which forced a postponement of large-scale preparations for a cross-Channel invasion. On the other hand, the investment had produced a handsome return—a new base of operations against German-dominated Europe. The Allies had now to weigh the relative advantages of a further advance in the Mediterranean against the risk that progressive commitment of resources in this region might retard the build-up in the British Isles and cause further postponement of the cross-Channel invasion.

As far as the shipping problem was concerned, however, the victory over enemy submarines was the more significant achievement. Combined with the outpouring of new tonnage from American shipyards, it presaged the end of the long stranglehold of shipping on the scale of overseas operations. To be sure, both cargo and troop shipping would remain critical, and their allocation and use would continue to be the prime con-

sideration in planning every operation. In the Pacific, because of the length of supply lines and the fact that even within theaters almost all transportation had to be by water, the shipping shortage would continue to be of greater consequence than in the Atlantic. Yet even in that area, once general objectives had been tailored more closely to the availability of resources, shipping was soon to become a less stringent limitation on strategy than the service troops and facilities needed to discharge and handle cargoes.

On the eve of the TRIDENT Conference held in Washington in May 1943, the prospects of establishing a realistic blueprint of a strategy for ultimate victory over the Axis that would make use of the mushrooming resources of the Allied production machine and the growing pool of trained manpower were far brighter than they had been at Casablanca a few months earlier. Yet if the limitations in shipping and other resources that had resulted in dissolution of much of the Casablanca program were receding, a new and significant factor was emerging that was to weigh heavily in determining the strategic blueprint. In the Pacific and in Europe the initial stage of every major advance required that troops land on hostile shores, and in Southeast Asia amphibious assaults were regarded as an indispensable adjunct to land and air offensives to drive the Japanese from Burma and Malaya. The basic tools of amphibious warfare were the specialized vessels needed to bring an assault force into position off a hostile shore, put the troops ashore fully equipped and ready for action, and supply them over the beaches until ports could be secured. The availability of assault shipping (as these vessels will collectively be called) was to be the most critical limitation on strategy during the year to come.

Assault Shipping: Tool of Amphibious Strategy

The tools of amphibious warfare had had no place in the Victory Program of 1941 or in any other prewar plan for industrial mobilization. Production officials as well as military leaders had failed to foresee the need for a massive arsenal of amphibious equipment. The impetus for production of assault shipping consequently grew out of specific needs to fulfill specific operational requirements that the planners began to foresee only dimly in 1942.

The three major categories of U.S. assault shipping used in World War II were combat loaders, landing ships and craft, and landing vehicles. Combat loaders were ocean-going transports and cargo vessels, armed and specially equipped to accommodate entire combat units with their essential weapons, vehicles, and other gear so loaded that men and equipment could all be discharged in fighting trim on a hostile beach. They carried on davits the small craft by which troops, equipment, and supplies were discharged over the beaches in ship-to-shore operations. The most common American types were attack troop transports (APA s); attack cargo auxiliaries (AKA's); modified attack troop transports (XAP's); old destroyers used as high-speed attack transports (APD's); and, on occasion, merchant cargo ships converted for special uses in amphibious operations. Landing ships and craft included a wide range of vessels: ocean-going types such

as the landing ship, tank (LST), landing ship, medium (LSM), landing ship, dock (LSD), and the misnamed landing craft, infantry, large (LCI (L)); beaching craft such as the landing craft, tank (LCT), landing craft, mechanized (LCM) and the landing craft, vehicle and personnel (LCVP), and even rubber landing boats—all with the common capability of beaching without injury. Landing vehicles were amphibians; they could "swim" ashore and, without stopping, propel themselves over land on wheels or endless tracks. The two most widely used types in World War II were the 2-1/2 ton amphibious truck (DUKW) and the amphibious tractor, or landing vehicle tracked (LVT).[6]

Procurement of amphibious equipment of all types except the DUKW and other wheeled amphibians had been made a Navy responsibility by the end of 1942. By agreements with the Army in February and March 1943, the Navy also took over responsibility for training all amphibious crews and manning all landing ships and craft except those entrusted to the Army engineer special brigades in the Southwest Pacific area.[7]

In spring of 1943 the Allies had not yet embarked upon the period of what might be called offensive amphibious strategy. Only three notable amphibious assaults had been undertaken during 1942—the landings in the Solomon Islands, at Dieppe in northwestern France, and in North Africa; the first and third of these had been successful, the second a disastrous failure. All three operations had been on a modest scale, and in none had the availability of assault shipping been a critically limiting factor. Nevertheless, the landings on Guadalcanal and in North Africa involved such hasty improvisations as the rapid conversion of old merchant ships and destroyers to perform the tasks of combat loaders, and of old oilers, originally built to sail on the shallow waters of Lake Maracaibo, Venezuela, to substitute for LST's. Neither operation might have been successful against determined and well-organized opposition on the beaches similar to that encountered at Dieppe. The great amphibious assaults of the war still lay ahead, and the doctrines and weapons of amphibious warfare were new and still for the most part untested.

The Navy's primary interest, in 1942, was in amphibious equipment for ship-to-shore operations, and involved for the most part combat loaders and their accompanying small craft. The initial program for combat loaders developed by the Navy, and apparently agreed to by the Army, provided for enough vessels for a 3-division lift, to be obtained mainly through conversion of existing hulls of standard merchant vessels. The requirement was raised in August 1942 to a 4-division lift and as computed by the Navy at the end of the year amounted to a total of 56 APA's and 20 AKA's—an amount calculated to provide equal increments for operations and training in both the Atlantic and the Pacific areas.

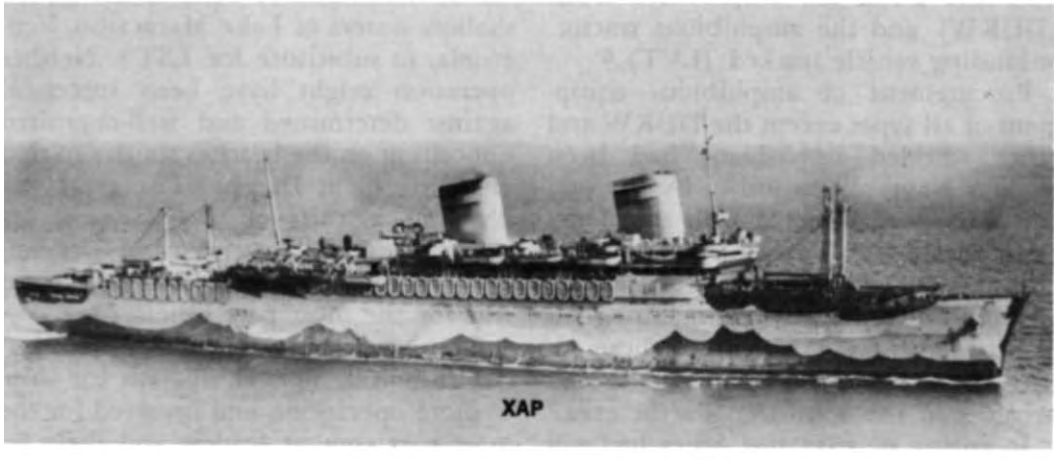
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[6] (1) For detailed characteristics of U.S. landing ships and craft in World War II, see Navy Department, ONI 226, *Allied Landing Craft and Ships*, 7 Apr 1944, and Supplement 1, 1945; also Appendix B-1, p. 828, below. (2) The best general work on the subject is Jeter A. Isley and Philip A. Crowl, *The U.S. Marines and Amphibious War* (Princeton, N.J.: Princeton University Press, 1951).

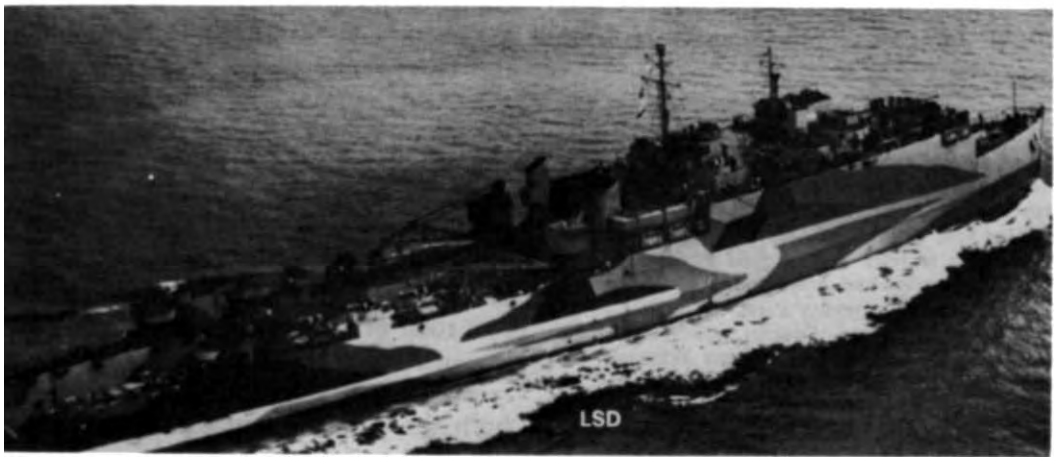
[7] (1) Leighton and Coakley, *Global Logistics, 1940–1943*, pp. 408–09. (2) Chester Wardlow, *The Transportation Corps: Movements, Training, and Supply*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1956), p. 463.



APA

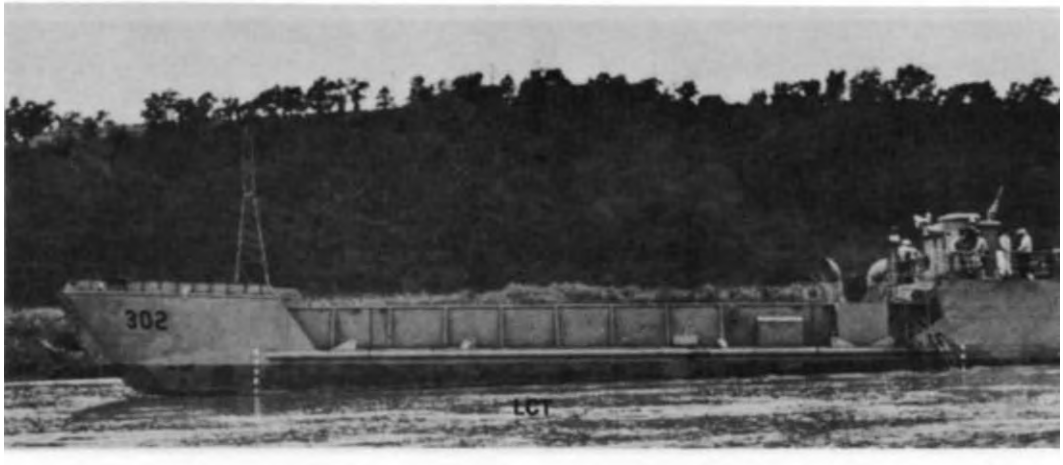


XAP



LSD


AKA


302
LCT


253
LSM

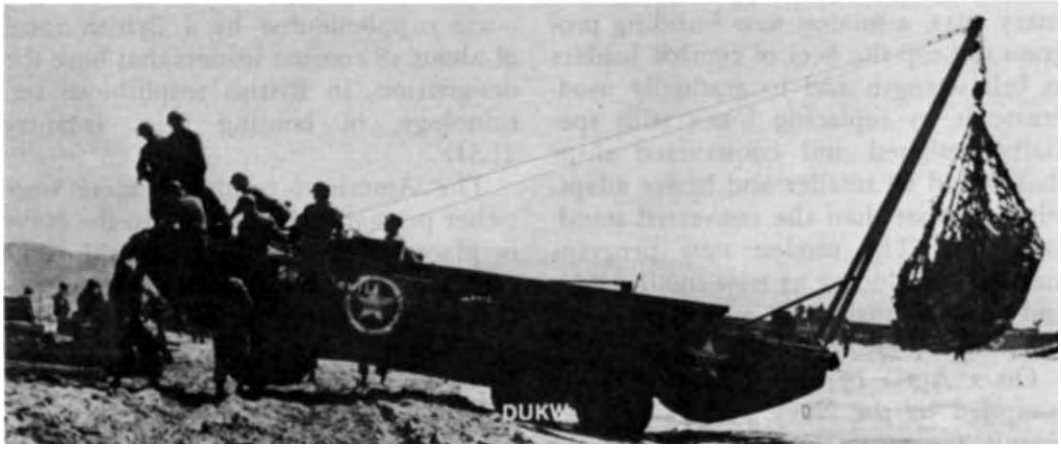

LVT


APD


LST


LCI(L)


LCM


DUKW



As of late December 1942 Admiral Ernest J. King, Commander in Chief, United States Fleet, and Chief of Naval Operations, reported that 28 APA's and 14 AKA's were available to meet this requirement, while two new APA's were being built and 25 additional APA's and 6 AKA's were undergoing conversion. These vessels, he thought, would be sufficient to meet all needs then anticipated, and, indeed, the conversion program was accorded no high priority. King proposed, however, and the JCS and the Maritime Commission approved in February 1943, a modest new building program to keep the fleet of combat loaders at full strength and to gradually modernize it by replacing losses with specially designed and constructed ships that would be smaller and better adapted to combat than the converted standard hulls. The modest new program aimed at producing 32 new small APA's and 32 new small AKA's by the end of 1944, again not on a high priority.

On 1 April 1943, deployment tables compiled by the Navy showed only 27 assault transports and 13 attack cargo ships actually available, plus 14 converted destroyer transports in the Pacific and 8 old converted merchant ships in the Atlantic, survivors of the North African landings. Though the numbers of the combat loaders in the Pacific—16 APA's, 5 AKA's, and the 14 APD's—outweighed the strength in the Atlantic area, the Navy's deployment plans still contemplated a relatively equal division between the two major theaters of war by the end of 1943. The American complement in the Atlantic and Mediterranean—11 APA's, 8 AKA's, and 8 XAP's—was supplemented by a British force of about 18 combat loaders that bore the designation, in British amphibious terminology, of landing ship, infantry (LSI).

The American combat loaders were either permanently assigned to the Navy or placed under the control of the Joint Chiefs, who assigned them as needed either to ferry Army troops or to perform tactical missions for the Navy. The War Shipping Administration (WSA) at first objected strenuously to the assignment of such a sizable pool of shipping to

permanent military employment but by the end of 1942 had conceded the case.[8]

Originally, the program for production of landing craft was also a modest one of low priority, concentrated almost entirely on small and medium-sized boats and lighters for Navy ship-to-shore operations. The decision in April 1942 to invade northwestern Europe across the English Channel in the spring of 1943 (ROUNDUP), or, under emergency conditions, in 1942 (SLEDGEHAMMER), gave the program a strong new impetus and an entirely different turn. The cross-Channel invasion was conceived primarily as a shore-to-shore operation, and the British succeeded in convincing their American allies that great quantities of large vehicular and personnel landing craft would be necessary to negotiate the difficult Channel waters. It was also mutually agreed that almost all of them would have to be produced by the American shipbuilding industry. The result was a crash landing craft production program in the United States, with schedules and objectives drawn up almost exclusively in terms of ROUNDUP and SLEDGEHAMMER. The new program got under way slowly, and meager output in the spring and summer was a potent consideration in the final abandonment in July of plans for SLEDGEHAMMER. Results were not impressive, even in the small boat category, until August. The first large personnel carrier (LCI (L)) was not produced until September and the first LST did not come off the ways until October, too late to take part in the North African landings. The real surge in production came in November 1942 and continued through February 1943, dropping off markedly thereafter. In the twelve months from May 1942 through April 1943, 8,719 landing craft totaling 512,333 light displacement tons were produced, almost three-fifths of them in the November–February period. They included 214 LST's, 302 LCI (L)'s, 470 LCT's, 2,052 LCM's, 3,250 landing craft, personnel (LCP), 690 landing craft, vehicle (LCV), 1,799 LCVP's, and 998 LVT's.[9]

The abortive planning for a cross-Channel operation in 1942 or 1943 thus left as one of its legacies a large pool of landing craft either in being or in production. The crash program compensated, at least partially, for earlier failure to plan for adequate quantities of amphibious equipment in the general munitions and shipping pool. Yet its effects were clearly disruptive of other naval building programs and created within the Navy an aversion to any further

[8] (1) JCS 90, 27 Aug 42, memo by COMINCH, title: Acquisition of Merchant Vessels for Navy Use. (2) JCS 151/9, 31 Dec 42, memo by COMINCH, title: Modification of 1943 Shipbldg Program. (3) Ltr, Adm William D. Leahy to Rear Adm Emory S. Land, 25 Feb 43, and other corresp, ABC 570 (2-14-42) Sec 4. (4) JCS 249, 27 Mar 43, title: Strategic Deployment of U.S. Forces for 1943, app. A. (5) Col. A. T. Mason, Special Monograph on Amphibious Warfare, ch. II, pp. 88–91, History of the Joint Chiefs of Staff in World War II, sec. II-D, Part III, MS, JCS Historical Sec. (6) Leighton and Coakley, *Global Logistics, 1940–43*, pp. 397, 615–23.

[9] (1) Civilian Production Administration, Landing Craft and the War Production Board, prepared by George E. Mowry (War Production Board, Special Study No. 11) (rev. ed., Washington, 1946) (hereafter cited as Mowry, Landing Craft and the War Production Board), pp. 6, 21, 23, 72. (2) Civilian Production Administration, *Industrial Mobilization for War: I, Program and Administration* (Washington, 1947) (hereafter cited as CPA, *Industrial Mobilization for War*), pp. 535, 609. These two studies, as well as other standard works, perpetuate the legend that the 1942–43 landing craft program originated in the decision to invade North Africa. (3) Leighton and Coakley, *Global Logistics, 1940–43*, pp. 376–82.

emergency programs of the kind. As a 1943 ROUNDUP, the original reason for the program, receded into the limbo of improbability, in mid-September 1942 Admiral King launched a move in the JCS to cut back construction of the larger landing craft. The JCS agreed to the extent of eliminating 100 LST's and 48 LCI (L)'s, reducing the total LST program from 490 to 390 and the LCI (L) program from 350 to 302. Other reductions were not practicable because construction was already so far advanced in most categories that speedy completion offered the best promise of clearing the ways for escort vessels and the other types the Navy wanted most.[10]

The Navy was far from asserting that no more landing craft were needed. The cuts were made only in the larger types that interfered directly with other naval building; simultaneously, with an eye to future ship-to-shore operations, Navy officials were planning a considerable expansion of the small boat program. In any case, even before landing craft production reached its peak, the program began to lose its official urgency. Late in 1942 it was dropped from the President's Number One Group of war production programs, and toward the end of March 1943 it fell to fourth place on the Navy's Shipbuilding Precedence List. By the end of April 1943 most of the individual crash programs had substantially achieved their targets or were severely cut back.[11]

The tapering off of the landing craft program was a source of considerable relief to Navy officials. The spectacular output of craft during the winter of 1942–43 had been achieved by the strenuous methods of a crash program. Behind the impressive production figures lay the inevitable costs of haste and waste, trial and error, and diversion of effort and resources from other programs. From the Navy's point of view, it had been forced to execute the landing craft program at the worst possible time—while straining to rebuild American sea power in the Pacific and at the same time fighting the submarine menace in the Atlantic. In its use of steel and other materials the program had threatened to interfere to some degree with almost every category of war production, but most particularly with the building of other combatant vessels that were dearer to most admirals' and, in the case of escort vessels, many generals' hearts. A Navy spokesman commented bitterly in April 1943 that the high rate of landing craft construction had been achieved "only by cutting across every single combatant shipbuilding program and giving the amphibious program overriding priority in every navy yard and every major civilian shipbuilding company. The derangement suffered from this overriding amphibious program will not be corrected for about six months."[12]

With the submarine menace assuming terrifying proportions in February and March 1943, Army and Navy officials alike were eager to terminate this competition between amphibious craft and other naval construction. That the current U-boat offensive would prove to be the dying gasp of German sea power

[10](1) Min 33d mtg JCS, 15 Sep 43; 25th mtg JCS, 29 Sep 42. (2) CCS 105/2, 27 Sep 42, rpt by CPS, title: Transportation of Ldg Cft and Recommended New Allocations.

[11]Mowry, Landing Craft and the War Production Board, p. 72.

[12] JPS 152/1, 3 Apr 43, title: Production of Ldg Cft, ABC 561/1 (19 Mar 43), Sec 1A.

could not then be foreseen, and Navy leaders were anxious to accelerate construction of escort vessels as much as possible. However, the escort building program was not given the overriding priority that many thought it needed, largely because such action seemed likely to "do more harm to other essential programs than it would do good to the escort vessel program."[13] Even so, escorts remained first on the Navy's Shipbuilding Precedence List through the early part of 1943, when only a few categories of landing craft stood as high as third. Late in March escorts were placed second, while landing craft fell to fourth place and lower. Output of escorts rose steadily through the first half of 1943.[14]

Landing craft schedules, by contrast, were cut back. Navy plans early in 1943 provided for production of 15 LST's per month, beginning in April 1943, until the reduced program total of 390 units was completed in March 1944. Thereafter production would be only 3 or 4 per month to replace losses. With the LCI (L) program for 302 units completed in April 1943, the Navy consented to place orders for a monthly output of 16 up to a total of 192 additional craft. New construction of LCT-(5)'s was also scheduled at 10 per month beginning in July. These low planned output levels contrasted with peak monthly production figures in the earlier program of 61 LST's, 70 LCI (L)'s, and 156 LCT (5)'s. Only for small craft were rates of production to stay high.[15]

The American landing craft pool and program were supplemented by a much smaller British contribution. The British had pioneered in the development of various types of landing ships and craft, including the LST, but their production facilities were inadequate for a program of the size needed for the cross-Channel invasion. After producing about half a dozen of a fast, long-range model LST (the LST (1)), the British agreed that the building of LST's henceforth would be restricted mainly to a newer model, the LST (2), more suitable for mass production. Production of this craft, along with that of most other types needed for a cross-Channel invasion, would be concentrated in American shipyards. The British proceeded, however, with construction of their own models of LCT's and various types of small and support craft, using facilities that could be spared from their regular naval and merchant shipbuilding programs. The whole effort was incapable of much expansion and depended on American production of engines for many types. The British, always more impressed than the Americans with the difficulties of landing on a well-defended hostile coast, placed more emphasis on incorporating armor and gunfire support in their amphibious equipment. Their principal small landing boat, for instance, the landing craft, assault (LCA), equivalent to the American LCVP, was much more heavily armored and

[13] (1) Ltr, CPRB to CCS, 28 Jan 43, Incl to CCS 137/3, title: Construction Program of Escort Vessels. (2) CCS 137, 28 Dec 42, same title.

[14] (1) Civilian Production Administration, Official Munitions Production of the United States by Months, July 1, 1940–August 31, 1945, Special Release, May 1, 1947 (hereafter cited as CPA, Official Munitions Production). (2) Mowry, Landing Craft and the War Production Board, app. D.

[15] (1) Memo, Rear Adm Charles M. Cooke, Jr., for Dir Reqmts SOS, 13 Feb 43, folder 18 Shpg File. vol. III, Case 28, ASF Plng Div. (2) JPS 152/1, 3 Apr 43, title: Production of Ldg Cft, ABC 561/1 (19 Mar 43) Sec 1A. (3) For characteristics of the LCT(5) see Appendix B–1, below.

mounted more guns. They also had several types of armored support vessels of larger size, such as the landing craft, support (medium) (LCS(M)), and the landing craft, gun (large) (LCG(L))—all of which mounted machine guns and mortars. The U.S. Navy, in contrast, perhaps because of its early orientation toward ship-to-shore operations in the Pacific, placed its major reliance for supporting fires "primarily on Naval gunfire, delivered from positions offshore by combatant ships."[16]

Since the original American landing craft program was drawn up in terms of the SLEDGEHAMMER-ROUNDUP strategy, tentative allocations set in mid-1942 assigned most of the craft for use in a cross-Channel invasion, including 200 American-produced LST's, 300 LCI(L)'s, and 340 LCT(5)'s. These allocations had not stipulated assignments of landing craft by country, but the agreement on U.S. production for use by both countries led the British to believe that they would receive generous allocations under lend-lease or other arrangements. With the demise of the initial invasion strategy, the Americans decided otherwise, proposing in September 1942 a complete revision of allocation schedules to provide greater quantities for the Pacific, the Mediterranean, and the Navy's Amphibious Force in the Atlantic at the expense of further accumulations in the British Isles. Allocations to the British were to be restricted, as far as the larger craft were concerned, mostly to those proposed for operation by British crews in the original ROUNDUP planning. (*Tables 1 and 2*)

Around these proposals a running controversy developed in the combined planning staffs, continuing through the Casablanca Conference. The British argued stubbornly for larger allocations and for resumption of the original program for assembling landing craft in the British Isles for a cross-Channel operation as soon as the immediate needs for the Pacific and Mediterranean had been met. They also proposed a pool of U.S. and U.K. amphibious resources in the Atlantic and standardization of replacement, maintenance, and training allowances by the two countries. The Americans, on the other hand, obviously fearing the accumulation of a large body of assault shipping in the European area at the expense of the Pacific theaters and the possibility of British control of whatever pool might be created, resisted these proposals. They finally took their stand on the ground that allocations should be made for specific operations as they were approved by the CCS, and that the problem of overhead allowances could be more expeditiously handled by arrangements between the naval staffs of the two countries, also as specific needs arose.[17]

[16] (1) Memo, Adm Cooke for Brig Gen Albert C. Wedemeyer, 24 Apr 43, sub: Support Guns and Antiaircraft Artillery on Ldg Cft, ABC 561 (31 Aug 43), Sec 1B. (2) Gordon A. Harrison, *Cross-Channel Attack*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1951), pp. 60–61. (3) ONI 226, *Allied Landing Craft and Ships*, 7 April 44.

[17] The controversy may be followed in: (1) CCS 105/1, 18 Sep 42; CCS 105/2, 27 Sep 42; and CCS 105/3, 4 Nov 42; all titled: Transportation of Ldg Cft and Recommended New Allocations, ABC 561 (2–19–42) Sec 2. (2) Min, 42d mtg CCS, 2 Oct 42; 40th mtg, 18 Sep 42; 47th mtg, 6 Nov 42. (3) Min, 32d mtg CPS, 11 Sep 42; 38th mtg, 26 Nov 42. (4) CPS 42/3, 1 Nov 42, rpt by British JPS, title: Ldg Cft Reqmts and Allocations; CPS 42/5, 24 Nov 42, rpt by subcom, title: Transportation of Ldg Cft. (5) Min, 33d mtg JCS, 15 Sep 42; 35th mtg, 29 Sep 42; 40th mtg, 3 Nov 42. (6) OPD Notes on JCS 35th mtg, 29 Sep 42, ABC 561 (2–19–42) Sec 2.

TABLE 1—PROPOSED DISTRIBUTION OF U.S. LANDING CRAFT SEPTEMBER 1942

Recipient	LCP/LCV	LCM(3)	LCT(5)	LCI(L)	LST
Total[a]	10,492	1,972	470	[b]294	390
Pacific	3,770	650	140	91	130
Atlantic Amph Force	1,052	168	50	27	45
TORCH	1,221	352	75	26	80
United Kingdom	982	455	150	150	75
Later allocation	[c]3,467	347	55	0	60

[a] All totals except for LCP/LCV represent scheduled production through February 1943; the LCP/LCV total is of listed allocations.
[b] This figure reflects a proposed cut of 56 in the current program, 8 more than the number finally canceled.
[c] Production not yet scheduled; total scheduled production through February 1943 at this time was 4,836.
Source: CCS 105/2, 27 Sep 42, title: Transportation of Ldg Cft.

TABLE 2—PROPOSED ALLOCATION OF U.S. LANDING CRAFT TO UNITED KINGDOM SEPTEMBER 1942

Type	Original Allocation for ROUNDUP			Proposed New Allocation[a]	
	Br Crews	U.S. Crews	Total		
LCP/LCV	479	588	1,067	982	(682)
LCM(3)	150	600	750	455	(155)
LCT(5)	0	340	340	[b]150	(1)
LCI(L)	150	150	300	150	(0)
LST	75	125	200	75	(0)

[a] Includes craft already delivered to the United Kingdom, as indicated in parenthesis. All would presumably have to be manned by British crews, since original plans to send U.S. boat crews to the United Kingdom had been suspended.
[b] No British crews were in prospect for these craft.
Source: CCS 105/2, 27 Sep 42, title: Transportation of Ldg Cft.

In the negotiations at the Casablanca Conference, the JCS stuck to this principle. The invasion of Sicily was the only specific amphibious operation in Europe agreed to at Casablanca, and provision of adequate lift for that undertaking absorbed most of the planners' attention, although the Americans also agreed to underwrite the assault shipping requirements for the amphibious operation in Burma. British requests for allocations, representing sizable reductions in their earlier requests but geared to a prospect of large-scale operations late in the year, were deferred and no final decision was rendered until early April 1943. These final decisions drastically scaled down the British requests for the larger craft, LST's and LCI (L)'s, while meeting in full requests for LCT's and smaller craft. As opposed to the request for 150 LST's by the end of August, the Americans promised 84. (*Table 3*) Meanwhile, in making their own allocations between the Atlantic and the Pacific for 1943, the Americans assigned the greater proportion to the Pacific—117 of 201 LST's expected to be available by 1 August 1943,

TABLE 3—REQUESTS VERSUS ALLOCATIONS OF U.S. LANDING CRAFT TO BRITISH JANUARY–APRIL 1943

Type	Prior Allocation[a]	Total by Request	1 April 1943 Allocation	Total by Request	1 August 1943 Allocation
LST	49	105	68	150	84
LSD	0	0	0	5	[b]1
LCI(L)	150	150	150	194	150
LCT(5)	150	150	150	150	150
LCM(3)	301	501		646	646
LCP	762	762	[c]762	832	[c]832
LCV	299	299	299	299	299
LCVP	0	0	0	160	[c]260

[a]In a strict sense, the term *allocation* was used to mean the allotment of future production; *assignment* referred to allotments of finished items. Relatively few of the craft here indicated as allocated before the Casablanca Conference had been actually assigned by then, and fewer still had been delivered to the British.

[b]At Casablanca the allocation of LSD's was left indefinite, though 7 of the 15 scheduled for production were earmarked for the British. In January it was expected that the first LSD to be produced, scheduled for May 1943, would be assigned to the British. Memo, Col Ray T. Maddocks for ACofS OPD, 24 Jan 43, sub: Availability of Ldg Cft for a Certain Opn, Exec 3, Item 1a, Case 6.

[c]Decided upon after the Casablanca Conference. 230 of the LCVP's were to be delivered to the United Kingdom by 1 August.

Source: (1) Paper by Br COS, Reqmts of U.S. Built Ldg Cft for Opns in 1943, 13 Jan 43, ASF Plng Div folder Landing Craft. (2) Table atchd to min, 67th CCS mtg, 22 Jan 43. (3) CCS 105/4, rpt of CPS, 9 Apr 43, title: Transportation of Ldg Cft, ABC 561 (2-19-42) Sec 2.

96 of 150 LCI(L)'s, and 180 of 281 LCT's. The British had to content themselves with the verbal assurances of Rear Adm. Charles M. Cooke, Jr. (Assistant Chief of Staff to Commander in Chief U.S. Fleet), that the needs of any possible cross-Channel assault would be met.[18]

Allocations made at Casablanca and afterward were obviously motivated both by the determination of the Navy to cut back production of larger landing craft, and by the American suspicion that British proposals for long-range allocations for a cross-Channel invasion represented an attempt to amass landing craft in the British Isles for an operation that, at best, could only be executed in the distant future—and at the expense of operations elsewhere, particularly in the Pacific. The allocations, together with the cutback in production, left the amphibious resources in prospect for any such operation dangerously low, as the planners were to learn by bitter experience in the ensuing year. Nevertheless, neither Army nor Navy officials were willing to reappraise production schedules in the spring of 1943. When in March the British asked that the United States re-examine the possibility of increasing production of LST's and LCT's to ensure adequate provision for a cross-Channel invasion in 1944, the request aroused suspicion that the British were merely trying to use the shortage of landing craft as a pretext to avoid launching an invasion at all. The Americans countered by proposing that the British take stock of their own resources in barges and other miscellaneous craft to be used in the follow-up. Reflecting the prevailing aversion to a new accelerated pro-

[18] Leighton and Coakley, *Global Logistics, 1940–43*, pp. 682–86.

gram, a Navy spokesman wrote: "In my opinion, anything approaching a repetition of the previous program would be disastrous from a standpoint of all other Naval construction."[19]

At no time, then, between the decision in July 1942 to invade North Africa and the TRIDENT Conference in May 1943, the period when the future program for production of assault shipping was being determined, did U.S. planners squarely face the problem of working out a schedule of requirements and allocations on the basis of a long-term strategy. To them it seemed impossible to do so until the questions of whether and when a cross-Channel invasion would take place had been settled with the British. Yet this was not the only factor at work — uncertainties introduced by rapid advances in amphibious technology and doctrine also contributed. New items of amphibious equipment emerging from the production lines were for the most part untested; their exact capabilities, capacities, and limitations remained undefined. It was extremely difficult for the logistical staffs, as late as spring of 1943, to perform in the field of amphibious operations the most basic exercise of the logistician's craft: to compute with precision the requirements of a given operation under given conditions. The varieties of and the uses for amphibious equipment made it almost literally impossible to make a preliminary calculation even in general terms of requirements of a future course of action sketched only in broad strokes. In May a planning committee, wrestling with the problem, felt impelled to write into an otherwise heavily statistical report this admonition:

> A detailed tactical plan with the details of logistical support is the basic factor in any study on the determination of landing craft for a given operation. One of the principal reasons that there are various types in existence is the fact that certain types are more efficient under given circumstances. But it does not follow that one type can be substituted for another simply because there are a variety of types available.
>
> A substitution must never be made unless two factors are known: hydrographic conditions and intended use. There is always a best method of lifting a combat team and support elements, though many combinations may be possible. The decision must be based on the tactical scheme of maneuver and detailed information on hydrographic conditions.[20]

Tactical schemes of maneuver that would permit detailed specifications of requirements were lacking in spring 1943 for anything beyond immediate operations. Without them the planners could only speculate, and all too frequently disagree. The problem was as acute in relation to the peculiarly American sphere in the Pacific as it was to Anglo-American planning for the assault on Fortress Europe. The prospective needs for the Pacific war were but dimly foreseen in spring 1943, and allocations made to the Pacific at that time seem to have been based on an appraisal of general rather than of specific needs. The role of the combat loader as a vessel especially adapted to transporting troops over the long distances involved in Pacific island warfare, and the consequent need for many more of them in the Pacific, was hardly recognized—the combat loader program was kept small with a

[19] Harrison, *Cross-Channel Attack*, p. 63.

[20] JCS 311, 15 May 43, rpt by JWPC, title: Mobility and Utilization of Amphibious Assault Craft.

low priority. Almost entirely unforeseen was the successful use of the amphibian tractor (LVT) in crossing coral reefs at Tarawa and in later Pacific operations. Requirements for both the LVT and the amphibian truck (DUKW) were seriously underestimated.

Because of these unknowns, and because the Americans wanted to preserve their freedom of action in production planning and in the Pacific war generally, the JCS did not, either at Casablanca or in the weeks following, present to the British any justification for their Pacific allocations in terms of specific scheduled operations. As these Pacific allocations had been developed to begin with in the context of a ROUNDUP-centered strategy, they understandably aroused British suspicions that the Americans were sending the bulk of their amphibious equipment to the Pacific for operations that had been jointly agreed should be secondary to the war against Germany. Yet the U.S. Navy was not ready to discuss allocations in these broader terms, and in the weeks after Casablanca succeeded in placing landing craft allocation, as well as production, almost entirely in naval channels. In connection with the final allocations for 1943, the JCS secured the agreement of their British colleagues that in the future allocations would be handled by agreement between the naval staffs of the two countries and not by the Combined Staff Planners, who had previously been wrestling with them, or by the machinery of the Munitions Assignments Board, which handled the allocation and assignment of other items. A protest by Army Service Forces representatives against this procedure was met by providing that allocations decided upon by the naval staffs should then be processed formally through the Munitions Assignment Committee (Navy) and the Munitions Assignments Board. This procedure left the Navy still in effective control.[21]

In one brief spurt of industrial effort, then, the United States in 1942 and early 1943 had created a fund of landing craft that hopefully would be enough – in combination with the products of a much smaller continuing program and the modest combat loader program—to carry out whatever amphibious operations might be decided on during the next two years. During the winter of 1942–43 and into the spring of 1943, for reasons that seemed compelling at the time, the JCS postponed really fundamental decisions on the future production and use of assault shipping. Strategic plans were unsettled, and even the Casablanca Conference failed to produce firm agreements on sequence or timing, and in some cases even choice, of specific operations in 1943–44. Amphibious technology and doctrine were changing so rapidly and so fundamentally that the planners could only grope blindly for the fixed premises on which any detailed staff planning must be based. Mutual distrust between British and American staffs further complicated the issues. Finally, U.S. Navy officials had an almost obsessive aversion to large increases in the landing craft production program. These circumstances were to complicate immensely strategic-logistical planning

[21] (1) CPS 42/8, 5 Apr 43, title: Transportation of Ldg Cft. (2) CCS 105/4, 9 Apr 43, same title. (3) Min, 80th mtg CCS, 16 Apr 43. (4) On the assignments machinery, see Leighton and Coakley, *Global Logistics, 1940–43*, pp. 270–94; and below, Chapter XXV.

for the great amphibious operations of 1943 and 1944.

Divergent Strategies

The British and American positions on allocation of scarce assault shipping reflected a long-enduring divergence in strategic outlook. In spring of 1943 these differences, reduced to their simplest terms, centered in the division of effort and resources, worldwide between the two spheres (or hemispheres) of the global war and, in Europe, between the Mediterranean front and preparations for a cross-Channel assault. The Americans wanted to place more emphasis on the war against Japan and to allocate a larger proportion of Allied resources to it; in Europe they insisted that preparations for a cross-Channel invasion should go full speed ahead at the expense of further operations in the Mediterranean once the conquest of Sicily was accomplished. The British, interpreting the primacy of the war against Germany more literally, seemed willing to postpone major offensives against Japan until after Germany's defeat. In Europe they were determined to make the main effort in 1943 in the Mediterranean, profiting from the momentum of the expected victory in Sicily.

If this much can be stated positively with regard to national strategies for 1943, the British position on an invasion across the English Channel in 1944 cannot be determined with the same degree of certitude. The theory that the British actually espoused what many American writers have described as a "peripheral" strategy—that is, one southward oriented in which the Mediterranean campaign would be continued into 1944 as the main effort in Europe and a cross-Channel operation would be carried out, if at all, only as a *coup de grâce* after Germany had been drained of her strength—is one that has been developed and sustained largely in American memoirs and other accounts published during and since the war. It reflects also the strong convictions of many, perhaps most, American military strategists and officials at the time, including so distinguished a figure as Secretary of War Stimson. British publications on the war, while not supporting this view, have not conclusively refuted it, either—in part, at least, because British strategists and their interpreters, starting from the premise that the Mediterranean had a legitimate and useful role to play in the European war, have candidly argued the case for Mediterranean operations on its merits, thus providing ammunition for those predisposed to believe that any defense of a Mediterranean strategy must *ipso facto* betray a Mediterranean orientation of European strategy. It is also worth noting that British official historians, with access to the records, have not (unlike their American counterparts) revealed in their published accounts the processes of debate and compromise through which agreed British positions were arrived at. Since American historians do not have access to British staff records, they cannot know what British positions on strategy actually were or whether they were, in fact, something other than what responsible British spokesmen represented them to be.[22]

[22] For a "revisionist" interpretation of British European strategy, see Richard M. Leighton, "OVERLORD Revisited: An Interpretation of American Strategy in the European War 1942–1944," *American Historical Review*, LXVIII, 4 (1963), 919–937.

British representations, at least, were clear enough. As put to the Americans in the spring of 1943, the official British position stressed the importance of retaining the initiative and moving ahead in the Mediterranean during 1943 in order to sap German strength in preparation for a cross-Channel invasion by then irrevocably deferred to 1944. Among the British leaders and staffs there was, of course, considerable divergence of opinion as to how much could be accomplished in the Mediterranean and when the invasion of France should be launched. It is reasonable to assume that many hoped, and some expected, that vigorous prosecution of the Mediterranean campaign through 1943, the effects of blockade and bombardment, and the drain of the war in the Soviet Union would bring about a German collapse, or would open up a southern avenue of advance less costly than a frontal assault from the northwest. Entertaining these hopes and expectations, the British were unmistakably reluctant as yet to set a firm target date for the cross-Channel invasion. They believed, however, that in the meantime preparations for a 1944 invasion should go forward with full vigor and in a priority second only to the urgent needs of current operations in the Mediterranean. British strategy, in short, was candidly opportunistic both as to time and as to place, in contrast to the rigid American insistence—as British leaders saw it—on immediate and overriding emphasis on preparations for a definitely scheduled, large-scale cross-Channel invasion in spring of 1944.

The candid opportunism of the British, together with their emphasis on the difficulties and risks of any cross-Channel operation, nurtured American doubts of any professed British willingness to undertake the invasion even in 1944. Between January and May 1943, these doubts powerfully affected American attitudes toward further accumulation of resources in Great Britain that might never be used or, as had happened the preceding summer, might be diverted to operations in the Mediterranean. At Casablanca the U.S. military leaders had not, in fact, seriously opposed the proposed invasion of Sicily, and at the same time they had made good their insistence on stepping up the scale and tempo of the Pacific war. But approval of the Sicilian campaign completed the derailment of the ROUNDUP strategy that the North African campaign had begun, and the Casablanca strategic program looked to the American staff like a British-inspired program. Not surprisingly, therefore, the Americans leaned strongly toward allotting more resources to and expending greater effort in the Pacific, particularly in the light of indications in spring of 1943 that the Japanese were rapidly consolidating their gains and might make their defenses impregnable unless the Allies moved promptly to breach them.

Anglo-American differences on the war in the Pacific were more fundamental than those over strategy in Europe. The British were apprehensive of Admiral King's insistence at Casablanca on a larger commitment of resources to the war against Japan, and their agreement to an offensive in Burma in 1943 was reluctant and conditional. They did not share American fears about growing Japanese strength, and believed that effective prosecution of the war in Europe demanded that the war against Japan be conducted on a strictly defensive strategy

and with limited commitment of resources.[23]

In approaching these major issues, particularly that of a Pacific strategy, the British were at a serious disadvantage. The relative abundance of resources in prospect was largely American abundance. The British war effort was already approaching its peak in early 1943, and was incapable of much expansion. The American economy was just beginning to show its full potential. The British, by virtue of their earlier entry into the war, their greater experience, and their participation in the arrangements for handling lend-lease, had won for themselves a place in the planning of the American production effort and the disposition of its products. In a number of cases they had turned over to U.S. industry the task of filling most of their needs for certain vitally essential items—for instance, landing craft and tanks—while assuming they would continue to participate in shaping American production and allocation plans. In return the British could and did offer bases, troopships, various supplies and services and, above all, military forces larger and better equipped than they could otherwise have been, for use in the common cause.

Yet the very nature of these arrangements weakened the British position in combined councils. As American strength grew, Americans began to chafe under the real or fancied influence of the British in shaping strategy, production plans, and allocation of matériel. An important step was taken in the fall of 1942 when the Americans announced their intention of excluding the British from participation in the formulation of plans for U.S. industrial production.[24] British members kept their places on the Munitions Assignments Board, which was responsible for the country-by-country allocation of American munitions, but their voice in these allocations was restricted in a number of ways. One method of restriction was the growing tendency of the Americans to make allocations on a national service level, excluding the British from participation in the detailed calculations of requirements and availability. A second way was through the principle introduced in late 1942 and effectively used in the landing craft controversy—that allocations of matériel should be made only for specific operations approved by the CCS. This gave the U.S. Chiefs an effective lever of control over the pursuit of any independent British strategic design even in theaters over which the British Chiefs exercised strategic responsibility.[25]

The British suffered the greatest disadvantage in matters concerning the war in the Pacific. Strategic responsibility for Pacific areas was assigned to the U.S. Joint Chiefs of Staff, and the Pacific war, by and large, was sustained by U.S. resources. The contributions of Australia and New Zealand were appreciable, but these dominions naturally tended to share American rather than British views on the war against Japan. The British had no "Pacific" of their own. Even in theaters formally within their strategic jurisdiction—the Middle East, India, and southeast Asia—they depended heavily on American resources.

[23] Arthur Bryant, *The Turn of the Tide* (New York: Doubleday & Company, Inc., 1957), pp. 492–93.

[24] Leighton and Coakley, *Global Logistics, 1940–43*, pp. 277–82.

[25] (1) *Ibid.*, p. 285. (2) See below, ch. XXV.

The only real influence the British could exert on the scale of American effort in the Pacific was in developing general formulas for worldwide distribution of resources, a function reserved to the CCS and the heads of state. Disagreement at those levels tended to focus on the wording of formally agreed statements of policy and principle, and did not involve the kind of detailed analysis of operational requirements that attended deliberations on strategy in Europe and southeast Asia. Lacking an effective bargaining lever, the British usually approached discussions of the Pacific gingerly and by indirection. Their strong feeling in spring of 1943 that American allocations to the Pacific of critical resources needed for the war in Europe jeopardized what they regarded as the essential strategy for an early defeat of Germany, did, in fact, generate one of the very few really sharp, though still generalized, debates of the war period on the question of the relative scale of American support for the two major sectors of the global war.[26] By contrast, this underlying difference came to focus both sharply and frequently in discussions of operations in southeast Asia where the British exercised primary strategic responsibility. They considered the American scheme for an early invasion of Burma as not logistically feasible and of a piece with the demand for a premature invasion of northwestern Europe.

The issue of global strategy was joined in April 1943 when the Joint Chiefs attempted to pin the British down to a formula that would ensure a more generous allotment of Allied resources to the war against Japan and prevent their dissipation into the Mediterranean. In a statement submitted to the British Chiefs, ostensibly designed to "clarify" the Casablanca decisions on the conduct of the war in 1943, the JCS proposed that operations in the Pacific and the Far East be on a scale sufficient not merely to "maintain" (the word used at Casablanca) but also to "extend" unremitting pressure against Japan. With the formula, the JCS submitted a suggested list of priorities to govern the allotment of resources for operations in Europe and in the Far East—significantly omitting the Pacific theaters, and thus serving notice of an intention to keep their prerogatives unfettered in those areas. First, second, and third priority were given to operations in Tunisia, Sicily, and the Combined Bomber Offensive, respectively; fourth priority went to the invasion of Burma and fifth to the build-up for a cross-Channel invasion (BOLERO).[27]

The British protested that the statement was a revision, not a clarification, of the Casablanca decisions. They charged that the new formula—"maintain and extend unremitting pressure" —was tantamount to giving "pride of place" to the Pacific war, and that the effect of relegating BOLERO to the lowest priority, together with the new definition of the scale of effort against Japan, might be to starve the build-up in the British Isles and so make a cross-Channel operation in 1944 impossible. The British levelled their strongest protest, however, at the implied exclusion of all further action in the Mediterranean

[26] Bryant, *Turn of the Tide*, pp. 491–500.

[27] CCS 199, 19 Apr 43, title: Survey of Present Strategic Situation (Clarification of Casablanca Decisions).

after HUSKY, reminding the Americans of the Casablanca agreement that efforts would be made to eliminate Italy and to create a situation favorable to Turkey's intervention.[28] Full debate on these issues was postponed until the TRIDENT Conference in May 1943.

Meanwhile, the exchange served to emphasize a fact already evident in the course of the landing craft controversy: the existence of a certain anomaly in the American and British positions with respect to preparation in 1943 for a cross-Channel operation in 1944. The Americans, supposed champions of the operation, were reluctant to commit themselves definitely to a large-scale build-up; while the British, supposedly hostile or lukewarm toward it, pressed the Americans for a commitment. One need not seek far for an explanation—it can be found in the twin pressures on American resources created by British plans for further advances in the Mediterranean and demands generated within the U.S. staffs to speed up the Pacific war. The requirements for the Sicily operation absorbed all resources the Americans felt could be committed to the war in Europe without unduly depriving the Pacific.[29]

Meanwhile, new indications of far-reaching British aims in the Mediterranean and of a lukewarm attitude toward a cross-Channel invasion were emerging. Early in April Prime Minister Churchill, in an exuberant message to President Roosevelt, confided his hopes that the conquest of Sicily would open up manifold opportunities for profitable action throughout the Mediterranean. In March Lt. Gen. Sir Frederick Morgan had been appointed Chief of Staff to the Supreme Allied Commander (Designate) (COSSAC), charged with planning a cross-Channel operation, and he had begun forming a combined staff for the purpose. Late in April the British proposed that the CCS directive to General Morgan be revised. The revision would have suspended all planning for cross-Channel operations in 1943 other than that for feeler raids, and would have left the main operation without a target date except a vague "in 1944." The JCS in reply insisted that the emergency return to the Continent be retained on the agenda, and only reluctantly agreed to abandon a preliminary bridgehead operation. On the question of timing, they grudgingly accepted a compromise phrase: "in 1944 as early as possible."[30]

These developments nourished the suspicion among the American staffs that the real aim of the British in pressing for acceleration of the invasion build-up in the United Kingdom was to provide a pool of resources that could be used to support operations in the Mediterranean, while the cross-Channel invasion for which it was ostensibly intended would be postponed to the Greek kalends. This suspicion strengthened the argument, of which Admiral King was the most forthright exponent, that these

[28] (1) CCS 199/1, 23 Apr 43, title: Survey of Present Strategic Situation. (2) Min, 81st mtg CCS, 23 Apr 43.

[29] See below, ch. II.

[30] (1) CCS 169/8/D, 23 April 43, title: Organization of Comd, Control, Plng and Trng for Cross-Channel Opns. (2) Msg, Prime Minister to President, *circa* 6 Apr 43, OPD 381 Security, II. (3) Harrison, *Cross-Channel Attack*, pp. 48–49. (4) L. M. Guyer, Section III: The War Against Germany and Its Satellites, ch. VIII, Part A, pp. 147–53, Part B, pp. 109–208, in History of the Joint Chiefs of Staff in World War II, MS, JCS Historical Sec (hereafter cited as Guyer, The War Against Germany, History JCS).

resources might better be sent to the Pacific. On the other hand, the continued reluctance to commit resources definitely to Europe raised questions in British minds as to American willingness to strive wholeheartedly for the common cause in that theater on any but American terms; it also provided justification to the British for their own unwillingness at this stage to accept a fixed date and a fixed scale for an invasion that might prove to be either unnecessary or infeasible—or something in between—when the time came. The American staffs, while not unanimously or unreservedly enthusiastic about expanding the war against Japan, were united in rejecting a strategy of pure containment in that war while the issue was being decided in Europe. Such a strategy would not only be unacceptable to the American public, but would offer no useful employment for the growing American battle fleets. The determination of the Americans to prosecute the global war vigorously on both fronts, with a major part of the total effort and resources devoted to the Pacific, by early 1943 had become a fixed and fundamental tenet of U.S. strategy and, in new guises and under new circumstances, would help to perpetuate the contraints that logistics had imposed on strategy during 1942.

CHAPTER II

HUSKY and BOLERO

Throughout the months of late winter and spring 1943, beneath the eddies of new strategy in the making, the administrative staffs were carrying toward fruition the major operational decision of the Casablanca Conference—the invasion of Sicily. Preparations went forward under the shadow of the recent unhappy experience in mounting the invasion of North Africa (TORCH) which, to Washington staff officers, had become a symbol of confusion, haste, and wasteful improvisation. The new undertaking posed many of the same problems, and in some respects the task appeared even more difficult. The base ports to which troops and material must be shipped were scattered along an immense stretch of the North African littoral. Facilities for reception, storage, and distribution in the theater were primitive compared to those in the United Kingdom, the base for most of the TORCH forces. All this had to be taken into account in stateside preparations: certain types of training must be given in the United States that the theater was not equipped to undertake; ships must be loaded so that specified cargo could be discharged at specified ports; and, for all the things that must be done with limited means in the theater, ample time must be allowed. Moreover, preparations for HUSKY, both in the United States and in the theater, must be subordinated to the build-up for the final offensive in Tunisia, which in its turn must be wound up in early May if HUSKY were to be mounted in June or July.

One, at least, of the problems that had almost wrecked TORCH—the pressure to meet an almost impossible deadline—was not now present. The staffs had had a little more than three months to plan and mount TORCH. For HUSKY they could count on almost five months, or, if the operation were launched in July, even six. As in TORCH, decisions were made and unmade, and the concept and general plan of the operation underwent a major revision only two months before D-day. The target date was not finally settled until April. Lacking firm objectives and detailed requirements, the logisticians often had to proceed on the basis of their own uninformed assumptions. Even so, at the beginning of February they knew the major objectives and the approximate size of the forces involved. And, as it happened, the prolonged uncertainty over D-day and eleventh-hour changes in tactical plans did not alter the pattern of administrative arrangements that had taken form early in the planning.

Meanwhile, the absorption of administrative staffs in preparations for HUSKY, the drain of additional resources to the Mediterranean that it entailed, and the continuing uncertainty over strategy in

the war in Europe, made resumption of the build-up in the British Isles impossible. The build-up for the Combined Bomber Offensive (SICKLE) lagged badly; that for an early invasion of the Continent (BOLERO) came to an almost complete halt. The only really heartening developments in the first four months of 1943 were the fading of the cargo shipping shortage in April and the appearance of a plan for reviving the 1942 scheme for preshipment of equipment to the British Isles for the invasion force that would be required in 1944.

Contrivance, Ingenuity, and a Favorable June Moon

The invasion of Sicily, as initially planned, was to be a two-pronged operation, with five British divisions landing along the eastern and southeastern coasts of Sicily, three U.S. divisions along the northern and southern coasts at the western end of the island. Including follow-up forces in both sectors, up to ten divisions with their supporting armor and services were to land during the first week, spaced around some two-thirds of Sicily's total circumference of about 500 miles. The plan for the widely dispersed landings was dictated by the supposed necessity of securing at the outset all the island's main ports and airfields (except Messina, in the northeastern corner, too far from Allied air and naval bases), in order to neutralize enemy air power operating from Italian bases and to ensure a rapid build-up and subsequent support of forces adequate to overpower the defenders.[1] As finally executed, the operations would be radically different in concept but not in the size of the force employed. Arrangements for support from the United States, meanwhile, because of their timing, had to be made largely in terms of the initial plan.

The timing of HUSKY had been the subject of a spirited debate at Casablanca, culminating in a decision by the combined staffs to set the operation for 25 July, when the moon would give light for an assault from the sea shortly before dawn. This period of the "favorable" moon in July (as then defined) received the grudging sanction of the President and the Prime Minister, but with the stipulation that strenuous efforts must be made by "contrivance and ingenuity" to advance the date to the same period in June.[2]

Achievement of a June date seemed to depend on two factors: the time required to wind up the campaign in Tunisia, thus freeing forces, material, and launching ports, and the time needed to mount the operation. For the most part, the Allied planning staffs in the theater arbitrarily assumed that Tunisian operations would end by late April or early May, an assumption in which they persisted even through the dark days of February and early March. They decided, therefore, that one of the best ways to accelerate the timetable and meet the prescription of a June date would be to bring into the Mediterranean before D-day a larger proportion of the assault forces than had been contemplated at Casablanca. These forces could

[1] (1) Lt. Col. Albert N. Garland and Howard McGaw Smyth, *Sicily and the Surrender of Italy*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1965), ch. III. (2) CCS 161, 20 Jan 43, memo by Br JPS, title: Opn HUSKY. (3) Richard M. Leighton, "Planning for Sicily," *U.S. Naval Institute Proceedings* (May, 1962), pp. 90–101.

[2] Leighton and Coakley, *Global Logistics, 1940–43*, p. 673.

be trained and equipped in the United States or United Kingdom while the fighting was still going on in Tunisia. Thus, early in February, Lt. Gen. Dwight D. Eisenhower, commanding Allied forces in North Africa, informed the CCS that he would need an extra division from the United States over and above the 45th Infantry and the 82d Airborne Divisions, the two already counted on. He also wanted the extra division and the 45th to have three weeks of mountain training, as well as their amphibious training, before sailing for the theater.[3]

It soon appeared that the primary obstacle to a June launching date would be the time required to carry out the necessary training, and to move these reinforcements with their accompanying supplies and the requisite assault shipping from the United States to the theater. Matters were further complicated by existing limitations on the size and frequency of convoys, the shortage of both cargo and personnel shipping, and a concomitant increase in requirements for troops and supplies to conclude the Tunisia Campaign.

The 45th Division presented no particular problem. It was scheduled to sail late in its own amphibious transport, and could probably work in the mountain training and still arrive in the theater in time to participate in final rehearsals for a June D-day. But training and shipping of the additional division within the time specified raised seemingly insurmountable problems. The 36th Infantry Division, which had already received some amphibious training, was chosen for the task, but to give it mountain training appeared to be out of the question. For lack of escorts, no more fast troop convoys were scheduled after UGF–8 in late April except for the one carrying the combat-loaded 45th.[4] Since the 82d Airborne Division was scheduled to move in UGF–8, the 36th could only be fitted in, if at all, in UGF–7, sailing a month earlier. Working feverishly, the staffs developing convoy schedules managed to build up UGF–7 and UGF–8 to some 40,000 troop spaces each, and tentatively scheduled UGF–9 (with a potential capacity of 45,000) to sail about 17 May. UGF–9 was to accommodate the 82d Airborne in case the 36th displaced it from UGF–8.[5]

While the planners were still wrestling with the convoy problem, the first real crisis arose over the movement schedules for assault shipping. Estimates of assault shipping requirements for HUSKY had been made at Casablanca. (*Table 4*) The Navy objected at first to providing the combat loaders (most of them to be used to carry the reinforced 45th Infantry Division from the United States to North Africa and then onto the assault area) believing it would require diversions from the Pacific, but the necessary vessels were found in the Atlantic and

[3] Msg 8885, Eisenhower to Marshall (eyes only), 4 Feb 43, OPD Exec 3, Item 1–b.

[4] Convoys to the Mediterranean from the United States were designated UG convoys, with the added letter "F" to identify "fast" or troop convoys, or "S" to identify "slow" convoys composed of cargo ships. They were then numbered in sequence. Thus UGF–8 designated a fast troop convoy, UGS–8 a slow convoy composed of freighters. A similar system for identifying convoys from the United Kingdom to the Mediterranean used the designations KMF and KMS.

[5] (1) Msg 2231, Marshall to Eisenhower (eyes only), 4 Feb 43, with related corresp, OPD Exec 3, Items 1–b and 12. (2) Memo, Maj Gen Thomas T. Handy for COMINCH, 18 Feb 43, folder 18 Shpg File, V, 5, Plng Div ASF. (3) Diary of a Certain Plan, 18, 20, 21 Feb 43 entries, Plng Div ASF.

TABLE 4—ESTIMATED ASSAULT SHIPPING REQUIREMENTS FOR HUSKY (AT CASABLANCA CONFERENCE)

Type	British	United States	Total	Type	British	United States	Total
Hqs ship	3	2	5	LCT	72	0	72
LSI(L)[a]	8	13	21	LCM	200	71	271
LSI(M)[a]	3	2	5	LCA	98	52	150
LSD	5	0	5	LCP	100	190	290
LST	56	44	100	LCS	14	12	26
LCI(L)	90	30	120				

[a] Equivalent to U.S. APA's.
Source: CCS 161, 20 Jan 43, memo by Br JPS, title: Operation HUSKY.

assigned to HUSKY. The allotment included 8 old XAP's that had survived TORCH, 9 APA's, and 6 AKA's; also, 68 LST's, 90 LCI(L)'s, and 100 LCT's were assigned to mount the American portion of the operation—all together somewhat more than the U.S. quota in the original plan.

The critical problem, as far as a June date was concerned, was not the supply of craft but the timing of their movement. The Navy's movement schedules, announced in early February, provided that only 16 LST's would reach the theater by early April; the rest of the landing craft would not arrive until late April or early May.[6] Determined to avoid the expedients and improvisations that had marked the North African landings, Eisenhower told the CCS on 11 February that this belated movement would make it impossible to launch HUSKY in June. Amphibious training required six weeks; redeployment, loading, and final rehearsals another four. Moreover, ships and craft arriving in the theater always needed repair and refitting. The launching date, Eisenhower asserted, could be no earlier than mid-July, and he stubbornly maintained this position in the face of vehement protests from Churchill and suggestions that training and rehearsals be telescoped.[7]

General Marshall supported Eisenhower: "A landing against organized and highly trained opposition," he argued, "is probably the most difficult undertaking which military forces are called on to face."[8] He thought the risks of skimping on training and rehearsals would far outweigh any possible gains to be expected from launching the attack in June. Admiral William D. Leahy, personal Chief of Staff to the President, and Admiral King felt that a June date was at least worth shooting for. Under pressure from Roosevelt, prompted by a personal appeal from Churchill, the

[6] (1) Memo, COMINCH for CofS, USA, 5 Feb 43, sub: APA, XAP and Ldg Cft for HUSKY, OPD Exec 3, Item 1–a, Case 7. (2) Other corresp on these arrangements in OPD Exec 3, Items 1–a and 12. (3) LST's and LCI(L)'s moved to the theater under their own power. Each LST carried an LCT piggy-back; other LCT's were shipped as deck loads; some were already in the theater.

[7] (1) Msg NAF 144 (No. 325), Eisenhower to CCS, 11 Feb 43. (2) Msg 1400, Eisenhower to Marshall, 17 Feb 43. Both in OPD Exec 3, Item 1–b. (3) Winston S. Churchill, *The Hinge of Fate* (Boston: Houghton Mifflin Company, 1950), pp. 723–27. (4) CCS 177/1, 16 Feb 43, title: Date for Commencing Agreed Opns.

[8] Memo, CofS USA for JCS, 17 Feb 43, sub: Date for Proposed Operation, OPD Exec 3, Item 1–b.

CCS on 19 February notified Eisenhower that a final decision would be postponed until 10 April, but that he must in the meantime work "with greatest vigor" to achieve a target date during the favorable moon period in June.[9]

Eisenhower responded with what amounted to an ultimatum of his own: If HUSKY were to be launched in June, he asserted, all his current and prospective force requirements, other than the combat-loaded 45th Division, must somehow be crowded into the two troop convoys, UGF–7 and UGF–8, then scheduled for March and April, respectively. The list included the 36th Infantry and 82d Airborne Divisions, supporting arms and services, line of communications troops, additional Navy and Army Air Forces personnel, replacements for the current fighting in Tunisia, and more replacements for the coming battles in both Tunisia and Sicily—something like 120,000 men in all.[10]

Even though the total number of troops was 38,000 more than the two fast convoys, expanded to maximum safe capacity, could carry, there was no disposition in Washington either to deny Eisenhower the troops he requested or to abandon hopes for a June D-day. In the atmosphere of urgency created by the German break-through at Kasserine Pass, the CCS wrestled with the problem for some two weeks. The only real solution appeared to be to move the 38,000 troops in fast transports sailing without escorts, an expedient that Admiral King was prepared to sanction, but with some misgivings. To provide the transports would require sacrifice of troop movements to other theaters. Only one fast U.S. transport of the six not already scheduled on the North African run was uncommitted. Troop movements to the Pacific were behind schedule and Admiral King adamantly refused to divert the two transports engaged in that service. President Roosevelt would almost certainly frown on any diversion of transports from the movement of service troops to the Persian Gulf for development of the supply line to the USSR. On the other hand, the British were willing to make available some of their large transports engaged in ferrying U.S. and Canadian troops across the Atlantic, in return for American help in moving British troops to the Middle East and American acquiescence to shifting the *Queen Mary* back to the Atlantic from her current assignment on the run around the Cape of Good Hope to India. Tentative arrangements were worked out along these lines, placing most of the burden of moving Eisenhower's additional 38,000 troops on three British transports (*Andes, Empress of Scotland,* and *Pasteur*); U.S. vessels released after arrival of UGF–7 would move about 10,000 British troops as far as Capetown on the Middle East run, thus sacrificing a good part of the tardy UGF–9, which was to have been made up of returning UGF–7 transports.[11]

[9] (1) Msg FAN 98 (No. 2574), CCS to Eisenhower, 19 Feb 43. (2) Msg 857, Eisenhower to Marshall, 14 Feb 43. Both in OPD Exec 3, Item 1–b. (3) Min, 72d mtg CCS, 19 Feb 43.

[10] Msg 2387, Algiers to AGWAR, 22 Feb 43, OPD Exec 3, Item 13.

[11] (1) CCS 182, 25 Feb 43, memo by CofS USA, title: Increase in Size of UG Convoys. (2) CCS 182/1, 26 Feb 43, comments by COMINCH, same title. (3) Min, 73d mtg CCS, 26 Feb 43. (4) Msg 2927, Marshall to Eisenhower, 26 Feb 43, OPD Exec 3, Item 12. (5) Diary of a Certain Plan, 27 Feb 43, Plng Div ASF. (6) Memo, Maj Gen Charles P. Gross for Lt Gen Brehon B. Somervell, 27 Feb 43, sub: Increase in Troop Lift to N Africa, OPD Exec 8, Book 7. (7) The *Mariposa* was later substituted for the *Pasteur*.

Under these arrangements, the cost in reduced or abandoned troop movements to other theaters could either be distributed fairly equally between deployment programs to India and the British Isles, or be charged wholly to the latter. Neither option held much attraction for the U.S. Joint Chiefs, who, even though committed to HUSKY, considered vigorous prosecution of the war in China-Burma-India and northwest Europe more important than any action in the Mediterranean. Of the alternatives, however, they were inevitably impelled toward the second by the President's avowed interest in accelerating the build-up of U.S. air power in China and their anxiety to avoid giving the British any excuse to slacken their own effort in Burma. The CCS had to decide, then, whether a gain of four weeks or less in the movement of 38,000 troops to North Africa would warrant further delay in the already lagging BOLERO-SICKLE build-up. Lt. Gen. Henry H. Arnold, Commanding General, Army Air Forces, and his Chief of Air Staff, Maj. Gen. George E. Stratemeyer, argued heatedly against a cut in BOLERO, pointing out the consequent delays in mounting the Combined Bomber Offensive. The members of the Joint Strategic Survey Committee (JSSC), who had opposed HUSKY from the beginning, urged that the operation should be definitely and finally postponed until July. In the end the Combined Chiefs overruled them, partly as a result of a British agreement to accept a delay in the movement of Canadian ground troops to England so as to provide shipping for some of the needed AAF personnel. This proviso was written into a CCS decision of 5 March, along with directions to use U.S. shipping to move 10,000 British troops on the first leg of their transfer from England to India, and to send two British transports, *Aquitania* and *Mauretania,* with U.S. troops to the same theater. The general feeling among the Combined Chiefs seemed to be that the sacrifices to BOLERO-SICKLE involved in an accelerated build-up could be accepted if HUSKY could somehow be launched in June.[12]

Yet, by 5 March a June date was probably already impossible. Movement schedules had undergone various practical modifications at the working levels during the course of the CCS discussion, and by the time the decision was handed down they provided for the bulk of the movement to be spaced over the last half of April and the first half of May, a period extending a full three weeks past the sailing date of UGF–8, supposedly the last regular troop convoy for HUSKY. Whether these arrangements would meet the timetable for a June assault was very doubtful; the Chiefs of Staff, however, appear not to have been apprised of any apprehensions, and the implications of the working schedule may well not have been fully appreciated at that level.[13]

Meanwhile, the arrangements taking shape for supporting cargo shipments also seemed difficult to reconcile with a June target date. And by mid-March the mounting cargo shipping crisis, precipitated by the German U-boat campaign in the Atlantic and British demands for their import program, overshadowed all

[12] (1) CCS 182/2, 3 Mar 43, title: Increase in Size of UG Convoys. (2) Min, 74th mtg CCS (Suppl), 5 Mar 43, with apps. A, B. (3) Msg 3340, Marshall to Eisenhower, 5 Mar 43, OPD Exec 3, Item 12.

[13] (1) Memo, Gross for Somervell, 27 Feb 43, sub: Increase in Troop Lift for N Africa, OPD Exec 8, Book 7. (2) CCS 182/2, 3 Mar 43.

other questions and threatened the execution of HUSKY on any date.

The escalation of the demand for supplies in North Africa had already forced the Navy to insert an additional slow UGS convoy into the regular 25-day cycle in both February and March. Eisenhower's request on 22 February for accelerated troop movements generated a requirement for 38 more cargo ships to be crammed into the HUSKY schedule—presumably during the same period as the troop movements. At Admiral King's behest and following earlier precedents, it was decided to send the 38 ships as a separate convoy, UGS–7½, instead of enlarging the regular slow convoys. Then, early in March, at the theater's request, the Navy extended the whole schedule into May by adding another convoy, UGS–8½, to sail in the middle of that month. The cargo build-up schedule now comprised four slow convoys, UGS–7 (29 March) through UGS–8½ (13 May), running at 15-day intervals with about 145 ships distributed more or less equally among them.[14]

The theater's motive in extending shipments on into May appears to have been a desire to avoid congestion in its own ports and line of communications. Though the aggregate capacity of North African ports—Casablanca, Oran, Algiers, and smaller ports in the vicinity of each of them—was ample, inland clearance facilities from Casablanca and Oran eastward were still poor. The theater wanted as many shipments as possible to come to the eastern ports—Algiers, Philippeville, Bougie, and Bône—whence HUSKY would be mounted, but the capacity of those ports was limited, and shipments to them added 1,400 nautical miles to the round trip. Whether the theater could absorb shipments any faster, whatever the implications for a June date, was a serious question.[15]

Finding ships seemed a matter of far greater moment during March than the limits on port capacity. With the rumblings of the British demand for shipping in the background, on 5 March the War Shipping Administration somewhat apprehensively promised to furnish 149 vessels against Eisenhower's requirement for 145. Eisenhower immediately demanded 30 more cargo ships to sail in UGS–8 and UGS–8½. Without them, he warned, he would have to reduce maintenance allowances and cased gasoline to dangerously low levels, eliminate all shipments of backlogged equipment for units already in the theater, and cut equipment of units still to come. The total requirement for the four build-up convoys now stood at about 175 ships.

Eisenhower's new demand arrived just as the long-simmering March cargo shipping crisis came to a boil. With the larger issue of military versus war economy requirements about to be joined in Washington and the fate of HUSKY itself in doubt, meeting the demand seemed not only impossible but unimportant.

[14] (1) CCS 182, 25 Feb 43. (2) CCS 182/1, 26 Feb 43. (3) Msg 2927, Marshall to Eisenhower, 26 Feb 43. (4) Msg 3328, 3 Mar 43. (3) and (4) in OPD Exec 3, Item 12. (5) Msg 3641, Algiers to AGWAR, 1 Mar 43, OPD Exec 3, Item 13. (6) Diary of a Certain Plan, 27 Feb, 2 Mar 43. (7) Memo, Gross for Somervell, 5 Mar 43, sub: UGS Convoys. (6) and (7) in Planning Div ASF. (8) Min, Conf, Douglas with Gross, 1 Mar 43, Folder Army Reqmts, WSA Douglas File. (9) Leighton and Coakley, *Global Logistics, 1940–43*, p. 472.

[15] (1) Msgs, J. E. Slater to Douglas, 12 and 24 Mar, 10 Apr 43, with related papers in WSA Douglas File, N Africa. (2) Memo, Col G. C. Stewart, CofT, NATOUSA, for DComdr, NATOUSA, 14 Mar 43, sub: Allocation of Convoys . . . , folder Shpg, III, Tab 45, Plng Div ASF.

For the present, the theater was told, it would have to get along with no more than 149 ships. Meanwhile, in its general reappraisal of strategy at the time, the U.S. Joint Strategic Survey Committee recommended, among other things, that the attack on Sicily be delayed, modified, or even canceled.[16]

While the broader issue was being fought out on the higher levels, the day-to-day struggle to find ships for all the convoys continued. Meeting the North African theater's growing appetite for shipping would depend, as Lewis Douglas told Maj. Gen. Charles P. Gross, Army Chief of Transportation, at the beginning of March, partly on whether ships came back at the same rate as they went over. During March, for various reasons—and apart from the toll levied by enemy submarines—they seemed not to be doing so. For lack of drydocks and other facilities, they were being held for weeks or months in the theater awaiting repairs. Many ships, arriving in North Africa with heavy bottom cargo instead of ballast, had to call at several ports after their cargoes had been discharged to pick up phosphates, iron ore, manganese, or whatever else they could find for return ballast. Ships loaded with coal as bottom cargo could unload it only at Oran and a few other places. The frequent use of incoming UGS ships, after discharge, to transship cargoes to eastern ports sometimes delayed their return by as much as six weeks. All figures indicated that the turnaround time to the eastern ports was longer than the additional distance warranted. Accordingly, schedules were revised to provide for only 15 cargo ships for the eastern ports in each of the four convoys and for landing at least half of the 1.5 million measurement tons of cargo destined for the HUSKY build-up at Casablanca, Oran, and their satellites, even though it would eventually have to be transshipped to eastern Algeria and Tunisia.[17]

By this and other expedients, from the middle of March onward ends and means drew closer together, and the shipping crisis gradually dissolved. By the 29th, Douglas was able to assure Roosevelt unequivocally that both British import requirements and essential military needs could be met, even though the Army might not get the full number of ships it wanted. On the basis of this assurance, the President ordered WSA to make available to the British the shipping requested.[18] As Douglas had warned, for a while the situation was "very, very tight." UGS–7 sailed on 1 April, a little late, with only 34 cargo ships instead of the 45 planned (3 were lost in crossing), and the departure of UGS–7½ on the 14th with only 36 ships left a requirement of 79 for UGS–8 and UGS–8½, if the mid-March goal of 149 ships was to be met. By mid-April, as the submarine menace waned, it was reasonably clear that the necessary cargo shipping could be made available to meet the theater's full demands, if the convoys would accommodate the ships,

[16] (1) See above, ch. I, and Leighton and Coakley, *Global Logistics, 1940–43*, pp. 690–702. (2) Msg 3339, Marshall to Eisenhower, 5 Mar 43, OPD Exec 3, Item 12. (3) Msg 6164, Algiers to AGWAR, 12 Mar 43. (4) Msg 7715, 19 Mar 43. Last two in OPD Exec 3, Item 13.

[17] (1) Msg NAWS 89, Slater to Douglas, 10 Apr 43, with related corresp, WSA Douglas File, N Africa. (2) ASF Monthly Progress Rpt, sec. 3, Transportation, 30 Apr 43. (3) Msg 3466, Marshall to Eisenhower, 7 Mar 43, OPD Exec 3, Item 12.

[18] See above, ch. I, and Leighton and Coakley, *Global Logistics, 1940–43*, pp. 698–700, for full treatment.

though the schedule could hardly be geared to a June D-day for HUSKY.[19]

Meanwhile, the problem of HUSKY's launching date had been resolved in an unexpected manner. About the middle of March the theater planning staffs came around to the view that a "favorable" moon phase would be governed mainly by the character of the supporting airborne assault, not the seaborne landing. The airborne assault would require moonlight at the time of the drop and for about four hours thereafter in order to develop the attack. The seaborne assault, on the other hand, should be made in darkness about two hours before dawn. Favorable conditions for the airdrop would occur, in June and July, about the 10th rather than the 25th of the month. So early a date in June being already impossible, resistance to a July date forthwith evaporated. As Churchill observed with pleased surprise, it meant a delay of only a fortnight, not a month. On 13 April, after lengthy correspondence and discussion, the CCS finally approved an early July launching date for HUSKY—an empty gesture since the relentless, impersonal course of administration had long since taken the decision out of their hands.[20]

The Final Assault Plan

The original HUSKY plan had undergone other alterations. From the start, theater planning staffs had worried over the risks of attacking with such widely dispersed forces an enemy holding the advantage of interior lines. In mid-March General Sir Harold R. L. G. Alexander, Eisenhower's British deputy in command of Allied ground forces, decided that the British landings on Sicily's east coast must be strengthened by one more full division to insure early capture of Syracuse and Augusta. To avoid having to sideslip the whole lineup along the southeastern coast, he asked for additional assault lift to mount the extra division, which was available in the Middle East. Almost simultaneously, Eisenhower's American commanders decided that they would need another armored command for their sector together with assault shipping to mount it. The full demand in assault lift for both British and American forces seemed to amount to almost two more reinforced divisions—about a 25 percent increase over that already allotted.[21]

The British were all for giving Eisenhower his additional lift provided the Americans could supply it. In Washington, councils were divided, and there were doubts whether the additional lift was really needed. The requirements were scaled down markedly in the course of a lengthy exchange with the theater. By the end of March the Washington staffs could finally discern from the cables that the equivalent of one combat team lift asked for would be saved in

[19] Diary of a Certain Plan, 26 Mar, 24 Apr 43, Plng Div ASF.

[20] (1) Garland and Smyth, *Sicily and the Surrender of Italy*, ch. III. (2) Churchill, *Hinge of Fate*, p. 940. (3) Msg 94, CCS to Eisenhower, 13 Apr 43, cited in Guyer, The War Against Germany, ch. VIII, Part B, p. 174, History JCS.

[21] (1) Msg NAF 182, Eisenhower to CCS, 20 Mar 43. (2) Garland and Smyth, *Sicily and the Surrender of Italy*, ch. III. (3) Field Marshal the Viscount Alexander of Tunis, *Despatch*, 9 October 1946, published as "The Conquest of Sicily from 10th July 1943 to 17th August 1943," in the *Supplement to the London Gazette* of Thursday, February 12, 1948 (cited hereafter as *Alexander Despatch*), pp. 1–2. (4) Msg 7645, Algiers to AGWAR, 19 Mar 43; Msg 6683, 15 Mar 43; both in OPD Exec 3, Item 13.

the total lift by a corresponding shrinkage in other formations. By slashing allowances for training and in-transit losses, by increasing the rated capacities of combat loaders, LST's, and LCT's, and by adding 10 LST's to the allotment, they were able, at least on paper, virtually to wipe out the vehicle lift deficit and to reduce the personnel lift deficit to approximately one regimental combat team. To absorb the latter deficit, the Navy agreed to set up a special convoy of 3 APA's, 3 XAP's, and 2 AKA's to sail about 10 May.[22]

Washington informed General Eisenhower of these decisions in mid-April, adding that if any more assault shipping were needed the British would have to provide it. As it happened, the British had already decided to do just that—making available for HUSKY, at the expense of training and planned amphibious raids on the Atlantic and Channel coasts, almost their entire reserve of unallotted assault shipping. It included 5 small attack transports (LSI(S)'s), 8 LST's, 49 LCI(L)'s, 6 small support craft (LCS(S)'s), and up to 48 British-built LCT's.[23] (*Table 5*)

These final allotments of assault shipping fixed the aggregate strength of the Sicily landings. Still, the uneasiness of the commanders in the theater over the planned dispersion of the landings increased as a result of mounting indications that the defending forces in Sicily would probably include substantial German ground combat formations. When General Sir Bernard L. Montgomery, British Eighth Army commander, studied the plan he described it as a "dog's breakfast," a gamble resting solely on the rash assumptions that opposition in the critical sectors would be light and that the enemy would not reinforce.[24] In the end, despite objections from both the air and naval commanders, Montgomery had his way, and on 2 May 1943 Eisenhower scrapped the plan for a two-pronged attack in favor of more concentrated landings on the southeastern and eastern coasts of Sicily. The CCS approved the new plan on 12 May.[25]

In its final form the HUSKY plan provided for landings along some 150 miles of the eastern and southeastern coast lines, with the U.S. Seventh Army assigned the western sector and the British Eighth Army the eastern sector. The general scheme was to crush resistance in the eastern end of the island and to advance rapidly on Messina, isolating enemy forces in the west and preventing their evacuation. Eight divisions, infantry and armored, were to assault abreast, supported by predawn airdrops in approximately divisional strength. Elements of the U.S. assault forces, equivalent to one division, were to be held back in floating reserve, and each army was to maintain a one-division reserve in Africa. In length of front and number of assault divisions simultaneously

[22] (1) Corresp and cables in OPD Exec 3, Items 10–13. (2) ABC 381 HUSKY (1943) Sec 2. (3) OCT HB Wylie File BIGOT I. (4) Folder, Current Opns, Plng Div ASF.

[23] (1) Msg, Brigadier H. Redman to Brig Gen John R. Deane, 14 Apr 43, with related corresp, OPD 560, Security I, Case 28. (2) Bryant, *Turn of the Tide*, p. 486. (3) Msg 031647, COMINCH to COMNAVNAW, 12 Apr 43, with related papers, OPD Exec 3, Item 11.

[24] (1) Quoted in Bryant, *Turn of the Tide*, pp. 513–14. (2) Msgs, NAF 182 and NAF 201, Eisenhower to CCS, 20 Mar and 7 Apr 43, OPD Exec 3, Item 13.

[25] (1) Garland and Smyth, *Sicily and the Surrender of Italy*, ch. III. (2) Msg FAN 121, CCS to Eisenhower, 12 May 43, OPD Exec 3, Item 8.

TABLE 5—ASSAULT SHIPPING FOR HUSKY

Type	Total	U.S.	Br
Headquarters ship	5	2	3
Attack transport	57	[a]20	[b]37
Attack cargo transport	7	7	[c]0
LST	148	[d]76	72
LSI(L)	235	90	145
LCT	238	100	[e]138
LCM	395	154	[f]241
LCA	272	0	272
LCVP	324	324	0

[a] APA's and 8 small converted transports (XAP's). One of the XAP's that sailed in the 10 May contingent (see p. 00 above) was used as a headquarters ship, and presumably is included under that heading in the table. The table also includes one more APA than are mentioned in the arrangements discussed on page 40.

[b] Only 16 were large LSI(L)'s. Most British attack transports were converted passenger liners of various sizes.

[c] Some of the attack troop transports carried cargo.

[d] Seventh Army History lists only 74 actually used.

[e] British types.

[f] Both American and British types.

Source: CCS 244/1, 25 May 43, Implementation of Assumed Basic Undertakings . . . , app. A to Annex V.

engaged, HUSKY was to be the largest amphibious operation of the war.[26]

The plan involved considerable logistical risk. Syracuse and Augusta in the British sector would be the only ports of even moderate capacity through which supplies could be brought in the early stages. The whole U.S. contingent would have to be supplied over the beaches for an indeterminate period. *(Map 1)* The judgment of the logistical staffs that they could be so supplied rested mostly on the promising but still little-known capabilities of the American-designed and built DUKW's, of which more than a thousand were to be allotted to the operation, some arriving on the very eve of the assault.[27]

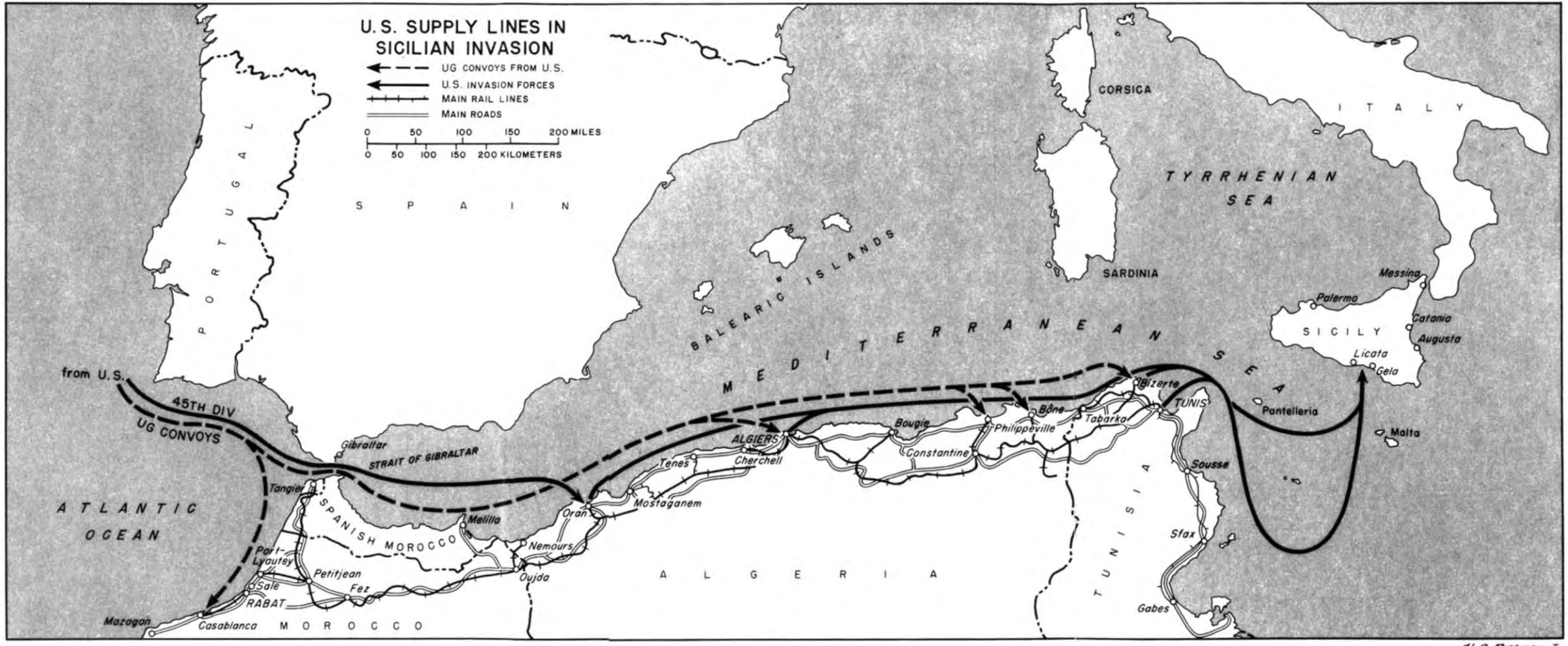
[26] Garland and Smyth, *Sicily and the Surrender of Italy*, ch. III.

[27] (1) Corresp in OPD Exec 3, Items 6, 7, 8, and 9. (2) Diary of a Certain Plan, entries for May, June 1943, Plng Div ASF. (3) H. H. Dunham, U.S. Army Transportation and the Conquest of Sicily, 1943, TC Historical Monograph 13 (hereafter cited as Dunham, Transportation and Sicily), pp. 77–78, MS, OCMH.

The Final Movements

The changed plan affected very little (in fact at that late date, could not affect significantly) the administrative arrangements in the United States for support of HUSKY. Setting D-day for July solved most of the problems of troop and landing craft deployment and of cargo shipping around which discussion had revolved in February and early March. Nevertheless, requirements tended to mount in almost every category right up to the day of the invasion.

For instance, troop movement schedules had to be fleshed out to meet new demands from the theater, particularly for service troops. By the end of April about 12,000 troops had been added to the schedule through mid-May, and more than 140,000 actually sailed during this period. The feat was accomplished by crowding about 7,000 troops into slow freighters and LST's, by inflating UGF–8 to the bursting point,



H. C. Brewer, Jr.

MAP 1

TABLE 6—TROOP BUILD-UP CONVOYS FOR HUSKY: APRIL–JUNE 1943

Sailing Date	Arrival Date	Movement Designation	Ships	Number of Troops	Composition	Remarks
1 April	19 April	UGS-7	31 cargo 10 tanker	146	1 med co	
2 April	13 April	UGF-7	12 transport	35,490	36th Inf Div, svc units, 3,200 repls	Includes troops on *Andes*, which sailed without escort 2 March; *Stirling Castle* sailed with convoy.
14 April	6 May	UGS-7A	36 cargo 9 tanker 17 LST	2,465	Svc trps	LST contingent also designated as UGL-3.
16 April	24 May	UGF-7-10W	1 transport	4,136	AAF and svc trps	*Mariposa* (substitute for *Pasteur*)
19 April	27 April	UGF-7-15W	1 transport	4,215	1 sta hosp, 3,900 repls	*Andes*
22 April	30 April	UGF-7-14W	1 transport	3,849	Coast Artillery and Ord trps, 3,571 repls	*Empress of Scotland*
28 April	20 May	UGS-8	44 cargo 10 tanker 5 LST	985	Coast Artillery, Armor, svc trps (incl 45th Div Task Force)	
29 April	11 May	UGF-8	19 transport 2 cargo 1 tanker	57,900	82d Abn Div, AAF, svc trps, 6,160 repls	Includes British aircraft carrier *Tracker*.

by squeezing still more troops into the special convoy of combat loaders that sailed on 10 May, and by using the fast unescorted transports to their full capacity. The U.S. 36th Infantry Division sailed for the theater in UGF–7 early in April, somewhat less schooled in mountain operations than General Eisenhower desired; the 82d Airborne sailed near the end of the month in UGF–8. On 8 June the combat-loaded 45th and attached units sailed as scheduled in UGF–9. Another troop convoy and added unescorted sailings in June brought the grand total of HUSKY troop deployment from the United States by the end of the month to about 186,000, and the strength of U.S. forces in the Mediterranean to 520,000—120,000 more than contemplated five months earlier at Casablanca.[28] (*Table 6*)

Cargo shipping schedules underwent the same sort of escalation. By the end of March the theater, alert to hints that more ships might be available, boosted its requirements. It restored earlier cuts

[28] (1) Strength of the Army Report, STM–30, 1 Jan 48. (2) Corresp, OPD Exec 3, Items 10, 11, 13.

TABLE 6—TROOP BUILD-UP CONVOYS FOR HUSKY: APRIL–JUNE 1943 (Continued)

Sailing Date	Arrival Date	Movement Designation	Ships	Number of Troops	Composition	Remarks
1 May	26 May	UGL-4	14 LST	2,322	Coast Artillery, Armor, Tank Destroyer (45th Div Task Force) 322 repls	
5 May	12 May	UGF-8A	1 transport	5,016	Svc trps	Transport not named in source.
10 May	23 May	UGF-8D	7 transport 4 cargo	14,681	Svc trps	Includes seatrains *Lakehurst and Texas*, and combat loaders for 36th Div. (See p. 40.)
14 May	20 May	UNO-1	1 transport	7,847	AAF, svc, 5 repl bns	*West Point*
14 May	3 June	UGS-8A	57 cargo 9 tanker 11 LST	1,515	Svc trps, 1,389 repls	
28 May	20 June	UGS-9	47 cargo 13 tanker	344	Svc trps, 97 repls	
8 June	13 June	UNO-2	1 transport	7,877	Repls	*Mariposa*
8 June	22 June	UGF-9	19 transport	21,350	45th Inf Div, engr and svc trps	Sailed combat-loaded.
10 June	21 June	UGF-9A	8 transport 1 cargo	10,469	Svc trps, 7,122 repls	
13 June	8 July	UGS-10	46 cargo 12 tanker	100	Not known	
17 June	26 June	UNO-3	1 transport	5,362	Svc trps, 4,633 repls	*West Point*

Source: Charts, Convoys to North Africa, Stat Sec, OSD, NYPOE.

and added heavy demands for more aviation gasoline—demands so large, in fact, that the Army-Navy Petroleum Board said they were "out of all reason."[29] By the end of April the allotment of cargo ships and tankers to UGS–7½ had grown well beyond the Navy's prescribed limit of 60 vessels. To reduce it to anything like manageable size, 10 freighters and 3 tankers had to be shifted to UGS–9, scheduled to sail at the end of May. When UGS–8½ actually sailed on 14 May, it consisted of 57 cargo ships, 9 tankers, and 11 LST's —the only convoy to exceed the Navy's 60-vessel limitation—and, with the 44 freighters that had sailed in UGS–8 on 28 April, brought the total number of cargo ships in the four build-up convoys to 168. As a result of setting the HUSKY target date in July, the build-up included UGS–9, which reached the the-

[29] Diary of a Certain Plan, 26 Mar 43, Plng Div ASF.

ater on 20 June, two days before the arrival of UGF–9 bringing the combat-loaded 45th Division. With the 47 cargo ships of UGS–9, plus 7 more sent in fast UGF convoys, the HUSKY build-up absorbed a total of 215 sailings, carrying well over 2 million measurement tons of cargo exclusive of bulk gasoline. Most of the theater's requests were filled, even the bulk of gasoline requirements originally labeled "out of all reason." The more than ample supply support for HUSKY was one evidence of the fading cargo shipping shortage, which in March had seemed an insuperable barrier to all overseas operations in 1943.

The movement of American landing craft to the theater got slightly ahead of schedule at the beginning only to fall behind later, the last of the LST's trickling in through May and early June, but they all arrived in time for a July operation. Contrary to Washington estimates, the assault shipping allotments proved something less than generous for landings on the scale of HUSKY. The estimates had taken personnel strength as the principal yardstick for requirements, but vehicle capacity proved to be the limiting factor. They had failed to make adequate provision for the large displacement of ordinary vehicles that resulted from loading as many as 400 tanks on LST's. As a result, 32 Liberty ships had to be especially fitted to bring vehicles, drivers, and cargo ashore in the immediate follow-up. Yet, despite all expedients to increase vehicle lift, vehicle allotments had to be pared down in a manner reminiscent of the cuts made in the North African landings. One of the prices that had to be paid for the cuts, and for the subsequent delay in capturing ports in the American sector, was that LST's were to be tied down in logistical ferrying operations long after the initial assaults.[30]

The Administrative Achievement

Despite the difficulties, support for HUSKY from the United States was adequate by any standards and, in some respects, very probably excessive. The smoothness with which movements were executed, once convoy schedules had jelled, was in marked contrast to the confusion that had characterized the mounting of TORCH. It gave evidence of a new maturity in the administrative echelons, particularly in Lt. Gen. Brehon B. Somervell's Army Service Forces (ASF), which carried the main burden of execution.

Until convoy schedules did begin to crystallize early in March, however, the staffs had to relive some of the confusion of TORCH. The Operations Division (OPD) was reluctant to inform either the Army Service Forces or the Army Ground Forces (AGF) of high-level decisions or to provide much other information needed for intelligent logistical planning. ASF had therefore to proceed during February on the basis of its own best guesses, largely independent of guidance from above, in anticipating special requirements for HUSKY and in assembling supplies and equipment at U.S. east coast depots. Somervell's hopes

[30] (1) Papers, OPD Exec 3, Items 8, 11, 13. (2) Diary of a Certain Plan, entries for April, May 1943, Plng Div ASF. (3) Joseph Bykofsky and Harold Larson, *The Transportation Corps: Operations Overseas*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1957), p. 193. (4) Samuel Eliot Morison, "History of United States Naval Operations in World War II," vol. IX, *Sicily—Salerno—Anzio, January 1943—June 1944* (Boston: Little, Brown and Company, 1954), 30–32.

that it might be possible to ship some equipment in bulk ahead of troops were, for the most part, disappointed.

The confused state of high-level planning itself, as well as ASF's lack of knowledge of it, was reflected in the March movements. Throughout February it remained uncertain whether the 36th Division would sail in UGF–7 (at the end of March) or later. The uncertainty disrupted the whole process of setting up troops for that convoy and for UGF–8, and of cargo for the UGS convoys. Under "normal" procedures—which thus far had only rarely been followed—the supply and transportation staffs were supposed to receive firm troop lists two months before convoy sailing dates. Since the sailing date for the 36th was not determined until the 5 March decisions of the CCS were handed down, nothing like two months remained for preparations. Considerable confusion resulted. At the end of February the division was awaiting orders, its training suspended, one combat team in western Virginia, having completed a brief stint of mountain training, the remainder, which was to have followed it, still at Camp Edwards, Massachusetts. Once the CCS decision was known, orders were issued immediately for the division to sail from New York on 2 April in UGF–7. Most of its units were to stage through Camp Edwards, the combat team in Virginia through Camp Kilmer or Fort Dix. The impact of all the backing and filling was evident, however, when UGF–7 sailed on schedule but with only 30,000 troops instead of the 40,000 planned for.[31]



GENERAL SOMERVELL

With convoy schedules firm, the atmosphere of preparations changed almost overnight. Early in March, almost two months before UGF–8 was due to sail with the 82d Airborne, ASF had a complete (though of course still tentative), troop list for all the HUSKY build-up convoys, including the combat-loaded 45th Division. At about the same time the slow cargo convoy schedules began to shape up. The staffs immediately began developing their own schedules for movement of units to staging areas

[31] (1) Task Force Chronology, Feb–Mar 43, Plng Div ASF. (2) Diary of a Certain Plan, entries of 13 Feb–5 Mar 43, Plng Div ASF. (3) Memo, OPD for CsTechSvcs, 2 Mar 43, sub: Reserves of Amphibious Supplies and Equipment, OPD 475 (Equip of Troops), Sec 1, Case 21. (4) Memo, Gen Somervell for Maj Gen LeRoy Lutes, 22 Feb 43, folder, Opns SOS 1942–43, Hq ASF. (5) Robert R. Palmer, Bell I. Wiley, and William R. Keast, *The Procurement and Training of Ground Combat Troops*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1948), p. 580. (6) Capt. T. P. Govan, Training in Mountain and Winter Warfare, AGF Study No. 23, p. 9, MS, OCMH. (7) Charts, Convoys to N Africa, Stat Sec, Overseas Supply Div, NYPOE.

and ports and filling equipment shortages. ASF promptly produced a detailed forecast matching prospective cargo space set up with its own estimate of the theater's cargo requirements; this forecast became the basis of the transatlantic debate in March and April over the theater's shipping needs.[32]

New York port officers remembered the movement of which UGF–8 was a part as one of the biggest and most smoothly executed operations of their wartime experience. For days troop trains rolled endlessly into staging areas and through New York City to shipside in carefully planned sequence and on time. Units were up to strength, equipment was in order. Within 24 hours upwards of 80,000 troops filed aboard ship in New York harbor, and early on the morning of 29 April 19 transports carrying almost 60,000 troops headed for the rendezvous point to pick up their escorts for the trip to North Africa.[33]

Mounting the 45th Division task force posed special problems because, unlike the other forces sent from the United States for HUSKY, it sailed in combat loaders directly (except for a short layover for rehearsals at Oran) to the assault. For this very reason, however, the preparation of the force did not become seriously entangled in the problems of convoy scheduling from which most of the administrative confusion of February stemmed. Its movement, in any case, took place so late that most arrangements could await crystallization of convoy schedules early in March.

The long delay in formation of the final tactical plan did not disrupt preparations for movement of the 45th as much as might have been expected. Theoretically, the plan should have governed the detailed composition of the assault forces, their material requirements, the manner of their assault loading, and the time of their departure. By early April, however, assault shipping allotments had already set strict limits to the size and to some extent the tactical composition and employment of all the assault forces insofar as they were dictated by the technical characteristics of the vessels. The various elements of the 45th Division task force had already been earmarked, and the 8 April listing of theater requirements merely confirmed them; their sailing date was also fixed within narrow limits. Later in April, when Eisenhower requested some comparatively minor changes, he was informed that the arrangements could be changed only if the sailing date of the convoy were postponed or the force were conventionally loaded. When the entire tactical conception of the assault was revised a few days later, the new plan merely changed the tactical objectives of the 45th Division force without altering its composition or the time of its sailing.[34]

The preparation and movement of the 45th Division task force provided the first major test for procedures standardized early in 1943. These procedures represented a distillation of much hard-

[32] (1) Task Force Chronology, 6 and 13 Mar 43. (2) Diary of a Certain Plan, entries for 1 and 2 Mar 43. Both in Planning Div ASF.

[33] (1) Interview, Leo J. Meyer, former Troop Movement Officer, NYPOE, with authors, 30 Jul 57. (2) W. Forrest Dawson, ed. and comp., *Saga of the All American* (Atlanta, Ga.: Albert Love Enterprises, 1946), prepared under auspices of 82d Abn Div Assoc., Inc.

[34] (1) Msg 150, Marshall for Eisenhower, 26 Apr 43, OPD Exec 3, Item 10. (2) Msg 2641, Algiers to AGWAR, 8 Apr 43, Exec 3, Item 11.

won administrative experience, gained particularly in mounting TORCH's Western Task Force. Responsibilities were carefully delineated and more decentralized than for TORCH. Army Ground Forces was responsible for training and readying the force for movement (Western Task Force had been controlled directly by the War Department), with the U.S. Second Army and Amphibious Force, Atlantic Fleet, carrying out most of the training; Army Service Forces handled supply and transportation, and, through the port of embarkation (Hampton Roads, Virginia), controlled the movement process from the time the force moved into the staging area.[35] The Troop Movements Section of OPD acted as control center for the movement; the chief of Movements Branch, ASF, assisted by one officer on the port staff and one from the task force staff, closely supervised and followed through on each step of the process. The force was first concentrated early in May at Camp Pickett, Virginia, within easy reach of Hampton Roads, and there continued its training until shortly before the sailing date, when it moved into Camp Patrick Henry, the new staging area just outside the port. All this was a vast improvement over the TORCH experience, when the Western Task Force had flowed into the port area from locations up and down the eastern seaboard.

A new set of procedures, Preparation for Overseas Movement (POM), inaugurated in February 1943, governed HUSKY troop movements. Troop commanders down to the small-unit level received a printed pamphlet of detailed instructions as long as three months in advance of the sailing date. The 45th's movement orders came out on 21 April, and had been preceded a week earlier by a basic directive issued by OPD containing a firm list of units of the force and special requirements for equipment and supplies, fixing levels of supply to accompany the force (21 days, and 7 units of fire), and assigning responsibilities. The date for concentration at Camp Pickett was set as on or about 10 May. Unlike the orders for Western Task Force, in which units had been broken down and rearranged by transport loads and subtask groups, the 45th Division movement orders were of the "normal" type, issued for the force as a whole under a single shipment code. By this method movement orders could be sent out six weeks before the sailing date (as against three weeks for Western Task Force), and well before loading plans began to take form. Detailed assignments to ships were made after the force reached the staging area. Also "normal" was the procedure of issuing orders for shipment of bulk supplies at the same time as the troop movement orders, thus giving the technical services ample time to ship them to port.[36]

To staff officers who had lived through the chaos of loading the TORCH forces, the loading of the 45th Division was a summer idyll. Planning began in mid-April and, though temporarily unhinged

[35] Palmer, Wiley, and Keast, *The Procurement and Training of Ground Combat Troops*, pp. 567, 580.

[36] (1) Copies of basic directive and movement orders are in History of Mobilization Division, ASF, prepared by Mobilization Div, ASF, vol. 4, sec. 2, MS, OCMH. (2) Maj. W. R. Wheeler, *The Road to Victory, A History of Hampton Roads Port of Embarkation in World War II*, 2 vols. (Newport News, Va., 1946), I, 85. (3) Dunham, Transportation and Sicily, pp. 51–55. (4) Leighton and Coakley, *Global Logistics, 1940–43*, pp. 441–42, 646–48.

by the change in the tactical plan early in May, proceeded without serious delay or interruption. Markings on freight shipments to the port were relatively simple — all bulk supplies and equipment, for example, were shipped under two codes, one for Newport News, the other for Norfolk — and freight movements into the port area were carefully controlled.

Inevitable last-minute shipments to the port, some of which had to be flown in to meet the deadline, did complicate loading. The division posted a staff officer at the port to reroute them by truck to the staging area in order to have them checked off the final shortage lists—a procedure that would not have been feasible had distances been greater. Loading plans for individual vessels, drawn up by the transport quartermasters, came in too late for the port staff to have bulk supplies on hand to fill unused space in deep tanks and lower holds, with the result that the ships had to sail lightly loaded. Loading itself proceeded smoothly in two installments. One group of vessels was loaded from 25 May to 29 May; the other was loaded from 31 May to 4 June, and included the five AKA's of the assault convoy and the eight Liberty's that were to sail with UGS–10 a few days later. The 21,000 troops of the task force embarked in a single day, and in the early morning of 8 June the transports set sail. It was the last combat-loaded convoy to leave the United States from the Atlantic coast during World War II.[37]

Effects of Husky on Bolero

The concentrated effort, British as well as American, that went into insuring the success of HUSKY produced the desired results. Sicily was overrun in a spectacularly successful 39-day campaign in July and August. In the meantime, the commitments of troops, supplies, naval escort, and assault, personnel, and cargo shipping—all well above the scales agreed at Casablanca—levied heavy costs on the already reduced build-up in the British Isles, delaying the Combined Bomber Offensive and dashing any lingering hopes that Allied forces might seize even a small bridgehead in France in 1943. Events seemed to have conspired to force upon BOLERO-SICKLE all the sacrifices entailed in either shipping shortages or increased demands from theaters where active operations were in progress. The British, convinced that great opportunities were opening up in the Mediterranean, supported demands for Sicily without a murmer. The U.S. Joint Chiefs, much more sceptical about this operation, nevertheless felt compelled to yield to the requests of an American commander. In doing so, they still sought to keep the build-up in Pacific and Far Eastern areas on schedule, thus leaving BOLERO-SICKLE as the only deployment program from which to draw additional resources for the Mediterranean.

HUSKY absorbed very nearly all the assault shipping then available in the Atlantic. The final British contribution almost wiped out the reserve of landing

[37] (1) Dunham, Transportation and Sicily, pp. 53, 56–58. (2) Wheeler, *Road to Victory*, I, 86–88. (3) Maj. M. C. Nicholl, SOP for Future Combat Loaded Movements, copy in Log File, OCMH. (4) Memo, ACofT for Dir NTS, 11 Jun 43, OCT 563.5 Afr 1943. (5) Memo, Lutes for Somervell, 5 Jun 43, sub: Weekly Summary Major Current Operations, Lutes File. (6) Chart, Convoys to N Africa, Strategy Sec, Overseas Supply Div, NYPOE. (7) Diary of a Certain Plan, entries during Apr 43, Plng Div ASF.

ships and craft in the United Kingdom that was being held for training and Channel raids. Although the U.S. Navy retained a small reserve of large landing craft against the possibility of other European operations, it committed to HUSKY about all that could be made ready in the theater in time for the operation in addition to its entire fleet of combat loaders in the Atlantic area.[38] This absorption of assault shipping in HUSKY, more than anything else, administered the deathblow to any hopes for even a small-scale landing in France in 1943.

Moreover, the already lagging build-up in Great Britain received almost the whole impact of the augmented HUSKY personnel movement and the increased shipments of troops for the Tunisian campaign. The BOLERO deployment goal of 80,000 troops in the first quarter of 1943, agreed on at Casablanca, became unrealizable when General Eisenhower's demands in February and March for additional forces pre-empted available troop transports and, even more, the escort vessels needed to convoy them. Only 18,000 troops sailed for England during the first three months of 1943, almost all aboard British transports. The continuing drain of U.S. forces from England to North Africa, meanwhile, by the end of February reduced the American establishment there to less than 105,000 men—its nadir, as events proved.[39]

In the uncertain atmosphere of February and March, deployment estimates for the rest of 1943 had to be made without a solid foundation in either a strategic plan for the invasion of western Europe or a realistic appraisal of the shipping situation. General Somervell's estimate at Casablanca that 1,118,000 U.S. troops could be supported in the British Isles by the end of 1943 rested on the expectation that, although cargo shipping would be tight until about mid-year, declining losses and mounting construction thereafter, together with savings in turnaround resulting from the hoped-for opening of the Mediterranean, would probably make enough tonnage available in the Atlantic to support any deployment to England for which troop transports and escorts could be found. Somervell's proposed program, which the CCS adopted at Casablanca as a basis for logistical planning, consequently scheduled almost three-fourths of the entire U.S.-to-U.K. troop movement in the last half of the year when cargo shipping was expected to be relatively plentiful.[40]

Back in Washington after the conference, Army strategic planners began to have second thoughts. Somervell's program allowed for only 172,000 AAF troops, a figure air planners declared completely inadequate for the full-scale bombing offensive against Germany ordered at Casablanca. It also seemed imperative to amass a balanced force of six American ground divisions in the United Kingdom by midsummer to take advantage of any sudden deterioration of Ger-

[38] Early in May the Navy expected to have 26 LST's, 12 LCI(L)'s, and 39 LCT's in the Atlantic over and above vessels assigned the Mediterranean. See JCS 291/1, 8 May 43, title: Invasion of European Continent from U.K. in 1943–44, app. A, Tabs I, II, III, IV.

[39] (1) Roland G. Ruppenthal, *Logistical Support of the Armies I* (hereafter cited as Ruppenthal, *Logistical Support I*), UNITED STATES ARMY IN WORLD WAR II (Washington, 1953), p. 118. (2) Leighton and Coakley, *Global Logistics, 1940–43*, pp. 486–87.

[40] CCS 172, 22 Jan 43, note by Gen Somervell, title: Shpg Capabilities for BOLERO Build-up.

man strength. Working toward these objectives, and virtually ignoring the indicated limitations on shipping, Army planners late in February 1943 produced a new deployment program that envisaged movement of more than 300,000 troops to Great Britain in the second quarter of the year and almost as many in the third quarter. At the end of 1943 the schedule tapered off rapidly to a terminal strength of 989,000 men, almost 130,000 short of the Casablanca goal, partly in recognition of the first-quarter deployment lag, but also reflecting increased commitments to the Pacific. More than one-half of the total forces scheduled to be sent to England in 1943 were to be AAF troops.[41]

Somervell, who had lowered his sights since Casablanca, bluntly characterized the OPD program as unrealistic. If the expanded and accelerated air force build-up was to be carried out, he told OPD early in March, no large movement of ground troops to England would be possible before midyear, and the total build-up would fall well short of 900,000. Even that could be accomplished, he stated, only by heavy cuts in the volume of American shipping committed to the British Import Program. His estimate for the second quarter of 1943 was that available cargo shipping, supplemented by diversions from the British program, would support the movement of 123,000 American troops to the British Isles in April, May, and June, as opposed to a Casablanca estimate of 169,000, and the 300,000 estimate of the OPD program.[42]

Even Somervell's lowered estimates disappeared into the mists with the 5 March CCS decision to divert British transports from BOLERO-SICKLE to meet Eisenhower's demand for 38,000 additional troops for HUSKY. Actually, the shipping arrangements agreed upon were intricate, and the impact on BOLERO was heavier in diversion of naval escorts than in loss of troop-carrying capacity as such. With British and American vessels remaining on the North Atlantic run, it might have been possible to move about 109,000 U.S. troops to the United Kingdom in April, May, and June had escorts been available for the slow vessels—lacking escorts, the movement fell short. Only 3,300 troops left the United States for England in April; in May transports with a capacity of about 15,000 were shifted to the Pacific where they could be used without escort. By various expedients, shipments to England were stepped up in the last part of May and a total second-quarter movement of about 77,000 was realized. This was still well under half of the Casablanca goal and, with the strategic bombing offensive holding top priority, ground forces in England increased by only 3,600 during the period.[43]

It was perhaps symptomatic of the disparity between American hopes for BOLERO and the actual disposition of

[41] Memo, ACofS OPD, for Com, 23 Feb 43, sub: Deployment of U.S. Army Forces in 1943, with attached com rpt, ABC 320.2 (3-14-43) Sec 1.

[42] (1) Memo, Somervell for ACofS OPD, 3 Mar 43, sub: Scheme of Deployment for U.S. Army Forces in 1943, folder ACofS OPD 1942–44, Hq ASF. (2) Leighton and Coakley, *Global Logistics, 1940–43*, pp. 677, 687–90.

[43] (1) CCS 182/2, 3 Mar 43. (2) Min, 74th mtg CCS (Suppl), 5 Mar 43. (3) Msg 106, Marshall to Eisenhower, 15 Apr 43. (4) Msg 6597, 23 Apr 43. (3) and (4) in OPD Exec 3, Item 10. (5) Msg 5967, Algiers to AGWAR, 21 Apr 43, OPD Exec 3, Item 11. (6) Memo, Brig Gen Robert H. Wylie, ACofT, for OPD, 3 Mar 43, sub: Lift for U.K. During Mar and Apr, OCT HB, folder Plng Div Studies. (7) Leighton and Coakley, *Global Logistics, 1940–43*, app. E. (8) Ruppenthal, *Logistical Support, I*, 129.

American resources that, pending a more thorough study of shipping capabilities, the JCS approved the OPD deployment program despite its obvious lack of realism. The program was to remain the official statement of American deployment objectives, though a dead letter as far as actual deployment planning was concerned, until some time after the TRIDENT Conference in May.[44]

Cargo Shipping and the Preshipment Plan

The impact of the enlarged HUSKY supply program upon cargo movements to the United Kingdom is much harder to assess. It can hardly be doubted that without it the build-up of American material in England would have been resumed on a far greater scale in spring 1943. On the other hand, from April onward the shipping authorities were able to provide more space for cargo than the Army could fill. The conclusion seems warranted that HUSKY's impact on BOLERO cargo movements, at least after April 1943, could be measured more accurately in terms of dislocations and diversion of supplies than in any real shortage of cargo space for transatlantic movements.

The ASF staff could not foresee these developments in February and March 1943. They did, however, begin to explore the possibility of expanding the flow of material to the United Kingdom, regardless of the dwindling flow of troops. The scheme for "preshipment" of equipment and supplies had been an integral part of the original BOLERO plan of 1942. Though the experiment had not been a notable success at that time, the conditions under which it was undertaken hardly permitted a fair trial.[45] Convinced of the essential soundness of the idea, the ASF staff sought to revive the plan.

The most compelling argument for preshipment was the advisability of shipping as much cargo as possible across the Atlantic during the spring and summer, when port operations in the United Kingdom would be least affected by darkness and enemy air activity. In the winter the capacity of both ports and the inland transportation system in the British Isles could be expected to shrink; while later, as D-day approached, movements of troops, vehicles, and freight into the ports, preparatory to the Channel crossing would impose drastic limits on incoming traffic. Presuming that the ultimate goal was to amass the largest possible force in the British Isles, it seemed imperative to start at once to move across the Atlantic the mountains of material that would be needed to house, service, equip, and support it. The heaviest troop flow (the official deployment program notwithstanding) seemed likely to occur late in 1943 and early in 1944. A large cargo movement before that time would therefore necessarily involve advance shipment of much of the equipment and supplies that normally accompanied or followed troops, as well as construction equipment and materials needed for reception and storage facilities and for troop housing.

The European Theater of Operations (ETOUSA) was already advocating preshipment, less because of concern over

[44] (1) JCS 249 (Rev), 12 May 43, title: Strategic Deployment of U.S. Forces for 1943. (2) Leighton and Coakley, *Global Logistics, 1940–43*, pp. 702–05.

[45] See Leighton and Coakley, *Global Logistics, 1940–43*, pp. 368–76.

the long-range problems of the build-up than because of a desire to receive individual and organizational equipment well in advance of the troops who would use it. As were other theaters in early 1943, ETOUSA was having its troubles in marrying up troops and equipment under the existing system whereby troops on fast transports normally arrived at their destinations far ahead of the slow freighters carrying their equipment. Preshipment in this sense aimed at more efficient administration of the process of equipping and training the individual soldier and troop unit after arrival overseas, rather than at large-scale stockpiling of material in the theater, the goal of the ASF staff. Yet the two concepts tended to merge in practice and the term preshipment was usually applied to both.[46]

While on an overseas tour following the Casablanca Conference, General Somervell collected a sheaf of complaints in several theaters about equipment arriving late, and on his return to Washington he pressed OPD for a policy decision on the European theater's requests. Early in March OPD ruled against a change in established troop movement procedures because of the continuing shortages of many categories of equipment, the uncertain outlook for shipping, and the lack of firm troop movement schedules for the next few months. The difficulties argued for themselves. There was no assurance that enough material could be found for a really large stockpiling program in Great Britain over and above the needs of other theaters and of the still-expanding forces in training in the United States. Production had increased mightily since the summer of 1942, but so had the scale of both overseas operations and zone of interior (ZI) training. Whether the depot system in England had matured sufficiently to handle a massive build-up posed another serious question. Theater officials stressed their need for more service troops, and the prospects were not bright for sending any appreciable number in the foreseeable future.[47]

An even more basic objection was the uncertainty that still beclouded the strategy of the European war. Without a reasonable assurance that a major cross-Channel invasion would be carried out in 1944, OPD officers did not want to sanction the stockpiling of material in England that might eventually have to be reloaded and shipped to another theater. Moreover, the shipping crisis in mid-March seemed to render the whole question academic. The American staffs hastily calculated that if all requested support was given to the British, no cargo shipping at all would be available to support troop movements to England in the second quarter, and only enough for an estimated 39,000 troops in the third quarter.[48]

Despite the gathering gloom, the ASF continued to prepare for an early re-

[46] (1) History of the Planning Division, Army Service Forces (2 vols. Text and 10 vols. Documentary Supplement) prepared by Planning Div, Office Dir Plans and Opns, ASF (hereafter cited as History Planning Div ASF), Text, I, 97–98, MS, OCMH. (2) Ruppenthal, *Logistical Support I*, 133. (3) Bykofsky and Larson, *The Transportation Corps: Operations Overseas*, pp. 98–99. (4) On preshipment generally, see below, Chapter VI.

[47] (1) Memo, Gen Lutes for Maj Gen Wilhelm D. Styer, 5 Mar 43, Notes on Lutes File, OCMH. (2) Msg R–6661, OPD to CG ETO, 14 Mar 43, folder U.K. Security, 1 Jan 43 to 15 Apr 43, Plng Div ASF. (3) Bykofsky and Larson, *The Transportation Corps: Operations Overseas*, p. 99.

[48] See Leighton and Coakley, *Global Logistics, 1940–43*, pp. 690–702.

sumption of large-scale cargo shipments to Britain, and on 16 March OPD, though still hoping for an increase in troop lift during the summer to permit a balanced flow of troops and cargo, reversed its earlier position by agreeing reluctantly and cautiously to ship equipment in advance of troops if necessary. Thus encouraged, ASF directed the technical services to begin procurement and stockpiling of certain categories of material for a force of about 900,000, and began to press OPD for a firm troop basis on which supply requirements could be calculated in detail. Meanwhile, on 10 March General Somervell submitted to the War Shipping Administration cargo shipping requirements for 42 sailings on Army account to the United Kingdom in April and slightly more in each of the two succeeding months. This was almost three times the volume of shipments planned in March.[49]

WSA was therefore well aware of both the BOLERO requirements and the increased schedules for HUSKY when Lewis Douglas assured the President on 29 March that enough cargo shipping would be available to meet the actual, though perhaps not the stated, military shipping requirements in April. Obviously, Douglas suspected that the stated military requirements, allegedly threatened by the British demands, concealed so many allowances to cover errors, contingencies, and waste that they could be drastically reduced without danger to vital objectives. Part of what Douglas had in mind with regard to the build-up in the United Kingdom had become apparent earlier in the month when he had proposed to General Gross, Chief of Transportation, that military and commercial cargoes be pooled and efficiently distributed among ships sailing to Britain on WSA, British, and U.S. Army account. Douglas held that millions of cubic feet of space were being wasted each month in commercial sailings in the North Atlantic for want of suitable measurement cargo, while at the same time ships allocated to the Army on the BOLERO run had insufficient weight cargo to bring them down to their Plimsoll lines. He contended that each commercial loading could be "full" as well as "down," while Army BOLERO shipments could be loaded "down" as well as "full"—that is, using full weight and cubic capacity in both cases.[50]

General Gross enthusiastically approved, and the British proved more than willing for U.S. Army cargo to be pooled with British imports, provided the distribution of incoming cargoes did not overtax the capacity of ports and inland transportation. Meanwhile, in keeping with his views, Douglas' immediate response to Somervell's request for 42 BOLERO-SICKLE ships in April was to offer, as an advance, the equivalent of about 82,000 measurement tons of space in commercial sailings for March while he looked into the April requirement.[51]

[49] (1) Chronology in Memo, Col. Richard D. Meyer for Gen Wylie, ACofT, 9 Apr 43, folder Cargo, OCT HB Wylie File. (2) Memo, Lutes for Dir Distr SOS, 6 Mar 43; (3) Memo for Dir Pls Div, SOS, 16 Mar 43. (2) and (3) in Notes on Lutes File, OCMH. (4) Memo, Somervell for Douglas, 10 Mar 43, folder Army Reqmts 1 Jan 43, WSA Douglas File.

[50] (1) Douglas Diary, Notes on Conf with Gen Gross, 1 Mar 43. (2) Memo, Douglas, 9 Mar 43. Both in folder Army Reqmts 1 Jan 43, WSA Douglas File.

[51] (1) Ltr, Gross to Douglas, 11 Mar 43, with related material in OCT 563.5 England Jan–Apr 43. (2) Memo, Douglas for Somervell, 11 Mar 43. (3) Msg, Harriman to Douglas, 27 Mar 43. Last two in folder Army Reqmts 1 Jan 43, WSA Douglas File.

Whatever complications and headaches these arrangements involved for theater receiving agencies, they promised to provide a considerably greater amount of cargo space for BOLERO shipments, probably as much as a million measurement tons during the rest of 1943. Of the 42 sailings Somervell had requested for April, Douglas hoped to find the equivalent of 10 this way.[52] While he was trying to line up the other 32 ships, the requirement itself began to shrink as WSA apparently had expected. It soon became evident that the Army had little cargo to offer in March to fill commercial space, and shipments in that month actually totaled only 115,000 measurement tons, not much more than in February. At the end of the month, when Douglas informed the President that military requirements for April could be met, the BOLERO requirement was set officially at 18 ships plus 100,000 tons of measurement cargo to be loaded on commercial sailings, a total of approximately 280,000 tons.[53]

The ASF failed to provide enough cargo to meet even this reduced goal. The cargo theoretically available simply did not materialize at New York and Boston, or came too late to be loaded aboard ship by the end of April. The reasons were many and varied. OPD was not yet firmly enough committed to the preshipment principle to allow organizational equipment to be preshipped unless units had been definitely scheduled for the ETO; early in the month it ruled that equipment could be taken from units for preshipment no earlier than 30 days before their scheduled sailing dates. Several troop units scheduled for April sailings to the United Kingdom received unsatisfactory status reports; their departure was consequently delayed and their organizational equipment could not be shipped. The North African Theater was still a powerful attraction for both units and material. Some units were diverted from Great Britain to North Africa, taking their equipment with them. The increase in the UGS–8 convoy confused both ship allocations and the assembly of troop equipment. Of Somervell's original 42 ships only 8 sailed before the end of April on Army account, 4 of them carryovers from March; some 45,300 measurement tons of cargo were turned over to WSA for commercial loading. Official statistics generously estimated total Army cargo shipments to the United Kingdom in April as 135,000 measurement tons—less than half of even the reduced target set at the beginning of the month.[54] The whole experience became an embarrassment to ASF officials vis-à-vis WSA in

[52] These requirements for sailings were normally expressed in terms of "notional" vessels possessing a theoretical capacity of 10,000 measurement tons, or approximately the equivalent of a Liberty ship.

[53] (1) Memo, Keating for Douglas, 13 May 43, folder Army Reqmts 1 Jan 43, WSA Douglas File. (2) Ltr, Gross to Douglas, 30 Mar 43, OCT 563.5 England Jan–Apr 43. (3) Gross requested that WSA furnish 3,000 tons of steel or other "close stowing cargo" to fill each of the 18 Army ships.

[54] (1) Memo, Maj V. C. Short, TC Liaison Officer, for W. J. Darcy, Mgr, A and N Dept, WSA, 7 June 43, sub: The U. K. Schedule Month by Month, OCT 565.2 England Jun 43. (2) Control Division ASF, *Statistical Review, World War II* (Washington, 1946), p. 131. (3) Memo, Col John M. Franklin, Chief, Water Div TC, for Gen Wylie, 9 Apr 43, sub: Cargo Sit for U.K. (4) Memo, Col Norman H. Vissering for Chief, Water Div OCofT, 15 Apr 43, sub: Cargo for U.K., OCT 563.5 England Jan–Apr 43. (5) Diary, Theater Br, Plng Div ASF, 3, 6, 13 Apr 43. (6) Memo, Col Carter B. Magruder for Gen Lutes, 24 Apr 43, sub: Cargo Reqmts, folder 18 Shpg File, III, Case 50, ASF Plng Div.

view of their earlier reactions to the British request for shipping.[55]

The fiasco of the April shipments also demonstrated the need for a clearer policy on preshipment. In vindication of Douglas' judgment, the cargo shipping situation was improving rapidly and by mid-April even ASF officials were ready to admit that the promised volume of assistance to the British Import Program would still leave a surplus of cargo space available for movements to the United Kingdom. On 17 April Maj. Gen. LeRoy Lutes, chief of ASF's Operations Directorate, calculated that a total of 3.2 million measurement tons would be available for BOLERO cargo over the next four months, an excess of 800,000 tons over that required for even the 300,000 troops supposed to move to England during that period under the existing unrealistic OPD deployment schedule.[56]

Preshipment seemed the only means by which the space estimated could be filled, since actual troop movements promised to be much less than 300,000. But finding the cargoes promised to be no easy task. The Army's cupboard in spring 1943, although not bare, was still not bulging. Critical supplies and equipment were distributed under a priorities system that allowed 50 percent (for divisional) and 20 percent (for non-divisional) forces in training, and 100 percent for all troops moving or preparing to move overseas. For items over and above authorized allowances the system rated theaters in descending scale of importance; in this scale, BOLERO-SICKLE did not rate high. The Air Forces buildup (SICKLE) was subordinate to operations in the Mediterranean, and bracketed with current operations in the Pacific; the BOLERO program ranked even below preparations for the Burma operation. Preshipment had to compete with troops in training for supplies and equipment, and Army Ground Forces constantly complained that training allowances were inadequate.[57]

On 16 April, with the prospects of BOLERO cargo in May so poor that a responsible Transportation Corps official wanted to limit the request to WSA to ten sailings for that month, General Lutes personally sought a decision from Brig. Gen. John E. Hull, Chief of OPD's Theater Group. He learned that OPD had decided to steer a middle course. Only a few days earlier OPD had, over the remonstrances of other General Staff divisions, turned down a plea from Lt. Gen. Lesley J. McNair, commanding general of Army Ground Forces, for an increase in established training allowances. But it was not ready to authorize large-scale stockpiling in the United Kingdom at the expense of McNair's needs for training. In response to Lutes' representations, Hull authorized advance shipments of all general purpose vehicles, Class IV supplies and equipment, and 45 days' combat maintenance against the entire 1943 ETOUSA troop basis; also, shipment of all organizational equipment of units definitely scheduled to sail for the ETO 30 days in advance of their sailing date. Hull insisted, however, that advance shipments must not involve either taking equipment from troops in training or result

[55] Douglas' Min of Conf, 7 Mar 43, folder CCS Reqmts and Availables 1943, WSA Conway File.

[56] Memo, Lutes for Dir Stock Control Div, ASF, 17 Apr 43, sub: Cargo Shipmts to U.K., in History of Preshipment, prepared by Distribution Div, ASF, Annex 3, MS, OCMH.

[57] On the priorities system, see below, Chapter VI.

in preventing them from receiving their authorized percentage allowances at successive stages. And the "troop basis" against which shipments were to be projected was purely a stopgap, based on the existing outdated joint deployment plan.[58]

It was thus a much watered-down preshipment policy that took form in the spring of 1943. Nevertheless, ASF was able to issue its first preshipment directive on 17 April and to expedite cargo for May shipment considerably. By the end of April it appeared that some 460,000 tons might be available and the Transportation Corps, cautiously this time, asked WSA for 34 BOLERO ships on Army account for May in addition to cargo space on commercial sailings.[59]

Any long-range planning under this makeshift directive and troop basis proved impossible. OPD promised a more definite troop basis in response to General Lutes' urging, but, considering the strategic uncertainties of the period before the TRIDENT Conference, the time could hardly have been less propitious for making the predictions that this involved. On 21 April ASF officials working up preshipment plans on the basis of the existing JCS projection of 900,000 men in England by the end of the year were abruptly told by OPD that the target would have to be lowered to 650,000 "in view of certain overall developments."[60] A week later, an ASF staff paper noted "it is currently understood that there is to be a major change in the entire strategic plan . . . the idea of cross-Channel operations is to be abandoned, and the ground forces in the U.K. are to be reduced . . . to approximately one reinforced corps. . . ."[61] These developments, reflecting the current doubts Army strategic planners were themselves feeling about BOLERO, threatened to undermine the whole basis of the preshipment program. ASF was permitted to proceed with arrangements for May shipments but the reduction in target troop strength, if carried out, would obviously require modification of plans for shipments beginning in June. Thus, despite the dissolution of the cargo shipping crisis, BOLERO continued in a state of limbo pending resolution of the strategic uncertainties surrounding it.

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[58] (1) MFR with Memo, Lutes for Stock Control Div ASF, 17 Apr 43. (2) Memo, OPD for G–4, 14 Apr 43, sub: Equipment for AGF, with related papers in OPD 475 Equip of Troops, Case 25.

[59] (1) *Ibid.* (2). (2) Memo, Vissering for Chief, Water Div TC, 15 Apr 43. (3) Memo, Vissering for CofT, 29 Apr 43, sub: Daily Rpt of U.K. Cargo for May. (2) and (3) in OCT 563.5 England Jan–Apr 43.

[60] Diary, Theater Br, 21 Apr 43, Plng Div ASF.

[61] Paper, Summary, BOLERO, 27 Apr 43, folder Current Opns, Item 3-a, Plng Div ASF.

CHAPTER III

TRIDENT

With victory in Tunisia all but complete and preparations for the Sicilian invasion moving into the final stages, the leaders of the Western alliance met again in Washington, 12–25 May 1943, for their third great wartime conference, TRIDENT. The occasion seemed auspicious. As Churchill declared in his opening remarks, the Allies for the first time could sense "the authority and prestige of victory," and feel that now it was possible, as it had not been at Casablanca, "to grasp the fruits of our success."[1]

To do so required resolution of the differences in outlook between British and Americans and agreement on a long-range strategy for the global war on which to base allocations of resources and firm logistical plans. Yet the sense of common purpose was overlaid by a deepening mutual distrust. The U.S. Chiefs of Staff came to TRIDENT convinced that if the course of action urged by the British were adopted, Allied resources would be frittered away in an indecisive area of Europe while Japanese power grew unchecked on the other side of the world. The divergence between U.S. and British strategy, according to a committee analysis endorsed by the JCS on the eve of the conference, was between a "global" strategy and an essentially parochial one. The Americans were striving to end both wars — the whole war—as quickly as possible. British strategy, in disturbing contrast, was represented as being narrowly European in its orientation and, within that framework, dangerously addicted to politically motivated "periphery-pecking" enterprises in the Mediterranean, while postponing indefinitely the decisive test of strength in northwestern Europe. As for the war against Japan, the committee warned:

> Much can happen between now and the defeat of Germany to blunt the British willingness to undertake an "all-out" war against Japan. The British have consistently indicated a surprising lack of concern about the Far East. They may be counted upon to perform the letter of their commitments in this connection, but they are traditionally expert at meeting the letter while avoiding the spirit of commitments. . . .[2]

American distrust was reciprocated. About to leave for the conference, Field Marshal Sir Alan Brooke, Chief of the Imperial General Staff, noted in his diary, "Casablanca has taught me too much. Agreement after agreement may

[1] Min, 1st White House Mtg, TRIDENT, 12 May 43.

[2] (1) JCS 283, rpt by JSSC, 3 May 43, title: Current British Policy and Strategy in Relation to That of the U.S.; approved by JCS at 78th mtg JCS, 8 May 43. (2) See also Min, 83d mtg CCS, 13 May 43, Annex A, Global Strategy of the War, Views of U.S. Chiefs of Staff. (3) Fleet Admiral William D. Leahy, *I Was There* (New York: Whittlesey House, 1950), pp. 157–58.

be secured on paper, but, if [the Americans'] hearts are not in it, they soon drift away."[3] To Brooke, the anxiety in Washington over reports of growing Japanese power, the increasing flow of American shipping and material to the Pacific while the build-up in Great Britain dwindled to a trickle, American reactions to the recent British import and shipping crisis, and the recent squabble over priorities between the European and the Pacific war, all formed an ominous pattern. "We are just about back where we were before Casablanca," he had written on 15 April. "Their hearts are really in the Pacific and we are trying to run two wars at once, which is quite impossible with our limited resources of shipping. All we can hope for is to go all out to defeat Italy, and thus produce the greatest dispersal of German forces and make the going easier for the Russians."[4] Brooke saw two somewhat conflicting drives in American strategic thinking, personified in General Marshall and Admiral King, respectively—one, an obsession with a cross-Channel invasion that could not be mounted before 1944 at the earliest, the other, an emotional commitment to the war in the Pacific heightened by an exaggerated notion of Japanese strength. The first blinded the Americans to opportunities for fruitful, possibly decisive, action in the Mediterranean during 1943; the second undermined their adherence to the agreed "Germany first" strategy. Unlike the ebullient Churchill, Brooke went to the meetings at Washington in a pessimistic mood, anticipating "hours of argument and hard work trying to convince them that Germany must be defeated first . . . [and that] unless our united efforts are directed to defeat Germany and hold Japan, the war may go on indefinitely."[5]

The American Program for Europe

On 8 May the U.S. Joint Chiefs of Staff determined on the line of action they proposed to advocate for the European war at the forthcoming meetings, and cleared it with the President.[6] Its central feature was a large-scale invasion of northwestern France in spring of 1944 (ROUNDUP) preceded by a systematic bombing offensive, mounting in intensity, against Germany and German-occupied Europe from bases in the United Kingdom. As in the original BOLERO-ROUNDUP plan, the build-up of forces in the United Kingdom for the main invasion was to be scheduled so as to permit an emergency Channel crossing (SLEDGEHAMMER) at any earlier date to exploit or hasten a German collapse. The target date for ROUNDUP, subject to revision, was to be 1 April 1944, roughly coinciding with the middle or end of the final phase of the strategic bombing offensive against German communications and industrial centers under a plan submitted to the JCS at the end of April 1943 by Maj. Gen. Ira C.

[3] Diary entry for 4 May 43, p. 496, quoted from *The Turn of the Tide* by Arthur Bryant, copyright 1957 by Arthur Bryant. This and later quotes from this book are reprinted by permission of Doubleday & Company, Inc.

[4] *Ibid.*, diary entry for 15 Apr 43, p. 493.

[5] (1) *Ibid.*, diary entry for 10 May 43, p. 500. (2) For Churchill's views of the conference see *Hinge of Fate*, Book Two, Chapter 20.

[6] Admiral Leahy's memoirs are the only available evidence of a JCS meeting with the President on the eve of TRIDENT. See Leahy, *I Was There*, p. 157, and Maurice Matloff, *Strategic Planning for Coalition Warfare, 1943–1944*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1959) (hereafter cited as *Strategic Planning, 1943–44*), p. 125, note 57.

Eaker, commanding general of the U.S. Eighth Air Force in England.[7]

In approving this program, the JCS had rather cavalierly brushed aside logistical calculations by the Army staff that raised serious doubts as to the feasibility of an invasion in spring 1944 cast in the heroic image of the original ROUNDUP plan. That the JCS had such an image in mind is clear enough from their use of the old code name and from the terms in which they discussed it. But two factors combined to rob the image of substance. First, owing to the general uncertainty of the outlook for shipping in March and April 1943, and, in particular the concentration of British and American troopships on the North Africa routes and of escorts on the convoys to North Africa and northern USSR, it appeared that the movement of U.S. troops to the United Kingdom would depend mainly on unescorted British troopships, primarily the *Queens,* until late in the summer. In consequence, the Army staff in April and early May could foresee a build-up of American forces in the United Kingdom to only 850,000 or 900,000 men by the end of 1943 and only 1,150,000 by 1 April 1944—in each case about 200,000 fewer than envisaged at Casablanca.[8]

The second factor in the new equation was the impact of recent plans for an augmented influx of air force and service elements. With the AAF build-up under General Eaker's plan expected to reach 380,000 men by April 1944 in a total of 1,150,000, and additional service troops needed for the whole U.S. establishment in the United Kingdom, OPD planners concluded that the maximum U.S. ground force that could be assembled by D-day would be 20 divisions, including the 29th Infantry Division already there and the 5th Infantry Division to be moved from Iceland. This was only one more division than the number figured on at Casablanca for the end of 1943. Moreover, divisions arriving after the first of the year would probably not be operational by 1 April. All these calculations caused some of the OPD planners to conclude late in April 1943, that the total forces available by spring 1944 would not be enough for a decisive cross-Channel invasion, and that a major invasion could not be undertaken until 1945.[9]

[7] (1) JCS 286/1, 8 May 43, memo, Adm Leahy for President, title: Recommended Line of Action at Coming Conference. (2) Min, 78th mtg JCS, 8 May 43; 79th mtg (Suppl), 10 May 43; 80th mtg, 12 May 43. (3) JCS 290, 7 May 43; JCS 290/1, 8 May 43, titles: Conduct of War 1943–44. (4) Guyer, The War Against Germany, ch. VIII, Part A, p. 163, History JCS. (5) Craven and Cate, *AAF II,* ch. XI.

[8] For arrangements to use British transports see: (1) Corresp, folders Alloc Gen and BMSM Misc, WSA Douglas File; (2) folder BIGOT I, OCT HB Wylie File; and (3) Memo, Col Marcus B. Stokes for Gen Somervell, 9 May 43, folder Agenda, Hq ASF. For deployment estimates see (4) Plng Div OCT Table, 24 May 43, OPD Exec 6, SYMBOL, TRIDENT (Rev) vol. I (1 May 43), Tab C, Troop and Troop Shpg; (5) JMT 13/2 (Rev), 7 May 43, title: Shpg Necessary for Troop and Cargo Lift for 1943; (6) JPS 160/1, 8 May 43, same title; (7) JCS 266 (Rev), 11 May 43, same title; (8) JCS 249 (Rev), 12 May 43, title: Strategic Deployment of U.S. Forces for 1943; (9) Memo, Gross for Somervell, 10 Apr 43, sub: Army Cargo Reqmts for 1943, folder 18 Shpg File, Plng Div ASF.

[9] (1) SS 54/1, 8 Apr 43, and SS 54/2, 12 Apr 43, sub: U.N. Courses of Action, folder Preps for U.S.–Br. Stf Conf, Plng Div ASF. (2) SS 79, 28 Apr 43, sub: Global Estimate of Situation, Tab D, Strat SYMBOL, TRIDENT (Rev), vol. I (1 May 43), OPD Exec 6. (3) Memo, OPD for CofS, 6 May 43, sub: Transfer of Troops N Africa to U.K., ABC 337 TRIDENT, Sec. C. (4) JMT 13/2 (Rev) 7 May 43, title: Shpg Necessary for Troop and Cargo Lift 1943. (5) Memo, Wedemeyer for Marshall, 17 May 43, sub: U.K. Build-up 1943–44, with Tabs, Exec 8, Book 9, Case 72. (6) See Leighton and Coakley, *Global Logistics, 1940–43,* pp. 687–90.

Rejecting this evidence, the Joint War Plans Committee (JWPC) concluded early in May that a decisive invasion *could* be launched by April 1944. This was the view that the JCS adopted on 8 May, having already (on the 4th) given the go-ahead to the Eaker bombing plan with its spring 1944 culmination date. The position papers taken to TRIDENT forecast a total of 20 U.S. and 16 British and Canadian divisions in the United Kingdom by 1 April 1944, assuming full consummation of British plans for transforming defensive into offensive formations. Only about 14 of the 20 U.S. divisions were expected to be operational, although in the position papers this was not made explicit. The remainder would be fed into the cross-Channel movement in subsequent weeks as they completed their equipment, training, and rehearsals. If adequate port capacity could be developed in Great Britain and on the Continent, forces on the far shore could be built up to 54 divisions by the end of 1944 and to 100 divisions within a year.

The Washington staffs had vigorously debated the question whether some of the invasion forces should be brought from the Mediterranean, and if so, how many. The question had, of course, a crucial bearing on what was to be done in that theater after the conquest of Sicily. Distances from Mediterranean and U.S. ports to the United Kingdom were approximately the same; savings in shipping therefore were not a consideration. Some of the Army staff urged, however, that forces in the Mediterranean area should be reduced to the bare minimum necessary to maintain the *status quo*, arguing that this would permit sending many battle-seasoned veterans to Britain for the cross-Channel invasion. They also feared that large forces left in the southern theater would constitute a temptation to further undertakings in the area that inevitably would pull in additional troops and resources. Others pointed out, conversely, that a major transfer of forces from the Mediterranean to the United Kingdom would not add to the total Allied strength in Europe and might dangerously weaken the southern European front at a critical time, besides which the forces concerned would be out of action for a considerable time while in transit and refitting in Great Britain. The upshot of the debate was a simple statement in the JCS position paper of 8 May to the effect that a transfer of six battle-tested divisions from the Mediterranean would be good insurance for the cross-Channel assault, even though it would not add to the total number of divisions.[10]

In the Army staff, opinions as to what should be done with ground forces remaining in the Mediterranean after Sicily ranged from the safe and easy, but not very profitable, alternative of occupying Sardinia and Corsica, to a scheme advanced by one unnamed heretic for a mainland landing in force near Genoa. Some favored landings on the "heel" of Italy or, if Turkish help were forthcoming, an attack on Crete and the Dodecanese. The old but persistent bogey of an Axis attempt to cut the Allied lifeline at Gibraltar deterred even the bitterest opponents of further action in the Mediterranean from advocating a wholesale withdrawal. Estimates of forces required just to stand fast after the conquest of Sicily ran as high as 14 divi-

[10] (1) SS 54/1, 8 Apr 43, and SS 54/2, 12 Apr 43. (2) JCS 291/1, 8 May 43.

sions. On an assumption (based on what proved to be underestimates of British strength) that only 25 Allied divisions in all would be in the theater, these calculations held out little hope for heavy withdrawals to the United Kingdom—or, for that matter, for further offensives in the Mediterranean. Somervell's staff, figuring on moving out six divisions, could think of no more profitable employment for the remaining five divisions than to occupy Sardinia and Corsica, or perhaps to seize a foothold in the Dodecanese.[11]

The JCS made no effort, in fact, to spell out a post-HUSKY program for the Mediterranean, beyond a reference to "limited offensive operations" aimed presumably at Sardinia and Corsica, and use of air power to destroy Italian war potential. They did stipulate conditions: after Sicily nothing must be undertaken that might interfere with the build-up for SLEDGEHAMMER and ROUNDUP; no American ground or naval forces should be committed "east of Sicily"; forces in the theater must not be reinforced; and an unspecified number of troops should be withdrawn for use in the cross-Channel operation. They stressed their antipathy to an invasion of the Italian mainland, but left the door open to discussion.[12]

[11] (1) SS 54/1, 8 Apr 43. (2) OPD Paper, 12 May 43, sub: Heretical Thoughts on One Phase of 1943 Strategy, OPD Exec 8, Book 9, Item 6o. (3) SS 79, 29 Apr 43. (4) Memo, Somervell for Marshall, 14 May 43, sub: Study of Opns for Italy and Turkey, folder Agenda, Hq ASF. (5) Memo, ACofS OPD for CofS, 6 May 43, sub: Transfer of Troops N Africa to U.K., ABC 337 TRIDENT, Sec C. (6) JCS 293, 7 May 43, title: Limited Opns in Mediterranean 1943–44. (7) Guyer, The War Against Germany, ch. VIII, Part B, pp. 290–322, History JCS.

[12] (1) CCS 219, 14 May 43, memo by U.S. CsofS, title: Conduct of the War 1943–44. (2) JCS 286/1, 8 May 43.

Indeed, in their whole strategy for Europe the JCS, no less than the British Chiefs, were evidently adjusting to the consequences of TORCH and, though perhaps not consciously, were sloughing off the heritage of BOLERO-ROUNDUP. The new ROUNDUP, despite its name, was clearly something less—though in its context more—than the original conception of a one-front, one-shot, all-or-nothing effort to crush an undiminished German Army in the West. Unlike the original, the ROUNDUP of 1944 would have to share honors with a subsidiary front in the Mediterranean and with a U.K.-based strategic bombing offensive of a power, intensity, and duration hardly foreseeable in spring of 1942—depending on both together for the attritional and diversionary preparation necessary to ensure its own success. Most obviously, the new ROUNDUP with 30, or even 36, divisions was not the 48-division ROUNDUP originally projected for 1943.

The U.S. Chiefs left their preconference briefing of the President on 8 May apparently under the impression that they now had his full support. Even more strongly than in their formal position papers they had stressed the importance they attached to limiting American liability in the Mediterranean after the conquest of Sicily. They had suggested that at the forthcoming conference U.S. representatives should be prepared to discuss very modest operations in the Western Mediterranean only (e.g. Sardinia) as bargaining counters to win a definite British commitment to a 1944 ROUNDUP and as alternatives to more risky Mediterranean ventures. Such limited operations should be portrayed as "of an emergency nature," defensible only to the degree that they

might support Russia. The President was warned to be wary of such British conference tactics as attempting to avoid discussion of ROUNDUP by restricting the agenda to strategy for 1943, and denying or glossing over the intimate relation between the war against Japan and the war in Europe. Against such tactics and any other unacceptable proposals—specifically, for operations "east of Sicily," or heavy commitments in the Mediterranean generally, or for abandonment of ANAKIM — the JCS urged a single response: the United States would then feel obliged to intensify its pressure and expand its commitments in the Pacific.[13]

In reality Roosevelt was far from going along with this strong line in its entirety. He accepted readily enough the idea of pressing for an invasion in 1944 (which there is no reason to believe he had ever abandoned), but he was not prepared to jeopardize relations with the British by taking the hard line on Mediterranean strategy that the military were pressing upon him. "No closed minds," he scribbled at the top of his copy of the JCS recommendations, and his other marginal notations indicated a positive interest in the eastern Mediterranean that would have shattered the optimism with which the JCS were then contemplating the approaching confrontation.[14]

The JCS and the British received a clear intimation of Roosevelt's position during his opening remarks at the first plenary meeting of the conference at the White House on 12 May. He began by stressing two cherished features of British Mediterranean strategy—the attritional effect of the North African campaign on German power, and the prospects of Turkish intervention leading to possible "combined operations toward the Adrianople line, thus threatening Bulgaria, and inducing that country to withdraw from the war."[15] He then proceeded to the cardinal point on which he and the JCS agreed, aversion to "putting large armies in Italy," but softened this, in turn, by suggesting as an alternative, not the attack on Sardinia favored by the JCS, but an occupation of the southern part of the peninsula.

Following these conciliatory remarks, Roosevelt firmly stated the American desire for a definite decision on a cross-Channel invasion in spring of 1944 and for an immediate resumption of the

[13] (1) Memo, Leahy for President, 8 May 43, sub: Recommended Line of Action at Coming Conference, Franklin D. Roosevelt Library, Hyde Park, N.Y. Also published as JCS 286/1, 8 May 43. (2) Admiral Leahy's memoirs state rather ambiguously that at this meeting the President agreed to press for a cross-Channel invasion "at the earliest practicable date" with preparations to launch it "by spring of 1944." Leahy, *I Was There*, p. 157. (3) Matloff, *Strategic Planning, 1943–44*, pp. 124–25.

[14] Memo cited in note (1) above. Other notations included: "Turkey . . . Taking the weight off Russia"; question marks opposite two statements concerning U.S. non-involvement in the eastern Mediterranean; and a sceptical or derogatory "This is conversation" opposite a long paragraph about Russian suspicions of British designs on the Dardanelles and about British ability to dominate the Straits from bases in the Dodecanese. The admonitions to invoke the turn-to-the Pacific threat (five of them in the five-page memo) were largely ignored, except for a heavy question mark opposite one and a "topsy turvy" opposite another. The assertion that U.S. public opinion would be impatient of eastern Mediterranean involvement, in the light of the Japanese threat in the Pacific, elicited a cryptic "Spinach."

[15] (1) Min, 1st White House Mtg, CCS, TRIDENT, 12 May 43. (2) For the characterization of Roosevelt's agreement at this time to press for a 1944 cross-Channel invasion as "one of the most far-reaching decisions of the war" see Matloff, *Strategic Planning, 1943–44*, p. 125.

build-up for it. Then, in characteristically offhand fashion, he added that if either SLEDGEHAMMER or ROUNDUP were to be executed at that time, the conference should reach a decision to undertake one or the other.[16] By thus bringing into the open at the beginning of the conference what the JCS had studiously excluded from their position papers in defiance of staff calculations, the real uncertainty surrounding the feasibility of mounting a cross-Channel operation on the scale of the original ROUNDUP by spring of 1944, Roosevelt neatly undercut the position with which the Joint Chiefs had hoped to confront the British. Once again, as at Casablanca, it was apparent that the Americans did not speak with a single voice. While the records show no detectable reaction to the President's remarks on the part of the U.S. Chiefs of Staff, the latter were well aware as the conference proceeded that he would not tolerate a rigid and doctrinaire approach to British proposals on Mediterranean strategy. As for northwestern Europe, it was significant that, as the staffs got down to the knotty questions of what could and what could not be done, the problem was discussed in terms of the vivid dichotomy—SLEDGEHAMMER versus ROUNDUP — in which Roosevelt had couched it.[17]

The British Program: Mediterranean Now, Roundup Maybe

The central theme of the British program for Europe was, in fact, the necessity of maintaining undiminished momentum in the Mediterranean following the conquest of Sicily. "The mere capture of Huskyland," Churchill had declared early in April, "will be a paltry and unworthy result for the campaign of 1943." In the wide spectrum of opportunities he foresaw opening up with the capture of Sicily, his first and major objective was the elimination of Italy. This, he was sure, "would cause a chill of loneliness over the German people, and might be the beginning of their doom."[18]

The British thought Italy could probably be knocked out by air and naval action followed by landings on the "toe" and "heel" of the peninsula, the task to be completed by November at the latest. With Italy out of the war, 7 Italian divisions in France and Corsica and 32 in the Balkans would have to be replaced by German units on something like a one-for-two ratio, and the overextended Luftwaffe would somehow have to make up for the loss of 1,400 Italian aircraft. Loss or neutralization of the Italian Fleet would release powerful British naval units for service against Japan. Turkey would become amenable to persuasion, and might even come over to the Allied camp. With German forces spread thin, it would be easy to seize a bridgehead on

16 (1) Min, 1st White House Mtg CCS, TRIDENT, 12 May 43. (2) For discussion of this episode see Kent Roberts Greenfield, *American Strategy in World War II: A Reconsideration* (Baltimore: Johns Hopkins Press, 1963), pp. 63–64.

17 (1) See, for example, Brooke's assertion that without an aggressive Mediterranean campaign in 1943, "at best only a SLEDGEHAMMER could be undertaken" in spring of 1944, Min, 85th mtg CCS, 15 May 43. (2) OPD notes on JCS mtg, 17 May 43, OPD Exec 5, folder 1, Item 10.

18 (1) Msg, Prime Minister to Lt Gen Sir Hastings L. Ismay, quoted in Churchill, *The Hinge of Fate*, Appendix A, Book Two, p. 943. (2) *Ibid.*, Book Two, p. 791. (3) Min, 1st White House Mtg, TRIDENT, 12 May 43. (4) Msg, Prime Minister to President, *circa* 6 Apr 43, OPD 381 Security II.

the Adriatic coast, say, at Durazzo, throw a few divisions into the Balkans to "activate" the guerrillas, and occupy the Dodecanese. Nothing else the Allies could possibly do in 1943, the British declared, would so effectively help the Russians on the Eastern Front, and it would be unthinkable to leave large forces in the Mediterranean idle for seven or eight months while Germany perhaps won the war on the plains of Russia.

In the meantime the build-up of forces in the United Kingdom and the strategic bombing offensive against Germany would be proceeding apace, looking toward a cross-Channel invasion "as soon as German resistance is weakened to the required extent"—a condition the British were confident of meeting by spring or summer of 1944. They summed up their program:

> Our final conclusion is that the Mediterranean offers us opportunities for action in the coming autumn and winter, which may be decisive, and at the least will do far more to prepare the way for a successful cross-Channel operation in 1944 than we should achieve by attempting to transfer back to the United Kingdom any of the forces now in the Mediterranean theater. If we take these opportunities, we shall have every chance of breaking the Axis and of bringing the war with Germany to a successful conclusion in 1944.[19]

By mutual agreement neither side attempted during the first few days of debate to present detailed estimates of requirements or capabilities. The discussion was confined to generalities in order, as the British Chiefs put it, to "clear our minds on the strategical issues, and decide, on merits, on the course of action at which we should aim."[20] Thus reduced to stark outline, the opposing emphases of the two positions—the British upon the Mediterranean in 1943, the American upon northwestern Europe in 1944—stood out in bold relief. The inevitable clash occurred almost at the outset. Following General Brooke's exposition of the British position at the first CCS meeting on 13 May, General Marshall took the floor with an abrupt "now we get to the heart of the problem." Military operations, he asserted, always cost more than originally expected; once undertaken, they had to be backed to the limit, regardless of cost. To invade Italy would create another vacuum in the Mediterranean, with the inevitable result that "in 1943 and almost all 1944 we should be committed, except for the air attack on Germany, to a Mediterranean policy," besides prolonging the war in Europe and jeopardizing the American position in the Pacific. Brooke replied that the Western Allies would be unable in any event to mount a serious effort on the Continent until 1945 or 1946; any force that could reach the Continent in 1944 would not be able to even hold its own unless the German armies were fully committed elsewhere. Did this mean, demanded Marshall, that the British "regarded Mediterranean operations as the key to a successful termination of the European war?" Did the British really believe, he probed, that the Russians would be satisfied with an attack on Italy at the cost of postponing ROUNDUP? Obviously nettled, Brooke retorted:

> What Russia wished us to achieve was a withdrawal of German forces. He believed

[19] (1) CCS 224, 14 May 43, memo by Br COS, title: Opns in European Theater Between HUSKY and ROUNDUP. (2) Min, 83d mtg CCS, 13 May 43, Annex B.

[20] Min, 83d mtg CCS, 13 May 43, Annex B.

that only by attacking in the Mediterranean could we achieve immediate results and that this was more valuable than building up for a 1944 ROUNDUP which might not even then be possible.[21]

When the U.S. Chiefs of Staff reviewed their notes it seemed evident to them that Brooke had let the cat out of the bag. The British, Admiral King declared, obviously wanted to "drift toward an incidental ROUNDUP" that would be undertaken only when Germany was at the point of collapse, and if they were not pinned down, would continue to "fiddle fuddle" and "limp along" as before. None of his colleagues challenged his conclusion that if the British could not be forced into an unequivocal commitment to carry out the cross-Channel invasion in spring of 1944, "we ought to divert our forces to the Pacific."[22]

The air did not begin to clear until the planning staffs got down to an examination of requirements and resources. On 17 May the British planners, after consulting their American opposites, gave the CCS an evaluation of the requirements of their Mediterranean program and its impact on BOLERO. They brought out a point previously obscure, that no ground reinforcements in the Mediterranean were anticipated, and their estimate of forces available after HUSKY came as a jolt to the Americans—38 Allied divisions, 25 of them British-controlled instead of the 13 assumed by the American staffs. The principal cost to BOLERO of post-HUSKY Mediterranean operations would be the diversion of 90 cargo vessels from the Atlantic, which would reduce a potential 20-division build-up in Great Britain to 14½ divisions. All but two of these, however, would be ready to move across the Channel on 1 April; whereas, if Mediterranean operations were suspended, only 16 of the 20 U.S. divisions in the British Isles at that time would be operational, owing to the limited capacity of British ports and the U.S. administrative establishment to handle incoming forces.

In short, the British staff contended that the difference between the alternatives of halting or continuing Mediterranean operations, as far as the impact on the U.K. build-up was concerned, boiled down to only 3½ divisions. Even this gap could be narrowed, they said, by bringing one or two of their own divisions back from the Mediterranean early in 1944, though they saw no point in doing so since the size of the cross-Channel assault forces seemed to be limited by availability of landing craft.

With the British estimating their home forces (including Canadians yet to arrive) at only 14 divisions rather than 16, the total Allied invasion army on 1 April 1944 would add up to roughly 27 or 28 divisions. Limitations of continental port capacity would hold down to 25 the number of divisions that could be put ashore by D plus 125—hardly enough to oppose an estimated 35 German divisions in France and the Low Countries, besides the additional forces that could be rushed from other sectors over Western Europe's excellent rail net. Hence the necessity, as the British saw it, of an aggressive campaign in the Mediterranean to disperse and pin down enemy forces and prevent Germany from reinforcing northwestern France. If the Mediterranean program were carried out, the British were confident that "a

[21] As in Min, 83d mtg CCS, 13 May 43.
[22] Min, 81st mtg JCS, 14 May 43.

successful invasion should be possible with the forces outlined above in the spring or summer of 1944."[23]

Analyzing the British plan, the American staffs quickly noted the contrast between the pessimism of estimates and calculations relating to the cross-Channel operation and the optimism of those relating to the Mediterranean. Reception capacity in the United Kingdom and the rate of build-up on the Continent seemed to have been rated low; the number, strength, and mobility of enemy forces in France and the Low Countries had been rated high. By contrast, for the Mediterranean cargo shipping requirements, escort limitations, and relief and occupation costs had been rated low or ignored altogether. The British seemed to expect that "the landing of a few . . . soldiers" in southern Italy would cause the immediate collapse of the Fascist government while the Germans looked idly on from north of the Alps. All was to be done, apparently, "in our spare time this summer." "The wish," General Marshall delicately suggested, "might have been father to the thought."[24]

Staff reactions were reflected in a rebuttal prepared by the U.S. joint planners attacking as "unsound strategically and logistically" the concept, which they read into British arguments, of attempting to defeat the Axis by an invasion of southern Europe rather than by a "decisive" invasion from the northwest. The planners restated the American case for a spring 1944 ROUNDUP, and particularly challenged the low British estimates of possible rates of build-up on the Continent. They were forced to recognize, however, that the American position, as presented early in the conference, had glossed over the time required to prepare U.S. divisions arriving in Great Britain for the move across the Channel. This contributed to a dawning realization by tne Americans that on the question of capabilities for building up a cross-Channel invasion force in the United Kingdom, the two positions actually were not far apart. Something like a break-through occurred on 19 May when, in separate meetings, Admiral Leahy and Admiral King referred to the projected invasion—Leahy alluding to the British concept, King to the American—as an expanded "SLEDGEHAMMER."[25]

How Large an Assault?

The rapid decay of the ROUNDUP concept in the first week of the TRIDENT Conference owed even more to the necessity, reluctantly accepted by both sides, of taking a realistic view of the future

[23] CCS 234, 17 May 43, memo, U.K. JPS, title: Defeat of Axis Powers in Europe (Elimination of Italy First).

[24] (1) Min, 87th mtg CCS, 18 May 43. (2) Memo, Cols Smith and Betts for Gen Wedemeyer, 18 May 43, ABC 331 (9-25-41) Sec 7. (3) Memos, Somervell for CofS, 17 and 19 May 43. (4) Draft JWPC Paper, 18 May 43. (3) and (4) in ABC 337 TRIDENT, Sec A. (5) Memo, Maj Gen Walter B. Smith for Gen Wedemeyer, 21 May 43, sub: Comments on Defeat of Axis Powers in Europe, OPD Exec 8, Book 9, Case 85. (6) Memo, Somervell for Marshall, 14 May 43. (7) Memo, Gross for Somervell, 17 May 43. (6) and (7) in folder Agenda, Hq ASF. (8) On civilian supply see below, Chapters XXX and XXXI.

[25] (1) Min, 88th mtg CCS; 85th mtg JCS, 19 May 43. Admiral Leahy, in the former meeting used the phrase "magnified SLEDGEHAMMER"; Admiral King in the latter meeting referred to a "glorified SLEDGEHAMMER." (2) CCS 235, memo by U.S. JPS, 18 May 43, title: Defeat of Axis Powers in Europe (Concentration of Largest Possible Force in U.K.).

availability of assault shipping. Since August 1942 British thinking with respect to the cross-Channel assault had been colored by memories of the Dieppe disaster. From that experience the British Combined Commanders' staff had drawn the lesson that any assault on the Channel coast must be both powerful and concentrated in order to break through the crust of coastal defenses, secure a substantial beachhead, and permit deployment of invading forces. A natural product of this line of thinking was SKYSCRAPER, an invasion model under study early in March, which envisaged simultaneous landings near Caen and on the east coast of the Cotentin Peninsula with subsequent exploitation toward Cherbourg and the ports to the northeast. It was a formidable conception: 10 assault divisions simultaneously afloat and landed in the first two days, comprising 227,000 troops and 33,000 tanks and vehicles. This assemblage would pose lift requirements for 60 combat loaders, 437 LST's, 538 LCI (L)'s, and over 3,000 LCT's and smaller craft. Such figures (for the larger types of assault vessels, at any rate) were generally recognized as fanciful and the British Chiefs of Staff presently scrapped the plan. When General Morgan and his assistants began work in April on cross-Channel plans, it was under the more or less explicit assumption that they must avoid their predecessors' cardinal error of aiming too high above the probable limitations of available resources.[26]

In Washington the approach was different. When preparing the estimates submitted to the JCS on 8 May, which purported to demonstrate the feasibility of a major cross-Channel operation, the Joint War Plans Committee had reached all the way back to the original ROUNDUP plan of April 1942 for its landing craft requirements. This plan belonged to an earlier era in the development of amphibious doctrine. Its assault force, like that of SKYSCRAPER, comprised ten divisions but was far weaker in armor and vehicles, and its lift requirements were correspondingly lower—for example, less than half the LST's and less than one-fifth the LCT's.[27] Contrary to all recent experience, moreover, the ROUNDUP estimates allowed for losses of only 10 percent of craft in training during the build-up period, and took no account of the space requirements inherent in assault loading as opposed to theoretical rated capacities of vessels. The staff assumed, finally, that no further amphibious operations, and therefore no further losses, would occur in the Mediterranean.

The JWPC concluded that the only serious shortages would be encountered in two of the larger types of vessel, LST's and LCI (L)'s. These shortages could be filled, the committee thought, by modest production increases that would not threaten other naval building programs —and since the increases would provide more of both types from 1944 production for the Pacific, it should be possible to borrow 35 LST's and 76 LCI (L)'s

[26] (1) Harrison, *Cross-Channel Attack*, pp. 55–59. (2) Memo, G–3 for Exec, Plng Sec, War Office, 9 Mar 43, SHAEF SGS 560, vol. I (RG 910).

[27] The difference in doctrine reflected here is more striking in that ROUNDUP provided for an initial assault on a 6-division front, whereas SKYSCRAPER was on a 4-division front; initial assault echelons had heavier complements of armor than the follow-up elements.

from Pacific allotments in 1943 for use in ROUNDUP.[28]

The proposals for diversions from the Pacific evoked immediate protests from Admirals King and Cooke, and the Joint Chiefs promptly deleted them. Deciding further that it would be unwise "to enter into argument" with the British over allocations, they detached the entire portion of the report dealing with landing craft and assigned it the status of "a Planners' paper." For purposes of discussion at TRIDENT, the JCS took its stand on the simple assertion that landing craft requirements could be met on the scale of the old ROUNDUP plan, though at the expense of some operations in other theaters. They recommended only such increases in production as might be managed "without undue interference" with other essential programs.[29]

The Navy had, in fact, already decided to increase production. Monthly schedules of LST's were to be raised from 15 to 20 through 1943, then leveled off at 12 per month beginning in January 1944 instead of in April as previously planned. For LCI (L)'s the new program increased monthly construction from 16 to 20 beginning in October 1943. An improved tank lighter, the LCT (6), was to go into production in August with a planned rate of output of 20 per month from November on; it would supersede the LCT (5), for which the current schedules of 10 per month would be allowed to run their course.[30]

By such modest increases in 1943 the Navy evidently hoped to meet ROUNDUP requirements as stated by the Joint Planners without resorting to the proposed diversions from the Pacific. Under the allocations subsequently made at TRIDENT most of the increases in output of LST's, LCI (L)'s, and LCT's for the rest of 1943 would be assigned to ROUNDUP, but from January 1944 on all production was expected to go to the Pacific along with the bulk of the total 1943 production. One ASF officer, noting on 15 May the preponderance of new 1943 tonnage assigned to the Pacific, drily commented that "Navy plans do not propose to distribute this equipment where the major operations are indicated."[31] Adjustments made later in the conference did little to rectify the imbalance.

At TRIDENT the size of the cross-Channel assault quickly became a subject of contention between the British and American staffs, although both agreed on the desirability of a large assault. Perhaps because General Morgan's staff had not had time to produce a smaller model in line with his recent instructions, the British brought to the conference a plan not noticeably smaller than the discarded SKYSCRAPER—four divisions in the initial assault, three in the immediate follow-up, and three more in surviving craft, with a total lift requirement of some 8,500 ships and craft of all types.

[28] (1) JCS 291/1, 8 May 43. (2) Memo, Col Arthur G. Trudeau for Gen Somervell, 15 May 43, sub: Ldg Cft for Proposed Opns, folder CsofS Jt and Comb 1942–44, Hq ASF. (3) JCS 311, 15 May 43, rpt by JWPC, title: Mobility and Utilization of Amphibious Assault Craft.

[29] (1) CCS 215, 13 May 43. (2) Min, 80th mtg JCS, 12 May 43.

[30] (1) CCS 244/1, 25 May 43, Annex V and app. B. (2) For previous production schedules see above, Chapter I.

[31] (1) Memo, Trudeau for Somervell, 15 May 43, sub: Ldg Cft for Proposed Opns. (2) Compare CCS 244/1, 25 May 43, app. B, with Tables I–VII in JCS 291/1, 8 May 43.

"The number of craft required to cross the Channel," the British planners contended, "is higher than in other parts of the world on account of the need for a quicker rate of build-up and of the higher degree of resistance expected."[32]

To the U.S. Chiefs of Staff—though they, too, wanted a strong assault—this approach seemed added proof of the insincerity of British professions of loyalty to a cross-Channel strategy and an indication of their intention, as Admiral King put it, to "wreck ROUNDUP on the matter of landing craft."[33] The U.S. Staff estimated that, assuming no Mediterranean operations after HUSKY, a total of 4,657 craft of all types would be available for ROUNDUP. This number, they now admitted in a partial retreat from their first optimistic estimate, might "not meet fully the maximum vehicle requirements of a large-scale ROUNDUP"—all the more reason, they thought, for not risking the certain losses further Mediterranean operations would entail, leaving an "entirely inadequate provision" for the cross-Channel invasion.[34] American staff criticism focused, in fact, on what seemed the fantastically optimistic British estimates of probable losses of amphibious shipping to be expected in their Mediterranean program. Assuming that Italy would collapse after the loss of Sicily and that if German resistance did materialize it could be bypassed, the British expected losses of only 10 percent in personnel lift and 6 percent in vehicle lift. American staff calculations, by contrast, assuming two major operations following HUSKY with 30 percent losses in each, indicated that of the lift then in the Mediterranean only about half would remain at the end of 1943. In any case the Americans doubted that the British timetable of Mediterranean operations could be completed in time to transfer surviving vessels back to England for ROUNDUP in spring of 1944.[35]

After some discussion the British and U.S. staffs were able to agree on loss rates, for planning purposes, of 20 percent for ships and 50 percent for craft in each major Mediterranean operation undertaken—a major concession to American conservatism. The British also substantially reduced their estimates of requirements for the cross-Channel attack, mainly in the small types of craft.[36] But these reductions still left a wide gap between estimated requirements and estimated assets in the three critical types —LST's, LCI(L)'s, and LCT's—even on the premise, which the British would not accept, that no further operations would be undertaken in the Mediterranean after HUSKY. The original choices remained fundamentally unaltered: either more assault shipping must be found, or the requirement must be reduced—by curtailing the scope of the operation, postponing it, or abandoning it altogether. Admirals King and Cooke, convinced that the British had no intention

[32] (1) CCS 234, 17 May 43. (2) The COSSAC staff was already working on a 5-division assault plan. See Papers, 1944 Hypothesis, 15 May 43, and Planning for Operations in 1943–44, 20 May 43, in SHAEF SGS 560, vol. I.

[33] (1) Min, 85th mtg JCS, 19 May 43. (2) See also min, 83d and 84th mtgs JCS, 17, 18 May 43; 87th mtg CCS; and 74th mtg JPS, 18 May 1943.

[34] CCS 235, 18 May 43.

[35] (1) *Ibid.* (2) CCS 234, 17 May 43. (3) Draft JWPC Paper, 18 May 43, title: Critical Analysis of British Plan. (4) Memo, Somervell for CofS, 19 May 43, sub: CCS 234. Items 3 and 4 in ABC 337 TRIDENT. (5) Min, 74th mtg JPS, 18 May 43.

[36] Min, 84th mtg JCS, 18 May 43; 85th mtg, 19 May 43.

of carrying out the operation anyway, did not hesitate to advocate the last course. "If the British will not do ROUNDUP," King repeatedly demanded, "why hoard toward BOLERO [sic]at all?"[37]

The Trident Decisions on Europe

In the midst of all the heated talk, a compromise was taking shape. By 17 May the Joint Chiefs were facing up to the clear indications that neither the forces nor (barring massive increases in production) the assault lift for a ROUNDUP-type operation could be amassed in the United Kingdom by spring 1944 under any scheme of deployment or under any limitation upon Mediterranean strategy. In the Army staff there was still some sentiment that, in the words of one OPD officer, "whatever landing craft [are] required to assure success must be obtained even at the cost of merchant shipping or escort craft." General Somervell urged this view on the Chief of Staff, but it found no adherents on higher levels. On the 17th the JCS agreed with General Marshall that a full-scale spring 1944 ROUNDUP was "a logistic impossibility."[38]

Plans for the air assault on Germany played no small part in this drift of thinking. Earlier General Marshall had admitted that it would have been suicidal to land 25 divisions on the Channel coast in 1942, but the great difference between 1942 and 1944 would be the interim "battering and bleeding" of Germany by Allied air power, which he ventured to hope might be worth 50 or 60 ground divisions. Under a protecting air umbrella a comparatively small assault force could seize a bridgehead and follow-up forces could "flood in behind." The British Chiefs also supported the bombing offensive, and the CCS on 18 May approved the Eaker plan, with its scheduled fourth phase designed to lead immediately into a cross-Channel assault.[39] Discussion of a medium-sized cross-Channel assault — something more than SLEDGEHAMMER and less than ROUNDUP — became explicit, and from this "split-the-difference" approach emerged, on 19 May, Operation ROUNDHAMMER (as Admiral King aptly named it). The conception was destined within a few weeks to take form on the planning boards in London under a more pretentious title, OVERLORD, and, after subsequent modifications, eventually to materialize on the beaches of Normandy in June 1944.[40]

Evidently the British had been moving in the same direction. In a closed meeting on 19 May, Brooke recorded, the Combined Chiefs of Staff "at last formed a bridge across which we could meet." Ostensibly, the compromise consisted of a British commitment to carry out ROUNDHAMMER on a definite target date and an American agreement to undertake "such operations in exploitation of HUSKY as are best calculated to elim-

[37] (1) Min, 81st mtg JCS, 14 May 43; 82d mtg, 15 May 43; 83d mtg, 17 May 43; 84th mtg, 18 May 43; 85th mtg, 19 May 43. (2) Min, 74th mtg JPS, 18 May 43. (3) CCS 235, 18 May 43. (4) Agreed loss rates are in CPS 71, Subcom rpt, 20 May 43, title: Availability of Ldg Cft for Operation ROUNDHAMMER, ABC 561.1 (19 May 43) Sec 1A.

[38] (1) Min, 83d mtg JCS, 17 May 43. (2) OPD Notes on CPS 58th mtg, 19 May 43, ABC 337 TRIDENT, Sec C. (3) Memo, Somervell for CofS, 19 May 43, sub: CCS 234.

[39] (1) Min, JCS mtgs: 81st, 14 May 43; 82d, 15 May 43. (2) Min, CCS mtgs: 85th, 15 May 43; 87th, 18 May 43.

[40] Min, 85th mtg JCS, 19 May 43.

inate Italy from the war and to contain the maximum German forces." The U.S. part of the agreement was regarded by everyone as a major concession, Brooke noting it as a "triumph" in the light of what he believed to be the American desire "to close down all operations in the Mediterranean after capture of Sicily."[41]

The U.S. Chiefs had reached their decision after three days of sometimes bitter debate among themselves and under what Marshall mysteriously referred to as "terrific" pressure from an unnamed source—possibly the President—to reach agreement with the British. The concession was, moreover, strictly qualified. The Americans stipulated that any operations undertaken in the Mediterranean must depend solely on resources already available in the theater, and they insisted on withdrawing for use in ROUNDHAMMER some of the air forces used in HUSKY and, after 1 November, four U.S. and three British divisions. They further stipulated that each specific operation in the Mediterranean must be approved in advance by the CCS, who would review the whole situation again in July or early August. Meanwhile, General Eisenhower would submit his recommendations on post-HUSKY operations as soon as the progress of the campaign in Sicily gave some indication of the quality of the resistance that might be encountered in Italy.[42]

The British nevertheless succeeded in writing into the TRIDENT "resources" paper, as a basis for assigning assault shipping, the three landings on the Italian mainland they had proposed: one near Reggio across the Strait of Messina; another on the east side of the toe in the Crotone area; and a third, a sizable effort, near Taranto on the north shore of the gulf of that name. If undertaken, Eisenhower would have at his disposal for these operations all the assault shipping that survived the Sicily landings, except for small amounts to be withdrawn for assaults on the port of Akyab in Burma and on Ramree Island off the Burma coast and, possibly, for a forced occupation of the Azores late in the summer. The arrangements were also subject to Admiral King's reservation that final disposition of the American combat loaders in the Mediterranean would be made later.[43] (*Table 7*)

The extent of the British concessions is less clear. Marshall's staff had no doubts, considering the agreement as "the first real indication" that the British had "definitely accepted" the idea of a decisive cross-Channel invasion—on the assumption, of course, that their real intention in presenting an invasion plan at the conference had been simply to have it rejected. Brooke himself, although apparently pleased, noted only that the bridge built on the 19th was

41 (1) Bryant, *Turn of the Tide*, p. 509. (2) CCS 237/1, 19 May 43, title: Draft Resolutions by CCS. (3) Min, 98th mtg CCS, 19 May 43.

42 (1) CCS 242/6, 25 May 43, title: Final Rpt to President and Prime Minister. (2) CCS 237/1, 23 May 43. (3) CCS 250/1, 25 May 43, title: Implementation of Decision Reached at TRIDENT Conf. (4) Min, 5th White House Mtg, 24 May 43. (5) Progress toward the U.S. concession can be traced in the JCS meetings of 17, 18, and 19 May, and in OPD Notes on 83d mtg JCS, 17 May, and 88th mtg CCS, 19 May 43, Exec 5, Item 10, folder 1. (6) General Marshall's remark is in Min, 83d mtg JCS, 17 May 43.

43 (1) CCS 223, memo CofS AFHQ, 14 May 43, title: Opns After HUSKY. (2) Min, 74th mtg JPS, 18 May 43. (3) Memo, Churchill for Field Marshal Jan Christian Smuts, 16 Jul 43, quoted in Churchill, *Closing the Ring*, pp. 35–37. (4) CCS 250/1, 25 May 43. (5) CCS 244/1, 25 May 43, app. A to Annex V.

TABLE 7—REQUIREMENTS AND AVAILABILITIES OF MAJOR TYPES OF ASSAULT SHIPPING FOR ROUNDHAMMER (TRIDENT)[a]

	APA (U.S.)	AKA (U.S.)	LSI (L and M) (Br)	LSI(H) (Br)	LST (1 and 2)		LCT (3 and 4)	LCT (5 and 6)		LCI(L)		LCI(S) (Br)
					(Br)	(U.S.)	(Br)	(Br)	(U.S.)	(Br)	(U.S.)	
Total requirements[b]	6	2	16	15	44	99	320	87	124	54	30	32
British assets in the United Kingdom, 1 May 1944	—	—	7	15	11	—	363	126	—	2	—	38
Assumed survivors of overseas operations to be returned to the United Kingdom[c]	7	6	10	2	38	48	18	—	41	20	24	—
U.S. allocation	—	—	—	—	—	62	—	—	105	42	16	—
Total available	7	6	17	17	49	110	381	126	146	64	40	38
90 percent of ships, 85 percent of craft of line assumed serviceable	6	5	16	15	44	99	324	107	124	54	34	32

[a] There were additional requirements, among major types, for 4 LSI(S)'s, 3 LSH's, 2 LSP's, 20 LCP(L)'s, 4 LCG(L)'s, 170 LCG(M)'s, and 12 LCS's. All of these were British types which the British were to furnish with the exception of 1 LSH. The only deficiency shown was for 146 of the 170 LCG(M)'s. There were also requirements for a large number of smaller types of craft and for personnel and motor transport ships which are not shown. No critical shortage of any of these types was anticipated.

[b] Requirements for Operation ROUNDHAMMER were based on the assumption that the British would provide two assault divisions and one immediate follow-up division, the United States one assault division and one immediate follow-up division.

[c] This was based on detailed calculations of requirements and loss rates for HUSKY, three Italian mainland landings, an operation in the Azores, and ANAKIM. The casualty rate assumed was 20 percent in the case of special ships and 50 percent in the case of landing craft as committed in each major operation. Among ANAKIM survivors, only some 5 LSI(L)'s were to be returned to the United Kingdom, but all survivors of Mediterranean and Azores operations were assumed available for ROUNDHAMMER.

Source: CCS 244/1, 25 May 43, title: Implementation of Assumed Basic Undertakings . . . , Annex V, app. A.

"not altogether a satisfactory one."[44] The record of the conference discussions seems to indicate that the retreat of the British from the concept of a ROUNDUP-type invasion in 1944 paralleled that of the Americans and was made easier by strong hopes, of which Brooke made no secret, that aggressive action in the Mediterranean might after all make the invasion unnecessary. But none of the available evidence suggests the slightest reluctance on their part to proceed energetically with the invasion build-up, to allot forces for the operation, or even to set a target date, so long as the Allies pressed forward in the Mediterranean.

The decision on the target date (1 May 1944) was a compromise, but a casual one. It was arrived at by splitting the difference between 1 April, the Americans' preference, and 1 June, the date suggested by Brooke to coincide roughly with the opening of the campaign season in Russia. Although at the beginning of the conference the Americans had insisted on an early and firm target date and later were to make much of its sanctity, their final acceptance of 1 May was rather offhand; at the time, Admiral King merely remarked that a later date might be equally acceptable and that target dates seldom were met anyway.[45] The British quite evidently attached little importance to it. Brooke's overriding idea, noted privately at the time, was that "success can only be secured by pressing operations in the Mediterranean to force a dispersal of German forces, help Russia, and thus eventually produce a situation where cross-Channel operations are possible." Having secured a qualified American agreement to push on in the Mediterranean, he was willing to work in the meantime toward a Channel crossing on 1 May 1944 on a scale sufficient, as the agreed directive to COSSAC stated, "to secure a lodgment on the Continent from which further offensive operations can be carried out."[46] ROUNDHAMMER was no SKYSCRAPER nor even a ROUNDUP, but neither was it a SLEDGEHAMMER—and it was more consonant than any of them with the strategic outlook in May 1943.

The TRIDENT estimates of the number of ships and craft likely to survive landings in Italy helped to determine the planned scale of the ROUNDHAMMER assault. British concessions on loss factors for planning had pushed the estimates of probable attrition in the Mediterranean sky-high. They now ranged from 40 to 80 percent cumulatively, "far beyond supportable losses," as Somervell observed, "in either men or matériel in any other part of our operations."[47] To the total number of survivors from operations in the Mediterranean, in Burma, and in the Azores (all of which were to be brought back to the British Isles by spring of 1944) the Americans undertook to add 62 LST's, 58 LCI (L)'s, and 105 LCT's from new production in the interim. New LCT's, LCA's, and other

[44] (1) Bryant, *Turn of the Tide*, diary entry for 19 May, p. 509. (2) OPD Paper, SS 106, title: Analysis of TRIDENT and ANFA Confs, no date, ABC 381 SS Papers 96–126/3 (7 Jan 43). See also Matloff, *Strategic Planning, 1943–44*, p. 133.

[45] (1) Min, 88th mtg CCS, 19 May 43. Compare King's remarks in 83d mtg CCS, 13 May, and 85th mtg CCS, 15 May 43. (2) Harrison, *Cross-Channel Attack*, pp. 69–70.

[46] (1) CCS 250/1, 25 May 43, Incl B. (2) Quotes from Bryant, *Turn of the Tide*, p. 513.

[47] Memo, Somervell for Smith, 19 May 43, OPD 560 Security, II, Case 53.

more specialized craft would also be forthcoming from British production.

The final tally for ROUNDHAMMER, after deducting 10 percent of ships and 15 percent of craft for unserviceability on D-day, added up (in major types) to 6 APA's, 13 LSI(L's), 143 LST's, 88 LCI(L)'s, and 555 LCT's. (*See Table 7.*) The prospective armada represented a fairly evenly divided coalition effort—from the United States would come almost all the landings ships; from Great Britain most of the regular combat loaders and nearly all of the more specialized types of support craft and converted assault ships. Each country would provide its own types of LCT's, LCM's, and small infantry assault craft.[48] (*Table 8*)

These estimates of available lift constituted the agreed upon "requirements" for the ROUNDHAMMER assault. The calculated lift added up to an estimated five divisions, three of them at assault scales, and these constituted henceforth the approved dimensions within which the planners had to work. In effect, the suit was cut to fit the cloth. The whole assault lift calculation was highly theoretical. The staffs had simply translated the total number of each type of vessel into the numbers of men and vehicles (including everything from jeeps to medium tanks) that its rated capacity indicated it could carry, added the totals together, and divided the sum by the average number of men and vehicles that current doctrine allowed for a division in an amphibious operation. They had not considered the inevitable shrinkage of capacity to be expected when vessels were grouped into subtask forces and teams and loaded with several types of units and equipment. Nor, since the site of the operation still was not fixed, had they considered the length of the Channel turnaround. ROUNDHAMMER requirements, accordingly, were set at five assault divisions—three in the initial assault and two in the immediate follow-up—with two more to follow in surviving ships and craft and an additional two airborne. General Morgan was given these specifications and directed to develop a plan.[49]

A total of 29 divisions (17 British and Canadian, 12 American) was expected to be assembled and ready in the United Kingdom on D-day, including the 7 to be transferred from the Mediterranean. As many as 6½ more from the United States might be on hand, but would not be fully equipped and ready to go.[50] The build-up to these force levels was calculated and recalculated, and calculations were still going on as the conference ended. British shipping was heavily relied on for the movement of U.S. forces, especially the *Queen Elizabeth* and the *Queen Mary*, which would run on a lengthened 4-week cycle and carry up to 15,000 troops per crossing. With these and other transports, there seemed a fair prospect that British shipping alone would move about 366,000 American troops across the Atlantic by May 1944. During 1943 the emphasis would be on building up air forces for the strategic bombing offensive and service troops to staff existing installations, construct new depots, and increase port intake capacity. Ground combat strength,

[48] CCS 244/1, 25 May 43, app. A to Annex V.

[49] The calculations are shown in CPS 71, 20 May 43. The directive to COSSAC is Incl B to CCS 250/1, 25 May 43.

[50] (1) CCS 244/1, 25 May 43, Annex II, Annex VII. (2) One French division was regarded as a possibility.

TABLE 8—ALLOCATION BY MONTH OF MAJOR TYPES OF U.S. LANDING CRAFT (TRIDENT) JULY 1943–JUNE 1944

Type and Area	Strength 1 July 1943	1943[a]						1944[a]					
		July	August	September	October	November	December	January	February	March	April	May	June
LST[b]													
Total	176	22[c]	22	20	22	19	18	12	12	12	12	12	12
Pacific	84	0	19	19	19	3	0	0	0	0	0	0	0
		(84)	(103)	(122)	(141)	(144)	(144)	(144)	(144)	(144)	(144)	(144)	(144)
Atlantic	92	6	3	1	3	16	17	0	0	0	0	0	0
		(98)	(101)	(102)	(105)	(121)	(138)	(138)	(138)	(138)	(138)	(138)	(138)
Unallocated	0	0	0	0	0	0	1	12	12	12	12	12	12
								(13)	(25)	(37)	(49)	(61)	(73)
LCT													
Total	319	10	10	14	20	20	20	20	20	20	20	20	20
Pacific	180	3	3	3	6	6	6	6	6	6	6	6	6
		(183)	(186)	(189)	(195)	(201)	(207)	(213)	(219)	(225)	(231)	(237)	(243)
Atlantic	139	7	7	11	14	14	14	1	0	0	0	0	0
		(146)	(153)	(164)	(178)	(192)	(206)	(207)	(207)	(207)	(207)	(207)	(207)
Unallocated	0	0	0	0	0	0	0	13	14	14	14	14	14
									(27)	(41)	(55)	(69)	(83)
(LCI)L[d]													
Total	172	16	16	16	20	20	20	20	20	20	20	20	20
Pacific	70	12	10	12	12	12	12	12	12	12	12	12	0
		(82)	(92)	(104)	(116)	(128)	(140)	(152)	(164)	(176)	(188)	(200)	(200)
Atlantic	102	4	6	4	8	8	8	8	0	0	0	0	0
		(106)	(112)	(116)	(124)	(132)	(140)	(148)	(148)	(148)	(148)	(148)	(148)
Unallocated	0	0	0	0	0	0	0	0	8	8	8	8	20
										(16)	(24)	(32)	(52)

[a] Parenthetical figures are cumulative.

[b] 10 LST's allocated to ANAKIM from early June production.

[c] 16 LST's committed to the United Kingdom from July production.

[d] Source states that 42 U.S. LCI(L)'s would be needed to lift British troops and "it would appear desirable that they be British manned." None of them, however, were definitely allocated to the British at TRIDENT.

Source: CCS 244/1, 25 May 43, title: Implementation of Assumed Basic Undertakings . . . , Annex V, app. B.

in consequence, would reach only 8 divisions by the end of 1943, in a total force of 763,000. The target strength for 1 May 1944 was 1,300,000 men—393,000 air and 907,000 ground forces.[51] (*Table 9*)

Backing up the troop movements were 259 scheduled cargo sailings in the third quarter of 1943, 280 in the fourth quarter, 420 in the first quarter of 1944, and 400 in the second quarter 1944. In addition, 12 shiploads of military cargo on BOLERO account were to be lifted monthly on vessels carrying British import supplies. Although the volume of scheduled troop and supply movements was heavier in the four months preceding D-day than earlier, the schedule clearly contemplated a substantial advance movement of supplies in the summer of 1943, since the troop build-up would not begin in earnest until August. It was not enough, even so, to satisfy the British, who were worried over the impact of the heavy winter and spring movements on their crowded ports and indicated that 150 ships per month was the maximum that could be accepted on BOLERO account. The TRIDENT decisions thus gave the ASF a green light for the BOLERO preshipment program, and before the conference ended a new program had already taken shape.[52]

The Other War

The debate on strategy in the European war dominated the TRIDENT meetings. There was no thoroughgoing discussion of the war against Japan, and consideration of actual operations was confined almost entirely to those in southeast Asia. The broader issues of whether—and, if so, to what extent—the war against Japan should be subordinated to the war in Europe, in terms of allocation of resources, was not debated at length. The final decision, which in the event proved more enduring than those on the European war, was reached with little fanfare.

The JCS came to the conference with a rationale of the "defeat Germany first" concept that was hardly compatible with the British understanding of it. In their own councils the JCS had agreed, repeatedly and explicitly, that if the British should insist on a predominantly Mediterranean approach in Europe, the United States must shift its main effort to the Pacific. The threat was not made explicit in the position papers presented to the British. These papers set forth the recently developed American theory of the interrelated character of the "global" war, and repeated the argument, briefly debated in April, that it was essential to "maintain and extend" the pressure in the Pacific war while the war in Europe was still in progress in order to defeat Japan in the shortest possible time. Since that time a significant new proviso had been added to the effect that, should conditions develop making it possible to end the war as a whole more quickly by mounting a major offensive against Japan before the European Axis was defeated, "the concept of defeating Germany first may be reversed."[53] As a corollary, in a discussion of the "main-

[51] (1) CCS 246, memo, by Br COS, 23 May 43, title: Movement of Queens. (2) Min, 93d mtg CCS, 22 May 43. (3) CCS 244/1, 25 May 43. (4) Min, 94th mtg CCS, 23 May 43, and Annex A.

[52] (1) See below, ch. VII. (2) CCS 244/1, 25 May 43, Annex VII.

[53] (1) CCS 219, 14 May 43, memo by U.S. Chiefs of Staff, title: Conduct of the War in 1943–44. (2) CCS 220, 14 May 43, memo by U.S. Chiefs of Staff, title: Strategic Plan for the Defeat of Japan.

TABLE 9—PLANNED U.S. BUILD-UP FOR ROUNDHAMMER (TRIDENT)

	Strength 1 July 1943	1943						1944					
		July	August	September	October	November	December	January	February	March	April	May–June[a]	3d Qtr[a]
From U.S.	180,700	22,000	124,200	114,400	92,000	91,000	34,000	58,000	128,000	147,000	154,000	139,000	52,000
From Iceland	—	—	15,000	—	—	—	—	—	—	—	—	—	—
Replacements	—	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	46,000	73,000
From North Africa	—	—	—	—	—	45,000	45,000	50,000	—	—	—	—	—
AAF (cumulative)	118,000	131,800	148,000	170,000	201,800	234,500	278,200	317,200	359,700	380,900	393,200	(May) 406,500	406,500
AGF–ASF (cumulative)	62,700	70,900	193,900	286,300	346,500	449,800	485,100	554,100	639,600	765,400	907,100	1,032,800	1,084,800
Total (cumulative)[b]	180,700	202,700	341,900	456,300	548,300	684,300	763,300	871,300	999,300	1,146,300	1,300,300	1,439,300	1,491,300
Divisions	1	1	2	4½	5½	6½	8	10	12	15	18½	21½	23
North Africa (cumulative)	503,300	512,300	512,300	512,300	512,300	467,300	422,300	372,300	372,300	—	—	—	—
CBI (cumulative)	40,600	56,100	56,100	62,200	71,700	71,700	82,800	83,000	—	—	—	—	—
Pacific (1944 only) (cumulative)	—	—	—	—	—	—	—	35,000	80,000	70,000	105,000	175,000	175,000

[a] Troop intake into the United Kingdom limited by ports after May 1944. Surplus troop lift: May, 45,000; June, 110,000; July, 160,000; August, 165,000; September, 170,000.
[b] Cumulative figures for the United Kingdom include transfers from North Africa.
Source: CCS 244/1, 25 May 43, title: Implementation of Assumed Basic Undertakings . . . , Annex VII, Table III.

tain and extend" formula in a CCS meeting on 17 May Admiral Leahy declared that "if an unfavorable situation arose in the Pacific, all would realize that, whatever agreements were in existence, the United States would have to divert forces to meet this eventuality."[54]

The U.S. Chiefs seemed to be taking the position that the extremes of either success or adversity in the Pacific might dictate a reversal of the "Europe first" strategy. Yet they did not think that position inconsistent with their continuing belief that in all probability the war could be won "most speedily by first defeating Germany, and thereafter by completing the defeat of Japan."[55] There is no indication that they had any plans for a really large-scale shift to the Pacific in the foreseeable future, and no recent staff studies had explored the logistical implications. The Chiefs must have been aware, indeed, that the President would not support such a move. It seems more likely that the real aim of the JCS was to reserve the right to make a major shift to the Pacific if developments should require it—or if the British should insist on a program of operations in the Mediterranean that the Americans could not accept.

Meanwhile, the U.S. Chiefs were determined, as they had served notice four months earlier at Casablanca, to step up the scale and tempo of the Pacific war. The "maintain and extend" formula, written into a CCS conference paper and approved by the heads of state, would lend to this purpose the sanctity of formally ratified coalition grand strategy, even though the British would have little or no share in its implementation. To be sure, implementation still lay largely in the future. The more realistic examination of resources that had taken place since Casablanca had led the U.S. planning staffs to scale down plans for operations against Japan in 1943 so that current plans actually were somewhat more modest than the Casablanca proposals. But the American position paper contained a broad hint of what was to come:

> U.S. naval forces [in the Pacific] will be increased to the maximum consistent with the minimum requirements in the Atlantic. With due regard to the requirements of the main effort against the European Axis, air and ground forces will be provided so as to facilitate joint action and make optimum use of the increasing strength of U.S. Naval forces.[56]

Deployment to the Pacific of naval forces that could not be profitably employed in the Atlantic would, of course, create its own rationale for new offensive operations. Naval forces, in turn, would draw in their wake additional air and ground forces, merchant shipping, and, of course, amphibious shipping, which already was moving to the theater in growing volume. As General Marshall had so often argued with reference to the Mediterranean, offensives, once they were launched, always generated demands for more resources and led to further offensives.

The British did not make this obvious point in the discussions at TRIDENT concerning the Pacific war. They did strenuously object, however, as they had in April, to the insertion of the phrase "and extend" into the Casablanca formula. Brooke argued that "shipping

[54] Min, 86th mtg CCS, 17 May 43.
[55] Min, 83d mtg CCS, 13 May 43, Annex A.
[56] CCS 219, 14 May 43.

alone prohibited an equal effort in the Pacific Theater," and that the Allies lacked the strength to defeat Germany and Japan simultaneously. After an exchange of views on 17 May the general issue was shelved temporarily in order to permit discussion of the more concrete aspects of the war against Japan.[57]

At the beginning of the conference the Americans had not yet agreed among themselves on the specific outlines of a strategy for the defeat of Japan. They presented both a long-range plan and one for specific operations to be undertaken in 1943–44; but the latter was sketchy, and neither had a definite timetable. The long-range plan called for operations converging on the China coast from the Pacific, overland through China, and by sea from India through the Strait of Malacca and the South China Sea. From bases in China, the Allies would first attempt to crush Japan by air bombardment; ultimately, if necessary, they would invade the home islands.

The short-range prospectus for 1943–44 provided for simultaneous advances in the Pacific along two main axes. The first was the familiar one already marked out in the South and Southwest Pacific; the second was the route through the Central Pacific laid down long before in the prewar plan ORANGE. Advances along the former line in 1943–44 were to extend only to the capture of the Solomon Islands, the Bismarck Archipelago, and New Guinea, and in the Central Pacific only as far as the Marshalls and Carolines, thus stopping far short of the Philippines and the China coast. These advances were to be combined with stepped-up air operations in China, a north Burma operation to open the Ledo Road to China, ejection of the Japanese from the Aleutian Islands, and intensified air and sea attacks on enemy lines of communication. A sketchy estimate of requirements indicated that about seven more Army divisions would be needed in the Pacific, considerably more aircraft both there and in China, and an indeterminate amount of cargo shipping besides the resources available from a rapidly growing fleet. Most significantly, though the Americans stated that the major restriction on Pacific operations would be "availability of trained amphibious divisions and amphibious craft," they made no attempt to enumerate how many of the latter would be needed.[58]

The British, as Brooke laconically noted, "accepted what was put forward"[59] in the American plan for 1943–44 Pacific operations, and agreed that the general plan for the defeat of Japan should be the basis for further study and report by the Combined Planners at the next conference. Over mild British protests, Admiral King and General Marshall served notice that any surplus of American aircraft in Europe would be sent to the Southwest Pacific.[60]

The real debate developed over strategy in Burma and China. It was not a purely Anglo-American debate, for both Stilwell and Chennault were on hand to support their opposing views. The President, although officially supporting the JCS position that a land campaign in

[57] Min, 86th mtg CCS, 17 May 43.

[58] (1) CCS 239/1, 23 May 43, title: Opns in Pacific and Far East in 1943–44. (2) CCS 220, 19 May 43, title: Strategic Plan for Defeat of Japan.

[59] Quoted in Bryant, *Turn of the Tide*, p. 510.

[60] Min, 95th mtg CCS, 24 May 43.

Burma would be needed to open communications with China, barely disguised his preference for Chennault's strategy of staking everything on an air offensive. Knowing this, the JCS had in fact come prepared to agree to a modified version of ANAKIM that involved a north Burma operation to clear the trace for the Ledo Road without the full-scale offensive earlier considered necessary to open the supply route north from Rangoon to the old Burma Road.[61] Before the conference ended Roosevelt had granted Chennault's Fourteenth Air Force so decisive a claim on tonnage airlifted over the Hump as to leave little capacity for ground equipment for the Chinese forces in Yunnan on whom Stilwell was counting heavily to carry out even a limited ANAKIM.

The British also threw their weight into the balance in favor of Chennault. They set forth at length their objections to executing ANAKIM in the 1943–44 dry season, stressing its cost, the immense logistical problems, and the difficulties of jungle fighting. They pointed out that, even if successful, the operation would not permit overland supply movements into China before mid-1945 or later. The British wanted, instead, to concentrate immediately on expanding the air route to China and carrying out limited offensives in north Burma and against Ramree Island and Akyab. As a grand alternative, finally, Churchill expounded the advantages of naval and amphibious attacks against Sumatra, Java, or Malaya.

These last-named schemes evidently reflected diversionary tactics, for they were not vigorously pressed. President Roosevelt's views, on the other hand, clearly pointed the way to a compromise on operations in Burma. He insisted that an enlarged air effort in China and preparations for a limited ground campaign in north Burma were not mutually exclusive, and the CCS obediently wrote both into their scheme of operations for the China, Burma, India theater (CBI) in 1943. First priorities were assigned to expansion of the Hump airlift from its current capacity of less than 4,000 tons to 10,000 tons monthly, and to development of air facilities in Assam with a view to intensifying air operations against the Japanese from both Burma and China and to increasing the flow of airborne supplies into China. "Vigorous and aggressive land and air operations into Burma via Ledo and Imphal" were also to be undertaken in step with an advance by Chinese forces from Yunnan, and the British were charged with the Akyab and Ramree Island amphibious landings. Meanwhile administrative preparations for major land and amphibious operations on the scale of ANAKIM were to continue, but without a target date.[62]

In effect, a campaign to reconquer all of Burma and to reopen the old Burma Road was indefinitely deferred. A limited operation to retake northern Burma and open a new road to China stayed on the books but only as a second-

[61] (1) JCS 297, 10 May 43, title: Opns in Burma 1943–44. (2) Charles F. Romanus and Riley Sunderland, *Stilwell's Mission to China*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1953), pp. 320–28. (3) See below, ch. XXI.

[62] (1) Min, 91st mtg CCS, 21 May 43. (2) Romanus and Sunderland, *Stilwell's Mission to China*, pp. 328–33. (3) For the background of the decisions concerning CBI made at TRIDENT see *Global Logistics, 1940–43*, pages 542–47. (4) And see below, ch. XXI.

ary commitment. And, despite the President's optimism, it soon became apparent that the resources committed to CBI were grossly inadequate to support simultaneous major offensives in the air and on the ground.

Whatever the result may have owed to differences within their own ranks, the American military regarded the southeast Asia program decided upon as essentially a British one. "The British," noted Admiral Cooke after the Burma decisions had been made, ". . . have written the ticket, in substance, for everything to date. . . . In the Pacific we will be carrying out the operations with American forces, and I urge that we write the ticket and accept absolutely no reservations from the British."[63] The British, in fact, did accept the American "ticket" for the Pacific as written, and this exchange smoothed the path for the agreement reached near the end of the conference on the "maintain and extend" proviso that had been shelved a week earlier. By 24 May only Admiral King, on the American side, still held to that proviso in its original form. After a short debate the impasse was finally broken by adding a phrase suggested by the British naval chief, Admiral of the Fleet Sir Dudley Pound: ". . . the effect of any such extension on the overall objective to be given consideration by the Combined Chiefs of Staff before action is taken." The Americans also quietly dropped the issue of a major shift to the Pacific under hypothetical conditions with a final warning, voiced by Admiral Leahy, that "public opinion in the United States would not permit the acceptance of major reverses in the Pacific."[64]

The amended "maintain and extend" formula, as both King and Brooke perceived, placed no real curb on American prosecution of the Pacific war, which was in fact soon to rise to a level of intensity not markedly lower than that of the war in Europe. How soon and how high were questions that could not be answered in concrete terms in May 1943, most of all because plans for the great Central Pacific offensive were still in the formative stage. It was this offensive, in which the growing power of the U.S. Navy would be mainly concentrated, that Admiral King evidently had in mind when he rejected any reductions in existing allocations of landing craft to the Pacific.[65]

The "Not Unmanageable" Cargo Shipping Deficit

One of the last items of business at TRIDENT, and an innovation in coalition strategic-logistics, was the combined cargo shipping budget. The impetus to this undertaking in global logistical account-

[63] Memo, Cooke for King, 21 May 43, sub: JCS 304, Opns in Pacific and Far East, 1943–44, ABC 337 TRIDENT, Sec E, Case 23.

[64] (1) Min, 95th mtg CCS, 24 May 43. (2) Bryant, *Turn of the Tide*, pp. 515–16. (3) Fleet Admiral Ernest J. King and Walter M. Whitehill, *Fleet Admiral King* (New York: W. W. Norton & Co., 1952), p. 441. (4) CCS 244/1, 25 May 43.

[65] (1) See, for example, the planned allocation of 60 LST's to the Pacific between August and November 1943 in Table 8. (2) Shortly after TRIDENT, in a revised plan for 1943 deployment of combat loaders, the Navy assigned 47 assault transports to the Pacific as against only 19 to the Atlantic; at the time of TRIDENT, the planned division between the two areas had been roughly equal (31 to 27). See JCS 249 (Rev), 12 May 43; and JPS 193/1, 15 Jul 43, title: Strategic Deployment of U.S. Forces to 1 Jul 44; the last is a planning paper based on the TRIDENT decisions.

ing came from the civilian shipping administrators, American and British alike, who felt that the bankruptcy of strategic planning following Casablanca had been in large part a result of the failure of the strategists to face up to the visible facts and prospects of the shipping situation. It was no accident, then, that at TRIDENT the U.S. Deputy War Shipping Administrator, Lewis Douglas, was in attendance along with his British opposite, Lord Frederick Leathers of the British Ministry of War Transport (BMWT). Both men were convinced that "it was important not to leave . . . without having related fully the shipping availability to the strategic programme."[66]

Because of differences in the composition and employment of the two merchant fleets, it had been agreed that the shipping representatives of each nation would bring to the conference a purely national balance sheet, projected to the end of 1943, matching their own requirements against their own assets. At the conference, after requirements had been adjusted to take into account decisions reached on strategy, they would try to apply one country's surpluses against the other's deficits, explore possibilities for further pooling on specific routes and for specific programs and, finally, arrive at an over-all estimate of the relation between means and ends.

The British budget, submitted to the American shipping authorities just before the conference began, showed a total deficit of 155 sailings for the last half of 1943, for 95 sailings on military account to the Mediterranean and Indian Ocean areas, and 60 for the United Kingdom import service after allowing for American aid already promised. No requirements had been budgeted for ANAKIM (possibly 120 sailings), for post-HUSKY operations in the Mediterranean, or for cargo transfers from the Mediterranean to the British Isles, apparently on the assumption that if such requirements materialized they would have to be absorbed in the American budget.[67] That budget, which had been consolidated by WSA from separate estimates submitted by the military services and other claimants, showed a deficit of 181 sailings.[68]

WSA officials did not consider the total deficit—336 sailings—as unduly for-

[66] (1) C. B. A. Behrens, "History of the Second World War, United Kingdom Civil Series," *Merchant Shipping and the Demands of War* (London: Her Majesty's Stationery Office, 1955), pp. 366, 337–38. (2) Leighton and Coakley, *Global Logistics, 1940–43*, chs. XXV, XXVI.

[67] (1) *Ibid.* (1), pp. 368, 382. (2) WSA Notes on Statements of Dry Cargo Shipping Position, May 10, 1943, Tables I, II, III. Table I is especially pertinent. Folder CCS Reqmts and Availables 1943, WSA Conway File (hereafter cited as WSA Notes). (3) The term "sailings" used by the United States as the unit of measure in computing its shipping budget meant one round voyage by a theoretically average-sized ("notional") ship. The British budget was computed in terms of dead-weight tons of shipping continuously employed. The British deficit of 155 sailings was the estimated equivalent in U.S. terms of about 800,000 dead-weight tons of U.K. shipping continuously employed. The different methods of measurement were used because the U.S. unit could not be applied to a great part of British shipping, 12 percent of which, for example, was permanently assigned to the "cross trades"—circuitous and varied rounds among ports in areas other than the British Isles; moreover, voyages between U.K. ports and distant areas such as the Indian Ocean involved complex routings among many intermediate ports. U.S. shipping, on the other hand, was used on relatively short, direct runs between a home port and a single overseas port or area. See Behrens, *Merchant Shipping*, p. 379.

[68] (1) WSA Notes, Tables I, II, III. (2) Table, U.S. Cargo Shipping Requirements 1943, prepared by Plng Div OCT, ABC 570 (2-14-42) Sec 4. (3) Table, Cargo Sailings Required by Army, folder 10a Shpg File SoPac, ASF Plng Div.

midable.[69] Since most of it fell in the third quarter of 1943 (109 sailings for the British, 105 for the Americans) any savings that could be made in distant voyages during that quarter would automatically reduce the fourth quarter deficit as well. WSA hoped in fact to pick up some U.S. savings on the Red Sea route after the opening of the Mediterranean, and even to persuade the military to decelerate the British build-up in India on the strength of a postponement of major operations there. There was room for more pooling of U.S. Army cargo and British import cargo on the North Atlantic run and for more efficient use of freighter deck space; and the Western Hemisphere trades, though already attenuated, might absorb a small further cut. By all these means, combined with rigid economies all down the line, WSA hoped to reduce the entire deficit by about two-thirds and to wipe out the United Kingdom import deficit altogether.[70] Even as it stood, the deficit represented less than 5 percent of total requirements projected for a longer period than shipping officials ordinarily were willing to make firm commitments. On the eve of TRIDENT Lewis Douglas and Sir Arthur Salter, the British merchant shipping representative in Washington, prepared a joint statement:

> All estimates of available shipping and requirements covering a long period extending into the future are necessarily unprecise and subject to all the changing fortunes of war. Shipping availabilities fluctuate with the progress of submarine warfare, routing, loss of shipping in assault operations, and a variety of additional factors. Military requirements vary with developments in the theaters of war and modified strategic plans. The present estimates of requirements and shipping availabilities must therefore be constantly reviewed in the light of changing conditions.

The deficits, they concluded, were "within the margin of error inherent in a forward projection," and, with careful economies, might "well prove to be manageable."[71]

Somervell and Gross, who had drawn up the U.S. Army requirements that formed the bulk of the American budget, took a different view. Still irked by the President's decision at the end of March to support British shipping needs at whatever cost to American military operations, they tried to have British import requirements assigned the role of residual legatee rather than listing them along with other requirements, and urged that the combined deficit be charged against the import program. Douglas and Hopkins overruled them in a preconference session, but they renewed their effort on 22 May when the combined budget came up for conference consideration.

The debate that ensued had a dreamlike quality. By this time the deficit had been swollen by the addition of new military requirements — for post-HUSKY operations in the Mediterranean, for the Azores occupation, for continued support of British forces in India, for Medi-

[69] Behrens, *Merchant Shipping*, pp. 369, 383, erroneously gives the American deficit alone as 336 sailings. This error invalidates much of her discussion of hte shipping problem at TRIDENT.

[70] (1) WSA Notes, Tab, Assumptions Underlying WSA Estimates, 6 May 43; and marginal pencil comment on Table IV; Tab, Memorandum, 9 May 43; and Table, 8 May 43. (2) Min, Conf, Douglas with Hopkins, Somervell, Gross, and Rear Adm William W. Smith, 7 May 43. Both in folder CCS Reqmts and Avlbles 1943, WSA Conway File.

[71] WSA Notes.

terranean-to-U.K. transfers, and for prisoner-of-war movements. Before the debate could get well under way, the British unexpectedly offered to write off their own deficit if the Americans would write off theirs. Behind this proposal apparently was a conviction, shared by Douglas and his colleagues, that U.S. military demands were inflated beyond reason and that the American deficit "existed on paper but not in fact."[72] As for the British deficit, import needs seemed likely to be absorbed in the growing volume of transatlantic movements, while sailings to India had lost some urgency with the postponement of ANAKIM. Nevertheless, a stormy debate ensued, in which the American military representatives attempted to secure a further deflation of the British budget. The climax was reached in the small hours of Sunday morning, 23 May, when Somervell, for reasons not explained, insisted that the budget be projected to cover the first nine months of 1944. This calculation, so conjectural as to be hardly worth discussing, entailed additional hours of labor and produced astronomical new paper deficits. Meanwhile, in piecemeal concessions the Americans had reduced their original 1943 deficit, despite interim additions, from 181 to 135 sailings, and Somervell made a final bid to persuade the British to pick up half of this rock-bottom debit. The British categorically refused, and Somervell finally conceded that "it might be managed." At 6:30 a.m. the meeting broke up "with everyone," Douglas recorded, "well satisfied."[73]

A few hours later Somervell with evident pride presented the final document to the Joint Chiefs, and that afternoon Lord Leathers presented it to the CCS. He indicated that the small residual 1943 deficit, less than 4 percent of total requirements, would probably prove "not unmanageable." The deficits for 1944 were simply ignored. With this verdict the CCS were content. Admiral King later told Douglas, with unwonted joviality, that the budget was "the first statement of shipping that he had ever understood."[74] (*Table 10*)

Behind all this facile manipulation of paper requirements and assets was a slowly dawning awareness that the Allies had won a smashing victory in the war at sea. This was not apparent at the beginning of the conference. As at Casablanca, the war against the U-boats was made a first charge against Allied resources, and there was talk of land operations against the Bay of Biscay submarine bases. The decision to acquire new air bases in the Azores, with or without the consent of Portugal, reflected the general assumption that the U-boat threat would continue to be a major limitation on Allied strategy.[75] But as

[72] (1) Behrens, *Merchant Shipping*, p. 370. (2) Conf, Douglas, Hopkins, and others, 7 May 43. (3) Conf, Douglas, Vice Adm Frederick J. Horne, Adm Smith, and others, 22 May 43. (2) and (3) in folder Alloc Genl, LWD Diary, WSA Douglas File. (4) See also related corresp, same folder.

[73] (1) Min, Conf, 22 May 43. (2) Behrens, *Merchant Shipping*, p. 371.

[74] (1) Douglas Notes on JCS and CCS Mtgs, 23 May 43, folder Alloc General, WSA Douglas File. (2) CCS 244/1, 25 May 43, Annex VII, Part III, Appendix: Memo by Douglas and Leathers, 23 May 43. (3) For Behrens' verdict on the budget see *Merchant Shipping*, pp. 373–74.

[75] (1) CCS 242/6, 25 May 43. (2) Min, 81st mtg, JCS, 14 May 43. (3) Col E. A. Peterson, Section III, The War against Germany and Its Satellites, ch. VIII, Part D, pp. 483–86, in History of the Joint Chiefs of Staff in World War II, MS, JCS Historical Sec.

TABLE 10—THE U.S. SHIPPING BUDGET: SPRING 1943
(IN SAILINGS)

Requirements	Submitted at TRIDENT 1943		Approved at TRIDENT, 23 May 1943[a]				
			1943		1944		
	3d Qtr	4th Qtr	3d Qtr	4th Qtr	1st Qtr	2d Qtr	3d Qtr
Maintenance services and misc minor operational requirements[b]	730	715	739 (+9)	724 (+9)	578	569	579
Aid to British imports	270	300	270	300	330	330	360
Other aid to Britian (nonmilitary)	96	111	111(+15)	111	150	160	200
Operational aid to Britian	[c]0	[c]0	0	[d]44 (+44)	[d]56	0	0
Aid to Russia	71	69	45(−26)	54 (−15)	54	54	54
Maintenance of prisoners of war	0	0	12(+12)	2 (+2)	0	0	0
Economic support of occupied countries	0	0	0	0	90	90	90
Major areas:							
Mediterranean	199	194	188(−11)	166 (−28)	123	123	123
(post-HUSKY maintenance)	0	0	0	90 (+90)	70	0	0
Azores	0	0	0	8 (+8)	0	0	0
European (BOLERO-SICKLE)	252	383	259 (+7)	280(−103)	420	400	360
CBI	47	42	48 (+1)	52 (+10)	34	51	51
Pacific[e]	0	0	0	0	117	130	66
Total requirements	1,665	1,814	1,672	1,831	2,022	1,927	1,883
Total assets	1,556	1,742	1,606(+50)	1,762 (+20)	1,900	2,050	2,250
Surplus or deficit	−109	−72	−66	−69	−122	+123	+367
	−181		−135				

[a]Figures in parentheses show additions to or subtractions from budget as initially submitted.
[b]This represents a consolidation of several categories of requirements, involving maintenance of the war-making capacity of the Western Hemisphere and support and maintenance of U.S. Army and Navy forces other than those in the British Isles, Mediterranean, China-Burma-India, and Pacific (1944).
[c]Original Army requirements included 60 sailings in last half 1943, covering most of the British deficit in this category.
[d]For cargo movements from Mediterranean to the United Kingdom, and 25 shipments in first quarter of 1944 to the Indian Ocean.
[e]1943 requirements included in category described in [b] above.
Source: (1) WSA Notes on Statements of Dry Cargo Shipping Position, 10 May 43. (2) CCS 244/1, 25 May 43, title: Implementation of Assumed Basic Undertakings . . . , Annex VII, Part I.

the conference wore on, and daily reports indicated a rising toll of submarine sinkings, the outlook grew steadily brighter. By 24 May Churchill could declare that the Allied victory in the current antisubmarine offensive was a "new fact" in the total equation. The kill for May amounted, in fact, to 40 U-boats in the Atlantic alone, a blow to the German submarine arm that proved very nearly mortal.[76]

By the time the shipping budget came up for consideration, it could be determined that actual ship losses since the beginning of the year had been 32 per-

[76] (1) Min, White House Mtgs, 19, 21, 24 May 43. (2) Winston S. Churchill, *Closing the Ring* (Boston: Houghton Mifflin Co., 1951), p. 10.

cent less than expected in February. The conferees were sufficiently encouraged to add 70 Atlantic sailings arbitrarily to prospective assets during 1943. If the trend continued, it could be expected that losses during the second half of the year might be reduced by almost a million dead-weight tons, representing a gain over earlier expectations of about half that amount of shipping in service, on the average, during that period. This was the equivalent of something over a hundred sailings on the North Atlantic route where losses were heaviest—a sufficient basis, perhaps, for the conclusion that the deficit might safely be regarded as "not unmanageable."[77]

From TRIDENT emerged the broad patterns of global strategy under which the Allies were to use the vast war-making resources becoming available. In Europe they involved a Mediterranean campaign and a bombing offensive against Germany leading up to a medium-scale cross-Channel invasion in spring 1944. For the war against Japan, they combined a more intensive campaign in the Pacific with a less ambitious effort in southeast Asia and China than had originally been visualized by the American staffs. Logistical considerations, as well as British arguments, had forced the American staffs to scale down their conceptions of ROUNDUP and ANAKIM. In recompense they had secured British agreement to "extending" unremitting pressure against Japan in the Pacific and a seemingly clear prohibition against further allotment of forces to the Mediterranean in the interests of insuring the medium-scale cross-Channel operation in 1944.

In its broader aspects the new global strategy was to prove far more realistic in relation to available resources than had the strategy developed at Casablanca. No new shipping crisis would arise of proportions formidable enough to shake the basic conclusion that shipping deficits would be "not unmanageable." Assault shipping estimates, on the other hand, were to prove far less realistic and their adjustment to the actual needs of ROUNDHAMMER was to be the principal strategic-logistical problem of the year to come. TRIDENT plans, moreover, lacked specific schemes of maneuver and, in their indefinite prescriptions for continuing operations in the Mediterranean and the Pacific and the degree of uncertainty about the feasibility of operations in Burma, left much room for misunderstanding and arguments between British and American staffs. Two more grand conferences would take place, and almost continuous strategic-logistical debate, before the patterns determined at TRIDENT would harden sufficiently for firm logistical plans to be based upon them.

[77] (1) Calculations are based on figures in CCS 174, rpt by CMTC, 4 Feb 43, title: Loss Rate for 1943; and in CCS 174/1, 2 Jul 43, same title. (2) Behrens, *Merchant Shipping*, pp. 293, 373 note 1.

PART TWO

ORGANIZATION AND METHOD

CHAPTER IV

Logistical Organization

By the time of the TRIDENT Conference in May 1943, both the U.S. and the combined machinery for making and executing strategic decisions had taken relatively final form. Changes made in the last two years of the war were mostly matters of detail, of refinements and adjustments to an intricate operating machine, and grew out of efforts to promote smoother functioning of the most extensive and complex part of the apparatus, that part concerned with planning, direction, and control of the logistical effort.

Civil-Military Relations

The American logistical effort, in its larger aspects, was civilian as well as military, and involved the nation's entire economy. In its direction and control both civilian and military organizations played their part. For the management of the war economy, President Roosevelt in 1942 created a multiplicity of special civilian agencies, most of them engaged in co-ordinating rather than operating functions. Of these agencies the War Production Board (WPB) was pre-eminent — in theory, if not always in fact, the arbiter of all industrial war production. Of no less importance for military logistics was the War Shipping Administration (WSA), which was charged with the allocation, control, and use of American merchant shipping within the limits of "strategic military requirements" as determined by other, presumably military, authority. Other agencies—the War Food Administration, Office of Defense Transportation, Office of Price Administration, Petroleum Administrator for War, Solid Fuels Administrator for War, and the War Manpower Commission, to name the most important—all exercised varying degrees of authority in their respective fields. Representatives of certain of the civilian agencies formed, with their British counterparts, the four civilian combined boards (Combined Production and Resources Board, (CPRB), Combined Raw Materials Board, Combined Shipping Adjustment Board (CSAB), and Combined Food Board) that served as media for co-ordinating the British and American economic effort.[1]

Within the military sphere, most strategic-logistic planning and determination of strategic requirements fell to the Joint Chiefs of Staff and its various committees. The Army-Navy Munitions Board (ANMB), theoretically at least representative of the undersecretaries of War and Navy, served as the military link with WPB at the joint level and

[1] For treatment of the civilian wartime agencies, see Bureau of the Budget, *The United States at War: Development and Administration of the War Program of the Federal Government* (Washington, 1946).

administered the complicated system of production priorities for military programs. The vast logistical operating functions – detailed calculation of requirements, planning and scheduling of military production, and storage and distribution of end products–fell to the War and Navy Departments acting through their own separate agencies.

Many of the organizational growing pains and the adjustment problems in 1942 involved the relationship between civilian and military authority. If, in theory, the logistical process could be divided into civilian and military segments, the one concerned with essentially commercial processes in production and distribution and the other with direct support of military operations, in practice the lines of authority overlapped at every turn. If military leaders respected the tradition of civilian control as much as did members of Congress and civilian heads of wartime agencies, they still considered it necessary that they share control and direction of the nation's economic effort because of its direct bearing on the success or failure of military operations. By mid-1943 most relative areas of responsibility had been satisfactorily defined, but some hazy sectors remained. By arrangements worked out in 1942 the military services had generally firm control of all operations that directly affected logistical support of the armed forces from production lines to overseas depots. WPB, for instance, did not become an operating ministry of supply, but left the actual purchasing, contracting, and inspection of military supplies to the Army and the Navy. Similarly, WSA, albeit with greater reluctance, left the actual loading and shipment of military supplies in the hands of the military services. The civilian agencies entered the picture in allocating between the military services and other claimants the necessary facilities, raw materials, and transportation. By an intricate network of liaison and committee arrangements, the military departments and the JCS participated in the processes of allocation, but by no means did they control them. Essentially processes of negotiation, of give and take, the relationships between civilian and military agencies were not precisely defined. When the Joint Chiefs had determined what they conceived to be strategic requirements for ships, raw materials, or plant capacity, they were reluctant to accept as final the decisions of civilian agencies that denied these claims because of competing civilian demands. The JCS could hardly help but consider civilian needs less essential than military. When disagreements of this kind over allocations arose–as they did in the feasibility dispute of fall 1942, and in the cargo shipping crisis of spring 1943–only the President could, and did, exercise the power of final decision.[2]

The governmental structure for directing the war effort, as it existed in mid-1943, has been described by one critic as "an amorphous, unwieldy, and baffling agglomeration of agencies, largely improvised as the developing situation seemed to dictate."[3] Yet it endured in all its fundamentals until the end of the war. The one major change that did take place was not in the structure itself but

[2] See Leighton and Coakley, *Global Logistics, 1940–43*, pp. 211–19, 602–11, 690–702.

[3] Herman Miles Somers, *Presidential Agency: OWMR, The Office of War Mobilization and Reconversion* (Cambridge, Mass.: Harvard University Press, 1950) (hereafter cited as *Presidential Agency, OWMR*), p. 41.

in the nature of the supervision over it. Recognizing the dual need for a greater degree of cohesiveness among the civilian war agencies and for a more positive measure of civilian control over military production programs, President Roosevelt on 27 May 1943 created the Office of War Mobilization (OWM) with former Supreme Court Justice James F. Byrnes as its director. OWM was granted sweeping powers to develop programs and establish policies for the maximum use of the nation's natural and industrial resources for military and civilian needs, and to unify the activities of all federal agencies and departments engaged in or concerned with production, procurement, distribution, or transportation of military or civilian supplies. Byrnes became something like a chief of staff to the President with authority over the entire domestic front. Only the determination of military strategy and the conduct of international political relations were excluded from his purview.

In exercising these powers, Byrnes sought neither to disturb the existing structure nor to assume operating functions for OWM. The creation of OWM nonetheless had reverberations throughout wartime Washington: It established a definite point below the Presidential level at which civilian control over the multifarious economic activities of the military services could be exercised. Also, OWM served as a pointed reminder of Roosevelt's intention to maintain firm civilian control. Byrnes acted quickly to assert his general review authority in the economic sphere. He requested each military service and the Maritime Commission to appoint a procurement review board to undertake a thorough evaluation of existing procurement programs. Shortly afterward, the President declined to issue a written charter for the JCS, and in doing so sharply reminded the military chiefs that they should establish more orderly control of the logistics function within the JCS structure. Thus the impulse behind the creation of the Office of War Mobilization opened a new chapter in the continuing search for economy and system, for from it evolved a revamped JCS committee structure for handling logistical matters and major adjustments in the Army's requirements program.[4]

Logistics in the Joint Committee System

By the end of May 1943 there probably was no staff officer in Washington who was not convinced that logistical considerations were very important factors in the formulation of strategy. Nonetheless, a basic disagreement remained within the War Department between the logisticians of Army Service Forces and the strategic planners of Operations Division as to how and by whom the integration of strategic and logistical planning should be carried out. The planners felt that the strategy and the logistics in any given operation must be treated as a whole and that only they (the planners) were in a position to do so, although they recognized the need to draw on the logistical experts in various fields for desired estimates, data, and advice as required. The logisticians claimed a place on the highest planning staffs for their experts, insisting that only in this way could adequate and accurate informa-

[4] (1) *Ibid.*, pp. 45–75. (2) On the War Department Procurement Review Board see below, Chapter V.

tion on logistical problems be brought to bear at every stage of strategic planning and timely preparations be made for actual execution of those plans when the JCS or the CCS approved them.

In the reorganization of the JCS committee structure completed in May 1943, the ASF retained or secured a place on all the committees concerned primarily with logistics but failed to get representation on the Joint Staff Planners (JPS), which continued to be the principal group on which the Joint Chiefs relied for final staff work on strategic problems.[5] In the reorganized committee structure, four main committees concerned themselves entirely with logistical matters—the Joint Military Transportation Committee (JMTC), the Army-Navy Petroleum Board (ANPB), the U.S. Representatives, Munitions Assignments Board (U.S. Reps, MAB), and the Joint Administrative Committee (JAdC).

The ANPB and JMTC antedated the May 1943 reorganization by more than a year, but at this time they first received formal charters setting forth their precise functions. Both agencies were highly specialized committees dealing with two of the most vital resources for the Allied war effort — petroleum, oil, and lubricants (POL), and shipping. They had certain broad operational functions as well as planning responsibilities. By its charter, JMTC was responsible for advising the JCS on shipping and all matters relating to overseas transportation (including the merchant shipbuilding program), for co-ordination of Army and Navy shipping requirements and their presentation to the War Shipping Administration, for apportionment of shipping allotted by WSA to meet Army and Navy requirements in accordance with priorities set by the JCS, for recommending adjustments in case of shipping shortages, and for general co-ordination of ship operations with WSA and with other United Nations (U.N.) shipping authorities. Similarly, the ANPB was charged with consolidation of Army and Navy requirements for petroleum products, with detailed co-ordination of the procurement, distribution, and use of products allotted to meet these requirements, and with liaison and co-ordination with the Petroleum Administrator for War.

By contrast, the assigned functions of the U.S. Representatives, MAB, were exceedingly broad, patterned after those the Combined Munitions Assignments Board (MAB) was supposed to perform for the Combined Chiefs of Staff. They were to maintain full information of the entire munitions resources and requirements of the United States and recommend to the JCS measures necessary "to keep planned requirements programs in line with strategic policy, changing operational conditions . . . and the realities of production."[6] They would also, when

[5] See (1) Leighton and Coakley, *Global Logistics, 1940–43*, pp. 649–55; (2) Ray S. Cline, *Washington Command Post: The Operations Division*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1951), pp. 257–61; (3) John D. Millett, *The Organization and Role of the Army Service Forces*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1954) (hereafter cited as *Role of the ASF*), pp. 111–23.

[6] (1) Charter of U.S. Reps, MAB, is JCS 202/20/D. (2) Charter of the JMTC is JCS 202/16/D. (3) Charter of the ANPB is JCS 202/21/D. All dated 11 May 43. (4) For the fullest description of the May 1943 reorganization of the JCS committees, see Vernon E. Davis, Section I: Organizational Development, 3 vols., II, 590–684, in History of the Joint Chiefs of Staff in World War II, MS, JCS Historical Sec.

directed by the JCS, recommend allocations of material between the Army and Navy and serve as U.S. members on the Combined Munitions Assignments Board in making assignments to other United Nations. In actual fact, the U.S. Representatives, MAB, did not effectively exercise such broad powers, but for the most part, like the MAB itself, were confined to the assignments function. They provided no real link between strategic and logistical planning, as their requirements function may have indicated, except insofar as they translated strategic decisions into assignments of munitions to service and national claimants.

It was, rather, an entirely new organization, the Joint Administrative Committee, that bore closest resemblance to what General Somervell wanted—a genuine logistics committee concerned with assuring proper consideration of logistics in strategic planning at the highest levels. However, the impetus for creation of this committee did not come from the logisticians so much as it did from the Joint Staff Planners, who were anxious to rid themselves of the burden of considering numerous miscellaneous matters outside the realm of pure war planning. Only after a strong protest from General Somervell did the ASF get a place on this committee, replacing a proposed OPD member. The duties of the JAdC were simply stated as "handling matters which do not come under the jurisdiction of one of the other agencies of the Joint Chiefs of Staff organization."[7] The committee was not given any jurisdiction over the Joint Military Transportation Committee, the Army-Navy Petroleum Board, or the U.S. Representatives, MAB. Moreover, although the terms of its charter implied a relationship of equality with the Joint Staff Planners, in practice the planners continued to act as the filter through which all important plans and problems went to the JCS for decision.

The arrangements for integrating logistics with strategy proved the weakest part of the May 1943 reorganization. Although U.S. staff work at TRIDENT was generally smoother than at Casablanca, the members of the Joint War Plans Committee complained in a postmortem of the difficulty of "obtaining in a reasonably short time, data on availability and allocations" relying on *ad hoc* subcommittees formed of War and Navy Department experts. They suggested an addition to the joint planning structure of "a joint logistics group charged with maintaining a central file of up to date statistics on availability and allocation of forces and equipment."[8] The joint planners demurred, apparently fearful of the creation of a separate logistics committee on an equal plane with themselves. Meanwhile, the Joint Administrative Committee had begun to function and was taking unto itself some of the functions a logistical committee might be expected to perform, but it had no subordinate working committee, such as the Joint Staff Planners had in the JWPC, to do the necessary detailed studies in support of its operations. In July the JWPC proposed the obvious solution: that the JAdC be specifically charged with those matters pertaining to mobilization, deployment, troop bases,

[7] JAdC Charter is JCS 202/10/D, 5 May 43.

[8] JPS 191, rpt by JWPC, 26 May 43, title: Joint War Plng Agencies. Quoted in Davis, Organizational Development, II, 718–20, History JCS.

training, equipment, and transportation that fell within the purview of the JCS and that a Joint Logistics Plans Committee be formed under the JAdC.[9]

In the end it was not the JWPC's insistent voice but a White House communication that produced a solution not unlike the one the planners' working group proposed. On 17 July, when specifically rejecting a JCS proposal that he approve a written charter for them, the President said:

> I believe that we have recently made important forward strides in joint as well as combined strategic planning . . . it is my opinion that more attention should now be given to organizing for the same kind of joint effort in dealing with questions of supply. Joint logistics planning should parallel joint strategic planning. Likewise, the joint military supply program should receive continuous review in order to attain a more perfect balance among the various programs. The supply program of each service should be carefully scrutinized as to its relationship to the programs of the other services to the end that there shall be one unified and balanced supply program consistent with up-to-date strategic concepts.[10]

As General Marshall noted when the matter was discussed in a JCS meeting three days later, it was evident that "the President's letter had been prompted by the effort of Justice Byrnes to have all agencies connected with the war effort correlated."[11] Marshall came to the meeting with a reply to the President's letter drafted by General Somervell, the tenor of which was that all that needed to be done had already been done. Somervell's draft described the several military programs as in "an excellent state of balance," and represented the Joint Administrative Committee as exactly the sort of organization the President wanted.[12] While OPD officers registered some strong private objections—they were not so sure the state of balance was so excellent and they stoutly denied that the JAdC had ever been charged with the broad functions described—the JCS accepted Somervell's draft as modified to indicate that even before the creation of the administrative committee the JCS had been effectively functioning in this area. The reply to the President stated categorically that the Joint Administrative Committee was charged with the integration of logistical with strategic planning, and that it was responsible for welding Army and Navy procurement plans into an over-all plan and for readjusting "military programs so that they will be feasible from a production viewpoint"[13]—obviously, what General Somervell thought a joint logistics committee should be rather than what the Joint Administrative Committee actually was. OPD officers prepared a memorandum for General Marshall showing that each of the functions claimed for the Joint Administrative Committee had in fact been assigned to the U.S. Representatives, MAB, by their charter. The memorandum was never sent, for the OPD officers soon recognized that the letter to the President had forced the issue, making mandatory a new charter for the JAdC that would give it at least some of the powers it was represented as having. The charters of other committees

[9] *Ibid.*, II, 720–25.

[10] Ltr, President to Leahy, Incl to JCS 415, 17 Jul 43, title: Joint Effort Regarding Supply.

[11] Min, 97th mtg JCS, 20 Jul 43, Item 1.

[12] Memo, Somervell for CofS USA, 19 Jul 43, and Incl, CsofS Jt and Comb 1942–44, Hq ASF.

[13] Memo, JCS for President, 20 Jul 43, sub: Logistics Planning, Incl, JCS 415/1, 21 Jul 43, title: Joint Effort Regarding Supply.

would then, of course, have to be modified accordingly.[14]

The members of the administrative committee themselves were quick to grasp the initiative. By 8 August 1943 they were ready with a new charter changing the name of the committee to the Joint Logistics Committee (JLC) and broadening and enlarging its functions to the point where it would stand on a plane of equality with the Joint Staff Planners. The Joint Logistics Committee was to act in co-ordination with the planners in preparation of joint war plans "so as to insure the logistic feasibility of such plans"; prepare basic logistical plans to implement war plans; advise the JCS in respect to logistical implications of prepared U.S. commitments relating to combined operations, balance among military production programs, and adequacy of supply and priority ratings; furnish logistic information and guidance to the JCS and other governmental agencies as required; and make up the U.S. membership of the Combined Administrative Committee (CAdC). Its membership, they said, should consist of three general officers from the Army and three flag officers from the Navy; two of the Army members should come from the ASF and one from the AAF. A Joint Logistics Plans Committee (JLPC) should be formed to serve as a working committee for the JLC.[15]

The proposed Joint Logistics Committee charter marked General Somervell's final bid for equal status of logistical experts with strategic planners in the Joint Staff hierarchy. Very quickly OPD opposition asserted itself. Expressing old fears that "logistical decisions could unduly affect . . . strategy," OPD officers turned to the task of whittling down both the pretensions of the new committee and the role of ASF on it. They agreed to the creation of a Joint Logistics Committee, but they felt it should be definitely subordinate to the JPS planners. They saw no need for the working subcommittee, and insisted that the existing system of consulting experts as required better served the needs of the planners. Moreover, they would eliminate one ASF member and substitute an OPD officer. On 9 August 1943 the JCS agreed to defer action on the matter until after the QUADRANT Conference scheduled to begin at Quebec on 14 August, and to refer the proposed charter to the Joint Strategic Survey Committee and the Joint Staff Planners for concurrent study and recommendation. In the meantime, a special logistical team composed of Army and Navy experts was set up to serve the planners at QUADRANT, an arrangement which, at least to the Army planners in OPD, seemed eminently satisfactory and worthy of perpetuation.[16]

By the time the separate reports of the joint planners and the Joint Strategic Survey Committee had been recon-

[14] (1) OPD Notes on JCS 97th Mtg, 20 Jul 43, ABC 334.8 JAdC (5 May 43), Sec I-A. (2) Min, 97th mtg JCS, 20 Jul 43, Item 1. (3) Draft Memo, ACofS OPD for CofS, 23 Jul 43, sub: Balanced Supply Program Consistent with Current Strategic Concept, and related papers in ABC 334.8 JAdC (5 May 43) Sec I-A.

[15] JCS 450, 8 Aug 43, rpt by JAdC, title: Adjustments in JAdC.

[16] (1) Quote from OPD Notes on JCS 102d Mtg, 9 Aug 43, and Tabs A-C. (2) OPD Notes on JPS 95th Mtg, 18 Aug 43. Both in ABC 334.8 JAdC 5 May 43, Sec I-A. (3) Memo, Brig Gen Walter A. Wood, Jr., for Gen Somervell, 9 Aug 43, sub: Action Taken at Special Mtg JCS Mon 9 Aug, CsofS Jt and Comb 1942-44, Hq ASF.

ciled, the Army planners had been persuaded to abandon their opposition to a JLC working committee. But they did gain their main point—that the Joint Staff Planners should continue to be responsible for the integration of logistics with strategy and that in this respect the logistics committee should "advise" the planners and not "act in co-ordination" with them. In facing the knotty problem of relationship between the Joint Logistics Committee and the specialized committees (JMTC, ANPB, and U.S. Reps, MAB) the joint report circumscribed the jurisdiction of the JLC by exempting from its surveillance matters "specifically assigned to other J.C.S. agencies, namely military overseas transportation, petroleum and munitions assignments." Although the JPS clearly perceived a conflict between the functions already assigned the U.S. Representatives, MAB, and those to be assigned the Joint Logistics Committee, the joint report circumvented the issue by suggesting that there was no real problem.[17]

This jettisoning of Somervellian concepts was almost entirely the work of the Army planners. The Navy took little part, and when the joint report was presented to the JCS on 14 September 1943, Admirals King and Cooke, Vice Chief of Naval Operations Admiral Frederick J. Horne, and Rear Adm. Oscar C. Badger, Assistant Chief of Naval Operations for Logistic Plans, all insisted that the new logistics committee should be accorded a higher place in relation to the specialized committees. The JCS thereupon instructed the Joint Strategic Survey Committee to revise the JLC charter so as to "establish the Joint Logistics Committee as the principal agency to which the Joint Chiefs of Staff should look for logistical advice," and to modify the charters of the other committees accordingly. This accomplished, JCS approved the Joint Logistics Committee charter on 13 October 1943.[18]

If in the final version the Army planners had to accept a somewhat higher place for the Joint Logistics Committee than they had postulated, and had to give way on the issue of a working committee, they were still able to preserve the essential point of JPS supremacy in the formulation of strategy and the final integration of logistics with it. The approved charter assigned as primary functions of the JLC:

> Advise the Joint Staff Planners in the consideration and preparation of joint war plans as to the logistic aspects of such plans in order that the Joint Staff Planners may insure the integration of logistics with strategy in the preparation of joint war plans.
>
> Prepare logistic plans for implementing the war plans prepared by the Joint Staff Planners.
>
> Advise the Joint Chiefs of Staff and the Joint Staff Planners concerning the logistics implications of proposed U.S. commitments relating to joint and combined operations.[19]

Relationships of the Joint Logistics Committee to the Joint Military Trans-

[17] (1) JCS 450/3, 14 Sep 43, title: Adjustments in JAdC, is the joint report of JSSC and JPS. (2) JCS 450/1, 9 Sep 43, is the separate report of JSSC. (3) JCS 450/2, 11 Sep 43, is the separate report of JPS.

[18] (1) Quotation from Min, 114th mtg JCS, 14 Sep 43, Item 4. (2) JCS 450/4, 8 Oct 43, title: Adjustments in JAdC. (3) Min, 118th mtg JCS, 12 Oct 43, Item 2.

[19] JCS 202/29/D, 13 Oct 43, title: Charter JLC.

portation Committee, Army-Navy Petroleum Board, and U.S. Representatives, MAB, were not really spelled out in detail. Revisions were made in the ANPB and JMTC charters to provide that certain of their planning functions would be carried out "in accordance with over-all logistical plans" as developed by the JLC, but their "administrative functions" were left intact and they maintained their independence of the logistics committee in their own specialized fields until the end of the war. The charter of the U.S. Representatives, MAB, on the other hand, was extensively revised. The over-all surveillance of requirements and production programs, a function long allowed to atrophy, was dropped and the committee reconstituted under a new name, the Joint Munitions Allocation Committee (JMAC), responsible for allocation of finished munitions between the Army and Navy and for concerting American policy on matters to be brought before the Combined Munitions Assignments Board.[20]

When the function of advising the JCS on the alignment of requirements programs with changing strategy, operational conditions, and the realities of production was removed from the U.S. Representatives, MAB, it was not assigned to the Joint Logistics Committee. Instead, at the direct request of Justice Byrnes, the JCS on 21 September created the Joint Production Survey Committee (JPSC) to function in that area, quite independent of JLC control. The committee was composed of two general officers from the Army (one of them from the AAF), and two flag officers from the Navy; an OWM representative, Fred Searls, attended each meeting though he was not formally a member. The committee was primarily conceived as a link between the JCS and Byrnes' office. The Joint Production Survey Committee was the logistical counterpart of the Joint Strategic Survey Committee, and was composed of "elder statesmen," though of not quite so exalted rank as those on the JSSC. Army Service Forces was not represented on the committee at all, so that the JSSC did not have the link the JLC had with the main War Department operating agency in the field of production.[21]

The membership of the Joint Logistics Committee had been set at three general officers from the Army and three flag officers from the Navy; as OPD asked, its Logistics Group was accorded a place; the ASF was assigned only one member; the third membership went to the AAF. The charter for the working committee, the Joint Logistics Plans Committee (JLPC), as approved on 10 November 1943, set the permanent membership at six, three from the Army and three from the Navy, with the Army members being drawn from precisely the same sources as those of the parent committee. The permanent members were to be simply a control group to direct, co-ordinate, and supervise the endeavors of a host of associate members

[20] (1) The revised charter of the JMTC is JCS 202/27/D, 13 Oct 43; that of the ANPB, JCS 202/28/D, 13 Oct 43; and that of the JMAC is JCS 450/8/D, 10 Nov 43. (2) Davis, Organizational Development, II, 747–57, History JCS. (3) On the JMAC see below, Chapter XXV.

[21] (1) JCS 202/26/D, 21 Sep 43, title: Charter JPSC. (2) Somers, *Presidential Agency, OWMR*, pp. 122–23. (3) Davis, Organizational Development, II, 757–61, History JCS.

who were to be logistics experts with various specialties drawn from the War and Navy Departments. So constituted, the JLPC was to prepare plans, studies, and estimates as directed by the JLC or upon its own initiative, and work in close liaison with the Joint War Plans Committee "to the end that resulting logistics plans will properly implement war plans."[22]

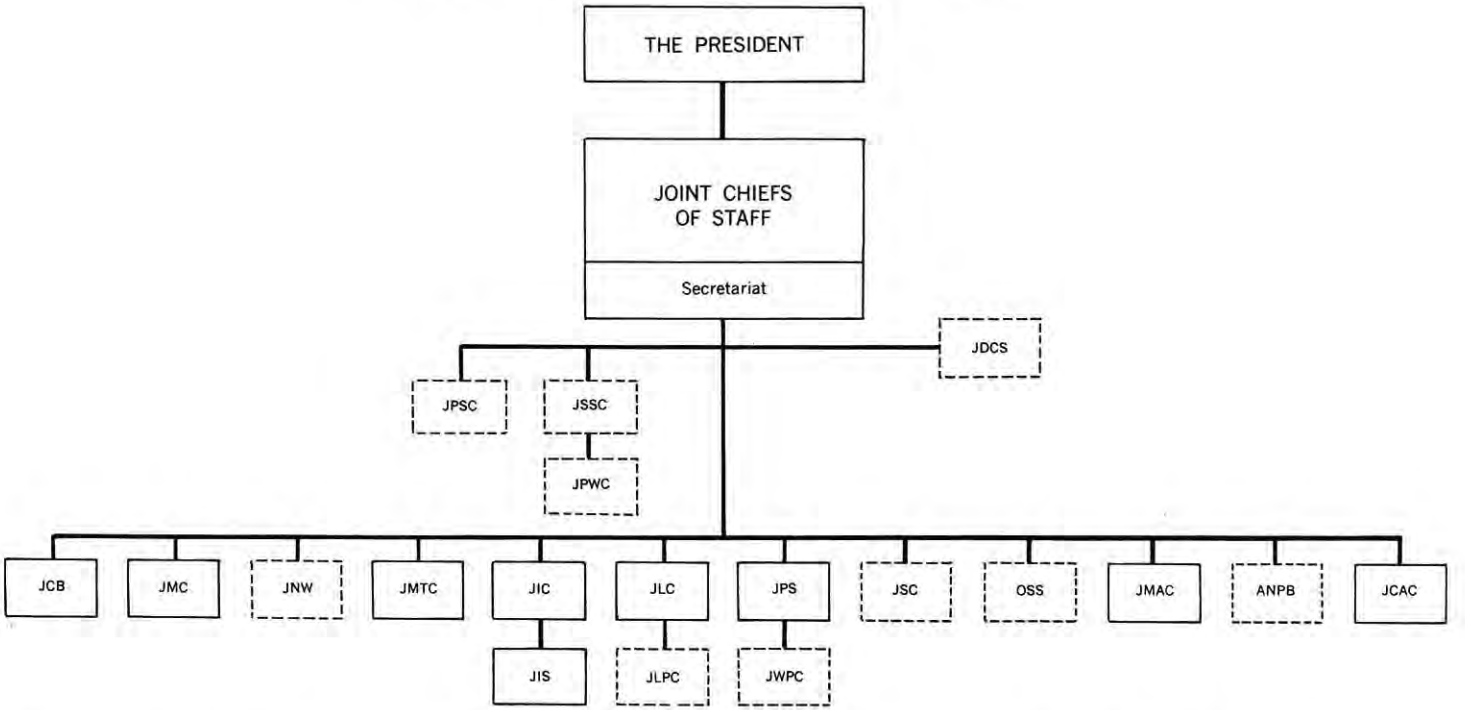
The arrangement of associate members in effect systemized the older method of calling on *ad hoc* committees of experts from the War and Navy Departments. Associate members were not appointed permanently but were assigned JLPC work in addition to their other duties. By the end of the first month of operations, the Joint Logistics Plans Committee had 150 associate members and the number rose slowly but steadily every month thereafter, reflecting the ever-increasing volume and complexity of joint logistical planning. The regular members of the JLPC complained in March 1944 that the whole system was relatively inefficient. Associate members, burdened with regular duties within their departments, could not always be counted on for JLPC work, and the effects were particularly serious when important studies had to be completed on short deadlines. The following month the JCS made some concessions: the number of permanent associates was increased to twenty, eleven to come from the Army and nine from the Navy; of the eleven Army members, OPD and ASF furnished three each, AAF furnished four members, and G–4 of the War Department General Staff supplied one.[23]

Establishment of the JLC and its working subcommittee and of the JPSC completed the World War II structure of Joint Staff planning committees. (*Chart 1*) That they came into being so late in the war indicates a belated acceptance of the need for systemization of logistical planning at the JCS level and for a body of logistical experts to serve as permanent members of the joint committees, not simply to be on call from their parent offices. Though the logistics committees provided a structure paralleling the strategic planning committees, they did not gain for the logisticians equal place with the planners in the formulation of strategy. The Joint Staff Planners retained the final word when it came to making the tentative estimates of resources and requirements requisite to strategic planning, and surrendered to the logistics committees only calculations of the more detailed sort that were necessary for drawing up final balance sheets or that actually governed the movements of troops and materials after over-all objectives had been decided upon. This was a lasting source of dissatisfaction to the ASF members of the JLC and JLPC, who continued to complain of not having enough knowledge of strategic plans to permit joint logistical plans to be intelligently formulated. On the other hand, the strategic planners also had occasion to complain that in their estimates the logisticians tried to influence strategy — indeed, at times to formulate their own strategy

[22] (1) JCS 450/7/D, 10 Nov 43, title: Charter JLPC. (2) Cline, *Washington Command Post,* pp. 264–65.

[23] (1) JCS 810, 8 Apr 44, rpt by JLC, title: Membership JLPC. (2) Cline, *Washington Command Post,* pp. 264–66.

Chart 1—The JCS Organization on 1 April 1945



JDCS—Joint Deputy Chiefs of Staff
JPSC—Joint Production Survey Committee
JSSC—Joint Strategic Survey Committee
JPWC—Joint Post-War Committee
JCB—Joint Communications Board
JMC—Joint Meteorological Committee
JNW—Joint Committee on New Weapons and Equipment
JMTC—Joint Military Transportation Committee
JIC—Joint Intelligence Committee
JIS—Joint Intelligence Staff
JLC—Joint Logistics Committee
JLPC—Joint Logistics Plans Committee
JPS—Joint Staff Planners
JWPC—Joint War Plans Committee
JSC—Joint Security Control
OSS—Office of Strategic Services
JMAC—Joint Munitions Allocation Committee
ANPB—Army-Navy Petroleum Board
JCAC—Joint Civil Affairs Committee

Joint agencies supplying U.S. members for combined committees of similar purpose.

Joint agencies having no combined counterparts.

Source: Vernon E. Davis, Section I: Organization Development, 3 vols, II, p. 809, in History of the Joint Chiefs of Staff in World War II, MS, JCS Historical Sec.

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on the basis of what they conceived to be the governing logistical factors.[24]

G–4, ASF, and the OPD Logistics Group

The joint committees dealing with logistics were focal points at which Army and Navy plans and estimates could be brought together, revised, and related to the broader issues of strategy, and where basic allocations of military resources could be worked out. The work of the committees was, nevertheless, largely of a planning, co-ordinating, and advisory nature. The work on which plans and estimates were based, as well as that involved in the enormous task of translating broad logistical plans into the myriad actions required to carry them out, rested with the staff and operating agencies of the War and Navy Departments. In the War Department structure the reorganization of March 1942 had left two real powers in the field of ground force logistics — Army Service Forces and Operations Division. While G–1, G–3, and G–4 of the War Department General Staff were entrusted with responsibility for formulating Army-wide policies in the fields of personnel, unit organization, and supply respectively, in point of fact these functions were exercised mainly by either ASF or OPD, or, for air matters, by the AAF. In the basic Army Regulations setting forth General Staff functions, the Supply Division (G–4) was charged with preparation of "broad basic supply plans . . . required by mobilization, training, and strategic plans" to guide the actions of AAF, ASF, and AGF, with collaboration with OPD in determining supply priorities and supply levels, and with preparation of "broad policies and directives . . . necessary to co-ordinate among the major commands" the principal areas of logistical activity.[25] But, by the sheer magnitude of its operation, its greater size and the superior effectiveness of its staff, and the driving personality of its commanding general, ASF completely overshadowed G–4. General Somervell continued to function as the principal adviser of the Chief of Staff on supply matters after he ceased to be G–4 and became Commanding General, Army Service Forces. With eight or a dozen officers assigned it G–4 found it impossible to exercise even policy supervision over logistical activities. Insofar as the power to determine general policy outside the technical sphere was concerned, OPD exercised control with its general responsibility for overseas operations. ASF generally determined detailed Army requirements, prescribed policies and procedures to be followed in production and distribution, served as the operating agency for supply, transportation, and general housekeeping in the zone of interior, and maintained liaison with the principal civilian agencies involved in the war effort. OPD provided the bases on which requirements were calculated, determined overseas troop bases and supply levels, set priorities on scarce items, and insisted on exercising the principal role in strategic-logistical planning. To the extent that ASF activities were concerned with support of overseas theaters, they were subject to active and effective supervision by OPD, while G–4 supervision over other aspects of ASF opera-

[24] Compare Cline, *Washington Command Post*, pp. 266–68, and Millett, *Role of the ASF*, pp. 122–23.

[25] AR 10–15, 13 Jul 42, General Staff, Organization and General Duties.

tions was quite nominal. Clashes between ASF and OPD in the areas of planning for and support of overseas operations, where the functions of the two agencies overlapped, were not infrequent.

All sections of OPD dabbled in logistical matters at times; however, the OPD agency primarily concerned was the Logistics Group, headed by Brig. Gen. Patrick H. Tansey, "a small but very influential staff for studying all matters of logistics, supply and equipment as such, as distinguished from such matters in any specific theater."[26] Theater Group, OPD, with its individual sections for each of the overseas theaters, also dealt continuously and directly with logistical problems in each separate theater.

During 1943 there was a general move in the direction of reassertion of the prerogatives of the General Staff at the expense of the ASF. It resulted in a moderate bolstering of the position of G–4, though it never went so far as to supplant General Somervell as the principal adviser to General Marshall on supply matters or to shift from either OPD or ASF to G–4 the right of membership on the more important joint committees concerned with logistics.

General Somervell opened the question of staff organization for logistics anew in the spring of 1943 with a blunt and overt proposal that the functions and personnel of G–1, G–4, and the Logistics Group, OPD, be absorbed into the ASF and AAF as appropriate. "In matters of supply and administration," wrote Somervell, "it is highly impracticable, if not impossible, to separate policy and operations. The enforcement of policy inevitably tends to become the actual operation of that policy with all the extra administrative detail and personnel required for an additional agency to do the work of another."[27] As far as G–1 and G–4 were concerned, Somervell was doing little more than requesting formal ratification of a situation that already existed. The abolition of OPD's Logistics Group was something else again, but the ASF commander insisted that it simply duplicated work his own staff was doing.

Somervell's proposal found no adherents anywhere in the War Department, and General Marshall took no formal action on it. The over-all result was, rather, to provoke a reaction in favor of bolstering the General Staff at the expense of the ASF. Somervell's proposal called attention to the atrophy of all General Staff sections save OPD, and the need to do something about it if G–1, G–3, and G–4 were not to wither away entirely. During the summer and well into the fall of 1943 debate continued within the General Staff as to the proper distribution of functions, centering around proposals that the OPD Logistics Group be transferred not, as Somervell suggested, to ASF, but to G–4. The ultimate decisions, rendered by Lt. Gen. Joseph T. McNarney, Deputy Chief of Staff, in effect reaffirmed OPD's position as the element within the General Staff having primary interest in overseas operations, and emphasized the necessity for G–4 to exercise effective policy supervision over more or less rou-

[26] (1) Cline, *Washington Command Post*, pp. 270–71. (2) Leighton and Coakley, *Global Logistics, 1940–43*, pp. 223–27.

[27] (1) Memo, Somervell for CofS, 3 Apr 43, sub: Suggested Changes in Organization of the War Department, File CofS, Hq ASF. (2) Millett, *Role of the ASF*, pp. 138–42.

tine supply operations in the zone of interior. McNarney's directive of 5 August 1943 stated:

> The Operations Division . . . will scrutinize the requirements of the several theaters, will balance the requirements against the means available, and will determine the priority and time when they are to be made available. The Operations Division will then inform the theater commander and the Assistant Chiefs of Staff, G–1, G–3 and G–4 what units, individuals and materials are to be furnished and when they will be made available. . . .[28]

Within OPD, it was generally agreed that all functions not essential to the direction of operations in overseas theaters should be performed by other sections of the General Staff. The great difficulty was that almost every activity in the zone of interior affected overseas operations. The functions of providing the means and of directing their employment were so closely related that OPD found it impossible to operate without maintaining its own sort of G–4, and all proposals to transfer the functions of the Logistics Group to G–4 fell by the wayside.

General McNarney did, in October 1943, transfer certain specific functions relating to procurement and munitions assignments from OPD to G–4. Responsibility for preparation of the Victory Program Troop Basis, used for computation of the Army Supply Program and for determining policies for planning and execution of procurement, were turned over to G–4, as was the task of representing the War Department on the joint and combined bodies concerned with munitions assignments—the Joint Munitions Allocations Committee, the Munitions Assignments Board, and their respective ground subcommittees.[29]

These specific functional shifts were made at a time when Army supply policies and procedures were under the intensive scrutiny of the War Department Procurement Review Board (McCoy Board), appointed at the instigation of Justice Byrnes, and of its successor, the Richards Committee, which was set up to review reserve levels of supply.[30] The Richards Committee found "some confusion" among officers assigned to OPD, G–4, and ASF as to their respective responsibilities, and recommended that the basic Army Regulations be clarified to delineate the responsibilities more clearly.[31] The tenor of many of its other recommendations was that G–4 should have additional powers of supervision over ASF and AAF and exercise them more effectively. An *ad hoc* committee composed of representatives of interested agencies went so far as to draft a new regulation definitely vesting in G–4 most of the policy, planning, and supervisory functions being exercised by ASF. The ASF member of the committee dissented vigorously, calling the proposal "so extreme that it would necessarily de-vital-

[28] (1) Memo, McNarney for ACsofS, G–1, G–2, G–3, G–4, G–5, 5 Aug 43, sub: Movements to Theaters, ABC 334.8 JAdC (5 May 43), Sec I–A. (2) Cline, *Washington Command Post*, pp. 270–84, treats these issues in detail.

[29] Cline, *Washington Command Post*, pp. 278–84.

[30] The complete reports of these investigating agencies, comments of War Department staff and major commands on their recommendations, and the final directive are in: Levels of Supply and Supply Procedure, 1 January 1944, with 7 appendixes in two volumes (hereafter cited as Levels of Supply), copy in Log File, OCMH. For a detailed discussion of the McCoy Board and the Richards Committee, see below, Chapter V, pages 119–24.

[31] Levels of Supply, app. F, Rpt of WD Special Com for Re-Study of Reserves (Richards Com), Recmn 3, I, 75.

ize many of the activities and functions currently being executed by the Army Service Forces and would require a reorganization within the War Department."[32]

No such major reorganization took place. General McNarney had directed that AR 10–15 be clarified to show division of supply responsibilities more clearly, but the end result was only an extremely minor change published in September 1944.[33] Nevertheless, under the basic AR 10–15, interpreted broadly, G–4 already had considerable power, and on 1 January 1944 General McNarney assigned the Supply Division major responsibility for seeing that the Richards Committee recommendations were carried out. G–4 was, among other things, to conduct a review of existing supply regulations, supervise the formulation of the Army Supply Program, undertake the accurate determination of replacement factors, and establish policy for and supervise a further wide variety of ASF and AAF activities.[34]

With the assignment of these responsibilities, the Supply Division received a modest increase in personnel—from 12 to 45 officers. The net results in terms of any major shift in power relationships within the War Department were not earthshaking. Maj. Gen. Russell L. Maxwell, who assumed office as G–4 in September 1943, aggressively sought to



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exercise his right to supervise supply activities of ASF and AAF and to determine broad supply policies and procedures. In a nominal sense he succeeded, but actual power relationships and methods of doing business changed very little; indeed, they could hardly have been changed very much at that point in the war without the major reorganization and the consequent dislocations of which ASF warned. The admonitions of General Somervell about the difficulty of separating supply policy and operations had considerable validity. As long as G–4 could communicate with the technical services and other ZI supply agencies only through ASF headquarters, the general staff agency was at a decided disadvantage. G–4 was able to assert its right to review policies and procedures developed by the ASF staff and publish these

[32] Memo, Col Henry R. Westphalinger, Hq ASF, for Maj Gen Russell L. Maxwell, Chmn, Ad Hoc Com, sub: Minority Rpt Covering Recmns of Ad Hoc Com . . ., Levels of Supply, app. G.

[33] AR 10–15, Change 1, 11 Sep 44.

[34] (1) Memo, McNarney, DCofS, for CG's AAF, AGF, ASF, and ACsofS G–1, G–3, G–4, and OPD, 1 Jan 44, sub: Changes in Supply Levels and Supply Procedures (hereafter cited as McNarney Directive 1 Jan 44), Levels of Supply, app. A. (2) See below, Chapters V and VI, for greater detail.



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policies and procedures as War Department, not ASF, directives; it did not, however, actually initiate many of these policies and procedures. The historian of OPD organization concludes that the transfer of functions to G–4 in 1943 marked "the beginning of a gradual rise in the volume of staff business done by G–4"; the ASF historian remarks that "thereafter the influence of G–4 was greater, or at least ASF found it expedient to keep G–4 fully informed about what it was doing."[35]

Not the least of G–4's handicaps was that for the most part it continued to be divorced from the area of correlation of logistics and strategy – the area in which OPD shared dominance with ASF. The key point was membership on the joint logistics committees in a period when those JCS agencies were maturing and exercising greater influence. General Maxwell protested in May 1945:

> The Assistant Chief of Staff, G–4, under existing conditions is unable to perform his prescribed logistical functions effectually. He is not a member, nor has he any representation on any committee on the Joint Staff level dealing with logistics except the Joint Munitions Allocation Committee and its subcommittees. . . . As a result at times he fails to get adequate or timely information and is not able to assist these committees as he should nor is he able to present to them the War Department viewpoint.[36]

In May 1943 a G–4 officer had complained bitterly of the middle position occupied by the Supply Division "between General Somervell as the Army representative in joint and international supply deals and General Somervell as Commanding General of the Army Service Forces, a theoretical subordinate."[37] The situation General Maxwell objected to near the end of the war still bore a distinct resemblance to the earlier "middle position" and persisted as an anomaly in the War Department structure despite the movement toward reassertion of General Staff prerogatives in 1943 and 1944.

Plans and Operations, ASF

Organization for logistics at the War Department level, then, continued to be an area in which indistinct and overlapping boundaries divided the work of four different agencies – ASF, OPD,

[35] (1) Cline, *Washington Command Post*, p. 284. (2) Millett, *Role of the ASF*, p. 144. (3) History of Supply Division, G–4, WDGS, MS, OCMH.

[36] Memo, Gen Maxwell for DCofS, 3 May 45, sub: Membership of G–4 on Joint Staff Committees Which Deal with Logistics, ABC 334.8 JAdC (5 May 43).

[37] Memo, Lt Col James McCormack, Jr., for Brig Gen Raymond G. Moses, G–4, 16 Apr 43, sub: Reorganization of the WD, G–4 020. See Leighton and Coakley, *Global Logistics, 1940–43*, p. 224.

G–4, and AAF. The unchallenged supremacy that ASF retained in ground force supply operations in the zone of interior made that agency the most important part of the Army concerned with logistics, and the ASF headquarters staff dwarfed in numerical strength that of any other agency in wartime Washington. The fundamental organization of the ASF remained relatively stable after May 1943, but largely because General Somervell's attempts to carry out a far-reaching reorganization along functional lines cutting across the traditional divisions among the technical services failed of acceptance.[38]

The May 1943 reorganization of ASF headquarters replaced the traditional staff divisions under assistant chiefs of staff with six staff directorates—Operations, Materiel, Personnel, Military Training, Fiscal, and Administration. In terms of logistical planning and support of military operations, the two most important directorates were Materiel under Maj. Gen. Lucius D. Clay and Operations under General Lutes. Clay's jurisdiction included requirements, production, and international aid; Lutes had jurisdiction over all matters pertaining to overseas troop and supply movements. Except for requirements, which had always been a general staff function, Clay's domain covered principally those matters that had fallen into the province of the Under Secretary of War before the March 1942 reorganization; Lutes inherited the more essential parts of the work of the Supply Division of the General Staff. Also, as the ASF staff became increasingly involved in logistical planning as well as in operations, Lutes



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formed a planning staff that soon became the dominant planning agency in the ASF. In July 1943 he suggested to Somervell that the Director of Operations should occupy the same place on the ASF staff that OPD did on the War Department General Staff, and he should, Lutes noted, "be charged with the strategic employment of the supplies in consonance with the approved strategic plans, and charged with all ASF matters affecting overseas operations."[39]

The last important reorganization of the ASF staff, in the autumn of 1943, carried out this concept in very considerable degree. At that time General Lutes was designated Director of Plans and Operations and his office made part of the Office of the Commanding Gen-

[38] On these proposals see Millett, *Role of the ASF*, p. 144.

[39] (1) Memo, Lutes for Somervell, 27 Jul 43, Misc Notes, Lutes File. (2) Millett, *Role of the ASF*, pp. 345–46. (3) Leighton and Coakley, *Global Logistics, 1940–43*, pp. 227–33.

eral, ASF, its mission to "coordinate and supervise planning and certain operational activities of the Army Service Forces."[40] Specifically, his responsibilities included providing the links between ASF and both the joint and combined committees and the War Department General Staff and of acting as principal co-ordinator for supply operations of the ports and the technical services in support of overseas theaters. Two divisions remained as direct parts of Lutes' office, the Planning Division and the Mobilization Division. Planning Division was charged with the central task of co-ordination and supervision of "all overseas responsibilities of the Commanding General, ASF"; Mobilization Division was to handle ASF responsibilities with relation to overseas troop movements, service troop bases, and the Troop List for Operations and Supply.[41] At the same time, three of the staff divisions that had been part of the Directorate of Operations — Stock Control, Storage, and Maintenance— were formed into a new Directorate of Supply under Brig. Gen. Frank A. Heileman.

General Lutes' expanded powers reflected recognition of the ever-increasing work of ASF in the support of overseas operations, and in his new position he would have general surveillance over requirements and production planning, functions of General Clay's Directorate of Materiel, as well as over ASF distribution activities. General Clay, however, apparently was not disposed to relinquish much of his control, and the Director of Plans and Operations did not gain effective control of requirements until the staff reorganization of mid-1944. In March 1944 the Army Supply Control System was established, supplanting the Army Supply Program as a method of stating production requirements. In essence the new system geared production demands to actual consumption experience, and so required a union of production and distribution planning and control. Consequently, in June 1944 the Requirements Division of the Director of Materiel's office and the Stock Control Division of the Directorate of Supply were merged into a Requirements and Stock Control Division directly under the Director of Plans and Operations.[42] (*Chart 2*)

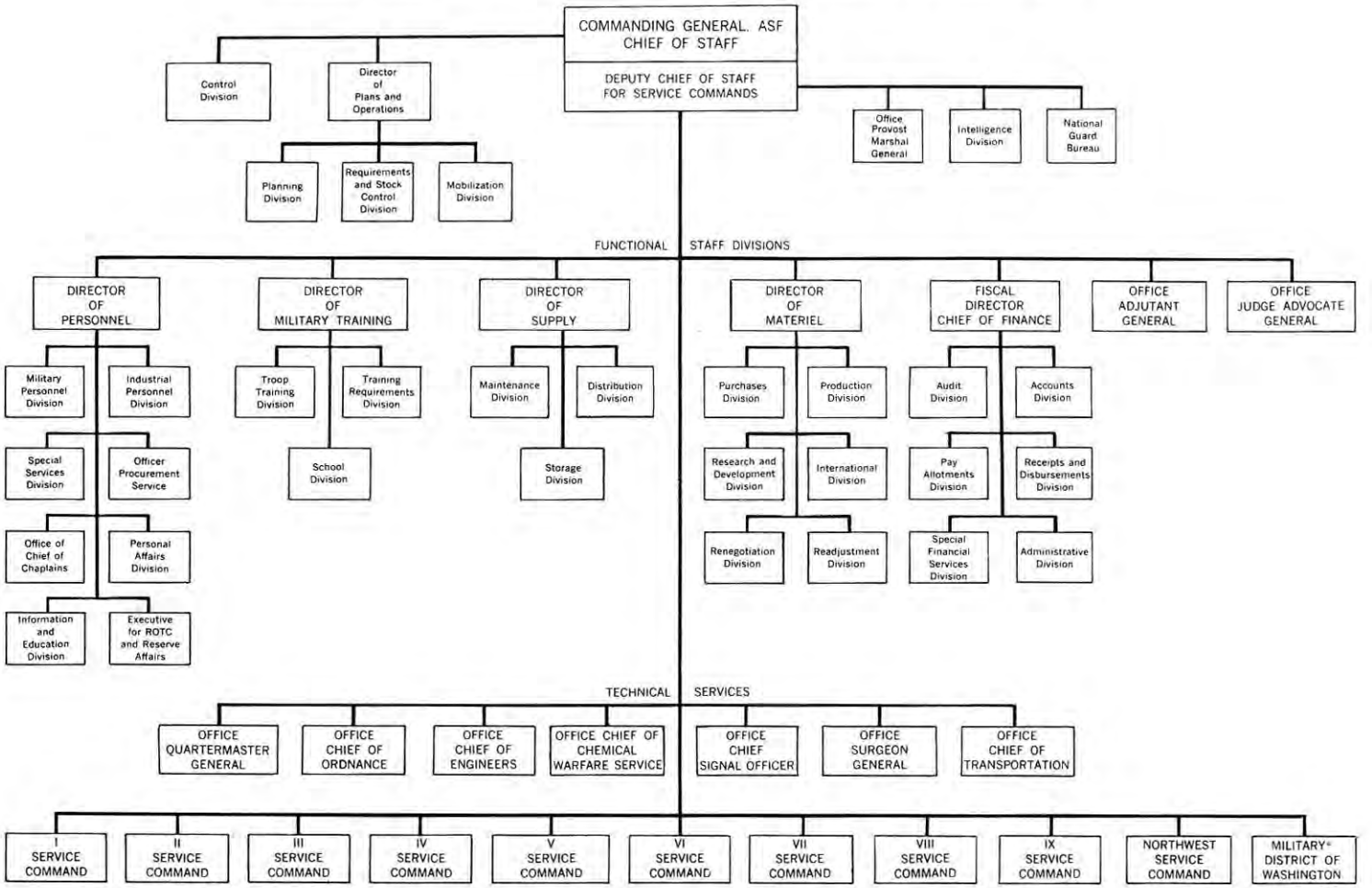
The Planning Division of General Lutes' office, under whatever denomination, from late 1942 was the focal point within the ASF for the correlation of logistics and strategy and for the evolution of policies and procedures for overseas supply. The Strategic Logistics Branch provided ASF membership for the Joint Logistics Committee and the Joint Logistics Plans Committee, maintained liaison with other JCS committees and with OPD, studied the implications of joint and combined plans, and conducted a certain amount of long-range logistical planning on its own. The Theater Branch was charged with co-ordinating, securing War Department approval when required, and issuing the necessary directives to fulfill ASF troop and supply requirements for overseas theaters. The branch was divided into sec-

[40] History Planning Div ASF, Text, I, 24.

[41] (1) Ltr, Gen Lutes to Brig Gen Edmond H. Leavey, 1 Mar 44, sub: Functions and Responsibilities of Dir P&O ASF, Gen Pac Day file, Feb 44, Plng Div ASF. (2) ASF Cir 118, 12 Nov 43. (3) History Planning Div ASF, Text, I, 24–26. (4) On the Troop List for Operations and Supply see below, Chapter VI.

[42] (1) ASF Cir 67, 15 Mar 44. (2) ASF Cir 175, 10 Jun 44. (3) Millett, *Role of the ASF*, p. 346. (4) On supply control see below, Chapter V.

Chart 2—Organization of the Army Service Forces 15 August 1944



* Under Army Service Forces for Administrative and Supply Functions.

tions corresponding to the active theaters in a close parallel to OPD's Theater Group, and each section sought to serve the interests of its own theater by shepherding its requests through the War Department machinery and co-ordinating shipping requirements with the Chief of Transportation. Zone of Interior Branch was charged with co-ordination of ASF programs for supplies, troops, and transportation, with the determination of long-range requirements for ASF troop units, and with processing theater long-range operational supply requirements. As General Lutes politely wrote theater Service of Supply (SOS) commanders in mid-1944, "The Planning Division . . . is therefore the Army Service Forces staff agency with which overseas Services of Supply Commanders and staffs are most concerned."[43]

As the focal point of ASF activity in logistic planning and support of overseas theaters, General Lutes' office was also the center of jurisdictional clashes with OPD, whose officers regarded much of the long-range logistical planning embodied in the strategic logistics studies as essentially strategic planning in disguise. Lutes in turn continually fought against the proclivity of OPD officers to communicate directly with chiefs of technical services on supply matters without going through Plans and Operations, ASF. In theory, Plans and Operations, ASF, simply took up where OPD, General Staff, left off, planning for the execution of and actually carrying out supply actions required by decisions of the CCS, JCS, and OPD. In practice, it was very hard to keep out of the business of anticipating these decisions and trying to influence them in terms of logistical problems involved. Indeed, Planning Division, ASF, freely admitted that it entered this field, and justified the practice on the ground that actual strategic decisions usually came too late to allow timely logistical preparations. This by-product of the exclusion of the supply experts from the highest councils of the joint planners endured until the very end of the war.[44]

[43] (1) Ltr, Lutes to Leavey, 1 Mar 44. (2) History Planning Div ASF, Text, I, 63–68. (3) General Orders 14, 12 March 1943, changed the name of Services of Supply (SOS) to Army Service Forces (ASF). Thereafter the Washington command used the new designation; theaters continued to use the old name until a rear area was officially designated a communications zone.

[44] (1) Cline, *Washington Command Post*, pp. 267–68. (2) Millett, *Role of the ASF*, p. 123. (3) Memo, Lutes for Dir Plng Div, 30 Aug 44, sub: Relations Between OPD and Chiefs of Services. (4) Memo, Lutes for ACofS OPD, 10 Oct 44. (5) Memo, Lutes for CofT, 25 Oct 44, sub: 772d MP Bn. (3), (4), and (5) in Lutes Diary.

CHAPTER V

Army Requirements, 1943–44

War Department logistical agencies exercised primary responsibility in the calculation of requirements for, and the procurement and distribution of, supplies and equipment for Army forces. This responsibility had to be exercised within the framework of determination by higher authority of the Army's share of the productive capacity of the country. The calculation of military requirements in World War II, in its broadest sense, involved questions of balance among various programs of the Army and Navy, and between those programs and others sponsored by civilian agencies that were equally essential for the conduct of the war or for meeting the needs of the civilian economy. The narrower, more specific military requirements for which the War Department had responsibility, particularly those needed to equip and sustain the ground army, are the province of this chapter.

The Requirements Process

The calculation of requirements is in many ways the most important and difficult step in the logistical process. On the adequacy of the requirements program success or failure on the battlefield may depend, for unless timely orders are placed in advance matériel of the right kinds and in the right quantities cannot be supplied when needed. The controlling factor is the industrial lead time necessary for production of all save the simplest commercial items. Because of industrial lead time, requirements calculations during World War II had to be based on strategic projections as to the nature and location of the battlefields made some six months to three years in advance.

Strategic projections were not sufficiently precise in 1942 to permit requirements to be calculated in terms of a specific strategy. During that year Army requirements took shape in terms of the over-all troop basis and of the aggregate numbers expected to be deployed overseas, without regard to their theater of deployment. Both the Victory Program Troop Basis and the Army Supply Program (ASP) aimed at creating a balanced pool of variegated military resources out of which the specific ingredients for a campaign or a series of campaigns in any theater could be drawn. If the troop basis, and hence the supply program, were initially tied to a "Europe first" strategy, the relationship was general and indirect, not specific and direct. In the period immediately after Pearl Harbor, the emphasis was put on getting production programs under way and on setting goals that were more challenging than realistic. There followed a period when the challenging programs had to be readjusted to the limits of pro-

duction realities, a process that reached its climax in the feasibility dispute of the fall of 1942. In that crisis the WPB ruled that proposed war production programs for 1943 were beyond the limits of American productive capacity, and the JCS consequently scaled them downward, with the Army requirements for ground force equipment receiving the brunt of the reduction. In the reduction, the question of a specific strategy was of less import than that of over-all balance of air, ground, and naval power and of merchant shipping in the pool.[1]

Coincident with the resolution of the feasibility dispute, a new system of allocation of raw materials was adopted by the War Production Board that further emphasized the necessity for close calculation of military requirements. The Controlled Materials Plan, first promulgated in November 1942 and put into effect in two major steps in April and July 1943, provided that each procurement agency should calculate its requirements for three basic raw materials — steel, copper, and aluminum—and present them to WPB quarterly. WPB would then make the necessary allocations, apportioning any shortfalls among the various agencies, and leaving to these agencies the actual distribution of critical materials among their contractors. This system proved to be far more effective than the previous method of allocating critical materials by means of priority ratings.[2]

With this system the calculation of Army requirements became both a more exact and a more exacting exercise in 1943. Not only did estimates for military end items have to be carefully reviewed and balanced, but all such items had to be translated into their equivalents in raw materials and production facilities. At the same time, as the pattern of future strategy and operations emerged, the requirements program had also to be adjusted to that pattern. The problem was no longer one of initial calculation of requirements to fit a specific strategy, but one of adjusting requirements (initially calculated in terms of creation of a general pool of military power) to meet specific needs as they developed. Thus the calculation of requirements in the later years of the war did become more closely allied to strategy as the Army completed its capital equipment program and moved on to a phase in which replacement, consumption, and special operational needs were the principal requirements. It cannot be said, however, that the specific goal of calculating "strategic requirements" was ever reached.

Since early 1942 the official compilation of requirements for the U.S. Army (except for aircraft and parts) and of Army-procured material for the Navy and lend-lease had been the Army Supply Program (ASP). With the 1 February 1943 edition the form of the program and the basic procedures for its formulation and semiannual revision had taken relatively final shape.[3] Sec-

[1] On the feasibility dispute, see Leighton and Coakley, *Global Logistics, 1940–43*, pp. 602–11.

[2] R. Elberton Smith, *The Army and Economic Mobilization*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1959), pp. 566–96.

[3] (1) See especially Smith, *The Army and Economic Mobilization*, pp. 140–212, for an extremely lucid account of the methodology of Army requirements determination. (2) Leighton and Coakley, *Global Logistics, 1940–43*, pp. 295–303, 632–35. (3) The following is based primarily on: Control Division, ASF, The Determination of Army Supply Requirements, prepared in 1945 by Lt. Col. Simon

tion I of the 1 February ASP showed requirements for ground equipment; Section II set forth those for equipment and supplies peculiar to the AAF; Section III contained the required production of lend-lease items not standard to the U.S. Army; Section IV set forth the construction program. Aircraft requirements were not carried in the ASP; they were handled separately by a joint Army-Navy agency, the Aircraft Resources Control Office at Dayton, Ohio, which scheduled aircraft production and dealt directly with WPB and with industry. Requirements in the 1 February edition were projected for 1943 and 1944; the 1 August 1943 edition carried 1945 requirements for the first time.

Section I contained the great bulk of ground army requirements. The task of their detailed calculation fell to the seven technical services, each of which handled the items within its jurisdiction under the supervision and direction of Requirements Division, ASF, a part of General Clay's Directorate of Materiel. The chief basis for calculation was the Victory Program Troop Basis, prepared by the OPD Logistics Group. It projected estimates of all types of units for approximately two years in the future, showing applicable tables of organization and equipment. It was a long-range forecast issued solely for use in requirements calculations and did not necessarily reflect the short-range schedules prepared by G–3 that the War Department actually followed in activating units. In 1943 it contained no data on troop deployment by theater, existing or projected.

Calculating detailed requirements for the thousands of individual items that made up the ASP was an almost unbelievably complex undertaking and involved hundreds of individuals in the technical services and ASF headquarters. In dealing with these calculations, a basic distinction must be made between equipment items that could be used over and over again until they wore out, such as rifles, tanks, planes, artillery pieces, and clothing (Class II and IV supplies), and expendables that could be used only once, such as food (Class I), POL (Class III), and ammunition (Class V). The factors used to compute requirements for the two categories were necessarily different, though requirements for both had to be based generally on the Victory Program Troop Basis and on the anticipated rate of overseas deployment.

Initial issue, maintenance or replacement,[4] and a distribution allowance were the basic factors for calculating equipment requirements. Initial issue was the quantity required to equip individuals and troop units in the first instance; replacement, the quantity necessary to replace initial issue worn out, lost, destroyed, or damaged beyond repair; the distribution allowance was the quantity required to keep the transportation pipeline full at all times so the

M. Frank, QMC, of Reqmts and Stock Control Div ASF, 5 vols. (vol. 1, text; vols. 2–5, appendixes and documents) (hereafter cited as Frank, Army Supply Requirements, with document number if pertinent) I, 52ff., Monograph OCMH; and on TM 38–220, 25 Jan 44, Preparation and Administration of the Army Supply Program.

[4] The use of the term "maintenance" to designate quantities needed to replace initial issue worn out, lost, destroyed or damaged beyond repair, and of "maintenance factor" to describe the percentage of initial issue needed for this purpose, was common in 1942 and 1943. In November 1943, the term "replacement" was adopted in lieu of "maintenance," and thereafter "maintenance" referred only to the care and repair of equipment.

soldier at the front could receive his equipment when and where he needed it. Certain factors that would appear to be properly a part of the distribution allowance (notably the provisions for shipping losses and for overseas theater reserve levels) in early editions of the ASP were calculated separately.[5]

At least in theory initial issue requirements were the simplest to compute. They were determined by multiplying the dozens of separate tables of equipment for different types of troop units by the number of those units in the Victory Program Troop Basis, and by multiplying individual allowances by the number of soldiers entitled to receive them. To the products had to be added special operational supplies in excess of individual and unit allowances and a strategic reserve to take care of contingencies. The strategic reserve in the 1 February 1943 Army Supply Program consisted of equipment for 1.5 million enlisted men in units not expected to be activated, about 20 percent more than the then anticipated 7.5 million-enlisted-man army. This strategic reserve was about equally divided between undetermined lend-lease needs and the needs of U.S. forces. Requirements for operational supplies were based on estimates of the areas of future operations and what they would entail.

Replacement requirements were determined by the use of replacement factors, flat percentages of initial issue that were supposed to indicate average monthly losses of each type of equipment from all causes. Separate factors were calculated for theaters of operation and for the zone of interior (the latter including certain inactive areas outside the United States such as Panama and the West Indies). During 1943 no differentiation was made among the active theaters—a weighted average was used for all of them. For example, the ZI monthly replacement factor for service shoes during 1942 was set at 10 percent and the theater of operations factor at 25 percent, which meant that the yearly ZI replacement requirement would be 120 pairs of shoes for every 100 pairs of initial issue, the theater of operations replacement requirement 300 pairs for every 100 of initial issue.[6] Calculation of total replacement requirements, then, depended on a determination of how many men on the average would be in active overseas theaters during the year and how many in the zone of interior or inactive areas. It was further complicated by the fact that the method used was to determine the number of months of each type replacement required for the *entire troop basis.*[7]

The distribution allowance, in the all-inclusive sense, consisted of the quantities necessary to fill ZI depots and theater supply levels, to provide for filling the segments of the pipeline from factory to overseas port, and a special 2 percent allowance for shipping losses. A distribution factor at first was calculated as a flat percentage of initial issue and replacement requirements for each

[5] TM 38-220, 25 Jan 44, lists initial issue, replacement, and distribution as the only factors; however, some ASF spokesmen later listed the strategic reserve as an additional separate element. See, for instance, address by Col. Lee A. Denson, Director, Reqmts Div ASF, at ASF Hq School, 15 Apr 44, File Speeches, Reqmts Div ASF.

[6] Smith, *The Army and Economic Mobilization*, Table, p. 190.

[7] For an explanation of this method see *Ibid.*, pp. 182–84, and Leighton and Coakley, *Global Logistics, 1940–43*, p. 299.

item with added allowances for items subject to size tariffs. This method was used by all the technical services except Quartermaster Corps in calculating distribution requirements for the 1 February 1943 ASP. The Quartermaster Corps system, the carry-over method, tied in calculation of distribution requirements with actual calculation of stocks, existing and required, at different points in the pipeline. Later in the year the other services adopted the Quartermaster method. There was a marked tendency, in fact, for the distribution allowance to be merged with the replacement requirement. In the 1 February 1943 ASP, for instance, the amounts required to establish the shipping loss allowance and a 4½-month overseas reserve level were both included with replacement under the general designation "maintenance." In the 1 August 1943 edition the distribution allowance was expressed entirely in terms of months of ZI and theater replacement although the various factors in distribution continued to be calculated separately.

Requirements for expendable supplies could not, of course, be determined in terms of either initial issue or replacement, although there was a similar distribution requirement for keeping the pipeline full. Expendable supplies were therefore estimated in terms of average rate of consumption, expressed in "days of supply." For ammunition the day of supply referred to the number of rounds per gun per day; for subsistence it was the amount consumed by one man in one day; for POL it was the normal daily consumption of each type of vehicle or other piece of equipment using liquid fuel. Determination of requirements, then, involved multiplication of the basic day of supply by the number of men or units to be supplied and multiplying the result by the number of days of supply required. The total days of supply necessary to provide for consumption by all units in the troop basis, to build up reserves in the pipeline, and to provide for a plethora of special circumstances, made up the total requirement for expendables. Of all expendables, ammunition requirements were the most difficult to predict because of variations in expenditure rates for different areas and different weapons and in the intensity of combat. However, 1942 and 1943 computations avoided these complications by the use of weighted averages for all theaters similar to those used for replacement factors.

After calculating total requirements for a given year, total stocks on hand were deducted to arrive at required production. The "on-hand" figures in early 1943, however, were largely hypothetical, based as they were on production figures for the previous year minus estimated wastage. In March 1943 ASF ordered an inventory of stocks on hand in depots, posts, camps, and stations, which was to be the basis for calculating on-hand quantities for the 1 August revision of the ASP. Requirements were then to be based on the assumption that all troops were equipped and all overseas levels filled except to the extent that requisitions were in hand at depots for shortages. This represented a first attempt to base requirements strictly on anticipated future issues, the premise behind the stock control system to be placed into effect in 1944. Unfortunately, the first inventories were not entirely satisfactory, and only three services — Quartermaster, Chemical Warfare, and

Transportation—could rely on them for computing requirements. The others, for the most part, fell back on over-all inventory figures usually determined on the basis of theoretical, not actual, rates of consumption.[8]

Once determined, required production was scheduled over the period for which requirements were computed, synchronized as closely as possible with troop activation and overseas movement schedules. When total required production for any year exceeded anticipated production capacity, the deficit was deferred for production the next year. In this connection the difference between "critical" and "essential" items must be noted. Critical items were those requiring a long lead time for production, and were for the most part in short supply during 1942 and 1943; essential items were those obtainable on much shorter notice and, even in the earlier period, generally available in adequate quantities. The basic plan for equipping units provided that units in training should receive only 50 percent of their allowance of critical items. Thus both the 1 February and 1 August 1943 ASP's provided for production of only 50 percent of critical items for those units in training not expected to go overseas until 1944. For 1944 and 1945 full authorized allowances of critical items were provided for all units.[9]

The calculation of Army requirements in early 1943 was thus more comparable to a mass volley than to carefully aimed fire. Apart from initial issue figures, which were as reliable as the troop basis and the tables of organization and equipment they were derived from, the computations behind the ASP figures were weighted averages determined more or less arbitrarily. No really reliable data existed as yet on which either replacement factors or ammunition days of supply could be based, and most of the data used were derived from World War I experience. There was no provision for different conditions in different theaters, either in replacement and consumption factors or in the methods by which reserve levels were computed. Overseas troop bases in each theater were assumed to be simply cross sections of the over-all Victory Program Troop Basis, for requirements were established without regard to variations in type troop requirements between the ZI and overseas theaters or in variations between overseas theaters themselves. Specific theater requirements entered into the calculation of the Army Supply Program only in the cases of special operational supplies, which were calculated by the chiefs of services from strategic projections furnished them by Plans and Operations, ASF. In the 1 February revision no provision had yet been made for calculating special project requirements on the basis of information from theater commanders.

If inexact and perhaps overgenerous in its provision for future Army needs, the Army Supply Program was as flexible as circumstances would permit. It underwent a major revision every six months, with monthly revisions for spe-

[8] Frank, Army Supply Requirements, I, 71–74.

[9] Items classified critical for procurement purposes were not necessarily the same as items listed as controlled for distribution under the War Department priority system. Similarly, items under control for overseas distribution and carried in the Materiel Status Report were not the same as critical or controlled items. (See below, Chapter VI.) Just why these three different categories were maintained separately is not entirely clear.

cific items. The aim of the ASF was to keep the requirements program responsive to needs as reflected from the active theaters and in line with production capacities insofar as necessary adjustments did not unduly disrupt the production program. Besides the program for better inventories on which to base on-hand quantities, in mid-1943 ASF began a project to secure better data from overseas theaters and ZI installations on which to base replacement factors and ammunition days of supply. At the same time, the first step toward calculation of operational supply requirements on the basis of actual theater needs was taken when theater commanders were asked on 1 June 1943 to submit as "keyed projects" their future requirements of that kind.[10] As troops actually moved out to overseas theaters in large numbers, and as the strategy under which the war would be fought and the operational conditions governing its conduct unfolded, the ASF sought in several other ways to bring the massive requirements program into line. Nevertheless, it was a slow process, for requirements once established and converted into production schedules generated a certain rationale of their own. The bulk of ground forces were not to be committed to battle until late in 1944, and in the meantime the realities of production governed adjustments in the Army Supply Program as much as did either real or prospective theater needs.

The Realities of Production—1943

American industry in 1943 reached its wartime peak in the mass production of munitions, exploiting the immense capacity built up through 1941 and 1942 to turn out weapons, equipment, and supplies of relatively easy manufacture. In 1944 the emphasis shifted from sheer physical volume to greater selectivity, and most particularly toward production of heavy equipment items neglected earlier. Thus the dollar value of munitions produced in 1944 exceeded that of 1943, but for sheer physical volume output in 1943 may well have surpassed that of any other year of the war. And, if ground munitions alone are considered (excluding subsistence), even in adjusted dollar value 1943 production slightly exceeded that of 1944 and more than doubled that of 1942.[11]

Significant as the 1943 production achievement was, it had been foreseen and counted on and must not be allowed to obscure the fact that war production failed to meet the goals set. At the beginning of 1943, even after the drastic cuts imposed by WPB the preceding November, the entire munitions program (excluding war construction) totaled $72.3 billion. Actual output for 1943 came to only $57.4 billion. About half of the shortfall can be explained by a general downward revision of unit costs that affected the dollar value fig-

[10] (1) History Planning Div ASF, Text, II, 216. (2) See below, pp. 49–51.

[11] Statistics: Procurement, 9 April 1952 draft, prepared by Richard H. Crawford and Lindsley F. Cook under the direction of Theodore E. Whiting (hereafter cited as Crawford and Cook, Statistics: Procurement), MS, OCMH, p. 15. (2) Conspicuous exceptions to the above generalizations were aircraft, subsistence, and artillery ammunition, for which production was greater in 1944 than 1943. The peak year for tank guns and howitzers was 1942. In terms of adjusted dollar values, all of the technical services except Ordnance and Medical procured more in 1944 than in 1943; if subsistence is excluded, Quartermaster procurement reached its peak in 1942.

ures, but this still leaves a gap of $7 or $8 billion between initial goal and performance.[12]

Limitations on productive capacity combined with voluntary reductions in military requirements in producing the gap. Often it was difficult to see which came first—reduction because of lesser need, or evidence that productive capacity would prove insufficient to fill the original requirement. Over all, the reductions had a broad strategic basis for, contrary to original Victory Program estimates, the USSR continued to tie down the great bulk of the German Army and mass invasion of the European Continent from the west was delayed. In making the reductions, nevertheless, they appeared far more closely related to limitations on the national economy than to any changes in strategic concepts.

The aircraft goal set in November 1942 during the feasibility crisis was 107,000 planes for 1943, including 80,000 combat aircraft. Many ground and naval munitions programs were given equal priority, however; and even before the end of 1942 General Arnold privately warned his staff not to count on more than 80,000 aircraft of all types, a number still considered sufficient to meet the Air Forces' mobilization objective of 273 combat groups by the end of 1943. Although neither the Air Forces nor the Joint Chiefs officially receded from the 107,000-plane target figure for 1943, by midyear the War Production Board had officially informed them that the maximum expectation would be only 95,000; actual production was 85,898. The 1944 goal was reduced from 150,000 to 120,000. Meanwhile, as much because of delays in training and deployment of combat crews as because of the production lag, the AAF deferred the goal of 273 combat groups to mid-1944; then in 1944 abandoned it altogether.[13]

Similarly, ground munitions goals proved excessive both in terms of need and of feasibility. The 1 February 1943 ASP requirements for ground equipment provided a total dollar value of $24.3 billion in 1943 and $26.8 billion in 1944, these figures themselves representing a sizable reduction from earlier goals. Attainment of these reduced ASP

[12] (1) CPA, *Industrial Mobilization for War,* pp. 533, 540, 600. (2) The $57.4 billion figure, as well as that of $32.5 billion for 1942, represents contemporary rather than adjusted dollar values. Dollar values adjusted on the basis of 1945 prices are $52.4 billion for 1943, $30.5 billion for 1942. See Civilian Production Administration, The Production Statement, United States War Program July 1, 1940–August 31, 1945, Special Release, May 1, 1947 (hereafter cited as The Production Statement), pp. 2–3. (3) The figures for the war production program include merchant shipping. Treasury-procured lend-lease, and direct foreign purchases, as well as the military supply programs. The $7–8 billion differential for the entire program is a rough estimate based on the assumption that the decline in unit costs across the board was approximately 10 percent. This assumption is in turn based on a comparison made by the ASF showing a decline in unit costs of approximately 10 percent between the 1 February 1943 and the 1 August 1943 editions of the ASP. The assumption, then, is that this 10 percent decline in unit costs would hold good in comparing dollar values of the whole war production program as originally planned for 1943 with the appraised value of 1943 production at the end of the year. See ASF, Monthly Progress Report, 31 Jul 43, sec. 6, Analysis, p. 50.

[13] (1) Wesley Frank Craven and James Lea Cate, eds., "The Army Air Forces in World War II," VI, *Men and Planes* (Chicago: The University of Chicago Press, 1954) (hereafter cited as Craven and Cate, *AAF VI*), 281–87, 358–59. (2) Leighton and Coakley, *Global Logistics, 1940–43,* pp. 602–11. (3) CPA, *Industrial Mobilization for War,* p. 605. The reduction in the number of groups was in part the result of the enlargement of certain types of groups and the introduction of the very long range (VLR) B–29 bomber.

goals depended on a more or less steady rise in output of most categories of ground munitions until late in the year. Actually, production spurted during April, but dropped in May and June; by the end of June ASF officials had written off 5 to 8 percent of the most critical segments of the ground munitions program as unlikely to materialize.[14]

The causes of production difficulties in 1943 were complex and, except in isolated cases, did not stem from inadequate productive capacity or from inadequate supply of basic materials. Failures in the infinitely complex processes of synchronizing the flow of materials and components and of insuring the availability of skilled labor were substantially responsible. Then, too, although supplies of basic materials were generally adequate, shortages of specific shapes and forms of material and refined products developed in the course of the year that held back production of end items. The inadequate supply of fabricated aluminum, for example, was a major factor in some of the cutbacks in aircraft production, although the supply of aluminum ingots themselves well exceeded the demand. A shortage of carbon steel developed in the summer of 1943, largely because of the prolonged strike in the coal mines. Because of a shortage of copper, the production of steel cartridge cases had been initiated, which, in its turn, was slowed down by chronic technical problems. Production of Army-procured vessels was held up by shortages of engines, deck equipment, and electrical control equipment. Rapid design changes made it impossible to maintain schedules for Signal Corps items such as radar and high frequency radio sets.[15]

Whatever the complex causes, production shortfalls called for further realistic adjustments in Army requirements to conform to what seemed to be the practical limits of feasibility. In the meantime an even more serious question of feasibility had to be faced: determination of the practicable limits of Army expansion, which, in turn, vitally affected production goals. The JCS had had the question of the ultimate troop basis for the Army and Navy under consideration since September 1942. Early estimates by both services, totaling about 14 million men for 1944 and 17.5 million by 1945, were far beyond the approximately 11 million men the War Manpower Commission thought would be available. In the struggle to bring even the 1943 requirement within the 11-million limit, the Navy took the position that the Army's 8.2-million-man program (100 divisions) was too great, that it would absorb men needed to man the new ships being built under the naval construction program, and would provide a much larger Army than could be transported overseas in shipping to be available by the end of 1944. The Army's program also came under attack from the War Manpower Commission and the Congress.

Under these pressures, General McNarney appointed a special committee headed by Col. Ray T. Maddocks of OPD, an Army member of the Joint Staff Planners, to study the whole question of reduction of the projected size of the Army. The Maddocks Committee,

[14] ASF Monthly Progress Reports, 30 Jun 43, sec. 6, Analysis.

[15] ASF Monthly Progress Reports, 30 Jun, 31 Jul, 31 Aug 43, sec. 6, Analysis.

using the proposed deployment of Army units drawn up in pursuance of TRIDENT strategic objectives, concluded that an Army of 88 divisions and 7.7 million men by the end of 1943 would be adequate, and that the planned activation of 12 additional divisions could be postponed until 1944. This recommendation was accepted and incorporated in a new G–3 Troop Basis for 1943 issued on 1 July. The question of the troop basis for 1944 was a matter of discussion in JCS committees for sometime longer; the issue was finally settled in November when the 7.7-million figure was set as a continuing ceiling on Army expansion and the Navy's ceiling was set at 2.9 million. Within the 7.7-million ceiling, 90 divisions became the accepted upper limit of expansion of the ground combat army.[16]

By mid-1943, then, it was reasonably clear that the ultimate limitation on the American war effort would not be productive capacity but military manpower. The reduction in the troop basis obviously opened the way for a corresponding reduction in material requirements that would make production shortfalls of little consequence except for individual critical items. Even so, in the 1 August 1943 revision of the Army Supply Program there was no meshing of these factors of decreased manpower availability and decreased production feasibility. The revised Victory Program Troop Basis, received by ASF from OPD on 17 June 1943, did not reflect the reduction in 1943 goals set forth in the G–3 Troop Basis to be issued less than two weeks later, nor did it reflect the general expectation that the Army would reach the limit of its expansion by the end of 1943. Instead, despite internal adjustments, it set forth precisely the same manpower goals as those on which the 1 February ASP had been calculated—7.5 million enlisted men (8.2-million-man army) in 1943 and 9 million in 1944. And it should be remembered that the February edition had included requirements for an additional 1.5 million men in 1944 simply to provide a 20 percent strategic reserve for which units were not expected to be activated. The practical effect of not considering the reduction in the Army's goals from 8.2 million to 7.7 million officers and men in 1943 was to add another contingency reserve of about 500,000 men for 1943 that would be carried over to provide an even greater one in 1944—a sizable cushion, since the total program provided equipment for 116 divisions by the end of 1943 and 148 by the end of 1944 as opposed to the 90 soon to be accepted as the practicable top limit of Army expansion. Perhaps because of this, the requirement for a 20 percent strategic reserve of food and clothing, materials procurable on short notice, was eliminated in the 1 August ASP.[17]

The established policy in connection with the 1 August revision of the ASP was that no changes in required production for 1943 should be made except where deemed "absolutely necessary" be-

[16] (1) Maj William P. Moody, Planning the Troop Bases for All Services for 1944 and Beyond, sec. II C, ch. VII, History of the Joint Chiefs of Staff in World War II, MS, JCS Historical Sec. (2) Matloff, *Strategic Planning, 1943–44*, pp. 179–84. (3) Kent Roberts Greenfield, Robert R. Palmer, and Bell I. Wiley, *The Organization of Ground Combat Troops*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1947), pp. 222–30.

[17] Frank, Army Supply Requirements, I, 65–71.

cause of the "cost, difficulty and delay which result from changes in production schedules which have been agreed upon, and which are now serving as the bases for determining raw material allocations."[18] Despite this avowed policy and the failure to adjust the Victory Program Troop Basis, the August ASP showed a considerable reduction in requirements from that of February. In terms of dollar value of ground equipment it totaled 14.4 percent for 1943 procurement objectives and 17.9 percent for 1944. Dollar value, however, was not a true measure. A substantial interim reduction in unit costs accounted for perhaps 10 percent of the diminished dollar values for each year, making the effective reductions in 1943 procurement objectives about 5 percent and of 1944 objectives about 8 percent. The most striking reductions were in the medium tank program in which 1943 objectives were cut from 26,386 to 23,262 and those for 1944 from 20,230 to 12,507. Equally significant were increased provisions for heavy trucks and DUKW's, reflecting requests from active theaters and prospective needs for the European invasion.[19]

The revised ASP, as officially explained, was "intended to represent a program that is feasible of attainment, and therefore reflects a number of cutbacks to approach a realistic volume of production."[20] Its feasibility, nevertheless, was evidently more theoretical than real, for implementing procurement plans drawn up in August cut more than 3 percent off the reduced goals as probably unattainable, and to realize even these reduced expectations output would have to be accelerated by 20 percent during the last four months of the year—an increase more than twice as rapid as any yet accomplished in a four-month period of 1943. The expectation did in fact prove too optimistic. Even though interim revisions whittled down the ASP by almost another billion dollars before the end of the year, performance fell short of reduced objectives by almost 5 percent. Shortfalls in the individual technical service programs ranged from 4.2 percent in Ordnance to 7.7 percent in Quartermaster, with the major deficits in combat vehicles, trucks, tractors, small arms, artillery ammunition, bombs, airborne radar, ground radios, field wire, landing mat, subsistence, equipage, general quartermaster supplies, drugs, and marine equipment. As the accompanying chart shows, the total 1943 output of ground munitions was far less than the goal set at the beginning of the year.[21] (*Chart 3*)

McCoy Board and Richards Committee

Requirements, meanwhile, were being revised downward. The greatest, though

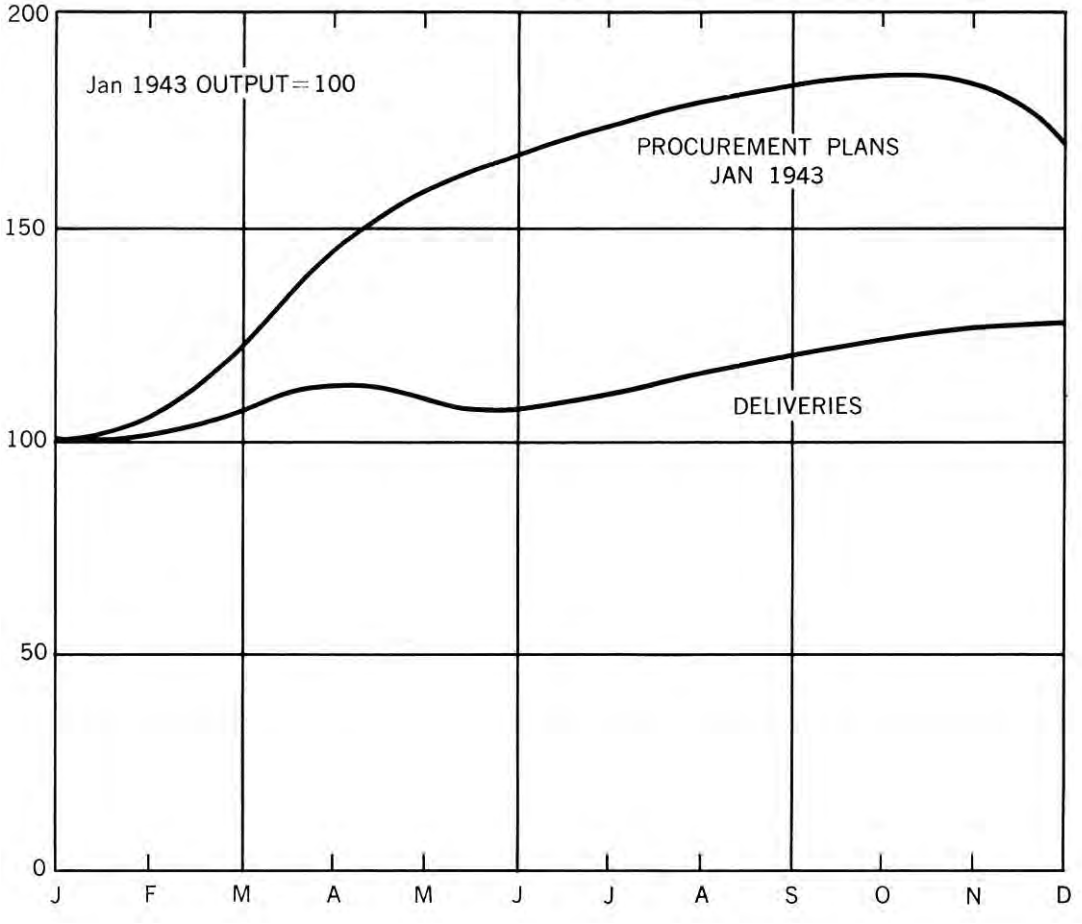
[18] *Ibid.*, doc. 83, Memo, Hq ASF for CsTechSvcs, 15 Jun 43, sub: Computation of Reqmts Sec I ASP, 1 Aug 43.

[19] (1) ASF Monthly Progress Reports, 31 Jul, 31 Aug 43, sec. 6, Analysis. (2) Selected items in ASF Monthly Progress Reports, 30 Jun, 31 Jul, 31 Aug 43, sec. 1A, Procurement.

[20] ASF Monthly Progress Report, 31 Aug 43, sec. 6, Analysis, p. 5.

[21] (1) ASF Monthly Progress Report, 31 Aug, 30 Nov, 31 Dec 43, sec. 6, Analysis. In the 31 December MPR total dollar value of ASF-procured supplies for 1943 was shown as $23.2 billion as opposed to a current required production goal of $24.4 billion, or 95.2 percent. (2) More refined statistics used by Crawford and Cook in Statistics: Procurement, show dollar value of ASF procurement in 1943 as $20.3 billion (all figures rounded to nearest million).

CHART 3—ORIGINAL 1943 PROCUREMENT PLANS AND ACTUAL ACCOMPLISHMENTS



Source: ASF MPR Sec 6 Analysis, 30 Nov 43 p. 3.

certainly not the only, impetus for revision came from the War Department's Procurement Review Board, appointed in mid-1943 at the behest of the Office of War Mobilization and headed by Maj. Gen. Frank R. McCoy. Instructed to review Army supply policies, procedures, and programs in the light of approved troop bases, projected operations scheduled by the JCS, and established lend-lease policy, the board first set out to study long-range strategic plans and to review procurement operations to ascertain how closely they followed and supported strategic concepts. The board members abandoned this approach when they found that operations were planned for no more than six months in advance, while procurement of many items had necessarily to be on an eighteen months basis. "Materials are ordered to meet the planned mobilization pro-

gram," the board reported, "and for the purpose of accumulating stockpiles to meet possible and unstated demands. We are, in effect, establishing a pool of supplies."[22]

In its sympathetic and constructive review, presented on 1 September 1943, the board members recognized the immense complications of the military supply program and that "the one irredeemable error of a supply program is not too much, but too little."[23] They found organization for supply "generally sound," and the military results achieved "excellent," but also noted that "in many phases of the program the sights have been set too high and must be critically re-examined with a view to their reduction."[24] In support of this latter contention, the board aimed its principal attack at overgenerous provision of reserves, inaccuracy in calculation of replacement and consumption factors, failure to consider variations in requirements of different theaters, lack of proper inventory control in overseas theaters, and failure to cancel requirements for obsolete programs or to liquidate investments in inactive theaters fast enough. In regard to reserves, the board pointed to the discrepancy between the Victory Program Troop Basis and the actual prospective rate of mobilization, noting that in the ASP the "so-called 20% reserve may be, in effect, a reserve of far greater proportions."[25] It suggested that a further vast accumulation of reserves would result from calculations based on inaccurate replacement factors and days of supply and from the too-generous calculation of distribution allowances to fill theater levels and the supply pipeline based on a more active submarine threat than then existed.

The most important of the board's thirteen recommendations proposed a "restudy of reserves to reduce them to realistic realignment with the actual situation and to give greater weight to the reserve strength which exists in our productive capacity."[26] On 3 September 1943 General McNarney appointed a special committee for this purpose, headed by Brig. Gen. George J. Richards, War Department budget officer, and made up of one representative each from G–2, G–3, G–4, and OPD of the General Staff, and one representative from each of the major ZI commands. The Richards Committee was to submit recommendations concerning the strategic reserve, theater reserves, stockpiles in the United States, days of supply and maintenance factors, and distribution and shipping loss allowances.[27]

The Richards Committee took the same line as had its predecessor. While warning of the necessity for any errors to be "on the side of over-supply," and that supply reserves had been subjected "neither to prodigious demands of large successful offensives on several fronts nor to the staggering losses of a major defeat," the committee still spelled out in 57 specific recommendations the means to reduce what it considered overabundance in the Army Supply Program.[28]

[22] Levels of Supply, app. B, Rpt of WD Procurement Review Board (McCoy Board), I, 63–64.

[23] *Ibid.*, p. 2.

[24] (1) *Ibid.*, p. 65. (2) Levels of Supply, app. E, Ltr, McCoy to Marshall, 31 Aug 43.

[25] *Ibid.*, Levels of Supply, app. B, p. 47.

[26] *Ibid.*, p. 67.

[27] Levels of Supply, app. E, Conference Held by the Deputy Chief of Staff on 3 September 1943.

[28] Levels of Supply, app. F, Rpt of WD Special Committee for the Re-study of Reserves (Richards Committee), I, 5, 89.

The general import of the recommendations was a call for a general reduction in reserve levels in view of the bright outlook for the Allied cause at the end of the year 1943. The Victory Program Troop Basis, the committee said, should be changed to conform to the practical limits of Army expansion and the strategic reserve drastically cut. Moreover, the troop basis should be revised to provide "by theaters or areas, the proper types and numbers of units needed for present and projected operations."[29]

Further, the committee called for calculation of replacement factors and ammunition days of supply for each individual theater rather than in terms of over-all weighted averages. The ASP, on that basis, should then be recalculated in terms of variant needs of the individual theaters based on actual and prospective deployments to them. In calculating needs for each theater, authorized theater levels should be reduced as a result of the diminished submarine menace to quantities necessary for a 30-day operating level, for filling theater distribution pipelines, and for sufficient stock to provide for convoy interval time for Classes I and III, and for emergency replacement time for Classes II, IV, and V. In calculating needs for the zone of interior, maximum stock levels should be lowered from 90 to 45 days on hand and on order at posts, camps, and stations, and from 180 to 90 days in distribution depots serving these installations. In filler depots serving overseas theaters 60 days' stock should be provided of items in the strategic reserve, over and above the 30-day contingency reserve for items not included therein.[30] Except for theater levels, the filler depot stocks, and the contingency reserve, distribution factors should be eliminated in the calculation of the ASP, the 2 percent allowance for shipping losses should be dropped and a substantial cut made in pipeline allowances of subsistence.

The Richards Committee thus proposed not only a reduction in reserves and elimination of in-transit allowances, but a more careful calculation of the Army Supply Program based on theater deployments and needs rather than on weighted averages. The committee also indicated that the Supply Division of the General Staff (G–4) should take a far more active role in supervising preparation of the ASP. The report therefore came as something of a blow to the ASF, which, since March 1942, had been largely responsible for the formulation of the ASP with little supervision by G–4. ASF did not welcome many of the committee's final recommendations. "The members of the committee," ran a collective ASF critique, "could not have been expected to have a detailed and working knowledge of the many phases of the problem. . . . Consequently, it is believed that some of the recommendations are based on incomplete data, misinterpretation of data, theoretical rather than practical considerations, etc., and that their adoption without more detailed study would be highly detrimental to the war effort."[31] The Army Service Forces objected most strongly to the elimination

[29] *Ibid.*, p. 76.

[30] Current ASF calculations provided for varying levels for the different classes of supply, see Table 12, ch. V, p. 126.

[31] Memo, Styer for DCofS, 4 Dec 43, sub: Rpt of WD Special Com for Re-Study of Reserves, ASF Dir Materiel File, Richards Com Rpt.

of in-transit allowances, but were skeptical of other points as well—the use of the theater basis for calculating requirements, the establishment of uniform depot reserve levels in the United States without regard to differences in types of supply, the differentiation between strategic and contingency reserves, and the assignment to G–4 of functions being performed by its own staff. As one ASF critic noted:

> The use of so-called theater computations, while having certain advantages, has many serious disadvantages. The chief objection to the theater computation is the inherent lack of flexibility; i.e., provision of the bulk of equipment in general purpose types is preferable. Moreover, theater computations require an accurate long-range projection of troop deployments. Any changes made in troop deployments will render surplus any special equipment procured, and more serious, will cause a shortage of general purpose equipment. . . . Replacement of equipment is more nearly a function of time; hence, with few exceptions, wastes generally at the same rate in any theater.[32]

The ASF objections carried little weight with a committee on which it had only equal representation with the other agencies involved. General McNarney assigned formal responsibility for comment on each of the recommendations variously to G–4, OPD, G–3, ASF, AAF, and to an *ad hoc* committee under the chairmanship of General Maxwell, G–4, and composed of representatives of all the interested agencies. ASF dissents were generally referred to the *ad hoc* committee, whence the original recommendations emerged with only minor modifications to meet ASF objections. On 1 January 1944 General McNarney issued a formal directive incorporating the fifty-seven recommendations as modified in the subsequent deliberations. The McNarney directive codified the final results of the survey begun by the McCoy Board, and established definite command or staff responsibility for carrying out each recommendation, with G–4 to carry the heaviest burden. As an ASF historian remarked, the directive "echoes with mandates to G–4."[33]

The McNarney directive, nonetheless, did not mark a sharp break with the past. It represented, rather, a culmination of trends toward greater logic, order, and system in the calculation of Army requirements, toward reduction of reserve levels, and toward calculations in terms of theater needs, all of which had been under way since 1942. It undoubtedly speeded up those trends and proved the value of an independent outside survey of the Army supply system. But changes were gradual, and not all the final recommendations were ever completely carried out, while others were, in fact, being carried out at the time the directive was issued. The shift of authority from ASF to G–4 for the formulation of the supply program proved to be more nominal than real, and practical adjustments made in a number of cases met many of the ASF objections and restored a considerable measure of administrative control over supply levels

[32] (1) *Ibid.* (2) For detailed comments see pages 51–55 of Richards Com Rpt.

[33] (1) Frank, Army Supply Requirements, I, 89; see also above, ch. IV. (2) Levels of Supply, app. G, Comments . . . on Recommendations [of the] Richards Com. (3) Levels of Supply, app. A, Memo, McNarney for CG's and Army CsofS, 1 Jan 44, sub: Changes in Supply Procedures and Supply Levels (hereafter cited as McNarney Directive, 1 Jan 44).

to that command.[34] The proposed theater method for calculation of requirements, in particular, would not be achieved for a long time.

The 1 February 1944 Army Supply Program

The Richards Committee report had its major impact on the formulation of the 1 February 1944 edition of the Army Supply Program. Computation of the program was going on concurrently with the deliberations of the committee and the staff review, and every effort was made to make the final product conform to the recommendations contained in the McNarney directive. The result was a marked downward revision of Army requirements as stated in the 1 August 1943 edition, but the very heart of the system proposed by the committee—the calculation of requirements on a theater basis—could not be effectively carried out.

The most significant factor affecting the reduction of the ASP was the new Victory Program Troop Basis drawn up in OPD and approved by General McNarney on 22 November 1943. Although it did not follow the Richards Committee recommendations in detail, the new troop basis was in substantial accord with the conclusions of that committee and of the McCoy Board, for it finally brought the basis for the supply program into alignment with the approved troop ceiling for the ground army. On the supposition that the Army would reach the limits of its expansion by the end of 1943—the approved ceiling of 7.7 million officers and enlisted men—and remain at approximately that strength through 1944 and 1945, the strategic reserve for which supplies were to be procured but units not activated was reduced from 1,678,000 to 532,000 men. The net total in terms of divisions and balanced supporting units for which material would be procured came to 115 (105 active and 10 strategic reserve), as opposed to the previous figure of 148. The deepest cuts were made in armored divisions (from 30 to 18) and antiaircraft battalions (from 550 to 257), which correspondingly affected requirements for heavy equipment.[35]

The expected progressive deployment of forces overseas during 1944 and 1945 is shown in Table 11.

The new Victory Program Troop Basis did not show prospective troop deployments by theater because neither OPD nor G–4 could provide timely estimates consistent with it. Consequently, the use of specific theater deployments as a basis for requirements computation was deferred until the next regular revision of the ASP later in the year. The basis

[34] (1) Since these developments are mainly related to distribution rather than requirements calculations they are treated in Chapter VI, below. (2) For a final appraisal of the probable impact of McNarney's directive on ASF operations see Memo, Clay for Somervell, 9 Jan 44, sub: Analysis of "Changes in Supply Procedure and Supply Levels," ASF Dir Materiel file, Richards Com Rpt.

[35] (1) Frank, Army Supply Requirements, I, 90–96. Document 94, volume III, is a detailed comparison of troop units in the Victory Program Troop Basis of 15 June 43 and that of 22 November 43. See also, Document 93, III, Memo, Hq ASF for CsTechSvcs, 27 Nov 43, sub: Computation Section 1 ASP, 1 Feb 44. (2) The Richards Committee calculations provided for procurement for 113 divisions in 1944 and for a possible additional 11 in 1945. See Com Rpt, pp. 10–22, and especially Table on page 22, in Levels of Supply. (3) The tabulation is not, however, entirely clear, and the ASF critique charged that the committee itself did not "fully understand" it. See Memo, Styer for DCofS, 4 Dec 43.

TABLE 11—SUMMARY OF GROUND ARMY STRENGTH, VICTORY PROGRAM TROOP BASIS 22 NOVEMBER 1943

	Thousands of Men		
Terminal strengths	1 Jan 1944	31 Dec 1944	31 Dec 1945
Total	7,700	7,700	7,700
Continental United States	5,110	2,765	1,700
Overseas	2,590	4,935	6,000
Average strengths	Calendar 1944	Calendar 1945	
Total	7,700		7,700
Continental United States	3,982		2,232
Overseas—noncombat areas	593		500
Overseas—combat areas	3,125		4,968

Source: Memo, Hq ASF for CsTechSvcs, 27 Nov 43, sub: Computation of Sec 1 ASP, 1 Feb 44, in Frank, Army Supply Requirements, doc. 93.

for calculation of the 1 February edition was still, for the most part, weighted averages with some consideration given to climatic factors. Keyed projects submitted by theater commanders were used to adjust operational supply requirements, and the provision for the distribution allowance was made to conform with the different theater supply levels prescribed by the Richards Committee. In the absence of an authoritative troop deployment, however, this had to be done by use of approximate figures and conversion to a weighted average for all theaters. ASF had already drastically cut theater levels (partly by providing for only half of the operating level) and in-transit allowances, and had eliminated the 2 percent shipping loss factor; but in January 1944 a recomputation had to be made eliminating the in-transit allowance entirely and providing for the newly prescribed theater levels. (*Table 12*) There was a total reduction in the distribution allowance for Class II and IV supplies from the previous edition's 215 to 285 days of supply (varying with the technical service) to an average standard allowance of 160 days for items included in the strategic reserve, and 190 days for items not included therein. Most of the reduction had actually been accomplished before McNarney issued his directive. Pipeline requirements for subsistence were reduced by approximately 14.5 percent. Distribution allowances for other expendables (except POL for which levels were determined by the Army-Navy Petroleum Board) were computed in accordance with the newly prescribed theater levels.[36]

[36] (1) Frank, Army Supply Requirements, I, 90–97, and doc. 97. (2) Memo, Clay for Somervell, 9 Jan 44. (3) Excerpts, ASF Rpts on Implementation of McNarney Directive, Log File, OCMH. (4) On the detailed problems of subsistence and POL requirements see Erna Risch, *The Quartermaster Corps: Organization, Supply, and Services I,* (hereafter cited as Risch, *Quartermaster Corps I),* UNITED STATES ARMY IN WORLD WAR II (Washington, 1953), 231–42.

TABLE 12—COMPARISON OF ELEMENTS OF DISTRIBUTION FOR CLASSES II AND IV SUPPLIES, ARMY SUPPLY PROGRAM

Element	Expressed in Days of Supply Theater of Operations Replacement Rates		
	1 Aug 43 as Published	1 Feb 44 Before DCofS Directive	1 Feb 44 as Published
Weighted average minimum reserve levels	75	63	70
Average operating level	[a]45	[a]25	30
In transit overseas	45	19	0
Reserves of T/O replacement in U.S.		90	60 for strategic reserve items
Ordnance	50		
Signal	75		
Engineers	120		
Quartermaster and Medical	90		or
Chemical Warfare Service			
East coast	115		90 for
West coast	120		nonstrategic reserve items
Total		197	160 for strategic reserve items
Ordnance	215		
Signal	240		or
Engineers	255		
Quartermaster and Medical	255		190 for
Chemical Warfare Service			nonstrategic
East coast	280		reserve
West coast	285		items

[a] Represents one-half average operating level because in-transit time included.
Source: Frank, Army Supply Requirements, doc. 95.

Replacement factors used in computing the 1 February 1944 ASP, though still as a rule weighted averages for all theaters and for the zone of interior, in many cases were refined and based on an evaluation of theater experience to date. During the last six months of 1943 replacement factors for 769 items (of a total 4,298) were revised, 713 of them downward. Also, inventories used by the technical services in determining on-hand figures were considerably more accurate than those used in August 1943, but they still left much to be desired. A final refinement used reserve productive capacity in lieu of end items in some categories — notably ammunition and quartermaster and chemical warfare

items—as the McCoy Board had recommended.[37]

The resultant net reduction achieved in Sections I, II, and III of the Army Supply Program was from $27.2 billion of required production for 1944 in the 1 August 1943 edition to $21.6 billion as of 1 February 1944. Section I (ground equipment) was reduced from $21.7 billion to $17.8 billion for 1944 and from $19.6 billion to $15.8 billion for 1945, or, roughly, a net total reduction of $8 billion for the two years. The major portion of the reduction by far was in ordnance equipment. ASF statisticians figured that of the total reduction 84 percent could be attributed to net decreases in requirements and 16 percent to reductions in unit costs. When the 1 February ASP was published, almost one-half of the decrease in net requirements had already been reflected in procurement schedules.[38]

The adjustment of the Army Supply Program to the realities of production and to the progressive reduction in the projected size of the ground army had been achieved, more or less, and the requirements program relatively stabilized. Most future problems would be those of adjusting specific items of production to needs reflected by theater experience as the ground army became progressively committed on all fronts. By early 1944 capital issue requirements for an army of 7.7 million men were nearing completion. In the future the major proportion of requirements would be for replacement and operational supplies needed for the great worldwide offensives of 1944.[39] Future requirements, too, were apt to be both more specific and more variable than those of the past that had been calculated mainly in terms of the over-all troop basis.

Theater Requirements and the Supply Control System

The basic requirements and production problem, then, as the climactic year of 1944 began, was to make the flow of supplies from the factories responsive to theater demands that were no longer potential but actual, and at the same time prevent the accumulation of surplus. The Army supply system evolved in that direction. There were several important aspects of this evolution. One was the development of replacement and consumption factors by theaters or areas of operation; a second, an increasing responsiveness to theater demands for special types of supplies, for changes in tables of organization and equipment, and for adjustments in the internal composition of the troop basis itself; a third, the development of the Supply Control System to replace the Army Supply Pro-

[37] (1) Frank, Army Supply Requirements, I, 97–98, 122. (2) Memo, Hq ASF for CsTechSvcs, 16 Sep 43, sub: On-hand Figures for 1 Feb 44 Rev ASP, with related papers, Reqmts Div ASF, On-Hand Data, 1 Feb 44 Rev of ASP. (3) Memo, Lt Col Paul I. Bertram for Maj Silverstrand, 8 Jan 44, sub: Replacement Factor Data for Gen Moore, Reqmts Div ASF, file Basis for Memo to Gen R. C. Moore. (4) ASF Monthly Progress Report, 31 Jan 44, sec. 6, Analysis.

[38] (1) ASF Monthly Progress Report, 31 Jan 44, sec. 6, Analysis. (2) For a convenient table of dollar values for the seven editions of ASP Section I see Smith, *The Army and Economic Mobilization*, p. 152.

[39] (1) Memo, Clay for Div, Dirs, Office Dir Materiel ASF, 28 Jan 44, Readj Div ASF file 400 ASP. (2) See Smith, *The Army and Economic Mobilization*, chart, p. 186, for proportion of initial issue and replacement requirements for each of the war years. The 1945 requirements were 100 percent replacement items, except, of course, new matériel and equipment.

gram as a method of stating Army production requirements.

The use of the theater basis for the determination of requirements depended on the development of a usable forecast of troop deployments by theaters. As a result of the McNarney directive this forecast became a primary responsibility of G–4. Working closely with OPD, G–4 finally came up with such a troop deployment on 20 May 1944—a revision of the Victory Program Troop Basis that was published under a new name, "Troop Schedule for the Army Supply Program." Based on the most recent G–3 troop basis, it showed projected deployment for all theaters and the zone of interior by calendar quarters up to and including 31 December 1945. Unfortunately, it was not entirely dependable, and often did not agree with actual activations being made by the major commands nor with other data on troop deployments. Later, on 19 July 1944 a revised Troop Schedule was distributed that was based on the War Department Troop Deployment prepared by OPD. This revision was used for the next regular edition of the ASP, not actually completed until 1 October 1944. On 1 October, also, OPD published a new War Department Troop Deployment that proved to be so satisfactory G–4 considered it necessary only to add an annex, designated the Supply Supplement, which set forth the necessary data for computing supply requirements. In this way the troop basis for procurement of supplies was finally brought into agreement with the troop basis for deployment.[40]

Despite delays in developing an accurate and satisfactory deployment forecast, more and better information after February 1944 permitted increased use of the theater basis for calculating requirements. Better theater reports on issues and expenditures clearly demonstrated marked differences in expenditure and wastage rates. On 10 June 1944 separate days of supply for categories of ammunition were established for four major areas—the European, Mediterranean, Asiatic, and Pacific. In July separate replacement factors were established for the two broad areas of the war, Pacific and Atlantic, and with additional accumulation of data in December 1944 the War Department finally could announce separate replacement factors for each of the six major overseas theaters and for the zone of interior. With the accumulation of additional data for each category, replacement and consumption factors were progressively revised.[41]

To gear procurement of operational supplies more closely to theater needs took somewhat longer. Operational supplies were those in excess of authorized allowances and needed for particular operations, mostly items for development of lines of communication or to take care of special combat exigencies created by

[40] (1) History of Supply Division, G–4, WD General Staff, Program Br, pp. 10–11, MS, OCMH. (2) Frank, Army Supply Requirements, I, 142–44; and docs. 123, 124. (3) Memo, Col H. M. Reedall, Dir Reqmts and Stock Control Div, for Dir P&O, ASF, 15 Jul 44, sub: Progress Rpt on Revision of Troop Schedule for ASP, Purchases Div ASF file ASP. (4) The Troop List for Operations and Supply prepared in the Strength and Accounting Office, ODCofS, continued to serve as the troop basis for distribution. See below, ch. VI.

[41] For fuller development of the problem of determining replacement factors and ammunition days of supply see Smith, *The Army and Economic Mobilization*, pp. 182–93, 203–08; especially Table 23, page 190, showing some particular replacement factors, and Table 25, page 207, showing ammunition days of supply for selected weapons.

peculiar conditions of geography, climate, or terrain. They consisted primarily of Class II and IV items, particularly engineer construction supplies, signal equipment for major installations, and road, rail, and water transportation equipment. They varied widely from area to area depending on the individual problems encountered; for instance, the needs for rehabilitating ports and railroads in Europe were necessarily different from those for building new installations on primitive islands and setting up water lines of communication in the Pacific. Such diverse requirements, like those for assault shipping, could only be calculated in terms of a fairly precise forecast of the area, nature, and scope of contemplated operations. Since the items called for were usually among the more complex ones, and required a long production lead time, forecasts had to be made one to two years in advance. Operational supplies in many ways were the real crux of the problem of strategic requirements.

It was obviously impossible in 1942 to make the specific strategic forecasts that would enable requirements for operational supplies to be computed with any exactness. Methods used were, in fact, quite haphazard. Chiefs of technical services simply made their own estimates of future needs the basis of procurement planning, while overseas commands requisitioned supplies when and as the need arose. As a more specific method became clearly requisite, Plans and Operations Division, ASF, tended to assume the major responsibility for furnishing the strategic grounds on which the technical services would base their calculations; theater commands, too, were more often consulted in the formulation or adjustment of procurement programs. Late in 1942 the ASF staff prepared a series of detailed assumptions as to operations in the Mediterranean during 1943 on which the Chief of Engineers prepared estimates of special requirements for construction materials in that theater. These estimates were forwarded to General Eisenhower's headquarters where, after several delays, they were revised downward about 30 percent. Shortly thereafter the Chief Signal Officer pioneered development of estimates of signal requirements for nearly all overseas theaters two years in advance, and they were approved for procurement planning purposes by the Joint Communications Board of the JCS. Other extensive estimates of requirements were made for the development of the supply line through Burma, one of the most elaborate operational projects of World War II. Another very extensive and urgent project, development of facilities in the Persian Gulf, was met by several expedients without extensive new production.[42]

In June 1943 the first step toward systematized consultation of theater commanders was taken with the initiation of the keyed projects system. Under this system overseas commands were to submit their requirements for operational supplies in the form of lists of projects, each with a key number, with either specific bills of material or with requests that the War Department compute such bills. The system was officially recognized by War Department circular in September 1943, and with significant modifications remained in effect throughout the rest of the war. Early in 1944 it

[42] On the CBI and Persian Gulf see Leighton and Coakley, *Global Logistics, 1940–43*, chs. XIX–XXI.

was reinforced when theaters were asked to prepare one additional project to provide for maintenance materials for engineer projects already under operation, and also a quarterly estimate to be used solely for procurement planning purposes of Class IV engineer supplies needed for special projects for three to five quarters in advance.

The keyed projects system proved in practice to be more a means for requisitioning operational supplies than for procurement planning. Its usefulness for the latter purpose was limited mainly to adjustments of procurement requirements already calculated on other bases. Procurement plans normally had to be initiated long before projects were submitted, for theater commanders could seldom anticipate operational supply demands a year or more in advance. During most of 1943 requirements for operational supplies were first calculated for the Army Supply Program mainly on the basis of strategic estimates (quarterly operational summaries) furnished to the technical services by Plans and Operations, ASF, and later adjusted to specific keyed projects submitted by the theaters. In mid-1944 the system was formally changed to conform more closely to the reality, and to check the tendency of technical services to relax their own efforts to anticipate theater operational requirements in view of the assumed responsibility of theaters for these calculations.

Much of even the theory that theater-prepared projects would be the main guide to procurement planning was abandoned. For it was substituted the concept that the War Department (Plans Division, ASF, and the technical services) should initially prepare projects and forward them to theaters for review and amendment; the theaters, then, should initiate only those projects that fell outside the scope of War Department plans. This ASF-theater partnership in the formulation of operational project requirements kept ASF active in the field of strategic speculation, for procurement planning had to go ahead whether or not a strategic plan had been approved.[43]

However much the initial estimates of operational supply requirements simply represented intelligent guesswork, the procedures for adjustment did make them much more responsive to actual theater needs. Similarly, during the latter part of the war, the basic allowance tables and the special lists of equipment were brought into closer consonance with theater requests. Moreover, the balance of units themselves was in constant state of adjustment, and this was one factor that made so difficult the development of a completely stable troop basis. A very important case in point was the move, early in 1944, to activate 66 additional heavy artillery battalions as a result of experience in the Italian campaign. This move brought in its train a requirement for a great expansion of

[43] (1) The above account is based mainly on History Planning Division ASF, pp. 213–22. (2) The most pertinent documents are: WD Cir 220, 20 Sep 43; WD Memo W 700–44, 31 Jan 44; WD Cir 203, 23 May 44; Ltr, Hq ASF to Dirs Plans, Reqmts, and Stock Control and Production Divs, 27 Oct 43, sub: Staff Procedure for Handling Reqmts for Opnl Supplies; Ltr, Hq ASF to CsTechSvcs, 27 Oct 43, sub: Procedure for Handling Reqmts for Special Opnl Supplies, apps. 13–D and 13–E, History Plans Div; and ASF Manual M415, 25 Aug 44, Special Operational Supplies. (3) See also below, Chapter VI, for treatment of distribution aspects of operational supplies problem, and Chapter XX for their particular application to Pacific theaters.

production of heavy guns, spare tubes, and ammunition. In much the same way, review of replacement factors based on combat experience revealed the necessity of a higher replacement rate for tanks and some other types of heavy equipment; the ammunition day of supply for small arms proved to have been heavily overestimated and that for practically all types of artillery to have been underestimated. These revelations had considerable impact on the Army Supply Program, and tended to reverse the economy verdicts of the McCoy Board and the Richards Committee. In nearly every line requirements for heavy and specialized equipment – heavy artillery, heavy trucks, crawler tractors, DUKW's, airborne radar, bombs, mines, grenades and pyrotechnics, rail cars and locomotives, and heavy engineer construction equipment – tended to climb during 1944. Despite the utmost efforts of the War Department to achieve economy by closing down production lines where excesses existed, these special needs exerted a constant upward pressure on required production goals in the months following publication of the 1 February 1944 ASP. By March, when the first complete schedules for the 1 February edition were issued, the dollar value of required production had already risen from $21.6 billion to $23.6 billion; by 30 June it had reached $24.8 billion. As stated finally at the end of the year, and influenced by production shortfalls in certain lines, it had fallen only to $24.25 billion. Goals for 1945 showed a similar progressive rise.[44]

In terms more purely of system, the major effort of the ASF to gear the production and flow of supplies more closely to actual demand came in the inauguration of supply control as a method of calculating requirements. Stock control, a related but not so comprehensive concept, had been practiced to a greater or less degree from the day the ASF started operations in 1942, but until March 1944 its main importance was in connection with distribution, as a means of determining ZI replacement factors and of on-hand quantities as of specific dates for use in computation of the ASP.[45] The Supply Control System inaugurated on 7 March 1944 had a much broader purpose—to provide an integrated method of determining requirements, carrying out distribution of material, and disposing of surplus. The heart of the system was stock control, that is, the maintenance of detailed stock records of inventory and issue by ZI depots of each separate commodity that entered the Army supply system. Records of past issue were then to become the main basis for forecasting future demand; the forecast would be the basis for adjusting inventory levels, disposing of surplus, and determining future requirements; requirements then would be the basis of production scheduling. Detailed data was to be provided monthly and revised either monthly or quarterly, as opposed to the way the Army Supply Program was computed,

[44] (1) This progression may be traced in ASF Monthly Progress Reports for January–December 1944, sec. 6, Analysis. (2) See also *Annual Report of the Army Service Forces, 1944* (Washington, 1944), pp. 94–100. (3) Adjustments in required production and their relation to strategic developments are treated more fully in Chapter XXII, below.

[45] (1) History of Stock Control, United States Army, MS, OCMH. (2) Frank, Army Supply Requirements, I, 132–34.

that is, to provide for annual requirements with major revisions only semiannually. The purpose behind supply control, then, was to make production schedules more immediately responsive to the fluctuation of supply and demand, in much the same way as peacetime industrial production.

To put the system into effect involved immense complications. One ASF officer, in fact, reviewing the initial proposal for a supply control system, commented:

> The inventory and issue basis proposed in your memorandum will leave to the judgment of clerks and relatively untrained supervisors decision as to projected rates of issue on the basis of data of unknown accuracy which must be carefully adjusted for changes in troop composition, non-recurring issues and special future requirements.[46]

At least some of these difficulties were recognized in the initial supply control directive, which provided for a gradual shift from ASP to supply control procedures.[47] Items of issue were divided into two broad groups, Principal (P items) and Secondary (S items). P items were those of sufficient military or monetary importance to require central control either because of production problems (such as lead time or scarcity of materials) or because of too little past issue experience to provide an adequate guide for the future. All the rest were classified as S items. Initial classifications were to be made by the responsible technical service and they were to be reviewed periodically. A progressive shift of items from the P to the S group was anticipated. Procurement of matériel in group P was to continue to follow ASP procedures for the time being, while considerably more leeway was granted the technical services in freely adjusting requirements for S items from month to month. Moreover, both types of items were to be the subject of intensive supply and demand studies in order to determine actual inventories and issue experience. Some items were to be reviewed monthly, and none less often than quarterly. In either case, a total authorized level for the zone of interior was to be determined for each separate supply item; it would include all depot stocks destined to fill either ZI troop or overseas theater demands and the various classes of reserves, but exclude all material overseas, en route overseas, in the hands of troops in the zone of interior, or under control of posts, camps, or stations. This level was to be converted to a numerical quantity. The objective would be to bring stocks in line with the authorized quantity at the earliest practicable date and thereafter to make procurement schedules accord with anticipated future demand. In determining future issue requirements, however, technical services were to use issue experience as the main guide only for items having "a relatively stable or readily predictable rate of issue." For other items, issue experience was to be combined with all the other pertinent factors previously used in calculating the Army Supply Program. The basic requirement, in any case, was "complete, centralized, accurate, consolidated and systematically recorded data" on all factors necessary to compute requirements. These data, plus a "continuous sched-

[46] Memo, Brig Gen Hugh C. Minton, Dir Production Div for Dir Materiel ASF, in response to Memo. Clay for Div Dirs, 28 Jan 44, 3 Feb 44, sub: Proposed Supply Program Procedures, Purchases Div ASF, File ASP.

[47] ASF Cir 67, 7 Mar 44.

uled review of requirements" were the real essence of supply control.[48]

The Supply Control System had perforce to be put into effect gradually, as necessary detailed inventories and records were developed and as procedures were crystallized and refined. The first ASF supply control manual was published on 20 July 1944; it was revised twice before the end of the war. An elaborate scheme of forms and records was devised that provided a single sheet for each important item in the supply system. By August 1944, 950 items had been brought under supply control, but the system continued to coexist with the Army Supply Program, the final edition of which was published on 1 October 1944. Supply control procedures were, however, used in the computation of this final edition of ASP. By March 1945 the number of items under supply control had risen to 1,900 and the monthly supply control report, ASF Monthly Progress Report, Section 20, had superseded the ASP as the official War Department production program and the procurement authority for the technical services.[49]

The Supply Control System was the final phase in the evolution of the Army's wartime system for forecasting matériel requirements. In its provisions for detailed stock records, close and detailed integration of requirements, procurement, and distribution, and for very frequent revisions of production schedules to prevent surplus accumulations and reflect current demand trends, it marked a distinct improvement over earlier methods. Its institution in the last phase of the war undoubtedly helped to cure some of the lack of realism and to curb some of the wasteful tendencies that the McCoy Board and Richards Committee had noted earlier. Yet the system had its own limitations and disadvantages. It involved a Herculean task of assembling the necessary data on hundreds of different items, and when assembled these data did not necessarily provide an adequate basis for predicting future issues, which in many lines were bound to be governed by the uncertainties of war. A certain element of crystal gazing necessarily remained in the calculation of requirements and hence a strong temptation to provide for all possible contingencies, for there was no gainsaying the McCoy Board's conclusion that the one irremediable error in a war supply program was not too much but too little. Moreover, close adherence to the supply and demand formula could easily lead to violent, and not readily manageable, fluctuations in production schedules. There were safeguards against the worst consequences of drastic upward and downward revisions, but those very safeguards negated some of the purposes of supply control. Requirements calculation to the end of the war remained as much an art as a science, requiring the use of good common sense and the judgment of experienced officials as well as detailed statistical analyses.[50]

Production feasibility, as it applied to the major reductions of the Army Sup-

[48] *Ibid.*

[49] (1) For a fuller treatment of the Supply Control System see Smith, *The Army and Economic Mobilization,* pp. 162–67; Risch, *Quartermaster Corps I,* 226–29; Frank, Army Supply Requirements, I, 156–65, 175–82. (2) The editions of ASF M413, The Supply Control System, are dated 20 Jul 44, 22 Dec 44, and 10 Apr 45. (3) For the 1 October 1944 ASP see below, Chapter XXII.

[50] (1) Smith, *The Army and Economic Mobilization,* p. 166. (2) Risch, *Quartermaster Corps I,* 229.

ply Program in 1942 or even the more limited ones of 1943, was no longer an important factor in 1944 and 1945, although this is not to say that production always met scheduled goals, or that critical materials were always available in adequate quantities, or that the military requirements program in the later war years did not strain the American economy. As will be more fully developed, the full-scale commitment of U.S. forces on two fronts in the fall of 1944 and the winter of 1944–45 did bring out in full relief some of the limitations on American resources, massive as they were.[51] In the last analysis, however, the strains were more severe on military manpower and shipping than on productive capacity, particularly insofar as it applied to production of supplies and equipment for the ground army. Feasibility, in 1944 had become mainly a matter of individual items, and the acute production problem was rather one of balance than over-all capacity.

The shortfall against the revised goal of $24.25 billion ASF-procured supplies in 1944, according to contemporary calculations, was only $764 million or 3.2 percent.[52] These over-all figures, of course, concealed serious shortfalls in certain lines and overages in others. They also meant that the Army requirements program in 1944 was generally being fulfilled on a current basis, and that shortages of equipment that had so plagued both training and operations in the early part of the war were largely a thing of the past. In the full-scale offensives of 1944 most shortages were to be the results of errors in the distribution process rather than genuine line item shortages except for a very few items for which production schedules were not adjusted in time. No operation failed, or was even significantly delayed, for lack of troop equipment.

[51] See below, ch. XXII.

[52] (1) ASF Monthly Progress Report, 31 Dec 44, sec. 6, Analysis. (2) Crawford and Cook, Statistics: Procurement, gives $21.37 billion as the dollar value of ASF procurement in 1944 as opposed to the ASF Monthly Progress Report figure of $23.48 billion. (3) See CPA, *Industrial Mobilization for War*, pp. 753–854, for an over-all view of war production in 1944.

CHAPTER VI

The Mechanics of Wholesale Distribution

The Distribution Process

Distribution of supplies had to be geared to strategy and operational plans to an extent that requirements and production could not be. The major task of the Army's logistical agencies was to deliver troops and supplies at the time and place they were needed and in the right numbers and quantities. The ultimate test of success or failure lay in the efficiency with which this complicated and intricate task was performed.

The work involved, besides the major task of supplying overseas theaters, provision of necessities for troops in training and performing administrative duties in the United States, and delivery of materials produced under Army auspices for the Navy and of lend-lease material to foreign governments. Every category of supply and almost every item generated its own peculiar problems. The primary concern here must perforce be with the evolution of a general system under which all classes of supply were handled, and more particularly with procedures used in the support of overseas theaters.[1]

The supply system involved huge magnitudes — thousands and thousands of separate items, millions of tons of freight, hundreds of thousands of troops, and thousands of ocean miles. It required broad planning for movement of carloads and shiploads of supplies to fill needs calculated, like production requirements, on the basis of numbers of different types of units with their respective Tables of Basic Allowances (TBA's) and Tables of Organization and Equipment (TOE's), and on replacement and consumption demands expressed in weighted averages (replacement factors and days of supply). It was, in short, a wholesale process throughout most of its several stages, giving way to a retail one only at the very end of the line.

To provide the necessary supplies out of which day-to-day retail needs could be met, the system relied on the accumulation of reserves at various points along the line—in depots and ports in the United States and overseas and in lesser quantities at posts, camps, and stations, and army and division supply points. In a sense, the basic concept was that of continuous pipelines of supply, with new articles flowing in at one end each time similar ones were issued at the other, and with proper adjustments at the intermediate storage points. In the wholesale sector, the one with which this chapter is concerned, regulation of the distribution process was primarily a matter of establishing and maintaining proper lev-

[1] Lend-lease distribution is discussed in Chapters XXV–XXIX; the problem of Army-Navy co-ordination in Chapters XVIII–XIX, below.

els of supply at each of the critical points along the pipeline. The system involved a certain calculated degree of oversupply for, if the distribution pipelines were really kept full, stockages at intermediate points would never be used. The primary problem was to maintain these stockages at a high enough point to permit each installation and overseas theater to draw the particular items and quantities to which it was entitled, and at the same time prevent accumulation of excesses that would unduly burden production and storage facilities and, in the end, become an embarrassment. Basic economy measures always involved principally efforts to reduce pipeline quantities or to perfect the keeping of inventories.

The Army Service Forces exercised administrative control over the distribution process as it concerned ground equipment, subject to policies and procedures (including initial setting of levels) established by the War Department General Staff. Within the ASF each of the seven technical services maintained control and responsibility for distribution as well as procurement of supply categories falling under its jurisdiction. The Transportation Corps exercised "unbroken control of troop and supply movements from domestic origins to the overseas ports of discharge" with the single exception of airborne traffic, which was controlled by the Army Air Forces. ASF control over supplies peculiar to the Air Forces, nonetheless, was limited to this movements phase. In almost all other matters relating to distribution of AAF matériel, the Air Service Command exercised a practical autonomy, except for some common items such as food, clothing, and certain types of ammunition that were procured and distributed to AAF through normal ASF channels.[2]

In the distribution pipeline, the most important points in the continental United States were the depots, the ports of embarkation, and the post, camp, and station supply installations. Supplies normally flowed from factories into depot stocks, and from depot stocks either to posts, camps, and stations for distribution to ZI units or to ports of embarkation for shipment overseas. Holding and reconsignment points near the ports were used for temporary storage in order to control the flow of material into the ports and prevent port congestion. At the storage depots each technical service controlled its own categories, and continued to exercise technical supervision over shipments even after they passed to Transportation Corps control on rail lines, at holding and reconsignment points and ports. The depot structure, consequently, followed technical service lines. Some depots stored only material controlled by a single technical service; others were jointly occupied, and after April 1943 were classified as ASF depots, but separate sections were controlled by responsible technical service chiefs.[3]

More important to the distribution process was the classification of depots by basic missions—filler, distribution, reserve, and key (or master) depots. Filler depots were the normal source for sup-

[2] (1) Leighton and Coakley, *Global Logistics, 1940–43*, pp. 244–46. (2) Quote in Wardlow, *The Transportation Corps: Movements, Training, and Supply*, p. 7.

[3] On the problem of administration of depots and ASF efforts to promote uniformity and to break across technical service lines to establish functional missions see History of Supply in the Zone of the Interior, prepared by Distribution Division, ASF, 1946, Chapter V, MS, OCMH.

plies to be shipped to overseas theaters, distribution depots the normal source for station supply in the zone of interior. Key depots stored centrally selected items not suitable for storage at filler and distribution depots. Reserve depots stored designated special-purpose items in bulk and supplies in excess of current needs. The general idea was that filler and distribution depots should stock fast-moving items, while slow-moving items and items in critical supply would be concentrated at the key depots. Also, limited stocks were maintained at ports of embarkation to permit more rapid filling of overseas demands. In theory ports relied on their own stocks and those of filler depots as their primary sources for filling requisitions from overseas theaters, and ZI stations depended upon distribution depots to fill theirs. When particular items were not available at the immediate back-up depot the requisitions were extracted to other filler depots or to reserve depots to the rear. Orders were placed directly on key depots for appropriate articles, with shipment direct from depot to post or port. Technical service chiefs were responsible for maintaining the detailed stock records that would indicate the depot from which any given article could be supplied, and for controlling the distribution of critical items in accordance with War Department policy.

Practice was not, naturally, a complete reflection of theory. The clear-cut classification of depot missions was not adopted until relatively late in the war. Record keeping was never ideal, and sometimes the whole depot system had to be combed to find a specific item required to fulfill a specific demand. Distribution depots might be called on to furnish articles for overseas supply, and filler depots to furnish training needs.[4]

In any case, ZI depot stockages were authorized at levels calculated in terms of so many days of supply for all troops in the United States and overseas translated into actual quantities of specific items by use of allowance tables and replacement and consumption factors. This was the general fund from which the needs of both ZI stations and overseas theaters were met. Stations and theaters were authorized to hold also their own general funds, again expressed in terms of days of supply, out of which they in turn served the units and installations for which they were responsible. Their demands on port and depot were formulated in terms of anticipated need to maintain authorized levels, or, in many cases, port and technical service computed those needs in accordance with stipulated allowances and forwarded the necessary supplies automatically. Thus the entire fund for meeting day-to-day requirements in the theaters consisted of the combined levels earmarked for this purpose in ZI depots, actually in existence in theater stocks, and in transit; similarly, the combined fund for meeting ZI requirements consisted of depot levels in the United States earmarked for this separate purpose and of the actual quantities of supplies at posts, camps, and stations or in transit. Total requirements, as has been shown, consisted of the amounts necessary to equip units in the troop basis initially, to maintain them over a prescribed period of time, to provide necessary operational supplies, to establish and main-

[4] (1) *Annual Report of the Army Service Forces, 1944*, p. 61. (2) TM 38-205, 21 Oct 43, Army Supply Procedures, Parts 1 and 2.

tain the stocks at designated points on the pipeline, and to keep the pipeline between them filled. The distribution process was thus the practical test of the efficacy of requirements calculations, and was as vitally affected by the accuracy or inaccuracy in setting replacement factors and days of supply.

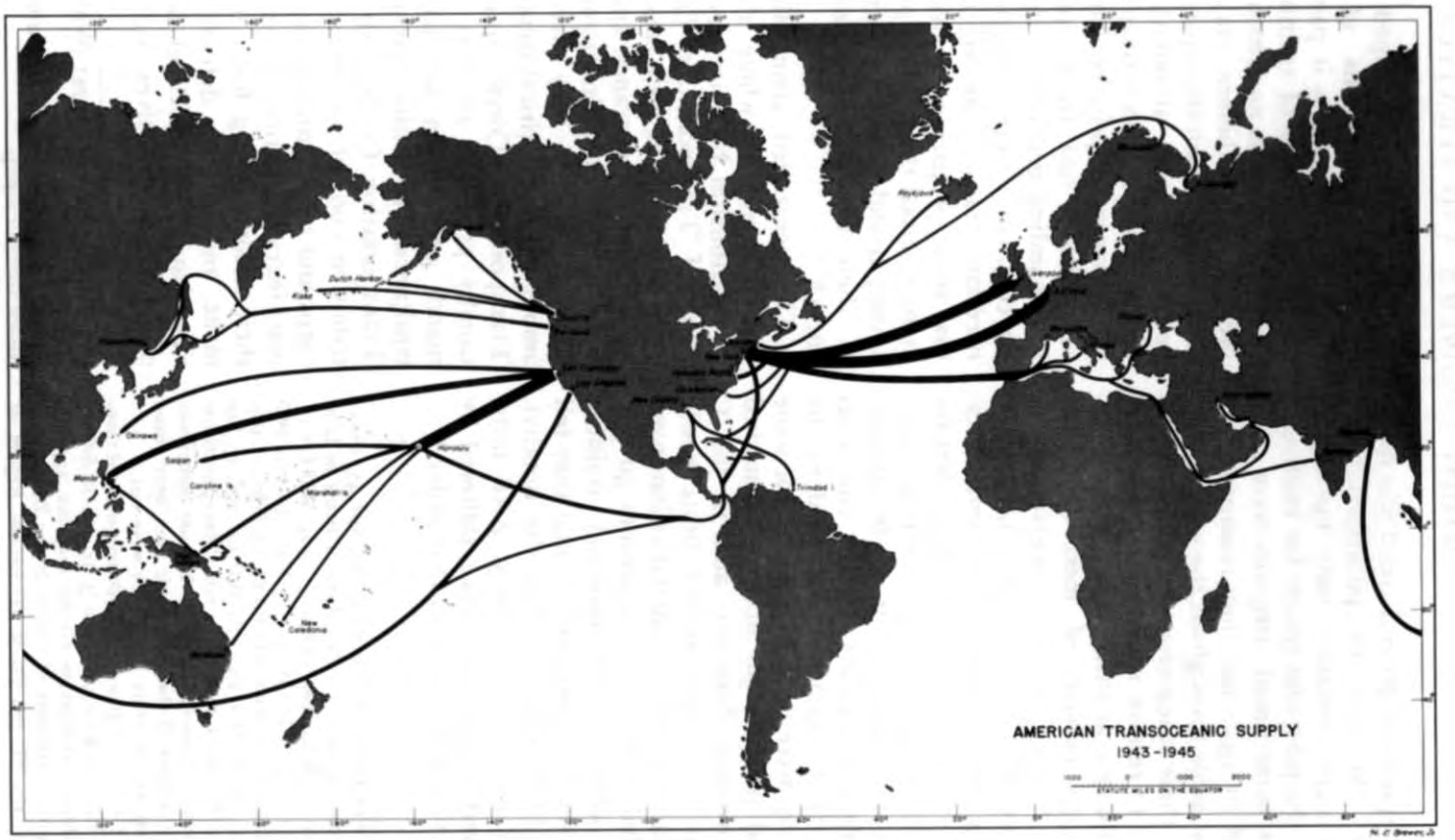
ZI requisitions, then, moved from unit to station supply officer, and from station supply officer to the appropriate technical service back-up depot. Initial equipment for newly activated units, however, was furnished automatically (without requisition) based on calculations of allowances of each item by the technical service concerned.[5] Overseas theaters and bases placed their orders on a designated responsible port of embarkation, which then channeled the orders to the proper source of supply and arranged shipment. Once supplies were delivered at a theater port a new distribution pipeline started wherein the level of supplies to be held at each particular point, the methods of ordering, and the regulations governing the flow of supplies to troop units were all determined by the theater commander.

Supply Priorities

Despite the increasing volume of production, plenty was always a relative matter, and scarcities of individual items of Army production continued to the end of the war, necessitating a constant measure of priorities control. Indeed, the first step in the distribution process —division of Army production among the U.S. Army, the U.S. Navy, and the several lend-lease claimants—was essentially an application of priorities. This division was a responsibility of the Munitions Assignments Board and its ground subcommittee (MAC (G)) and of the Joint Munitions Allocation Committee. In certain cases of exceptionally scarce items, for instance DUKW's, the MAC (G) established detailed priority lists setting up specific numbers for distribution among the theaters and for training.[6] For the great mass of items, the War Department received a bulk allocation (nearly always the lion's share of Army production) and distributed it under its own priorities policy, which, as its central feature, designated certain items as controlled items, that is, items for which real or anticipated demand was greater than supply, or for other reasons required close control over distribution. This control was centralized in the War Department, with G–3 and OPD's Logistics Group prescribing the basic priorities; ASF administered them through the technical services. (Distribution control over noncontrolled items, those normally in plentiful supply to meet all needs, was generally exercised at the lower echelons in the depots and at the ports.) The basic task of compiling controlled items lists fell to the technical services. They prepared individual lists quarterly, which were consolidated, reviewed, and edited in Distribution Division, ASF, and then sent to G–4 for approval and publication by The Adjutant General. In the spring of 1943, 776 items were on the list, but thereafter except for an occasional up-

[5] (1) TM 38–205, 21 Oct 43, Parts 1 and 2. (2) See History of Supply in the Zone of the Interior, Chapters 3 and 4, for a detailed account of station supply.

[6] On the operations of the munitions assignment machinery, see Leighton and Coakley, *Global Logistics, 1940–43*, Chapters X and XI, and below, Chapter XXVI.



MAP 2

ward spurt the general trend was downward. The final list, published on 27 June 1945, contained only 130 items.[7]

In the priorities system for controlled items, three broad categories were established in 1942 and they remained relatively stable throughout the war. In mid-1943 these categories consisted of an A group to receive 100 percent equipment in sequence as listed, a B group to receive 50 percent of most controlled items, and a C group to receive only 20 percent. Into the A group fell, in order, testing and laboratory units, units overseas, units on one to six months' alert for overseas movement (in three groups), units in a pool about to be alerted, schools and training centers, and units of defense commands. Included in the B group were units in training for some period of time but not yet earmarked for overseas shipment, and in the C group all others, mainly units newly activated. Newly activated divisions were entitled to receive a minimum 50 percent allowance of essential training equipment despite the fact that they fell into the C category. For the nondivisional units in C priority, AAF units received highest preference, followed by AGF and ASF units, in that order.[8]

The system was shaped to provide progressive increments of controlled items to each unit as it passed through the various stages of training and prepared for overseas movement until, theoretically, just before embarkation it would be 100 percent equipped. Initial issues were made automatically by the technical services on activation and with each change in priority status; replacement items had to be requisitioned. Commanding generals of the three major commands were authorized to make necessary transfers among units to see that those preparing for overseas movement received their full allowances, and among B and C units within the limits of their respective authorized allowances.[9]

The controlled items list was the heart but not the whole of the system of distribution by priorities. No major items of Transportation Corps equipment—locomotives, rail cars, boats and harbor craft, port cranes, and so forth—were listed as controlled items until early in 1945 though they were generally among the most critical items of supply. Transportation Corps equipment was usually produced to meet specific demands and seldom was part of TOE equipment of units, except for the Transportation Corps' own units. Distribution control was exercised by the corps and by the munitions assignments machinery. Antiaircraft weapons with their accompanying fire control equipment, and seacoast defense equipment were issued by the Chief of Ordnance under special directives. Motor vehicles,

[7] (1) WD Memo W 700–20–43, 21 Apr 43, shows 776 controlled items. (2) Numbers of items in later lists were: WD Cir 260, 20 Oct 43—504; WD Cir 42, 1 Feb 44—415; WD Cir 191, 13 Mar 44—335; WD Cir 355, 1 Sep 44—290; WD Cir 65, 28 Feb 45—475; WD Cir 100, 31 Mar 45—278; WD Cir 191, 27 Jun 45—130. The item count does not always constitute an accurate measure, however, because sometimes different models of the same basic item were listed separately and at other times they were not.

[8] (1) TAG Ltr, 1 Jun 43, sub: Distribution of Controlled Items of Equip, AG 400 (5–25–43) OB-S-C-M. (2) Leighton and Coakley, *Global Logistics, 1940–43*, pp. 303–15. (3) History of Supply in the Zone of the Interior, ch. VI, pp. 6a–16. (4) *Annual Report of the Army Service Forces, 1943* (Washington, 1944), p. 101.

[9] TAG Ltr, 1 Jun 43, sub: Distribution of Controlled Items of Equip.

though not included on the controlled list, were distributed under the same general system of priorities except that even C category units were entitled to a 50-percent allowance on activation and a 100-percent allowance at the end of six months' training. Training units usually received used vehicles, which they turned in for new ones when preparing for movement overseas. Priorities for controlled items informally governed the distribution of substitutes suitable for training purposes. Finally, there was a category designated "credit items" over which a modicum of control was exercised by allocating units and installations depot credits for definite quantities of supplies for prescribed periods of time. The credit system was used mainly for expendables such as POL and ammunition.[10]

The clear purpose of the priorities system was to provide critical items of equipment to overseas theaters or units preparing for overseas movement at the expense of units in training, but at the same time to prevent equipment shortages from crippling the training effort. Its successful application depended very heavily on accurate and stable designations of units in the various categories and on an orderly procession through training to preparation for overseas movement. During the first year after Pearl Harbor there was little stability or orderliness in these processes. Erratic changes in designations of units for overseas movements and sudden calls for units far down the priority list entailed continual shifting about of equipment from unit to unit. Moreover, unit training suffered from crippling shortages, the subject of agonized complaints from the Army Ground Forces.[11]

Beginning roughly with the April 1943 movements for the invasion of Sicily, these problems became progressively less acute. By midyear the system was working more or less as planned, and the worst examples of equipment shuffling were a thing of the past. The increase in the availability of equipment and the diminution in the number of controlled items played no small part. The inauguration early in 1943 of the OPD Six Months Forecast of unit deployments, and establishment of a pool of units within each major command from which emergency overseas demands could be met introduced a greater element of stability into movements forecasting. The AGF continued to complain justifiably of shortages for training, the complaints now being leveled more against the inadequacies of the allowances than the failure of units to receive them. By mid-1944 the equipment shortage problem had given way to the more serious personnel problem created by large-scale raids on training divisions for overseas replacements.[12]

The emphasis shifted to intertheater priorities. After 1942, except for the small-scale requirements for laboratories

[10] (1) Leighton and Coakley, *Global Logistics, 1940–43*, pp. 304–07. (2) TAG Ltr, 1 Jun 43, sub: Distribution of Controlled Items of Equip. (3) History of Supply in the Zone of the Interior, ch. VI, pp. 9–11, 18. (4) Memo, G 3 for G–4 thru OPD, 30 Dec 44, sub: Prop WD Cirs on Distr of Equip, G–4 400, VI.

[11] Leighton and Coakley, *Global Logistics, 1940–43*, pp. 309–15.

[12] (1) The last WD directive on distribution of controlled items was TAG Ltr, 1 Feb 44, sub: Distribution of Controlled Items of Equip, AG 400 (28 Jan 44) OB-S-C-M. (2) Palmer, Wiley, and Keast, *Procurement and Training of Ground Combat Troops*, pp. 463–68, 557–58. (3) Cline, *Washington Command Post*, p. 288.

and testing (A-1-*a*), active overseas theaters received highest priority (A-1-*b*) on all critical items of equipment. Troops about to proceed to theaters ranked next, in A-2 through A-4 depending upon the imminence of movement. The competition between theaters necessitated, however, arrangements within these categories to provide priority rankings for areas and operations generally in accord with the strategic decisions of the JCS and the CCS. This priorities structure, controlled by Logistics Group, OPD, was complicated and viable. Highest priority was usually assigned to theaters where operations had been specifically approved and ordered, with preference given to theaters in the war against Germany over those of the war against Japan. Thus in 1943 Mediterranean operations normally had first priority, the principal Pacific theaters second, and the China, Burma, and India theater last, with various aspects of the build-up in the United Kingdom sandwiched in between. During most of 1943, for instance, air forces in the United Kingdom were assigned priority A-1-*b*-4, roughly equal to that of Pacific operations; ground forces held A-1-*b*-8, just above the CBI; and the advance shipment program held a fairly low rating in the A-2 group.[13]

The administration of theater priorities was not entirely a matter of formal ratings. If the priorities system had been applied literally, all requirements for a critical item for one theater would have had to be satisfied before any requirements for a theater of lower priority were considered. This proved impractical, and the system adopted attempted to supply all TOE equipment for theaters first, then maintenance and operational supplies, and lastly all other requirements to the maximum level, so that each theater was assured certain minimum essential supplies, the priorities system applying only to its marginal requirements. Even in this area, Logistics Group, OPD, did not follow the ratings strictly if they threatened to deprive low priority theaters of equipment vital to the success of approved operations. In the last analysis, the preference accorded a theater depended as much on troop deployment schedules, allocations of shipping, and the evaluation of other factors in each instance as it did on the formal system of priorities for allocation of critical items of equipment. Still, the priority rating accorded a theater at any given time did, as a rule, indicate its standing on the preference scale in accordance with which all these resources, insofar as they were controlled by the War Department, were allotted.[14]

[13] For development of the priority problem in relation to the BOLERO build-up and the preshipment program, see below, Chapters VII, IX, and XII.

[14] (1) Memo, Tansey, Logistics Gp, OPD, sub: Allocation of Munitions for Log Support of Global Strategy, no date, ABC 400 (2–17–42) Sec. 6. (2) TAG Ltr, 1 Feb 44, AG 400 (28 Jan 44) OB-S-C-M. (3) ASF Control Div, The Problem of Troop and Cargo Flow in Preparing the European Invasion 1943–1944 (hereafter cited as The Problem of Troop and Cargo Flow), prepared by Richard M. Leighton, pp. 102–19, MS, OCMH. (4) TAG Ltr, 14 Feb 44, sub: MSR Editing Levels, SPX 400 (11 Feb 44) OB-S-SPDDL-M. (5) Cline, *Washington Command Post*, p. 285. (6) Memo, Dir Plng Div ASF for OPD, 8 May 45, sub: Theater Priorities, Thtr Files, Pac Sec General File, Plng Div ASF. (7) Dir, Service, Supply and Procurement Div, WDGS, *Logistics in World War II, Final Report of Army Service Forces* (Washington, 1948) (hereafter cited as *Logistics in World War II, ASF Final Report*), p. 79.

Equipping Outbound Troops and the Shipment of Troop Equipment

The first phase of support of overseas operations involved the shipment of troops with their accompanying equipment and impedimenta. The extent to which systematized procedures in troop movements had replaced the hurry and confusion of 1942 was evidenced in the marked contrast between the orderliness of movements for the Sicily operation and the disorder that had attended the preparations for the North African landings. Much of this orderliness had been achieved through the preparation and widespread distribution of standardized procedures in the booklet "Preparation for Overseas Movement" (POM), by fixing in OPD the responsibility for determining troop requirements and making unit allocations to overseas theaters and in the three major commands the responsibility for determining unit availability, designating units to be moved, and making initial preparations for movement. By the fall of 1943 OPD's Six Months Forecast of deployment was stating "quite firm" requirements for the next two months and reasonably accurate "theoretical" ones for the following four.[15] This made possible the orderly processing of troops for movement according to the detailed procedures of POM. Movement orders, preparation of which was a joint responsibility of OPD and the major commands, specified additional details as to port of embarkation, appropriate TOE's, and the supplies to be made available at the port or staging area by the technical services.[16]

The flow of troops into ports and staging areas was controlled by port commanders in consonance with the availability of transports. Transport schedules for Atlantic sailings were worked out by Movements Division, Office, Chief of Transportation (OCT), subject to arrangements with the Navy for convoys and routing and with the British Ministry of War Transport when British troop carriers were involved. The system differed somewhat for Pacific sailings. Here joint utilization of transports with the Navy was necessary, and schedules generally were worked out by joint committees in San Francisco. In any case, Movements Division developed its own six-months' forecast of troop lift in close and direct co-ordination with OPD, the agency responsible for the six-months' deployment forecast on which preparation and initial movements of units was based. At the very top level, the joint and combined transportation committees serving the JCS and CCS made the basic allocations of troop lift in the light of existing strategy or other considerations.[17]

A fundamental problem in connection with all troop movements was the assembly and shipment of authorized supplies and equipment in close synchronization with the shipment of the units themselves. Under POM regulations units moving overseas were en-

[15] Memo, unsigned, 19 Nov 43, sub: Procedure for Assignment of Units to Overseas Theaters, Folder Gen and Misc for Pac Theater, Plng Div ASF.

[16] On movement orders see Troop Movements in World War II, prepared by Movements Br, Mobilization Div, ASF, MS, OCMH.

[17] (1) For a complete and detailed account of the procedures involved in troop movements see Wardlow, *The Transportation Corps: Movements, Training, and Supply*, pp. 89–136. (2) On the Pacific system see below, Chapter XVIII.

titled to their full TOE and TBA allowances, to certain maintenance supplies and ammunition, and such further matériel as might be specified in Special Lists of Equipment (SLOE's). POM procedures divided responsibility for seeing that embarking troops were properly equipped among unit commanders, station commanders, major ZI commands (AAF, AGF, and ASF), service commands, technical services, and the port of embarkation, with Mobilization Division, ASF, exercising general co-ordination over the process. At the initial alert for overseas movement, unit commanders determined by means of showdown inspections existing shortages of items and quantities of combat serviceable equipment to fill allowances and submitted lists to their respective station commanders. Station commanders then filled shortages to the extent possible from station stocks and depots normally supplying the station, drawing when necessary on units of lower priority at the same station. For items they were unable to supply, station commanders then prepared an "Initial List of Shortages" and forwarded it to the responsible technical services, which filled them by shipments either to the unit at home station or directly to the port area. AGF and AAF commanders were empowered to transfer from other units of lower priority under their command any items not obtainable from ASF sources. Port commanders were responsible for filling such last-minute shortages as remained when the unit moved into the port area. ASF service commands rendered advice and assistance all along the line.[18]

Despite the involved co-ordinating arrangements, the procedures became relatively routine and the large troop movements of 1943 and 1944 were carried out with a minimum of waste motion. The synchronization of the flow of equipment and supplies into a port from many different sources with the movement of troops on the port call remained difficult, however, and inevitably units sometimes sailed before all of their allotted supplies arrived. When this happened, shortages had to be made up in follow-up shipments.

Troops carried only their individual equipment (A and B bags, later the single canvas duffel bag) and minimum essential housekeeping equipment with them. Organizational equipment was shipped separately, and this gave rise to the truly major problem of synchronization—that of insuring the arrival of this equipment overseas at the time and place where it could be issued to debarking troops without undue delay. The ideal solution to the problem was found in certain special types of loading (combat, unit, and convoy), but all were excessively expensive of shipping space. Combat loading, whereby troops and equipment were loaded on the same ship

[18] (1) Preparation for Overseas Movement (POM), 2d ed., 1 Aug 43, AG 370.5 (12 Jul 43) OB-S-E-GN-AF-SPMOT-M. (2) For a graphic presentation of the system for equipping a typical AGF unit see Leighton and Coakley, *Global Logistics, 1940–43*, p. 647. (3) The procedure had been changed by 15 January 1945 only to the extent of excluding noncontrolled items from the initial list of shortages. See POM, 3d ed., 15 Jan 45. (4) Certain additional procedures and variants were prescribed for AAF units, see Additional Preparation for Overseas Movement for AAF Units (AIR-POM), 2d ed., 1 Aug 43, AG 370.5 (6 Aug 43) OB-S-AF-M. (5) A third procedure governed movement of replacements, see WD Pam 29–2, Preparation for Overseas Movement of Individual Replacements (POR), 15 May 44. (6) Troop Movements in World War II, pp. 6–7; see appendix B for a typical movement order.



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with equipment stowed so that it could be discharged quickly in the order needed, required specially rigged ships such as the Navy's APA's and AKA's and was reserved for troops mounted out directly for amphibious assaults. Unit loading, whereby troops and equipment were loaded on the same ship but without special facilities for discharging, was usually impracticable because most troop transports did not have the required cargo space; and even when they did, wasteful loading practices frequently resulted. Convoy loading simply involved sailing the cargo ships in the same convoy as the troop transports but it, too, was usually impractical because troopships either did not sail in convoys or moved in fast convoys while cargo vessels moved in much slower ones. Thus the need to use cargo space efficiently ruled out, for all but special movements, methods that would have insured the rapid marrying up of troops and equipment overseas; instead, shipments of organizational equipment usually had to be made in separate cargo vessels, sometimes scattered over several convoys.[19]

This last method of loading was a frequent source of complaint from theater commanders who found it difficult to locate and identify organizational equipment after it had arrived in the theater. The problem was particularly acute in the Pacific where there was

[19] See Wardlow, *The Transportation Corps: Movements, Training, and Supply*, pp. 148–50, 373.

seldom any central point for handling all incoming shipments, and troops and supplies were frequently unloaded at widely separated points. No completely satisfactory solution was found that applied to all areas. Much was achieved by administrative improvements—the adoption of a standard marking system for shipments, meticulous record keeping at the ports, closer liaison between ports and theaters, greater care and system in the preparation of shipment manifests, and greater speed in relaying advance information on manifests to the theaters detailing the cargo to be expected on specific vessels. An Initial Troop Equipment Division was established in each port, separate from the Overseas Supply Division, with special responsibility for handling initial shipments to accompany troops.[20]

Outside the realm of administrative improvements, the major innovations were preshipment of organizational equipment to the United Kingdom for the cross-Channel invasion forces and bulk shipment of equipment to ports on the Continent for follow-up divisions coming directly from the United States.[21] Both of these procedures put the emphasis on bulk shipments from technical service depots, bypassing normal POM procedures. Neither was used extensively in the Pacific, although some instances of preshipment of divisional equipment occurred. All in all, in the later stages of the war as equipment became more plentiful, there was a marked tendency to substitute bulk shipments to be placed in theater stocks and then issued to units as they arrived for the more meticulous and time-consuming processes of gathering and shipping organizational equipment and supplies for each unit as it sailed. Shipment of maintenance allowances with troops, for instance, was gradually abandoned, and by late 1944 these allowances were being shipped in bulk to all theaters and placed in theater stock.[22]

Evolution of the Overseas Supply System

The main principles governing overseas supply in World War II were laid down in a directive issued shortly after Pearl Harbor, hastily conceived and generally considered to be of an experimental nature. The salient feature of the system then adopted was decentralization of operations to permit control of the normal flow of supplies by ports of embarkation based either on computation of standard allowances or on requisitions submitted by theaters. The War Department's role was confined to determining policies, establishing allowances and levels, controlling particularly critical items, and supervising operations to see that practice was brought into harmony with policy. Surprisingly enough, this original plan proved flexible enough to meet the changing needs of operations that quickly expanded into every quarter of the globe. This flexi-

[20] (1) See *Ibid.*, pp. 149–55, 396–103. (2) On the importance and the evolution of the standard marking system see Leighton and Coakley, *Global Logistics, 1940–43*, pp. 644–45. (3) For more specific information on the problem of Pacific theaters see below, Chapter XX.

[21] See above, ch. II and chs. VII, IX, and XIV, below.

[22] (1) Wardlow, *The Transportation Corps: Movements, Training, and Supply*, pp. 155–61. (2) Msg, AGWAR to CG's, USAFICPA, USAFCBI, San Francisco and Los Angeles POE's, 7 Aug 44, file 13b Day File Cen Pac, Feb 44, ASF Plng Div.

bility was, of course, largely a matter of broad and general language that left a multitude of concrete problems to be solved in the future: organization at ports of embarkation, theater supply levels, methods of requisitioning and controlling the flow of various types of items, and co-ordination among staff and operating agencies involved. Thus the evolution of the system was still in progress in the summer of 1943, although the general lines of its development were quite clear.

No small part of the accomplishments of 1942 and early 1943 was the development of a satisfactory mechanism for controlling the flow of supplies in and out of ports without disproportionate sacrifice of the ultimate goal of the supply system — the shipment of specific items and quantities of supplies overseas to meet the specific needs of overseas commanders. Satisfactory control over the flow of supplies into ports was largely attained through the use of holding and reconsignment points and establishment of procedures for calling supplies forward into the port area as shipping became available to transport them. The first step in the marriage of supply and transportation considerations was the establishment in 1942 of an overseas supply division at each port responsible for the ports' overseas supply activities. The second came in early 1943 with the working out of a *modus vivendi* between General Lutes and General Gross that provided, in effect, for close co-ordination between Lutes' ASF operations staff, the Office of the Chief of Transportation, and the port commanders in supervising the work of the overseas supply divisions. Thus, while the overseas supply divisions continued to be parts of the port commands and so under the Chief of Transportation, the Director of Plans and Operations was authorized direct communication with them on matters pertaining to supplies to be shipped overseas.[23] As the system worked—and it did work better in practice than looked possible on an organization chart—the Office, Chief of Transportation, planned the availability of shipping while Plans and Operations, ASF, had cognizance over the types and kinds of cargo to fill the ships.[24]

Each theater was assigned as the responsibility of a single port, and the Overseas Supply Division in the primary port was the key center for handling all matters relating to overseas supply for the theater or theaters for which it was responsible, save only the shipment of initial equipment for troops moving overseas.

The procedures developed during 1942 provided for shipment of Class I and III supplies on an automatic basis by the ports, Class II and IV on requisitions initiated by overseas commanders, and Class V on directives issued by the commanding generals of ASF and AAF. But even for classes II, IV, and V supply was to some degree automatic since troops moving overseas were entitled to maintenance allowances and these al-

[23] (1) On development of the overseas supply system in 1942 and early 1943 see Leighton and Coakley, *Global Logistics, 1940–43*, pp. 233–38, 317–36, 642–48. (2) See also Wardlow, *The Transportation Corps: Movements, Training, and Supply*, pp. 335–57. (3) Two useful monographs are: ASF, Control Division, Development of Overseas Supply Policies and Procedures, prepared by Richard M. Leighton; and Harold Larson, Role of the Transportation Corps in Overseas Supply, OCT Historical Monograph 27; both in OCMH.

[24] (1) Memo, Lutes for CsTechSvcs, 11 May 43. (2) Memo, Lutes for CofT, 3 Aug 43. Both in Log File, OCMH.

lowances normally constituted the first step in building theater supply levels. In the early stages of the war supply of all classes for task forces was automatic. For instance, in the North African invasion supplies were shipped on the early convoys almost entirely on the basis of initial and maintenance allowances and estimated consumption rates, not on requisitions from the theater commander. The whole emphasis during 1942 was on automatic supply to establish minimum theater levels; it was only at the end of 1942, when massive evidence of resulting unbalanced stocks in several theaters came to light, that the emphasis began to shift to the more selective process of determining actual theater stocks and needs and governing shipments accordingly

Meanwhile, basic procedures for requisitioning Class II and IV supplies had been worked out. They provided that the Overseas Supply Officer at the port should edit requisitions for noncontrolled items in terms of theater allowances and furnish matériel to meet them either from port stocks or by back-ordering on appropriate depots. (*Chart 4*) Requisitions for controlled items were to be forwarded to appropriate chiefs of technical services for editing in accordance with existing priorities and determination of source of supply. (*Chart 5*) The great problem that emerged was that of determining the actual status of theater assets as a basis on which intelligent editing could be conducted, either at the port or by the technical services. And, as unbalanced stocks of food and POL appeared in the various theaters, the problem of determining supply status became equally acute as it applied to the automatic categories. Reporting requirements in 1942 had been kept at a minimum as too great a burden on newly established overseas bases. The major report required was the Materiel Status Report, which listed on-hand quantities of a selected list of scarce items (similar to, but not identical with, the controlled items list, and including ammunition); it was submitted directly to the War Department each month and used by the technical services in editing requisitions for controlled items. It was an imperfect instrument, and usually contained outdated figures by the time it was received. For the great mass of noncontrolled and automatic supply items the ports became the principal record-keeping agencies, basing their figures largely on what had been shipped and on whatever information "they could cajole from overseas commanders."[25]

In May 1943 the War Department took action to systemize reporting, and in so doing gave the overseas supply system a new turn. Three reports were required for each theater: a Monthly Materiel Status Report (MMSR) for selected Class II and IV items, a monthly Automatic Supply Report for Class I and III supplies, and an Ammunition Supply Report for Class V to be submitted every ten days. The port commanders were made primarily responsible for preparing these reports, but definite deadlines were established for overseas commanders to forward the necessary data. All reports were designed to show theater stocks, quantities en route, and the theater allowances against which they should be matched; these last, in the case of the MMSR, were to

[25] Leighton and Coakley, *Global Logistics, 1940–43*, pp. 322–28.

be compiled by the technical services. OPD was made responsible for furnishing ASF within eight days after the end of the month the official troop bases for each overseas theater on which allowances were to be calculated.[26]

The stated purpose of these reports was to serve a statistical and control function to permit ASF headquarters, the technical services, and the ports to edit requisitions intelligently and adjust the flow of automatic supply. The whole evolution of the supply system at this point, however, was toward use of the reports as a form of requisition and the semiautomatic flow of supply this implied. In September 1943 the trend was formally recognized in a new "bible" for overseas supply. The directive[27] divided overseas supply operations, as they might be expected to develop after the occupation of a new theater, into three consecutive phases. In the first phase all supply was to be automatic "until such time as normal supply procedure can be put into operation." During this phase all supplies would be shipped in accordance with schedules and levels prescribed in the plan for establishing the theater or base and, at least theoretically, the theater commander would not have to concern himself with the shipments at all. From this stage it was intended to hurry as quickly as practicable into the second phase wherein procedures styled "semiautomatic" would apply; that is, ammunition and controlled items would be supplied on the basis of status reports and other supplies by requisition. Considerably later, after authorized levels had been reached and stabilized, a third phase of supply by requisition only would be instituted with the status reports to be continued for statistical purposes.

The new instructions substituted a Selected Items Report on certain Class I and III supplies for the Automatic Supply Report. This report occupied a less determinate status than either the Monthly Materiel Status Report or the Ammunition Report as a requisition. Medical supplies were to be obtained by requisition. The new circular also confirmed special procedures for handling POL that had taken shape since the founding of the Army-Navy Petroleum Board in July 1942, by which requisitions for POL from overseas theaters were forwarded to the Board, and this JCS agency then determined allocations of petroleum products to theaters and prescribed their sources, relying on the Quartermaster Corps for procurement to meet ground force needs and on the Transportation Corps to arrange movements. For other items on the Selected Items Report, mostly Class I rations, the circular prescribed that "the port commander will take necessary action to maintain levels," which was taken, at least by port commanders, to mean that rations would be shipped on a semiautomatic basis without requisition.[28]

Another practice confirmed at that time was one by which Air Forces tech-

[26] TAG Ltr, 5 May 43, sub: Monthly Materiel Status Rpt, Automatic Supply Rpt, and Ammunition Supply Rpt, AG 400 (1-25-43) OB-S-D-M.

[27] (1) WD Cir 220, 20 Sep 43. (2) For the voluminous background papers on the drafting of the circular and the preliminary drafts see Drafts on Supply of Overseas Depots, Theaters and Separate Bases, ASF Plng Div.

[28] (1) Quotation is from WD Cir 220, 20 Sep 43. (2) TAG Ltr, 19 Sep 43, sub: Overseas Supply Rpts, AG 400 (19 Sep 43) OB-S-SPDDL-M. (3) On the system of petroleum distribution, see Erna Risch, *Fuels for Global Conflict*, QMC Historical Study 9, (rev. ed.; Washington, 1952).

CHART 4—OVERSEAS REQUISITIONS FOR NONCONTROLLED ITEMS

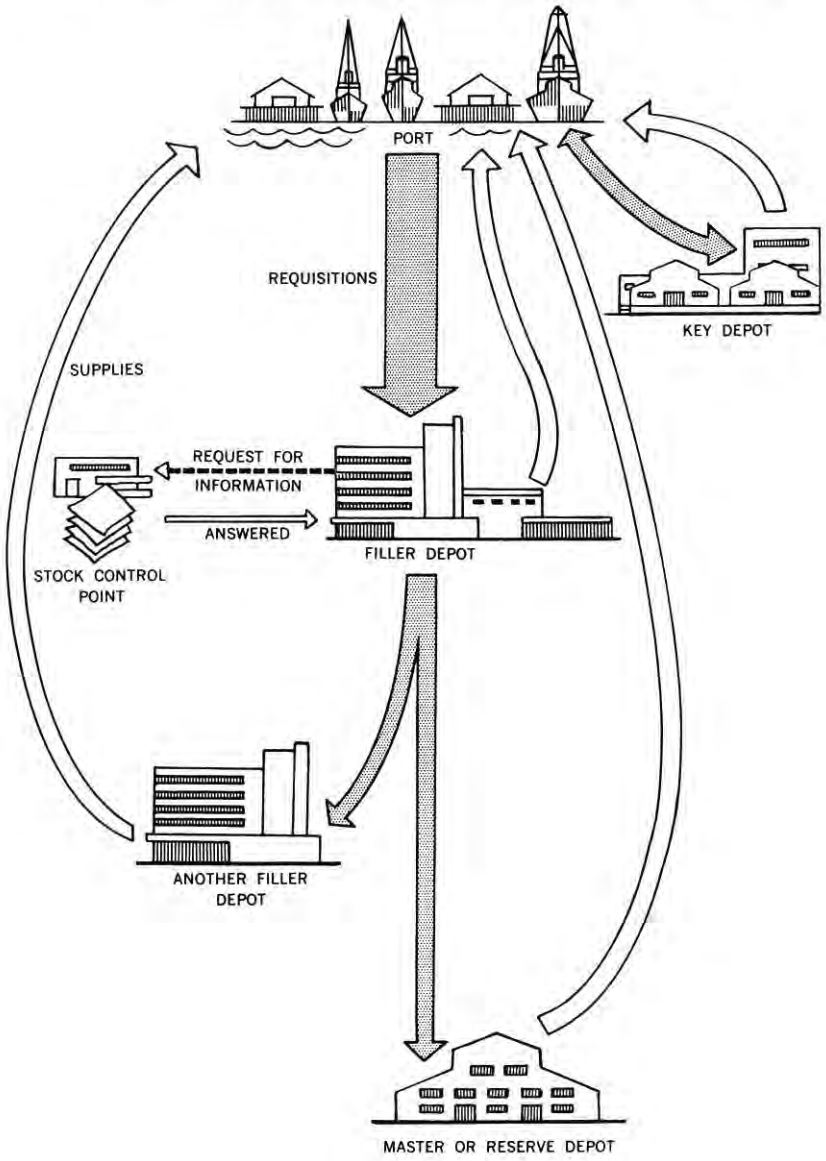
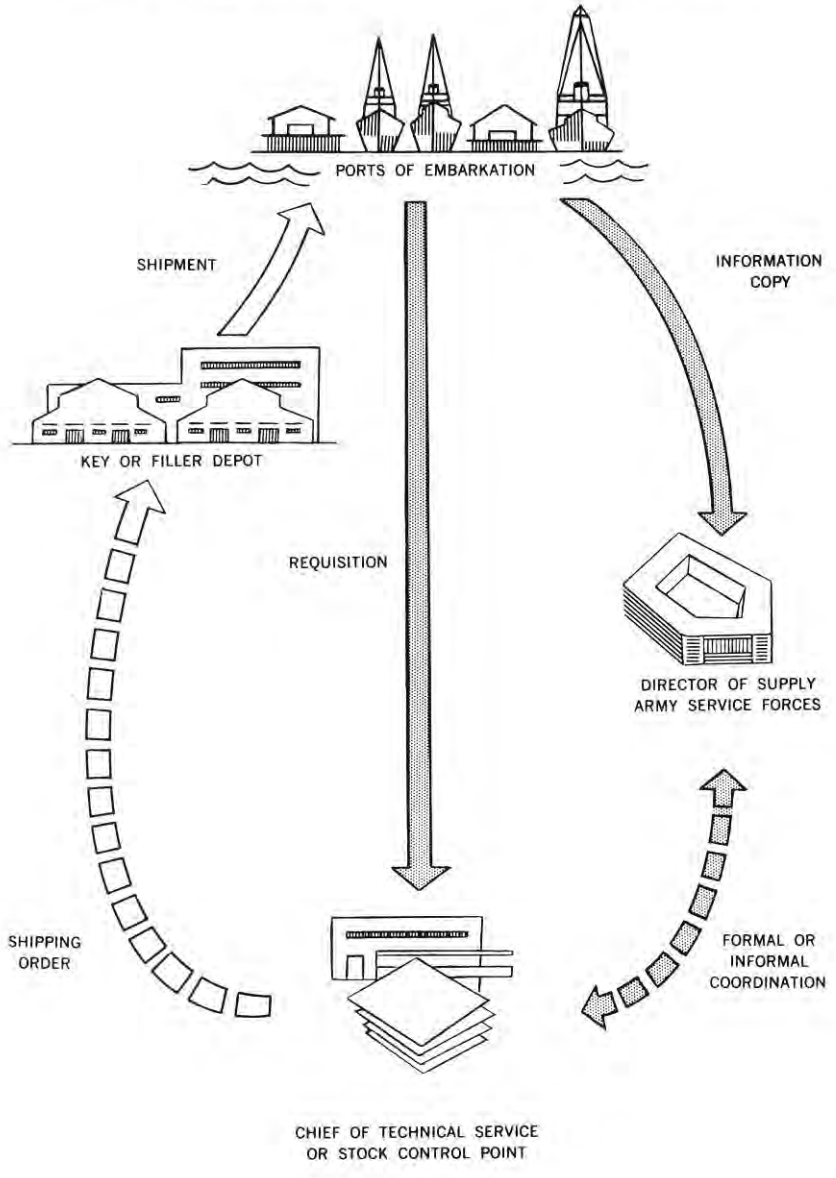


CHART 5—OVERSEAS REQUISITIONS FOR CONTROLLED AND MATERIEL STATUS ITEMS



nical supplies were requisitioned directly from the Air Service Command at Patterson Field, Ohio, with the port completely eliminated from the requisitioning channel. To give the port adequate information on shipping requirements, the AAF was directed to provide at periodic intervals information on cargo under its control requiring water shipment and to maintain liaison officers in the port overseas supply divisions. But the AAF maintained near the ports its own in-transit depots that received Air Forces cargo, processed it for overseas shipment, and delivered it to the port's Water Division for loading. AAF cargoes amounted to some 10 percent of the Army cargo moved through the various ports during the war.[29]

The circular also contained a few new provisions aimed at arresting the overaccumulation of stocks in overseas theaters. One of them enjoined commanders to "establish and maintain an effective inventory control system"; another prescribed "centrally located necessary records as to the status of supplies on hand and due in and levels of supply to be maintained in his command." Moreover, the commander was to "continually review maintenance factors and submit recommendations for changes" and to request promptly instructions from higher authority concerning disposition of any unbalanced stocks or excessive amounts of supplies.[30] These provisions were straws in the wind indicating mounting concern in the War Department with weaknesses in control that were causing overstockage and uneconomical distribution of supplies in the theaters, a concern that was concurrently amply reflected in the investigations being conducted by the McCoy Board into the requirements system.[31]

The system outlined in September 1943 continued in effect for all practical purposes throughout the rest of the war. A new directive published on 23 May 1944 was largely a refinement of the earlier one. The only significant changes, most of them products of the Richards Committee report and the McNarney directive, were specific stipulations that the War Department should set overseas operating levels and that neither ports nor theater commanders could adjust them, and specific instructions that theater commanders should establish definite systems of supply control.[32] Yet both the September 1943 and the May 1944 circulars prescribed quite flexible limits within which the evolution of the overseas supply system continued. The evolution moved toward more efficient methods of stock control and record keeping in the zone of interior and the theaters, and, at the same time, toward the third phase, requisition supply, as a method still more efficient than either automatic or semiautomatic flow.

Problems cropped up almost immediately in the operation of semiautomatic supply—inadequate theater inventories, divergent port and theater figures for stocks on hand, and duplication of status report shortages by separate theater requisitions. Moreover, because of time delays involved in gathering data

[29] History Planning Div ASF, Text, II, 194.

[30] WD Cir 220, 20 Sep 43.

[31] (1) On the McCoy Board, see above, Chapter V, pp. 119–24. (2) Leighton, Overseas Policies and Procedures, pp. 210–13.

[32] (1) WD Cir 203, 23 May 44. (2) History Planning Div ASF, Text, II. 196. (3) *Annual Report of the Army Service Forces, 1944*, p. 9. (4) WD Cir 455, 30 Nov 44, amended Cir 203 in some particulars, but made no basic changes in the system.

for the status reports in the theaters and processing them in the ports and technical services, the reports tended to be outdated by the time supply action was taken on them. The Monthly Materiel Status Report, in particular, gave rise to a multitude of procedural problems. It did not correspond to the controlled items list, though a directive in the fall of 1943 did prescribe that all controlled items must be included in it. In practice the Monthly Materiel Status Report list was infrequently revised. A Control Division report in mid-1944 noted:

> Some items have lost the importance which required their inclusion in the list. Other items originally included for the reason of being in short supply are now in long supply and should be removed. Important items now in short supply and not on the list should be added. Other items should be dropped for the reason they are no longer issued.

The report concluded that the use of the Materiel Status Report "slows up rather than speeds up the actual delivery of supplies to the theaters" because of time consumed in processing the report, and that "supply could be more readily accomplished through the standard requisitioning procedure and standard supply channels."[33]

These conclusions took shape slowly and had little effect on supply procedures until late in 1944. For the better part of a year after the general initiation of semiautomatic supply in September 1943 the ASF concentrated on making the system work by educating everyone concerned in its principles, and most particularly by improving stock control in overseas theaters. "Successful accomplishment of overseas supply by the War Department," insisted a new directive on reporting issued in mid-March 1944, "is dependent in a large measure on the availability and the coordination of *accurate* and *up-to-date* supply statistics from overseas commands," and went on to prescribe a more precise system for compilation of the Materiel Status Report.[34] The port commander was instructed to keep a "perpetual inventory" for each overseas command for which he had responsibility, to be based initially on a "firm inventory," furnished by the overseas commander "as of a convenient date" mutually agreed upon, and to be kept up to date through notification of vessel arrivals in the theater and from theater reports on items and quantities lost, expended, or transferred to non-Army agencies. The theater commander was to keep a similar perpetual inventory of Materiel Status Report items in his theater, and the two would be adjusted as occasion demanded. In this way, it was hoped, the monthly formal compilation of the report would give a true picture of theater shortages. At the same time, for those inactive theaters that had been placed entirely on requisition supply, a quarterly submission of the Materiel Status Report was prescribed instead of a monthly one, "for statistical and control purposes."[35]

Requirements for the Selected Items Report and the Ammunition Report were also tightened, though it was now stipulated that rations as well as medical supplies would be furnished on requisi-

[33] (1) TAG Ltr, 28 Nov 43, sub: Overseas Supply Rpts, AG 400 (25 Nov 43), OB-S-SPDDL-M. (2) Control Div, ASF, Survey of Operation of MSR, Aug 44, Log File, OCMH.

[34] TAG Ltr, 14 Mar 44, sub: Overseas Supply Rpts, AG 400 (10 Mar 44) OB-S-SPDDL-M.

[35] *Ibid.*

tion except to theaters still on an automatic supply basis. The Ammunition Report, on the other hand, would be used as the principal basis for supply of items listed on it.

In pursuance of the goal of more effective inventory control overseas, on 15 May 1944 the ASF issued a new manual on stock control in overseas theaters, laying down the general principles already in use in ZI depots, though it was hardly expected that these operations could reach the same height of efficiency in areas where stocks were scattered and troops engaged in active combat.[36] All these efforts were soon merged in the general endeavor, beginning in the spring of 1944, to institute the Supply Control System Army-wide. The key feature of this system, it will be recalled, was the use of central and accurate records of depot stocks and issues to forecast both production and distribution requirements.[37] In this connection, the whole system of status report supply came into question. The Control Division, ASF, in its adverse report on the Materiel Status Report in August 1944, proposed a new system to eliminate unnecessary duplication in planning, record keeping, and reporting that the coexistence of the Materiel Status Report procedure and the Supply Control system would engender. Since overseas theaters, ports, and technical services would all be keeping very nearly the same records, Control Division pointed out, the port could be eliminated from the procedural chain and the burden of inventory control thrown directly on the overseas commands and the technical services. Overseas theaters would receive supplies of critical items entirely on requisitions, which would be edited against allocations projected six months in advance by the technical services based on present and projected troop strength, issue experience of the past three months, and anticipated extraordinary demands. Control would be exercised through adherence to these allocations (with interim changes on proper justification) with detailed ZI and theater stock control records as a substitute for the "perpetual inventory" at the ports.[38]

This proposal and its several variants were extensively debated during the fall of 1944. The faults of the Monthly Materiel Status Report were generally admitted, but there were those, such as General Lutes and Brig. Gen. William M. Goodman, Overseas Supply Officer, New York Port of Embarkation, who also thought it had virtues. "I have never liked the MMSR system . . . ," wrote Lutes. "We shouldn't lose sight of the fact, though, that with [its] faults, we have supplied our forces very well."[39] He feared that elimination of the ports' running inventories would result in loss of effective editing control by the ASF. "If we wiped out the ports' inventory," he remarked, "we would have to accept the theater commander's figures and edit alone on his statements."[40] Lutes could also point to existing discrepancies between port and technical service records and to the need for ASF to have author-

[36] (1) TM 38–205, 15 May 44, Stock Control for Overseas Commands, Part 3. (2) History of Stock Control, U.S. Army, pp. 202–10.

[37] See above, ch. V.

[38] (1) Control Div, ASF, Survey of Operation of MSR, Aug 44. (2) *Annual Report of the Army Service Forces, 1945* (Washington, 1945), p. 32.

[39] Memo, Lutes for Somervell, 30 Aug 44, sub: Monthly Materiel Status Report, Lutes Diary.

[40] NYPOE Conf, sub: Inventories; Changes in System of Editing at Ports, 12 Oct 44, Lutes Diary.

itative figures of its own on theater holdings to refute complaints from theater commanders or outside criticism of ASF performance.[41] Because of the reluctance to abandon a tried if imperfect control instrument for untried stock control methods, status report supply continued in effect until the war in Europe was almost over. Lutes's initial decision was to institute requisition supply about 1 January 1945, when it was expected Germany would be defeated, but the prolongation of the struggle in Europe and the reappearance of many scarcities led to further postponement. Meanwhile, editing procedures were liberalized for noncontrolled items wherever it was determined that theaters were on a satisfactory inventory control basis, so that ports checked only nomenclature and form, accepting the theater's computations of its shortages against authorized allowances. The list of items on the Materiel Status Report was revised with a view to removing items no longer in short supply. Finally, on 18 January 1945, theaters were informed of the intention to move into the third phase (requisition supply) as soon as possible, and their concurrence requested. On receipt of affirmative answers from all of them a new system was announced on 16 March to be effective 1 May 1945—as it happened, only one week before the war in Europe ended.[42]

The new system incorporated many elements of the Control Division plan but it still maintained one essential feature of the old order — the perpetual inventory at the ports. All overseas theaters were placed on requisition supply, but requisitions for critical items were to be submitted directly to the chiefs of technical services, not to the ports. For items expected to be in short supply the technical services were to prepare "distribution plans" for three months in advance, a system not unlike the allocations suggested by Control Division. The ports were to continue to prepare a status report, now named the Critical Items Report, based on data submitted by the theaters, this to be used in conjunction with the distribution plans in editing requisitions for critical items. It was no longer to be, in itself, a requisition.[43]

The final transition to requisition supply and even the beginning of full implementation of stock control as a method for regulating the flow of supplies overseas came too late in the war to receive a thorough test. Experience with the various forms of automatic supply nevertheless led to the conclusion that requisition supply with appropriate measures of statistical control did represent the best method. The Planning Division, ASF, recognized the need for some form of automatic supply in the

[41] Note on ASF Conf on Reduction of Paper Work at Various Depots, 7 Nov 44, Lutes Diary.

[42] (1) Memo, Lutes for Somervell, 28 Sep 44. (2) TAG Ltr, 7 Oct 44, sub: Overseas Supply Rpts, AG 400 (5 Oct 44) OB-S-SPDDL-M. (3) Memo, Lutes for Dir Supply ASF, 17 Oct 44, sub: Items on MSR. Both in Lutes Diary. (4) TAG Ltr, 18 Jan 45, sub: Placing of Overseas Comds on Phase III Supply Basis, AG 400 (11 Jan 45) OB-S-E-M. (5) Memo, Hq ASF for Staff and Tech Svcs NYPOE, 29 Jan 45, sub: Editing Policies for NYPOE for ETO, Log File, OCMH. (6) TAG Ltr, 16 Mar 45, sub: Overseas Supply Rpts, AG 400 (17 Mar 45) OB-S-D-M. (7) History of Stock Control, U.S. Army, pp. 211–13. (8) *Annual Report of the Army Service Forces, 1945*, pp. 32–35.

[43] (1) TAG Ltr, 16 May 45, sub: Overseas Supply Rpts, AG 400 (17 Mar 45) OB-S-D-M. (2) Ltr, Hq ASF to CG's POE's and CsTechSvcs, 17 Mar 45, sub: Overseas Supply Rpts, SPX 400 (17 Mar 45) OB-S-SPDDL-M, Log File, OCMH. (3) *Annual Report of the Army Service Forces, 1945*, p. 33.

early stages of operations, but shortly after war's end concluded that:

> The varying conditions encountered through the world with corresponding varying supply requirements leads to the conclusion that passing to a 100% requisition basis at the earliest practicable moment is essential if excesses are to be avoided and desired items only are to be shipped.[44]

Levels of Supply

Regardless of the method of ordering and shipping supplies — whether automatic, semiautomatic, or by requisition —the key factor in determining any theater's authorized stockage was its prescribed level of each class of supply. The concept of theater levels had already undergone a considerable evolution by mid-1943. The original supply plan in January 1942 set certain reserve levels to be reached but not exceeded in each of the then existing theaters and bases; these reserve levels were considered as insurance should sea supply lines be cut. The ever-present fear of interruption of oversea supply lines was behind the May 1942 decision that reserve levels should be considered almost inviolate, not to be drawn on except in an emergency. The reserve level then ceased to be a ceiling and was redefined as a minimum level. In July 1942, to counter the possibility that a given theater might continue to build its stocks *ad infinitum* at the expense of others, the concept of the maximum level was introduced. In this concept each theater was entitled to certain minimum reserve levels of each class plus an operating level defined as "the quantity required for normal consumption prior to the date upon which the next consignment of supplies may reasonably be expected to arrive at an overseas base."[45] A limit of 90 days' supply was set on the operating level except where shipping conditions or the tactical situation required a higher one; even then any higher level had to have the express approval of the Commanding General, ASF.

In July 1943, as a corollary to the standardization of status reporting, theater levels were reduced in modest proportions and the whole system refined and clarified. The existing concept of maximum and minimum levels was confirmed, but confined to uncontrolled Class I, II, and III supplies. Operating levels for these classes (still not to exceed 90 days except in special instances) were to be determined by the port and overseas commanders in collaboration "based on the frequency of shipments and the time required for supplies to reach their destination." Materiel Status Report items, ammunition, and any other articles in short supply would be furnished only to the minimum level "until such time as the supply situation permits furnishing the operating level of supply. . . ." Class IV supplies were to be furnished on the basis of operational projects and were not to be included in theater levels. For purposes of computing stocks on hand against levels, all supplies "at ports of debarkation, intransit within the theater, or in depots in the theater" were to be considered.[46]

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[44] History Planning Div ASF, Text, II, 200.

[45] TAG Ltr, 19 Jul 42, sub: Levels of Supply for Overseas Depots, Theaters, and Base Comds, AG 400 (7–11–42) MS-SPOPS-M.

[46] (1) TAG Ltr, 10 Jul 43, sub: Levels of Supply for Overseas Areas, Depots, Theaters and Bases, AG 400 (8 Jul 43) OB-S-SPOPI-M. (2) History Planning Div ASF, text, II, 201–02. (3) Leighton and Coakley,

Events in 1943, meanwhile, were rapidly outdating the concepts on which supply levels had been based. The submarine threat in the Atlantic lessened, and the shift from defensive to offensive operations in the Pacific put an end to any imminent threat that the enemy in either major area would be able to cut American supply lines. This was a prime consideration with the Richards Committee in drawing its conclusions that reserve levels were too high all along the line. The committee accepted the existing concept of minimum and operating levels, but insisted that minimum levels should not be held sacred and that supplies held against them should be used temporarily at any time there was an interruption in the normal flow. The committee went on to develop a formula for computing authorized theater levels for all classes as follows—for Classes I and III: theater level = theater distribution time (including unloading time) + convoy interval time + operating level; for Classes II, IV, and V: theater level = theater distribution time (including unloading time) + emergency replacement time + operating level. Based on information from the Transportation Corps that shipping capabilities insured delivery of maintenance supplies to every theater at least once every 30 days, the Richards Committee recommended a uniform operating level of 30 days for all theaters except for certain stations such as Greenland that were frozen in for part of the year or those where the garrison was too small to justify monthly sustaining shipments. It then proceeded to calculate the other factors for the various theaters, finally recommending minimum levels that reduced the average, considering all theaters, from 120 to 97 days. The committee felt that direct control over all levels should be exercised by the War Department and not delegated to the ports and theater commanders as prescription of operating levels had formerly been.[47]

The Richards Committee recommendations on levels were accepted *in toto* and officially promulgated in the McNarney directive of 1 January 1944. (*Table 13*) They remained in force, with minor modifications mainly affecting inactive areas, until the end of 1944 when further reductions were made in levels in the Pacific theaters. They were at first regarded almost universally as too low by both theaters and ASF operating agencies, largely because they seemed to make no provision for the long time lag between preparation of a requisition or semiautomatic supply report and the actual arrival of supplies in the theater. Much of this criticism was obviated by the recognition, shortly after the promulgation of these levels, of order and shipping time as a factor in editing theater requisitions. Port and theater commanders were instructed to determine the average length of time required between requisition and delivery at a theater port and to add that number of days to the theater's requisitioning objective. Since order and shipping time varied between two and four months, it provided a sizable cushion against which theater requisitions were edited. The net effect was to establish

Global Logistics, 1940–43, pp. 333–36, 643–44. Appendix F–1 shows authorized levels of supply in June 1942 and June 1943.

[47] (1) Levels of Supply, app. F: Richards Com Rpt, pp. 23–30. (2) See Leighton and Coakley, *Global Logistics, 1940–43*, Appendix F–1 for levels prescribed in July 1943.

TABLE 13—AUTHORIZED LEVELS OF OVERSEAS SUPPLY: JANUARY 1944[a]

Theater	Theater Distribution (Including Unloading Time)	+	Convoy Interval or Emergency Replacement Time	= Theater Levels Minimum	+ Operating	= Total Level
European				[b]		
Class I, III	10		15	30	30	60
Class II, IV, V	10		30	45	30	75
North African						
Class I, III	10		15	30	30	60
Class II, IV, V	10		35	45	30	75
Hawaiian						
Class I, III	15		10	30	30	60
Class II, IV, V	15		40	60	30	90
Central Pacific[c]						
Class I, III	30		30	60	30	90
Class II, IV, V	30		60	90	30	120
South Pacific						
Class I, III	30		30	60	30	90
Class II, IV, V	30		65	105	30	135
Southwest Pacific						
Class I, III	45		30	75	30	105
Class II, IV, V	45		70	120	30	150
China-Burma-India						
Class I, III	60		30	90	30	120
Class II, IV, V	60		90	150	30	180
Latin America						
Class I, III	10		20	30	30	60
Class II, IV	10		30	45	30	75
North America and Iceland						
Alaska Defense Command						
Class I, III	15		30	45	30	75
Class II, IV, V	15		50	75	30	105

[a] Special operating levels were authorized for those stations frozen in for part of year and those served direct from a port, where the garrison was so small that monthly shipments would be uneconomical.
[b] Minimum in terms of 15-day increments.
[c] Exclusive of current operations.
Source: McNarney Directive, 1 Jan 44.

a new formula reading: theater requisitioning objective = theater level + order and shipping time. Except in the case of critical items, the actual theater level was expected to fluctuate between the minimum and maximum authorization of each class of supply.[48]

The investigations of the Richards Committee also affected levels of supplies in the zone of interior. The McNarney directive set back-up stocks for overseas theaters at 60 days in filler depots plus the strategic reserve (equipment for 10 divisions, 27 air combat groups, and supporting troops) and a contingency reserve of 30 days' supply of items not included in the strategic reserve. It provided only 105 days' sup-

[48] (1) History Planning Div ASF, Text, II, 204–05. (2) TAG Ltr, 20 Jan 44, sub: Levels of Supply for Overseas Areas, Depots, Theaters and Bases, AG 400 (11 Jan 44) OB-S-E-M. (3) TAG Ltr, 29 Dec 44, sub: Overseas Supply Levels, AG 400 (12 Dec 44) OB-S-E-I.

ply on hand and on order in distribution depots and posts, camps, and stations (45 days normally to be held in the latter) to serve ZI units, as against a previous maximum authorization up to 270 days at the discretion of the commanding generals, ASF and AAF. ASF aimed its most vociferous protests against these provisions because they did not take into account in-transit allowances that would permit inclusion of order and shipping time in requisitioning objectives. In the case of overseas back-up stocks, the ASF admitted that strategic and contingency reserves would, in effect, provide for in-transit quantities, but found the whole sytem too inflexible in its classification of the various types of reserves. On the other hand, the 105-day ZI level made no provision for in-transit distribution at all.[49]

The ASF objections went unheeded for a time. ZI stock levels were officially fixed in late February 1944 in strict accordance with the Richards Committee recommendations. Two other types of reserves were identified and defined at this time—utility reserves of special types of equipment to be used mainly as a back-up for operational projects and to meet other special demands; and production reserves, defined as stockages made necessary "when production reasons make it mandatory to accept delivery of supplies in addition to stocks prescribed. . . ."[50]

For the next two months, the diligent effort to bring stock levels in line with these authorizations went ahead, but concomitantly the ASF was moving toward the Supply Control System, the premises of which in many cases were at variance with the rigid levels prescribed in the McNarney directive. Finally, on 24 May 1944, with the issuance of a new directive on ZI levels, ASF for all practical purposes won its case. While the 45-day level for posts, camps, and stations was retained, the ZI depot level was made very largely a matter for determination by ASF and AAF subject to G–4 review, and without exception was to be "that quantity necessary to assure uninterrupted supply under current procurement conditions." When the future issue of items could be estimated with reasonable accuracy—as S items in the Supply Control System—this level was not to be higher than expected issues for the next 90 days; other items, for which future issue could not be estimated or which had to be stocked against undeterminable issues—as P items in the Supply Control System—had no ceiling.

At the same time the strategic reserve was further defined and expanded to include, besides initial issue for the units composing it, a 90-day reserve of medium and heavy artillery ammunition at War Department day-of-supply rates, and 90 days of replacement of initial issue items whose rate of production could not be raised within 90 days.[51]

[49] (1) Draft Memo, Somervell to CofS, 9 Jan 44 (prepared in Office Dir Materiel, ASF) sub: Changes in Sup Levels and Sup Procedures, Dir Materiel, ASF File, Richards Com Rpt. (2) Related papers in same file. (3) Levels of Supply, app. F, Richards Com Recmns 31, 32, 42, 51. (4) See ch. V, above.

[50] WD Cir 85, 25 Feb 44, Sec III. The Richards Committee apparently recognized the existence of these two types of reserves but did not include them in its formula for requirements calculation.

[51] (1) WD Cir 206, 24 May 44, Sec VIII. (2) Memo, IG for DCofS, 3 May 44, sub: Memo, 1 Jan 44. . . . (3) Memo, Dir Supply ASF, for G–4, 16 May 44, same sub. (4) Memo, ASF for G–4, 19 May 44, sub: Proposed WD Cir and Memo Changes in Supply Procedures and Sup Levels. Last three in G–4 334 WD Spec Com, vol. 2.

The net effect was to leave ASF depot levels for all practical purposes under the administrative control of ASF. The problem of levels soon resolved itself largely into one of establishing effective stock control, both in the zone of interior and overseas, and of determining both accurate troop bases and accurate day-of-supply and replacement factors in terms of which actual quantitative levels could be computed.[52]

Not the least problem was that of determining existing and projected troop bases for each theater accurately enough to permit basing supply action on them. Until mid-1944 the Victory Program Troop Basis that was used for procurement purposes did not even contain an approximate theater breakdown. For distribution purposes a far more accurate instrument was required, and to develop a satisfactory one took time. All through 1943 operations were handicapped by the use of three different sets of figures—one set furnished by OPD's Logistics Group in the form of periodic theater troop bases and the Six Months Deployment Forecast; a second set compiled by Planning Division, ASF; and a third set maintained at each port of embarkation. The second and third sets were based on the first only in part, and there were frequent discrepancies among all three. Technical services frequently used one troop basis in editing requisitions while ports used another. In late 1943 ASF, charged by War Department regulations with furnishing a troop basis to its own agencies for supply purposes, set up a special section in the Mobilization Division to prepare a Troop List for Operations and Supply that would provide current data on the location of all units in the Army together with their projected movements. The first usable list was produced in January 1944; revised monthly thereafter, for six months it was the standard basis for all ASF supply action. In the meantime, it became evident that the problem transcended the limits of ASF authority, and the Strength Accounting and Reporting Office was set up in the Office of the Deputy Chief of Staff cadred by trained personnel drawn from the OPD Logistics Group and ASF's Mobilization Division. Beginning in July 1944 this special office produced a monthly Troop List for Operations and Supply showing both existing and projected data for the zone of interior and all theaters; it provided for the first time a satisfactory instrument on which distribution operations could be conducted. Deployment schedules, of course, were themselves becoming more stable and reliable by this time.[53]

Requisitioning and Shipment Procedures

As the overseas supply divisions in the ports were the key centers of contact between theaters of operations and the ZI supporting establishment, the efficiency of the whole overseas supply system depended in no small measure on port procedures for handling orders and making shipments. In mid-1943 New York was assigned responsibility for the European and Mediterranean theaters, San Francisco for the three main Pacific theaters, Seattle for the North Pacific, Los Angeles for the CBI, New Orleans for the Panama Canal and Caribbean bases,

[52] (1) See above, ch. V. (2) History Planning Div ASF, Text, II, 202–03.

[53] History Planning Div ASF, Text, II, 210–12.

Boston for North Atlantic bases, Hampton Roads for Bermuda, and Charleston for the Middle East, Central Africa, and the Bahamas. The larger ports had subports directly under their control, or they used outports, that is, independent ports in their own right, to relieve the load on their own facilities. Thus Boston, Hampton Roads, and Charleston often served as outports for New York; all Pacific ports, New Orleans, and sometimes ports on the Atlantic coast, served as outports for San Francisco. In the case of subports or outports, the main port of embarkation received and processed the theater orders, and planned shipments to the theater for which it was responsible.[54]

Requisitions from overseas, usually containing great varieties of items and quantities, were first broken down by the port Overseas Supply Division into their component parts. Materiel Status Reports or separate requisitions for controlled items were forwarded directly to the Stock Control Division in ASF headquarters. The rest of the requisitions were edited at the port. Editing involved first a check of technical details such as nomenclature and form and then a determination whether the supplies requested were within the theater's allowances. Requests for quantities in excess of established levels were supposed to be accompanied by complete justification. Such requests, even if for noncontrolled items, were also frequently referred to ASF headquarters for decision, particularly if they involved supplies for a special operation; at other times adjustments were made in telephone or teletype conferences with the theater. Editing was frequently something less than an exact process; its general purpose was not so much to hold theaters to exact limitations of allowances as it was to eliminate what was genuinely excessive and unnecessary. Liberal editing was particularly characteristic of the period of intensive build-up for operations on the European Continent in 1944 when the New York port was instructed to honor all reasonable requests and to use "sound judgment and common sense, predicated on past experience and the tenor of cables and other correspondence being received at the base."[55] Other theaters were not treated quite so kindly during 1943 and most of 1944, nor, for that matter, was the ETO during the earlier part of this period. Theaters frequently complained about port actions in reducing requisitioned quantities. Much of the time misunderstanding arose because of differences in port and theater records of theater stocks or the use of inadequate replacement factors and days of supply. Better stock control and refinement of factors progressively minimized these problems but never completely eliminated them. Nevertheless, as stock control procedures became more effective, editing was generally liberalized.[56]

Once requisitions were broken down by technical service and edited, the next step was to determine source of supply. Within the discretion of the port commander, some supplies were furnished

[54] (1) Wardlow, *The Transportation Corps: Movements, Training, and Supply*, p. 340. (2) Leighton and Coakley, *Global Logistics, 1940–43*, app. G.

[55] Quoted in Larson, Role of the Transportation Corps, p. 113.

[56] (1) *Ibid.*, pp. 103–18. (2) Wardlow, *The Transportation Corps: Movements, Training, and Supply*, pp. 342–43. (3) General Goodman's remarks at Port Comdrs Conf, Boston, 30–31 Aug 43.

from port stocks, the remaining parts of the requisition "extracted" to appropriate filler or key depots. After decisions had been made on the extent to which theater orders would be honored, the port had to arrange shipment following priorities laid down by the theater commander within the limitation of availability of both the supplies and shipping. In this phase, the port had responsibility not only for matériel furnished on requisitions edited in its Overseas Supply Division but also for AAF technical supplies, Materiel Status Report items, special operational supplies, and petroleum.

Theater priorities were usually of three types. The first, a time priority, required shipment of designated items within a given period or by a certain limiting date; the second, a type priority, stipulated in order of relative need the various types of supplies ordered by the theater; the third, a shipment priority, gave a particular shipment or series of shipments an overriding preference.[57] Meeting the priorities, of whatever kind, depended on close synchronization of movement of exact types and quantities of supplies into the port with the availability of cargo shipping to move them out. And it involved, almost inevitably, some compromises. The theater commander's wishes could not always be met because of the practical limitations imposed by the necessity of making the utmost possible use of cargo space, because supplies simply were not shipped by depots on time, or because of conflict between a single theater's priorities and the intertheater priorities imposed by the War Department on critical items.

The first step in the shipment procedure was to determine the availability of ships to load Army cargo at specific ports. Long-range allocations were usually made within the framework of the Joint Military Transportation Committee, while specific nominations for specific tasks were worked out between WSA and the Water Division in the Office of the Chief of Transportation for Atlantic shipments, and by the Joint Ship Operations Committee in San Francisco for shipments in the Pacific. The Water Division provided WSA with a monthly statement of the number of vessels required for Army loading at each port; after adjustments, WSA named the specific vessels to be used, adjusting the schedule as required in daily meetings with representatives of the Army and Navy. The Ocean Traffic Branch, OCT, working in close co-ordination with Plans and Operations, ASF, undertook to balance shipping and cargo on a nationwide basis, but each port was responsible for planning its own shipment schedules and calling forward the cargo to meet them.[58]

The basic system for following up requisitions, planning shipments, and loading cargo was developed for the most part at the New York Port of Embarkation in connection with the heavy shipments to the North African theater, and later extended to other ports. It involved a judicious mixture of long- and short-range planning geared to the convoy cycle. First, the convoy cycle was planned on an average of six months in advance, to cover all convoys or shipping periods within that half-year. Charts were prepared by the Overseas Supply Division

[57] History Planning Div ASF, Text, II, 195.

[58] Wardlow, *The Transportation Corps: Movements, Training, and Supply*, pp. 357–59.

at the beginning of the period and distributed to all interested agencies, ZI and overseas, in time to reach the theater before the preparation of requisitions for movement on the first convoy or during the first shipping period indicated. Revisions were published as necessary and distributed in the same way. These Convoy Cycle and Shipping Period Charts showed the amount and the type of cargo shipping expected to be available as a basis for planning utilization of cargo space.

Planning for each convoy or shipment began with the processing of requisitions and the preparation of cargo distribution charts. These charts, prepared by the Overseas Supply Division and revised from day to day as required, served as a kind of general repository for virtually all data pertaining to future shipments including all supplies scheduled for shipment to each destination from the main port, subports, and outports in each convoy or shipping period. They were the chief source of information for planning the actual loading of supplies, a function performed by a port loading committee composed of representatives of the Overseas Supply Division and of the other port agencies (Water Division and Army Transport Service) responsible for loading and sailing vessels.

Planning, however, could proceed only so far without definite information on what supplies would be available in the port on certain dates. The New York port developed a follow-up system for this purpose that was perhaps the most distinctive feature of its procedures. Called the Date-line System, it anchored the whole series of actions taken on a requisition to the sailing date of the vessel on which supplies were to be loaded. Starting with the sailing date, the schedule moved backward, establishing deadlines for each phase of the supply process. The first deadline was the Cut-off Date, the date on or before which all requisitions for supplies to be forwarded in a given convoy or during a given shipping period must be dispatched from the port to depots or appropriate War Department agencies. The second was the Initial Date, the date on or before which supplies called for *should* be ready at depots for shipment to port. The third was the Limiting Date by which time all supplies *must* be set up at depots for shipment. The fourth was the Deadline Date, on or before which shipments should arrive in the port. The fifth and last, the Sailing Date, was the date on which loading must be completed. The time intervals between the various dates could be expected to vary somewhat but the standard cycle used at New York allowed 39 days from the time of receipt of a requisition to the final loading of supplies aboard ship—2 days for processing the requisitions at the port, 10 days from Cut-off Date to Initial Date during which requisitions would go to depots and be processed there, 7 days for depot crating and marking between Initial Date and Limiting Date, 10 days for movement into port between Limiting Date and Deadline Date, and a final 10 days for loading aboard ship.

Geared to the whole Date-line System was a port follow-up of requisitions to determine their status, and on the basis of this follow-up cargo distribution charts were constructed. In October 1943 a detailed procedure was prescribed for depot reports on availability of supplies,

but prescribed procedures were not as important as an aggressive follow-up by every means of communication, as General Goodman of the New York port emphasized "to put the pressure on" the depots.[59]

Follow-up at San Francisco was not quite so aggressive. The accumulation at that port of a large number of unfilled requisitions in the fall of 1943 led to a full-scale Control Division survey of the port's operations in support of the Pacific theaters that occasioned appropriate corrective measures. The survey at San Francisco became the prototype for similar surveys at other ports of embarkation. It also gave impetus to development of a standard operating procedure for all ports, which the Transportation Corps established in January 1944. Drafted by General Goodman, for the most part it simply codified procedures already in effect at the New York port.[60]

The port surveys showed that the major problem in procedures revolved around the relationship of ports and depots and the flow of information between them. When requisitions could not be filled at the first depot to which they were sent, the transaction tended to degenerate into extracts and re-extracts until the order sometimes became lost in the complicated machinery. Procedures for cancellation of unfilled requisitions were imperfect and some ports simply left them in the files for months on end. The Transportation Corps standing operating procedure prescribed a more aggressive follow-up. Port overseas supply divisions were required to maintain records showing the status of all requisitions, granted authority to request status reports on them when necessary, and instructed to initiate follow-up action on any items where availability had not been determined two days after the Limiting Date. Procedures developed by the end of the war along these lines had been simplified to the point where depots were simply required to file notices when items were delayed or could not be made available.[61]

The flow of information between depots and ports in many ways was simply accessory to the flow between ports and overseas theaters. This was a most vital link in the whole chain of overseas supply because advance information on each ship's cargo was a prime requisite to theater planning for handling it on arrival, as well as to the theater's actions in ordering further supplies. During 1942 the principal advance information reaching the theater commanders consisted of a copy of each ship's manifest, which sometimes did not arrive until the ship was in a theater port and which was not always accurate, nor did it contain enough detailed information. Airmailing the manifests produced some improvement but theater complaints of lack of advance information on ship-

[59] (1) Port Comdrs Conf, Boston, 30–31 Aug 43. The talk made by General Goodman at this conference is an excellent and succinct description of the way the system was working at the NYPOE in mid-1943. (2) The above is generally based on Gen. Goodman's talk; on Leighton, Overseas Supply Policies and Procedures, pp. 170–88; and Larson, Role of the Transportation Corps, pp. 118–35.

[60] (1) TC Pam 5, 27 Jan 44, Standing Operating Procedure for Supply of Overseas Theaters and Bases. (2) See Larson, Role of the Transportation Corps, pp. 197–212 for port surveys. (3) On the survey at San Francisco and its effect on Pacific supply see below, Chapter XX.

[61] (1) TC Pam 5, 27 Jan 44, and Revision, 1 Apr 44. (2) ASF Cir 336, 7 Oct 44. (3) WD Cir 5, 3 Jan 45.

ments continued. The fault did not always lie with the port—the theaters themselves sometimes did not use the manifests properly. In 1943 and 1944 the whole mechanism for keeping theater commanders informed of the fate of their requisitions greatly improved when a regular series of actions, once again developed for the most part from practices instituted at the New York port, was prescribed. The first notification to be sent overseas under the new procedures was a copy of the edited requisition, dispatched by air courier as soon as completed. Cargo distribution charts and depot notices of action taken on requisitions followed. At the time of each sailing a cargo summary was dispatched by cable or radio; copies of the ship's manifest and stowage plan were then forwarded by air courier. The New York port also attached to the manifests lists of principal items by technical service and, with installation of teletype facilities in 1944, conducted daily teletype conferences with the European theater. The use of a standardized War Department Shipping Document for each shipment from depot to destination greatly simplified the process of furnishing adequate information to the theaters. By early 1944 it had become standard practice to use the War Department Shipping Documents as annexes to a summary manifest. Also, for a time, most ports furnished theaters additional periodic summaries of the status of requisitions, but this practice was abandoned in mid-1944 as being too burdensome on the ports.[62]

Standard operating procedures alone could not, of course, provide solutions for all the difficulties involved in the complex relations between theaters and ZI supporting agencies. Too many individual problems in supplying each separate theater required special handling, special loading methods, and the expediting of individual items and categories of supply. Despite increased standardization of procedures, each port and each theater had its own peculiar problems that had to be worked out in a never-ending series of adjustments. Improvements normally reflected a growing ability of many different agencies to work together as a team.

In early 1945 ASF Control Division undertook to measure the efficiency with which overseas supply operations were being conducted by determining the average turnaround cycle for each major theater, that is, the lapse of time between the dispatch of a requisition from the theater to the arrival of the supplies requested at a theater port. The studies were limited to routine requisitions for maintenance supplies and did not include Materiel Status Report items. The results showed a turnaround cycle of 133 days for the European Theater of Operations, 115 for the Mediterranean Theater of Operations, 118 for the Pacific Ocean Areas, and 181 for the Southwest Pacific Area. The greatest delays occurred in depot processing—75 days out of 133 for ETO, and 66 days out of 181 for SWPA. Independent studies at New York showed only 28 percent of requisitioned supplies reached port by the Deadline Date and only 48 percent before the convoy sailed. At least half of the convoy loads, therefore, seemed to be of cargo requisitioned for previous

[62] (1) Wardlow, *The Transportation Corps: Movements, Training, and Supply*, pp. 349–52, 400–02. (2) TC Pam 5, 27 Jan 44. (3) Leighton, Overseas Supply Policies and Procedures, pp. 188–90.

months. Although further investigation modified these conclusions by showing that long delays on a small number of items unfavorably affected the results, the studies did reveal overlong delays in the whole process of requisitioning and shipping maintenance supplies. These conditions were mitigated, however, by the quicker performance possible in shipping critical items on Materiel Status Reports and faster action on cabled requisitions. In the very last days of the war, considerable effort was devoted to improving depot performance in processing requisitions and post-V–E Day studies showed considerable improvement in the turnaround cycle to Pacific theaters.[63]

Special Operational Supplies

In the distribution phase special operational supplies also constituted a separate and difficult problem, involving as they did those extraordinary items needed for specific operations that could not be calculated in terms of authorized allowances—items that one supply officer in 1944 described as "to date the biggest headache of Army Service Forces."[64] Procedures developed to deal with this particular "headache" centered around the operational, or keyed, projects system developed in mid-1943, devised as a means of shifting the burden of anticipating need from Washington to the overseas theaters. As a device for forecasting long-range operational requirements for procurement planning the system was far from being a signal success, and in many ways it proved to be of greater significance in the distribution process than in the calculation of requirements.[65]

The operational project system was not all-inclusive. Another method by which theaters secured equipment above T/E and TBA was through War Department approval of Special Lists of Equipment for particular units, still another was by simply requisitioning additional supplies or equipment on short notice. The first of these was legitimate enough, but the whole purpose of the project system was to avoid the second with all the confusion, haste, and waste it entailed.[66]

Procedures established in the fall of 1943 placed the principal responsibility for processing project requirements on OPD and ASF—OPD for checking strategic justification and ASF for detailed technical review and administration. Each project was assigned a key number by the theater commander and submitted directly to OPD, accompanied by a detailed bill of materials or by enough information to permit the War Department to compute one. In either case, the theater indicated what would be available locally, whether by procurement from indigenous sources or by use of stocks on hand. After preliminary review OPD forwarded the project to Planning Division, ASF. Under the aegis of Planning Division, the appropriate technical service and other staff divisions of ASF undertook a technical review and appraisal, computing or revising the bill of materials as required, determin-

[63] (1) *Annual Report of the Army Service Forces, 1945*, pp. 41–44. (2) Wardlow, *The Transportation Corps: Movements, Training, and Supply*, p. 347.

[64] Lecture, Lt Col Clarke at Hq ASF School, 13 Apr 44, Log File, OCMH.

[65] See above, ch. V.

[66] Final wartime procedures for processing SLOE's are in WD Memo 310–44, 1 Sep 44.

ing the availability of necessary materials, and calculating the impact on the Army Supply Program. Planning Division then returned the completed project to OPD for final approval or disapproval, and if approved supervised subsequent actions in providing materials to meet it. The bill of materials did not in itself constitute a requisition, but served only to establish an approved requirement. Once the bill was approved, the theater was authorized to requisition materials against it directly on the responsible port and the port to process the requisitions in the usual way, editing them only to see that quantities requested conformed to the bill. The original project normally indicated the desired phasing of shipments; ASF staff divisions acted as co-ordinators in assembling materials to meet the schedules, and prepared monthly status reports containing performance data on all keyed projects.[67]

These procedures were developed on the assumption that the theaters would submit their projects far enough in advance to permit orderly planning for both procurement and shipment. In practice, they proved unable to do so. "At the present time," an ASF officer commented in April 1944, "the majority of projects are being received in the War Department with barely sufficient time to assemble the equipment and place it aboard a ship to meet the requirements of the theater. The project system is degenerating into an easy method of securing supplies over and above normal requirements."[68] Requisitions frequently were submitted along with the project, and then the project system simply became a procedural framework for submitting supply orders. The practice at first was officially frowned on but was legalized in the revised outline of the overseas supply system published in May 1944, which provided that projects submitted requiring shipment of material within 90 days were to be accompanied by requisitions so that "expeditious supply action can be effected on approval."[69] The ASF was authorized in the interests of speedy action to ship supplies in advance of OPD approval if there was not enough time for normal processing, to act on minor amendments and changes to approved projects, and even to ship against emergency requisitions of sufficient urgency pending submission of projects to cover them. OPD reserved the right of *ex post facto* review.[70]

The extent to which keyed projects became simply a method for short notice requisitions can, of course, be exaggerated. When the area and nature of operations could be predicted far enough in advance, projects were submitted and both procurement and shipment carefully planned in accordance with the theory laid down in War Department and ASF directives. One major project

[67] (1) WD Cir 220, 20 Sep 43. (2) Ltr, Hq ASF to Dirs Plng, Reqmts, Sup Cntrl, Production Divs, 27 Oct 43, and to CsTechSvcs, 27 Oct 43, sub: Procedures for Handling Reqmts of Operational Supplies, History Planning Div ASF, apps. 13–D, 13–E. (3) Lecture, Clarke, Hq ASF School, 13 Apr 44. (4) Lecture, Lt Col Scherer, 20 Apr 44. (3) and (4) in Log File, OCMH. (5) History Planning Div ASF, Text, II, 216–18.

[68] Lecture, Clarke, 13 Apr 44.

[69] WD Cir 203, 24 May 44.

[70] (1) Memo, Handy for CG ASF, 10 Jan 44, sub: Operational Projects. (2) Memo, Lutes for ACofS OPD, 12 Feb 44, same sub, with 1st Ind by OPD, 14 Feb 44. Both in History Planning Division ASF, Apps. 13–F, 13–G. (3) See also ASF Cir 32, 28 Jan 44.

—the rehabilitation of the port of Cherbourg—was submitted by the European theater on 12 August 1943, materials were placed under procurement on 23 August, and by D-day on 6 June 1944 all the necessary materials had been assembled in the British Isles. As the pace of operations in Europe quickened, demands had to be presented on shorter notice. In the Pacific, where a strategy of opportunism prevailed, there was seldom time for advance planning for projects in specific geographic areas. In the Southwest Pacific Area in particular the project system became something of a whipping boy, and was blamed for many of the delays in receipt of engineer construction supplies.[71]

Recognizing that the project system was not working well, ASF undertook a thorough review in the summer of 1944. The net result was the publication of an ASF manual on operational supplies, consolidating all existing procedures in one place. The only major change to the existing system was the provision that War Department prepared projects (a Planning Division responsibility) be the main guide for theaters in calculating their own requirements for operational supplies. But no supply action was authorized until the theaters had presented their own projects, whether based on those prepared in ASF or those developed independently. Basic procedures for processing theater projects and shipping supplies to meet them were only refined in detail. Among the refinements was a provision for a separate category of restricted items for operational supply purposes (as distinguished from Materiel Status Report items) over which ASF headquarters and the technical services would exercise control.[72]

Though the project system, even after its modification to provide for War Department prepared projects, never was regarded as a completely satisfactory method of determining operational requirements it remained in effect through the end of the war. Refinements and changes proposed in 1945 never got beyond staff consideration. The basic problem, not completely soluble under any system of calculation, was that of anticipating specific operations far enough in advance to prepare for them. General Tansey, chief of OPD's Logistics Group, commented toward the end of the war:

> It will be readily seen that unless the theater commander is given long range strategical directives that he will be unable to submit projects in time for procurement and thus will be forced to take what the Army Services Forces and Army Air Forces have anticipated as his needs. One of the outstanding things in this respect is the super-ability of the Army Service Forces and Army Air Forces to furnish anything imaginable on practically no notice. While this abundance of supply is commendable, it has had the effect of removing restrictions and control of supply for overseas theaters. . . . The great ability of this country to produce can and will supply theaters with what they need, but will never be able to supply them what they want. It would be desirable in the future for all operational projects to be prepared in detail by the War Department and sent to the theater commander for such modifications as are necessary. This has been attempted by the Joint Logistics Plans Committee and the Army Service Forces and has met with a certain amount of success, the trouble being that

[71] (1) *Annual Report of the Army Service Forces, 1944*, p. 12. (2) On the problem of operational projects in the Pacific see below, Chapter XX.

[72] ASF Manual M115, Special Operational Supplies, 25 Aug 44.

we started it too late in the war and operations usually overtake our plans.[73]

Conclusions reached in the Planning Division, ASF, the other agency fundamentally concerned with operational projects, were essentially the same.[74]

The Army's elaborate apparatus for distribution of supplies, for all its faults and imperfections, met its ultimate test successfully. Supplies were delivered to theaters in more than adequate quantities and usually at the right time and place. No operation, once definitely scheduled by the JCS or CCS, was ever canceled or even significantly delayed by failures in the delivery of supplies attributable to malfunction of the system. As has been demonstrated, the system depended on a calculated degree of oversupply, that is, on a generous stockage of all the way stations on the long road from factory to using troops, and in this as well as in other respects it was wasteful. After the war critics would charge that because of this built-in waste more supplies were left over at the end of the war than were used by the Army in all its overseas operations. An officer writing in 1951 remarked:

> We operated on the principle of plenty for everybody—plus a good padding in case things went wrong. Our supply system operated on the principle of the shotgun rather than the rifle. If you shoot enough pellets you are bound to hit every one, but with better aim we could have hit every target with fewer bullets.[75]

The system was better geared to meet routine and predictable demands common to all areas and operations than to furnish the exceptional and extraordinary items needed at special times and places. Even so, with timely special arrangements—often a judicious mixture of preparation for the largest possible number of contingencies plus a generous measure of improvisation — supply agencies usually managed to meet all legitimate demands. This, too, usually involved a calculated degree of oversupply.

At other times and places and under other circumstances, the system might not have met the test so well. Certainly, after early 1943 the success of supply operations involving mass shipments by sea and mass accumulations of reserves at key points was in no small part due to the absence of any large enemy air or submarine threat. In the particular time and circumstances of World War II, and granted the wealth of national resources it had to draw upon, the Army's distribution system was well adapted to the tasks it had to perform. Before the war no one foresaw the magnitude or the complexity of supply operations involved in supporting troops in theaters of war scattered round the globe. That the system developed under the stresses of war was wasteful in some respects is not surprising. Of more fundamental importance is the fact that it did provide adequate support for the large-scale military campaigns necessary for victory over the Axis.

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[73] Memo, Tansey, no date, sub: Allocations of Munitions for Log Support of Global Strategy, ABC 400 (2-17-42), Sec. 6.

[74] History Planning Div ASF, Text, II, 222.

[75] Lt. Col. Page H. Slaughter, "Substituting Speed for Men," *Ordnance*, XXXV, No. 185 (March-April 1951), 415-18.

PART THREE

THE MEDITERRANEAN IN THE GLOBAL WAR JUNE–DECEMBER 1943

CHAPTER VII

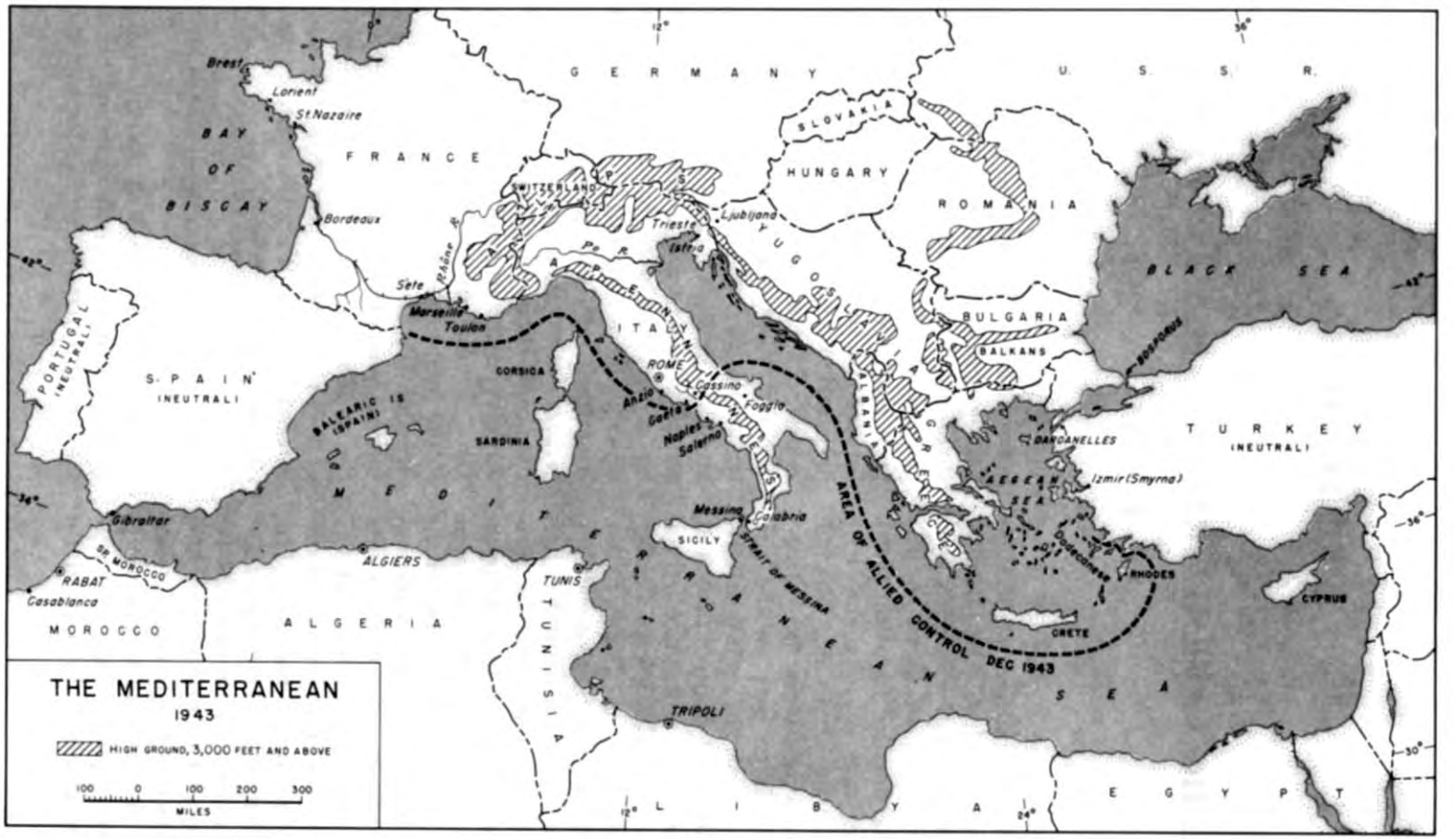
Outline OVERLORD and the Invasion of Italy

The ponderous machinery of Army production and distribution, while more flexible in mid-1943 than it had been in 1942, still could operate efficiently only with early and firm decisions to provide a basis for detailed logistical plans. The American case in 1942 and 1943 for a firm decision on a major Channel crossing, with a relatively fixed target date, rested in large part on the presumed need to give the administrative machine a stable and positive direction.

Unfortunately, the course marked out by TORCH and the Casablanca Conference and confirmed at TRIDENT contained no built-in guarantee of stability. In Europe, the Pacific, and the Far East the conduct of the war after the summer of 1942 reflected a strategy of opportunity rather than of fixed long-range goals. In the Mediterranean and in the South and Southwest Pacific, where activity was most intense, the military situation was extremely unstable and vulnerable to radical shifts of direction dictated by opportunity or necessity. This was the problem facing American strategists and logisticians in the interval between the TRIDENT Conference in May and the QUADRANT Conference in August of 1943. TRIDENT had formally ratified the determination of the U.S. military leaders to conduct the war in the Pacific in their own way and at an accelerating tempo. It had also produced Allied agreement on a major cross-Channel invasion (ROUNDHAMMER) with a target date of 1 May 1944, along with provisos designed to ensure a strategy of limited risk in the Mediterranean while preparations for ROUNDHAMMER were under way. On the other hand, a decision on future operations in the Mediterranean awaited the outcome of the landings in Sicily early in July, and, assuming success there, the British could be expected to press for a determined effort to force Italy out of the war. The Americans faced this prospect with misgivings rather than practicable alternatives, and their misgivings grew out of the very expectation of success. In their view, the real prospect of further gains in the Mediterranean, with the corollary demand for further investment of resources to secure and exploit them, posed the most serious threat to the continuity of logistical preparation that they considered essential to a successful cross-Channel invasion. *(Map 3)*

The Italian Debacle

The TRIDENT decision to undertake operations in the Mediterranean "calculated to eliminate Italy from the war and


THE MEDITERRANEAN
1943
HIGH GROUND, 3,000 FEET AND ABOVE
100 0 100 200 300
MILES
AREA OF ALLIED CONTROL DEC 1943
Brest
Lorient
St Nazaire
BAY OF BISCAY
FRANCE
GERMANY
U. S. S. R.
SLOVAKIA
HUNGARY
ROMANIA
SWITZERLAND
Bordeaux
Sete
Rhône R.
Trieste
Ljubljana
Istria
YUGOSLAVIA
BLACK SEA
Marseille
Toulon
ITALY
BULGARIA
BALKANS
PORTUGAL (NEUTRAL)
SPAIN (NEUTRAL)
CORSICA
ROME
Cassino
Foggia
Anzio
Gaeta
Naples
Salerno
BALEARIC IS (SPAIN)
SARDINIA
ALBANIA
GREECE
BOSPORUS
DARDANELLES
TURKEY (NEUTRAL)
AEGEAN SEA
Izmir (Smyrna)
Gibraltar
MEDITERRANEAN SEA
Messina
Calabria
SICILY
STRAIT OF MESSINA
Dodecanese
RHODES
CYPRUS
SPANISH MOROCCO
RABAT
Casablanca
ALGIERS
TUNIS
CRETE
MOROCCO
ALGERIA
TUNISIA
TRIPOLI
LIBYA
EGYPT
F. Temple

MAP 3

to contain maximum German forces" had, indeed, glossed over a basic disagreement. British and American leaders could agree on the second aim, but the Americans did not share the conviction of their allies that eliminating Italy would be the best way to accomplish it. Churchill was fully aware that General Eisenhower's judgment on the issue might prove decisive. Immediately following the conference, accompanied by General Marshall and with the President's blessing, he visited Eisenhower's headquarters in Algiers in the hope of winning him over to an invasion of Italy. Eisenhower stood up well under the onslaught of Churchillian charm. He agreed to develop a plan for a move to the Italian mainland along with the plans for occupying Sardinia and Corsica, but with the understanding that a final decision would not be made until mid-August when the course of events in Sicily would afford some basis for estimating enemy reaction.[1]

Already the TRIDENT estimates of the cost of an Italian mainland invasion were dissolving into mist. Largely because of limitations of assault lift and the distance from the nearest fighter bases, Eisenhower's staff had decided that of the proposed mainland landings only that in Calabria, on the toe across from Sicily, could be undertaken. Even this would require 68,000 additional antiaircraft and service troops to reach the theater in August, borrowing fighter aircraft from other areas, and clarification of TRIDENT schedules to permit retention of 9 U.S. APA's and 4 AKA's used in HUSKY, 90 cargo ships, and 18 U.S. destroyers for escort in the Mediterranean.[2]

Eisenhower's request launched the familiar process of trading and shuffling shipping. Cargo shipping presented no difficulty; the problem centered on personnel vessels. To provide the 68,000 troops Eisenhower needed it was decided without much debate to switch a large troop convoy in August from the United Kingdom run to the Mediterranean and at the same time to reshuffle various unescorted troop sailings. More difficult was the provision of assault transports, for their assignment to an operation in the Mediterranean would not only further delay BOLERO movements but would also press upon operations in the Pacific and Burma, a consequence the Washington staffs were not willing to accept. Combat loader assets actually in the Mediterranean at the time comprised 13 U.S. APA's and 7 XAP's, along with 16 British LSI (L)'s, passenger liners converted for assault use. All were reserved for Sicily, but, of the entire fleet only 3 LSI (L)'s had been slated for post-Sicily operations, and Eisenhower's staff was reluctant to risk these big, valuable ships in a major assault. Three other LSI (L)'s, earmarked for a putative Azores expedition though not for combat use, were presently released as the necessity of a forcible occupation of the Portuguese islands faded. Six more LSI (L)'s were due to be redeployed to Burma in July, the rest of them to the North Atlantic. Of the American assault transports, the XAP's were also assigned to the Atlantic sector; in June Admiral King exercised one of his TRIDENT options to assign two

[1] (1) CCS 242/6, 25 May 43. (2) Matloff, *Strategic Planning, 1943–44*, pp. 153–55.

[2] (1) Min, Algiers Conf, 29 May 43, TRIDENT Book. (2) CCS 268, 1 Jul 43, title: Post-HUSKY Opns, N African Theater.

APA's to the same area, and ordered six more to the Pacific to fill the complement of 18 required for the Gilberts-Marshalls operation. The U.S. vessels were due to depart immediately after the Sicily landings.[3]

All these assignments left Eisenhower a theoretical total of only 5 APA's and 3 LSI (L)'s, less expected heavy losses off Sicily, for whatever operations might follow. The British thought his needs should be met but declined to offer LSI (L)'s as substitutes for the requested APA's. The Americans argued that Eisenhower should make do with the vessels he had been allotted. In the midst of the debate 6 APA's and 4 AKA's departed as scheduled for the Pacific. Happily, the expected losses in the Sicily landings did not materialize—all the assault transports came out unscathed, and losses in landing ships and craft amounted to only 4 LST's, 2 LCT's, and 15 LCM's. This permitted a compromise decision, transmitted to Eisenhower on 20 July, allowing him to keep the 7 remaining APA's and 2 of the 7 XAP's. The British LSI (L)'s were expected to make good most of the troop spaces thus lost to BOLERO-SICKLE. Eisenhower was also granted 18 of the 48 destroyer escorts in the theater, 3 U.S. cruisers, and the 90 cargo ships already earmarked. His request for fighter aircraft was denied.[4]

Events were overtaking these arrangements even as they were made. As the armored spearheads of Lt. Gen. George S. Patton, Jr., fanned out through the rugged terrain of Sicily, it soon became apparent that the Italian troops on the island had little stomach for further fighting. Reports flooding into Allied Force Headquarters indicated similar low morale among Italian units occupying the Balkans. Palermo fell to the U.S. Seventh Army on 22 July, and on the 25th the world heard the news broadcast from Rome that Mussolini had been arrested and a new government formed by Marshal Pietro Badoglio. All signs seemed to point to an early collapse of Germany's principal partner.

Reacting promptly, on the basis of intelligence reports of declining Italian combat power, Marshall had proposed to the CCS on the 16th, with King's support, that Eisenhower be sounded out on the feasibility of an amphibious flanking attack on the Italian mainland near Naples. Marshall hoped that a sudden landing in force south of Rome might complete Italy's demoralization. With Allied armies firmly ensconced in southern Italy, and the Italian Government and people out of the war, the Allies might venture to go on the defensive in the Mediterranean and devote their full energies to preparations for the Normandy invasion. Churchill, how-

[3] (1) Memo, Horne for Somervell, 16 Jun 43, with related corresp in OPD 560 Security, II, Case 54. (2) Memo, Col Claude B. Ferenbaugh for ACofS OPD, 25 Jun 43, sub: Effect of Special Convoy on U.K. Lift, ABC 384 Post-HUSKY (14 May 43), Sec 3. (3) CCS 244/1, 25 May 43, Annex V. (4) CCS 268/2, 15 Jul 43, title: Post-HUSKY Opns N African Theater. (5) Memo, Somervell for Marshall, 30 Jun 43, sub: Combat Loaders for Post-HUSKY Opns, OPD Exec 3, Item 1c. (6) Min, 66th mtg, CPS, 10 Jul 43; 67th mtg, 17 Jul 43. (7) Table, Assault Shpg Med Area, 3 Jul 43, in ABC 561 (31 Aug 43), Sec 1B. (8) LSI(L)'s had an average capacity of about 2,500 troops, APA's about 1,500, XAP's about 1,100.

[4] (1) CCS 268/3, 19 Jul 43, memo by Reps Br COS, Post-HUSKY Opns N African Theater. (2) CCS 268/4 and 268/5, 20 Jul 43, same title. (3) Min, 69th mtg, CPS, 20 Jul 43. (4) Msg 172032, COMINCH to COMNAVEU, 17 Jul 43, OPD Exec 3, Item 5. (5) Paper, Landing Craft Losses in HUSKY as Reported 28 Jul 43, in folder Misc Shpg Info, OCT HB.

ever, professed to read into Marshall's proposal a change of heart and an espousal of a more aggressive strategy in the Mediterranean. The British Chiefs of Staff also reacted enthusiastically to the idea of landings south of Rome—they suggested a target date of late August, offered to provide a heavy carrier and four escort carriers for the operation, and finally urged that while Eisenhower was estimating his requirements all withdrawals from the Mediterranean be halted. Without waiting for the American reply, on 24 July they ordered a halt to all movements of their own troops, aircraft, and shipping from the area and suggested that the Americans follow suit.[5]

The reaction in Washington was sharp. What disturbed the U.S. Joint Planners was not so much the immediate consequences of a suspension of Mediterranean withdrawals, which would not be dire, but the "plain inference," as it seemed to them, that whatever Eisenhower might ask for, now or later, must be given to him.[6] On this premise they foresaw disastrous consequences for Pacific and CBI operations and for the build-up for the cross-Channel invasion. In the light of the actual British proposals, these forebodings, in retrospect, seem somewhat premature. The British wanted, at the moment, simply to suspend decision on all imminent movements from the Mediterranean until Eisenhower's needs were formulated and could be debated on their merits. They did not propose recalling ships already departed, such as the six Pacific-bound APA's, or any action that might prejudice planned movements to either the Pacific or the United Kingdom. The elements immediately affected by the "stand fast" order were (1) 3 groups of medium bombers temporarily assigned to the theater for the scheduled raid on Ploeşti in August; (2) 2 U.S. cruisers and a destroyer group scheduled to depart about 12 August for Atlantic escort duty; and (3) 6 British LSI (L)'s and 8 LST's due to depart immediately for India.

With the possible exception of the destroyers, it seems unlikely that a brief delay in any of these scheduled movements would have had serious consequences. The JCS had now decided, however, to take "a very firm position."[7] Because retention of the India-bound LSI (L)'s and LST's would admittedly delay planned operations in Burma, the Americans made this the major issue. In a stiff note on 26 July rejecting the British proposals, the JCS informed the British Chiefs:

> The U.S. Chiefs of Staff do not consider that the accelerated rate of success in the Mediterranean eliminates the need for the execution of the Burma operations as agreed upon. They are now concerned with the apparently slow progress of the plans and preparations for operations in Burma.

The JCS made it clear that they regarded the proposed landings near Naples as a quick, bold stroke in a situation that justified taking risks. The op-

[5] (1) On Churchill's conversation with Stimson on this matter, see Matloff, *Strategic Planning, 1943–44*, pp. 156–59; Henry L. Stimson and McGeorge Bundy, *On Active Service in Peace and War* (New York: Harper and Brothers, 1947), pp. 429–39; Bryant, *Turn of the Tide*, pp. 549–53. (2) Memos by Reps Br COS in CCS 268 series, 19–24 Jul 43, under title Post-HUSKY Opns N African Theater.

[6] JCS 421, rpt by JPS, 23 Jul 43, title: Post-HUSKY Opns N African Theater.

[7] Memo, Wood for Somervell, 23 Jul 43, folder CsofS, Jnt and Comb 1942–44, Hq ASF.

eration should be carried out, therefore, with resources already provided—which, even after planned withdrawals, would give Eisenhower an estimated assault lift for almost 80,000 troops, ample to mount a 3-division assault even after absorbing 25 percent losses in the Calabrian landings.[8]

This verdict the British were in no mood to accept, for the Naples operation (AVALANCHE) had now become the crux of Mediterranean strategy. On the same day as the JCS reply, Prime Minister Churchill poured out his hopes in a jubilant letter to Roosevelt, painting a prospect of fighting between Germans and Italians, surrender of the Italian fleet, and wholesale capitulation of garrisons throughout the Mediterranean. He wanted to increase pressure on Turkey, to throw agents, commandos, and supplies into the Balkans, and in Italy to seize lodgments on both coasts "as far north as we dare"—and, he declared, "this is a time to dare." With the Allies dominating the Adriatic and the Balkans on fire, the Germans might be forced back to the line of the Sava and Danube; Italy could become a great air base for bombing southern and central Germany. Ten days earlier, in a sterner mood, he had confided to Field Marshal Jan Christian Smuts that he would "in no circumstances allow the powerful British and British-controlled armies in the Mediterranean to stand idle." The British Chiefs held to their "stand fast" order pending a reappraisal of the situation at the impending conference at Quebec.[9]

Revolt Against Overlord

Behind the apparently solid front of the U.S. Chiefs, the new situation in the Mediterranean stirred up a ferment of critical discussion of European strategy among the Washington staffs. In OPD some officers dared to hope that the enemy was now on the run, and that southern Europe might indeed be the "soft underbelly" of the Axis, a logical target for the main Allied effort. Others reluctantly perceived a seemingly irresistible drift of events which should be accepted and exploited. Brig. Gen. John E. Hull, Chief of OPD's Theater Group and one of the founding fathers of American cross-Channel strategy, commented on 17 July that "our commitments to the Mediterranean have led me to the belief we should now reverse our decision and pour our resources into the exploitation of our Mediterranean operations."[10] For many Navy officers, of course, a shift of the main effort to the Mediterranean had a special appeal in that it might release more resources for the war in the Pacific.

The issue was soon joined. On 25 July, the day of Mussolini's fall, two Army members of the Joint War Plans Committee, Cols. William W. Bessell,

[8] (1) CCS 268/9, memo by U.S. CsofS, 26 Jul 43, title: Post-HUSKY Opns N African Theater. (2) Memo, Handy for CofS, 25 Jul 43, and related papers in ABC 384 Post HUSKY (14 May 43), Sec 3. (3) Min, 103d mtg CCS, 23 Jul 43, and Spec mtg JCS, 26 Jul 43. (4) JWPC 67/2, 22 Jul 43, title: Post-HUSKY Opns. (5) Draft, Notes for Gen Marshall, undated, OPD Exec 5, Item 11.

[9] (1) Msg, Former Naval Person [Churchill] to Roosevelt, 26 Jul 43, quoted in Churchill, *Closing the Ring*, pp. 55–58. (2) Msg, Churchill to Smuts, 16 Jul 43, quoted *ibid.*, pp. 35–36. (3) CCS 268/10, memo by Reps Br COS, 26 Jul 43. (4) Msg FAN 177, CCS to Eisenhower, 30 Jul 43, OPD Exec 3, Item 4.

[10] Memo, Hull for Handy, 17 Jul 43, ABC 381 Strategy Sec Papers (7 Jan 43) 96–126/3, Tab SS 111.

Jr., and Richard C. Lindsay, boldly attacked the cross-Channel strategy and the following day the committee itself raised the standard of revolt in a formal report to the JPS.[11] As the committee saw the situation, Germany had already been so weakened that she could not destroy the Soviet armies while simultaneously under attack in the west. German leaders might well have already concluded that their best hope lay in a negotiated peace with the Western Allies. If so, the obvious course for the Allies would be to increase, not relax, pressure during the remainder of 1943 and early 1944 by strategic bombing and further offensives in the Mediterranean where strong and seasoned forces were deployed in readiness to strike. From Mediterranean bases, Allied air power could extend its bombing range and, ultimately, re-equipped French armies could invade southern France. In this perspective, an invasion from the northwest would not be "the opening wedge for decisive defeat of the German armies," but rather the "final, as opposed to the decisive, action—decisive action having already taken place in the air over Europe, on the ground in Russia, and at sea." The committee concluded that, while the invasion build-up should continue, it should be "without prejudice to the achievement of our objective in the Mediterranean, the elimination of Italy." The seven divisions scheduled for withdrawal should be left in the theater, enabling the same amount of shipping to be used to augment the total Allied strength in Europe by bringing seven fresh divisions from the United States.[12]

The seriousness of the challenge to established strategic concepts was underlined when Admiral Leahy, on 26 July, told his JCS colleagues that the President himself had suggested it might become necessary to reorient Allied strategy in Europe in view of events in Italy. Leahy hinted that "we may not mount OVERLORD." Invasion forces might be deployed to the Mediterranean, and the decisive attack on Fortress Europe might be made through northern Italy or southern France.[13] Ten days later the Joint Strategic Survey Committee added the weight of its prestige to the new line of thinking. In an appreciation submitted to the JCS on 5 August this senior group took note of the "inviting promise of new situations" in analyzing the merits of an advance up the Italian Peninsula to Pisa and Ancona, possibly even to the Po River, along with either a "collateral threat" or a full-scale entry into southern France to support the Normandy invasion. Most significantly, the JSSC was willing to envisage "encroachments" on the cross-Channel operation that might reduce it to a purely opportunistic effort to exploit "a marked deterioration" in Germany's Atlantic defenses.[14]

Meanwhile, however, the JWPC had reviewed its own conclusions and given the argument a somewhat different turn. The committee now regarded Mediterranean operations in a new light—as neither a diversion nor a main effort,

[11] (1) Rpt by Special Subcom, Conduct of the War, 25 Jul 43, ABC 381 (9-25-41), Sec 7. (2) JPS 231, rpt by JWPC, 26 Jul 43, title: Adequacy of TRIDENT Strategy. (3) The language of the two papers is similar at many points.

[12] JPS 231, 26 Jul 43.

[13] Min, spec mtg JCS, 26 Jul 43.

[14] JCS 443, memo by JSSC, 5 Aug 43, title: QUADRANT and European Strategy.

but rather as a co-ordinate part of an integrated, converging offensive aimed at driving the Germans from France. During 1943 and early 1944 the emphasis would be on operations in the western and central Mediterranean, centering in a drive up the Italian Peninsula, while strategic bombing from the United Kingdom continued with mounting intensity. By spring 1944 Germany would be reeling under these pressures and the blows of the Soviet armies in the east, its position in France an exposed salient, its strength spread thin. At this juncture the Western Allies would launch a double offensive, one prong reaching across the English Channel, the other up the Rhône Valley from initial lodgments in the Toulon-Nice area and an overland advance from northern Italy. The JWPC contemplated no additions to the forces present in the Mediterranean and even conceded that the seven earmarked divisions might safely be withdrawn, though the committee hoped the withdrawals could be held to three divisions. This would leave about 29 divisions for the 1944 campaigns in Italy and southern France.[15]

For its first conception of a main effort in the Mediterranean followed by a *coup de grâce* delivered across the English Channel, the JWPC thus substituted the grander idea of a squeeze from north and south on the whole peninsula of western Europe. The northern claw of the pincers would still be "the primary action on the ground for the defeat of Germany" in the west, but its primacy clearly was of a different order from that hitherto accorded to ROUNDUP and ROUNDHAMMER.

Meanwhile, the champions of strategic orthodoxy were organizing their counterattack. They were reinforced early in August by the arrival from London of Maj. Gen. Ray W. Barker, U.S. deputy to COSSAC, who had come to explain and defend the recently completed outline plan for the cross-Channel invasion (OVERLORD). In two JPS meetings on 4 August Brig. Gen. Albert C. Wedemeyer and Brig. Gen. Laurence S. Kuter, the Army members, sharply attacked both the original and the revised JWPC paper, urging that recent events only underlined the need for an abrogation of opportunism and a return to "sound strategic plans which envisaged decisive military operations conducted at times and places of our choosing, not the enemy's." Merely to label OVERLORD "primary," they argued, would not prevent it from being in fact "de-emphasized" by the effort called for in the Mediterranean. Split between the Army and Navy members and pressed for time, the JPS sent up to the JCS both the revised JWPC paper and a new version drawn up by the Army planners.[16]

Wedemeyer and Kuter, it was soon evident, had correctly read their Chiefs' leanings. When the JSSC paper came up before the JCS on 6 August, its authors

[15] (1) JPS 242, rpt by JWPC, 5 Aug 43, title: Strategic Concept for Defeat of Axis in Europe. (2) Memo, Col M. B. Stokes for Col Frank N. Roberts, 2 Aug 43, sub: Movement of 7 Divisions to U.K., ABC 384, Post-HUSKY (14 May 43), Sec 3. (3) It had been estimated that three divisions could be moved from the Mediterranean in British shipping returning from the Indian Ocean.

[16] (1) JPS 242/1, memo by U.S. Army Planners, 5 Aug 43, title: Strategic Concept for the Defeat of the Axis in Europe. JPS 242 became JCS 444; the Army Planners' paper became JCS 444/1, 5 Aug 43. (2) For a contrasting interpretation of this episode see Harrison, *Cross-Channel Attack*, p. 94, note 35. (3) For handling of JPS 231, see WDCSA 381, vol. II.

were sharply interrogated, Admiral King remarking that "he did not desire to see this paper get into the hands of the British." Lt. Gen. Stanley D. Embick, the Army member of the JSSC, assured him he was actually "decidedly in favor of OVERLORD," and General Marshall, coming to Embick's defense, said he was sure the "tenor" of the passage referred to was "due to its wording" and unintentional. Sent back to its authors for revision, the offending paper was returned the following day purged of any hint of a main effort in the Mediterranean. On the 9th the JCS, who meanwhile had been briefed on the two Planners' papers, agreed on a "Strategic Concept for the Defeat of the Axis in Europe" that was virtually identical with the Army planners' version. This became the American position paper on European strategy at Quebec the following week.[17]

It was not, however, the return to orthodoxy that it was represented to be. The Army planners, no less than their Navy opposites and the JWPC, were eager to exploit the evident crumbling of Axis fortunes, and recognized the immense potentialities of the 25 or more Allied divisions and 5,000 combat aircraft that would be deployed along Fortress Europe's southern flank with no shipping available to move them elsewhere. Merely to pin down the Germans wherever in northern Italy they chose to make a stand would not, the Army planners conceded, fully occupy all these forces. If they were not occupied the British might find ways of using them in the Balkans. The Army planners adopted the JWPC's Mediterranean program in full—to seize the islands of the Tyrrhenian Sea, pin down enemy forces and establish air bases as far north as possible in Italy, bomb southern Germany and the Balkans, aid the Balkan guerrillas, and finally open a new front in southern France to support OVERLORD —and they were only a degree less optimistic than the JWPC over the prospects for driving to the Po and overland into France. On the other hand, both groups saw OVERLORD, with a spring target date, as the main effort for 1944, the Army planners holding out for 1 May instead of 1 June. Both agreed that no additional resources should be allotted to the Mediterranean, and that the TRIDENT withdrawals should be carried out as scheduled. In approving this program the U.S. Chiefs of Staff thus rejected the older party line, still intoned in certain quarters of OPD, that nothing whatsoever must be undertaken in the Mediterranean following the collapse of Italy. They were committed henceforth to a continuing effort in the southern theater, centered in Italy, and providing a supplementary prong in a pincers strategy destined to emerge full-blown in spring of 1944 with the Normandy and southern France operations.[18]

The Overlord Plan

Thus ended, somewhat anticlimactically, the revolt against OVERLORD. It coincided, appropriately enough, with the

[17] (1) Min, 100th mtg JCS, 6 Aug; 101st mtg, 7 Aug; 102d mtg (Suppl), 9 Aug 43. (2) JCS 443 (Rev), rpt by JSSC, 7 Aug 43. (3) CCS 303, 9 Aug 43, memo by U.S. CsofS, title: Strategic Concept for the Defeat of the Axis in Europe.

[18] (1) JCS 444/1, 5 Aug 43. (2) SS 93, 3 Aug 43, sub: Comments on Strategic Concept for the Defeat of the Axis in Europe, ABC 381 Strategy Sec Papers (7 Jan 43) 2–95. (3) OPD paper, no date, sub: Conduct of War in Europe after Collapse of Italy, *ibid.*, 240/11/24, Tab 240 Misc.

appearance of the prospectus for the operation that General Morgan had been directed to prepare at the end of the TRIDENT Conference. The assignment was a formidable one. Morgan had been allotted enough assault shipping, theoretically, to lift five divisions, and enough transport aircraft for about two-thirds of an airborne division. He could count on Allied superiority at sea and in the air, with some reservations as to local fighter cover and protection against submarines. With these assets, he had been instructed to draw up a plan for seizing a lodgment on the Continent from which further offensive operations could be launched and which would contain facilities necessary to maintain from 26 to 30 divisions initially and subsequent increments of 3 to 5 divisions per month.

General Morgan's response to these prescriptions was not notably hopeful. The COSSAC staff had concluded that the most promising area for an amphibious attack was a 27-mile stretch of the Normandy coastline between Caen and the base of the Cotentin Peninsula, within fighter range of England but not so near nor so heavily fortified as the Pas de Calais. Success would depend on certain conditions: German fighter strength must be substantially reduced, and the Germans should not have available in France and the Low Countries at the time of the assault more than twelve mobile, first-quality divisions, nor be able to transfer from the Eastern Front during the first two months more than fifteen such divisions. In the target area itself, it was essential that no more than three mobile divisions be brought to bear on D-day, five divisions on D plus 2, or nine divisions by D plus 8. To help achieve these conditions, COSSAC recommended skillful deception measures and diversionary operations against the Pas de Calais area and southern France.[19]

Aside from these conditions, General Morgan's greatest concern was the problem of build-up and maintenance following the initial assault. The target area contained only a few small ports, and Cherbourg, the only sizable one within striking distance, was not large enough to support 26 to 30 divisions. Therefore, until the Brittany and Seine ports could be seized—possibly two or three months after D-day—a considerable part of the forces would evidently have to be supplied over the beaches. To overcome this difficulty Morgan counted on an expedient that was as yet scarcely more than an idea—prefabricated ports that could be towed across the Channel, anchored off the beachhead, and protected by breakwaters made of sunken ships. "I feel it my duty to point out," he warned, "that this operation is not to be contemplated unless this problem of prolonged cross-beach maintenance and provision of artificial anchorages shall have been solved."[20]

As for the assault itself, Morgan's analysis showed all too clearly the limitations imposed by the meager allotment of amphibious shipping made at TRIDENT. When the COSSAC staff set about breaking down this allotment into task and subtask groups, it found that the sum of the parts did not add up to the

[19] (1) Digest of Operation OVERLORD, 27 Jul 43. Reproduced as Appendix A in Harrison, *Cross-Channel Attack*, pp. 450–56, and as JCS 442, 5 Aug 43. (2) For full discussion see Harrison, *Cross-Channel Attack*, pp. 71–79.

[20] Memo, Gen Morgan for COS Com, 15 Jul 43, with Outline OVERLORD Plan in QUADRANT Conf Book.

total lift assumed at the Conference. The available lift was sufficient for five divisions simultaneously afloat, but small craft could not safely be used to cross so treacherous a body of water as the English Channel, and there were not enough combat loaders to carry them or large landing vessels to substitute for them. Moreover, the three assault divisions with their attached armor and "overheads" (mainly antiaircraft and special engineer troops) required so much lift that two of the divisions following would have to be loaded in conventional shipping, and all of the follow-up and subsequent build-up would be delayed. In the crucial first two days, only the three reinforced assault divisions and one follow-up division would be ashore and fighting, instead of the seven divisions (three assault, two follow-up, two build-up) prescribed at TRIDENT.[21] In order to load all the follow-up forces in assault shipping, the COSSAC staff estimated that 110 additional LST's or their equivalent would be needed, and still more LST's and LCT's to load some of the build-up formations tactically and to accelerate the flow of vehicles ashore. Nor could the planners even count on all the assault shipping promised at TRIDENT, particularly LCT's. Of



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the 555 LCT's of all types expected to be operational on D-day, 44 were now being used for net protection duties with the British Fleet at Scapa Flow, with no prospect of being released for OVERLORD. Another 43 were to be converted to gun and rocket support craft for the assault. Requirements for more support craft of various kinds, most of which would have to be contrived from LCT hulls, were snowballing and the end was not in sight. The deficit on the eve of the Quebec Conference was estimated at 72 LCT's, about 11 percent of the entire LCT allotment; in another month the figure was to climb to 164.[22]

General Morgan recommended an all-around increase of 10 percent in assault lift as "highly desirable in order to provide a greater margin for contingencies within the framework of the present

[21] (1) Harrison, *Cross-Channel Attack*, pp. 74–75. (2) Table accompanying CCS 304, note by Br COS, 10 Aug 43, title: Opn OVERLORD. (3) General Barker's comments at 110th mtg JCS, 21 Aug 43.

"Follow-up" forces in amphibious operations were preloaded at the time of the initial assault; "build-up" forces came ashore in craft surviving the initial assault and, after the beach area was secure, in vessels of all types. In the outline plan, reinforcing armor to be landed on D-day was the equivalent of a division, and there were three, not two, follow-up divisions. But the first build-up division would not come ashore until late on D plus 2, and would not be operational until the next day.

[22] (1) Harrison, *Cross-Channel Attack*, p. 101. (2) Corresp in SHAEF SGS 560, vol. I.

plan," and observed further that enough additional lift for another division could "most usefully" be employed for a landing on the Cotentin Peninsula west of the target area, in order to ensure early capture of Cherbourg. He did not press the issue of how the two airborne divisions and additional parachute regiments allotted to OVERLORD were to be transported, given the small allotment of transport aircraft, but the outline plan provided for airdropping both divisions.[23]

In presenting the plan to the British Chiefs of Staff on 15 July, General Morgan had stressed what he called the "essential discrepancy in value" between the position of an enemy awaiting attack in carefully prepared defenses, and troops assaulting them at the end of a difficult Channel crossing subjected to all the disadvantages inherent in movement under fire from water to land. He reminded his superiors of the novelty of the conditions that had to be faced—tide, weather, relation between base and target area and, above all, the problem of prolonged maintenance over beaches—and he warned against comparisons with the Sicily operation. A more generous allotment of resources, he pointed out, would permit alternative courses of action, freeing the assault plan from the limitations which dictated rigid adherence to a single course or none at all. In the interests of greater flexibility he was prepared to recommend, as a last resort, postponement of OVERLORD's target date.[24]

General Barker, Morgan's American deputy, faced a skeptical audience when he presented Outline OVERLORD to the U.S. Chiefs of Staff on 6 August. Even though the product of a combined staff, as Barker's presence emphasized, the plan seemed to the JCS to reflect British influence and aims. To Admiral King in particular the conditions stipulated in the plan looked suspiciously like the old, familiar British reservations—what King called their policy of "delay, linger and wait." It was imperative, King insisted, to pin the British down to an unequivocal decision "whether or not we are really going to get down to actually do OVERLORD." Without such a decision, King thought, "we are frittering away valuable means," which "could better be used elsewhere . . . possibly the idea of OVERLORD should definitely be abandoned."[25] Answering a pointed question by General Marshall, Barker assured his hearers that the British military from top to bottom were "one hundred percent favorable" to OVERLORD, but he added a qualifying remark about the effect of the "sun lamp" of the Prime Minister's personality on the British Chiefs. Barker made a persuasive case for the feasibility of the OVERLORD plan. He had to confess, however, that "if there is any over-all compelling problem for OVERLORD, it is that of a shortage of landing craft," and he went so far as to suggest that the proposed southern France landings might be reduced to a feint in order to provide more lift for the Normandy assault.[26]

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[23] Harrison, *Cross-Channel Attack*, app. A.

[24] (1) Memo, Morgan for COS Com, 15 Jul 43, QUADRANT Conf Book. (2) Naval Branch (Br), Appreciation of Effect of Provision of Extra Ldg Cft . . . , 27 Jul 43, SHAEF SGS 560, vol. I.

[25] (1) Min, 101st mtg JCS, 7 Aug 43; 100th mtg, 6 Aug 43. (2) JCS 442/1, 6 Aug 43, title: Opn OVERLORD, Suppl Notes by Maj. Gen. R. W. Barker.

[26] Min, 100th mtg JCS, 6 Aug 43.

Despite their misgivings, the JCS decided to accept the OVERLORD plan as the basis for further planning of the cross-Channel invasion. It remained to win the President's approval, which, in the light of Admiral Leahy's recent report of his Mediterranean leanings, was by no means to be taken for granted. Roosevelt was, in fact, evidently searching for a basis for compromise with the British. On 9 August he startled General Marshall by inquiring whether it would be feasible to send seven fresh U.S. divisions to the Mediterranean to replace the seven to be withdrawn for OVERLORD, observing that he felt more could be done in the Mediterranean than did his advisers. Military planners, he whimsically complained, were "always conservative and saw all the difficulties."[27]

Roosevelt's inquiry came at a time when shipping estimates indicated, despite the August diversions from BOLERO to the Mediterranean, a potential capability of moving about 100,000 more troops across the Atlantic before May 1944 than anticipated at TRIDENT. However, the troop basis submitted by the European theater in conjunction with the OVERLORD plan called for almost exactly the total of 1,400,000 men that the shipping estimates now indicated could be moved. The transportation staffs had little difficulty in demonstrating that the suggested movement would cut deeply into planned deployments to either the United Kingdom or the Pacific. The staff advised Marshall, and Marshall advised the President, that it would be unwise to skimp the theater of primary effort in Europe, especially since all the estimates were based on rather optimistic assumptions of future ship losses.[28]

On 10 August, shortly before the JCS came to the White House to present these arguments, Secretary Stimson gave the President a careful analysis of British views as he interpreted them on the basis of conversations with Churchill and other leaders during his recent visit to England. Both Churchill and Sir Alan Brooke, Stimson asserted, were haunted by "the shadows of Passchendaele and Dunkerque," and mortally afraid of a cross-Channel invasion, for all the "lip service" they had given it in the past. As for the Mediterranean, while admitting that Churchill professed to have no desire for a land invasion of the Balkans, Stimson believed nevertheless that most British leaders thought Germany could be defeated "by a series of attritions in northern Italy, in the eastern Mediterranean, in Greece, in the Balkans, in Rumania and other satellite countries." Anthony Eden, the British Foreign Secretary, was reported to be openly in favor of a Balkan invasion in order to forestall Soviet domination of that region. Stimson was convinced that no British commander could ever provide the resolution or energy needed for a cross-Channel invasion, and he urged the President to insist that this assignment be given to General Marshall.[29]

Stimson's imputations of British coolness to OVERLORD and hankering for a

[27] Memo, GCM [Marshall] for Handy, 9 Aug 43, ABC 384 Post-HUSKY (14 May 43), Sec 2.

[28] (1) Memo, Stokes for Handy, 9 Aug 43. (2) Memo, Handy for CofS, 9 Aug 43. Both in ABC 384 Post-HUSKY (14 May 43), Sec 2. (3) Min, mtg at White House, President and JCS, 10 Aug 43, ABC 337 (25 May 43).

[29] (1) Stimson and Bundy, *On Active Service*, pp. 335–38. (2) Min of mtg at White House, 10 Aug 43. (3) Bryant, *Turn of the Tide*, pp. 573–76, disputes Stimson's conclusions. (4) See also Matloff, *Strategic Planning, 1943–44*, pp. 211–16.

Balkan invasion evidently made a deep impression on the President. Roosevelt had already assured Marshall that he wanted no part of a Balkan campaign, but hoped merely to ensure that the Allies would gain a good position north of Rome, occupy Sardinia and Corsica, and "set up a serious threat to Southern France."[30] On Marshall's assurances that Eisenhower would be able to do substantially this without replacing the seven divisions, and that to replace them would be a clear invitation to the British to invade the Balkans, Roosevelt gave up the idea of reinforcing the Mediterranean. In a burst of enthusiasm he wondered whether OVERLORD might not be made a purely American undertaking. Marshall reminded him that no shipping was available to move elsewhere the 15-odd British and Canadian divisions expected to be in the United Kingdom. At least, the President persisted, OVERLORD's commander must be an American as Stimson had urged, and he told Marshall to see to it that U.S. forces on D-day were decisively preponderant over the British.[31]

Resources for a Pincers Strategy

Thus, on the eve of the Quebec Conference, despite widespread misgivings about the OVERLORD plan, the OVERLORD concept was riding high. Voices of staff dissent had been stilled, and it seemed likely that the President's support for an OVERLORD-centered strategy could be counted on in any showdown with the British. OVERLORD, it was true, was now blended into a larger strategic concept in which continuing Mediterranean operations and strategic bombing during 1943 and early 1944 had an important role. Still, the case for this grand design rested on the dubious premise that resources allotted at TRIDENT with a lesser strategy in view would suffice for major operations in three widely separated areas—Italy, southern France, and Normandy. The Washington staffs thought that the 24 Allied divisions remaining in the Mediterranean after seven had been withdrawn for OVERLORD would be adequate. General Eisenhower, less confident, informed Marshall on 13 August that everything would depend on German reactions. Though he anticipated no difficulty in getting to the Po if the Germans fell back, he doubted whether he could even get to Rome if they stood and fought. At any given time, he pointed out, he could count on no more than two-thirds of the divisions theoretically at his disposal to be fully equipped, at full strength, and ready for action, and the obstacles to rapid deployment within the theater would reduce even that proportion. As for a southern France operation, what with the uncertainty as to future enemy strength, limited port capacity, and, above all, "the constantly annoying and limiting factor of shipping and landing craft," Eisenhower found himself unable to predict his capabilities so far in the future.[32]

The Washington staffs had ample reason by mid-August to question the adequacy of the very slim margins of assault

[30] Memo, GCM [Marshall] for Gen Handy, 9 Aug 43.

[31] (1) Min of mtg at White House, 10 Aug 43. (2) Min, 103d mtg JCS, 10 Aug 43.

[32] (1) Msg 7205, Eisenhower to Marshall (eyes only), 12 Aug 43, OPD Exec 3, Item 5. (2) Msg 4751, Marshall for Eisenhower (personal), 11 Aug 43, OPD Exec 3, Item 4. (3) Min, 101st mtg JCS, 7 Aug 43.

lift capabilities on which OVERLORD and its southern France complement were being planned. One disturbing recent development concerned the movement schedules of landing craft to be sent to England from the United States and the Mediterranean. Movements across the Atlantic had started in July and were to continue through the following March, with most of the larger vessels sailing after the turn of the year. Redeployments from the Mediterranean of vessels surviving the post-HUSKY operations were not yet definitely scheduled, but were expected to take place in November or earlier, after the landings in Italy. Late in July it was learned that the COSSAC planners now wanted one-half of all OVERLORD assault shipping to be on station by the first of the year, the remainder by 16 March. To meet this requirement, the British estimated the following deadlines for arrival in the United Kingdom: half of the LCT's from the United States by 1 November, half of all the LST's and LCI (L)'s by 1 December, and the remaining increments by mid-January and mid-February, respectively. American naval experts challenged as excessive the time allowed for refitting and movement to station, and General Barker himself admitted that the indicated arrival dates for the first increment might be delayed as much as a month.

While the matter was being debated, the reports of low landing craft losses in the Sicily operation seemed to indicate a way out. The windfall accruing from Sicily could be assigned to OVERLORD, thus meeting COSSAC's stepped-up schedule and obviating the need for some of the later movements from the United States. Perhaps the British could even increase their own contribution to OVERLORD, permitting some reduction in that of the Americans. By 4 August the Joint Staff Planners were venturing to hope that in this way OVERLORD requirements could be "more than met." The Navy was, in fact, already augmenting allotments of American landing craft production to the Pacific.[33]

But while some of the joint staffs were planning to move all surviving assault lift out of the Mediterranean for OVERLORD, another group was estimating that the Sicily windfall would leave an aggregate lift of two reinforced divisions for the southern France operation.[34] Admiral Cooke, calling attention in the JCS meeting of 6 August to these conflicting assumptions, roundly asserted that the Allies could not mount two major amphibious operations in Europe simultaneously and that, if OVERLORD were to be carried out, all the assault lift surviving the invasion of Italy would have to be transferred to England. As Cooke was aware, the prolonged tie-up of the Mediterranean amphibious fleet in over-the-beach supply operations in Sicily[35] was already raising serious doubts as to the extent to which even the TRIDENT allocations of Mediterranean assault lift to OVERLORD, much less the "surplus" resulting from overestimation of losses, would in fact be available for timely redeployment. As for the southern France operation, the Joint War Plans Committee noted on 13 August in comment-

[33] (1) Min, 89th mtg JPS, 4 Aug 43, and OPD notes. (2) Memo, JHC for Gen Wedemeyer, 6 Aug 43. Both in ABC 384 (9 Jul 43), Sec 1. (3) JPS 228/1, 2 Aug 43. (4) Diary entry, 12 Aug 43, in Historical File 23, ASF Plng Div.

[34] JPS 242, 5 Aug 43, app. B.

[35] See below, pp. 189–90.

ing on the feasibility of the OVERLORD plan that the withdrawal of additional amphibious equipment from the Mediterranean to provide the increased lift General Morgan had asked for would "most seriously limit the possibility of amphibious operations against Southern France, which is . . . a subsidiary but nonetheless important element of our overall strategy for the defeat of the Axis in Europe."[36]

The JCS themselves were still unwilling to write off this operation. Their position paper on European strategy for the forthcoming conference at Quebec, as finally approved on 9 August, omitted the recent optimistic but now hardly tenable estimates of landing craft availability based on the Sicily windfall, but retained the end-product of those estimates, the statement that a southern France assault by "at least" two reinforced divisions in support of OVERLORD could be mounted. General McNarney suggested that in cases of competing demands between the two theaters OVERLORD should be explicitly accorded an "overriding" priority. Vice Adm. Richard S. Edwards quickly objected that this might be construed to subordinate the claims of the Pacific. The JCS accordingly modified McNarney's proviso to read: "As between Operation OVERLORD and operations in the Mediterranean, when there is a shortage of resources, OVERLORD will have overriding priority."[37]

The position of American military leaders on European strategy before the Quebec Conference was thus a curious blend of optimism and caution. Axis reverses in the Mediterranean had inspired hopes of eliminating Italy from the war, occupying the islands of the Tyrrhenian Sea and a large part of the Italian Peninsula, and, by combined overland and amphibious operations, driving up the Rhône Valley in spring of 1944 to a junction with OVERLORD forces pushing eastward from Normandy. In this way Mediterranean strategy, hitherto regarded as peripheral and diversionary, might be made to serve the orthodox strategy centering in a decisive invasion of the Continent from the northwest. For the Americans, it had the additional attraction of being a means of keeping Mediterranean forces profitably occupied in the western half of that vast theater and thus unavailable for British-instigated adventures in the Balkans. Yet, for all its grandeur, it was still a strategy of opportunity, at the mercy of any upturn of Axis fortunes or even a German decision to make a stand south of Rome. The "overriding priority" formula adopted by the JCS on 9 August was ostensibly a hedge against such contingencies, calculated to ensure the primacy of OVERLORD over the Mediterranean—though not over the Pacific—in any situation dictating hard choices. The JCS seemed hardly to recognize the inconsistency between this formula and their stubborn hopes for an amphibious assault in southern France, which at best would require the retention in the Mediterranean of landing craft badly needed for OVERLORD. They were already coming to regard the southern France operation, rather than Mediterranean operations in

[36] (1) JPS 253, 13 Aug 43, rpt by JWPC, title: Comments on COSSAC Outline Plan. (2) Min, 100th mtg JCS, 6 Aug 43; 101st mtg, 7 Aug 43. (3) Min, 71st mtg CPS, 13 Aug 43. (4) Min, 91st mtg JPS, 7 Aug 43.

[37] (1) Min, 102d mtg (Suppl) JCS, 9 Aug 43. (2) CCS 303, 9 Aug 43.

general, as the real southern prong of the new pincers strategy, an integral part of OVERLORD, which shared in some measure its primacy over other operations in the southern theater. But this line of thinking could not alter the facts of geography. Southern France lay in the Mediterranean theater, and "overriding priority" could be invoked as readily against a southern France complement of OVERLORD as against the eastern Mediterranean involvements it was primarily intended to forestall.

Assault Shipping and the Invasion of Italy

In the theater, meanwhile, Eisenhower's planners were sniffing uneasily at various schemes for getting into Italy. They regarded a landing near Naples (AVALANCHE), suggested by the CCS, as too risky without a secure lodgment in Calabria as a preliminary. Only on 26 July did Eisenhower assign priority to planning for AVALANCHE, and the operation was not definitely decided upon until 16 August.[38]

The cautious pace of this planning and the narrow range of its choices were governed primarily by the twin limitations of air power and assault lift. Naples itself lay beyond effective operating range of single-engine fighters based on Sicilian airfields. The area finally chosen for AVALANCHE, some distance south of Naples in the Gulf of Salerno, was barely within this range for fighters equipped with extra tanks. Even with the few available long-range fighters and aircraft from the five British carriers, air cover for the assault would still be heavily outweighed by enemy shore-based aircraft. To offset this disadvantage, Eisenhower pleaded repeatedly for more heavy bombers to pound enemy airfields and isolate the battlefield. All his requests were turned down. The B–24's that carried out the Ploeşti raid on 1 August were withdrawn to England as scheduled, and Eisenhower was left with only about two-thirds of the air strength his commanders wanted.[39]

Eisenhower's pleas for more air power were aimed at offsetting a weakness in assault lift that seemed to preclude putting ashore at any point, except perhaps in Calabria, forces as large as those the enemy could mass to oppose them. The optimism engendered by the small losses in the Sicily landings and the rapid disintegration of Italian resistance was soon dispelled by the prolonged tie-up of landing ships and craft in supplying the forces ashore. LST's, LCM's, and DUKW's were engaged in lightering cargo ashore from freighters, while LCI(L)'s, LCT's and other LST's ran a cargo shuttle service between Tunis-Bizerte and Sicily. More LCI(L)'s and other personnel craft labored to roll up the administrative tail as the invasion progressed, and a few unscheduled amphibious landings in the enemy's rear on the northern and eastern shores of Sicily absorbed other vessels. The wear and tear on vessels which, for the most

[38] Martin Blumenson, *Salerno to Cassino,* UNITED STATES ARMY IN WORLD WAR II (Washington, 1968), chs. I, II.

[39] (1) Msgs, late Jul–19 Aug 43 in OPD Exec 3, Item 5. (2) Eisenhower Dispatch, The Italian Campaign, 3 September–8 January 1944 (hereafter cited as Eisenhower Dispatch), copy in OCMH, pp. 18–19. (3) Craven and Cate, *AAF II,* pp. 492–96.

part, had not been built for prolonged work of this sort, was severe.[40]

On 26 July Eisenhower was informed that sufficient ships and craft could not be released from Sicily in time to be refitted and redeployed for another major operation before 7 September at the earliest. This quashed any hope for amphibious landings in force either before or immediately following the capture of Messina, and left as the only means of rapidly exploiting the fall of Mussolini such highly risky undertakings as an airborne drop or direct entry into a port—expedients that were, in fact, considered and prepared for but (except for a bold dash into Taranto) ultimately abandoned. The Germans were thus given ample time to organize countermeasures.[41]

Meanwhile, with lift in sight for only one major undertaking, Eisenhower's commanders, still dominated by the belief that a foothold in Calabria was an indispensable preliminary to AVALANCHE, were compelled to divide even this meager resource. They set up one amphibious force for AVALANCHE, another smaller one for crossing the Messina Strait (BAYTOWN), and a third to be used (BUTTRESS) either to support AVALANCHE if BAYTOWN prospered or to land in northern Calabria if BAYTOWN went badly. The crossing at Messina was to be launched as soon as possible, thus releasing some shipping for either BUTTRESS or AVALANCHE. The whole complicated arrangement, Eisenhower confessed, involved "some sacrifice of efficiency in the interests of flexibility.[42]

As the Sicilian battle roared to its end, the outlook for AVALANCHE remained uncertain. On 16 August, the day before his forces entered Messina, Eisenhower decided in favor of AVALANCHE and canceled BUTTRESS, but not unequivocally; ship commanders had sealed orders providing for a possible last-minute switch. Montgomery, in charge of the BAYTOWN landings, gave up hope for an unopposed crossing and demanded a lift so large as to imperil the main landings south of Naples. The preparations now considered necessary made it unlikely that BAYTOWN could be launched before September. Since AVALANCHE could not be delayed beyond the 9th of September, if favorable moon conditions were to obtain, the likelihood of releasing BAYTOWN shipping to support it seemed remote.[43]

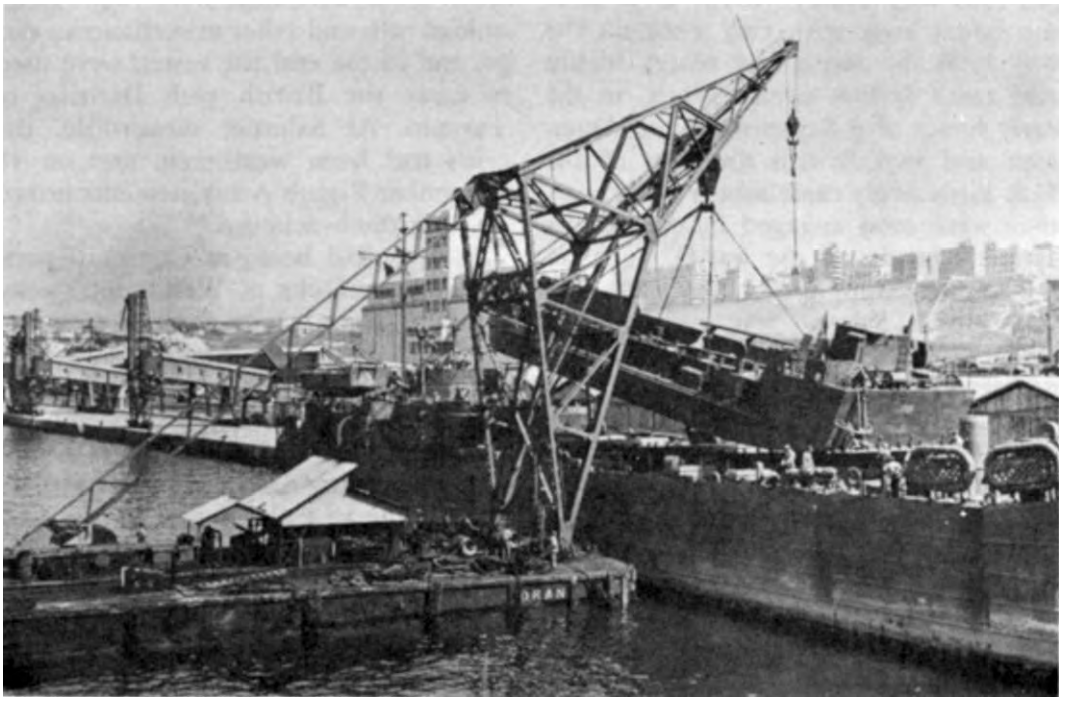
In Oran harbor were ten LST's, the American contingent of the eighteen destined for India. They were scheduled to be released on 20 August; the eight British LST's were being held under the "stand fast" order of July pending decisions of the Quebec Conference, which had convened on the 14th. On 18 August, Eisenhower cabled the CCS at Quebec an "earnest request" to be allowed to retain the ten American LST's for at least one trip in the forthcoming operations and, if possible, until the end of

[40] (1) CCS 268, 1 Jul 43. (2) Eisenhower Dispatch, pp. 2, 22. (3) Rpt of Opns . . . Seventh Army, Part I, pp. b–18–22; Part II, pp. e–13–15. (4) Msg NAF 265, Eisenhower to CCS, 18 Jul 43, ABC 384 Post-HUSKY (14 May 43), Sec 3. (5) Msg, COMNAVNAW to COMINCH, 25 Aug 43, OPD 560 Security II, Case 63.

[41] (1) Msg NAF 300, Eisenhower to CCS, 27 Jul 43; Msg NAF 312, 5 Aug 43. OPD Exec 3, Item 5. (2) Capt. Harry C. Butcher, USNR, *My Three Years with Eisenhower* (New York: Simon and Schuster, 1946), pp. 371–74.

[42] (1) Msg NAF 312, 5 Aug 43. (2) Eisenhower Dispatch, pp. 20–21.

[43] (1) Blumenson, *Salerno to Cassino*, ch. III. (2) Eisenhower Dispatch, pp. 24–31. (3) Msg NAF 326, Eisenhower to CCS, 16 Aug 43, OPD Exec 3, Item 5.



AN LCT BEING LIFTED FROM ITS "PIGGY-BACK" BERTH ON AN LST, *Oran, Algeria.*

September. Though Marshall favored a short delay, the American admirals insisted they must be released on schedule, since the process of fitting the vessels for the voyage to India and taking on their deck-loaded LCT's would hold them up until mid-September in any case. Eisenhower was curtly informed, therefore, that the Burma LST's, British as well as American, must depart on schedule. Before the end of the conference the British Chiefs of Staff also ordered their six LSI (L)'s, earmarked for the same operation but held under the July order, to proceed to India.[44]

On 3 September Italian representatives formally took their country out of the war, and on the same day the Allied invasion of the mainland got under way with an almost unopposed crossing of the Strait of Messina by elements of the British Eighth Army. Six days later Admiral of the Fleet Sir Andrew B. Cunningham boldly sailed four cruisers and accompanying destroyers loaded with troops of the British 1st Airborne Division directly into the harbor of Taranto, encountering no organized resistance from shore. The Germans had decided, in fact, to mass their forces against the main Allied landings, which they believed would be made farther up the west coast, probably near Naples. By the

[44] (1) Msg NAF 330, Eisenhower to CCS, 18 Aug 43. (2) Msg FAN 197, CCS to Eisenhower, 20 Aug 43. Both in OPD Exec 3, Item 5. (3) Min, 108th mtg JCS, 19 Aug 43. (4) Min, 74th mtg CPS, 15 Aug 43. (5) Churchill, *Closing the Ring*, pp. 204–05.

9th they had three divisions in or near the target area, with two more on the way from the south and others within easy reach farther north. When, in the early hours of 9 September, one American and two British divisions of the U.S. Fifth Army came ashore at Salerno, they were soon engaged in one of the bitterest battles of the war.[45]

Assault shipping for an adequate build-up at Salerno was lacking. The meager six days' interval between Montgomery's crossing of the Strait of Messina and the Salerno landings did not permit the transfer of enough landing craft northward to strengthen the assault or early build-up of the forces in the beachhead. In effect, enough assault lift to mount a division or more was immobilized far to the south in what was virtually an unopposed operation. And Montgomery's forces, hampered by demolitions and insufficient transport, never got close enough to the Salerno battlefield to affect the outcome. At Salerno the situation immediately became critical and remained so for a full week while frantic efforts were made to bring in reinforcements. Fortunately, as in Sicily, very few landing craft were lost in the initial assault, but only limited reinforcements could be brought in during the first few critical days. On 11 September the CCS reversed their previous decision, and, at Eisenhower's urgent request, granted him permission to use the 18 Burma LST's. They also made available some additional heavy bombers. The bombers helped to turn the tide in the later stages of the battle, but the loan of the LST's was too late to do much good. Five days were required to unload rails and other miscellaneous cargo, and in the end the vessels were used to carry the British 78th Division to Taranto. At Salerno, meanwhile, the crisis had been weathered, and on 18 September Eighth Army elements linked up with the beachhead.[46]

Salerno had been, as Churchill paraphrased the Duke of Wellington's comment on Waterloo, "a damned close-run thing."[47] German mistakes, as well as Allied efforts, contributed to the outcome—for example, Hitler's decision not to support Field Marshal Albert Kesselring by sending divisions from northern Italy. Otherwise the denial by the CCS of the assault shipping and heavy bombers Eisenhower requested might well have had disastrous consequences. The denial of the LST's seems doubly futile in retrospect, since the Burma assault shipping of which they were a part was destined to sail all the way to India and back again without landing a single soldier or vehicle on a hostile beach. "No one," commented Eisenhower's naval aide, noting American press criticism of the Allied failure to rapidly follow up the Sicilian victory, "seems to emphasize the bitter truth, which is that troops do not have that mysterious power attributed to Jesus when he walked across the water. We still have to rely on landing craft and, unfortunately, we didn't have enough to continue to supply Sicily and conduct two other large-scale operations at the same time."[48]

[45] On these events, see Blumenson, *Salerno to Cassino.*

[46] Blumenson, *Salerno to Cassino,* chs. X and XI. (2) Msg, NAF 367, Eisenhower to CCS, 9 Sep 43, OPD Exec 3, Item 5. (3) Morison, *Sicily—Salerno—Anzio,* pp. 286–97, 314.

[47] Churchill, *Closing the Ring,* p. 147.

[48] Butcher, *My Three Years with Eisenhower,* p. 407. (2) Morison, *Sicily—Salerno—Anzio,* p. 294.

Bolero in the Balance

Under the pressures created by events in the Mediterranean, and beset by a lack of firm strategic objectives, the BOLERO build-up continued uncertainly between May and August 1943. Movement schedules developed at TRIDENT provided for placing 763,000 U.S. troops in Britain by the end of 1943 and 1,300,000 by 1 May 1944, together with the supplies and equipment for launching a cross-Channel assault on the latter date. The schedules envisaged a progressively mounting tempo of movement, reaching a peak in the first three months of 1944, but, in deference to the limitations of British port capacity, spacing shipments over the entire period to the maximum extent practicable. The planners expected a substantial acceleration in the summer of 1943, particularly of supplies and equipment shipped in advance for troops who were to move later.[49] These TRIDENT estimates represented little more than educated guesswork, based on a general appraisal of the future availability of shipping in the North Atlantic and a highly tentative troop basis; they were tied to no definite operational plan. As in 1942 the real aim was to generate some momentum. Precise objectives, and the schedules for attaining them, would come later.

A few days before the TRIDENT Conference the European theater had submitted a hastily concocted troop basis for 1943, showing a total of 888,000 men. This figure, rather than the TRIDENT goal of 763,000 became the real basis of planning in OPD and ASF. Even before the final TRIDENT decisions, OPD gave its blessing to a more comprehensive policy, establishing the ground rules under which the preshipment program was to proceed for the rest of the year. This enabled ASF on 17 May 1943 to publish a new directive supplanting the stop-gap instructions issued in April. The new tentative ETOUSA troop basis was attached as a supplement.[50]

The plan was to begin shipping immediately against the theater's total needs through 1943 calculated in terms of the tentative troop basis and known requirements for operational supplies. But it was hedged by many restrictions. Units under orders for April, May, and June were to sail under normal POM procedures except that their equipment would be withdrawn 30 days before the sailing date and shipped in bulk to arrive in the theater simultaneously with or shortly before the troops. Equipment for units scheduled to depart from July through December was to be shipped in bulk, not marked for any particular unit. However, a priority was set for these shipments well below that for competing training allowances—and thus automatically below current requirements of other theaters—and cargo was to be taken only from depot stocks and new production, not from equipment already in the hands of troops. Even for equipment to fill shortages at the time units sailed and for other special supplies, the pri-

[49] See above, chs. II and III.

[50] (1) Ruppenthal, *Logistical Support of the Armies I*, 123. (2) TAG Ltr to CG's ETO, NYPOE, and CsTechSvcs, 16 May 43, sub: SOP for Shipments of Equip and Sups to U.K., copy in History of Preshipment, Annex 17. (3) Memo, Lutes for OPD, 7 May 43, sub: Cargo Shipments for U.K., with 1st Ind, OPD to ASF, 17 May 43, Lutes File, folder ETO. (4) Diary, Theater Br, entries for 7, 11, 14 May 43, ASF Plng Div.

ority for ground force equipment for the European theater was set at A-1-*b*-8, below that of all other active theaters; the priority for Air Forces equipment was set at A-1-*b*-4.

The May 1943 troop list on which advance shipments were to be based was imperfect in many respects. It was only partial—it did not add up to the total numerical strength forecast for the end of the year—and the only reasonably firm entries were those units under orders for May and June. It was, moreover, extremely tentative and made up predominantly of units not specifically named but designated simply by type, and the phasing of movements to the theater beyond mid-1943 faded into guesswork. The list of ground force units was built around seven infantry divisions (including the 29th already in England), two armored divisions, and one airborne division—a total strength of 390,000 ground combat forces with directly supporting service elements. The Services of Supply numbered 245,000 and there were 250,000 AAF troops. Units not already in the theater or under orders for May and June were phased, more or less arbitrarily, in monthly increments from July through December. This phasing bore no relation to deployment plans, but was intended as a guide for advance shipments with a view to preserving a rough balance among various types of material, subject to the availability of cargo and the requirements of efficient stowage. In short, the troop basis was hardly more than a fiction, and it was to remain so for some time to come.[51]

Preshipment procedures served the useful purpose of freeing the supply staffs from pressure to balance the flow of various types of material and to meet a detailed schedule of interim requirements. Under the low priority assigned, however, ASF staff officers were reduced to scrounging in corners for whatever odd fragments of unbooked cargo they could find. Filling ships by this method was objectionable on many counts and made supply officers unhappy. But by May it was evident that the available cargo space could be filled in no other way. In short, while the ultimate goal was to provide a balanced stockpile of supplies and equipment for units to be shipped, unbalanced shipments over any given period were a built-in feature of the plan. The very real danger that advance shipments might build up a stockpile of material in the theater unsuited to the needs of forces eventually sent there was ever present in the minds of the Army planners, and inhibited more definitive and far-reaching planning.

In this situation, Eisenhower's requests for more troops in the Mediterranean were disruptive. Troop movements to the United Kingdom in June and July slightly exceeded the low TRIDENT estimates, but in August, when the troop build-up was expected to move into high gear, the diversion of an entire BOLERO convoy to transport 68,000 men to North Africa again upset the program. Only 174,000 U.S. troops moved to the United Kingdom during the period May through August, and at the end of the latter month theater strength stood

[51] (1) *Ibid.* (2). (2) Ltr, Lutes to CG ETO, 31 Jul 43, sub: Advance Shipment of Equip to U.K., quoted in Leighton, Problem of Troop and Cargo Flow, p. 13. (3) Memo, Lutes for Somervell, 18 May 43, Lutes Diary.

at 278,742 as against the TRIDENT estimate of 341,900.[52]

The impact on the preshipment program was twofold. Troops sailing for the Mediterranean took with them initial equipment originally destined for the European theater. They were mainly service troops who had been expected to arrive in the United Kingdom in advance of combat elements in order to construct cantonments and other facilities, unload preshipped cargo, and perform the thousand and one tasks involved in developing an administrative base for the invasion. In this respect the troop build-up in the United Kingdom between May and August was disappointing. With AAF troops receiving highest priority and diversions to the Mediterranean draining the available pool of trained service units, the theater received less than 46,000 service troops during the period. The ground force build-up lagged even more, but with the invasion date still far off, this was of less concern.[53]

Meanwhile, in the United States the struggle to move cargo to port to fill shipping space assigned to BOLERO continued on a hand-to-mouth basis. ASF requests to WSA for shipping were carefully tailored to estimates of cargo availability, but even so the ships were usually not filled by the end of the month for which they were requested. By 31 May only 24 of the 38 ships allocated for that month had been filled; the other 14 had to be carried over into June. At the end of June, of 42 vessels allocated, 12 had to be listed as carryovers into July.[54] In reality, the program was lagging more seriously than these figures would suggest, since the requests to WSA themselves fell far short of original projections. Shipments over the May–August period totaled 2.3 million tons, instead of the 3.2 million General Lutes had stipulated as a goal in April. Measured against TRIDENT targets, shipments through September fell about 53 shiploads short.[55]

Preshipped cargo accounted for 39 percent of the May–August total. This relatively high proportion was to be expected at a time when troop movements were at a low ebb. That it was not higher meant that the preshipment program was failing at the very outset to attain the double purpose of fully using available cargo shipping and exploiting British port capacity during the long daylight hours of summer. "We can never recover," Somervell wrote the theater SOS commander, "the precious time that is now available to you during the good weather."[56]

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[52] (1) See Appendix D–5, below. (2) Ruppenthal, *Logistical Support of the Armies I*, 131, 132. (3) Memo, Gross for Somervell, 8 Jul 43, sub: Combat Loaders for Post-HUSKY and UGF–10, Lutes File ETO. (4) Memo, Col Alexander D. Reid, Chief, European Sec, Theater Gp, OPD, for Gen Hull, 11 Jul 43, sub: Build-up of U.S. Forces in U.K., ABC 381 (9-25-41), Sec 5.

[53] (1) Ruppenthal, *Logistical Support of the Armies I*, 130–32. (2) Corresp in Hq ASF, File ETO (6).

[54] (1) Memo, Wylie for Gross, 2 Jun 43, sub: U.K. Cargo Statement for May. (2) Memo, Vissering for CofT, 29 Jun 43, sub: Cargo and Ship Sit for U.K. Both in OCT 563.5 England May–June 1943.

[55] (1) See above, ch. II. (2) See Appendix D–5, below. (3) The statement concerning the TRIDENT target is made on the assumption that shipments were projected as notional sailings of 10,000 measurement tons each. The target included 36 shiploads mixed with British imports besides 259 sailings on Army account, or a total of 295. Actual cargo movements in terms of notional sailings totaled 242.

[56] (1) Ltr, Gen Somervell to Maj Gen John C. H. Lee, 30 Jul 43, Hq ASF, File ETO (6). (2) Leighton, Problem of Troop and Cargo Flow, pp. 16–16a.

The basic cause of the shortfall was the low priority assigned the preshipment program. The ASF made one attempt, in June and July, to secure additional equipment for preshipment by holding troops in training strictly to their percentage allowances, but ran into a hornet's nest of opposition from Army Ground Forces. OPD supported General McNair's objections, reaffirming existing priorities and specifically prohibiting any withdrawals for preshipment from units in training, whether or not the units had more than their allotted percentages.[57]

Undoubtedly OPD's position was occasioned in part by the atmosphere of uncertainty in July 1943 concerning the future course of strategy for the war in Europe. Even within ASF, there was a gnawing fear that the whole preshipment program might prove to be wasted effort. Though only on the fringes of the debate over future operations in the Mediterranean, the supply planners could sense the strong pressures arising from what one ASF officer called "intangible sources," to postpone or abandon OVERLORD and shift the main effort to the southern theater.[58] As early as 17 June General Lutes argued that a successful HUSKY followed by an invasion of Italy would absorb the maximum shipping effort to the exclusion of the ground force build-up in England, and he bluntly recommended to General Somervell that "pre-shipping of cargo to the United Kingdom be discontinued."[59] Lutes's recommendation may have been prompted mainly by a desire to secure a high-level decision, but it illustrates the difficult position of the ASF as initiator and principal champion of the preshipment program. If a cross-Channel invasion was to be undertaken in 1944, it was imperative to expedite the build-up by preshipment of equipment in 1943; if the main Allied effort was to be made in the Mediterranean, advance shipment, clearly, should be halted as soon as possible.

Opinion within the ASF was divided. By mid-July Lutes had reversed his position and was arguing that preshipment should continue as long as a prospect remained that both BOLERO and Mediterranean operations could be supported. When on 8 July Somervell was apprised by OPD that the Chief of Staff contemplated halting preshipment on 15 August "until the strategic situation is more clarified," the ASF chief argued forcefully against so abrupt a termination.[60]

By mid-July a decision seemed imperative. The bulk of the organizational equipment for units on the tentative ETOUSA troop basis for 1943 had been set up for shipment by the end of August, excepting only critical items inaccessible under the low preshipment priority. Only if shipments were author-

[57] (1) Memos, Lutes for OPD, 19 Jun 43, Somervell for Handy, 14 Jul 43, Lutes Diary. (2) Memo, CG AGF for CofS, 3 Jul 43, sub: Policies Governing Issues of Equip, Log File, OCMH. (3) Memo, Handy for CG ASF, 26 Jul 43, sub: Preshipment, 1a Policy File SWPac, ASF Plng Div.

[58] Memo, Wood for Lutes, 7 Jul 43, sub: BOLERO Build-up, Lutes File ETO.

[59] Memo, Lutes for Somervell, 17 Jun 43, sub: Cargo Shipmts to U.K., in History of Preshipment, Annex NN.

[60] (1) Memo, Lutes for Dir Stock Control Div ASF, 8 Jul 43, sub: Shipments to U.K., in History of Preshipment, Annex NN. (2) Memo, Dir Stock Control Div for Gen Lutes, 12 Jul 43, sub: Pres Chgs and Preshipment of Equip, Lutes File Svc Troops 1942–43. (3) Memo, Lutes for Dir Stock Control Div, 19 Jul 43, folder Current Opns, Case 26, ASF Plng Div.

ized against a troop basis extended through the first four months of 1944, when the bulk of ground combat units were expected to move, could sufficient cargo be assembled to fill the shipping expected to be available in September and the months following. OPD, awaiting strategic decisions at the joint and combined levels, refused to sanction any advance shipment of equipment for troops scheduled to move after 31 December 1943. Transportation Corps officials could foresee only 50 shiploads of cargo in September for the 120 ships then expected to be available.[61]

On 20 July Somervell addressed a pointed inquiry to the Chief of Staff: "The status of ROUNDHAMMER is becoming indefinite," he wrote. "Fears are prevalent that it may go the way of our previous experience." Should the build-up in the United Kingdom proceed, he asked, regardless of the uncertainty whether the troops and matériel amassed there would ever be used?[62] For two weeks the question went unanswered. By 4 August, finally, the crystallization of U.S. strategy positions for the forthcoming Quebec Conference had progressed far enough for Maj. Gen. Thomas T. Handy of OPD to give Somervell a tentative go-ahead, though still within the framework of a 1943 troop basis. A few days later, as a cumulative result of the appearance of the OVERLORD plan and receipt of a new ETOUSA troop basis, the completion of shipping estimates showing that the 1,400,000 men in the troop basis could be moved to the British Isles by 1 May 1944, and, finally, the JCS decision on 9 August to insist on OVERLORD as the main effort in 1944, OPD gave ASF its full sanction to move ahead with the preshipment program in the remaining months of 1943. ASF was sufficiently emboldened to issue instructions on 13 August anticipating an extension of the program to cover material for units sailing in the first four months of 1944, using the new ETOUSA troop basis as a guide.[63] In the existing atmosphere this was an administrative gamble involving some risk. It remained to be seen whether the decisions to be taken at Quebec would justify it. Based on the experience of the period since TRIDENT, U.S. Planners felt that the decision must be final and irrevocable.

[61] (1) Ltr, Gen Wylie to Brig Gen Frank S. Ross, CofT, ETOUSA, 19 Jul 43, OCT 370.5 England, Jan–Jul 43. (2) Diary, 20 Jul 43, Theater Br, ASF Plng Div. (3) Memo, Lutes for Somervell, 29 Jul 43, Lutes Diary.

[62] Memo, Somervell for CofS, 20 Jul 43, sub: Planning, ABC 381 (9-25-41), Sec 7.

[63] TAG Ltr to CsTechSvcs, 13 Aug 43, sub: Shipment of Equip and Sups to U.K. on Extended Troop Basis, SPX 400.22 (13 Aug 43) OB-S-SPDDL-M.

CHAPTER VIII

First Quebec

Almost four weeks before the battle for Italy was joined on the beaches of Salerno, Allied leaders had assembled on the picturesque heights above Quebec for their fourth wartime conference—QUADRANT. The conference was in session from 14 to 24 August 1943. In retrospect the issues debated there seem difficult to define. Neither the British nor the Americans proposed any significant changes in either the broad strategy or the specific decisions agreed on at TRIDENT, and the QUADRANT decisions were largely reaffirmations of those reached at the earlier meeting. But to the American military leaders the conference seemed to be a crossroads in the evolution of the strategy of the European war, and they came prepared to force a showdown on what they considered to be the basic issue: whether the main effort against Germany should be made in northwestern France or in the Mediterranean. The British, in contrast, apparently considered this issue dead, and refused to debate on those terms. They took the position at Quebec that within the framework of the primacy of OVERLORD adequate provision must be made for maintaining the utmost pressure possible on Germany's southern flank during 1943 and early 1944. More pessimistic than the Americans as to the adequacy of resources allotted at TRIDENT for both European theaters, they were unwilling to agree that the full burden of any unavoidable retrenchment must necessarily fall upon the Mediterranean theater.

"Overriding Priority" and the Conditions of Overlord

To the American military leaders and their staffs in mid-August 1943 it seemed that the really fundamental decisions on European strategy had yet to be made—or, rather, re-made. Recent British actions and pronouncements—the "stand fast" order in the Mediterranean, talk of operations in the Adriatic and farther east, reservations and qualifications hedging acceptance of the OVERLORD plan—all seemed to foreshadow a British attempt to renege on the TRIDENT agreements. There was no expectation of a forthright proposal to cancel or downgrade OVERLORD. What the Americans looked for from the British was, rather, a variety of schemes for opportunistic ventures in the eastern Mediterranean along with a major effort in Italy, all scheduled wishfully to be completed in good time for release of resources earmarked for OVERLORD. Such a program, the Americans were convinced, could bring no decisive results and, because operations once undertaken must be sustained, would eventually drain off resources needed for OVERLORD. Accordingly, the JCS had inserted into their

position paper on European strategy the proviso that OVERLORD should be given an overriding claim on resources as against operations in the Mediterranean, though they were not prepared to assign it a similar claim in relation to resources allotted to the Pacific.[1]

On "overriding priority" the JCS pinned their hopes for a successful showdown with the British at Quebec. Behind the proviso lay the accumulated frustration resulting from a drift of events which, since the summer of 1942, seemed to have responded to British manipulation, drawing the Allies deeper and deeper into the Mediterranean and away from the center of German power. Many officers on the American staffs genuinely believed that by going into the Mediterranean the Allies had thrown away good prospects of ending the war in 1943, and they were desperately afraid that further operations there would sidetrack OVERLORD in 1944. A favorite staff exercise in OPD was to contrast the 450,000 American troops actually in Europe at the beginning of April 1943 with the force of one-million-plus which, it was assumed on very dubious premises, could have been amassed in Great Britain by that date if the strategy of concentration had not been abandoned with the decision to invade North Africa.[2] There was also a strong tendency in the staff to think of OVERLORD, despite the TRIDENT compromise, in the old, heroic terms of ROUNDUP, as "a mass explosive air, sea, and ground attack" that would crush the German Army in the west as the Russians were crushing it in the east. The corollary seemed inescapable: to execute OVERLORD on an adequate scale would "leave no margin of our limited resources available to implement any additional secondary operation."[3]

Underlying this view was the doctrine, deeply rooted in American military tradition and teaching, that concentration of resources and effort on a single line of action was essential to success in war. As one OPD officer noted, with reference to the TRIDENT decisions on division of resources:

> We should either choose an objective and accept that we are going to commit within reason the resources required, be they more or less than estimated, or we must allocate a fixed number of resources and direct the commander to exhaust them in a given direction. The first method is generally the sound one strategically.[4]

The objective chosen for concentrated effort should, it was generally assumed, be one likely to bring decisive results. But concentration per se was the important idea. Some of those who advocated a shift to the Mediterranean in July felt that concentration even upon an indecisive line of attack was preferable to a division of effort with the risk of falling between two stools.[5] The dominant view among the staffs was, in any case, that a successful OVERLORD was the supreme objective in Europe and that any expansion of operations in the Medi-

[1] (1) CCS 303, 9 Aug 43. (2) See above, ch. VII.

[2] For BOLERO's prospects in summer of 1942 see Leighton and Coakley, *Global Logistics, 1940–43*, Chapter XIV.

[3] (1) SS 90, 8 Aug 43, Conduct of the War in Europe, ABC 381 Strategy Sec Papers (7 Jan 43) 2–95. (2) See also OPD Paper, 25 Jul 43, Conduct of the War.

[4] OPD Notes on JCS 98th Mtg, 27 Jul 43, ABC 337 (25 May 43).

[5] See General Handy's remarks at 104th mtg JCS, 15 Aug 43, and 105th mtg, 16 Aug 43.

terranean would seriously jeopardize its fulfillment.

That the Joint Chiefs of Staff themselves leaned toward this view may be inferred from the fact that a staff paper expounding it and flatly opposing any "expansion of operations in the Mediterranean" was included in the dossier of each American military representative at Quebec.[6] Yet strategic concentration in so exclusive a sense was quite clearly inconsistent with the pincers strategy the JCS were prepared to advocate at the conference. In a wider frame of reference, it was equally inconsistent with the strategy of an expanding war in the Pacific to which the Americans had been formally committed since TRIDENT. "Overriding priority" for OVERLORD was, in a sense, an attempt to invoke the classic principle of concentration in one sector of the war with the hope of curbing trends that had already outmoded it. Since midsummer of 1942 Allied strategy had been on a course that increasingly dictated not concentration but a flexible, delicately balanced division of effort among competing undertakings in many parts of the globe—a division of effort that by its very nature could not be rigidly governed by schedules and plans, but must, without losing sight of objectives, be constantly responsive to events and the opportunities they offered. The somewhat equivocal pincers strategy that emerged early in August from the staff debate evoked by the events of July was the most recent stage in this evolution. It would not be the last.

At Quebec the British promptly avowed their full support of the principle "that OVERLORD should constitute the major offensive for 1944 and that Italian operations should be planned with this conception as background." Churchill himself insisted several times during the conference that, whatever his earlier views on a cross-Channel operation in 1942 or 1943, he was now fully committed to carrying out OVERLORD in 1944. It was he, in fact, who proposed that the OVERLORD commander should be an American officer, thus disposing of the issue Stimson had raised with Roosevelt on 10 August.[7]

To the surprise of the Americans, moreover, the British presented no Mediterranean program of their own and raised no objection to the American program. They accepted as a basis for discussion the American position papers on European strategy, in which Brooke professed privately to find evidence that "at last they [the Americans] are beginning to see some daylight in the problems confronting us."[8] Particularly surprising to the Americans was the failure of the British to put forward any proposals for action in the eastern Mediterranean. In mid-July, as it happened, the British staff had examined and rejected as not worth the effort, the Durazzo venture advanced at TRIDENT. They had further disparaged any other undertakings in the Balkans as likely to lead to "an exhaustive and indeterminate campaign," which even if successful would be out of phase with OVERLORD.

[6] SS 90, 8 Aug 43.

[7] (1) Quotation is from Brooke's comments at 108th mtg CCS, 15 Aug 43. (2) Min, 1st Plenary Mtg, QUADRANT, 19 Aug 43. (3) Min, 105th mtg JCS, 16 Aug 43. (4) Min, 71st mtg CPS, 13 Aug 43. (5) Churchill, *Closing the Ring*, p. 85. (6) Bryant, *Turn of the Tide*, pp. 575, 578–80.

[8] Bryant, *Turn of the Tide*, p. 577.

By early August they had decided not to press Turkey to intervene for the present, but merely to "adjust" her neutrality somewhat in the Allies' favor. As prospects for Turkish intervention dimmed, British preparations to move into the Dodecanese in order to open the sea route to Smyrna were for the most part suspended, although Churchill still clung to the hope that a bloodless occupation of Rhodes might be brought about if the Italian garrison could be induced to defect; as far as the British planners were concerned, however, any incursion into the Dodecanese was regarded as "no longer urgent."[9]

The focus of British interests in the Mediterranean seemed, indeed, to have shifted westward.[10] Without advocating a major effort to drive the Germans farther north than any line where they might choose to make a stand, the British did raise for discussion early in the conference the advantages of an advance to the Milan-Turin area in order to secure air bases for bombing central Germany and to open an overland route into southern France. A similar proposal had been put forward some weeks earlier by General Arnold. Late reports from the theater indicated, however, that the Germans might dig in as far south as the southern face of the Apennines, and the idea was not pressed. On 17 August Churchill laid it to rest in a paper prepared at the conference:

> Although I have frequently spoken of the line of the Po or of the Alps as being desirable objectives for us this year in Italy, it is not possible to see so far at present. A very great advantage will have been gained if we stop at the Leghorn-Ancona line. We should thus avoid the danger . . . of the immense broadening of the front which will take place as soon as that line has been passed. . . . From such a position we could by air supply a fomented rising in Savoy and the French Alps . . . and at the same time with our right hand we could act across the Adriatic to stimulate the Patriot activities in the Balkan peninsula.

The guiding thought in all this, he pointedly added, was that "the integrity of OVERLORD shall not be marred."[11]

In airing the possibility of an overland advance from Italy into southern France, Brooke reflected British misgivings over American proposals for an amphibious assault in that area. The British planners quickly concluded that neither the forces nor the assault lift prospectively available for this venture would be adequate. In a curious reversal of the situation at TRIDENT, when the Americans had underestimated British-controlled forces in the Mediterranean, they now overestimated them. Against an American estimate of 28, the British planners indicated only 22 organized British divisions would be in the theater, and only 19 (instead of 24) effective

[9] (1) Min, 71st mtg CPS, 13 Aug 43. (2) JP(43)221 (Final), Rpt by Br JPS, 12 Jul 43, Mediterranean Strategy, ABC 384 Med (26 Oct 43) Sec 1-A. (3) Memo, JPS for JCS, 16 Aug 43, ABC 381 Europe (5 Aug 43). (4) Churchill, *Closing the Ring*, pp. 203–04. (5) John Ehrman, "History of the Second World War, United Kingdom Military Series," *Grand Strategy, August 1943–September 1944*, V (hereafter cited as *Grand Strategy V*) (London: Her Majesty's Stationery Office, 1956), 80–81, 88–92, 112.

[10] See Ehrman, *Grand Strategy V*, 112.

[11] (1) Churchill, *Closing the Ring*, p. 83; see also comments at 1st Citadel Mtg, QUADRANT, 19 Aug 43. (2) Msg W-7445/173, FREEDOM to BOSCO, 15 Aug 43, Annex A to min, 105th mtg JCS, 16 Aug 43. (3) JS (Q)16, 14 Aug 43, title: Comments by British JPS on CCS 303. (4) Memo, JPS for JCS, 16 Aug 43. (3) and (4) in ABC 381 Europe (5 Aug 43). (5) Matloff, *Strategic Planning, 1943–44*, p. 155. (6) Min, 108th mtg CCS, 15 Aug 43.

Allied divisions would be available for operations in northern Italy and southern France after withdrawal of the 7 OVERLORD divisions and provision of rear-area forces. The British regarded these forces as insufficient to hold a defensive line in Italy while executing an independent amphibious operation in southern France, especially if the latter were not supported by an overland movement. As for assault shipping, the British planners were quick to perceive the contradictions in the JCS-endorsed calculation of a 2-division residual lift in the Mediterranean; their own estimates indicated a lift of less than one division, badly unbalanced at that. "We consider," the British planners asserted, "that nothing less than a corps of three divisions would be sufficient for an amphibious operation against southern France," and with this verdict General Eisenhower's representatives at the conference agreed. In the Mediterranean, in short, the British urged a strategy of concentration on the campaign in Italy.[12]

Accepting the general pattern of the American pincers strategy, the British nevertheless flatly rejected the "overriding-priority" proviso for OVERLORD and, to a degree the Americans found disturbing, emphasized the conditions stipulated in the plan for undertaking the operation. They argued that whether these conditions could be met would depend very largely on what was done in the Mediterranean during the next nine months, and that it would therefore be unwise to decide irrevocably in advance that any competition for resources between operations now in progress in the Mediterranean and preparations for OVERLORD must be resolved in favor of the latter. Each case should be decided on its merits as it arose. The British saw no contradiction between making OVERLORD the main effort in 1944 and leaving the door open meanwhile to an adequate provision for Mediterranean operations during 1943. As for the projected 7-division transfer from the Mediterranean, they held that judgment should be suspended until German intentions became clearer, leaving open the alternatives of shipping fresh divisions to the Mediterranean or to England.[13]

In general, however, the British declaration of support for OVERLORD and their conservative views on Mediterranean strategy left no major issue of European strategy to be debated except that of overriding priority for OVERLORD. For this formula the British proposed to substitute a statement to the effect that the CCS might at any time "readjust" allocations between OVERLORD and the Mediterranean as the situation demanded.[14] Admiral Leahy thought the proposal reasonable enough, but his colleagues disagreed. British rejection of the "overriding priority" formula seemed, indeed, to bring to a head the distrust of British intentions regarding OVERLORD, and this distrust was fanned by the emphasis the British placed on the conditions for undertak-

[12] (1) JS(Q)16, 14 Aug 43. (2) Min, 71st mtg CPS, 13 Aug 43. (3) Min, 116th mtg CCS, 24 Aug 43. (4) The force estimates included 9 U.S. and 5 French divisions, with perhaps 6 more French divisions to be available in spring of 1944.

[13] (1) Min, 108th mtg CCS, 15 Aug 43. (2) Min, 1st Citadel Mtg, QUADRANT, 19 Aug 43.

[14] Min, 108th mtg CCS, 15 Aug 43.

ing the operation, their interest in northern Italy, and their unwillingness to accept the pending 7-division transfer as a settled matter. Admiral King suspected that what the British had in mind was to "create an emergency" to justify retention and even reinforcement of the seven divisions. Although ostensibly supporting OVERLORD, King charged, they were really seeking to "depreciate" and "emasculate" the operation by emphasizing the dangers and difficulties, with a view to getting it postponed and at last abandoned altogether. In King's opinion, unless the British could be forced into unequivocal support of OVERLORD, the United States should shift its main effort to the Pacific—a strategy that at least "we could reasonably expect would be carried out."[15]

On the second day of the conference General Marshall expounded the American view that without an overriding priority OVERLORD would inevitably decline to the status of a subsidiary effort as its resources were nibbled away by successive *ad hoc* redeployments and reallocations. Apart from their effect on OVERLORD, these would be enormously disruptive and would have repercussions "as far back as the Mississippi River." On 16 August the JCS nailed their colors to the mast in a formal paper restating their demand "for a decision now as to whether our main effort in the European Theater is to be in the Mediterranean or from the U.K." They again insisted that this decision must take the form of a reaffirmation of the Allies' intention to carry out OVERLORD with a definite allocation of resources and an overriding priority over other operations in Europe. They added a warning:

> The U.S. Chiefs believe that acceptance of this decision must be without conditions and without mental reservation. They accept the fact that a grave emergency will always call for appropriate action to meet it. However, the long-range decisions for the conduct of the war must not be dominated by possible eventualities.[16]

Since the British were already on record as favoring OVERLORD as the main Allied effort in Europe, and conversely had shown no signs of weakening in their stand on "overriding priority," this pronouncement was hardly calculated to advance the debate. The JCS were, in fact, not hopeful. On the day they submitted their manifesto, they sent its author, General Handy, posthaste to Washington to inform the President, who had not yet departed for Quebec, that they and the British had reached an impasse on the OVERLORD issue.[17]

Whether by some indication of the President's attitude or not, the impasse was broken in two closed CCS meetings on the day Roosevelt arrived at Quebec, 17 August.[18] In the main, the British won their point. The CCS agreed that OVERLORD with a 1 May 1944 target date should be the "primary U.S.-British ground and air effort against the Axis in Europe," a principle the British had agreed to from the start. They also ap-

[15] Min, 104th mtg JCS, 15 Aug 43.

[16] (1) CCS 303/1, 16 Aug 43, memo by U.S. CsofS, Strategic Concept for the Defeat of the Axis in Europe. (2) Min, 108th mtg CCS, 15 Aug 43. (3) Min, 104th mtg JCS, 14 Aug 43; 105th mtg, 16 Aug 43. (4) Memo, JPS for JCS, 16 Aug 43, ABC 381 Europe (5 Aug 43).

[17] (1) Memo, 16 Aug 43, in OPD Exec 10, Item 51. (2) Matloff, *Strategic Planning, 1943–44*, note 26, p. 223.

[18] See Bryant, *Turn of the Tide*, pp. 579, 581.

proved the outline OVERLORD plan with the conditions intact and instructed General Morgan to proceed with detailed plans and full preparations. The U.S. Chiefs accepted as a substitute for "overriding priority," a clause providing that, if OVERLORD's requirements should compete with those of the Mediterranean, available resources should be "distributed and employed with the main object of insuring the success of OVERLORD." They also accepted the original British condition that Mediterranean operations should be carried out with the forces allotted at TRIDENT, "except insofar as these may be varied by decision of the Combined Chiefs of Staff."[19] These conditions covered the disputed case of the seven divisions, though the assumption remained, for deployment planning, that they would move to England as scheduled.

With the central issues disposed of, there was little difficulty in agreeing on a specific program of operations in the Mediterranean. The program followed the proposals in the original American paper, except for the invasion of southern France, concerning which some concession was made to British reservations. For Italy it was agreed that after the anticipated surrender of the existing government the Allies would proceed with the occupation of air bases in the Rome area and "if feasible" farther north; occupation of Sardinia and Corsica (largely by infiltration and subversion); and thereafter pressure on the Germans in the north in support of OVERLORD. The agreement on the southern France operation was studiously vague. Operations in Italy, it was hoped, might somehow create a situation favorable for "eventual" entry of Allied forces into the south of France, including eleven French divisions to be rearmed in North Africa. General Eisenhower was directed to submit to the CCS by 1 November an outline plan for landings in the Toulon-Marseille area in connection with OVERLORD, using only resources then allotted to the Mediterranean. Only minor commando raids, bombing from the air, and supply of guerrilla forces were scheduled for the Balkans. It was agreed that the time was not ripe for Turkish intervention; for the present the Turks would be supplied on a modest scale and urged to sit tight and remain benevolently neutral. Nothing was said about operations in the Aegean.[20]

The conferees also agreed that the strategic bombing offensive against Germany "from all convenient bases" was an indispensable prerequisite to OVERLORD and, as at TRIDENT, gave it "highest strategic priority." They approved, in addition, a series of plans (RANKIN) prepared by the COSSAC staff for an earlier return to the Continent in the event of a collapse or marked weakening of Germany's defenses in the west, thus imposing on the OVERLORD build-up program the necessity of ensuring that, at least from early 1944 on, balanced forces would be on hand in the British Isles ready to move across the Channel on short notice. Finally, as a highly theoretical alternative to OVERLORD, the con-

[19] CCS 303/3, 17 Aug 44, resolutions by CCS, title: Strategic Concept for the Defeat of the Axis in Europe.

[20] (1) *Ibid.* (2) CCS 319/5, 24 Aug 43, title: Final Rpt to President and Prime Minister. (3) CCS 328/1, 27 Aug 43, title: Directive to General Eisenhower.

ference left on the books Churchill's long-cherished project for an invasion of Norway.[21]

In estimating the availability of ground forces for the two European theaters, the final figures adopted at the conference provided for 19 U.S. and 17 British divisions in the United Kingdom for a 1 May 1944 OVERLORD of which all but 5 U.S. divisions would be available for operations. British figures formed the basis for final QUADRANT estimates that 29 divisions would remain in the Mediterranean after the withdrawal of 7 for OVERLORD, and that 20 of them would be available for operations on 1 November 1943. Two additional French divisions over and above garrison requirements were expected by 1 June 1944.[22]

"To my great relief," Sir Alan Brooke wrote in his diary on the 17th, after the decisive CCS meeting, "they accepted our proposals for the European theatre, so that all our arguing has borne fruit and we have obtained quite fair results." Yet on the day before the conference ended he wrote: "We have not really arrived at the best strategy, but I suppose that when working with allies, compromises, with all their evils, become inevitable."[23] It is not without significance that the War Department planners, who had so ardently sought an "overriding priority" for OVERLORD at Quebec, looked back on the conference with a similar mixture of satisfaction and disappointment.[24]

[21] (1) CCS 319/5, 24 Aug 43. (2) CCS 320, 20 Aug 43, title: RANKIN.

[22] CCS 329/2, 26 Aug 43, title: Implementation of Assumed Basic Undertakings and Specific Opns for Conduct of the War, 1943–44, Annex II.

[23] Bryant, *Turn of the Tide*, pp. 581, 586.

[24] See Matloff, *Strategic Planning, 1943–44*, p. 242.

Assault Shipping for Two Wars

As far as OVERLORD was concerned, the British had apparently come to Quebec prepared to debate not its primacy but the adequacy of the assault and immediate build-up as set forth in the outline plan. To them the question of priority between OVERLORD and the Mediterranean seemed of less moment than the scale of the proposed OVERLORD assault, which they regarded as a dangerous weakness in the plan. This feeling lay behind their stress on the conditions of OVERLORD, and led them to consider the invasion of southern France an unwelcome new claimant for the inadequate amphibious resources allotted to the European war.[25] On 12 August the British had invited General Morgan to prepare a detailed report on the shortage of landing craft and other naval resources for the operation. The study was not completed until long after QUADRANT, so that the British were not able to present a detailed case at the conference. They did, nevertheless, raise the question of the adequacy of OVERLORD's allotted assault lift, only to meet with determined resistance by the Americans against any attempts to raise it above the figures agreed to at TRIDENT.

On 18 August the British Chiefs called attention to the developing shortage of LCT's for OVERLORD resulting from the diversion of 44 of them to net protection duties at Scapa Flow and the need to convert many more to gun support craft. They asked for an increase in American production to meet the deficit. In the CCS meeting on 18 August Admiral King cautiously informed them

[25] CCS 304, 10 Aug 43, Opn OVERLORD, Outline Plan, Covering Note by Br COS.

that preliminary reports from Washington indicated some possibility of an increase of 25 percent in landing craft production across the board. But two days later in an official reply to the British request the JCS bluntly stated they could not increase their existing commitment of 146 LCT's because any acceleration in production would not be felt before April 1944. OVERLORD's deficiencies in vehicle lift would have to be made good "from the Mediterranean," unless, the statement continued, some of the broken-down LCT's already in the United Kingdom could be put into serviceable condition.[26] In the same way, the Americans showed no inclination to provide for production of gun support craft, the demands for which were encroaching more and more on the available supply of LCT's.[27]

On 20 August the British raised the question of the supply of DUKW's, citing doubled requirements for OVERLORD "to mitigate the great problems involved in prolonged maintenance over the beaches under difficult conditions." They asked that the Americans examine the possibility of increasing production as a matter of urgency, that the CCS accept the principle that "priority of allocations of production be given to OVERLORD," and that allocations for OVERLORD be made concurrently for American and British needs in a ratio to be stated by General Morgan. The Americans were in fact already exploring the question of increasing DUKW production, but they were by no means ready to adopt the priority or the system the British urged. Admiral Cooke pointedly remarked that the overriding priority for OVERLORD applied only to Europe, "not throughout the world." General Somervell complained that the British seemed to "wish us to turn DUKW's over to them in lavish fashion," citing the fact that they proposed to use 280 per 60,000 troops in unloading operations whereas the Americans would use but 100.[28] The CCS finally decided to defer the matter. Eventually it was settled within the munitions assignments committees, which continued to assign DUKW's as before—by country and theater on the basis of priorities that were by no means exclusive. Without fanfare, meanwhile, in the fall of 1943 production of DUKW's was substantially increased.[29]

The British Prime Minister, in full conclave on 19 August, brought the whole issue to a head by proposing that the OVERLORD assault be strengthened by at least 25 percent and that it include a right flank landing on the east Cotentin beaches to insure a stronger initial lodgment. In the eight or nine months remaining before D-day, he suggested, it should be possible somehow to obtain the additional assault lift needed. The American response was guarded and unenthusiastic. General Marshall emphasized that "the shortage of landing craft

[26] (1) CCS 314/3, 20 Aug 43, memo by U.S. CsofS, title: Allocation of Ldg Cft (Opn OVERLORD—Vehicle Lift). (2) CCS 314, 18 Aug 43, memo by Br COS, same title. (3) Min, 111th mtg CCS, 18 Aug 43.

[27] (1) See above, ch. VII. (2) Memo, Head of Navy Branch (British), 2 Sep 43, sub: Provision of Support Cft, with related corresp in SHAEF SGS 560, I.

[28] (1) CCS 326, 21 Aug 43, memo by Br COS, title: Amphibians for OVERLORD. (2) Min, 111th mtg JCS, 23 Aug 43.

[29] (1) Min, 115th mtg CCS, 23 Aug 43. (2) Min, WD Conf Gp on Amphibious Vehicles, 11 Oct 43 and 13 Mar 44, folder 451.94 Amphib Vehs, ASF Plng Div. (3) Memo, Gen Somervell for Lt Gen Sir Thomas Riddell-Webster, 23 Aug 43. (4) Msg, Clay to Somervell, 21 Aug 43. Last two in folder British, Hq ASF.

places the greatest limitation on all our operations," but Admiral King assured the Prime Minister that prospects were excellent for having more landing craft available than previously anticipated.[30] In their own councils, General Barker reminded the U.S. Chiefs that the COSSAC planners were dubious of the merits of widening the assault, and that it was the follow-up elements that needed to be strengthened, not the D-day assault forces, which were already stronger than the three divisions prescribed at TRIDENT. Admiral King ventured to hope that the Prime Minister had failed to grasp this point, but when General Marshall tactfully intimated as much at the next plenary meeting, Churchill made it clear that he wanted separate landings on the Cotentin anyway. Marshall assured him the matter would be looked into. Roosevelt made no comment, and the JCS received no instructions to explore the question.[31] The Combined Planners meanwhile went on to agree on allocations of U.S. landing craft for OVERLORD, which were, in all essential respects, the same as those set at TRIDENT for ROUNDHAMMER.

The key to these tactics in large measure lay in American concern lest an increase in the OVERLORD allotment prevent an acceleration of Pacific operations. American plans for the war in the Pacific, had matured considerably since TRIDENT. Operation CARTWHEEL, the converging drive on Rabaul from the South and Southwest Pacific was now well under way, and in the Central Pacific Admiral Chester W. Nimitz was preparing to launch a parallel offensive with an attack on the Gilbert Islands in mid-November. A tentative timetable of operations presented at Quebec called for bringing these converging lines of advance to points just short of the Philippines by the end of 1944 in phase with the reconquest of Burma and the overland advance through China to the coast.[32]

The American delegation brought to Quebec only "broad estimates" of the assault shipping required in Pacific operations. From them it appeared that requirements through mid-1944 could be met in most categories, but only on the premise that OVERLORD allocations would not be increased.[33] The lack of specific requirements for the Pacific reflected the opportunism inherent in the strategy for that area. To exploit opportunities as they arose, large numbers of all types of vessels would obviously be needed. To reach the China coast or the mainland of Japan in this oceanic theater would require a series of amphibious operations rapidly succeeding one another. For most of the contemplated operations, all attacking forces—assault, follow-up, and build-up—would have to be ferried to the target area in one trip. Distance precluded the incremental shuttling of forces from bases to target areas in the same assault shipping, or the repair of badly damaged vessels for use in later stages of the same operation. Huge distances were also involved in in-transit movements between operations, particularly from one theater to another.

[30] Min, 1st Plenary Mtg, QUADRANT, 19 Aug 43.

[31] (1) Min, 110th mtg JCS, 21 Aug 43. (2) Min, 2d Plenary Mtg, QUADRANT, 21 Aug 43.

[32] Pacific strategy is treated separately in greater detail in Chapter XVI, below.

[33] CCS 329/2, 26 Aug 43, Annex V.

In the South and Southwest Pacific up to this time, amphibious lift had been grossly inadequate. In SWPA, for instance, General MacArthur had to rely mainly on smaller types of vessels manned by Engineer special brigades—LCM's and LCVP's—and a miscellaneous collection of ordinary small craft and merchant vessels. For longer hops along the New Guinea coast and the island chain of the Solomons, the demand for larger landing craft and ships would certainly mushroom. Meanwhile, a major new requirement was emerging in the Central Pacific where the Navy was to commit most of its expanding fleet. In that vast theater, now favored by the JCS as offering prospects for a more rapid advance than the south, would take place most of the long transoceanic amphibious leaps by fully equipped assault forces simultaneously afloat. The basic carriers would be assault transports (APA's) and assault cargo ships (AKA's), with their complementary small craft and vehicles, especially amphibious tractors. These operations would, however, also require a large fleet of LST's and LCT's, the vessels most needed in Mediterranean and English Channel operations.

The timetable the JCS brought to Quebec did not fully reflect their real long-range strategic goals. The Combined Staff Planners, acting on instructions of the CCS at TRIDENT, had long been working on an outline plan for the ultimate defeat of Japan. The first plan submitted provided for a three-pronged advance toward the China coast—from the Pacific, overland through China, and by sea around Malaya. It contemplated a prolongation of the war with Japan until 1947 or 1948, even assuming Germany's defeat in 1944. At QUADRANT the U.S. planners took the position that Japan must be defeated within twelve months after the surrender of Germany. The British planners, while agreeing that some acceleration might be possible, would not accept the twelve-months' target, which they said involved "an entirely new concept of operations."[34]

The U.S. staff, nevertheless, began immediately to explore the possibility of achieving the one-year goal. The search began with a plan to project very long range (VLR) bombers — B–29's — into China before the opening of a land supply line and led eventually to a marked acceleration of the American advance through the Pacific islands with the aim, among others, of basing the VLR bombers in the Marianas. While this outcome was not yet foreseen at Quebec, the American staffs, especially the Navy members, began to think in terms of amphibious resources that would be needed for an accelerated Pacific advance. They had to reckon with the probability, suggested by the prolonged tie-up of assault shipping in Sicilian waters, that the shipping used in OVERLORD would not be quickly released for redeployment to the Pacific, TRIDENT assumptions notwithstanding. The estimated date for releasing OVERLORD shipping was now moved back from the TRIDENT prediction of one month to four months after OVERLORD—almost certainly too late for any of it to be used in the Pacific during 1944.[35]

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[34] CCS 313, 18 Aug 43, title: Appreciation and Plan for the Defeat of Japan.

[35] (1) CCS 239/1, 23 May 43. (2) CCS 329/2, 26 Aug 43, Annex V.

The Navy was, in fact, already planning to enlarge its assault shipping construction programs with a view to supporting an intensification of the Pacific war long before the defeat of Germany, building up to a massive offensive almost immediately thereafter. The Quebec Conference was, in a sense, almost incidental to this development, the day-to-day course of which occasionally produced faint echoes in staff discussions at the conference. The Navy's latest (1 August 1943) production schedules were the basis of the conference discussions of U.S. landing ships and craft. These schedules envisaged increased production of LST's, LCI (L) 's, and LCT's, but mainly in 1944, too late to provide any sizable increment for OVERLORD. Planned monthly production rates for LST's were to be boosted from 12 to at least 20, and for LCI (L) 's from 20 to 25, during the first six months of 1944 (actually an extension of the 1943 rate into that period). Owing to the changeover from the LCT (5) to the improved LCT (6) no LCT's had been produced in the United States between January and August. The Navy now proposed to increase the planned production of the new type in the period October 1943–May 1944 from 200 to 300, but the largest part of the increase would not come until 1944. Even the 105 LCT's promised for OVERLORD at TRIDENT, the Navy said, could not be moved in time to meet the readiness dates proposed by COSSAC—a result of the production stoppage caused by the changeover. The allocation schedules the Americans brought to QUADRANT, based on the new production schedule, assigned to the Pacific the entire expected increase in all types while holding Atlantic allocations to those agreed to at TRIDENT.[36]

On the first day of the conference, before the British had even raised the question of landing craft production, Admiral King had telephoned instructions to the Navy Department in Washington to look into the possibility of a further increase. An accompanying message to the War Department rather tortuously explained:

> Reason for this is that the availability of landing craft and landing ships is resulting in tight situation relative to carrying out vital planned operations unless furtherance of war in Pacific is to deteriorate.[37]

King's "reason" was ample evidence of the dilemma in which the Americans found themselves in the face of British pressure to strengthen the OVERLORD assault. Unless landing craft production could be accelerated immediately to increase significantly the number of LST's, LCT's, and LSI (L) 's coming off the ways in the closing months of 1943 and the early months of 1944, the only source of additional craft for OVERLORD would be Pacific allocations. King clearly was not prepared to slow down or dilute his Pacific program in order to provide more lift for OVERLORD, particularly in the light of his oft-stated conviction that the British would probably contrive, in one way or another, to prevent its execution. Nor were the naval authorities willing to embark on another accelerat-

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[36] (1) Mowry, Landing Craft and the War Production Board, pp. 28, 33. (2) See above, ch. III, for TRIDENT allocations. (3) JPS 228/1, 2 Aug 43, appendixes. (4) CCS 329/2, 26 Aug 43, Annex V, app. B.

[37] (1) Msg No. 16 for Gen Gross, unsigned, 14 Aug 43 (rec'd as CM-IN 10723, 15 Aug 43), OPD Exec 5, Item 11. (2) For the sequel to this inquiry, see below, Chapter X.

ed program of production to meet the needs of both the European and the Pacific war if it meant disrupting other vital building programs. On 17 August King received his reply from the Navy's Bureau of Ships in Washington to the effect that not merely a 25 percent but a 35 percent increase in landing craft production was possible. To realize it before April 1944, however, would involve disruption of other programs.[38] An increase at so late a date promised few additional craft for OVERLORD, particularly in view of the accelerated arrival schedules COSSAC was then demanding. On the other hand, it would add immensely to amphibious resources available for acceleration of Pacific operations. These circumstances probably explain the contrast between King's studiously vague promises of an increase in landing craft production in the meetings with the heads of state and the concurrent insistence of the Americans in the planners' meetings on holding the line against further allocation of craft for OVERLORD.

At Quebec the British tried again, and for the last time, to challenge the American determination to pursue an aggressive multifront strategy in the Pacific. Would it not be less costly, Sir Alan Brooke inquired early in the conference, to make the main effort against Japan along the Central Pacific axis, with only a subsidiary effort in the southwest, and thus release resources for OVERLORD? Admiral King promptly rejoined that both lines of advance were "complementary and equally essential," but that, in any case, whatever resources could be released from the Southwest Pacific would go to the Central Pacific, not to Europe. General Marshall attempted to soften somewhat the implications of this stand by pointing out that operations in the Southwest Pacific were not, in the main, employing types of amphibious equipment most needed in the Central Pacific and in Europe. Furthermore, he added, the commitment to the Southwest Pacific had already gone so far that a radical shift of emphasis was no longer practicable. The British decided to let the matter drop, leaving unsaid their private convictions that in the Pacific the Americans were making a virtue of the strategy of dispersion they rejected in Europe.[39] The American program of operations in the Pacific was approved with only perfunctory discussion, and the long-range plan was sent back to the CPS for further study in light of the American determination to defeat Japan within twelve months after the end of the war in Europe.[40]

Meanwhile, as usual, the principal debate on the war against Japan was revolving around the future course of operations in the Far East. The U.S. staff successfully resisted Churchill's renewed pleas for his Sumatra project, a long amphibious leap to the southeast that would have required considerably more assault transports than the currently

[38] (1) Memo, Chief BuShips for VCNO, 17 Aug 43, sub: Additional Ldg Cft Programs, app. A to JCS 462, 30 Aug 43, title: Landing Ships and Craft, Means of Increasing U.S. Production. (2) For a more complete discussion, see below, Chapter X.

[39] (1) Min, 110th mtg CCS, 17 Aug 43. (2) Bryant, *Turn of the Tide*, p. 576.

[40] (1) Min, 114th mtg CCS, 24 Aug 43. (2) Min, 113th mtg CCS, 20 Aug 43. (3) CCS 313/1, memo by U.S. CsofS, 20 Aug 43, title: Appreciation and Plan for the Defeat of Japan.

planned Akyab-Ramree landings. The British Chiefs themselves had no enthusiasm for Churchill's project, but neither they nor he were willing to commit themselves to the Akyab-Ramree venture nor to the full-scale campaign in southern Burma to which it would serve as prelude. The Americans had to settle for a Southeast Asia program that was, in effect, simply a reiteration of the TRIDENT decisions, but with the priority between the land offensive in north Burma and the air effort in Burma and China implicitly if not explicitly reversed.[41] As for amphibious operations, the CCS agreed simply that preparations should continue for landings in the spring of 1944 "of the order of those contemplated for . . . Akyab and Ramree." In consonance with this decision the British agreed to send to India the 6 LSI (L)'s and 8 LST's they had recently retained in the Mediterranean under the "stand fast" order, and as already noted, the JCS refused Eisenhower the temporary use of the 10 U.S. LST's and 10 LCT's that were also earmarked for movement to India.[42]

The CCS also ratified the allocations of American assault shipping that the JCS had worked out before the conference. From August 1943 through March 1944 all the assault transports, about 55 percent of the LST's, 60 percent of the LCI (L)'s, and 45 percent of the LCT's expected to be built in the United States were to be assigned to the Pacific. For all types except LCT's these allocations would increase the percentage of total U.S. active-theater assault shipping deployed against Japan on the eve of the cross-Channel invasion—from 67 to 73 percent for the assault transports, from 51 to 52 percent for LST's, from 41 to 54 percent for LCI (L)'s. (*Tables 14 and 15*) The schedules took no account of the proposed increases in production that presumably would also accrue to the benefit of the Pacific.

These figures were not, of course, the whole picture. As long as British-controlled assault shipping remained concentrated in European waters, a preponderance of Allied assault lift—in large landing craft, at least—would remain deployed against the European Axis. Distances and other conditions peculiar to the Pacific war also to some degree invalidated the significance of any purely arithmetical analysis of the division of amphibious shipping between the two main sectors of the global war. Nevertheless, there was real paradox and striking irony in the fact that, as the war in Europe approached its climax and the American military leaders' distrust of British loyalty to the OVERLORD strategy became increasingly vocal, these same leaders were resisting British urging to strengthen the OVERLORD assault while at the same time sending to the other side of the world the greater portion of the United States' immense assets in what was probably the most critical single branch of weaponry in the Allied arsenal—certainly the most critical limitation on the scale of the OVERLORD assault. Small wonder that the British became sceptical of American pretensions

[41] On this aspect of CBI strategy, see below, Chapter XXI.

[42] (1) CCS 329/2, 26 Aug 43, Annexes I and V. The British were to provide most of the lift: 9 LSI(L)'s, 1 LSC, 1 LSH, 1 LSI(H), 8 LST's, 12 LCI(L)'s, and 5 LCT's, besides numerous small craft. (2) See above, ch. VII.

TABLE 14—QUADRANT LANDING CRAFT (MAJOR TYPES ONLY)
ALLOCATIONS FROM U.S. PRODUCTION
SEPTEMBER 1943–MARCH 1944[a]

Type	Europe	Pacific-Far East	British	Training
LST				
As of 1 Sep 43	76	116	84	19
Sep 43–Mar 44	[b]62	76	0	2
LCI(L)				
As of 1 Sep 43	90	88	150	15
Sep 43–Mar 44	34	78	0	18
LCT				
As of 1 Sep 43	103	167	[d]160	49
Sep 43–Mar 44	[c]93	88	[d]2	61

[a] No losses considered.
[b] Includes 3 LST's to be taken from training if needed to meet TRIDENT commitment for OVERLORD.
[c] Includes 25 LCT's to be taken from training if needed to meet TRIDENT commitment for OVERLORD.
[d] Twelve LCT's included in total allocation to British to replace losses already incurred in transit.
Source: CCS 329/2, 26 Aug 43, title: Implementation of Assumed Basic Undertakings and Specific Operations for Conduct of the War, 1943-44, Annex V.

of fidelity to the "Germany-first" strategy.[43]

Although the JCS insisted that any OVERLORD deficit must be made up "from the Mediterranean," they clung to their original position that the surplus of landing craft over TRIDENT allocations resulting from light losses in Sicily and anticipated light loss rates in Italy should stay in the Mediterranean for the southern France operation. The British thought this surplus should be allotted to OVERLORD in accordance with the TRIDENT agreement. Since neither side would yield, they went their separate ways. The British increased the planned transfers of their own craft to the United Kingdom—48 LST's instead of the 38 agreed on at TRIDENT, 44 LCI (L)'s instead of 20, 75 LCT's instead of 18, 174 LCA's instead of 65, and 12 large gun support craft instead of 5. The Americans, despite the overriding priority formula, held to the transfers of their own craft stipulated at TRIDENT — 48 LST's, 24 LCI (L)'s, and 41 LCT's. (*Table 16*) Based on an agreed loss rate of 15 percent for landing ships and 30 percent for landing craft in post-HUSKY operations, these transfers would leave in the theater an estimated 3 LSI (L)'s, 26 LST's, 84 LCI (L)'s, 38 LCT's, and miscellaneous smaller craft—a meager and unbalanced lift for perhaps 27,000 troops and 1,500 vehicles, and hardly adequate to mount more than a threat against southern France. Its inadequacy was reflected in the studiously vague fin-

[43] (1) CCS 329/2, 26 Aug 43, Annex V. (2) The above figures on landing craft deployment do not include substantial numbers of U.S. craft intended for training in home waters, almost all of which, by late spring of 1944, could be considered as serving the Pacific war. Even so, the figure of "eleven twelfths" cited by Bryant in *Turn of the Tide*, p. 587, as the allotment of U.S. landing craft to the Pacific at the time of QUADRANT is obviously a great exaggeration and cannot be supported by the figures available to all the principals at Quebec.

TABLE 15—PLANNED DEPLOYMENT (MAJOR TYPES) OF U.S. ASSAULT SHIPPING AT QUADRANT[a]

Type	Europe	Pacific–Far East	Training
APA			
1 September 1943	10	24	0
1 May 1944	10	34	0
AKA			
1 September 1943	6	9	0
1 May 1944	6	10	0
LST			
1 September 1943	62	65	19
1 May 1944	105	114	18
LCI(L)			
1 September 1943	72	50	15
1 May 1944	78	92	38
LCT			
1 September 1943	71	77	49
1 May 1944	125	113	60

[a]All figures represent vessels estimated to be operational on dates shown. For planning purposes the following serviceability rates were used: LST's, 85 percent; LCI(L)'s, 80 percent; LCT's, 75 percent. No serviceability factor was used for assault transports nor for craft in training.

Source: CCS 329/2, 26 Aug 43, title: Implementation of Assumed Basic Undertakings and Specific Operations for Conduct of the War, 1943–44, Annex V.

al pronouncements of the conference on operations in this area.[44]

The Shipping Budgets

"One of the difficulties with this conference," observed Lewis Douglas as the Quebec meetings were drawing to a close, "is that it started with the misapprehension that there is a surplus of [dry cargo] shipping. . . . So we have been spending some time bringing the military face to face with reality."[45]

The optimism of the military was understandable. In the Atlantic the victory over the U-boat appeared to be complete, while the flood of new American shipbuilding continued each month to add between a million and a million and a half dead-weight tons, net, of new bottoms to the Allied merchant fleets. By conservative estimates, these fleets were expected to increase by almost five million dead-weight tons by the end of 1943, and by ten million by mid-1944. British merchant tonnage, which had

[44] (1) CCS 329/2, 26 Aug 43, Annex V, apps. A and B. (2) The QUADRANT schedules for assault shipping movements to the United Kingdom, in keeping with General Morgan's desires, rested "on the assumption that landing craft will be sent from the Mediterranean to OVERLORD so as to arrive by 15 December 1943, and assault ships by 1 March 1944." The British schedules provided for arrival of their craft some time in December, the American for arrival of theirs by 1 November. Landing ships and craft from American production were to move to England early in 1944, and all to be on station by 1 April. *Ibid.* (3) Min, 71st mtg CPS, 13 Aug 43. (4) Min, 116th mtg CCS, 24 Aug 43. (5) Churchill, *Closing the Ring*, p. 83. (6) JS (Q) 16, 14 Aug 43, Comments by Br JPS. (7) Msg, Brig J. F. M. Whiteley to Gen Smith, 15 Aug 43, OPD Exec 5, Item 11.

[45] Ltr, Douglas to Land, 21 Aug 43, folder Quebec (Douglas) 1943, WSA Conway File.

TABLE 16—PLANNED U.S. AND BRITISH CONTRIBUTIONS OF ASSAULT SHIPPING FOR OVERLORD—TRIDENT AND QUADRANT CONFERENCES[a]

	British						United States					
	LSI(L)		LSI(M)		LSI(S)		LSI(H)		LSH		APA	AKA[b]
Assault transports												
TRIDENT	14		3		4		17		2		[c]15	—
QUADRANT	14		4		5		17		3		[d]16	—
	LST		LCI(L)		LCT(3,4)		LCT(5,6)		LCA		LSVP	
	Br	U.S.	Br	U.S.	Br	U.S.	Br	U.S.	Br	U.S.	Br	U.S.
Landing ships and craft												
TRIDENT	[e]49	110	64	40	381	0	126	146	495	0	260	470
QUADRANT	[f]53	110	66	[g]58	475	0	142	146	412	0	—	—

[a] Vessels expected to be on hand 1 May 1944. No allowance for unserviceability.
[b] Includes 8 XAP's.
[c] Includes 6 XAP's.
[d] Not shown in source.
[e] Includes 8 LST's expected to return from India, following ANAKIM.
[f] ANAKIM LST's not expected to return in time for OVERLORD; 10 additional LST's, over TRIDENT commitment, included.
[g] Represents the net result of a cut in the number of LCI(L)'s to be turned over to the British for manning, and an increase in the number of British LCI(L)'s to be redeployed from the Mediterranean.

Source: (1) CCS 244/1, 25 May 43, title: Implementation of Assumed Basic Undertakings . . . , Annex V. (2) CCS 329/2, 26 Aug 43, title: Implementation of Assumed Basic Undertakings and Specific Operations for Conduct of the War, 1943–44, Annex V, app. A.

reached its lowest level of the war in March, was climbing again for the first time since 1941. The situation bore out the bright expectations embodied in the budgets prepared at TRIDENT when deficits had been labeled "not unmanageable." These deficits for 1943 had, in fact, dwindled almost to the vanishing point and those for 1944, it now appeared, would be replaced by fat surpluses. In short, cargo shipping was no longer the "stranglehold on all offensive operations" it had appeared to be seven, even five, months earlier.[46]

One by-product of this abundance, which military planning had to take into account, was an increasing imbalance between troop and cargo shipping. To rectify it, construction of troop transports and conversion of cargo ship hulls into troop carriers had been expanded —in the latter case to the point where, in the opinion of War Shipping Administration officials, the output of finished cargo vessels was being seriously jeopardized. WSA expected the shortage of troop lift to disappear before the middle of 1944, and feared that expanding military and war economy requirements would before long wipe out the expected surplus of cargo shipping. But on the eve of the Quebec Conference Army calculations showed a troop lift deficit of more than 300,000 spaces against the number of troops that available cargo shipping theoretically could be expected to support overseas by the end of 1943, and predicted that the deficit

[46] (1) On the TRIDENT estimates, see above, Chapter III. (2) JMTC Survey of U. S. Shpg, 13 Aug 43, folder Future Opns, Case 5, ASF Plng Div. (3) Behrens, *Merchant Shipping*, pp. 69, 328. (4) CCS 329/2, 26 Aug 43, Annex VII.

would be almost doubled a year later. This combination of anxiety over troop movement capabilities and complacency over the outlook for cargo shipping was among the presuppositions that the American military staffs brought to Quebec.[47]

As at TRIDENT, balancing the U.K. and U.S. shipping budgets was one of the last items of business at QUADRANT. The U.S. cargo shipping budget, in general, showed approximately the same volume of tonnage available for the various war services as did the TRIDENT budget, and anticipated little increase after the beginning of 1944—even though the total size of the merchant fleet would be rapidly expanding. Requirements, which at TRIDENT had been projected on a rising scale through the first few months of 1944, now were expected to decline after reaching a peak in the last quarter of 1943. Moreover, for the whole ten-month period covered, the budget forecast a reduction of almost 12 percent—757 sailings—in requirements projected at TRIDENT. (*Table 17*)

Cuts in military requirements accounted for only a small part of the reduction. Most of the cuts were in the BOLERO program and were largely dictated by shortages of dock labor in Great Britain and the anticipated swamping of British port and transit facilities during the weeks immediately preceding the Normandy invasion. Only small cuts were made in military requirements of other areas. The major portion of the reduction in TRIDENT requirements was in assistance to British shipping programs, a result in large part of the increase of about 800,000 dead-weight tons in cargo shipping under British control since TRIDENT. For United Kingdom imports, the U.S. shipping authorities budgeted a total of 872 sailings, representing the estimated equivalent of the deficit in the British budget which, as at TRIDENT, the Americans were asked to assume. Through the remainder of 1943 this assistance was scheduled at approximately the same level as at TRIDENT, but for the ensuing six months was scaled down by 172 sailings, a reduction also dictated by the traffic congestion anticipated during the mounting of OVERLORD. A more drastic reduction was made in the regular U.S. lend-lease shipping assistance to the British (known as "customaries") —from 478 to 117 sailings over the ten-month period from September 1943 through June 1944. U.S. assistance to British military programs, set at 108 cargo ship sailings at TRIDENT, was eliminated entirely.

Part of the ostensible reduction was fictitious. Soon after TRIDENT, under the President's order to transfer 15 to 20 new U.S. cargo ships per month to British control, 29 vessels had been turned over to the British on lend-lease bareboat charters, and 162 more were scheduled for delivery by mid-1944. This form of American assistance did not appear in the U.S. shipping budget except for the initial voyages of each ship. Since they would account for 192 additional sailings after transfer, this represented the extent to which the QUADRANT budget actually exaggerated the reduction.[48] (*Tables 17 and 18*)

Even so, the real reduction in U.S. help to Great Britain was substantial—

[47] (1) JMTC Survey, 13 Aug 43. (2) JCS 420, 22 Jul 43, ltr from WSA, title: Army and Navy Reqmts for Troop Transportation. (3) JCS 420/1, 9 Aug 43, rpt by JMTC, same title.

[48] See Behrens, *Merchant Shipping*, p. 385.

TABLE 17—U.S. CARGO SHIPPING BUDGET—QUADRANT CONFERENCE
(COMPARABLE ENTRIES IN TRIDENT SHIPPING BUDGET IN PARENTHESES)

	[a]1943				[a]1944			
	September		4th Quarter		1st Quarter		2d Quarter	
Requirements (sailings)[b]								
Maint of war-making capacity of Western Hemisphere	44	(44)	134	(134)	136	(134)	136	(134)
Maint of war-making capacity of British Empire								
U. K. Import Program[c]	75	(90)	[d]309	(300)	265	(330)	223	(330)
Regular lend-lease allocations	14	(37)	43	(111)	30	(150)	30	(180)
Ships, bareboat chartered	17	(0)	52	(0)	58	(0)	35	(0)
Lend-lease allocations other than British								
Russian	21	(15)	56	(54)	64	(54)	75	(54)
French	4	(0)	12	(0)	12	(0)	12	(0)
China defense	1	(0)	3	(0)	3	(0)	3	(0)
French rearmament	Included in Mediterranean requirements							
Economic support of occupied countries (Italy)	Not yet determinable; Italian tonnage available.							
Equipment for Turkey	Carried in British shipping							
Maintenance of prisoners of war	Included in Mediterranean requirements							
Military Operations, U.S. forces: support and maintenance								
Minor areas (Army)	24	(32)	72	(84)	62	(53)	60	(53)
Azores			0	(8)				
BOLERO-SICKLE (Army)[c]	78	(108)	298	(280)	365	(420)	332	(400)
Allocations to British					0	(25)		
Mediterranean (Army)	93	(65)	257	(258)	171	(193)	171	(123)
Allocations to British			0	(44)	0	(31)		
Central Pacific (Army)	12	(10)	46	(30)	46	(50)	57	(47)
South and Southwest Pacific (Army)	29	(52)	127	(163)	143	(153)	159	(190)
China-Burma-India (Army)	14	(16)	44	(52)	57	(34)	55	(51)
Alaska (Army)	31	(27)	93	(78)	70	(56)	69	(56)
Navy requirements	84	(80)	222	(235)	202	(249)	189	(219)
Total requirements	541	(576)	1,768	(1,831)	1,684	(2,022)	1,606	(1,927)
Total available	549	(549)	1,731	(1,762)	1,905	(1,900)	1,982	(2,050)
Balance	+8	(−27)	−37	(−69)	+221	(−122)	+376	(+123)

[a] TRIDENT figures shown here are arranged somewhat differently from those shown on page 850.

[b] Requirements included the British deficits and also 50 ships for operational use in Mediterranean for post-HUSKY, 80 ships after 1 April 1944 for OVERLORD, and 71 ships for use in Southwest Pacific.

[c] Each BOLERO cargo ship was to lift about 1,500 tons of British import cargo, and the equivalent of 12 shiploads of measurement cargo for BOLERO was to be lifted on ships carrying British imports.

[d] Includes 10 sailings in compensation for British ships employed in Mediterranean.

Source: (1) CCS 329/2, 26 Aug 43, title: Implementation of Assumed Basic Undertakings and Specific Operations for Conduct of the War, 1943–44, Annex VII, Part III. (2) Table, Summary of U.S. Shpg Reqmts, QUADRANT . . . OCT HB Plng Div Studies folder Misc Shpg Info, p. 92.

TABLE 18—U.S. SHIPPING FOR BRITISH PROGRAMS—QUADRANT AND TRIDENT BUDGETS
(In Sailings)

Category	Sep–Dec 43		1st Qtr 44		2d Qtr 44		Total	
	QUADRANT	TRIDENT	QUADRANT	TRIDENT	QUADRANT	TRIDENT	QUADRANT	TRIDENT
Total	513	582	397	536	433	510	1,343	1,628
Bareboat charters								
Deliveries	(69)	(0)	(58)	(0)	(35)	(0)	(162)	(0)
Sailings on 4-month turnaround	[a]72	0	102	0	180	0	354	0
U.K. imports	384	390	265	330	223	330	872	1,050
Regular lend-lease allocations	57	148	30	150	30	180	117	478
Military operations	0	44	0	56	0	0	0	100

[a] Assuming 29 bareboats already in service on 1 September.

Source: Compiled from CCS 329/2, 26 Aug 43, title: Implementation of Assumed Basic Undertakings and Specific Operations for Conduct of the War, 1943–44, Annex VII.

almost 18 percent of the aid scheduled at TRIDENT. It was tantamount to releasing, on an average three-month turnaround, some 855,000 dead-weight tons of shipping for American use out of the 4.9 million tons previously earmarked for British use. (*See Table 18.*) With British dependence on U.S. aid thus declining, and military requirements for the first time showing a tendency to level off, the military planners at Quebec might well be pardoned for regarding the future, as far as cargo shipping was concerned, with confidence.

The optimism of civilian shipping officials was more restrained. Lewis Douglas and Lord Leathers attached a caveat to the shipping budgets suggesting that they did not "reflect the real situation." War requirements, they charged, had not been "fully submitted," and they thought them unlikely to be lower during the first half of 1944 than in the last quarter of 1943.[49] Their misgivings were not without foundation. The military cargo shipping budget badly underestimated some requirements and omitted others. It did not fully reflect either the needs of an accelerated advance in the Pacific or the demands for operational shipping for intratheater use. In the latter category, the Americans assigned 50 cargo vessels for extended service in the Mediterranean and 80 to be retained in British waters from 1 April 1944 onward for OVERLORD; the British made somewhat larger allocations in terms of tonnage. The adequacy of these allocations was open to question. Moreover, there was no provision at all for retention of shipping in the Pacific where the demand was bound to be great—an omission dramatized during the conference by the arrival of a message from General MacArthur requesting permission to retain 71 WSA-controlled vessels in the Southwest Pacific for impending operations in New Guinea. The request was granted, but failed to get into the U.S. shipping budget. Also omitted were certain looming but unpredictable de-

[49] Comments by Mr. L. W. Douglas and Lord Leathers on the Dry Cargo Shipping Position, attached to CCS 329/2, 26 Aug 43, Annex VI, Part III.

mands for shipping to support civilian populations in occupied areas as well as developing requirements for old freighters to form a sunken breakwater off the Normandy beaches during OVERLORD. Hidden and omitted costs undoubtedly sufficed in the aggregate to transform the small indicated cut in military requirements into a net increase over those in the TRIDENT budget, lending some substance to the candid suspicions of the shipping officials.[50]

The anxiety of the U.S. military staffs focused, nevertheless, mainly on troop shipping. This preoccupation was a consequence both of deficits in personnel movements since April and of studies on the eve of the conference indicating a visible American troop lift capability from October through the following June of only about 1.6 million. Against this capability the staffs had approved deployment plans for adding more than 2.4 million to the existing overseas troop population during the same period. Three months after TRIDENT, the military staffs had not yet succeeded in "integrating" (the current euphemism for "reconciling") deployment plans with shipping capabilities, even though the JWPC and JMTC had directives, already more than two months old, to get together and do so.[51]

On the face of it, the figure of 1.6 million troops was a conservative estimate of the deployment capability over the next nine months of a transport fleet that already comprised 267,000 passenger spaces (not counting assault transports or other vessels permanently assigned to the military services) and that was expected to be augmented by another 150,000 spaces by mid-1944. Even if the real capacity of the U.S. transport fleet still fell short of the 2.4 million troops the JCS hoped to send overseas by the middle of 1944, it was backed up by the immense troop-carrying capacity of British shipping, which at the moment was even larger than the American and was expected to hold at about that level. By mid-1944 new American construction in all probability would bring the aggregate capacity of the two transport fleets to more than 700,000 spaces. On an average turnaround of two months, they could be expected to transport over the next ten months more than three million troops.[52]

Most of the British troop lift was now available to help their allies. By mid-1943 British overseas establishments for the most part were fully manned, and their projected deployments, compared to American, were quite modest. British plans for the future involved a total lift of 744,000 men, mostly replacements and limited reinforcements, to overseas stations from Gibraltar to India and Canadian troops across the Atlantic to the United Kingdom for OVERLORD. After meeting these commitments, the British were prepared to make available enough shipping to move 860,000 U.S. troops by mid-1944, mainly in the North Atlantic, to accelerate the long-delayed American build-up in the United King-

[50] (1) CCS 329/2, 26 Aug 43, Annex VII. (2) On Pacific shipping, see below, Chapter XIX; on civilian supply, see below, Chapters XXX and XXXI.

[51] (1) JPS 193/1, 15 Jul 43, title: Strategic Deployment of U.S. Forces to 1 Jul 44. (2) Memo, Secy JPS for Secy JWPC, 21 Jul 43, ABC 320.2 (3-13-43), Sec 1. (3) JMTC Survey of U.S. Shpg, 13 Aug 43, Tables III and IV.

[52] (1) CCS 329/2, 26 Aug 43, Annex VII, Part IV. (2) JMTC Survey, 13 Aug 43.

dom. QUADRANT schedules provided for a slow start in September, rapidly accelerating thereafter with monthly installments of 150,000 troops and upwards. The British proposed to increase the capacity of the *Queens* on the winter runs, to return them to the three-week cycle abandoned in the spring, and to furnish additional capacity in transports returned from other areas and in LSI (L)'s converted from American cargo ship hulls. All told, the British were prepared to make available enough transport to ferry some 625,000 U.S. troops to England from August 1943 to May 1944 and still more thereafter. With almost 700,000 men to be ferried in American transports, the total U.S. Army strength in Great Britain was scheduled to reach 814,300 by the end of 1943 and 1,416,900 by the end of April 1944—116,000 more than the TRIDENT final target. Moreover, the British offered to pick up in convoys returning from India one of the four U.S. divisions slated for redeployment from the Mediterranean to the United Kingdom, and they allotted some additional lift for U.S. movements to the Mediterranean and India and one fast transport for two trips in the Pacific.[53]

These arrangements appeared adequate to cover American troop deployment requirements on the Atlantic side. In the Pacific, where little British assistance was expected, the problem was somewhat different and a tight situation was in prospect during the period of preparation for the Central Pacific offensive. It was foreseen, however, that existing deficits would be overcome once the conversion program was completed, which, at the outside, should be by the second quarter of 1944. All in all, as the final QUADRANT report stated, the "heavy strain on troop transports" seemed likely to ease by 1 May 1944.[54] (*Table 19*)

Full provision of shipping for the BOLERO program now seemed assured. QUADRANT schedules provided for a tremendous movement of troops and cargo across the Atlantic, which from September 1943 on would dwarf all other overseas deployment programs. The chief limiting factor now in prospect was the capacity of British ports and internal transport to handle the load. Cargo shipment schedules spread the burden more evenly over the entire period than had been done at TRIDENT, accentuating again the importance of maximum advance shipment of supplies in the fall of 1943 to make up for the summer deficit and to avoid overloading British ports while OVERLORD was being mounted. Planned BOLERO cargo sailings on Army account for the fourth quarter of 1943 were slightly augmented—from 280 to 298—while those for the first and second quarter of 1944 were cut back from 420 and 400 to 365 and 332 respectively. TRIDENT provisions for an equivalent of 36 sailings per quarter in BOLERO measurement cargo on U.K. import ships and for shipment of 1,500 tons of U.K. im-

[53] (1) CCS 329/2, 26 Aug 43, Annex VII, Part IV. (2) Informal Notes on Mtg held at 5 p.m., Aug 18, 1943. (3) Memo, Douglas for Lord Leathers, 19 Aug 43. (4) Notes for Lord Leathers and Mr. Douglas . . . , 19 Aug 43. (5) Table, Employment of Troop Lift for U.S. Forces, 18 Aug 43. (2) through (5) in folder Quebec (Douglas) 1943, WSA Conway File. (6) Msg 32 W-17, CM-IN 12033, Stokes to CofT, ASF, 16 Aug 43, OPD Exec 5, Item 11.

[54] (1) CCS 329/2, 26 Aug 43, Annex VII, Part V. (2) For a fuller treatment of the Pacific problem see below, Chapter XVI.

TABLE 19—PLANNED U.S. TROOP MOVEMENTS (QUADRANT CONFERENCE) AUGUST 1943–JUNE 1944

Movement and Accumulated Strengths	Strength 1 Aug 43	Aug–Sep 43	4th Qtr 44	1st Qtr 44	Apr 44	May–Jun 44	Total
Total movements	1,732,500	421,900	921,650	940,850	333,050	455,400	3,072,850
Navy in Pacific	—	51,800	166,000	143,100	37,400	76,700	475,000
Army and Navy: minor areas	—	6,600	15,750	13,950	4,050	7,800	48,150
Army cumulative strength	261,300	249,600	247,500	240,900	238,700	234,300	234,300
BOLERO-SICKLE (Army)							
Replacements	—	10,300	29,500	68,500	20,000	50,000	178,300
U.S. to U.K.	—	115,800	370,500	411,700	190,000	158,000	1,246,000
Iceland to U.K.	—	16,000	—	—	—	—	16,000
North Africa to U.K.	—	—	90,000	—	—	—	90,000
Total	—	142,100	490,000	480,200	210,000	208,000	1,530,300
Army cumulative strength	222,000	353,800	814,300	1,226,000	1,416,900	1,574,900	1,574,900
(Divisions)	1	4	10	17	19	22	22
Mediterranean (Army and Navy)	—	79,500	34,700	37,800	8,500	17,000	177,500
Army cumulative strength	525,800	585,800	495,800	495,800	495,800	495,800	495,800
Central Pacific (Army)	—	27,900	41,900	64,700	20,600	49,800	204,900
Army cumulative strength	159,800	172,900	150,800	203,500	210,100	251,900	251,900
South and SW Pacific (Army)	—	52,600	138,000	171,000	44,000	88,000	493,600
Army cumulative strength	373,700	393,000	513,000	644,000	677,000	741,000	741,000
China-Burma-India (Army)	—	24,700	27,800	24,100	6,500	4,100	87,200
Army cumulative strength	50,100	73,600	99,600	121,600	127,400	130,100	130,100
Alaska (Army)	—	36,700	7,500	6,000	2,000	4,000	56,200
Army cumulative strength	139,800	154,800	145,800	142,800	142,800	142,800	142,800

Movements include replacements, except for BOLERO-SICKLE as indicated. Cumulative strength figures reflect net build-up present or en route. Table as a whole is based on estimated troopship capacity that allows for no unusual contingencies; that is, it represents optimum performance. Intra-area operating requirements are not allowed for. Navy movements are omitted from BOLERO-SICKLE figures.

Source: CCS 329/2, 26 Aug 43, title: Implementation of Assumed Basic Undertakings and Specific Operations for Conduct of the War, 1943-1944, Annex VII, Part IV, Table III.

port cargo on each BOLERO ship were carried forward.[55]

These decisions justified the action, already taken by ASF on 13 August, to extend the preshipment program to cover the new ETOUSA troop basis through April 1944. It remained to be seen whether the strategic planners were sufficiently convinced of British commitment to OVERLORD to give the program the high priority needed to release cargo up to the full capacity of shipping now available.

In conclusion, a certain imbalance in the QUADRANT allocations of assault and merchant shipping must be noted. For operations approved by the CCS and the heads of state at Quebec, allocations of assault shipping to the Pacific were far more generous than those to the Atlantic. On the other hand, QUADRANT plans for the use of ordinary troop and cargo shipping were more generous to the Atlantic theaters. In the war against Germany, from the end of the Quebec Conference until almost the end of 1944 shortages of merchant shipping were virtually nonexistent — indeed, something like a glut developed in mid-1944; whereas, by contrast, the shortage of assault lift was the crux of the problem of mounting OVERLORD and amphibious operations in the Mediterranean. If the shortage of ordinary personnel and cargo shipping in the Pacific never became quite so acute, it was largely because as shortages began to develop shipping authorities were able to divert some of the Atlantic surplus to that area. Similarly the U.S. Navy eventually revised, more or less unilaterally, some of the approved allocations of large landing vessels to the Pacific in order to make more adequate provision for OVERLORD and Mediterranean operations.[56] This curious asymmetry in initial allocations of resources to the two major sectors of the war resulted from the conflict between deep-seated national and service interests and proprietary attitudes which stubbornly resisted thoroughgoing pooling of resources and effort and yielded only to the pressure of extreme emergency. The conflict made logistical planning at all the wartime conferences something less tidy and more complex than a classic textbook exercise.

[55] (1) CCS 329/2, 26 Aug 43, Annex VII. (2) The figures of 298, 365, and 332 are derived by deducting Navy requirements from the total requirements for sailings to the United Kingdom on military account in each quarter. Navy requirements (10 in 3d quarter 1943 and 1st quarter 1944, 8 in the 2d quarter 1944) are shown in TC Summary, U.S. Cargo Shpg Reqmts . . . QUADRANT, in OCT HB File Plng Div Studies, Misc Shpg Info, though they are not shown separately in the QUADRANT budget itself. Compare Ruppenthal, *Logistical Support I*, 136–38, whose figures include the sailings on Navy account.

[56] On the Pacific shipping problem see below, Chapter XX. On diversions of landing craft from Pacific allocations to the European theaters, see below, Chapters X, XI, XIII.

CHAPTER IX

Bog-down in the Mediterranean

Underlying the QUADRANT decisions on operations in the Mediterranean was a belief that once the Allies had gained a firm foothold in Italy, the Germans would not seriously dispute their advance south of Rome but would withdraw to a defense line farther north. In August this was indeed the enemy's intention, but by October Hitler had changed his mind, and the Allies thus faced a long and bloody contest in southern Italy under conditions that strongly favored the defenders. As soon as Hitler's decision became apparent, the Allied high command was compelled to reappraise its own hopes and plans—in the process exacerbating Anglo-American differences over strategy and allocation of resources.

On 9 September 1943, as battle was joined at Salerno, Prime Minister Churchill made the most of a visit to Washington to lay before Roosevelt and the CCS his views on the "next steps" in the Mediterranean. He did not expect the Germans to make a prolonged defense of Rome. He anticipated that by the end of the year at the latest the Allied armies would come up against the main German positions north of the city. Beyond that point he believed, now as at Quebec, they should not go. He proposed instead that a fortified front should be established, manned in part by refurbished Italian divisions, releasing other Allied forces for action elsewhere "either to the west or to the east." Westward, as Admiral King later noted, Churchill seemed at the moment to see only Sardinia and Corsica. To the east he had his sights on the Dodecanese where he thought prompt action might provoke "far-reaching reactions" in Germany's Balkan satellites and even, possibly, the unsolicited intervention of Turkey. In the western Balkans Churchill also hoped to organize concerted action against the Germans by Italian and patriot forces. With their help, he boldly suggested, it might be possible "to open quite soon one or more good ports on the Dalmatian coast, enabling munitions and supplies to be sent in by ship and all forces that will obey our orders to be raised to good fighting condition." From these ports Allied forces released from Italy might later "emphasize a movement north and northeastward." Churchill disclaimed any thought that the Allies should "work from the bottom of the Balkans upwards." Nor was there any question, he assured the Americans, of "whittling down" OVERLORD, and he promised that the movement of the seven OVERLORD divisions from the Mediterranean would be carried out.[1]

[1] (1) Churchill, *Closing the Ring*, p. 136. (2) Matloff, *Strategic Planning, 1943–44*, pp. 250–51. (3) Min, special mtg JCS, 9 Sep 43.

The generally eastward orientation of Churchill's thinking and the specter of a land campaign in the Balkans alarmed the U.S. Chiefs and staffs—a reaction shared by the British Chiefs. Nevertheless, the general optimism concerning German intentions in the Mediterranean prevented serious dissent. The President himself reaffirmed his interest in possible action in the Adriatic area and agreed that whatever opportunities might offer in the Balkans should be seized. On 10 September the U.S. Chiefs cautiously endorsed the idea of using Dalmatian ports provided no Allied amphibious landings would be involved. They also approved current British plans for occupying some of the Dodecanese islands. Neither then nor later, however, did they give much support to Churchill's idea of arming Italian combat divisions, and they were of course no more inclined than earlier to contemplate any augmentation of resources already allotted to the Mediterranean.[2]

Build-up in Italy

For the moment no action was called for, and the roar of the Salerno battle drove long-range plans into the background. The ensuing victory insured the capture of Naples (1 October) and of the Foggia airfields on the other side of the peninsula, which were overrun on 25 September. Sardinia and Corsica fell to rearmed French forces as by-products of the mainland advance. By 26 September optimism was restored and Eisenhower ordered the capture of air bases in the Rome area as the next objective, with a subsequent advance to Arezzo, Leghorn, and Florence—all, hopefully, to be accomplished by the end of the year.[3]

Meanwhile, a new problem was emerging. At Quebec General Eisenhower's representatives had warned that, even if his forces could get ashore in Italy, success would depend on their ability to match the enemy's rate of build-up. Inherent advantage seemed to rest with the Germans, who would be fighting a defensive battle and would enjoy excellent rail communications from the north as far south as the Rome-Naples area. The Allies would have to rely on the scantier, more difficult roads and railroads of southern Italy and on ports that the Germans could be counted on to demolish with the same thoroughness as at Palermo. Superior Allied naval and air power and the hoped-for Italian resistance to the Germans could not wholly offset these disadvantages. A German withdrawal was far from a foregone conclusion, and the Quebec decisions on redeploying assault shipping would, if carried out, soon nullify the theater's ability to make flanking amphibious landings behind enemy lines.[4]

The theater's first estimates of the rate of the Allied build-up—twelve divisions by 1 December—were so pessimistic as to draw vehement protests from both Churchill and the British Chiefs. The

[2] (1) Matloff, *Strategic Planning, 1943–44*, pp. 250–51. (2) On arming of Italian divisions, see Chapter XXVIII, below. (3) Ehrman, *Grand Strategy V*, 151–52.

[3] (1) Blumenson, *Salerno to Cassino*, chs. III and IV. (2) Ehrman, *Grand Strategy V*, 67.

[4] (1) Msg 7205, Eisenhower to Marshall (eyes only), 13 Aug 43, OPD Exec 3, Item 5. (2) Eisenhower Dispatch, 3 Sep 43 to 8 Jan 44, pp. 1–7. (3) Msg W–7445/173, Smith for Whiteley, 15 Aug 43. Filed as Annex A to Min, 105th mtg JCS, 16 Aug 43.

CCS immediately queried Eisenhower on what could be done to speed the movement of forces onto the peninsula. In his reply Eisenhower emphasized that the primary limitation was the capacity of the Italian ports and that a secondary one was the shortage of vehicles, particularly in British formations. Ports in Calabria and Apulia, he noted, were small and far from the front, and it remained to be seen how soon Naples could be captured and put into operating order. To insure full use of port facilities as they became available, Eisenhower asked for 14 more freighters besides the 126 allotted at TRIDENT, ample numbers of tugs, barges, and lighters, and, above all, permission to retain all LST's then in the theater until an adequate build-up was in prospect, since the main problem was one of loading and off-loading vehicles. He promised to make every effort to release the LST's "in numbers and on the dates laid down in the QUADRANT decisions."[5]

The CCS readily granted Eisenhower's requests for tugs, lighters, barges, and freighters, and the British Chiefs undertook to send more vehicles for their forces. But the request for LST's aroused misgivings both in Washington and London. Naval officers especially deplored the "misuse" of landing craft in a purely logistical role on the scale that had developed in Sicily. The British Chiefs were willing to postpone again movement of the 18 LST's earmarked for India and held over for the Salerno crisis, but yielded to American insistence that they should proceed as planned no later than 10 October. Eisenhower was also instructed to send 24 LST's (12 British and 12 American) to arrive in the United Kingdom for OVERLORD training no later than 10 November and 72 more (36 British and 36 American) to arrive no later than 15 December. This would complete the movement scheduled at Quebec. The only concession granted with regard to assault shipping was an authorization to use whatever vessels might be available from the eastern Mediterranean.[6]

Meanwhile, during the last three weeks of September, the build-up of Allied forces in Italy went ahead at a rate that belied the early gloomy estimates. In the U.S. Fifth Army sector it was accomplished almost entirely without ports. Salerno was wrecked by German artillery fire within a few days of the landings, and by the time Naples was taken on 1 October the Germans had wrought a masterly work of ruination on that harbor and its facilities. Even so, the large assemblage of landing ships and craft in the theater, including some 159 LST's, were used to good effect, and troops and cargo began to discharge in Naples in the first week of October. By the end of that week more than 212,000 troops, 45,000 vehicles, and 154,000 tons of cargo had been brought ashore in the Naples-Salerno area. In the south and on the east coast the British Eighth Army rapidly built up its strength and mobil-

[5] (1) Msg NAF 408, Eisenhower to CCS, 18 Sep 43, Incl to CPS 88/2, 19 Sep 43, title: Build-up in Italy. (2) CPS 88/1, 16 Sep 43, same title. (3) CCS 334, 2 Sep 43, memo by Reps Br COS, title: Slowness of Build-up for AVALANCHE. (4) Churchill, *Closing the Ring*, pp. 95–96.

[6] (1) Msg FAN 240, CCS to Eisenhower, 24 Sep 43, OPD Exec 3, Item 4. (2) Min, 120th mtg CCS, 24 Sep 43. (3) Memo, JHC for Col Roberts, 28 Sep 43, sub: Build-up in Italy, ABC 561 (31 Aug 43), Sec 1 B. (4) JCS Memo for Info No. 139, 29 Oct 43, sub: Misuse of Ldg Cft in Combined Opns.



THE RUINED PORT OF NAPLES. *Generals Eisenhower (left) and Clark (behind him) inspect the damage.*

ity. Thirteen Allied divisions (including two airborne divisions soon to be withdrawn) were now in Italy, and a total of twenty facing the enemy was confidently anticipated by the end of the year.[7]

The optimism engendered by this rapid progress was soon dispelled. As the British Eighth Army and the U.S. Fifth Army pressed northward from Foggia and Naples early in October they encountered increasingly stubborn resistance. This reflected, in fact, a basic change in Axis strategy. Increasingly uneasy over his exposed position in the Balkans, which a retreat in Italy would make even more vulnerable, Hitler had decided to hold a line along the river and mountain barriers south of Rome. In October German reinforcements began to move into both Italy and the Balkans. Churchill's hopes for easy gains in the eastern Mediterranean went glimmering, and the Allies faced the necessity of reappraising their long-range

[7] (1) H. H. Dunham, U.S. Army Transportation and the Italian Campaign (hereafter cited as Transportation and the Italian Campaign), OCT Historical Monograph 17, MS, OCMH, pp. 42–43, 52–55, 60–61. (2) Ehrman, *Grand Strategy V*, 66–68.



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strategy in the entire theater, with disturbing implications for OVERLORD.[8]

Setback in the Aegean

Events in Italy coincided with the swift development of a crisis in the Aegean. Axis forces lodged in the Dodecanese chain, especially on Rhodes, had long been a thorn in the side of the Allies. Axis air power based in the islands effectively closed the Aegean Sea to Allied shipping, which, by hugging the Turkish coast, might otherwise have had practicable, though precarious, access to the Straits and the Black Sea beyond. Conversely, Allied air power lodged in the Dodecanese could have dominated the whole Aegean area and shielded Turkey from an Axis onslaught by sea and air. The whole question of Turkish intervention on the side of the Allies was therefore closely bound up with occupation of those islands—especially Rhodes.

The general disintegration of Italian resistance late in July convinced Churchill that the islands were ripe for plucking. Plans were made to land an Indian division on Rhodes about 1 September, but had to be abandoned because of the Turks' coolness to the idea. The division was then put at Eisenhower's disposal for use in Italy, and the departure of six assault transports for India left the Middle East Command, by the end of August, without the means for executing an amphibious assault.[9]

With Italy's surrender in September British hopes once again revived. On the 10th, as noted earlier, the CCS approved in principle a new attack in the Dodecanese. Spurred on by Churchill to "improvise and dare," General Sir Henry Maitland Wilson, British commander in the Middle East, parachuted emissaries onto Rhodes to urge the Italian garrison to overpower the German division stationed there. The coup failed to materialize, but before the end of the month Wilson did manage to land small forces on Kos, Leros, Samos, and a number of other small islands north of Rhodes. Then on 22 September Wilson submitted, and the British Chiefs endorsed, a new plan to attack Rhodes in October using the partially equipped 10th Indian Division with some armor and airborne troops. Part of these forces would have to come from the central Mediterranean, along with most of the

[8] (1) See Ralph S. Mavrogordato, "Hitler's Decision on the Defense of Italy," in Greenfield, ed., *Command Decisions*, pp. 303–22. (2) Ehrman, *Grand Strategy V*, 66–69.

[9] (1) Churchill, *Closing the Ring*, p. 204. (2) Ehrman, *Grand Strategy V*, 88–92.

warships, ordinary shipping, troop carrier aircraft, and assault lift—3 LSI (L)'s with accompanying small craft and 2 LST's. General Eisenhower gave his support to the plan, and the assault on Rhodes was scheduled for 23 October.[10]

At the time it did not seem likely that these diversions would jeopardize the build-up in Italy. Then on 3 October the Germans launched a heavy airborne attack on Kos, overwhelming the small British garrison and seizing the only airfield from which effective air support could be given to the attack on Rhodes. These developments alarmed Eisenhower, who feared they might lead to further demands on his own resources. As the British frantically reinforced Leros and sought the wherewithal to carry out the Rhodes operation as the only way to avert disaster, Eisenhower warned the CCS that further diversions to retrieve the situation in the Aegean would endanger the Allied position in Italy and thus, indirectly, OVERLORD itself.[11]

In Washington the Army staff immediately stiffened its opposition to any diversion of resources to support what they called a "strategically unimportant secondary operation." The prevailing view was that an attempt to take Rhodes, even if successful, would inevitably broaden into a major campaign on the Balkan mainland, although a minority discounted this danger and held that Rhodes was well worth taking. Since the British already had official American blessing for their current effort in the Aegean, at General Marshall's suggestion the JCS decided to tell the British Chiefs that operations there should be given whatever support General Eisenhower felt he could spare from the central Mediterranean.[12]

At this juncture Churchill, on 7 October, brought the whole matter to a head by a personal appeal to Roosevelt. He spelled out his aims: an assault on Rhodes using a first class division to be replaced later by static troops; occupation of the Dodecanese; and establishment of British air forces in the area, possibly on bases in Turkey as well as in the islands. He defended the considerable air effort involved as offering an opportunity to force the enemy to spread and expend his dwindling air forces. To mount the assault would require, besides local shipping, the loan of nine of the OVERLORD landing vessels (presumably LST's) scheduled to leave the Mediterranean soon; their departure would be delayed perhaps six weeks, a trifling encroachment on the six months remaining before they would be needed in OVERLORD. Still unaware of the recent about-face in German strategy, Churchill felt that the needed forces could easily be spared from Italy. He repeated his disclaimer of any desire to "send an army into the Balkans," and concluded with a pointed request that the President not let his request be "brushed aside" by his military advisers.[13]

Despite Churchill's pleas, Roosevelt supported the JCS recommendation to leave the matter up to Eisenhower, and

[10] (1) Churchill, *Closing the Ring*, pp. 205–10. (2) Ehrman, *Grand Strategy V*, 93–94. (3) CCS 341/2, 10 Sep 43, title: Review of Strategic Situation. . . .

[11] (1) Ehrman, *Grand Strategy V*, 94. (2) Matloff, *Strategic Planning, 1943–44*, pp. 254–55.

[12] (1) Memo, OPD for CofS, 5 Oct 43, sub: Future Opns in the Eastern Mediterranean. (2) OPD Notes on 117th mtg JCS, 5 Oct 43, with related papers. All in ABC 381 Strategy Sec Papers (7 Jan 43) 131–159. (3) OPD Notes on 84th mtg CPS, 7 Oct 43, ABC 384 Med (3 Oct 43). (4) Min, 117th mtg JCS, 5 Oct 43.

[13] Churchill, *Closing the Ring*, pp. 210–11.

told the Prime Minister he opposed any diversions that would "in Eisenhower's opinion jeopardize the security of his current situation in Italy" or "prejudice OVERLORD as planned." He also turned down a last-minute request from Churchill to send Marshall to Eisenhower's headquarters for a meeting with him (Churchill) and the British Chiefs. The President's reply to the latter request (drafted for him by the Army staff) made it evident that he and the JCS still assumed as fact what Churchill contested as the point at issue—that to attack Rhodes would be in actuality "to enter into a Balkan campaign, starting with the southern tip." On this premise, American fears for OVERLORD were understandable, but they ruled out any objective consideration of Churchill's proposals on their immediate merits. An annoyed Churchill was later to declare that American insistence that the retention of a handful of LST's for six more weeks would jeopardize OVERLORD "was to reject all sense of proportion."[14] Before the month was out, the JCS were in fact to permit the retention of many times this number of LST's and for a longer period in order to retrieve the situation in Italy.

The decision now rested with the theater commander and was to be made on other grounds altogether. By 8 October Eisenhower had ample evidence of the German decision (taken on the 4th) to fight it out south of Rome, though Churchill himself may not have been aware of it until the 9th or 10th. Facing probable enemy superiority on the ground, Eisenhower's staff felt that the Allies would be more than ever dependent on air superiority and that they could not spare, even for a limited time, the bombers and fighters needed for the attack on Rhodes. With this conclusion all the top commanders, British as well as American, concurred at a meeting in Tunis on 9 October. The choice was, simply, "between Rhodes and Rome," and the decision of the CCS to support the view of the commanders on the spot was a foregone conclusion—particularly since the British Chiefs themselves lacked Churchill's enthusiasm for Rhodes. The Prime Minister yielded with the best grace he could muster, and the Rhodes operation was canceled.[15]

The decision sealed the fate of the British forces in the Aegean. Leros fell after heroic resistance on 16 November, and the Germans mopped up the remaining islands of the Dodecanese before the end of the month. The prospects of Turkish intervention now became more than ever remote. Late in October Washington staffs learned with alarm that Soviet representatives at the Foreign Ministers Conference at Moscow had proposed that the Allies should jointly "suggest" to Turkey the advisability of immediate entry into the war. Believing as they did that the Turkish Army would be unable to stand up under a German attack, even with the limited aid promised in Anglo-Turkish agreements in spring of 1943, the Americans feared Turkey's entry would prob-

[14] *Ibid.*, pp. 212, 214.

[15] (1) Msg NAF 384, Eisenhower to CCS, 9 Oct 43, OPD Exec 3, Item 3. (2) Churchill, *Closing the Ring*, pp. 215–18. (3) Ehrman, *Grand Strategy V*, 98–99. (4) Dwight D. Eisenhower, *Crusade in Europe* (New York: Doubleday and Company, Inc., 1948), p. 191. (5) Craven and Cate, eds., *AAF II*, 550. (6) Arthur Bryant, *Triumph in the West* (New York: Doubleday and Company, Inc., 1959), pp. 30–32.

ably lead to full-scale involvement of Allied forces—which would mean opening a new front, new ports, and a new line of communications. With the establishment of Allied strategic air power in Italy, moreover, the advantages to the Allies of Turkish air bases now seemed less compelling. Churchill, of course, grasped eagerly at the Soviet *démarche*. On his instructions Foreign Secretary Eden sounded out the Russians on a renewed British attempt with Turkish support to clear the Aegean in order to send naval forces and war material into the Black Sea and ultimately, perhaps, "to give them [the Russians] our right hand along the Danube." The Russians, it soon became apparent, were not ready to support such an undertaking and Eden and U.S. Secretary of State Cordell Hull joined in declining their proposal. In any case, discussion of intervention now seemed academic, as the Turks watched the unfolding British debacle in the Aegean. By early November British negotiations with Turkey had reached a temporary impasse.[16]

LST's and the Crisis in Western Strategy

The American stand in the Rhodes episode, as finally defined in Roosevelt's messages to Churchill, was that nothing must be undertaken in the eastern Mediterranean, even on a minor scale, that might jeopardize the success of the Italian campaign, and that nothing must be undertaken in the Mediterranean as a whole that might interfere with the execution of OVERLORD as planned. Given the immediate situation, the British fully concurred with the first half of the proposition, and probably at least in principle with the second. Churchill, whose acquiescence was reluctant, remained unconvinced that the Rhodes operation could not have been "fitted in," and regarded its rejection as "improvident." Understandably, too, he resented the American attempt to influence the decision by what he considered to be irrelevant considerations—fear of further involvement in the Balkans and the alleged threat to OVERLORD posed by delaying the scheduled transfer of a few LST's to the United Kingdom.[17] Neither Churchill nor the British Chiefs were prepared to accept the second half of the American proposition under any rigid interpretation of the phrase "as planned," believing as they did that the fortunes of OVERLORD and operations in the Mediterranean were so intertwined as to make an "either-or" approach meaningless to begin with.

The issue came to a head in the context of a deteriorating situation in Italy, described in a long, gloomy message from General Alexander on 24 October. Although the Allies still held a slight edge over enemy forces facing them south of Rome, at least 15 and perhaps 19 German divisions were reported concentrating in the north. From them and from strategic reserves beyond the Alps, Alexander said, the Germans could rapidly replace their tired divisions on the Italian battlefront and be in a position, if the Allied offensive bogged down, to launch an immediate counterattack. On

[16] (1) Churchill, *Closing the Ring*, pp. 219–26, 286–89, 334–35. (2) Ehrman, *Grand Strategy V*, 99–103. (3) John R. Deane, *The Strange Alliance* (New York: The Viking Press, 1947), pp. 21–22. (4) OPD Notes on JCS 546, Swedish and Turkish Participation in War, OPD Exec 9, Book 13, Case 84.

[17] See his reflections in *Closing the Ring*, pp. 218–25.

the other side, the speed of the Allied build-up was dwindling as wear and tear took its toll of landing vessels, tugs, and harbor craft, as OVERLORD LST's and LCT's departed or prepared to depart for the north, and as the port of Naples remained unusable for ocean-going ships. Instead of a hoped-for 1,300 vehicles per day, Alexander reported, forces ashore were receiving only about 1,000 per week. His ground forces, moreover, now had to share the inflow of men and matériel with heavy bomber elements, which, as a result of recent U.S. decisions, were to be moved forward immediately to the Foggia bases instead of waiting for capture of the Rome airfields, and augmented at the expense of those in the United Kingdom.

Alexander now estimated his build-up at only thirteen divisions by the end of November, and one or two additional divisions per month thereafter through January. With the drive on Rome already grinding to a halt, it seemed all too likely that the enemy would stabilize the front and then strike back with fresh troops at the weary and depleted Allied divisions. Winter weather would deny the Allied ground forces the full support of their superior air power, and coastal flanking operations would be ruled out by lack of assault shipping.[18]

On 23 October, the day before he received Alexander's message, Churchill had once again unburdened himself in a long message to the President. He was worried over the division of Allied forces in Europe between two theaters, in either one of which the enemy, operating on interior lines, could mass superior strength while holding fast in the other. The situation demanded "the most accurate timing between the two theatres, and . . . the greatest possible forces for both operations, particularly OVERLORD." In the Mediterranean, where the immediate threat as well as the immediate opportunity lay, the impending withdrawal of assault shipping threatened to "cripple . . . operations without the said craft influencing events elsewhere for many months." These withdrawals, Churchill reminded the President, were hinged to OVERLORD's 1 May target date, which had been set "by splitting the difference between the American and British views." The implication was plain: postponement of OVERLORD might not only serve to meet the immediate threat in Italy but also to allow more time for building up larger invasion forces in the United Kingdom. Although the Prime Minister did not press the point, and reaffirmed his adherence to the QUADRANT agreements, he referred with undisguised bitterness to the absence from the Italian front of the two crack British divisions already withdrawn for OVERLORD.[19]

On receipt of General Alexander's grim dispatch from Italy the next day, Churchill impulsively transmitted it verbatim to Anthony Eden, who was at the Moscow Foreign Ministers Conference, with orders to show it to Marshal Josef Stalin. He authorized the Foreign Secretary to tell the Soviet premier that

I will not allow, while I am responsible, the great and fruitful campaign in Italy . . .

[18] (1) Msg NAF 486, Eisenhower to CCS, 24 Oct 43, Incl to JPS 310/D, 26 Oct 43, title: Opns in Mediterranean. (2) Craven and Cate, eds., *AAF II*, 564–72, 723–27.

[19] (1) Churchill, *Closing the Ring*, pp. 312–13. (2) See also Msg OZ 3351, Prime Minister to Field Marshal Sir John Dill for Gen Marshall, 24 Oct 43, OPD Exec 5, Item 12a.

to be cast away and end in a frightful disaster, for the sake of crossing the Channel [OVERLORD] in May. The battle must be nourished and fought out until it is won. We will do our very best for OVERLORD, but it is no use planning for defeat in the field in order to give temporary political satisfaction.[20]

At Moscow, Stalin apparently took the bad tidings of a possible postponement of OVERLORD with astonishingly good grace, seeming, as Eden put it, "to show he no longer regards an overseas operation as a simple matter."[21] Eisenhower in the meantime had forwarded Alexander's message to the CCS with his own endorsement and reinforcing comments. The Allies, he said, must at all costs retain the initiative in the Mediterranean until early spring, when an enemy counteroffensive in Italy would help, not hinder, OVERLORD, "and it then makes little difference what happens to us." He accordingly proposed to drive on toward Rome in both the Eighth and the Fifth Army sectors and to execute powerful amphibious runs around both the enemy's coastal flanks — with a brigade group on the east coast and a full division on the west. More assault lift would of course be needed and Eisenhower promised to forward his detailed requirements soon.[22]

To the British Chiefs, the developments in Italy constituted a crisis of the first magnitude. On 26 October, through their representatives on the CCS in Washington, they issued what appeared to be a virtual ultimatum, developing the theme expressed by Churchill in his messages to Eden and the President. They warned that in their opinion adherence to OVERLORD's current target date and to the preparatory schedules tied to it might become impossible if the situation in Italy continued to deteriorate. "We are convinced," they declared, "that if the campaign in Italy should lead to a reverse, or even to a stalemate, resulting in the Germans recovering the initiative, then OVERLORD would inevitably have to be postponed." They echoed the Prime Minister's assertion that the campaign in Italy must be backed to the full whatever the cost, and hinted darkly that they intended to bring up for reconsideration soon "the whole position of the campaign in the Mediterranean and its relation to OVERLORD." For the present they again urged, as they had in July, that all amphibious shipping be held in the Mediterranean until Eisenhower's exact needs could be determined.[23]

Had the Allies really faced the threat of a "frightful disaster" in Italy, it would have been hard to deny that, as Churchill insisted, "Eisenhower and Alexander must have what they need to win the battle, no matter what effect is produced on subsequent operations."[24] As yet, however, reports from Italy hardly justified such hyperbolic language. Larger forces did not seem to be needed, and the British had made no explicit demand to hold the remaining OVERLORD divisions in the Mediterranean. The real problem was to bring to bear the sizable forces already in the theater in order to avert a protracted stalemate south of Rome. The best solution, in the opinion of commanders on the spot, was to turn the enemy's exposed coastal flanks by

[20] Churchill, *Closing the Ring*, p. 290.
[21] *Ibid.*, p. 293.
[22] Msg NAF 486, 24 Oct 43.
[23] CCS 379, 26 Oct 43, memo by Reps Br COS, title: Opns in Mediterranean.
[24] Churchill, *Closing the Ring*, p. 290.

landings in his rear. On this point Washington and London did not disagree.

On the broader issue of the relationship of the Mediterranean and OVERLORD the U.S. Chiefs took their stand on the principle asserted in the Rhodes crisis earlier in the month: Eisenhower must be strongly supported, of course, but not at the expense of OVERLORD, Most of the original objectives in the Mediterranean had already been won, earlier than anticipated. In the last resort, if Eisenhower could not keep the initiative with the forces he had, then he must go on the defensive on the ground, while continuing the bombing offensive from his Foggia bases. "We are convinced," the JCS asserted, "that it would be militarily unsound to take any action to the possible detriment of OVERLORD merely to insure that we advance farther on the Italian mainland." In view of Allied air and naval superiority, they believed a serious setback to be extremely unlikely. Meanwhile, Eisenhower should be directed to report his specific requirements for the flanking operations he proposed.[25]

Requirements, however, could not be simply stated. With respect to LST's, the nub of the question, inquiries via transatlantic telephone on the staff level elicited the following information: of the 48 American and 56 British LST's scheduled to leave for the United Kingdom by 1 December, 36 of the former were almost ready for departure. General Eisenhower wanted to retain the remaining 68 (56 British, 12 American) at least until 15 December and preferably until 5 January, making a total of 100 including the 32 permanently assigned to the theater. By the earlier date arrears in the build-up of auxiliary ground force units for the divisions ashore could be made up, and substantial progress could be made in the strategic air force build-up; the proposed one-division flanking assault could also be mounted. If the LST's were held for three more weeks, the entire strategic air force could be established in Italy. Under the first alternative the OVERLORD vessels would reach the United Kingdom by the beginning of February; under the second, a month later. There were no LST's at all in the Middle East. Clearly, the build-up problem was overshadowing the proposed amphibious landings, for which plans were rather vague. Indeed, the projected east coast operation seemed to have been quietly abandoned, and the west coast landings could not be launched before mid-December, if at all. "We cannot say definitely," warned Maj. Gen. Walter B. Smith, Eisenhower's chief of staff, in a telephone conversation with General Handy, chief of the Operations Division, "that we will get any operational assault under way, and if we do not get it under way by January 5, we will let the craft go at that time." General Handy suggested that some of the "great concentration of shipping . . . other than landing craft" in the area might be used for the build-up. Smith's reply was succinct and illuminating:

> My answer is that if these ships were packed head to foot or if we had twice as many as there are now here, it wouldn't help a bit, as the port capacity for ocean-going ships is the limiting factor. The rea-

[25] (1) CCS 379/1, 29 Oct 43, memo by U.S. CsofS, title: Opns in Mediterranean. (2) See also Msg, Marshall to Prime Minister, 27 Oct 43, OPD Exec 5, Item 12a.

son we need landing craft is that they can go where ocean-going ships are not able to go. I can say that everything is being used that can be used.[26]

Eisenhower's confirming message the following day reported simply that the proposed landings would be carried out if the OVERLORD LST's could be retained. Without them the build-up requirements would leave barely enough amphibious shipping for a single brigade group, a force too weak to be even considered. Eisenhower concluded:

> I am not certain what effect the two alternatives [retention until 15 December or 5 January] . . . would have on OVERLORD, but I am very sure that the success of our operations in this area will have a great effect on OVERLORD and a greater on POINTBLANK. Therefore, while I am reluctant to repeat my previous request for delay in returning LST's to the United Kingdom, the enormous value to us of being able to use these additional LST's for a comparatively short period beyond the time originally scheduled for their return is so impressive from our local viewpoint that I have decided after consultation with my senior commanders again to present these facts for your consideration.[27]

Again the British Chiefs of Staff backed up Eisenhower's request. They went further:

> In our view, unless General Eisenhower has at his disposal the resources to enable him to carry out amphibious operations on both east and west coasts of Italy in adequate strength, probably of the order of a division on each side, we shall be faced with a long drawn-out campaign involving a series of frontal attacks at heavy cost. . . . Anything short of this would in our view fail to afford our commander on the spot the latitude of maneuver which he clearly requires for obtaining a quick decision.

They specifically proposed that the theater not only be permitted to retain the 68 LST's requested, but be given enough additional LST's and combat loaders to mount a one-division assault on the east coast of Italy.[28] The Prime Minister followed through with a direct appeal to the President.[29]

The Joint Chiefs were caught once more between the promise of great results at little cost on the one hand and the threat of disaster on the other. The OVERLORD deadlines were no longer beyond the horizon. In order to begin amphibious training, COSSAC wanted half of the entire complement of assault shipping to be on hand in the United Kingdom by the first of the year. The 68 LST's in question represented more than a third of the whole OVERLORD contingent. To hold them back until early January would mean that, under existing schedules for deliveries from the United States, OVERLORD training would have to be conducted with 43 fewer vessels than needed during January, and 23 fewer during February. Each American LST retained in the Mediterranean,

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[26] (1) Synopsis of telephone conversation with Gen Smith in Conf Room, Pentagon, 1400 DST 31 Oct 43. (2) Msg 1328, Handy to Smith, 30 Oct 43. Both in OPD 560 Security II, Case 100. (3) See also related papers in ABC 561 (31 Aug 43) Sec 1B. (4) See LST movement schedule in Ehrman, *Grand Strategy V*, 73.

[27] (1) Msg NAF 496, Eisenhower to CCS, 31 Oct 43, Incl to CPS 103/D, 1 Nov 43, title: Opns in Mediterranean. (2) See also NAF 498, Eisenhower to CCS, 3 Nov 43, Incl to CCS 379/4, 4 Nov 43, same title. This message corrects the earlier request for 60 LST's to 68. (3) POINTBLANK was the code name for the combined bomber offensive against Germany.

[28] (1) Msg COS(W)929, Br COS to JSM, 4 Nov 43, ABC 561 (31 Aug 43) Sec 1-B. (2) CCS 379/3, 3 Nov 43, memo by Reps Br COS, Opns in Mediterranean. (3) Min, 126th mtg, CCS, 5 Nov 43.

[29] Churchill, *Closing the Ring*, p. 248.

moreover, would also hold back an LCT.[30]

Even so, most of the Army staff thought General Eisenhower should have his LST's. Fortunately, at this juncture, Admiral King made the decision easier by allotting to OVERLORD a number of additional LST's and LCT's, some of which would be sent in November and December.[31] On 5 November the Joint Chiefs agreed with the British representatives to allow the 68 LST's to be retained in the MTO until 15 December. At the same time Eisenhower was pointedly admonished that the high command expected him to use them as fighting vessels, not "as freighters." The JCS saw no good reason, moreover, for giving him more than he had asked for—that is, additional shipping for an east coast operation, as the British had proposed. In any case, all U.S. combat loaders within reach were already scheduled to move troops from the Mediterranean to the United Kingdom, return to the States for refitting, and then carry more U.S. troops to England.[32]

Clearly, the JCS were resigned to the probability of still further delays in the transfer of LST's from the Mediterranean. When Admiral Leahy noted that the build-up in Italy would still be incomplete in mid-December, Admiral King pointed out that "a decision on any further holding of landing craft could be taken at a later date if General Eisenhower put in a further request." Field Marshal Sir John Dill was at pains to remind the U.S. Chiefs that his superiors in London did not consider the size of the planned amphibious operation south of Rome a closed question and that General Alexander was in fact already pleading with London for a full month's extension of the 15 December deadline. Churchill decided on 9 November to risk an American veto, and told Alexander to make his plans on the assumption that the LST's would stay in the theater until mid-January.[33]

Thus, by mid-November the U.S. Chiefs were adjusting to the military setbacks of October in the Mediterranean—much as they had adjusted to the gains of July and August. The grand design of early August had receded into the realm of the improbable. Few now believed that Alexander could reach the Po even by spring, and early in November assignments of assault shipping and other resources were being made on the basis of requirements for reaching a line north of Rome, no farther. One underlying feature of the pincers strategy remained: the Allies were committed for better or for worse to maintain a "going" front in Italy so that it might play its part when OVERLORD was launched in the spring. (*Table 20*)

Eisenhower's report on the southern France project, submitted as directed late in October underlined the degree

[30] (1) Memo, Handy for CofS, 4 Nov 43, sub: Retention in Mediterranean of Ldg Cft Scheduled for OVERLORD, and Memo, 5 Nov 43, same sub, with related papers in ABC 561 (31 Aug 43), Sec 1-B. (2) Msg, Gen Barker to Gen Morgan, 4 Nov 43, SHAEF SGS 560, vol. I. (3) CCS 379/5, rpt by CPS, 4 Nov 43, title: Opns in Mediterranean. (4) Min, 126th mtg CCS, 5 Nov 43.

[31] See ch. X, below.

[32] (1) Min, 126th mtg CCS, 5 Nov 43. (2) CCS 379/5, 4 Nov 43. (3) JCS 548/1, JPS rpt, 10 Nov 43, title: Opns in Mediterranean. (4) CCS 379 (SEXTANT), memo by U.S. CsofS, 18 Nov 43, same sub.

[33] (1) Churchill, *Closing the Ring*, p. 249. (2) Min, 123d mtg JCS, 15 Nov 43. (3) Eisenhower Dispatch, pp. 86–87. (4) Field Marshal Sir John Dill was head of the British Joint Staff Mission in Washington and the chief British representative on the Combined Chiefs of Staff.

TABLE 20—LST'S IN THE MEDITERRANEAN: SEPTEMBER–DECEMBER 1943

	British	U.S.	Total
Used in HUSKY[a]	72	76	148
Assigned to Southeast Asia	8	10	18
Total	80	86	166
Losses			
in HUSKY	1	3	4
at Salerno[b]	2	1	3
Scheduled departures (as of 24 September)[c]			
for Southeast Asia (in October)	8	10	18
for United Kingdom (before 10 November)	12	12	24
for United Kingdom (before 1 December)	44	36	80
Reported in theater early October[d]	77	82	159
Withdrawn for Southeast Asia (October)	8	10	18
Reported in theater 31 October[e]	[f]67	72	139
Withdrawn for OVERLORD (October–November)	0	[g]36	36
Scheduled for withdrawal for OVERLORD in December or January (JCS decision of 5 November, confirmed at SEXTANT)[h]	56	12	68
Reported in theater on 1 January 1944[i]	[j]69	36	105

[a] CCS 329/2, title: Implementation of Assumed Basic Undertakings and Specific Operations for Conduct of the War, 1943–44.
[b] Estimated; source not available. Based on subtraction of known HUSKY losses from reported totals in theater for early October.
[c] Msg FAN 240, 24 Sep 43, Exec 3, Item 4; ASF Spec Rpt, Ldg Cft, 25 Oct 43, Tabs D, E.
[d] ASF Spec Rpt, Ldg Cft, 25 Oct 43.
[e] CCS 428, (Rev), 15 Dec 43, title: Relation of Available Resources to Agreed Operations, app. A.
[f] This figure is two less than the remainder left after subtracting the British withdrawals for India from the early October theater total. It is one of several unexplained discrepancies involved in calculations of Mediterranean LST's in October. As the theater status report for 1 January 1944 indicates (last line in table), the status report for 31 October may itself have been in error.
[g] Tel conv with Gen Smith, 31 Oct 43.
[h] See page 234, note 32.
[i] Theater status report, in ABC . . . 561 (30 Aug 43), Sec 2.
[j] See note *f*, above.
Source: Compiled by Richard M. Leighton from numerous sources, all cited in the text.

of adjustment. He advised the CCS not to assume as yet that that operation was "certain to be the best contribution this theater can make at, or near, the time of OVERLORD." Under certain conditions, he thought, a threat to southern France might actually attract German forces into France and thus imperil OVERLORD. If spring should find the Allies bogged down before fortified positions across the waist of Italy, they might be able to pin down more German divisions there by frontal assaults and amphibious turning movements than in any other way. If a southern France diversion must be undertaken in these circumstances, Eisenhower thought it would be more useful as a threat—to be kept poised from a few weeks before until a few weeks after the cross-Channel attack, and actually carried out only if the Germans seemed unlikely to oppose it in force. In the remote event that the Allies should reach the north Italian plain by spring, the original plan of a co-ordinated overland and amphibious operation might be effective, but it should be launched after OVERLORD, following a

threat of several weeks' duration. In any case, an amphibious attack with the assault lift likely to be available in the spring would be very weak—a division strong, at most, with only two brigades in the initial assault, and even weaker if wastage of craft during the coming six months proved heavy. Eisenhower recommended, essentially as he had done in mid-August, that the operation be regarded "as but one of the various alternative opportunities which will lie open to us for assisting OVERLORD." In London General Morgan, though still convinced that OVERLORD would need some sort of diversion in southern France, preferably more than a feint, shared Eisenhower's misgivings as to its feasibility. The British Chiefs passed Eisenhower's report on to Washington with their endorsement.[34]

On 11 November the JCS concurred in the British recommendation. The southern France operation stayed on the books and theater preparations for it continued. But it had been relegated to the limbo of contingent plans, tailored to an improbable degree of enemy weakness and designed, in general, to help OVERLORD more by the threat than by the reality of diversionary action. So improbable was its execution considered that it was not even included on the agenda of the forthcoming international conference at Cairo and Tehran. As Admiral King tersely expressed his and his colleagues' view: "Our plan is OVERLORD. Operations such as against southern France are diversions. We do not have facilities to carry out these diversions and also OVERLORD."[35]

The Mediterranean Lock-up

The limited capacities of ports in Italy during the early stages of the invasion, which helped to produce the crisis over LST movements, had similar repercussions on the movement of merchant shipping to and within the theater. September and October 1943 saw the first appearance in the Mediterranean of the kind of shipping congestion that on several occasions in 1942 had seriously impeded military operations in the South Pacific and the flow of aid to the USSR.

During the build-up for HUSKY the volume of shipping pouring into the Mediterranean areas had risen nearly to the limit that Algiers and the ports farther east could then handle, and the decision to invade Italy ensured that there would be no early diminution in the flow. The old potential bottleneck—the size and frequency of convoys—for the most part no longer threatened. In July the Navy raised the ceiling for UGS convoys from 60 to 80 ships, and beginning with UGS 14 on 6 August stepped up their cycle from two weeks to ten days. By 7 September in response to pressures from the Army, Admiral King had agreed that beginning in November these convoys could sail at 7-day intervals if desired.

The port situation in the theater made it impossible to take full advantage of the relaxation of convoy restrictions. Be-

[34] (1) Msg NAF 492, Eisenhower to CCS, 29 Oct 43, quoted in Ehrman, *Grand Strategy V*, 188, 190–91. (2) CCS 394, 10 Nov 43, memo by Reps Br COS, Opns against South of France to Assist OVERLORD.

[35] (1) Min, 123d mtg JCS, 15 Nov 43. (2) Memo by S&P Gp OPD, 7 Nov 43, sub: Compilation of Background Material for SEXTANT, ABC 337 (19 Oct 43), Sec 5. (3) CCS 394/1, 11 Nov 43, title: Opns Against South of France.

cause North African ports could not yet accommodate so heavy an influx of shipping, the July and early August convoys sailed with far less than their full complements, and a backlog of loaded and partially loaded ships began to accumulate in U.S. east coast ports. By mid-August 91 ships were lined up for UGS–16, scheduled to sail on the 26th, and 79 more were already earmarked for UGS–17, sailing 5 September. But these and later convoys departed with far fewer than their full quota of 80 ships and the Navy's offer to sail the convoys at 7-day intervals had to be turned down.[36]

This attempt to tailor convoy schedules to port capacities for receiving and discharging cargo in order to avoid a shipping tie-up was only partially successful. The situation was complicated by the need to retain shipping in the theater for movements across the Mediterranean to Italy. At Quebec it had been agreed that an average of 80 British and 50 U.S. cargo ships should be retained in the Mediterranean for this purpose. In practice, ships were held for only one or two intratheater voyages and then replaced by new arrivals; the number actually in use fluctuated widely, but the total in the area tended to exceed QUADRANT allocations. On 14 September the WSA representative at Algiers reported that 103 British and 59 U.S. vessels were then being held. The nine excess U.S. ships were scheduled for early departure; however, the British, who had requirements for an accelerated build-up through Taranto and support of operations in the Aegean, did not expect to be able to reduce their own retentions below 90 before the end of the year. They also requested temporary use of a number of westbound U.S. freighters returning from the Red Sea and Indian Ocean areas to carry cargoes to the western Mediterranean. Other demands for intratheater shipping were imminent.[37]

Shipping retained in the theater, engaged largely in trans-Mediterranean movements to Italy, had to be outloaded from the North African ports that were also handling incoming cargoes; the turnaround in Italy was slow and uncertain. Shipping was thus tied up at both ends. Algiers and Bône, the major North African ports supporting the troops in Italy, carried the heaviest burden. By 28 September, 22 loaded cargo ships were lying idle at Algiers awaiting berth with no prospect of completing discharge before mid-October, by which time 24 more were expected to arrive. The situation at Bône was similar.[38]

During the next few weeks the shipping authorities in Washington and London watched with growing uneasiness as matters steadily worsened. The North African Shipping Board (NASBO), the interallied co-ordinating agency for shipping in the theater, made strenuous efforts to halt the trend. Some ships waiting with cargoes at Algiers were diverted

[36] (1) Msg, COMINCH to CESF, 2 Jul 43; Msg, COMINCH to Admiralty, 21 Jul 43, folder N Africa, WSA Douglas File. (2) NYPOE charts, Convoys to N African Theater. (3) CCS 222/2, 20 Aug 43, rpt by CMTC, title: Future Convoy Arrangements in Atlantic; CCS 222/3, 22 Aug 43, and CCS 222/5, 20 Sep 43, same title. (4) OPD Notes on CCS 222/3, undated, ABC 560 Atlantic (1-19-43), Sec 1.

[37] Msg NAWS 370, Kalloch to Douglas, 14 Sep 43, folder N Africa, WSA Douglas File.

[38] (1) Msg NASAB 595, NASBO to CSAB, 28 Sep 43. (2) Msg NAWS 415, Kalloch to Westernlund, WSA, 2 Oct 43. Both in folder N Africa, WSA Douglas File.

to Oran; others were sent on to Italy. A number of operational loadings for U.S. forces were shifted to Oran, and for U.K. forces to Bougie and Philippeville. Large-scale discharge of packaged gasoline at Algiers, a major factor in the congestion there, was drastically curtailed. At all ports, the work of discharging and clearing incoming cargoes from the docks and loading cargoes for forward movement went on around the clock.[39]

Apart from these and other local corrective measures, the situation seemed to call for prompt action in Washington and London to curtail further the flow of shipping into the congested areas. On this question a sharp difference of opinion emerged between British and American shipping authorities. Even though, beginning in late September, the British had reduced the KMS convoys somewhat, they now took the position that no further curtailments were necessary and that local remedial measures had already gone far toward breaking the shipping jam. They confidently predicted that the crisis would pass before the end of November. According to London, the theater was unwilling to forego a number of high-priority shipments of munitions due in October and November and destined primarily for British forces. It appeared, moreover, that most of this material would have to be carried in American bottoms, since the British Ministry of War Transport had submitted requests for about 40 WSA vessels in October KMS convoys and 14 in October and November UGS convoys to carry British military cargo. The British also needed help in their coal shipments to Italy for civilian relief.

WSA officials suspected there was more here than met the eye. It was hard to believe that many, if not all, of the high-priority items needed in the theater could not be found among the scores of loaded freighters lying idle in North African ports. WSA held that whatever was not actually on hand in the theater should be sent in a few special shipments instead of being loaded, as was evidently the plan, along with a large amount of routine cargo for which there was no immediate need and which would only aggravate the existing congestion. WSA also wanted to know why the British did not meet their Mediterranean needs by diverting some of the 150 or more ships they ordinarily sent each month in ballast to North America and the West Indies for return loadings to the United Kingdom. American shipping would be far more economically employed in replacing these diversions than in serving British needs in the Mediterranean. And WSA objected to delaying American vessels returning from the Middle East to take on British cargoes at Cairo. What WSA officials thought they detected in all this was a deliberate British attempt to shift U.S. shipping from the United Kingdom import service in the North Atlantic to more distant and riskier service in the Mediterranean, while they reduced the number of their own ships servicing the Mediterranean in order to build up their commercial trades, hitherto starved by the demands of military programs.[40]

[39] Msg SABLO 345, London to Washington, 16 Oct 43, folder N Africa, WSA Douglas File.

[40] (1) *Ibid.* (2) Msg NA 5544, Douglas to Philip Reed, 22 Oct 43. (3) Msg, Schneider to Nicholson, 13 Oct 43. (4) Msg, Douglas to Kalloch, 18 Oct 43. All in folder N Africa, WSA Douglas File.

Douglas informed the British of these suspicions on 22 October, and cited figures to show that the accumulation of shipping in the Mediterranean had reached crisis proportions. As of 11 October reports showed a total of 396 Allied ocean-going ships in these ports; less than a third of them were actually working, and at least a fifth were lying idle awaiting berth for discharge or loading. At Algiers alone there were 74 Allied ships: 43 of them were idle, and only 15 were being discharged or loaded. If ships under way to and from and within the area were added to these tonnages, at least 6 million dead-weight tons of shipping were engaged in the Mediterranean service, amounting to almost a seventh of the entire Allied merchant fleet. At the moment, an estimated one-sixth of all shipping serving the Mediterranean appeared to be idle. "This is by far the greatest wastage of shipping in the war to date," Douglas declared. "We regard it as a high military necessity that this be stopped."[41]

In the face of Douglas' stringent representations, the British did make some concessions, abandoning their position that purely local measures would suffice to keep the ports clear. Lord Leathers repeatedly assured the WSA representative in London, Philip Reed, that he was in "whole-hearted agreement" with the WSA policy of limiting shipments to cargo urgently needed by local commanders but insisted that U.S. bottoms were required for that purpose. He stoutly denied any intention of shifting the burden of British maintenance services in the Mediterranean to American shipping or of building up British commercial trades, and he maintained that some "switches" of this kind were necessary because of the types of ships involved. Requests for American shipping to fill KMS convoys were, nevertheless, scaled down during late October and in November, and the entire British shipping program for the Mediterranean during those months was somewhat reduced.[42]

As the British had predicted, the situation did improve rapidly after the middle of October. Reductions in cargo shipments by both the Americans and the British helped, but more directly effective was the reconstruction of the port of Naples, where by November enough piers were in operation to discharge ocean-going freighters on a large scale. After November Naples, together with Taranto, Bari, and the smaller Italian ports, provided an outlet for shipping backlogged in the North African ports, and also handled the bulk of new shipping entering the theater. There was little diminution in the volume of merchant shipping engaged in the Mediterranean services, which held at a level of about 6 million dead-weight tons, or in the number of operational retentions, which remained above the level agreed to at QUADRANT. Expanded port capacity, however, restored fluidity to port operations. For example, an analysis of shipping supporting U.S. Army forces in the theater, excluding vessels retained for operational purposes, showed that at the

[41] (1) Msg NA 5544, Douglas to Reed, 22 Oct 43. (2) See also Msg HAL 200, Reed to Douglas, 29 Oct 43, and related papers in folder N Africa, WSA Douglas File.

[42] (1) Msg SABLO 375, Reed to Douglas, 10 Nov 43, with related corresp in folder N Africa, WSA Douglas File. (2) Memo, J. A. McCulloch to Reed, 17 Nov 43, sub: Allocation of WSA Ships to KMS Convoys, folder BMSM Misc, WSA Douglas File.

peak of the congestion on 11 October ships that had been delayed longer than ten days had spent 1,674 ship days in port; by the end of November, this index had dropped to 200. At Algiers, where congestion had been worst on 11 October, conditions a month later were nearly normal with only 6 vessels awaiting berth of a total of 38 in port. One salutary result of the improved situation was a lessening of the need to use landing craft in routine logistical operations.[43]

The Mediterranean port crisis did not seriously affect the Allied war effort in that region, but it did cause bad feeling between the British and American shipping authorities, paralleling in some ways the differences on strategy that were simultaneously developing. Despite British assurances, the whole question of the use of American shipping aid in a manner designed to permit the expansion of British overseas trade in wartime was due to come up for discussion at the Cairo Conference late in November.

The Progress of Bolero

One reason the Mediterranean lockup had no really serious consequences, for all the inefficient use of cargo shipping it involved, was because that commodity had become relatively abundant in the Atlantic in the fall of 1943. The cutbacks in outward sailings from the United States to the Mediterranean increased the surplus and made it possible to shift a sizable block of cargo ships to the Pacific in November and December to meet the growing demands of preparations for the Central Pacific offensive.[44] Moreover, the availability of cargo shipping ceased to be even a theoretical limitation on the advance shipment of supplies to the United Kingdom for invasion forces.

The decisions at Quebec cleared the air considerably with regard to BOLERO, justifying the action taken by OPD on 13 August to extend the preshipment program to include the ETOUSA troop basis into 1944. In the theater a more definitive troop basis for the Normandy invasion was rapidly developed, and in November it received War Department approval. In its final form it provided for 1,418,000 U.S. troops to be in the United Kingdom on D-day—a figure very close to the QUADRANT estimate. Of this total (designated the first-phase troop basis), 626,000 were ground force troops, 417,000 AAF, and 375,000 Services of Supply. Theater estimates for the ultimate build-up on the Continent brought the grand total—the second-phase troop basis—to 2,583,000. With these figures, which remained relatively firm, the War Department was able to proceed rapidly with the designation of units and the preparation of more accurate movement forecasts. This gradual shift from type units to actual units definitely assigned to the operation as the basis for programing advance shipments of material to the theater eliminated much of the

[43] (1) *Ibid.* (1). (2) Memo, Col Joseph J. Billo for Col George A. Lincoln, 3 Dec 43, sub: Shipping Turnaround in Mediterranean, ABC 381 Strategy Sec Papers (7 Jan 43) 160–95, Tab 173. (3) Bykofsky and Larson, *The Transportation Corps: Operations Overseas*, pp. 205–07. (4) Graph showing trend of ship delays in overseas theaters is in ASF Monthly Progress Report, 31 Aug 44, sec. 3, Transportation, p. 48. (5) Msg, Corbett to Schneider, WSA, 23 Nov 43, OPD Exec 5, Item 14.

[44] See below, ch. XIX. Some ships for Pacific and CBI destinations were loaded out from Atlantic and Gulf coast ports.

uncertainty that hitherto had clouded the future of the preshipment program.[45]

Special operational requirements also could be developed within the framework of the outline OVERLORD plan. Beginning in June 1943 the theater submitted a series of "keyed" operational projects, including a very important one for the rehabilitation of the port of Cherbourg, and the ASF undertook to fit procurement of the necessary material into the Army Supply Program. Project material, like organizational equipment, thus became an integral part of the total ETOUSA demand against which advance shipment was to be made. The principal remaining problems were the lack of a priority high enough to produce cargo in volumes commensurate with the shipping now available and the capacity of the ports and the supply organization in Britain to absorb shipments. The priority problem was the more pressing.

QUADRANT plans for the movement of one U.S. division from Iceland and four from North Africa and for completion of the rearming of eleven French divisions in North Africa by the end of December 1943 somewhat complicated shipping arrangements and intensified the problem of filling cargo ships. Under the QUADRANT arrangement, the four U.S. divisions moving from the Mediterranean would leave their equipment behind for the French divisions, and pick up new equipment in Great Britain from the preshipped stockpile for type units. The division moving from Iceland would be equipped in the same way. Theoretically, the ASF could find new equipment for continuing the preshipment program in new production resulting from Army Supply Program requirements for rearming the French divisions. Since French rearmament matériel held a higher priority for shipment than preshipped BOLERO matériel, however, to actually get it reassigned to the preshipment program was not a simple matter.[46]

In the period following QUADRANT the invasion build-up moved at least into second, if not into high gear. Troop movements from the United States spurted upward from 46,000 in August to 77,000 in September and 156,000 in October. Cargo shipments reached 907,000 measurement tons in September and a 1943 high of 1,018,000 in October. Troop movements from the Mediterranean and from Iceland were carried out generally as scheduled—the 5th Infantry Division moved from Iceland to England late in August; the 1st and 9th Infantry Divisions, the 2d Armored Division, and the 82d Airborne Division came in from the Mediterranean, mainly in November. Nevertheless, neither the personnel nor the cargo build-up in the end actually met the QUADRANT schedule. The shortfall in cargo shipments was the more serious of the two, threatening as it did to defeat the plan to space these movements over the whole period in order to prevent overloading of British facilities in the period just before D-day.[47]

In large measure, the failure to meet the QUADRANT schedule was a conse-

[45] Ruppenthal, *Logistical Support I*, 126–31.

[46] (1) Leighton, Problem of Troop and Cargo Flow, pp. 84–101. (2) On French rearmament, see below, Chapter XXVIII.

[47] Leighton, Problem of Troop and Cargo Flow, pp. 87–91.

quence of the same factors that had beset the program earlier—low priority and complications resulting from the demands of the Mediterranean campaign. As noted, cargo shipping was not a problem; personnel shipping, on the other hand, continued to be in short supply, and this shortage contributed to the delay in the build-up.

Certain supporting units originally included in transfer plans for the four U.S. Mediterranean divisions were held back to support operations in Italy, and in response to Eisenhower's request, two new U.S. divisions, the 85th and 88th, were set up for shipment to Italy in December to partially compensate for the divisions transferred to England. Most of the shipping space was found by using personnel capacity available on cargo ships, although some diversion from planned troop movements to the European theater was required. Moreover, equipping the two divisions necessarily cut into the cargo bank available for BOLERO. Officials in ASF thought there was enough surplus equipment in the Mediterranean theater to equip the divisions after they arrived, even granting that matériel left by the four departing divisions must be used for French rearmament. But the theater pointed to combat losses in Italy, and OPD instructed ASF to supply the two divisions with 100 percent of their noncontrolled items and 50 percent of their controlled items of equipment.[48]

Moreover, the complex schedule of troop movements in and out of the Mediterranean areas inevitably affected the flow of both troops and supplies to the United Kingdom. Toward the end of November one of the regular troop convoys from the United States to England was diverted to the Mediterranean to handle part of the 4-division movement. As a result BOLERO troop movements in November fell to 68,000 from 156,000 the previous month, and ASF officials again had to search for cargo to fill the shipping space that would have been occupied by the equipment of the outgoing troops. Although in September and October almost all allocated cargo space for BOLERO was filled, ASF fell well behind again in November and December. Shipments dropped from the October peak of over a million tons to 848,000 in November, and rose only to 910,000 in December, when they had been expected to reach 1.25 million tons. "We haven't yet filled the total number of ships for any month since August," an ASF planner complained early in December.[49] Against the QUADRANT schedule the shortfall was about 56 notional sailings (10,000 measurement tons each).[50] Even though personnel shipping was in shorter supply, the troop build-up came nearer to meeting its goal. At the end of December 1943, 773,753

[48] Diary, Theater Branch, entries for 4, 6, 21, 24 Sep 43, 4, 8 Oct 43, and 11 Nov 43, ASF Plng Div.

[49] (1) Memo, Theater Br for Dir Plng Div ASF, 1 Dec 43, sub: Supply Situation, ETO, Plng Div Historical File #75. (2) See Table, Appendix B–5. (3) Diary, Theater Br, Plng Div ASF; weekly entries of planning figures in the Diary for from mid-August through December 1943 show considerable variation, but the evidence generally supports the shortfalls described.

[50] This calculation is based on a total QUADRANT goal for the quarter of 334 sailings (298 on Army account plus 36 on U.K. Import Program ships), as communicated to the ASF from Quebec on 20 August —104 for October, 105 for November, and 125 for December. Diary, Theater Br, 20 Aug 43, Pl Div ASF. Actual sailings carried approximately 2.78 million measurement tons or the equivalent of 278 notional sailings. Compare figures in Ruppenthal, *Logistical Support I*, 138.

U.S. troops were in the United Kingdom, as against the QUADRANT target of 814,300. Moreover, the flow of service troops was stepped up during the last four months of the year, tripling the strength of the ETOUSA Services of Supply.[51]

Despite a substantial volume of advance cargo shipment during these months, the failure to use all the available shipping space again reflected a lag in the preshipment program. Low priority was still the root of the problem. The effects of low priority were twofold: it diminished the net total of cargo of all kinds available for BOLERO, and it resulted in unbalanced shipments, for the priorities system applied more particularly to items in short supply. Thus, in the shipments of organizational equipment made through the end of August 1943 for type units on the ETOUSA troop basis, there were numerous shortages of critical items—in signal equipment, for example, which the ASF had not even attempted to preship. On 24 September ETOUSA complained bitterly of the situation and asked for a delivery schedule that would assure full equipment for all divisions 45 days before arrival of personnel.

Stock Control Division, ASF, found in an item-by-item survey, that the situation was less alarming than the theater had painted it, but pointed out that "shipments have reached the point where the existing priority is not sufficient to forward balanced stocks."[52] Col. Frank A. Henning, Acting Chief of Stock Control Division, urged that the priority for preshipment be raised at least above that of troops in training. Officials who were in closest touch with strategic developments, both OPD and ASF, were not yet ready to take this step. Col. Carter B. Magruder of Planning Division, ASF, was reported by Colonel Henning to feel that

> in view of tactical considerations we would not be justified in increasing the priority of this project for the sole purpose of providing the theater commander with equipment 45 days in advance of the arrival of units simply to permit him comfortable time for distribution. Colonel Magruder stated that all written directives pointed to OVERLORD as the main effort, but that the fluidity of the tactical situation at the present time was such that he considered it a definite possibility that the emphasis would be taken from this operation in favor of augmentation of forces in the Mediterranean. . . .[53]

Further study by Stock Control Division indicated that the total amount of equipment for the OVERLORD troop basis could probably be laid down in the United Kingdom by D-day (then planned for 1 May 1944) if the priority for signal equipment were raised by 1 December 1943 and for the rest of the technical service equipment by 1 January 1944. If cargo had to be found to fill all available ships, then the priority must be raised by 1 November. With these assurances concerning the total amount, which seemed to take little note of the problems of overloaded British ports and distribution within the theater, higher authority was apparently satisfied. One small concession was made late in October—current theater priorities (A-1-*b*-8 for ground equipment; A-1-*b*-4 for air) were extended to cover

[51] Ruppenthal, *Logistical Support I*, 132, 232.

[52] (1) Memo, Col Henning, Actg Dir Stock Control Div, for Dir Opns ASF, 2 Oct 43. (2) Msg, W-4888 WXCB 505, London to AGWAR, 24 Sep 43. Both in Log File, OCMH.

[53] *Ibid.* (1).

shortages against TOE's of units scheduled to sail before the end of 1943. In reality, this hardly involved priorities for advance shipments at all, because by that time all further shipments would be less than 60 days in advance of troops sailing in November and December. Certainly little of it could arrive in ETOUSA in time to permit the 45 days for distribution demanded by that theater. The real preshipment problem, by the end of October, involved units scheduled to embark in 1944. For these the priority for advance shipment remained low in the A-2 category.[54]

As the prospects for filling available shipping in November faded, pressures for a revision of priorities mounted. The only alternative appeared to be a cutback in the schedule of allotted ships to bring cargo space in line with ASF capacity to ship. At least partially facing up to this situation, ASF on 6 November formally requested from OPD an A-2-*b* priority for preshipment against the 1 May 1944 troop basis with a special priority of A-1-*b*-1 for automotive equipment to insure supply of heavy vehicles direct from production. OPD approved this request on 10 November, but the upgrading did not go into effect until the 22d, too late to have any appreciable effect on November shipments.[55]

By early December 1943 the situation had reached a point where more far-reaching decisions were needed. Priority for preshipment in itself could no longer be considered the basic issue. It was rather the priority of the European theater and of OVERLORD in the whole scale of global war. The long daylight hours of summer were no longer a consideration, and relatively little time remained even for using advance shipments to spread the load on British ports and inland transportation facilities with a view to avoiding congestion just before D-day. In general, the flow of troops in late 1943 was rapidly catching up with the flow of cargo. On 1 November 1943 an estimated 1,040,000 tons of preshipped equipment were available for issue in the United Kingdom. Two months later, despite the continued flow of supplies, these stocks had dwindled (through issue to troops) to less than half that amount —445,000 tons.[56]

In short, preshipment was only a limited success in 1943, since it had failed to achieve its larger purposes. By the end of the year its continuation was justified mainly as a convenient method of shipping in bulk all organizational equipment, necessary maintenance, and special operational supplies that must be on hand for a 1 May 1944 D-day. The major questions now were whether these supplies could actually be provided on time under existing priorities, and whether, if they were loaded in the United States in the intervening months, British ports and inland transport facilities could handle the deluge of incoming freight.

It might well be argued that the delays in executing BOLERO in 1943, of which the shortfall in the preshipment program was probably the most significant aspect, made almost inevitable the postponement of D-day beyond May 1944, though this point is not clearly

[54] (1) *Ibid.* (2) Leighton, Problem of Troop and Cargo Flow, pp. 109–11.

[55] *Ibid.* (2).

[56] (1) Memo, ASF for OPD, 4 Nov 43, sub: QUADRANT Decisions. (2) Memo, Dir Plans and Opns, ASF, for CG ASF, 4 Jan 44, sub: SEXTANT Decisions. Both in Historical File #9, Plng Div ASF.

demonstrable and the issue was never really debated at the high levels. From another point of view, for all its inadequacies the BOLERO build-up by November 1943 had reached a stage where the decision to go ahead with OVERLORD was practically irreversible, leaving only the precise date at issue. The assembly of troops and supplies in the United Kingdom, the construction of facilities, the training of troops, and the development of administrative plans and schedules had created a momentum that could have been arrested only by some cataclysmic event, such as a German debacle in the Mediterranean or in Russia and imminent collapse of Hitler's regime. No such event seemed in the cards when the Cairo Conference convened late in November.

CHAPTER X

Ships, Landing Craft, and Strategy

While the strategic issues were being debated in fall of 1943, important decisions were in the making on shipbuilding and landing craft programs for the following year. Both problem areas had taken on a new complexion. For merchant shipbuilding, the problem no longer was to produce maximum tonnages in order to offset and outpace the drain of ship sinkings, but rather to strike and maintain a balance between general and special types of shipping and among the various special types themselves. As might be expected, the most critical decisions for the immediate future centered on assault shipping—both combat loaders and landing craft—the provision of which was the chief complicating factor in the formulation of plans for the war in Europe. Ironically, the very urgency of the need in the ETO worked against its solution. With OVERLORD's D-day not far off, and a production lead time of many months to reckon with, the time of decision had virtually passed. In the Pacific theaters, where the Navy's greatest interest lay, the lead time was longer, and Navy planners began to shape a new assault shipbuilding program mainly in terms of Pacific needs.

Shipbuilding: A Record-breaking Year

The year 1943 was the greatest year for Allied merchant shipbuilding in World War II. American shipyards poured out 19.2 million dead-weight tons, more than two-and-one-third times as much as in 1942 and, added to the 1942 output, exceeding the President's original goal for 1942–43 by more than 3.2 million tons. In ocean-going merchant shipping alone, this mammoth output registered a net gain of 15.2 million tons over American losses in 1943; it was mainly responsible for a net increase of 16.4 million tons in Allied and neutral shipping during the year. As early as October, statisticians could jubilantly report that the vast cumulative deficit in Allied and neutral shipping that had existed since the beginning of the war in Europe had finally been wiped out. Henceforth, the charts would show a steeply climbing curve above the inventory level of September 1939. At the end of 1943 the U.S. ocean-going merchant fleet alone stood at 29.4 million dead-weight tons, almost two-and-a-half times as large as it had been when the European war started.[1]

That the shipping tonnage built in 1943 was not even greater was largely because of a shortage of steel. By late spring 1943 the Maritime Commission had

[1] (1) U.S. Maritime Commission, *Statistical Summary*, Tables A–3 and A–4. (2) Lane, *Ships for Victory*, p. 638. (3) ASF Monthly Progress Report, sec. 3, Transportation, 31 Mar 44. (4) Behrens, *Merchant Shipping*, p. 23.

established a goal of 21 million tons of shipping for the year, but under military protest that steel allocations for such a program would cut too far into other essential military production, the goal had to be reduced to 18.9 million tons. As indicated, the goal was exceeded by 300,000 tons, largely by squeezing more steel, through improved management, from raw stock inventories and backlogs of fabricated parts in the shipyards themselves.[2]

Over 1,200 of the 1,949 ships of all types built in this record-breaking year were Libertys (70 percent of total deadweight tonnage), more than twice the number built in 1942. Yet the spectacular performance of the shipyards in 1943 was not wholly a matter of the application of mass production techniques to standardized, easy-to-build ships such as the Liberty. The output of standard cargo vessels (C-types), built to peacetime standards, was three times that of the year preceding, and the number of military types built by the Maritime Commission for the armed services—combat loaders, Navy tankers, troop transports, escort carriers, frigates, and LST's—more than quadrupled. The number of minor and special types, such as concrete and wooden ships, ore carriers, and tugs, multiplied more than eightfold over the 1942 program. These were signs of the beginnings of a transition from emergency shipbuilding programs that emphasized simplicity of design, standardization, and rapid construction, toward more diversified programs designed to meet specialized military needs.[3]

Twenty-One Million Tons for 1944

How these specialized military needs would figure in the 1944 program was not apparent in the planning early in 1943 for ship construction during the following year. The first phase of that planning involved instead a bitter controversy between the War Production Board and the Maritime Commission over the relative merits of standardization and mass production of cargo ships versus smaller production of faster, higher quality vessels. Independently of any stated military need the Maritime Commission had, as far back as September 1942, introduced the Victory ship, a fast (16.5 knots) carrier, slightly larger than the Liberty and a better all-around vessel. It was designed with half an eye to postwar commercial competition, although it was not so well adapted for that purpose as the standard C-type cargo ships normally built in American shipyards before the war. For wartime use, its potentialities were obvious: its speed reduced the need for naval escort and made it suitable for conversion as a troop carrier. In a sense, too, the Victory was a product of the steel shortage, though it used more steel than the Liberty. Since there seemed little prospect of the shipyards getting enough steel to build all the Libertys they were capable of building, the Maritime Commission decided

[2] (1) On the dispute over allocation of steel see Ltr, JCS to Donald M. Nelson, Incl to JCS 282/5, 10 Jun 43, title: Third Quarter Allocations of Steel, and JCS 500/3, 18 Sep 43, title: Allocation of Steel Plate for Fourth Quarter, with related papers in ABC 411.5 (4-28-63 and 11 Sep 43). (2) Leighton and Coakley, *Global Logistics, 1940–43*, pp. 625–29. (3) Lane, *Ships for Victory*, pp. 334–53, especially charts page 345. (4) Maritime Comm, *Statistical Summary*, Table B–10.

[3] (1) Maritime Comm, *Statistical Summary*, Table B–3. (2) Lane, *Ships for Victory*, pp. 574, 637–38.

the yards' extra capacity should be used to construct better, faster ships that took longer to build. Shipyards with the best records in turning out Libertys were scheduled to convert to the Victory in the latter part of 1943. The commission's 1944 program, as it stood in April 1943, called for 524 Victory ships, 369 C-type vessels, and only 367 Libertys in a total goal of 19.2 million dead-weight tons.[4]

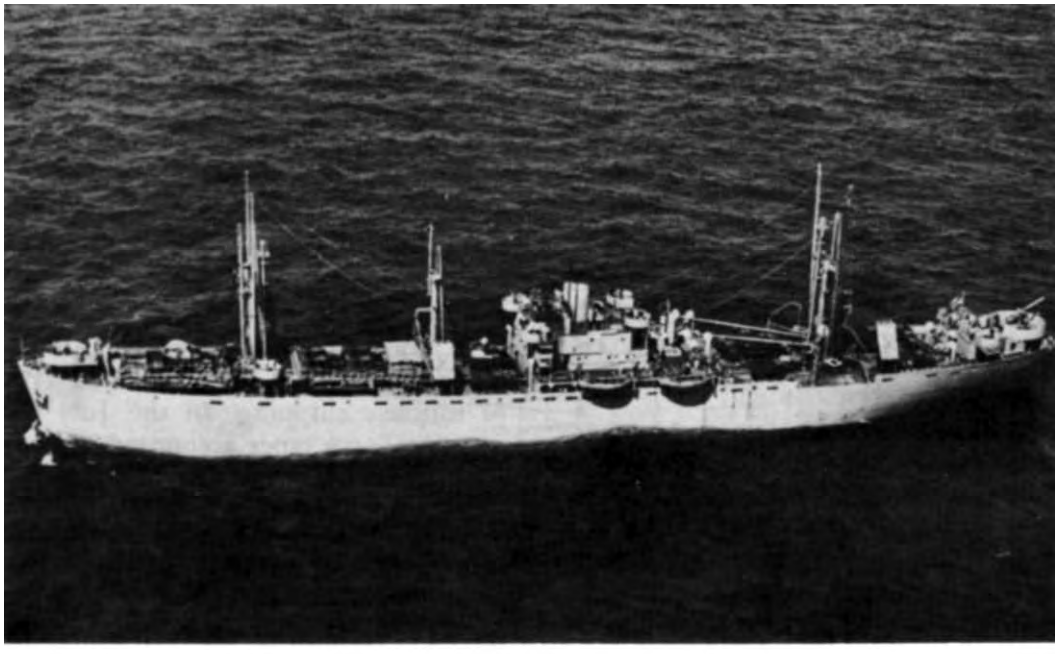
The program immediately came under sharp attack from the War Production Board, which wanted the commission to reduce the number of types in order to increase total output. The chief spokesman for this point of view was William F. Gibbs, a naval architect of national prominence, who was named Controller of Shipbuilding under WPB in December 1942 and in March 1943 became chairman of a new Combined Shipbuilding Committee (Standardization of Design) under the CCS. The details of the controversy cannot be recounted here, but by July 1943 Gibbs and WPB had forced a revision of the 1944 shipbuilding program to increase total tonnage to 21 million (22.3 million tons including conversions) with a marked shift of emphasis back toward the mass-produced Liberty. In the July plan 814 Libertys were to be built, along with 340 Victorys and 314 standard C-type vessels.

This new program, essentially a compromise, did not end the controversy. WPB pressed for elimination of the C-type ships entirely in favor of one fast ship, the Victory, using a single standardized turbine engine, and a further increase in the number of Libertys. The Maritime Commission resisted WPB's proposals and denied its jurisdiction in matters relating to vessel design. The two agencies thus reached an impasse that could only be broken by higher authority. Who or what that higher authority would be remained for a while in doubt. Then on 15 July Charles E. Wilson, executive vice-chairman of WPB, put the problem to the Joint Chiefs of Staff by asking for a statement of strategic shipping requirements for 1944. In this form, the question was referred to the Joint Military Transportation Committee for detailed study.[5]

The JMTC made no pretense of recalculating military requirements for shipping. Instead they listened to an exposition of the respective positions and then examined the military implications of each. On the main question, the JMTC was impressed by the military advantages offered by fast cargo carriers—fewer losses, lower escort requirements, more round trips and more cargo delivered per year, smaller crew requirements, better adaptability to conversion as troop carriers. Some of these points, to be sure, had been challenged—for example, until fast ships became available in large numbers (probably in 1945), they would have to be used along with slow ones in convoys where their speed would be a wasted asset. However, the 21 million tons of shipping the Maritime Commission planned to build in 1944, would, according to JMTC calculations, support an overseas Army deployment of five million men by the end of 1944, together with all other military

[4] (1) Maritime Comm, *Statistical Summary*, Tables A–4, B–10. (2) Lane, *Ships for Victory*, pp. 28, 574–77, 607. (3) See Table 21, p. 258, below.

[5] (1) For details of the controversy, see Lane, *Ships for Victory*, pages 587–604. (2) Memos, Wood for Somervell, 13 Jul 43 and 9 Aug 43, folder CsofS Jt and Comb 1942–44, Hq ASF.



LIBERTY SHIP *(top)* AND VICTORY SHIP *(bottom)*



and civil commitments. Strategy for 1944 and 1945, as now foreseen, was built around this scale of deployment, which was also the estimated maximum for which the country was expected to be able to produce munitions. It followed that more shipping would not be needed —perhaps could not even be used—and this cut the ground from under the WPB argument. Admiral Leahy summed up the case in a letter to Wilson on 9 August:

> The JCS believe . . . that shipping . . . will not continue to be the bottleneck of our war effort overseas, that limitations in production of war products other than merchant shipping will govern. The urgent necessity to produce the greatest possible number of ships in a given time, met by mass production of Liberty ships, therefore becomes less compelling.
>
> Since the beginning of the shipbuilding program, the fast C ships, particularly the C_2 and C_3, have best met the strategic needs. . . . They are now being rapidly converted as combat loaders and as combination passenger and cargo to fill vital military needs. The C_4 is building in direct response to Army requirements. The increased speed of these faster ships reduces the danger of loss of troops and cargo from submarine attack, shortens the time of turnaround, decreases the requirements for escorts and saves crew manpower. . . . This experience leads to the conviction that our strategic needs in 1944 will best be met by the maximum number of fast ships.[6]

The JCS, Leahy concluded, "endorsed" the Maritime Commission's program for 1944.

This verdict from the group representing the principal users of merchant shipping apparently settled the controversy, although neither the WPB nor the Maritime Commission recognized the JCS as a superior authority in matters relating to ship construction. The 21-million-ton program of July stood for the time being. The JCS endorsement of the program was nevertheless premature, for it took into consideration neither the amount of steel required for a program of such magnitude nor the growing demands for specialized types of military shipping. In the July program military types accounted for only 2.3 percent of proposed 1944 construction.[7]

Once the increased demands for steel engendered by the 21-million-ton program became apparent, the JCS was forced to reconsider. Early in September 1943 the Maritime Commission opened the battle over fourth-quarter steel allocations with a request for 225,000 tons more steel than it had been allotted in the third quarter, citing as justification the need to meet first-quarter 1944 schedules under the new building program. The plate requested (1,725,000 tons) represented 64 percent of the total amount available for the Army, Navy, and Maritime Commission together instead of the 60 percent the commission had been receiving. This posed a threat to military production programs for which steel plate was already short—Army trucks, harbor craft, landing mat, steel drums, naval combat vessels, and, above all, the vital landing craft program. On the recommendation of the Joint Administrative Committee, the JCS on 14 September asked WPB to hold fourth-quarter steel plate alloca-

[6] (1) JCS 448/1, 12 Aug 43, ltr, Leahy to Wilson, 9 Aug 43, title: Large Dry Cargo Ships. (2) JCS 448, 7 Aug 43, rpt by JMTC, same title. (3) See also draft of (1) in OCT HB, Gross Day File 1943, Case 197.

[7] See Table 21, p. 258.

tions to the 60–40 ratio then prevailing, and directed the JAdC to restudy military requirements for steel to bring allocations to the three principal users "into more effective balance." Finally, on 22 September, the JCS informed the chairman of the Maritime Commission, Rear Adm. Emory S. Land, in some embarrassment (and in contradiction of the record) that their earlier "endorsement" of the 1944 building program referred only to types of vessels and not to the aggregate size of the program. They added that the JAdC had been instructed to examine military shipping needs in order to determine "the total program that can be undertaken without impinging on other necessary military programs."[8]

This casual announcement flashed a danger signal to Admiral Land. The JCS, he replied, were at liberty to examine the Maritime Commission's program insofar as it related to military requirements, but they had no jurisdiction whatsoever over merchant shipbuilding, and he could not recognize their authority to review the shipbuilding program "in relation to programs other than military programs."[9] Regardless of the merits of this contention, the Maritime Commission was, in fact, swimming against the tide. All the war agencies were under heavy pressure from the Office of War Mobilization to cut back their supply requirements. The huge shipbuilding program for 1944, larger even than that for 1943, invited attack, particularly since the JCS were on record as stating that in 1944 merchant shipping would no longer be the bottleneck of the war effort. On 28 September the President directed James Byrnes to have the Joint Production Survey Committee (JPSC) of the JCS review the entire shipbuilding program of the Navy, Army, and Maritime Commission. Roosevelt's instructions indicated that he had in mind primarily combat types, and that the study of possible cuts in merchant shipbuilding should be left to the Maritime Commission. Byrnes chose, ostensibly as a matter of administrative convenience, to interpret the directive broadly, and, over the protests of Land and Douglas, ordered the commission to submit its recommendations directly to the JPSC. He added a revealing comment on the report that the commission had already submitted in defense of its program:

> Assuming all . . . uncertainties . . . there seems little room for doubt that the actual production of ships in accordance with [the program] will lead, after the first quarter of 1944, to an accumulation of merchant tonnage, for which there will be no wartime need and which it will be difficult and unnecessary to man and use under the manpower deficiency with which we will be at that time confronted.[10]

[8] (1) Ltr, Leahy to Land, 22 Sep 43, Incl in JCS 501/1, 22 Sep 43, title: Endorsement of Maritime Comm Shipbldg Program 1944, with related papers in ABC 561 (7 Aug 43), Sec 1. (2) Ltr, Leahy to Nelson, 14 Sep 43, Incl in JCS 500/1, 14 Sep 43, title: Allocation of Steel Plate for Fourth Quarter. (3) JCS 500, 13 Sep 43, rpt by JAdC, same title. (4) Min, 26th mtg JAdC, 13 Sep 43; 27th mtg, 14 Sep 43. (5) Min, 114th mtg JCS, 14 Sep 43; 115th mtg, 21 Sep 43.

[9] Ltr, Land to Leahy, 9 Oct 43, Incl to JCS 501/2, 16 Oct 43, title: Endorsement of Maritime Comm Shipbldg Program.

[10] (1) Ltr, Byrnes to Land, 16 Oct 43, folder Maritime Comm Proc Rev Bd 1945, WSA Conway File. (2) On the procurement review boards, see above, Chapter IV. (3) Memo, President for Byrnes, 28 Sep 43, filed with JCS 501/2, 16 Oct 43, title: Endorsement of Maritime Comm Shipbldg Program.

Pending completion of the survey, the President on 18 October provisionally authorized the Maritime Commission to proceed with its 1944 program (21 million tons of ocean-going shipping), with the understanding that the decision would be reviewed in January. But the commission had read the signs. On 29 October, its procurement review board reported to Byrnes that, if sufficient steel were provided to permit building at the existing rate through the first half of 1944, schedules could probably be cut back about 20 percent beginning in July.[11]

Combat Loaders for the Pacific

At this juncture, the emergence of concrete military demands for specialized types of shipping—chiefly transports, assault ships, and landing ships and craft for the Pacific campaigns—gave the whole controversy a new turn. Expansion of the landing craft program would remove steel and facilities from the Maritime Commission's program altogether. Since transports and assault ships took longer to build, ship for ship, than the mass-produced cargo carriers, and usually involved time-consuming design changes while on the ways and conversion processes after the completion of the basic vessel, a given number of them displaced much more than their equivalent tonnage of merchant shipping in the program.

Even in July and August 1943, when the military services endorsed the Maritime Commission's plan to build more fast cargo ships, they were primarily interested in them as potential troop carriers. Since May military demands for troop-carrying tonnage to be provided either by conversion or completion on the ways had multiplied at such a rate that on 21 July Admiral Land registered a protest with the JCS. Conversions demanded in 1943 alone, Land warned, would absorb all the new C–2's and C–3's now scheduled, cutting deeply into the fast cargo fleet at a time when military requirements for cargo movement were still growing. Shortly before the Quebec Conference in mid-August the JCS made some concessions but they involved mostly conversions of Libertys rather than the faster C-types. After Quebec, with new and larger deficits in Pacific troop lift imminent, the Maritime Commission received new demands for conversions and agreed in mid-September to add 13 C–1 and 15 C–4 hulls to the existing program. This raised the 1943–44 program total for conversions to troop carriers to about 220 ships, almost all from standard cargo types.[12]

This was only the beginning. The Navy's desire to provide adequately for accelerated advances in the Pacific soon brought new demands which promised to have far greater impact on the 1944

[11] (1) Rpt of Maritime Comm Procurement Review Board in reply to OWM Ltr of 16 Oct 43, 29 Oct 43, folder Maritime Comm Proc Rev Bd 1945, WSA Conway File. (2) Ltr, President to Adm Land, 18 Oct 43, Incl to JCS 501/4, 20 Oct 43, title: Endorsement of Maritime Comm Shipbldg Program.

[12] (1) JCS 420, 22 Jul 43, ltr, Adm Land to JCS, title: Army and Navy Reqmts for Troop Transport. (2) JCS 420/1, 9 Aug 43, rpt by JMTC, same title. (3) JCS 493, 10 Sep 43, rpt by JMTC, title: Provision of Adequate Trooplift for Movement of U.S. Forces Overseas. (4) Ltr, Douglas to Land, 22 Aug 43, folder Quebec (Douglas) 1943, WSA Conway File. (5) Douglas Notes on conf with Adm Smith and Comdr Ross, 31 Aug 43, folder Navy Allocs, WSA Douglas File. (6) Ltr, Leahy to Land, 13 Sep 43, OPD 561 Sec I, Case 13. (7) In November 1943, 30 more C–4's were added to the conversion program. See Lane, *Ships for Victory*, pp. 617–24, for the full story.

program. On 18 September Admiral King tossed into the hopper a new requirement for combat loaders—40 APA's, 20 AKA's, and 3 AGC's (amphibious headquarters ships)—to meet the schedule of Pacific operations agreed to at QUADRANT. These vessels were to be obtained by converting C–2, C–3, or Victory hulls—as many as possible to be completed in 1944, all of them by mid-1945. With these added to vessels already in service, and the building and conversion programs already approved, the Navy would eventually have about 140 APA's, 83 AKA's, and 8 AGC's for the final offensives against Japan.[13] Then on 4 October the Navy planners submitted through the Joint War Plans Committee a new combat loader program more than three times as large as the one King had proposed—133 APA's, 53 AKA's, and 13 AGC's, besides those already approved and in service. Most of them would be needed by the end of the year 1944, an acceleration of six months over King's 18 September schedule.[14]

The Navy program rested on the strategic concept, currently under study, of defeating Japan within a year after the defeat of Germany, then hopefully anticipated by 1 October 1944. Its avowed purpose was to provide assault lift in the Pacific theaters for ten amphibious divisions by October 1944 and for two more by the end of 1944, not counting lift available in landing ships and craft. It assumed concurrent advances in the Central, South, and Southwest Pacific, in the last instance accelerated by six months over the QUADRANT schedule. The planners made ample allowances for the fact, as Rear Adm. Bernhard H. Bieri explained, that "distances in the Pacific precluded quick turnaround and rapid shifting of combat tonnage from one area to another." Additional allowances were provided for a lapse of three months between the delivery of a new vessel in the United States and its readiness for assault, and for an accelerated and expanded amphibious training program on the west coast.[15]

While OPD planners considered these estimates of combat loader requirements based on yet unapproved plans for Pacific operations after mid-1944 "of little or no value," they agreed to accept them as long-range estimates subject to quarterly review. The Joint Planners accordingly sent them on to the Joint Administrative Committee for consideration in connection with the review of the ship construction program the JCS had directed in September.[16]

The whole issue was beclouded during most of October by an assumption in the joint committees that the combat loader program could be accomplished by conversions in Navy shipyards without substantially affecting the Maritime Commission's ship construction program. On this assumption, the JMTC, from which the JAdC had requested estimates of shipping requirements for 1944 and of new construction necessary to meet them,

[13] (1) JCS 507, 18 Sep 43, memo by COMINCH, title: Combat Loader Reqmts for USN, ABC 561 (18 Sep 43). (2) As of 1 October 1943 the Navy reportedly had 30 APA's and 14 AKA's in service. CCS Memo for Info No. 154, title: Landing Craft Reports, ABC 561 (31 Aug 43) Sec 1A.

[14] JPS 285/1, 4 Oct 43, rpt by JWPC, title: Shipbldg Program of Maritime Comm for 1944.

[15] (1) *Ibid.* (2) Quotation from Min, 105th mtg JPS, 6 Oct 43.

[16] (1) OPD Notes on JPS 105th Mtg, 6 Oct 43, ABC 561 (7 Aug 43), Sec 1. (2) Min, 106th mtg JPS, 6 Oct 43.

on 27 October in effect re-endorsed the Maritime Commission program. The committee reported a need for as much as 18.7 million dead-weight tons of new dry cargo shipping in 1944 and concluded that the 16.7 million tons programed by the Maritime Commission (making up, with tanker tonnage, the 21-million-ton program) would be a safe goal only because of uncertainties surrounding requirements in the last quarter of the year.[17] The Navy had decided meanwhile that it had nothing like the yard capacity to carry out the conversions, and on 24 October had asked the Maritime Commission to estimate the impact of constructing the combat loaders from the keel up in its facilities. The Joint Logistics Committee (the successor to the Joint Administrative Committee) had therefore finally to face an entirely new factor in framing its report for the JCS.[18]

Time by now had grown short since 10 November was the deadline for placing mill orders for steel plate to be rolled in the first quarter of 1944. On 5 November the Joint Logistics Committee (JLC) turned in its report. Under pressure from the Maritime Commission and ASF, the committee had pared down the number of combat loaders to 130 APA's and 30 AKA's and postponed the delivery date for most of them to the last three months of 1944; the AGC's were to be obtained through conversion in Navy yards. If the 160 combat loaders were put into the 1944 building program, the JLC reported, they would displace from the building program 386 fast cargo ships (mostly Victorys) and about 30 tankers. The committee proposed, however, to cut more than twice this number of tankers in order to release still more steel plate (at 4,200 tons per tanker) for other programs, mainly landing craft. By these means, it was hoped that steel plate allocations to the commission during the first three months of 1944 could be held down to 60, 55, and 50 percent, respectively, of the supply available for the three major claimants (the Maritime Commission was then demanding 61.1, 62.2, and 58.5 percent). The net reduction in the whole shipbuilding program for 1944 would be about 3.5 million dead-weight tons.[19]

Neither the small proposed reduction in the number of combat loaders nor the postponement in deliveries caused more than a ripple of dissent. These modifications, the JWPC noted, might somewhat reduce "flexibility," but the original program had evidently embodied it in more than ample measure. The size and implication of even the reduced program, on the other hand, alarmed ASF officials, who had been worried from the start over the impact of the combat loader program on ship tonnages needed for the ordinary tasks of moving and supplying troops. "Undoubtedly more combat loaders are needed," General Gross admitted, ". . . but the number . . . should be more carefully justified and approved before shipping for other needs

[17] JMT 35/1, 27 Oct 43 (JLC 17), title: Steel Allocations to Army, Navy, Maritime Comm for 1943–44.

[18] (1) Ltr, Rear Adm Howard L. Vickery, Maritime Comm, to Adm Badger, ACNO Log Plans, 28 Oct 43. (2) Memo, Col Stokes, Chief Planning Div, OCofT, for Col Magruder, 1 Nov 43, sub: Interim Rpt Shpg Situation. Both in folder Shpg vs Pers vs Supply, ASF Plng Div.

[19] (1) *Ibid* (2). (2) JCS 569, 5 Nov 43, rpt by JLC, title: Allocation of Steel Plate and Endorsement of Maritime Comm Shipbldg Program.

is so easily tossed aside."[20] ASF officials were concerned over an estimated deficit of 233 cargo sailings in the last quarter of 1944 and about 100 small (4,000-ton) freighters needed for the Southwest Pacific that the JCS had not yet formally requested from the Maritime Commission. This fourth-quarter deficit, to be sure, rested on such dubious assumptions as full American responsibility for rehabilitation and economic support of occupied territory, growing lend-lease commitments, and, finally, a continuous increase in deployment to Europe to the very end of 1944. As General Lutes admitted, these assumptions were inconsistent. If the war in Europe ended in October there would hardly be an increase in lend-lease commitments or in deployment to Europe; if it did not, the burden of rehabilitation and economic support of liberated or occupied territory was not likely to be so large.

Nevertheless, there was something akin to sleight of hand in the ease with which the supporters of the combat loader program now wrote off new cargo ship and tanker tonnage for which the JMTC had foreseen a need only nine days earlier. Faced with a Navy attempt to have the combat loader program approved by informal JCS action, General Lutes insisted that it be formally considered and suggested that the ASF "press for an approved strategic plan as foundation."[21]

The JLC report was formally considered by the JCS on 9 November, but little was said about strategic foundations. It was the day before the deadline for placing first-quarter steel orders, and Admiral King, flanked by Admirals Horne and Badger, made the most of this circumstance to counter Somervell's request that the report be studied before it was approved. After a spirited debate, in which Somervell stood alone against the report, General Marshall ended the discussion by suggesting the JLC proposals be accepted, with steel plate allocations for January to be made firm and those for February and March to be suspended until 15 December. The shipbuilding situation as a whole was to be reviewed again in January, as the President had already directed. Letters were formally dispatched to WPB and the Maritime Commission requesting adjustments in the 21-million-ton program to accommodate the 160 combat loaders.[22]

The JCS decision coincided with the other pressures on the Maritime Commission for reduction in its program, and by 20 November 1943 the commission had readjusted its sights for 1944 along lines indicated by the JCS. The 20 November program showed a net reduction of slightly over three million dead-weight tons. It provided for 171 new combat loaders instead of the 160 asked for, and in compensation reduced the number of C–4 troop transports from 27 to 17. It increased the number of Victorys at the expense of standard cargo vessels, while the number of Libertys remained very nearly the same. Over-all, by various

[20] (1) Memo, Gross for Somervell, 8 Nov 43, sub: Comments on JCS 569, OCT HB Gross Day File, 1943, Case 245. (2) JPS 285/2, 8 Nov 43, rpt by JWPC, title: Shipbldg Program of Maritime Comm, ABC 561 (7 Aug 43), Sec 1.

[21] (1) Memo, Lutes for Styer, 5 Nov 43, and Memo for Dir Opns, 6 Nov 43. (2) Memo, Col Stokes for Gen Gross, 6 Nov 43. Both in folder Current Opns, ASF Plng Div, Case 45.

[22] (1) Min, 122d mtg (suppl) JCS, 9 Nov 43. (2) Ltrs, Leahy to Nelson and Leahy to Land, 9 Nov 43, Incls to JCS 569/1, 9 Nov 43, title: Allocations of Steel Plate. . . .

adjustments the Maritime Commission program cut the anticipated deficit in cargo ship sailings in the fourth quarter of 1944 from 233 to 164. Even at this lesser cost, ASF spokesmen were not satisfied. On 25 November Brig. Gen. Walter A. Wood, ASF member on the Joint Logistics Committee, challenged the JCS decision as having been made in undue haste and "without clear justification" and asked that the JLC draw up "a more thoroughly prepared program of ship construction in 1944."[23]

By this time ASF opposition seemed to be directed less at the scope of the combat loader program as such than at the general failure of the JCS committees to really integrate the shipping study with proposed strategy or to stipulate the use and control of the huge pool of combat loaders when they were not engaged in amphibious operations. The Navy's defense of its combat loader program, despite an allusion to the possibility of using the vessels "to supplement overall troop and cargo requirements as primary operational needs would permit" had not been reassuring on the latter score.[24] General Wood's paper never emerged from the lower committees for consideration by the JCS. Following the SEXTANT Conference, the Joint War Plans Committee re-examined the combat loader requirements in the light of decisions reached there on Pacific strategy and concluded that the combat loaders should not be made available according to the quantities and schedules of the JCS decision of November, but according to those the JWPC had proposed early in October. These schedules called for 23 more APA's and 3 more AKA's and for delivery of 148 of the 186 total during the third quarter rather than the fourth quarter of 1944. Against this proposal General Gross issued a final blast describing it as "impossible" and "unrealistic," since it would cause "further drastic invasion of cargo ship tonnage."[25] But Gross had already been forced back to a defense of the Maritime Commission's latest (as opposed to the earlier) program, and he got no support from OPD even against the proposal for accelerating the combat loader program further. "Although General Gross states that the combat loader requirements are unrealistic," wrote an OPD officer, "it would be equally unrealistic to produce hundreds of cargo vessels to serve armies and then find that these armies cannot be placed in contact with the enemy due to the lack of combat loader shipping."[26]

The JCS took no formal action on the JWPC's proposals to accelerate the combat loader program further. Nonetheless, during December and early January other demands emerged to push the

[23] Memo, Dep Dir Plans and Opns, ASF, for Secy, JLC, 25 Nov 43, sub: Review of JCS 569 to Determine Maritime Comm Construction Program for 1944, file CG ASF 1943–44, Hq ASF.

[24] JPS 285/2, 8 Nov 43.

[25] (1) Memo, Gen Gross for Gen Wood, 26 Dec 43, sub: Combat Loader Reqmts. (2) Memo, Secy JLC for Secy JPS, 9 Dec 43. (3) JPS 285/4, 14 Dec 43, rpt by JWPC, title: Combat Loader Reqmts. All in ABC 561 (7 Aug 43), Sec 1.

[26] (1) Memo, Col Billo for Chief, S&P Gp, OPD, 29 Dec 43, sub: Memo for Gen Wood Concerning Combat Loader Reqmts, ABC 381 Strategy Sec Papers (7 Jan 43) 196–213, Tab 201/1. (2) Colonel Billo and other OPD officers during this period show some confusion as to the difference between the original requirement set forth by the Navy in JPS 285/1 and the program approved by the JCS in JCS 569. Billo's memo therefore did not, in fact, squarely meet the points raised by Gross.

Maritime Commission further in the direction of building military types at the expense of ordinary cargo tonnage. Though Admiral Land protested again to the JCS on 10 December about the continuing drain of fast cargo tonnage into the military pool, in reality the Maritime Commission seems to have given up its fight against the trend. It also accepted steel allocations for February and March as the JCS had proposed them, thus freeing steel plate for use in other military programs, particularly in the critical landing craft program that was concurrently undergoing expansion.[27]

By January 1944 military types of shipping made up about 11 percent of the Maritime Commission program, as against 2.5 percent in April 1943. The proportion of ships to be finished as fast cargo carriers had fallen correspondingly from over 45 percent to less than 17 percent. This trend, ironically enough, reversed not only the Maritime Commission's plans for 1944 building but also the military services' own verdict of 9 August. Similarly, WPB, although at the time it had apparently lost its fight for continuing emphasis on construction of Libertys, could take some satisfaction in the fact that this category, which the commission in April had planned to reduce to only 20 percent in the 1944 program, now comprised almost 46 percent. (*Table 21*)

The Joint Production Survey Committee, meanwhile, on 7 November 1943 had returned a verdict endorsing the Navy's current program for building combat vessels, and on 8 January 1944 it filed a second equally uncritical report endorsing the programs for building other types.[28] The JPSC report was apparently accepted as the January review the President had ordered. By this time even the ASF seemed to be satisfied. A Planning Division report noted: "At first it was believed that the reduction in dry cargo tonnage demanded by the heavy combat loader program would cause serious shortages of dry cargo space. Continual examination has developed that these fears were groundless."[29]

The Maritime Commission viewed the future less serenely and, as it turned out, in some respects more prophetically. In January its Procurement Review Board replied to a request from the Office of War Mobilization for a report on possible cutbacks in the event the European war ended in 1944. The board pointed out that heavy merchant shipping losses could be expected in the Normandy landings and subsequent operations, and that no requirements had yet been submitted for supporting civil economies in occupied Europe, for maintaining occupation forces, or for carrying on the war in the Pacific. In the light of these immense unknown factors, the board considered that further cutbacks would be unwise.[30]

[27] (1) See Lane, *Ships for Victory*, p. 328. (2) Ltr, Chmn Maritime Comm to JCS, 10 Dec 43, Incl to JCS 641, 23 Dec 43, title: Manning of Cargo Vessels with Navy Crews. (3) JCS 569/5, 18 Dec 43, rpt by JLC, title: Allocation of Steel Plate for Feb–Mar 44.

[28] (1) JCS 573, 7 Nov 43, rpt by JPSC, title: Rpt on Army, Navy, and Maritime Comm Shipbldg. (2) Min, 141st mtg JCS, 11 Jan 44.

[29] Memo, Lt Col Cooper for Chief Strat Log Br, Plng Div, ASF, 7 Jan 44, sub: Shpg Situation . . ., folder Shpg vs Pers vs Supply, ASF Plng Div.

[30] (1) Rpt of Maritime Comm Procurement Review Bd, 17 Jan 44, folder Maritime Comm Proc Rev Bd 1945, WSA Conway File. (2) Rpt of Maritime Comm Procurement Review Bd, 11 Feb 44, folder Reading File, WSA Douglas File.

TABLE 21—SHIPBUILDING FOR 1944—EVOLUTION OF THE PROGRAM IN 1943

(In Thousands of Dead-weight Tons)

Program as of	Total Number	Slow (Emergency) Cargo		Standard Cargo		Victory Cargo		Tankers		Minor Types		Military Types	
		Number	Pct.	Number	Pct.	Number	Pct.	Number	Pct.	Number	Pct.	Number	Pct.
15 Apr 43	19,218.3	3,847.5	20.0	3,209.2	16.7	5,502.0	28.7	5,516.9	28.7	658.9	03.4	483.8	02.5
15 Jul 43	22,391.6	8,545.5	38.2	3,110.8	13.9	3,570.0	15.9	5,952.5	26.6	699.2	03.1	513.6	02.3
JCS recommendation (9 Nov 43)	18,488.4	[a]	—	[a]	—	[a]	—	4,000.0	21.6	262.0	01.4	2,250.4	12.2
20 Nov 43	19,126.5	8,672.4	45.4	2,149.3	11.2	1,632.4	08.5	4,226.2	22.1	1,048.2	05.5	1,398.0	07.3
15 Jan 44	18,371.6	8,445.6	46.0	1,528.1	08.3	1,579.4	08.6	3,895.5	21.2	925.9	05.0	1,997.1	10.9
Actual 1942	8,044.5	6,401.8	79.6	387.8	04.8	—	—	982.3	12.2	106.3	01.3	166.3	02.1
Actual 1943	19,210.0	13,361.1	69.6	1,330.3	06.9	—	—	3,233.7	16.8	652.6	03.4	632.3	03.3
Actual 1944	16,300.0	7,797.6	47.9	1,209.3	07.4	1,128.4	06.9	3,732.2	22.9	650.9	04.0	1,781.6	10.9

(In Numbers of Ships)

15 Apr 43	1,834	367	20.0	369	20.1	524	28.6	241	18.6	120	06.5	113	06.2
15 Jul 43	2,115	814	38.5	314	14.8	340	16.1	365	17.3	146	06.9	136	06.4
JCS recommendation (9 Nov 43)	1,803	807	44.8	306	17.0	57	03.2	237	13.1	84	04.6	312	17.3
20 Nov 43	2,012	803	39.9	207	10.3	154	07.7	252	12.5	271	13.5	325	16.1
15 Jan 44	1,998	782	39.1	152	07.6	149	07.5	233	11.7	246	12.3	436	21.8
Actual 1942	760	597	78.5	44	05.8	—	—	62	08.1	24	03.1	34	04.5
Actual 1943	1,949	1,238	63.5	138	07.1	—	—	214	11.0	203	10.4	156	08.0
Actual 1944	1,786	722	40.4	124	07.0	104	05.8	224	12.5	237	13.3	375	21.0

a Breakdown not shown in source. Total cargo ships 11,976,000 dead-weight tons, 64.8 percent of total.

Source: For 9 November 1943, see JCS 569, 5 Nov 43, rpt by JLC, title: Allocation of Steel Plate and Endorsement by Maritime Commission Shipbuilding Program. For remainder of table, see Maritime Commission Statistical Summary, Tables A–4, A–5.

More Landing Craft: The "Percentage Game"

Although the Navy's plans as early as June 1943 had contemplated a moderate increase in landing craft production in the fall, the first strong impulse for a new "crash" program on the scale of that undertaken in 1942 came in August 1943. In that month pressure to produce more landing craft became heavier in both main sectors of the war—in the Pacific as a result of the JCS decision to seek means of defeating Japan within a year of the defeat of Germany; in the European war as a result of the appearance of the OVERLORD outline plans and demands from many quarters to strengthen the OVERLORD assault. At the same time, the unmistakable completeness of the victory over the U-boat promised to release facilities and materials hitherto pre-empted by construction of escort vessels. Yet the new landing craft program was not designed for a two-front war. A companion piece to the Navy's big new combat loader program, it was shaped by the demands of the Pacific war, not the war in Europe.

On 17 August the Navy's Bureau of Ships, in response to Admiral King's telephoned inquiry from Quebec, reported that it would be possible to expand production of landing craft by as much as 35 percent. (On the following day King told the conference that no increase greater than 25 percent was being considered).[31] The greatest limitation would be the output of diesel engines, the power plant for all principal types except LST's. Steel requirements would require cuts in Army and Maritime Commission allocations, not to mention other Navy programs, during the remainder of 1943 and early 1944; from spring of 1944 on, steel production was expected to be more adequate. As for facilities, the Bureau of Ships report ruled out those used in the major combat vessel program, indicated that the yards to be released by cutbacks of submarine chasers were unsuitable in one way or another, and advised against assigning the building of LST's to Maritime Commission yards as had been done the year before. All this seemed to point to the yards engaged up to then in building escort vessels, especially since these yards had performed most brilliantly in the crash landing-craft program the previous winter. Two conclusions emerged clearly: (1) a 35 or even a 25 percent increase in monthly output could not be attained before spring of 1944, and (2) the rate of acceleration before then would be about the same for any program, regardless of its ultimate size.[32]

Studying the report later in the month, the Joint Administrative Committee concluded that a 35 percent increase would have a "real, though not destructive effect" on various Army and Maritime Commission programs, and advised that no more than a 25 percent increase be undertaken for the present. The committee recommended that the necessary steel be contributed in equal amounts over the next six months by the three major users, and thereafter by the Navy alone. Costs were estimated — to the

[31] See above, ch. VIII.

[32] (1) Memo, BuShips for VCNO, 17 Aug 43, sub: Additional Ldg Cft Program, app. A to JCS 462, rpt by JAdC, 30 Aug 43, title: Landing Ships and Cft, Means of Increasing U.S. Production. (2) See also Memo, Wood for Somervell, 18 Aug 43, sub: Expansion of Production of Landing Ships and Craft, folder Future Opns, ASF Plng Div, Case 19.

Army, 9 million square feet of landing mat, 125 medium tanks, 360 flat cars, and 5,500 heavy trucks; to the Navy, 65 destroyer escorts and 12 submarine chasers; to the Maritime Commission, 35 Liberty ships. On 9 September the JCS endorsed these recommendations with the stipulation that by the 20th the JAdC should have ready a more thorough study of a 35 percent increase in the program.[33]

Meanwhile, the Joint Deputy Chiefs of Staff (JDCS) had directed the Joint Planners to determine the "exact percentage" of increase in each type that would result from boosting the whole program by 25 percent. This was a poser, for a "25 percent increase" might mean many things. In its original report the Bureau of Ships experts had assumed that any agreed percentage of increase would be applied to the *directed average output* of each type of vessel. This level had in most cases not yet been attained and bore little relation even to scheduled production over any given short period. The Navy used program goals and monthly schedules (on which directed average output was based) as incentives to greater production, setting both goals and schedules higher than was justified by a realistic estimate of capabilities. What Navy officials actually expected to be produced was often difficult to determine. The JDCS directive to the Joint Planners implied that the basis used in the Bureau of Ships report for calculating the actual increase might not necessarily be used. Did it mean, an OPD officer wondered, that the percentage should be applied to actual current output, or to the directed average over the entire period of the program, or to the average that the Navy realistically expected to attain? Was the increase to be roughly uniform for each type of craft, or was it to be only in the most critical types? What was to be the unit of measure — numbers of craft or tonnage?[34]

Two weeks after receipt of the JDCS directive the planners were still mulling over these questions. Navy members had suggested that a decision should await the results of current tests of certain new types of craft. In their general approach to the problem, moreover, their Army colleagues thought they detected signs of a "reluctance to realistically resolve these matters." Then, on 22 September came a startling development—someone in OPD dug up "fairly accurate evidence" that the Navy had in fact already put into effect, not a 25, but a 35 percent increase in the landing craft program.[35]

The evidence was accurate enough. At the planners' meeting on 22 September the Navy members belatedly produced a copy of a directive from Admiral King to the Vice Chief of Naval Operations and approved by the Secretary of the Navy, ordering an increase of "approximately thirty-five percent" in the program. It was dated 6 September, three days before the JCS had approved the 25 percent increase, and implementing instructions had gone out to the bureaus on the 13th. The JPS found themselves in the awkward position of having to

[33] (1) JCS 462, 30 Aug 43. (2) JCS 462/1, 8 Sep 43; and JCS 462/2, 15 Sep 43, same title. (3) See also papers in OPD 560 Security II, Case 66.

[34] (1) OPD Notes on JPS 101st Mtg, 15 Sep 43, ABC 561 (30 Aug 43). (2) CPA, *Industrial Mobilization for War*, p. 607. (3) Mowry, Landing Craft and the War Production Board, p. 33.

[35] (1) OPD Notes on JPS 103d Mtg, 22 Sep 43. (2) Min, 101st mtg JPS, 15 Sep 43. Both in ABC 561 (30 Aug 43).

recognize as a *fait accompli* the launching of a production program whose feasibility the JAdC was even then investigating and which the JCS had yet to approve or disapprove. Although the Navy was technically within its rights, it remained to be seen whether the new program would deny materials, facilities, or labor to other programs. The JPS hurriedly directed the JWPC to analyze the new program and determine whether it would meet strategic requirements laid down at Quebec. At the same time the planners decided that the 25 percent increase directed by the JCS on 9 September should apply to the gross tonnage of all craft to be produced, while the increase in output of each type should be governed, within this limit, by the ratios indicated in the QUADRANT tables of theater requirements. A subcommittee was assigned the task of working out the figures.[36]

Within two weeks the JAdC found a way to resolve the difficulty without embarrassment to either the Navy or the JCS. What had been labeled a 35 percent increase was, it soon appeared, considerably less than that—only 32 percent of gross tonnage and only 22 percent of the numbers of craft produced per month. This discrepancy suggested to the committee the happy fiction of equating the Navy's alleged 35 percent increase with the 25 percent increase already approved by the JCS. Thus the Navy's instructions to its bureaus on 13 September became the "implementation" of the JCS directive of 9 September, rather than of the COMINCH directive of the 6th, and the JAdC was free to recommend either that the program be left at the level to which the Navy had raised it or that it be still further augmented.[37]

The real significance of the Navy's new program was not a matter of percentages, but of types and timing. The entire emphasis was put on a brand new type of craft—the LCT (7), a longer and heavier model than the LCT (6), with a cruising radius of 1,500 miles and ocean-going capabilities. It was essentially a smaller edition of the LST, equipped with the characteristic bow doors of that vessel, and in fact was soon to be renamed landing ship, medium (LSM). Production had not yet begun. First deliveries were expected in May or June 1944, rising to a monthly level of 25 by October at the earliest. Not only would the new ship contribute nothing to the war in Europe, but the production effort it would absorb would detract heavily from the output of older types. Apart from the LCT (7), the new program promised an increase of only 15 percent over the old program in gross tonnages of craft produced per month. It added only two LST's to the existing average monthly output, and no LCT (6)'s at all. None of the scheduled increases, finally, was expected to be realized before spring of 1944. In short, the program was designed specifically, very nearly exclusively, for the war in the Pacific.

[36] (1) Memo, Secy JPS for Secy JWPC, 23 Sep 43. (2) Memo, no date, Secy JPS for named officers. (3) Min, 103d mtg JPS, 22 Sep 43. (4) Memo, COMINCH for VCNO, 6 Sep 43, sub: Revision of Shipbldg Program; and Ltr, VCNO to Bureau Chiefs, 13 Sep 43, both in app. A to JPS 270/1, 27 Sep 43, title: Landing Ships and Craft, Means of Increasing U.S. Production. (5) Min, 104th mtg JPS, 29 Sep 43, with OPD notes. All in ABC 561 (30 Aug 43).

[37] (1) JAdC 56/1, rpt of subcom, 13 Oct 43, title: Ldg Cft and Ships, Means of Increasing U.S. Production, ABC 561 (30 Aug 43). (2) Comments by General Tansey, 26 Oct 43, on JCS 462/4, OPD Exec 9, Book 13, Case 51.

As the JWPC reported on 27 September, the increased output would permit a marked acceleration of amphibious operations by the latter part of 1944 but "the QUADRANT decisions relative to OVERLORD . . . will not be affected."[38]

Lobbying for Overlord

While the percentage game was in progress, pressure to strengthen the OVERLORD assault had been mounting. Churchill's proposal at Quebec that the cross-Channel assault force be enlarged by at least 25 percent had set in train a re-examination in the United Kingdom of the possibilities of squeezing still more landing craft from Great Britain's shipyards and factories. The results were not encouraging. With British manpower and war industries mobilized to the hilt, landing craft production could only be expanded by diverting steel, components, facilities, and labor from other programs, and even the present level of output was endangered by a shortage of engines. Production officials feared even more the displacement of labor and unsettling of established wage patterns that such a shift might cause. Beyond the production problem loomed the equally baffling one of finding manpower for additional crews. To attempt to increase landing craft output on a large scale would produce effects, the British Chiefs of Staff were warned, that would be "disastrous and permanent." The effort was nonetheless made and proved less disruptive than expected. British landing craft production rose from 327,300 tons in the third quarter of 1943 to 361,200 tons in the fourth quarter, a 10 percent increase. After declining somewhat in the first three months of 1944, it rose to an even higher level in the spring. At the beginning of October 1943, however, this achievement was not foreseen.[39]

To the OVERLORD planners in London, in fact, Churchill's proposal seemed like asking for the moon. They already faced a substantial deficit of lift for the force now planned, particularly in armored LCT's and various types of support craft, many of which were to be converted from LCT's. Before widening the assault front, as Churchill had suggested and as the British Chiefs proposed to Washington on 24 September, General Morgan wanted first to liquidate the existing deficit, then to strengthen the assault on the front then planned.

On 30 September Morgan explained his ideas to the British Chiefs in detail. He reminded them that the assault lift promised him at TRIDENT "bore little or no relation as to numbers and types to the actual requirements of the proposed operation." To mount the initial assault with this allotment would be barely possible, and then only by skimping dangerously on the immediate follow-up. Two divisions, which for lack of assault lift would have to be preloaded in conventional shipping, could not enter the

[38] (1) JPS 270/1, rpt by JWPC, 27 Sep 43, title: Ldg Cft and Ships, Means of Increasing U.S. Production. (2) JAdC 56/1, 13 Oct 43. (3) MFR to Msg, Morgan for Barker, 6 Nov 43, OPD 560 Security II, Case 102. (4) ONI 226, *Allied Landing Craft and Ships*, 7 Apr 44.

[39] (1) Quotation from Memo, Vice Chief of Navy Staff, 22 Sep 43, sub: Availability of LCT for OVERLORD. (2) Notes on Br COS Mtg for COSSAC, dated 4 Oct 43. Both in SHAEF SGS 560, vol. I. (3) M. M. Postan, "History of the Second World War, United Kingdom Civil Series," *British War Production* (London: Her Majesty's Stationery Office, 1952), pp. 292–93.

battle until D plus 2. As a result, D plus 1 would be "a very lean day," and the recent Salerno landings had shown the risks of a weak follow-up. To widen the planned front, whether westward into the swampy coastland of the Cotentin or eastward toward the guns of Le Havre, Morgan thought would be a grave error. Instead, he wanted more lift to flesh out the D plus 1 follow-up—as he put it, to stock the "back premises" rather than the "shop window." After this had been done, an extra assault-loaded division to be used as a floating reserve would be more than welcome. To improve the assault as he proposed would require, over and above the lift originally allotted, 18 LST's, 251 LCT's, 108 support craft, and 6 small combat loaders; to mount an extra division would add another 21 LST's, 138 LCT's, 18 LCI (L)'s, 80 support craft, and 9 combat loaders.[40] (*Table 22*)

While not wholly convinced by Morgan's arguments as to the form the assault should take, the British Chiefs did not question the need for more lift. In view of the bleak prospects for expanding British production, they decided early in October to send Morgan himself to Washington to plead his own case. There seemed to be more than a faint hope, indeed, that the Americans' resistance to increasing their own production of landing craft might at last be weakening. In a recent chat with Donald Nelson, Chairman of the U.S. War Production Board, then visiting in England, Morgan had received a distinct impression, he reported, "that we could obtain more craft from the United States." Actually, Nelson had already, on 27 September, cabled an urgent message to Wilson of the WPB:

> I am convinced that landing craft, especially LCT and LST types, are the most important single implement of war in the European theater. The requirements have been grossly underestimated, in my opinion. The whole landing craft program should without fail be advanced at least one month. My conviction is that 25,000 or more lives depend on our doing this. Do everything possible to investigate this program at once. My suggestion would be to secure the best production man you can get to speed up the production of landing craft with the objective of stimulating even more . . . the step-up of one month.[41]

In Washington Navy officials whom Wilson approached with his chief's anxious message already knew, from the report of the JWPC submitted on 27 September, that the expanded landing craft production ordered three weeks earlier held no promise for OVERLORD and that any substantial increase in output before spring was considered unlikely. Wilson accordingly got no encouragement and little or no information. "No one in the lower echelon," stated one Navy official after more than a week of fruitless inquiries from WPB, "is competent to

[40] (1) Memo, Morgan for Secy Br COS, 30 Sep 43, sub: Sup of Ldg Cft for Opn OVERLORD, OPD 560 Security II, Case 62. (2) Memo, COSSAC for Secy CsofS, 10 Sep 43, sub: Ldg Cft for OVERLORD, with related papers in SHAEF SGS 560, vol. I. (3) The British Chiefs' proposal to the JCS to add an extra division is in Msg OZ 2915, Br COS to Britman Wash, 24 Sep 43, *ibid.*

[41] (1) State Dept Msg 6463, Nelson for Wilson (Reed to Stettinius, OLLA), 27 Sep 43, OPD 561, Sec I, Case 14. (2) Memo, Morgan for Nelson, 29 Sep 43, sub: Re-estimate of Reqmts of Ships and Craft for OVERLORD. (3) Min, 236th mtg Br COS, 3 Oct 43; 237th mtg, 5 Oct 43. (4) Memo for COSSAC, unsigned, 4 Oct 43. Last three in SHAEF SGS 560, vol. I.

TABLE 22—REQUIREMENTS VERSUS ALLOCATIONS, ASSAULT SHIPPING FOR OVERLORD
30 SEPTEMBER 1943

Type	Requirements, 3 Divisions and Follow-up[a]	TRIDENT Allocs.	Surplus Deficit	1 Additional Div		Total Deficit or Surplus, 1 Additional U.S. Div
				British	U.S.	
APA	6	7	+1	—	6	−5
AKA	—	6	—	—	—	+6
Br combat loader[b]	45	42	−3	[c]9	[c]3	−6
LST	177	159	−18	27	21	−39
LCT (Br)	608	381	−227	168	—	−227
LCT (U.S.)	296	272	−24	24	138	−162
LCI(L)	104	104	—	35	18	−18
LCI(S)	35	38	+3	—	—	+3
Support craft[d]	236	195	[e]−41	79	68	−109
LCT(R)[f]	36		−36	12	12	−48
LCA	368	495	+127	113	28	+99
Misc small craft[g]	327	1,019	+692	36	230	+462

[a] Includes 2 British, 1 U.S. divisions, Commandos, and Rangers. Serviceability factors applied: assumed 90 percent of available LST's, 85 percent of landing craft, and 100 percent of all other ships and craft serviceable on D-day.

[b] Includes LSI(L)'s, LSI(M)'s, LSP's, LSI(S)'s, LSI(H)'s, and LSH's.

[c] The additional division, whether British or U.S., was to have 1 LSH. A U.S. division would have 2 LSI(L)'s, besides the 6 APA's noted; a British division would require 8 LSI(L)'s to carry support craft.

[d] Includes LCF's, LCG(L)'s, LCG(M)'s, LCG'(Spec), LCS(L)'s, LCS(M)'s, LCS(S)'s. See note *f*.

[e] Included a deficit of 72 LCG(L)'s, LCG(M)'s, and LCF's, partly offset by surplus in LCS types.

[f] Rocket launching LCT's listed separately for no apparent reason.

[g] Includes LCVP's, LCP(L)'s, LCP(R)'s, LCP(L)'s Smoke, LCA(H)'s.

Source: Table attached to Memo, Gen Morgan for Secy COS, 30 Sep 43, OPD 560 Security II, Case 62.

give you the material to answer the cable."[42]

One possible reason for the Navy officials' evasiveness was that the staffs were still awaiting the JAdC study, ordered a month before, on the feasibility of further increases in landing craft production. After several extensions of the deadline, the study at last appeared on 13 October. The committee had reversed its earlier verdict. A 35 percent increase over the basic program, it now reported, would be perfectly feasible, the chief condition being a prompt expansion of diesel engine production, and steps were already being taken to do this. Since the outlook for steel had improved, the impact on other programs would be less severe than had been expected: the Navy would lose 29 more destroyer escorts, the Maritime Commission one more Liberty ship, the Army about 2,000 trucks it had already decided were not needed anyway. The cost, an OPD officer commented, would not be heavy "compared to the strategic importance of the landing craft program."[43] Certainly the proposed program promised an impressive yield. The 35 percent increase in numbers of craft to be produced per month amounted to a *57 percent* increase in gross tonnages over the basic program. Also LST production would rise to 28

[42] Quoted from Ltr, L. W. Powell to C. E. Wilson, 8 Oct 43, in Mowry, Landing Craft and the War Production Board, pp. 29–30.

[43] OPD Notes on JCS 120th Mtg, 26 Oct 43, ABC 561 (30 Aug 43).

per month, LCI (L)'s to 27 per month, LCT (6)'s to 41 per month, the new LCT (7)'s to 35 per month and a total of 132 by the end of 1944.[44]

Like its predecessor, the new program smiled upon the Pacific war and turned its back upon Europe. Little increase in production was expected before mid-1944; of the types critical for OVERLORD only two LST's and 17 LCT (6)'s could be expected by March. When General Handy, looking over the JAdC report, wondered whether it would "do OVERLORD any good," he was told "not much." OPD's chief logistical officer explained:

> No matter what our efforts, no *appreciable* change in OVERLORD availability can be expected at this late date. Any drive on one type craft, for example LCT (5), would affect our total program in favor of a craft that now has limited use.[45]

The JAdC report of 13 October thus appeared to rule out the only likely means of providing more craft for OVERLORD. Exploration of other sources, prompted by the British Chiefs' proposals on 24 September to mount another U.S. division in the assault, had been no more productive. On 1 October the Joint War Plans Committee had emphatically rejected diversions from the Pacific or Southeast Asia and affirmed that only in the Mediterranean could significant numbers of craft be found to strengthen OVERLORD, and then only by sacrificing the planned southern France landings in spring 1944. Even this would not release enough craft to meet Morgan's bill of requirements for an improved and enlarged assault.[46]

Although the Army members of the JWPC presumably went along with the verdict, it did not pass unchallenged in the Army staff. Col. George A. Lincoln, soon to become deputy chief of OPD's influential Strategy and Policy Group, objected particularly to the implication that resources allotted for operations in the Pacific and even for the still embryonic southern France project could not be touched without "disrupting" approved strategy. While the demands of the Pacific war had multiplied, OVERLORD had been held to an assault shipping budget that was demonstrably obsolete, even though OVERLORD was supposed to be the supreme effort against Germany and the defeat of Germany had been accorded primacy over the defeat of Japan. OVERLORD, according to the JWPC, had been allotted enough resources to give it a "reasonable chance of success." Should not OVERLORD be allotted, Lincoln demanded, all it needed "to give assurance of success"? "The U.S. Joint Chiefs of Staff," he declared, "cannot face history if OVERLORD is a failure or only a bloody partial success."[47]

General Marshall was sufficiently worried over the OVERLORD assault about this time to consider supporting WPB's

[44] (1) JAdC 56/1, 13 Oct 43, JLC 12, 20 Oct 43, same title (a slightly revised version of JAdC 56/1). (2) Memo, A. D. Douglas and Capt Donald R. Osborn, Jr. for Adm Bieri, 13 Oct 43. (3) Memo, Gen Hugh C. Minton, Dir Production ASF, for OPD, 8 Nov 43, and OPD MFR, 22 Nov 43. All in ABC 561 (30 Aug 43).

[45] (1) Paper by Gen Tansey on JCS 462/4, 26 Oct 43, OPD Exec 9, Book 13, Case 51. (2) Memo, A. D. Douglas and Capt Osborn for Adm Bieri, 13 Oct 43.

[46] (1) JPS 228/4, rpt by JWPC, 1 Oct 44, title: OVERLORD Assault. (2) JPS 228/5, 7 Oct 43, same title. Both in ABC 384 (9 Jul 43), Sec 1.

[47] (1) Memo, Col Lincoln for Col Roberts, 18 Oct 43, sub: OVERLORD Assault. (2) OPD Notes on JPS 105th Mtg, 6 Oct 43. Both in ABC 384 (9 Jul 43), Sec 1.

efforts to persuade the Navy to accelerate production of landing craft, but apparently decided finally not to do so. Lincoln's suggestion that the Navy should give up some of the craft earmarked for the Pacific was not pressed. At least a few OPD officers felt that too much was being made of the problem. "Landing craft alone cannot win the war," one observed. "There will never be enough . . . and any increase must necessarily be an increase within a balanced program."[48]

In any case, the final JPS draft reply to the British Chiefs' recommendations for enlarging the OVERLORD assault was an even more forceful statement of Navy views than had been the JWPC's report three weeks earlier. Whether more landing craft should be taken from the Mediterranean to reinforce OVERLORD should, the JPS paper suggested, be left for the OVERLORD commander to decide. A few craft might be scraped together from the Middle East, training pools, and other "miscellaneous sources." But no further benefit for OVERLORD could be expected from new production, and any diversions at the expense of the Pacific would "require a major modification of plans for prosecution of the war against Japan and . . . involve political and psychological considerations of grave importance to the Nation. This source is therefore rejected." The JCS concurred, and the British Chiefs were so informed on 23 October. On 26 October the JCS approved the 35 percent increase in the landing craft program and just two weeks later its companion piece, the combat loader program, was also approved.[49]

Thus, at the end of October 1943 there seemed no reasonable ground for hope that the OVERLORD assault could be strengthened. General Morgan, who had arrived in Washington early in the month with high expectations, soon found himself uncomfortably situated as he later put it "between the millstones of interservice politics," his pleas for more American landing craft answered by pointed queries about restrictions on British production. He suspected, he wrote General Barker, that "if sufficiently powerful pressure was applied at the right spot, U.S. landing craft production . . . [could] in fact be increased," but he had been unable to find "just exactly whence to have this pressure applied." Nelson's earlier "optimistic gestures," Morgan was forced to conclude, had been illusory; the only hope for a stronger assault for OVERLORD seemed to lie in postponing the target date. Wilson's inquiries, which had been reinforced by representations from U.S. Ambassador John G. Winant in London, continued to draw noncommittal replies; "no decision has been arrived at as to . . . our potentialities . . . for acceleration of these programs," he informed Nelson on 27 October, the day after the adverse JCS decision on these same potentialities. Nelson apparently learned the bad news a few days later when he returned from London. On 2 November he cautiously reported to the WPB that "an advance of one month [in landing craft

[48] (1) OPD MFR, 1 Oct 43. (2) Memo, Lt Col Edward B. Gallant for Gen Handy, 18 Oct 43, sub: Ldg Cft Production Program. Both in OPD 561, vol. I, Case 14.

[49] (1) JCS 449/1, 18 Oct 43, rpt by JPS, title: OVERLORD Assault. (2) Min, 119th mtg JCS (suppl), 19 Oct 43; min, 120th mtg, 26 Oct 43. (3) Min, 107th mtg JPS, 17 Oct 43. (4) Msg JSM 1272, Britman Wash to London, 23 Oct 43, SHAEF SGS 560, vol. I.

production] may be too much to expect."[50]

For understandable reasons the JCS had no wish to inform the Russians of this blow to OVERLORD's prospects. At the Moscow Foreign Ministers Conference in October, in fact, Maj. Gen. John R. Deane, the American military representative, played up the new landing craft program as the best proof the Western Allies could offer of their firm intention to go through with the cross-Channel invasion. Deane declared to the Soviet representatives:

> The effects of such a readjustment [in production] are felt not only in England but throughout the breadth of the United States including the California coast. Such a change in production affects the shipyards along the coast and the engine manufacturers in the Middle West. It is inconceivable that such a dislocation of industry would be permitted if the intention to launch the operation was questionable.[51]

This was on 20 October, the day after the JCS had discussed the JWPC report on the implications of the new program and had decided to tell the British that no more landing craft would be forthcoming for OVERLORD.

A little more than two weeks later Admiral King, without warning, reversed that same verdict—at least in principle. On 5 November, while the CCS were discussing the retention of LST's in the Mediterranean, he abruptly announced that during the coming six months, over and above previously scheduled shipments, he would send 23 LST's, 24 LCI (L)'s, and 24 LCT's to the United Kingdom for OVERLORD.[52] For the LST's and LCI (L)'s these were roughly the equivalent of the one month's extra output (at current levels) that Nelson had asked for. Whether it represented an unexpected windfall in production or was a belated concession by the Navy to the pressures to increase the OVERLORD lift can only be conjectured. Whatever the reason, the Bureau of Ships now was predicting a somewhat larger output than had been estimated two weeks earlier — more than enough of LCI (L)'s and LCT's to permit the modest addition to OVERLORD allocations. Production of these craft had shot ahead of even the Navy's incentive schedules for three months past. The 24 LCI (L)'s would only partly restore the cut in the U.S. allocation of this type of vessel made

[50] (1) Lt. Gen. Sir Frederick Morgan, *Overture to Overlord* (New York: Doubleday and Company, Inc., 1950), pp. 204, 206. (2) Ltr, Morgan to Barker, 28 Oct 43, quoted in Harrison, *Cross-Channel Attack*, p. 105. (3) Paper by Gen Tansey, 26 Oct 43, OPD Exec 9, Book 13, Case 51. (4) Msg, Wilson to Reed (London), 27 Oct 43, quoted in Mowry, Landing Craft and the War Production Board, p. 30. (5) Min, 72d mtg WPB, 2 Nov 43, in Civilian Production Administration, *Minutes of the War Production Board, January 20, 1942 to October 9, 1945*, Historical Report No. 4 (Washington, 1946), p. 287.

[51] (1) Rcd of mtg of Tripartite Conf . . . Moscow, 20 Oct 43, OPD Exec 5, Item 12. (2) At the Tehran Conference American representatives made substantially the same claim. See Min of Mil Mtg (EUREKA), 29 Nov 43.

[52] (1) Min, 126th mtg CCS, 5 Nov 43. (2) Memo, Adm King for Comdr 12th Fleet, 5 Nov 43, sub: BOLERO Ldg Cft Schedule, ABC 561 (31 Aug 43), Sec 1-B. The shipment schedule was as follows:

Date	LST	LCI(L)	LCT
1943			
Total	83	40	121
Sep	0	0	6
Oct	0	0	6
Nov	0	0	12
Dec	10	0	20
1944			
Jan	18	12	22
Feb	22	19	22
Mar	28	9	28
Apr	5	0	5

at QUADRANT, but they more than covered the requirements recently laid down by the OVERLORD planners. As for LCT's, the problem was not one of production but one of shipment. LCT's shipped to the United Kingdom either had to go "piggy-back" on LST's or be broken into sections and loaded on freighters. Many LCT's were constructed in the Middle West, and freezing weather would prevent much of the winter output from being moved over inland waterways to Atlantic ports. LCT's, the Navy said, were available for OVERLORD if they could be moved.[53]

The outlook for LST's was less promising. October deliveries had taken a sharp dip, and the November output was to continue below that of August and September. More disturbing was the lag in Navy contracting. In September and early October the Navy had canceled more than 300 destroyer escorts from its building program, releasing yards that had gained experience the year before in constructing LST's. But only one LST contract had been let to one of these yards (in September, for 25 LST's); and no more were to be let to any of them until December. No deliveries from these yards were expected before February 1944. The vessels scheduled for delivery through January had been contracted for no later than June 1943 and most of them many months earlier.[54]

Nevertheless, the output of LST's predicted for the winter and early spring months was slightly higher than that predicted in August, on which the QUADRANT allocations had been based. Under the August allocations, OVERLORD had been slated to get most of the new deliveries in November, December, and January, then expected to run at about 20 per month; with 3 more LST's from the Atlantic training pool, this would have amounted to 62 in all to be shipped during January, February, and March. Winter production now (that is, in November) was estimated at 23 or 24 per month. Admiral King's new schedule provided for shipment of 83 LST's to the United Kingdom from December through April, based mainly on allocations from new production during October, November, December, and January. The last 5 of the 83, tentatively scheduled for shipment during April, were not likely to reach the United Kingdom in time for a 1 May D-day, and for this reason probably would not be sent; 5 more from March production were not even included in the shipment schedule. (*Table 23*)

Nor had King allotted the entire anticipated winter production of LST's to OVERLORD. Six were to be converted to amphibious repair ships (ARL's) destined for use in the Pacific; five more, from October production, were assigned to the Central Pacific. The remaining 12 from October deliveries now assigned to OVERLORD included 10 originally destined at QUADRANT for the Pacific as loss replacements for the Marshalls operation in January; from November deliveries another LST was similarly diverted. These diversions evidently were possible because the Central Pacific had already received its full quota of allocations, a month ahead of schedule. In effect, King

[53] (1) Notes to Appendixes in Memo, Secy JPS for listed officers, 6 Nov 43, sub: Preparations for Next U.S.-Br Staff Conf, ABC 337 (11 Jan 45), Sec 1-A. (2) Mowry, Landing Craft and the War Production Board, tables on pp. 28, 72–73.

[54] Mowry, Landing Craft and the War Production Board, pp. 33–36, and app. B.

TABLE 23—ADMIRAL KING'S BONUS FOR OVERLORD: 5 NOVEMBER 1943
(LST's only)

	1943			1944				
	September	October	November	December	January	February	March	April
QUADRANT Allocations (August 1943)								
Predicted production	20	17	20	20	20	20	20	21
Allocations of new production								
Pacific and Southeast Asia	20	15	3	—	—	[a]18	20	21
OVERLORD	—	2	17	20	20	—	—	—
OVERLORD shipment schedule[b]	—	—	—	—	19	20	[c]23	—
5 Nov 43 Allocations								
Predicted production	—	[d]17	20	24	24	23	25	25
Allocations of new production								
Pacific and Southeast Asia	—	5	—	—	—	18	20	23
Conversions (ARL) for Pacific	—	—	2	2	2	—	—	—
OVERLORD	—	12	18	22	22	5	[e]5	—
OVERLORD shipment schedule[b]	—	—	—	10	18	22	[f]28	[g]5

[a] The remaining 2 from predicted production were allocated to training.
[b] Shipments normally were made in the second month after delivery.
[c] Includes three from training.
[d] Actual production was 16, but calculations evidently assumed 17.
[e] These 5 would be too late for an early May D-day.
[f] Includes three from training.
[g] These 5 might be too late for an early May D-day.
Source: (1) CCS 329/2, 26 Aug 43, title: Implementation of Assumed Basic Undertakings and Specific Operations for Conduct of the War, 1943–44, Annex V, app. B. (2) CCS 428 (Rev), 15 Dec 43, title: Relation of Available Resources to Agreed Operations, Annex V.

had added to the three-months' production of LST's already assigned to OVERLORD about two-thirds of the meager October output, now no longer absolutely essential in the Pacific, plus half of the small expected increase in production during the three months following. Together with the accompanying LCT's and LCI (L)'s, the increases left a deficit, against General Morgan's latest requirements for a strengthened assault, of 16 LST's, 365 LCT's, 188 support craft, and 15 combat loaders.[55]

The net result of American decisions just before the Cairo Conference to boost production of both combat loaders and landing craft served mainly to underwrite the Pacific campaigns after mid-1944 for which specific strategic plans did not yet exist. They went far to assure that the supply of assault ship-

[55] (1) For QUADRANT schedules and allocations, see CCS 329/2, 26 Aug 43, Annex V, app. B, especially Tables I and II, and JPS 228/1, 2 Aug 43, appendixes and notes. (2) For the 5 November shipment schedule and allocations, see appendixes to Memo, Secy JPS for listed officers, 6 Nov 43; and CCS 428 (Rev), 15 Dec 43, title: Relation of Available Resources to Agreed Operations, Annex V. (3) For September estimates, see above, Table 22, p 264.

Note that the 83 LST's in the new shipment schedule represented an increase of 21, not 23, over the QUADRANT schedule; evidently the QUADRANT schedule had been cut back in the interim.

ping would be no barrier to a vast acceleration of the Pacific war in that period, even if the war in Europe did not end in the meantime.

If Admiral King's belated concession of craft for OVERLORD involved some small encroachment upon Pacific interests, it still fell far short of meeting General Morgan's stated requirements for an enlarged OVERLORD assault. With the additional prospect that LST's would be tied up in Italy well beyond their scheduled dates of departure for the United Kingdom, the assault shipping situation alone argued for a postponement of OVERLORD beyond the 1 May target date. New U.S. production schedules promised more craft by June or July—but not by May. Another month or two would permit use of the LST's in the Mediterranean to complete the build-up of supplies in Italy and exploitation of opportunities for amphibious landings in the rear of the Germans. The situation, like the rate of the BOLERO build-up, constituted a basic handicap for the American staffs going to the conferences at Cairo and Tehran with instructions to insist on a May target date for OVERLORD.

CHAPTER XI

The Cairo-Tehran Conference

In early November 1943 preparations in Washington and London for the forthcoming conferences at Cairo and Tehran (SEXTANT-EUREKA) were drawing to a close.[1] Tension between the two Western Allies arising from their long-standing and recently aggravated differences over European strategy mounted to a dangerous pitch. The reaction in London to the twin crises in Italy and the Aegean has been noted earlier.[2] The worsening situation in the Mediterranean, combined with Washington's refusal to consent to the emergency measures the British proposed to meet it, had produced among the British leaders not merely resentment, but a hardening determination to do something about it. "We are now beginning to see the full beauty of the Marshall strategy," Sir Alan Brooke bitterly noted in his diary. "It is quite heart-breaking when we see what we might have done this year if our strategy had not been distorted by the Americans."[3] The British Chiefs of Staff served notice on Washington that at the forthcoming conferences they intended to bring to a head the whole issue of the relation between current operations in the Mediterranean and the various preparatory deployments and redeployments for OVERLORD agreed upon at Quebec in August. They then drew up a careful statement of their position on OVERLORD and Mediterranean strategy, together with a set of proposals for action in the Mediterranean theater to be placed before the Americans at the conference. To these proposals, which were fully expected to produce a showdown, perhaps even a crisis in Allied relations, the Prime Minister gave his hearty endorsement.[4]

In Washington a similar mood prevailed. General Morgan, who had been exposed to it during his recent visit, warned his superiors in London of "American indignation at certain trends

[1] The meetings were held from 22 November through 7 December 1943. Roosevelt and Churchill met at Cairo (22–27 November) for the first time in a formal conference with the President of China, Generalissimo Chiang Kai-shek. At Tehran (28 November–1 December) they met for the first time with Marshal Stalin. From 2–7 December the Western leaders held additional conferences at Cairo. For preparations for these conferences, see Matloff, *Strategic Planning, 1943–44*, Chapter XV, and Churchill, *Closing the Ring*, Chapter 17. For discussions of grand strategy see Matloff, *Strategic Planning, 1943–44*, Chapter XVI; Ehrman, *Grand Strategy V*, 155–202; Richard M. Leighton, "OVERLORD Versus the Mediterranean at the Cairo-Tehran Conferences," in Greenfield, ed., *Command Decisions*, pp. 255–85; and Leighton, "OVERLORD Revisited: An Interpretation of American Strategy in the European War 1942–1944," *American Historical Review*, LXVIII, 4 (July, 1963), 919–37.

[2] See above, ch. IX.

[3] Diary entry for 25 Oct 43, quoted in Arthur Bryant, *Triumph in the West*, copyright 1959 by Arthur Bryant, p. 36. This and later quotations from this book are reprinted by permission of Doubleday & Company, Inc. See also pp. 30–44.

[4] Ehrman, *Grand Strategy V*, 118–21.

in Allied strategy in the Mediterranean."[5] The feeling was hardly new, but it was more intense than before and it colored American attitudes toward the substantive issues to a degree not evident in earlier pre-conference periods when essentially the same issues had been on the block. American indignation had developed from a rankling suspicion, quickened by British actions and attitudes since midsummer, that the British secretly intended somehow to sidetrack, weaken, or indefinitely postpone OVERLORD, subordinating it to peripheral and indecisive ventures in the Mediterranean that would serve their own long-range political purposes. Now, at long last, the true aims of the British seemed about to come out in the open. Not only the sharpness of British reaction to the crisis in Italy, but, even more, the readiness with which they sought to link the fortunes of OVERLORD with the developing situation in the Mediterranean, combined with the ominous warning that the issue would be raised at Cairo and Tehran, seemed to leave no room for doubt that the whole OVERLORD-centered strategy was under attack. And, for all the misgivings the prospect inspired in Washington, the staffs faced the showdown boldly and with feeling akin to relief.[6]

Perfidious Albion and Inscrutable Ivan

In the Army staff, which since the days of the old ROUNDUP plan had felt a strong paternal attachment to the cross-Channel invasion concept, the sense of impending crisis was particularly intense. OVERLORD was considered the legitimate offspring and reincarnation of ROUNDUP, and for the Army staff had become a symbol of the American way in war and of the dominant doctrines of American strategic thinking—the direct approach, the power drive, the set-piece attack, meticulous preparation and massive logistical support—the antithesis of the opportunism and indirection that the Americans believed to be the British way. OVERLORD seemed to promise an escape from the involutions of Mediterranean strategy and the quicksands of Mediterranean politics, a means of forcing the war in Europe to a climax and quick victory, thus enabling the United States to turn its full power against Japan. The expectation of an attack on the OVERLORD strategy was in itself sufficient to arouse strong emotions.[7]

Behind this feeling lay two and a half years of growing distrust of British motives, embittered by the pent-up impatience and frustration growing out of a drift of events in the European war that seemed somehow usually to have acceded to British aims and perhaps even responded to British manipulation. According to this view, reflected in various staff studies and position papers drawn up in preparation for the forthcoming conferences, Churchill had been the real architect and Roosevelt only a pawn in the postponement of the cross-Channel invasion in summer of 1942, in violation of British pledges made in April. As a consequence, invasion preparations

[5] (1) Ltr, Barker to Handy, 17 Nov 43, Exec 5, Item 15, folder 3, Case E20. (2) See above, ch. X.

[6] See, for example, OPD Draft Memo, CofS for President, 8 Nov 43, sub: Conduct of European War, OPD Exec 9, Book 13, Case 81.

[7] The following analysis is based largely on staff papers in ABC 381 Strategy Sec Papers (7 Jan 43), 131–59 and 160–95.

had been suspended, the British Isles stripped of U.S. troops, and U.S. resources diverted, with attendant confusion and waste, into the development of a new line of communications and a new invasion base in North Africa. At Casablanca, in this retrospective view, the British had maneuvered the Americans into new decisions ensuring that the Mediterranean area would continue to be the main theater of the European war and that no cross-Channel invasion could be attempted until 1944 at the earliest. Since then British persuasion and the ineluctable logic of momentum had drawn the Allies ever deeper into the Mediterranean—from Tunisa into Sicily, Italy, Sardinia, Corsica, the Dodecanese. The drain of resources into the region at the expense of the lagging invasion preparations in the British Isles had gone on unabated, and a long, costly uphill struggle had still to be fought in Italy.

Most alarming to the Army staff were the persistent British attempts to broaden the Mediterranean front eastward—by pressure on Turkey to enter the war, by proposals to seize ports on the Dalmatian coast and to step up aid to the Balkan guerrillas, and by the recent, ill-starred incursion into the Dodecanese. Apart from the strategic eccentricity of this eastward orientation, it raised in American minds the specter of military operations and political involvement in the Balkans, a land of inhospitable terrain, primitive communications, and turbulent peoples. Aversion to "Balkan ventures," a term often applied indiscriminately in staff papers to any proposed undertaking in the eastern Mediterranean, colored the Army staff's approach to the whole question of Mediterranean strategy.

In its present frame of mind the Army staff was inclined to gloss over or ignore many aspects of Anglo-American collaboration since Pearl Harbor. Staff papers reviewing the history of that collaboration made no mention of British efforts late in 1942 to keep alive the American invasion build-up in the British Isles at a time when the Americans seemed willing to let it die, of the rise in British production of landing craft during the first half of 1943 while U.S. output declined, of the assignment to OVERLORD of surplus British landing craft in the Mediterranean while surplus American craft were retained for possible landings in southern France, of persistent British efforts against American opposition to strengthen the planned cross-Channel assault, or of the immense investment the British had already poured into the invasion preparations. Above all, the staff tended to ignore the implications of the full mobilization of British manpower, which made imperative a major effort to defeat Germany in 1944 because thereafter the scale of Britain's war effort must inevitably diminish.[8] In the eyes of the Army staff, the British attitude toward the BOLERO program during the past year and a half appeared "indifferent" and "cool" in contrast to their "enthusiasm" for Mediterranean operations and their "alacrity and resourcefulness" in seeking to increase the forces in that theater.[9]

[8] (1) See Leighton and Coakley, *Global Logistics, 1940–43*, pp. 482–86, and above, chs. VII–X. (2) Ehrman, *Grand Strategy V*, 42–47.

[9] (1) OPD Draft Memo, CofS for President, 8 Nov 43. (2) SS 180, 7 Nov 43, U.N. Overall Strategy in Europe-Africa Area, ABC 381 Strategy Sec Papers (7 Jan 43) 160–95, Tab 180. (3) OPD paper [*circa* 12 Nov 43], Course of Action at SEXTANT, OPD Exec 9, Book 13, Case 119. (4) Greenfield, *American Strategy in World War II: A Reconsideration*, pp. 41–45.

The Army staff therefore discounted heavily the assurances of British leaders, from Churchill on down, that they fully intended to go through with the cross-Channel invasion, and branded as disingenuous the rationale of their Mediterranean strategy as essential to the success of OVERLORD. In the context of this belief, British references to the conditions in the OVERLORD plan stipulating that the operation should not be undertaken if German strength in the West rose above certain levels seemed to take on an ominous significance—even though the U.S. Chiefs of Staff had themselves accepted the conditions along with the plan. Churchill's insistence upon these conditions at Quebec caused particular concern. "The British," one staff paper observed, "always extremely cool toward OVERLORD, have repeatedly stated the conditions which must exist before OVERLORD can be mounted. They feel that it is doubtful that all of these conditions will be met."[10]

Behind the British reservations, it was widely believed, lurked a fear of coming to grips with the German Army on ground of its own choosing, a desire to wait until the process of defeat and exhaustion on other fronts crumbled the defenses of western Europe from within. OVERLORD would then be replaced by RANKIN—a mop-up action, or, in the President's words, "a railroad invasion."[11] An Anglophobe minority on the Army staff had become convinced that British leaders were deliberately plotting to create a situation in which abandonment, dilution, or indefinite postponement of the cross-Channel operation would appear to be unavoidably dictated by circumstances. The Western Allies' contribution to the war against Hitler would be limited to strategic air bombardment and indecisive ground operations along the southern periphery of Europe, leaving to the Russians the task, for which they had displayed such talent, of crushing the German Army. Those who held this view of British intentions accepted also its corollaries—that the British were willing to gamble in Europe against the near certainties of slowing momentum, drag-out, even stalemate; and that, in order to hoodwink their allies, they were prepared to see the great invasion build-up in the British Isles carried to completion, with attendant deprivation of the war against Japan, even though in the end the whole massive effort would go for naught. Staff papers foretold the eventual role of the invasion forces in hyperbolically gloomy terms: "a gigantic deception plan and an occupying force"—or "a huge military force that is to sit idle awaiting either the achievement of military victory by our Russian allies, or the success of a gamble on political and psychological disintegration within the German citadel of Europe."[12]

In the midst of these forebodings, the Washington staffs in the second week of November received a rude shock. Gen-

[10] SS 180, 7 Nov 43.

[11] (1) *Ibid.* (2) OPD Paper [*circa* 12 Nov 43], Course of Action at SEXTANT. (3) SS 133/3, 4 Nov 43, Survey of Conditions Prerequisite to Launching of OVERLORD, ABC 381 Strategy Sec Papers (7 Jan 43) 131–59, Tab 133/3. (4) OPD Paper [*circa* 12 Nov 43], U.S. Courses of Action in Case SEXTANT Decisions Do Not Guarantee OVERLORD, OPD Exec 5, Item 12a. (5) JCS 533/6, 16 Nov 43, rpt by JPS, title: Recommended Line of Action. . . . (6) For Roosevelt's remark see Min, 124th mtg JCS, 17 Nov 43.

[12] (1) OPD Paper [*circa* 12 Nov 43], sub: U.S. Course of Action. . . . (2) OPD Draft Memo, CofS for President, 8 Nov 43.

eral Deane, who had stayed behind at Moscow after the Foreign Ministers Conference to head the U.S. Military Mission, had been puzzling over the strange behavior of the Russians—their casual acceptance of the possibility of a postponement of OVERLORD, their lively interest in current and proposed operations in the Mediterranean, their attempt to force Turkey into the war. Deane's uneasiness increased when Soviet military representatives, while showing little concern for OVERLORD, complained bitterly that the Allies were dragging their feet in the Mediterranean, whence the Germans had recently transferred some divisions to the Eastern Front. These signs persuaded Deane that the Russians, as he notified his superiors on 9 November, "want to end the war quickly and feel they can do it." He concluded that they were less interested in OVERLORD, six months distant, than in immediate action to draw German strength from the Eastern Front. Deane warned that at the forthcoming conference the Russians might demand a greater effort in Italy and "some venture in the Balkans," even if it meant delaying OVERLORD.[13]

Deane's prediction, even though labeled as only an "impression," added to the disquiet already aroused in Washington by indications of a hardening British attitude. Taken together, they conjured up a nightmarish vision of a joint Russian and British demand at Tehran for a major shift to the Mediterranean — or, worse, to the eastern Mediterranean—at the expense of the cross-Channel invasion.[14] There was a flurry of staff activity. Old staff studies on Balkan operations were resurrected and new ones prepared. All of them led to the familiar conclusions, summed up in a recommendation already made to the President just before the arrival of Deane's message, that "the Balkan-Eastern Mediterranean approach to the European Fortress is unsuitable," and that no additional Allied resources should be committed to that region even to secure Turkish intervention.[15]

Facing what threatened to be the major crisis in Allied strategy since the ARCADIA Conference almost two years earlier, the Army staff was resolute but pessimistic. Through the studies prepared for General Marshall on the eve of the Cairo-Tehran conferences ran one dominant theme: the unacceptable strategic consequences and logistical costs of shifting the main effort in 1944 to the Mediterranean. In the present advanced state of preparations for OVERLORD, General Marshall told the President on the way to Cairo, such a reorientation would leave more than a million tons of American war matériel stocked in the United Kingdom and would disrupt an administrative apparatus reaching all the way back to the Rocky Moun-

[13] (1) Msg 51, 9 Nov 43, Deane to JCS, and related papers in OPD Exec 5, Item 15, Envelope 3. (2) Deane, *Strange Alliance*, p. 35. (3) Churchill, *Closing the Ring*, pp. 286–89. (4) Cordell Hull, *The Memoirs of Cordell Hull*, 2 vols. (New York: The Macmillan Company, 1948), II, 1301. (5) Ehrman, *Grand Strategy V*, 100–01, 156–57. (6) Matloff, *Strategic Planning, 1943–44*, pp. 303–05. (7) Harrison, *Cross-Channel Attack*, note 143, p. 121.

[14] See Memo, Col Lincoln for CofS, 10 Nov 43, sub: Msg from Gen Deane . . . , ABC 381 Strategy Sec Papers (7 Jan 43) 160–95, Tab 181/1.

[15] (1) Memo, Adm Leahy for President, 9 Nov 43, sub: U.N. Strategy in Balkan–E Mediterranean Region, OPD Exec 9, Book 13. (2) JCS 558, 1 Nov 43, and JCS 558/1, 5 Nov 43, same title. (3) See also studies and corresp on Balkan operations in ABC 381 Strategy Sec Papers (7 Jan 43) 160–95, and in OPD Exec 9, Book 13.

tains — without producing any decisive military results or even assured help to the Russians.[16]

Curiously enough, however, the American staffs explored no alternative courses of action (other than a shift to the Pacific) or possible bases for compromise with the British and Russians. In particular they appear to have made no examination of the contingency of which the British Chiefs had given clear forewarning: a proposal for a short postponement of OVERLORD, with its possible advantages in terms of added time for transatlantic deployment of troops, matériel, and, above all, assault shipping.

To the expected Anglo-Soviet proposals the Army staff had, in fact, only one recommended answer: abandon OVERLORD, continue strategic bombing against Germany and limited offensives in the Mediterranean, and go all out in the Pacific. The pessimism of the staffs apparently infected their chiefs. In the final shipboard conferences with the President en route to Cairo, the JCS spoke almost as though British proposals for an invasion of the Balkans were already before them. General Marshall told the President:

> We have to see this Balkan matter finished up . . . the British might like to ditch OVERLORD at this time in order to undertake operations in a country with practically no communications. If they insist on any such proposal we could say that . . . we will pull out and go into the Pacific with all our forces.[17]

In their formal position on the strategy of the European war for 1944, then, the U.S. Chiefs of Staff stood pat on the basic grand design centering in OVERLORD with a 1 May 1944 target date as "the primary U.S.-British ground and air effort against Germany," preceded by the final phases of the combined bomber offensive, intensifying according to plan. Emphasis on the role of air power was made even more explicit than heretofore. OVERLORD's principal objective was stated to be to secure the Channel ports and to establish bases for Allied air power on the Continent, preparatory to launching a major air offensive "designed to precipitate the collapse of enemy resistance prior to a general assault on the hostile ground forces in the advance into the heart of Germany." Balanced forces were to be held in readiness for a quick move across the Channel before D-day if the opportunity presented.

With respect to the Mediterranean, the U.S. Chiefs reaffirmed the principles of limited liability and subordination to OVERLORD: in Italy maximum pressure with forces already allocated in order to create conditions favorable to OVERLORD and an "eventual" entry into southern France; in the eastern Mediterranean no further operations other than minor commando raids, bombing of selected targets, and supply of guerrilla forces, "so long . . . as the present strategic situation in this area remains substantially

[16] (1) Min, JCS mtg with President [on USS *Iowa*], 19 Nov 43, OPD Exec 2, Item 11. (2) OPD Paper, 11 Nov 43, Opns in Mediterranean, ABC 381 Strategy Sec Papers (7 Jan 43) 160–95. (3) JCS 533/7, 18 Nov 43, rpt by JPS, title: Recommended Line of Action. . . .

[17] (1) Min, JCS mtgs with President, 19 Nov 43 and 15 Nov 43, OPD Exec 2, Item 11. (2) OPD Paper, 11 Nov 43, Opns in Mediterranean. (3) See also Memo, Gen Magruder for Chief, Theater Br, ASF, 8 Nov 43, sub: Plng Data, in folder Prep for U.S.-Br Stf Conf, SEXTANT, ASF Plng Div. This memo directed the preparation, on a few hours' notice, of a staff study on the logistical implications of a major redeployment to the Pacific beginning in January 1944.

unchanged." Reflecting the inconclusive outcome of the recent discussions at Moscow, the U.S. Chiefs recognized the desirability of bringing Turkey into the war and sanctioned "pressure" to this end, in collaboration with the USSR, looking to a Turkish offensive in the Balkans—but only on condition that it involved no diversion of Allied resources that might prejudice success elsewhere. They reasserted their belief that "the Balkan-Eastern Mediterranean approach to the European Fortress is unsuitable, due to terrain and communication difficulties, for large-scale military operations." As to the division of scarce resources between OVERLORD and the Mediterranean, they again invoked the established provisos: resources should be "distributed and employed with the main object of insuring the success of OVERLORD" and operations in the Mediterranean would be limited to forces already allotted "except insofar as these may be varied by decision of the Combined Chiefs of Staff." Recommendations on missions, objectives, and operations in the Mediterranean would be made to the CCS by the OVERLORD commander, when appointed, and to the latter by the Allied commander in the Mediterranean, when appointed—all with a view to making "the greatest contribution towards insuring the success of Operation OVERLORD."[18]

Bush-League Strategy in the Mediterranean

At Cairo, after some inconclusive discussion of strategy in southeastern Asia with the Chinese at the early meetings, the British opened the debate on European strategy on 24 November with a blunt attack on what their position paper described as American obsession with the "sanctity of OVERLORD."

> We must not . . . regard OVERLORD on a fixed date as the pivot of our whole strategy on which all else turns. In actual fact, the German strength in France next spring may, at one end of the scale, be something which makes OVERLORD completely impossible, and, at the other end, something which makes RANKIN not only practicable, but essential. Consequently, to assume that the achievement of a certain strength by a certain date will remove all our difficulties and result in shortening the duration of the war is entirely illusory. This policy, if literally interpreted, will inevitably paralyze action in other theaters without any guarantee of action across the Channel. . . . It is, of course, valuable to have a target date to which all may work, but we are firmly opposed to allowing this date to become our master, and to prevent us from taking full advantage of all opportunities that occur to us to follow what we believe to be the correct strategy.

They were prepared, they asserted, to carry out the cross-Channel invasion "as soon as the German strength in France and the general war situation gives us a good prospect of success," but they insisted that unless the Allies pursued an aggressive course of action in the Mediterranean during the coming winter and

[18] (1) CCS 398, memo by U.S. CsofS, 18 Nov 43, title: Specific Opns for the Defeat of Germany and Her Satellites 1943–44. The paper also alluded to plans for operations in collaboration with the USSR aimed at bringing Sweden into the war in the event that OVERLORD could not be executed and for coordination with the USSR in other areas. (2) For an account of negotiations and planning on these matters at the Moscow Conference and subsequently, see Matloff, *Strategic Planning, 1943–44*, pp. 296–99, and John L. Snell, *Illusion and Necessity: The Diplomacy of Global War, 1939–45* (Boston: Houghton Mifflin Co., 1963), pp. 141–42.

spring, such conditions were unlikely to develop.[19]

After this ominous manifesto the program of Mediterranean operations that it served to introduce was somewhat anticlimactic. The British proposed that the Allies should advance in Italy only as far as the Pisa-Rimini line; extend more aid to the Balkan partisan forces in the form of weapons, supplies, technical assistance, and commando raids; try to bring Turkey into the war before the end of the year; and, with Turkish help, capture Rhodes, clear the Aegean, and open the Dardanelles to Allied shipping. Chastened by their recent setback in the Aegean, the British made Turkish intervention a prerequisite for the attack on Rhodes, thus assuring adequate air cover from the mainland. German garrisons on other Aegean islands would be smoked out by air attacks or left to starve. All forces required, including air, were already on hand in the Middle East, and the assault shipping, which would have to come from the Mediterranean pool, would be needed for only a short time.

Beyond Rhodes stretched a vista that Churchill hoped would attract the Russians. With Allied supplies flowing to Turkey and through the Straits into the Black Sea, Allied air squadrons ensconced in Anatolia, and Allied antiaircraft and technical units stiffening the Turkish army, Turkey might attack Bulgaria with reasonable hope of success. Rumania and Hungary, already threatened by the USSR from the northeast, would be caught in a squeeze, and the Germans might even have to evacuate Greece. Allied naval forces would dominate the Black Sea, protecting the flow of supplies to the Soviet Union—by a route Churchill described as "far less costly, far more swift, and far more abundant than either the Arctic or the Persian Gulf." To carry out their Mediterranean program the British wanted, finally, control of the whole region to be unified under a British commander—a concession the Americans were already prepared to make in return for the appointment of a U.S. commander for OVERLORD.[20]

In short, the British hoped by means of a major effort in Italy and what Ambassador Winant called "bush-league tactics" farther east to force the Germans back along the entire Mediterranean front. The Americans reacted with understandable suspicion, and seriously discounted the Prime Minister's reckoning that the operations in the eastern Mediterranean would involve not more than one-tenth of the combined British and American strength in the theater. General Marshall branded the Aegean venture as both "laborious" and "dangerous,"[21] and General Somervell expressed scepticism of the alleged benefits of opening the Black Sea route to Russia.[22]

Nevertheless, the Americans quite evidently had expected far more extrava-

[19] (1) CCS 409, note by Br COS, 25 Nov 43, title: OVERLORD and the Mediterranean. (2) Ehrman, *Grand Strategy V*, 109–12.

[20] (1) Churchill, *Closing the Ring*, pp. 346, 371, 686. (2) CCS 409, 23 Nov 43. (3) Matloff, *Strategic Planning, 1943–44*, pp. 278–79, 339.

[21] Min, 129th mtg JCS, 24 Nov 43.

[22] (1) JCS 611, rpt by JPS, 26 Nov 43, OVERLORD and the Mediterranean. (2) Mins, 127th mtg JCS, 22 Nov 43; 132d mtg, 28 Nov 43. (3) Min, 2d Plenary Mtg, SEXTANT, 24 Nov 43. (4) Ehrman, *Grand Strategy V*, 104–21, 165–67. (5) CCS 409, 25 Nov 43.

gant demands, and the British were astonished at the mildness of their objections. "We did not meet with half the reaction we were expecting," Sir Alan Brooke confided to his diary.[23] The Americans were particularly taken aback by the limited character of the measures proposed for the Balkan area, while the stated objectives of the Italian offensive coincided generally with those they were prepared to support. Admiral King's only reaction to the proposals for Italy was to remark that, once the Pisa-Rimini line was reached, the British would probably change their minds and want to drive on to the Po.[24]

Pressure to go beyond the Pisa-Rimini line in Italy came, not from the British, but from General Eisenhower, who presented his views to the conference on the 25th and 26th. Eisenhower made it clear that he still considered the Po Valley the only logical stopping point in Italy. From that point, he argued, the Allies could bomb the industrial heart of Germany, conduct raids into Yugoslavia by way of islands in the Adriatic, clear the Aegean, and eventually push on into France or the valley of the Danube. The American planners were inclined to favor a sustained offensive in Italy over one that would have to be cut short in order to open a new front in the Balkans.[25]

From the American point of view, however, the overriding drawback to both the British program, and even more, to Eisenhower's scheme (which, in effect, superimposed upon it a drive to the Po), was the impact upon OVERLORD that would result from the retention of assault shipping in the Mediterranean. The British timetable—"Rome in January, Rhodes in February"— terminated in a 1 July OVERLORD. By Eisenhower's own reckoning his program would delay OVERLORD until 1 August; the American staff thought it would rule out a full-scale cross-Channel invasion in 1944 altogether. Their pessimism on this score owed something to Eisenhower's own analysis in a recent message of the immediate outlook for the drive on Rome, which the JCS had hoped to expedite by their recent acquiescence in the theater's request for delaying the departure of the 68 OVERLORD LST's. It now appeared that the planned amphibious landings south of Rome could not be launched until the main drive had reached a point, in the general area of Frosinone (a little more than halfway between Naples and Rome), from which it could link up with the beachhead within 48 hours, since winter weather made over-the-beach maintenance precarious. Field commanders had no hope of getting so far until mid-December at the earliest, and they were worried over the growing weariness of the troops. Eisenhower emphasized that an amphibious hook was the only alternative to exhausting frontal attacks, which would require more divisions than he now had and would again, as in the initial build-up in Italy, tie up assault shipping in prolonged ferrying of troops, vehicles, and supplies. Yet he seemed not at all confident of carrying off the operation successfully. "In any event," his message had concluded with disturbing ambiguity, "it is essential that these

[23] Diary entry, 25 Nov 43, quoted in Bryant, *Triumph in the West*, p. 57.

[24] Min, JCS mtg, SEXTANT, 26 Nov 43.

[25] (1) Min, 131st mtg CCS, 26 Nov 43. (2) Min, JCS mtg, SEXTANT, 25 Nov 43. (3) JCS 612, 27 Nov 43.

LST's remain in the area."[26] In his testimony at Cairo he indicated that he would like to have, over and above the larger numbers of craft needed for build-up and maintenance, a full division assault lift constantly on hand to slash around the enemy's coastal flanks whenever opportunity offered. Admittedly "not sure of his figures," he said he would have to keep all this shipping, along with some additional personnel transports, "for a considerable part of the winter . . . at least until the end of January." His staff officers at Cairo, more cautious, said "indefinitely."[27]

Regardless of the pros and cons of the British Mediterranean program, the Americans bridled at the British Chiefs' remarks on the "sanctity" of OVERLORD. The Joint Planners professed astonishment that the British could fail to appreciate "from our common experience to date that without a target date, firmly and honestly accepted by all, no major operation can be mounted successfully." To them the British attitude seemed clearly to betray an intention "to relegate OVERLORD to an operation of opportunity."[28] The Americans had also, however, to consider an alternative proposal by the British that held promise of permitting the Rhodes assault *without* postponing OVERLORD: namely, to transfer the needed assault lift from India at the expense of the planned Allied offensive in Burma.

Rhodes Versus Buccaneer

At this time (late November) the amphibious phase of the Burma offensive was still not definitely planned.[29] The general plan (CHAMPION), as submitted to Generalissimo Chiang Kai-shek at Cairo, was to launch converging drives into northern and central Burma by British-Indian forces from the west, by Stilwell's American-trained Chinese from the northwest, and by Chiang's own armies from southern China. Subsidiary features of the plan included a British naval demonstration in the Bay of Bengal by fleet units to be released from the Mediterranean after the surrender of Italy, and amphibious landings at some point from which mainland operations could be supported. Assault shipping for the landings — 6 attack transports, 18 LST's, and a number of smaller craft— had recently arrived in the theater after a protracted holdover in the Mediterranean. Churchill meanwhile had come out strongly for an "Asiatic-style TORCH" in the form of a surprise descent on the northern tip of Sumatra (CULVERIN), which the Americans opposed as eccentric to the main effort and his own advisers thought would require more resources than were available. The commanders in the theater, finally, had proposed a more modest substitute in

[26] (1) Memo by CinC AFHQ, 22 Nov 43, Incl to CCS 379/7, 27 Nov 43, title: Retention of LST's in Mediterranean. (2) *Fifth Army History*, Part IV, Cassino and Anzio, pp. 11–12.

[27] (1) Min, 131st mtg CCS, 26 Nov 43; 132 mtg, 30 Nov 43. (2) Min, JCS mtgs, SEXTANT, 24, 25, 26, 28 Nov 43. (3) JCS 611/1, rpt by JLC, 26 Nov 43, title: OVERLORD and the Mediterranean. (4) Min, 2d Plenary Mtg, SEXTANT, 24 Nov 43. (5) American and British estimated timetables for Mediterranean operations and ship movements differed considerably. The U.S. staffs allowed more time for intra-theater movement, repairs, and rehearsals attendant on the Rhodes operation, and less time for passage to the United Kingdom and training and rehearsals for OVERLORD, than did the British.

[28] JCS 611, rpt by JPS, title: OVERLORD and the Mediterranean, app. A.

[29] See below, ch. XXI.

the form of landings in the Andaman Islands, southwest of Rangoon, in March or April 1944. This operation (BUCCANEER) had been tentatively endorsed by both the British and the U.S. Chiefs of Staff, although it, along with the other features of the general plan, still awaited formal approval at the highest levels. BUCCANEER was, then, the amphibious part of the general plan (CHAMPION) submitted to Chiang at Cairo.[30]

The plan immediately ran into heavy weather. Hardly anyone, in fact, had much enthusiasm for BUCCANEER, except perhaps Chiang, who had not been informed of its objective but may have learned of it through private channels; in any event, while at Cairo he suggested the Andamans as a likely target for an amphibious operation. The most serious defect of BUCCANEER was that it seemed to have little connection with the mainland operations it was intended to support, and hardly represented a threat serious enough to provoke a strong enemy reaction. The U.S. Chiefs of Staff preferred it to CULVERIN, but were not committed to any particular operation. Admiral King favored a landing on the mainland near Moulmein with a view to cutting across the isthmus to Bangkok, but such an undertaking was not thought feasible with the assault shipping available. Evidently the most that could be said for BUCCANEER was that it would provide a base for future amphibious landings on the mainland and for bombing the new Bangkok-Moulmein railroad, which gave the Japanese in Burma direct overland connections with the Gulf of Thailand.[31] Churchill made no secret of his distaste for BUCCANEER and had earlier declared that if he could not have CULVERIN he would send the British assault shipping back to the Mediterranean. At Cairo he expanded on the idea: If the Americans would not accept CULVERIN, and if they refused to postpone OVERLORD the few weeks necessary to carry out the attack on Rhodes and move assault shipping back to the Mediterranean, then why not take the shipping needed for Rhodes from southeast Asia? BUCCANEER might be postponed rather than canceled. "There really cannot be much hurry," he remarked. "The capture of the Andamans is a trivial prize compared with Rhodes, and also it can be undertaken at any time later in the year."[32]

That Churchill was willing to entertain the idea of carrying out BUCCANEER at all, despite his aversion to it, could be attributed to the position taken at Cairo by Chiang Kai-shek. The Generalissimo immediately branded the whole Burma plan as inadequate. As a price for his participation in a more ambitious one, moreover, he demanded an immediate increase in the airlift far beyond

[30] (1) Ehrman, *Grand Strategy V*, 148–53. (2) Charles F. Romanus and Riley Sunderland, *Stilwell's Command Problems*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1956), ch. II. (3) Vice-Admiral the Earl Mountbatten, *Report to the Combined Chiefs of Staff by the Supreme Allied Commander, Southeast Asia, 1943–1945* (London: Her Majesty's Stationery Office, 1951) (hereafter cited as *Mountbatten Report*), p. 27. (4) Matloff, *Strategic Planning, 1943–44*, chs. XIV–XVI.

[31] (1) *Mountbatten Report*, p. 27. (2) Romanus and Sunderland, *Stilwell's Command Problems*, p. 51. (3) King and Whitehill, *Fleet Admiral King*, pp. 509–10. (4) Ehrman, *Grand Strategy V*, 162. (5) Min, 129th mtg CCS, 24 Nov 43.

[32] (1) Msg, Prime Minister for Br COS Com, 21 Nov 43, quoted in Churchill, *Closing the Ring*, p. 686. (2) Ehrman, *Grand Strategy V*, 114, 159. (3) Min, 2d Plenary Mtg, SEXTANT, 24 Nov 43. (4) Romanus and Sunderland, *Stilwell's Command Problems*, p. 66. (5) Min, 131st mtg JCS, 26 Nov 43.

the capacity of available transport aircraft and explicit guarantees from the British that the land operations would be supported simultaneously by major co-ordinated naval and amphibious attacks. Chiang's attitude caused the Western military leaders to close ranks.[33] A moderate increase in airlift was ordered, but the Chinese were told unequivocally that they must choose between an offensive in Burma and expanded ferry operations, since both competed for transport aircraft. As for BUCCANEER, the U.S. Chiefs of Staff did not at first push hard for it, agreeing to postpone debate pending decisions yet to be taken on the broader strategy of the war against Japan and the British role in it. In the CCS, therefore, Chiang's demand for an amphibious operation was carefully and noncommittally "noted," with merely a promise of future "consideration." Churchill himself sharply challenged Chiang's view of the interdependence of the naval and amphibious phases of CHAMPION and the land operations. He pointed out that in the absence of accessible bases and because of the time needed for redeployment from the Mediterranean British naval forces would not be able to provide direct support for the landings. Finally, he told Chiang emphatically that no definite undertaking could then be given to carry out an amphibious operation in conjunction with the land campaign.[34]

Chiang thus faced defeat on all his demands. Early in the afternoon of 25 November he agreed to the CHAMPION plan as drawn, with the stipulations that the British should gain naval superiority in the Bay of Bengal—which Churchill had already promised—and that the plan should include an amphibious operation, to which Churchill was willing to agree if the Americans met his own conditions in the Mediterranean. At the same time Chiang was asking that President Roosevelt give him something to show for attending the conference.[35] The President obliged. On the same afternoon he told Stilwell and Marshall that he had decided, as a further concession to Chiang, to greatly enlarge the program for equipping Chinese divisions, and some time on the same day he seems to have given Chiang a pledge that BUCCANEER would be carried out on the scale and at the time planned.[36]

The President's pledge, if such it was, left his military advisers very little room for maneuver. If the Soviet leaders at Tehran should insist, as the JCS fully expected them to do, on an immediate major effort by the Western Allies in the Mediterranean, with or without

[33] (1) See Marshall's outburst quoted in Joseph W. Stilwell, *The Stilwell Papers*, arranged and edited by Theodore H. White (New York: William Sloan Associates, Inc., 1948), p. 255. (2) Min, 129th mtg CCS, 24 Nov 43. (3) Min, 130th mtg JCS, 25 Nov 43.

[34] (1) Churchill, *Closing the Ring*, p. 328. (2) Ehrman, *Grand Strategy V*, 162, 164–65, 571. (3) Min, 128th mtg CCS, 23 Nov 43. (4) Romanus and Sunderland, *Stilwell's Command Problems*, p. 65. (5) Min, 1st Plenary Mtg, SEXTANT, 23 Nov 43.

[35] See Marshall's remark at the JCS meeting earlier in the day. Min, 130th mtg JCS, 25 Nov 43.

[36] The evidence on this point is strong though not absolutely conclusive. Churchill (*Closing the Ring*, p. 328) and Leahy (*I Was There*, p. 201) assert unequivocally that the pledge was given and Ehrman accepts this as fact (*Grand Strategy V*, 165). Matloff (*Strategic Planning, 1943–44*, p. 350) noncommittally cites Churchill's statement in the reference noted. It may be significant that the President, in the interview with Marshall and Stilwell mentioned above, seemed from his remarks to have had the Andamans operation on his mind. The most convincing evidence is to be found, as shown below, in the abrupt change in the attitude and position of the JCS on the morning of 26 November. See also Romanus and Sunderland, *Stilwell's Command Problems*, pp. 63–71, and Bryant, *Triumph in the West*, pp. 63, 73.

OVERLORD, approval of the British program seemed assured. The assault shipping allotted to BUCCANEER, now sacrosanct, could not be made available for Rhodes. If OVERLORD shipping currently in the Mediterranean were used instead, how could it be replaced in time to meet the OVERLORD target date? Most new American production after January was allotted to the Pacific, and Admiral King was in no mood to give up any of it. The only remaining possibility seemed to be to postpone OVERLORD a few weeks as the British had proposed, thus giving more time to redeploy assault shipping from the Mediterranean and, incidentally, making available another one or two months' production of landing craft. As Admiral Leahy remarked, the problem was brutally simple: the JCS had to decide whether or not they could accept a delay in OVERLORD; if they could not, "the problem appeared insoluble."[37]

A delay of OVERLORD had been in the President's mind even before he made his pledge to Chiang. Back in Washington OWM Director Byrnes had received a "very urgent message" from Roosevelt on the 23d inquiring whether, with an overriding priority, the output of landing craft could be increased during the *first five months of 1944*—an inquiry that made sense only under the assumption that OVERLORD might be postponed beyond 1 May. Byrnes' reply, dispatched on the 25th, indicated that substantial increases might be possible in April and later, but virtually none before then. Roosevelt probably knew, therefore, when he promised Chiang an amphibious operation, that if OVERLORD were postponed to July it could be bolstered by the addition of some 22 new LST's, not to mention 10 more now allocated but unlikely to reach the United Kingdom in time for a May assault—and this without encroaching on Pacific allocations of February and later output.[38]

Final decision had to wait, then, until the Russians showed their hand. At the last Cairo meeting with the British (on 26 November), the U.S. Chiefs of Staff stressed the sanctity of BUCCANEER, but were strangely noncommittal on OVERLORD and the Mediterranean. Sir Alan Brooke asked them whether they understood that "if the capture of Rhodes and Rome and Operation BUCCANEER were carried out, the date of OVERLORD must go back?" Marshall assured him they did. Would it not be better, urged Brooke perplexedly, to postpone BUCCANEER rather than OVERLORD? What if the Russians demanded both a strong Mediterranean offensive *and* an early OVERLORD? The situation had become embarrassing. Finally, Admiral Leahy offered a broad hint: the U.S. Chiefs of Staff "were not in a position to agree to the abandonment of Operation BUCCANEER. This could only be decided by

[37] Min, 131st mtg JCS, 26 Nov 43.

[38] (1) See below, Chapter XII, for results of this inquiry. (2) Msg, FDR [Roosevelt] to Byrnes, Dir OWM, 23 Nov 43, OPD Exec 5, Item 14. (3) Msg, Byrnes to President, 25 Nov 43, in JCS Memo for Info 171, 27 Nov 43, ABC 561 (30 Aug 43). (4) Mowry, Landing Craft and the War Production Board, pp. 30–32.

For other indications that the American staff at Cairo was seriously considering a postponement of OVERLORD, see (5) Memo, Col A. D. Reid for Gen Handy, 26 Nov 43, sub: Movement of OVERLORD Divs, OPD Exec 5, Item 15, folder 3, Case E17, containing a reference to a "four to six weeks" delay in OVERLORD; and (6) Memo, Gen Tansey for Gen Handy, no date, sub: Production of Ldg Cft, OPD Exec 5, Case E15, showing estimated production of LST's, LCI(L)'s, and LCT's under the existing program for April, May, and June.

the President and the Prime Minister." There was little more to say. The Americans accepted the British program as a basis for discussion at Tehran but on the contradictory assumption that it "would in no way interfere with the carrying out of Operation BUCCANEER." The British departed with the distinct impression, as Lt. Gen. Sir Hastings L. Ismay reported to the Prime Minister, that the Americans, now rigid against any tampering with BUCCANEER, contemplated a postponement of OVERLORD "with equanimity."[39]

Enter Anvil, Compromise on Overlord

At the opening general meeting at Tehran on 28 November, the three principals, at Stalin's brusque suggestion, promptly got down to business. Roosevelt noted in his opening remarks the possibility that OVERLORD might have to be postponed "for one month or two or three," and spoke of the operations—in the Aegean, in the Adriatic, and in Italy—that were being considered to relieve German pressure on the Eastern Front. OVERLORD, he pointed out, would draw off to the west more German divisions than any of the Mediterranean ventures, and he urged that, if possible, it not be delayed "beyond May or June." Churchill presented the British case, elaborating on the promising opportunities that could be exploited in the eastern Mediterranean without detriment either to the campaign in Italy or to OVERLORD. How would Marshal Stalin, he asked, regard this prospect "even if it meant as much as about two months' delay in OVERLORD?"[40]

Up to this point the atmosphere had been cordial. To the pleased surprise of the Western leaders, Stalin opened his remarks with an almost casual promise that the Soviet Union would intervene in the war against Japan as soon as Germany was defeated. This statement confirmed and strengthened the more tentative offers the Soviet Premier had made on earlier occasions. His next words brought the discussion abruptly to a tense climax. He declared bluntly that to him the whole Mediterranean program appeared to involve an excessive dispersion of forces. OVERLORD, he said, should be made the "basic" operation for 1944; and all others, however attractive, should be regarded as diversions. He saw only one useful possibility in the Mediterranean, an attack on southern France followed by a drive northward toward an eventual junction with the main OVERLORD forces—the classic pincers strategy, which the Russians had employed so often in their own theater. Why not, he blandly suggested, suspend the Italian campaign immediately in order to release forces for this operation, and then launch OVERLORD two or three months later?[41]

Whatever the reasons for the sudden evaporation of Stalin's recently displayed interest in Mediterranean operations and for his return to the familiar de-

[39] (1) Min, 131st mtg CCS, 26 Nov 43. (2) Ehrman, *Grand Strategy V*, 166–67.

[40] (1) Min, 1st Plenary Mtg EUREKA, 28 Nov 43. (2) See also Robert E. Sherwood, *Roosevelt and Hopkins: An Intimate History* (New York: Harper & Bros., 1948), pp. 777–81. Marshall and Arnold were not present, having misunderstood the time of the meeting. According to Sherwood, Roosevelt also mentioned the possibility of landings in southern France.

[41] (1) Min, 1st Plenary Mtg, EUREKA, 28 Nov 43. (2) Ehrman, *Grand Strategy V*, 174–76.

mand for a second front in France,[42] his deceptively simple proposals injected new difficulties into an already complicated problem. The Mediterranean was a going theater of war in which both Western allies had a heavy investment. To stop short on the present line in Italy would not satisfy the declared American desire to maintain strong pressure against the Germans and, as Churchill promptly asserted, for the British the capture of Rome was both strategically and politically imperative.

Stalin seemed, moreover, not to have grasped the constraints that shipping and landing craft placed upon the timing and sequence of operations. He had to be reminded that the troops in the Mediterranean, except for the seven divisions already in transit to the United Kingdom, were irrevocably bound there for lack of shipping to deploy them elsewhere. He missed the point that the southern France operation and the landings in the Adriatic had been suggested as mutually exclusive alternatives, and that the Rhodes operation was very modest in scope. When Churchill reminded him of this last fact, Stalin conceded that on those terms the capture of Rhodes might be worth undertaking. But it was obvious that if both the Rome and Rhodes operations were to be carried out, or even only the latter, the proposed landing in southern France two or three months before OVERLORD could be worked into the crowded schedule only by postponing OVERLORD—for which, up to this point, Stalin had stipulated no date.[43] The Soviet Premier's lack of interest in what he may have regarded as mere details in the grand design of a long-awaited major second front in the West was understandable. Following Roosevelt's and Churchill's rather careful exposition of those details, however, Stalin's analysis of the problem must have appeared to the Western military leaders present to reflect an appalling ignorance of, or indifference to, the hard realities of amphibious warfare.

At this juncture Roosevelt interposed. Stalin's proposals, he said, had raised a serious problem of timing. A choice must be made: either undertake Churchill's Aegean operations, which would delay OVERLORD a month or two or, as the Soviet Premier had suggested, "attack [southern] France one or two months *before the first of May* and then conduct OVERLORD *on the original date.*" (Italics supplied.) His own preference, he added, was for the latter alternative.[44]

Churchill was caught off balance. Nothing in the President's earlier remarks had suggested any intention to insist on adherence to the 1 May target date for OVERLORD. On the contrary, Roosevelt had appeared to accept the idea of postponement, urging only that it be brief; and, when the Cairo meetings ended, his military advisers had seemed resigned to the inevitability of some delay. By now implying that Stalin had demanded a 1 May date (although he had not, in fact, done so), the Presi-

[42] As Herbert Feis points out (*Churchill, Roosevelt, Stalin: The War They Waged and The Peace They Sought* [Princeton, N.J.: Princeton University Press, 1957], p. 258), since October the Russians had suffered a temporary setback on the front southwest of Kiev, and this may have made Stalin more wary of an Anglo-American offensive in the eastern Mediterranean, which might lead to an extension of Western influence into southeastern Europe before the arrival of the advancing Soviet forces.

[43] (1) Churchill, *Closing the Ring*, p. 355. (2) Ehrman, *Grand Strategy V*, 175.

[44] (1) Min, 1st Plenary Mtg, EUREKA, 28 Nov 43. (2) Ehrman, *Grand Strategy V*, 176.



STALIN, ROOSEVELT, AND CHURCHILL AT TEHRAN

dent may have hoped to enlist support for an early and definitely scheduled invasion. If so, it was an adroit maneuver, for Stalin failed to challenge the innuendo. Its significance was not lost on Churchill, who immediately protested the idea of condemning twenty or more divisions in the Mediterranean to inactivity "solely for the purpose of keeping the May date for OVERLORD," and chided the President for the "rigid timing" of the program he had proposed.[45]

Stalin had shown his hand. For the Americans, the nightmare of an Anglo-Soviet demand for a shift to the Mediterranean had been dissipated in the comforting assurance that the Soviet leaders once more stood solidly for the primacy of OVERLORD and shared the American aversion to operations in the eastern Mediterranean. That the Russians shared American suspicions of British motives quickly became apparent when, in the course of the following day (29 November), both Churchill and Brooke, under polite but persistent questioning by their hosts, were repeatedly obliged to go through the ritual of affirming their loyalty to OVERLORD.[46] At a meeting of the military representatives on the same day the Soviet representa-

[45] (1) Min, 1st Plenary Mtg, EUREKA, 28 Nov 43. (2) Ehrman, *Grand Strategy V*, 176.

[46] (1) Min, Military Mtg, EUREKA, 29 Nov 43. (2) Min, 2d Plenary Mtg, EUREKA, 29 Nov 43. (3) See also Churchill's account of Stalin's castigation of General Brooke at the banquet on the evening of 30 November, in *Closing the Ring*, pages 386–88.

tive, Marshal Klementy Voroshiloff, indicated no very specific notions as to what should be done in the Mediterranean or when. In answer to Sir Alan Brooke's observation that a landing in southern France so long in advance of OVERLORD might be crushed before the latter could get well under way, Voroshiloff merely reasserted rather woodenly that the operation would be a valuable complement to OVERLORD. Anyway, he added, Stalin did not insist on a southern France operation. All other undertakings in the Mediterranean, "such as Rome, Rhodes, and what not," were diversions that, if carried out at all, should be "planned to assist OVERLORD and certainly not to hinder it." Evidently the Soviet Premier had no intention of becoming embroiled in Western squabbles over Mediterranean strategy. According to Voroshiloff, however, Stalin *did* insist on OVERLORD and "on the date already planned."[47]

Thus the issue was finally joined on the timing of OVERLORD. On this same 29 November Roosevelt, now committed to a May OVERLORD and evidently confident that with Soviet support he could win, sent a message to Washington tardily instructing Byrnes to call off the proposed speed-up in landing craft production about which he had inquired on the 23d. "The increase in critical types . . . ," the President explained, "does not become effective soon enough to justify change in present construction programs."[48] At the plenary meeting that afternoon, Stalin set forth his position in the language of an ultimatum: OVERLORD "must be carried out by the limiting date." He also pressed for an early appointment of a commander for the operation. Soviet forces, he promised, would match the invasion from the west by a simultaneous offensive from the east.[49] Churchill held the floor for most of the session with a spirited defense of the British Mediterranean program. He vainly tried to draw out Stalin on his proposed southern France operation, for which, as he pointed out, no plan had yet been drafted; as Brooke had already done, he warned that if the attack were too weak or launched too early, it would invite disaster. On the other hand, if a two-division amphibious lift could be left in the Mediterranean, bright possibilities opened up—turning movements along the Italian coasts, then a swift capture of Rhodes, finally, an invasion of southern France in conjunction with OVERLORD. OVERLORD might have to be set back by six or eight weeks, or (here Churchill introduced the alternative for the first time at Tehran) the needed assault shipping could be brought back from India. Anyway, Churchill concluded, if the handful of vessels needed for Rhodes could not somehow be found, it was unreasonable to suppose that the larger number required for an invasion of southern France or any other diversionary operation in support of OVERLORD could be provided. His reminder that OVERLORD could not be undertaken at all unless there were a reasonable ex-

[47] Min, Military Mtg, EUREKA, 29 Nov 43.

[48] (1) Quoted in Mowry, Landing Craft and the War Production Board, p. 31. (2) For acceleration of landing craft production in response to Roosevelt's message of the 23d, see below, Chapter XIII.

[49] (1) Min, 2d Plenary Mtg, EUREKA, 29 Nov 43. (2) According to Churchill, Stalin told him at lunch on the 30th that he wanted OVERLORD in May *or in June* in order for it to synchronize with the Soviet offensive. In the event the Soviet offensive started on 23 June. See Churchill, *Closing the Ring*, pp. 380, 383.

pectation of success based on certain specified conditions of enemy strength brought from Stalin a sarcastic query: Would OVERLORD be ruled out if there were 13 instead of 12 mobile German divisions in France and the Low Countries on D-day? Churchill assured him it would not.[50]

Stalin made no attempt to answer Churchill's arguments. He ignored the allusion to BUCCANEER, restated his demand for a May OVERLORD, and indicated his preference for a southern France invasion to be launched two or three months before OVERLORD—or, if this were not possible, simultaneously with OVERLORD or even a little later. All other operations in the Mediterranean he regarded as diversions. Roosevelt finally interposed to suggest a date for OVERLORD "certainly not later than 15 or 20 May, if possible." Churchill promptly and emphatically dissented, and the atmosphere again became tense. Finally, the problem was referred to the military representatives to work out before the next afternoon when final decisions would be reached.[51]

Despite the appearance of a deadlock, a compromise was beginning to take form. Both Stalin and Roosevelt had refrained from insisting on a 1 May date. Before lunch the next day (30 November) Churchill decided to agree to a date sometime in May, and that morning the British Chiefs of Staff came to the meeting with their American opposites with specific proposals worked out on that basis.[52] General Eisenhower would be allowed to keep the 68 OVERLORD LST's in the Mediterranean until 15 January in order to ensure the early capture of Rome. By British calculations, this meant that OVERLORD could not be earlier than June—but to satisfy Stalin the British Chiefs of staff were willing to define this as "in May." They were also prepared to support an operation against southern France. Most important, they would agree that no assault shipping earmarked for OVERLORD should be retained in the Mediterranean specifically for the Rhodes operation. The key to this last concession lay in their final proposition: as a result of Stalin's momentous pledge on the 28th to enter the war against Japan after Germany's defeat, they argued, the role of China in the coalition had been automatically reduced and the whole case for an offensive in Burma in spring 1944, including BUCCANEER, had been weakened. The British therefore hoped to persuade the Americans to cancel BUCCANEER and send its assault shipping back to the Mediterranean, where it could be used to help mount the southern France operation—and, as a likely by-product, the attack on Rhodes as well. If the Americans refused to cancel BUCCANEER, the burden would be upon them to find assault shipping for southern France elsewhere, leaving the same probability that it could also be used for Rhodes.[53]

Meanwhile, the U.S. Chiefs of Staff, confident in the assurance of Soviet support, had worked out their own position. The assault shipping now in the Mediterranean could be safely kept there un-

[50] (1) Min, 2d Plenary Mtg, EUREKA, 29 Nov 43. (2) Churchill, *Closing the Ring*, p. 371. (3) Ehrman, *Grand Strategy V*, 179.

[51] (1) Min, 2d Plenary Mtg, EUREKA, 29 Nov 43. (2) Churchill, *Closing the Ring*, p. 370. (3) Ehrman, *Grand Strategy V*, 180. (4) Sherwood, *Roosevelt and Hopkins*, p. 788.

[52] (1) Churchill, *Closing the Ring*, p. 376. (2) Ehrman, *Grand Strategy V*, 181.

[53] Ehrman, *Grand Strategy V*, 181.

til mid-January to support the Italian campaign, as General Eisenhower had asked, without endangering an early May OVERLORD. With what remained after the withdrawals, the staff thought, a 2-division assault could be mounted against southern France (now labeled ANVIL). This operation, for tactical and strategic reasons, should be launched no earlier than three or four weeks before OVERLORD rather than on the date suggested by Stalin. But even a date three or four weeks before OVERLORD would not leave time, the Americans emphasized, to shift any landing craft over to the eastern Mediterranean for an attack on Rhodes and get them back to Corsica in time to refit for the ANVIL landings. *Ergo*—no Rhodes operation. The problem, as Admiral Leahy triumphantly summed up, "seemed to be a straightforward one of the date of OVERLORD."[54]

The argument that a southern France operation would be feasible but a Rhodes operation would not hinged on logistical calculations of an extremely speculative nature. The American estimates of ANVIL requirements at Tehran were hastily concocted and based on an old outline plan used at Quebec three months before, the only plan for the southern France operation they had brought to the conference. While projections showing a 2-division assault lift for ANVIL could not be positively disproved at the time, the case for the ANVIL landings seemed particularly flimsy to the British. Sir Alan Brooke could cite against it the recent verdicts of General Eisenhower that the assault lift remaining in the Mediterranean would suffice for only one division, that the build-up following the assault would be very slow, and that no attack on such a scale would be likely to succeed. Moreover, the British did not believe the OVERLORD assault vessels to be used in Italy could be moved back to the United Kingdom in time for a May D-day if they left the Mediterranean after mid-January; and they continued to express their oft-repeated fears that the landing craft allotment for OVERLORD was inadequate. Brooke flatly asserted in his diary that a 1 May ANVIL, simultaneous with OVERLORD, was "an impossibility."[55]

Caught between contradictory logistical estimates, the discussion deadlocked. Nevertheless, the afternoon deadline was at hand, and the Russians had to be given an answer. The military leaders therefore agreed (falling back on the subterfuge suggested by the British) that the Russians could be told "we will launch OVERLORD *during May* in conjunction with a supporting operation against the south of France on the largest scale that is permitted by [available] landing craft," with a target date, for planning purposes, the same as that for OVERLORD. The advance in Italy would continue as far as the Pisa-Rimini line, and the 68 LST's requested by Eisenhower would be left in the Mediterranean until 15 January. The fate of BUCCANEER and the Aegean operations was reserved for discussion at Cairo.[56]

Thus hopefully, or perhaps resignedly, the Western military leaders added

[54] Min, 132d mtg CCS, 30 Nov 43.

[55] (1) *Ibid.* (2) Quote in Bryant, *Triumph in the West*, p. 64. (3) Matloff, *Strategic Planning, 1943–44*, pp. 365–66. (4) Harrison, *Cross-Channel Attack*, p. 125. (5) On Eisenhower's views, see above, Chapter IX.

[56] (1) Min, 132d mtg CCS, 30 Nov 43. (2) Ehrman, *Grand Strategy V*, 182. (3) Msg FAN 281, 1 Dec 43, CCS to Eisenhower, OPD Exec 3, Item 13.

another major amphibious undertaking to their already crowded agenda for mid-1944, leaving unanswered the knotty questions of timing and provision of means that its introduction had raised. The political leaders, facing an impasse, were in no mood to cavil. On the same afternoon, two days after Stalin had dropped his bombshell, the Big Three ratified the CCS program and declared OVERLORD and ANVIL the "supreme" operations of the Western Allies in 1944. No breath of discord ruffled their meeting. As Churchill declared, it was inconceivable that the United States and Great Britain, "with their great volume of production, could not make the necessary landing craft available."[57]

Second Cairo: Scratch Buccaneer

Back at Cairo, the CCS faced up to the problem of finding enough assault lift to carry out (1) a late May or early June OVERLORD, (2) a simultaneous southern France operation, (3) an attack on Rhodes as soon as possible following the impending landings south of Rome, and (4) BUCCANEER, still scheduled for March. Thanks to the firmness of the Western leaders at Tehran, the heart of the Mediterranean program—capture of Rome and advance to a defensible line beyond — now seemed assured, despite Stalin's attempt to call a halt to operations in Italy. Prospects for the rest of the British Mediterranean program remained bright. The modest program for the Balkans had been accepted, and Stalin had agreed to the British proposal that Turkey should, if possible, be brought into the war before the end of the year. The attitude of the Turks themselves, which in the last analysis could make or break British fortunes in the eastern Mediterranean, was soon to be tested anew in negotiations at Cairo. American opposition (with, on this point, only lukewarm Soviet support) had centered on the proposed operations in the Aegean, for which Admiral King had warned he would not under any circumstances turn over American landing craft. On the other hand, the introduction of an assault lift requirement for ANVIL, which the Americans were virtually committed to meet, promised to increase the available pool of assault shipping. If the timing of the two operations at opposite ends of the Mediterranean could be worked out, American insistence on mounting one to the exclusion of the other might prove difficult to maintain.[58]

The British made it clear that in any event they intended to press on with their plans for the Aegean and that, in view of Stalin's firm pledge of participation in the war against Japan, they now considered BUCCANEER fair game. That operation was, in fact, even more vulnerable than before, since Admiral Lord Louis Mountbatten, Supreme Allied Commander, Southeast Asia, in his most recent plan provided for a considerably stronger assault with increased requirements for assault, shipping and carrier-borne aviation. Even though Admiral King had promised to provide the carriers, and the other means were

[57] Min, 3d Plenary Mtg, EUREKA, 30 Nov 43.

[58] (1) Min, 131st mtg JCS, 26 Nov 43. (2) See Hopkins' strong statement on Aegean operations in Sherwood, *Roosevelt and Hopkins*, pp. 793–96. (3) CCS Memo for Info 165, 2 Dec 43, title: Military Conclusions of the EUREKA Conference.

available in the theater, the ends in view seemed hardly commensurate with the cost, for more than 50,000 troops were to be concentrated against a garrison estimated at only about 5,000. The British insisted, moreover, on debating the larger issue of the whole campaign in Burma, which, in view of American plans for the Pacific and Stalin's firm promise to enter the lists against Japan, seemed to them to make little sense. Even the JCS found BUCCANEER difficult to defend on its merits. General Marshall candidly admitted that if the operation could be dropped without wrecking the mainland campaign, "he personally would not be seriously disturbed."[59]

Whatever the defects of BUCCANEER, the JCS were, of course, no more inclined than ever to release assault shipping for an attack on Rhodes. But the British now adroitly shifted ground. They soft-pedaled their Aegean plans (which depended mainly on the outcome of negotiations with the Turks, anyway), and concentrated on the problem of mounting an adequate attack against southern France, to which the Americans were firmly committed. ANVIL, they argued, must not be tailored to the leavings of other undertakings (as implied in the Tehran formula), but should be made strong enough to form a genuine complement to OVERLORD—specifically, an assault by at least two divisions, perhaps three. But when the staffs checked their hasty Tehran estimates against the more ample data available at Cairo, they found that after OVERLORD withdrawals the residual assault lift in the Mediterranean would not exceed one and two-thirds divisions and might be even less. After a half-hearted attempt to hew to the Tehran line, the JCS conceded the need for at least a two-division assault, and on 4 December Admiral King, in a surprise move, offered to meet the ANVIL assault shipping deficit from new production previously allotted to the Pacific. The total extra lift required was calculated at the time at 3 XAP's, 12 motor transport (MT) ships (these were especially fitted to carry deck loads of vehicles), 26 LST's, and 31 LCT's. King promised to provide all the XAP's and LST's, and 26 of the LCT's which the LST's would carry to the theater. The MT ships were, or would be, available in the area. The five additional LCT's could be taken from craft earmarked for OVERLORD and replaced from the contingent Admiral King had promised for OVERLORD on 5 November.[60]

King's offer opened no breach in JCS opposition to the Rhodes operation since, as he made clear, the new ships and craft could not reach the Mediterranean in time to be used for it. On the other hand, although they almost covered the calculated deficit for a 2-division ANVIL assault, they fell short of guaranteeing this operation. They left no margin for unforeseen contingencies, and many on the American as well as on the British side considered

[59] (1) Min, 135th mtg CCS, 5 Dec 43. (2) Ehrman, *Grand Strategy V*, 185–86. (3) Romanus and Sunderland, *Stilwell's Command Problems*, pp. 65–67.

[60] (1) Min, 133d mtg CCS, 3 Dec 43. (2) Min, 3d Plenary Mtg, SEXTANT, 4 Dec 43. (3) CPS 131/1, 3 Dec 43, title: Amphibious Opns Against South of France. (4) Msg 10131, Adm Badger to VCNO, 5 Dec 43, OPD Exec 4, Item 13. (5) CCS 424, rpt by CPS and CAdC, 5 Dec 43, title: Amphibious Opns Against South of France. (6) Ehrman, *Grand Strategy V*, 184, 187, 195. (7) On the possible basis of King's offer see below, Chapter XIII.

even a 2-division assault too weak. Moreover, OVERLORD's own weakness, even after the allocations of 5 November caused growing uneasiness. Time was growing short. OVERLORD and ANVIL were now designated the supreme operations for 1944. The responsible commanders were about to be named,[61] and few doubted that when they reviewed the existing plans they would demand a more ample provision of means. At the plenary meeting of 5 December Harry Hopkins elicited from the military leaders, after some sharp cross-questioning, the remarkable admission that although they had given the stamp of approval to a 2-division ANVIL and a 3½-division OVERLORD, they believed nevertheless that both operations should be strengthened.[62]

After two days of discussions at Cairo, the problem had taken on new dimensions. Instead of merely mounting the ANVIL assault at a fixed scale, it now seemed necessary to provide a pool of assault shipping large enough to mount both ANVIL and OVERLORD on a scale as yet undetermined but adequate to give both operations a reasonable margin of safety. Precisely how much shipping would be needed could not be known until the plans were revised and developed in detail. The very uncertainty on this score lent force to the British argument that it would be folly to commit precious assault shipping irrevocably to a venture in southeast Asia that even the U.S. Chiefs of Staff conceded to be of secondary importance.

At the plenary meeting on the 5th, Churchill bluntly pointed out that only President Roosevelt's unilateral pledge to Chiang stood in the way of agreement. He suggested that Chiang might be offered some lesser substitute for BUCCANEER for the time being, the remainder of the campaign to be carried out as planned. Hopkins supported the idea. The President, obviously unhappy, finally agreed to the suggestion that Mountbatten's representatives, then in Cairo, and Mountbatten himself should be queried as to what small-scale amphibious operations might be undertaken if he had to give up most of his assault lift. At the same time the CCS were ordered to re-examine forthwith the two European operations "with a view to increasing the assaults in each case." Roosevelt's full capitulation swiftly followed. The same afternoon, after consulting with his advisers (only King in the JCS held out against postponing BUCCANEER), he sent Churchill a brief message: "BUCCANEER is off."[63]

The Joint Chiefs were not informed of the decision until the next day, but after their meeting with the President they must have realized that it could not long be delayed. What had now to be decided were the precise alternatives to be offered Chiang. On the night of the 5th the British and U.S. planners made a list of amphibious operations that might be undertaken in Burma during the spring, assuming arbitrarily that the shipping to be withdrawn from the theater would comprise most of the LST's, combat loaders, and small aircraft carriers. The list was not impressive. The

[61] The President announced General Eisenhower's appointment as OVERLORD commander on 6 December.

[62] Min, 4th Plenary Mtg, SEXTANT, 5 Dec 43.

[63] (1) Churchill, *Closing the Ring*, p. 411. (2) Min, 4th Plenary Mtg, SEXTANT, 5 Dec 43. (3) Ehrman, *Grand Strategy V*, 190–92. (4) King and Whitehill, *Fleet Admiral King*, p. 425. (5) Leahy, *I Was There*, p. 213. (6) Sherwood, *Roosevelt and Hopkins*, p. 801.

Joint Chiefs, studying it the following morning, were inclined to conclude that it might be better to give up serious amphibious ventures in the Southeast Asia Command (SEAC) altogether during that season, and to transfer all the BUCCANEER assault shipping back to European waters. The British agreed. The CCS accordingly recommended that major amphibious operations in the Bay of Bengal be delayed until after the monsoon season and that Chiang Kai-shek be offered two alternatives: (1) the mainland offensive as planned with British naval control of the Bay of Bengal assured, but without BUCCANEER, for which would be substituted carrier strikes, commando raids, and bombardment of Bangkok and the railroad; or (2) postponement of the mainland offensive, compensated for by increased airlift to China and more rapid development of the long-range bombardment program from bases in China. Mountbatten's reply, later that day, stated flatly that seaborne operations smaller than BUCCANEER would not be worth the effort. He proposed that, in anticipation of Chiang's probable reaction, only limited land operations in northern and central Burma and along the Arakan coast should be undertaken, and that the aim of opening the land route to China during the spring be abandoned.[64]

By the evening of 6 December all knew that the President, without informing the JCS, had decided to abandon BUCCANEER and, moreover, had already cabled Chiang the bad news, presenting the same alternatives arrived at by the Chiefs of Staff that morning.[65] Chiang's reply had not yet been received, but the President was due to leave Cairo the following morning and the conference decisions could not wait. Accordingly, the alternatives presented to Chiang were both included in the final SEXTANT paper approved by the President and Prime Minister at the plenary meeting on the night of the 6th.

In the light of the Generalissimo's known attitude, there could be little doubt that he would reject the first alternative; there was considerable doubt that he would accept even the second. Actually, by ruling out any worthwhile substitute for BUCCANEER and by so informing the Chinese leader forthwith, the President had thrown away an option that might have been acceptable to Chiang, inasmuch as the latter had never been told precisely what sort of operation was contemplated, but only that it would be a major one. At the time the conference decisions were approved, however, the leaders had Mountbatten's word for it that nothing less than BUCCANEER would serve. Later in the month he changed his mind, but by then the President's message had left Chiang in no mood for compromise. In any case, Mountbatten's small residue of assault shipping was soon to be swallowed up in the maw of swelling European requirements. On 7 December the worldwide redeployment of assault shipping dictated by the SEXTANT decisions began as the CCS ordered Mountbatten to send 15 LST's and 6 LSI (L)'s—the

[64] (1) Min, 136th mtg JCS, 6 Dec 43. (2) Min, 136th mtg CCS, 5 Dec 43. (3) Min, 137th mtg CCS, 6 Dec 43. (4) CCS 427, rpt by CPS, 5 Dec 43, title: Amphibious Opns in Southeast Asia Alternative to BUCCANEER. (5) Romanus and Sunderland, *Stilwell's Command Problems*, p. 70. (6) Ehrman, *Grand Strategy V*, 192-93.

[65] (1) Msg, President to Chiang, 5 Dec 43, OPD Exec 10, Item 70. (2) Min, 5th Plenary Mtg, SEXTANT, 6 Dec 43.

bulk of his amphibious fleet—back to European waters.[66]

Acceleration in the Pacific

At Cairo the CCS also approved a tentative "Over-All Plan for the Defeat of Japan" providing for simultaneous advances along the Central and Southwest Pacific axes as the main effort against the Asiatic adversary. Operations in China and southeast Asia were definitely relegated to a subsidiary role. Although the plan did not fulfill the American prescription that Japan must be defeated within a year after the defeat of Germany, it did provide for a marked acceleration in Pacific operations during 1944. MacArthur's forces were to reach the Vogelkop Peninsula at the western end of New Guinea by October 1944, and Central Pacific forces were to push to the Mariana Islands about the same time. This represented a substantial speed-up of the schedule to which the Americans had secured agreement at Quebec three months earlier. In addition, bombing of Japan by the giant B–29's was to be initiated from bases in China early in 1944. Ultimately these bombers would be deployed in the Marianas.[67]

Beyond 1944 the plan was necessarily and perhaps deliberately vague. How the operations in China and southeast Asia might contribute to the general design was more than ever uncertain, especially with the cancellation of BUCCANEER. It also remained to be decided whether Japan would be defeated in the end by air blockade and bombing or by invasion of the home islands. The plan stipulated that British fleet units would be used in both the Pacific and the Indian Oceans after the defeat of Germany, but failed to spell out a specific role for them. The possible contribution of Soviet forces, in the event the USSR entered the war against Japan, received considerable attention along with the attendant requirement for advance build-up of supplies and preparation of Siberian airfields.

The British went along with the plan, as presented by the Americans, willingly and with no recorded debate. The concept of a main effort in the Pacific and the importance attached to the USSR, with a corresponding downgrading of China as an ally in the war against Japan, dovetailed neatly with their arguments for the transfer of Mountbatten's assault shipping back to the Mediterranean. Sir Alan Brooke perceived, even if his chief did not, that the American drive in the Pacific was already gaining so much momentum that British plans for southeast Asia, like American plans for China, were likely soon to be overtaken by events and that if the British Fleet were to find profitable employment against Japan, it would probably have to be in the Pacific.[68]

It has become almost a commonplace in American interpretations of World War II to say that at Tehran the British were forced to abandon their reservations concerning OVERLORD. Thus, it is asserted, the primacy of OVERLORD vis-

[66] (1) Ehrman, *Grand Strategy V*, 193, 211–12. (2) *Mountbatten Report*, p. 29. (3) Romanus and Sunderland, *Stilwell's Command Problems*, pp. 75 ff.

[67] (1) CCS 426/1, 6 Dec 43, title: Rpt to President and Prime Minister. (2) CCS 417, 2 Dec 43, Rpt by CPS, title: Over-all Plan for Defeat of Japan. (3) CCS 397 (Rev), memo by U.S. CsofS, title: Specific Opns for Defeat of Japan, 1944. (4) See below, Chapters XVI and XXI, for fuller discussion of strategy in the war against Japan.

[68] Bryant, *Triumph in the West*, pp. 112–14.

à-vis the Mediterranean, and, indeed, its very execution were finally assured.[69] Like the classic query, "When did you stop beating your wife?" this interpretation accepts as fact what is actually the nub of the issue, namely, the American allegation that the British, and Churchill in particular, had never intended to go through with OVERLORD and only resigned themselves to do so under Soviet pressure at Tehran. In reality, both Churchill and Brooke, forced repeatedly by the Russians to state their intentions concerning OVERLORD, stood firm. At the end of the conference their position was the same as it had been before: OVERLORD would be the main effort of the Western Allies in Europe, and, as far as the British were concerned, it would be carried out, as Churchill told Stalin on 30 November, "provided the enemy did not bring into France larger forces than the Americans and British could gather there."[70] In essence, this was the reservation already spelled out in the OVERLORD outline plan and accepted by the U.S. Chiefs of Staff themselves. Whether British leaders secretly harbored reservations of a more far-reaching nature is not known now (except by themselves) and probably will never be known. Certainly the Americans had no basis at the time, other than hearsay, for suspecting that they did. The historian's position is likely to depend largely on where he decides to place the burden of proof—on the Americans to demonstrate that their suspicions were based on fact, or on the British to show that their professions were sincere.[71]

As for Stalin's stand on OVERLORD, it was no more than a restatement of the familiar "second front" theme dinned into Western ears from the time of the German invasion down to the Moscow Conference of October 1943. The most puzzling question it raises is why the U.S. Chiefs and staffs accepted so readily General Deane's erroneous predictions before the Cairo-Tehran Conferences. It may be doubted whether Stalin at Tehran was taken in by the transparently vague formula suggested by the British and U.S. Chiefs of Staff to define the target date for OVERLORD, but there is no indication in his recorded utterances at the time that he attached any importance to fixing the date more precisely than sometime in May or June. His pronouncements on OVERLORD added nothing to earlier Anglo-American agreements on the relation between the cross-Channel operation and operations in the Mediterranean. The most significant decision at Cairo-Tehran was not the designation of OVERLORD and ANVIL as "supreme" operations in 1944, but the corollary CCS decision of 5 Decem-

[69] For example, Sherwood (*Roosevelt and Hopkins*, p. 788) states that Churchill at the plenary meeting on the 29th "bowed to the inevitable" accepted OVERLORD) by promising Stalin that "Britain would hurl every ounce of her strength across the Channel at the Germans." Admiral Leahy in his memoirs (*I Was There*, p. 209) speaks of the decision on a May OVERLORD (which he represents as a capitulation by the British, not a compromise) in the same sense: the British "fell into line." See also Harrison, *Cross-Channel Attack*, pp. 125–26; Cline, *Washington Command Post*, p. 229; Matloff, *Strategic Planning, 1943–44*, pp. 365, 384–85; and Maurice Matloff, "The ANVIL Decision: Crossroads of Strategy," in Greenfield, ed., *Command Decisions*, p. 287; also Kent Roberts Greenfield, *The Historian and the Army* (New Brunswick, N.J.: Rutgers University Press, 1954), p. 54; and Trumbull Higgins, *Winston Churchill and the Second Front* (New York: Oxford University Press, 1957), pp. 212–13, 244.

[70] Churchill, *Closing the Ring*, p. 380.

[71] See Feis' interpretation of Churchill's position at Tehran in *Churchill, Roosevelt, Stalin*, pp. 261–262.

ber to explore the possibility of strengthening the two assaults. This decision, which virtually invited the responsible commanders to demand the means they considered necessary, formally recognized what the JCS since spring of 1943 had refused to concede—that the limit placed on the size of the OVERLORD assault at the TRIDENT Conference was arbitrary and unrealistic. It vindicated the stubborn efforts of the British since early 1942 to persuade the Americans to provide more assault lift for the operation.[72]

To Stalin's stand at Tehran can also be attributed the declaration that OVERLORD and ANVIL would be the supreme operations for 1944, with the stipulation that "nothing must be undertaken in any other part of the world" to jeopardize their success. Never before had the primacy of the European war been affirmed in such sweeping terms. The statement wiped out at one stroke the U.S.-dictated provisos at TRIDENT that in the face of reverses in the Pacific the United States would intensify its effort there even at the expense of the war in Europe, and for the first time spelled out the corollary implicit in the Germany-first coalition strategy. In principle, at least, the war in the Pacific was now subordinate to the war in Europe in the American scheme of things as well as in the British.[73]

Coming when they did, the decisions at Cairo and Tehran relating to the war in Europe have taken on a retroactive luster from the dramatic events of the following summer—the invasions of Normandy and southern France, the advance up the Italian Peninsula, the sweep across France to the Rhine. The decisions foreshadowed the events; it is less certain that they shaped them as well. ANVIL, for instance, though now closely linked to OVERLORD, faced a precarious future and, in the form in which it was eventually carried out, could not have been justified by the arguments used at Tehran. Within a few weeks after the conferences, unforeseen circumstances were playing havoc with the decisions on Turkey, the Aegean, Italy, and southeast Asia.

As for OVERLORD, Stalin's insistence upon it undoubtedly enhanced the likelihood that the means would be found to execute the operation even if there should be an unforeseen increase in German power. On the other hand, American staff thinking had already been moving in that direction, and the massive preparations for the invasion had generated a momentum difficult, if not impossible, to arrest. Any radical change of direction or of emphasis at this time —let alone later—would have caused an upheaval in plans and preparations more costly than many military defeats. As a practical matter, the war in Europe had progressed beyond the point of no return. Even the date was hardly any longer in the realm of strategic decision. After Tehran strategic planning was pointed toward a late May or early June OVERLORD (though the administrative staffs continued for some time to work toward an early May deadline). In the end the actual date of OVERLORD was dictated, as Churchill has remarked, mainly "by the moon and the weather."[74]

[72] On this point see Greenfield, *American Strategy in World War II: A Reconsideration*, pp. 34–35, 40–41.

[73] CCS 426/1, 6 Dec 43.

[74] Churchill, *Closing the Ring*, p. 376.

CHAPTER XII

Inventory and Aftermath

As the major decisions were taking shape at Cairo, the Combined Administrative Committee, assisted by shipping and logistics experts, was preparing a general appreciation of the relation of available resources to approved operations. While most of the work was done at Cairo, the resources paper was not completed and formally presented to the CCS until a week after the conference had ended. The final assessment was highly optimistic. Apart from assault shipping, still a problem area, the staffs predicted that ground, air, naval, and merchant shipping resources would be ample for contemplated operations in both main sectors of the war. Certain shortages were noted, but none were judged likely to have an adverse effect on planned operations. A shortage of service troops impended for both ANVIL and the Pacific campaigns; supply of naval escorts, escort carriers, and destroyers would be tight during the early part of 1944 but would be "considerably eased by new construction as the year progresses." Shortages of air transport were in prospect both for ANVIL and for operations in China, Burma, and India, and of land-based aircraft for Pacific operations. A mildly critical situation was expected in the supply of high octane gasoline. Army organizational and project equipment (Classes II and IV) would continue in short supply "but in no case [would be] so serious as to preclude mounting of operations scheduled." The impact of these shortages would be felt mainly in the Pacific and CBI because of the high priority now assigned OVERLORD and ANVIL.[1]

Shipping: The Deficits Vanish

The general optimism and the reasons for it were nowhere better reflected than in the merchant shipping estimates. What with new construction and conversion programs, the coming year held out the prospect of a larger deployment of U.S. forces overseas than ever before, beyond even the expectations of the Quebec Conference. Now that U.S. deployment plans were for the first time, "adjusted to conform to . . . estimates of shipping capabilities," it was expected that by the end of 1944 almost 6.9 million U.S. personnel of all services, including 4.9 million Army troops, would be overseas.[2] During the first nine months of 1944 (the limit of SEXTANT shipping projections), 2,837,000 U.S. troops were scheduled for overseas move-

[1] CCS 428 (Rev), 15 Dec 43, title: Relation of Available Resources to Agreed Operations.

[2] (1) JPS 193/2, 1 Oct 43, title: Strategic Deployment of U.S. Forces to 31 Dec 43. (2) Figures include all forces outside the Continental U.S. and Canada except Bermuda and Greenland. Actual overseas deployment of U.S. Army forces at the end of 1944 was in fact just under 5 million.

ment—almost a million more than had been sent during the entire preceding year. The British, with 200,000 tons of troop shipping in excess of that expected in August, were prepared to make an even more massive contribution to this movement than before by transporting more than 800,000 American troops overseas between January and October 1944, over and above handling their own commitments. (*Table 24*)

The planned British contribution was concentrated on the U.S. build-up for OVERLORD, the increase in American lift being mainly reserved for the Pacific. Army forces in Pacific theaters and in CBI were to be built up by mid-1944 to strengths 167,000 greater than contemplated at Quebec, and 45,000 troops were to be redeployed out of the Alaskan area. Accelerated by shipments from the United States east coast, deployment to the Pacific was expected to draw abreast of objectives, thereby eliminating the deficit forecast at Quebec. QUADRANT deployment objectives for the Mediterranean theater had also been raised, in the main simply to reflect the large volume of movements to that area that had occurred since the earlier conference. MTOUSA strength on 1 January 1944 stood at 613,000 against a QUADRANT estimate of only 495,800. At Cairo, with the intrusion of ANVIL, an additional 40,700 troops were scheduled to sail for the Mediterranean between January and April 1944; after that date the theater strength was expected to remain stable.

The 1 May 1944 target for the OVERLORD build-up was now set at 1,366,100, slightly below the QUADRANT objective and the ETOUSA troop basis for the operation, with average monthly movements of 100,000 thereafter through September 1944. British shipping was expected to carry 736,000 troops, more than half of the 1,340,400 U.S. soldiers scheduled to sail to Britain from January through September. In all this picture of expanding promise, only one warning note sounded: The flood of troops moving across the North Atlantic depended heavily on continuous shuttling by the great British-controlled passenger liners —*Ile De France, Nieuw Amsterdam, Aquitania, Mauretania,* and the *Queens* —and no allowance was made for possible interruption in service. With the target date now only four months distant, and completion of the program dependent on monthly troop movements of 150,000 men, the loss—even serious damaging—of one of the "monsters" would be little short of disastrous.[3]

As for cargo shipping, there were no "unmanageable" deficits in prospect. Even the rosy expectations of expanding tonnage at the time of the Quebec Conference had been exceeded by a substantial margin. The British- and American-controlled dry cargo fleets had grown by the end of the year to a total of 41.7 million dead-weight tons, 800,000 more than predicted in August and almost 6.5 million more than the tonnage available in mid-1943.[4] Shipping losses from

[3] (1) CCS 428 (Rev), 15 Dec 43, Annex VII, Part IV. (2) Ruppenthal, *Logistical Support of the Armies I,* 129–32. (3) On the QUADRANT schedules see below, Chapter VIII.

[4] (1) ASF Monthly Progress Reports, 31 Mar 44, sec. 3, Transportation, p. 12; 30 Sep 43, p. 6. (2) Behrens, *Merchant Shipping,* p. 69. (3) The fleet under U.S. operation grew from 16.77 million tons on 30 June 1943 to 21.62 million tons on 31 December 1943; the British-controlled fleet from 18.53 million tons to 20.08 million tons. These figures exclude United Nations and neutral shipping not working on British Empire or U.S. services, and vessels owned by or under bareboat charter to the U.S. Army and Navy.

TABLE 24—PLANNED U.S. TROOP MOVEMENTS (SEXTANT CONFERENCE): JANUARY–SEPTEMBER 1944

Movements[a]	Strength 1 Jan 44	1st Qtr 44	Apr 44	May 44	Jun 44	3d Qtr 44	Total
Total movements	2,576,300	948,375	408,425	289,125	246,525	914,270	2,806,720
Navy in Pacific (including Alaska)	[b]	115,225	79,375	61,975	37,175	98,400	392,150
Army and Navy: minor areas	—	4,850	1,550	1,450	1,550	4,470	13,870
Army cumulative strength	212,000	203,100	200,100	197,900	195,700	186,900	186,900
BOLERO-SICKLE (Army)							
Replacements	—	66,700	20,000	60,000	70,000	90,000	206,700
Troop units	—	353,000	157,100	62,600	61,100	399,900	1,033,700
Total	—	419,700	177,100	122,600	131,100	489,900	1,340,400
Cumulative strength (end of period)	817,200	1,203,200	1,366,100	1,476,300	1,572,400	1,972,300	1,972,300
Divisions	—	17	19	21	22	31	31
Mediterranean (Army and Navy)	—	100,500	18,600	14,600	14,600	43,500	191,800
Army cumulative strength	590,500	649,700	653,700	653,700	653,700	653,700	653,700
Central Pacific (Army)	—	76,300	41,200	35,200	29,700	53,500	235,900
Cumulative strength	185,700	215,500	249,200	261,900	294,100	325,000	325,000
South and Southwest Pacific (Army)	—	195,800	59,300	40,900	19,000	146,200	461,200
Cumulative strength	523,300	710,100	761,400	809,300	820,900	918,100	918,100
China-Burma-India (Army)	—	34,500	30,800	11,900	12,900	76,800	166,900
Cumulative strength	108,600	137,300	161,900	168,500	176,200	237,300	237,300
Alaska and NW Svc Comd (Army)	—	1,500	500	500	500	1,500	4,500
Cumulative strength	139,000	115,500	107,500	100,600	97,500	97,500	97,500

[a] Movements include replacements, except for BOLERO-SICKLE as indicated. Cumulative strength figures reflect net build-up present or en route. Table as a whole is based on estimated troopship capacity that allows for no unusual contingencies; that is, it represents optimum performance. Intra-area operating requirements not allowed for. Navy movements omitted from BOLERO-SICKLE figures.

[b] Not shown in source.

Source: CCS 428 (Rev), 15 Dec 43, title: Relation of Available Resources to Agreed Operations, Annex VII, Part IV, Table IV.

August through November 1943 hovered in the neighborhood of 200,000 dead-weight tons monthly, despite the reappearance of a U-boat pack in the North Atlantic armed with a new weapon—acoustic homing torpedoes. Meanwhile, the shipyards each month were adding six or seven times this tonnage to the merchant fleets. It seemed a reasonable expectation that in the year to come British- and American-controlled merchant shipping might grow another ten million tons or more.[5]

Nevertheless, the British shipping budget showed a deficit of 2.7 million dead-weight tons for the first half of 1944 and slightly more thereafter. As at Quebec, the chief task of the shipping experts was to absorb it into the American budget. Even though the British deficit was 500,000 tons smaller now than anticipated at Quebec, it did not go unchallenged by the Americans—a symptom of the coolness that had developed between U.S. and British shipping authorities.[6]

The Americans sharply questioned the British goal for the U.K. Import Program in 1944 — 26 million tons — even though it was substantially lower than the QUADRANT estimate and slightly less than the amount actually imported in 1943. They argued that, whatever the need, it was unrealistic to expect that Britain's ports, roads, railways, and storage facilities could handle all this freight along with the immense burdens attendant on the OVERLORD operation; 24 million tons, they thought, would be a more nearly attainable goal. The British insisted that the need was real and that their supply agencies were actually asking for 27.5 million tons; to reduce imports to 24 million tons would draw raw material stocks back down to the danger level above which they had with difficulty been raised by the end of 1943. The precise timing of the OVERLORD movements and their impact upon import traffic could not be predicted with certainty. The British further pointed out that the traffic burden would be greatly eased if the build-up of American forces were scheduled to taper off about the time the roads and ports would be saturated by the outward movement instead of, as now seemed likely, reaching its peak at that time.

The only concession the British would make was to re-examine, without abandoning, the 26-million-ton import goal for 1944. A tentative midyear objective of 12.5 million tons was set, subject to reduction at the first clear indication it would not prove feasible. The QUADRANT allocation of shipping for British imports was proportionately reduced.[7]

The British did not correspondingly reduce their demand for American aid, and this provoked further debate. Their shipping budget lent color to American suspicions that British overseas commerce was expanding. While there had been no visible rise in British exports and shipping services since 1942, the Americans strongly suspected that one was concealed in the mounting volume of civilian supply shipments among Brit-

[5] (1) CCS 399/1, 23 Nov 43, title: Progress Rpt on U-Boat War. (2) ASF, Control Div., *Statistical Review, World War II*, p. 144. Copy in OCMH. (3) ASF Monthly Progress Report, sec. 3, Transportation, 31 Mar 44, p. 15.

[6] (1) See above, ch. IX. (2) The British budget actually showed 650,000 more dead-weight tons of shipping in operation in 1944 than had been counted on at Quebec, but the military services were expected to absorb 150,000 tons of the increase.

[7] (1) Behrens, *Merchant Shipping*, pp. 398–402. (2) Msgs, Reed to Douglas, 11 Dec 43; Douglas to Reed, 28 Dec 43, folder U.K., WSA Douglas File.



SHIPS UNDER CONSTRUCTION AT LOS ANGELES

ish areas of responsibility, identified in the shipping budget as the "cross trades." At QUADRANT, 2.25 million dead-weight tons had been budgeted for these cross trades; by December 1943 actual employment had risen to about 3 million, and the British proposed to allot 3.1 million tons to them during the coming year. The additional 850,000 tons coincided neatly with the reduction in shipping allotted to U.K. imports for the first half of 1944, and it was to this program that U.S. aid was almost entirely pledged. To the American shipping authorities it looked very much as though the British were simply shifting more than three-quarters of a million tons of their shipping from import services vital to the joint war effort into permanent services abroad in order to pave the way for the revival of their commerce after the war —in the process inflating the deficit that the United States was asked to absorb.[8]

As in other areas of Anglo-American distrust, this suspicion was not susceptible of proof. The substantive issue really came down to the question of the essentiality of the overseas services the British wanted to expand, and in debating this point the Americans were somewhat at a disadvantage. In the end, without too much argument, the British won their case. The American shipping rep-

[8] (1) Behrens, *Merchant Shipping*, pp. 343–53, 394–96. (2) Memo, McCulloch for Reed, 17 Nov 43, sub: Allocation of WSA Ships to KMS Convoys, WSA Douglas File BMSM Misc. (3) See below, Table 25, p. 304.

resentatives at Cairo, while insisting that U.S. aid must not rise above the levels agreed to at Quebec, made no determined effort to lower it. U.S. tonnage for "maintenance of the war-making capacity of the British Empire" was budgeted at the very same amounts which, three months earlier, had been calculated as sufficient to make up a British deficit 500,000 tons greater than the one it now purported to meet. If anyone at Cairo wondered how this came to pass, the fact has not been recorded.

Negotiations at Cairo were mainly concerned with the distribution, not the amount, of American shipping to be employed in British services. The British had given notice in the fall of 1943 that they wanted a more flexible arrangement that would permit them to switch their American allocations from one route to another as the situation dictated. Cases in point were their requests in October and November for U.S. ships of the required size and speed for the KMS convoys to the Mediterranean, and disagreement over this practice had been primarily responsible for the coolness of their relations with the U.S. War Shipping Administration.[9] At Cairo Lewis Douglas offered a solution: The United States would resume the "Eastern customaries," ten recently discontinued American sailings monthly on British account to the Red Sea and Indian Ocean areas, thus permitting the British to transfer American vessels of suitable types allotted to them under bareboat charter from these routes back to the Atlantic where they would be available to fill out KMS convoys to the Mediterranean. In addition, 16 "flexible customaries" would be offered each month to sail from North America, probably to North Africa and Italy. American allocations to the U.K. Import Program would be reduced proportionately—to about 60 sailings per month, besides what could be carried as bottom cargo with U.S. Army BOLERO shipments.[10]

Another issue in the shipping negotiations at Cairo involved responsibility for emergency wheat shipments to Italy, where a food crisis had suddenly developed, and for the carriage of coal to the same area. In general, the British wanted to shift responsibility for these shipments to the Americans.[11] The whole issue was not resolved at the conference, but the Americans did accept responsibility for providing 174 sailings for Italian relief during the first half of 1944 and for continuing shipments at the same level thereafter. Relief requirements for other areas to be liberated following OVERLORD would have to be faced, but no shipping was budgeted for this purpose at Cairo. Both WSA and BMWT considered all the available estimates as too speculative in nature to warrant definite commitments, but they warned that the delicate balance in the shipping budgets might be upset when European civil relief demands materialized, as they eventually must.[12]

[9] See above, ch. IX.

[10] (1) Msg, Bilge 3804 (London) to Nicholson, 10 Dec 43, with related papers in folder Cairo Misc Rpts Douglas 1943, WSA Conway File. (2) See also Corresp in OPD Exec 5, Items 13 and 14. (3) CCS 428 (Rev), 15 Dec 43, Annex VII, Parts II and III. (4) The British budget showed these arrangements in fine print; they were not reflected in the U.S. budget, which showed all American aid (except 10 "southern customaries" and the bareboats) as applied against the U.K. Import Program.

[11] See ch. XXX, below.

[12] Comments by Lord Leathers and Mr. L. W. Douglas on the Dry Cargo Shipping Position, 7 Dec 43, in CCS 428 (Rev), 15 Dec 43, Annex VII, Part III.

The U.S. cargo shipping budget that emerged from the discussions at Cairo showed an increase of nearly 300 cargo sailings for the first half of 1944 over the QUADRANT budget. More than two-thirds of the increase was accounted for by projected civilian supply shipments to Italy and aid to the USSR. Most of the increases in military supply were in the Pacific, reflecting in part a transfer of cargo shipping to that area in the autumn of 1943, and requirements for China-Burma-India also showed a moderate rise. For the war against Japan as a whole U.S. military cargo shipments scheduled for the first half of 1944 now exceeded the estimates for Europe.

In Europe, readjustments in the BOLERO program resulted in a small net reduction in scheduled cargo sailings before OVERLORD D-day. Despite British objections, however, second-quarter shipments were again scheduled to rise, and after D-day the volume of maintenance shipments to northwestern Europe was expected to swell to 200 per month by September (double the March and April quota), augmented by 20 shiploads per month on tanker decks. Only in the Mediterranean, among active theaters, were military cargo shipping requirements expected to taper off, a reduction more than counterbalanced by an increase in shipments for civil relief.

Both the U.S. and the British military shipping budgets at Cairo allotted even larger blocks of tonnage than at Quebec for retention overseas in direct support of major operations in 1944. More than a million tons of British shipping were thus budgeted for OVERLORD and operations in the Mediterranean, while American shipping similarly retained overseas was expected to reach a peak of 120 ships in the Mediterranean, 100 in U.K. waters, and 120 in the Pacific—all during the first quarter of 1944. (*Tables 25 and 26*)

These arrangements made for a very tight budget—without deficits, to be sure, but also without the fat (and suspect) surpluses of the QUADRANT budget. As far as the estimates for the first six months of 1944 were concerned, the shipping authorities gave a cautious endorsement. For the period following, they warned, "the situation . . . is susceptible of such wide and unpredictable changes that only by frequent review can any variations that promise materially to affect the position be satisfactorily disposed of."[13]

To American military officialdom the decisions on OVERLORD at Cairo and Tehran came as a long-awaited green light for BOLERO, replacing one that hitherto had alternated frustratingly between red and flickering yellow. With OVERLORD now unequivocally in top strategic priority, it now became possible to free BOLERO cargo shipments from the administrative priority restrictions that since April 1943 had artificially prevented full use of the abundant shipping available.

On 9–10 December, ASF officials again approached OPD, pointing out that the existing priorities of the European theater—A-1-*b*-4 for air equipment and A-1-*b*-8 for ground—would not permit shipment of necessary supplies in time for the OVERLORD operation. They urged OPD to raise these priorities to A-1-*b*-1 and A-1-*b*-2 respectively—that is, to the

[13] (1) Comments of Lord Leathers and Mr. Douglas, 7 Dec 43. (2) Memo, Col Stokes for Gen Wylie, 26 Dec 43, sub: SEXTANT Conf Decisions, folder Implementation of SEXTANT Decisions, ASF Plng Div.

TABLE 25—BRITISH SHIPPING BUDGET—SEXTANT CONFERENCE

Availability and Employment	Million Dead-weight Tons			
Total shipping available				
Estimated available 31 Dec 43				20.30
Estimated losses Jan–Jun 44		1.1		
Estimated gains Jan–Jun 44		2.1		
Estimated available 30 Jun 44				21.30
Estimated losses Jul–Sep 44		.55		
Estimated gains Jul–Sep 44		.55		
Estimated available 30 Sep 44				21.30
Average available in first half 1944				20.85
Average available in third quarter 1944				21.30
Employment	1st Half 1944		3d Quarter 1944	
Estimated tonnage available		20.85		21.30
Deduct				
Average tonnage under repair	2.60		2.65	
U.K. coastal shipping	.45		.45	
Shipping permanently abroad (cross trades)[a]	3.10		3.10	
Nonimporting naval and military shipping				
Naval commissioned ships	.60		.60	
Naval, military, and RAF auxiliaries	.60		.60	
Misc naval and military services (permanently in Mediterranean, Indian Ocean, and northern Russia)	.50		.50	
Troopships	1.35	9.20	1.35	9.25
Tonnage available for military requirements and U.K. imports		11.65		12.05
U.K. imports[b]	7.40		7.60	
Military build-up and maintenance	5.90		5.90	
Retained in theaters for military operations (Mediterranean and OVERLORD[c])	1.05	14.35	1.40	14.90
Deficit[d]		2.70		2.85

[a] Actually, this figure was shown under two entries: "Tonnage Permanently Abroad" (2.2) and "Additional Tonnage Temporarily Operating to and Within the Same Areas" (0.9).

[b] After allowing for an average of 1,500 tons on each ship carrying military cargo for U.S. Army forces in the United Kingdom.

[c] For the Mediterranean, provides for average of 70 ships in the first quarter, 39 in the second quarter, 36 in the third quarter. For OVERLORD, provides for one-half (agreed upon as British share) of following requirements: 625,000 tons of coastal shipping for the first three months and 100,000 tons thereafter, besides 160 MT ships in the first month, 100 in the second, 70 in the third. In addition, provides 90 ocean-going stores ships (9,000 dead-weight) to be taken up about middle of second month of OVERLORD, for British account only. Includes no allowance for expected requirement to ship naval aircraft and landing craft to the Pacific in the second half of 1944 for the build-up of a British task force.

[d] When translating the British deficit into requirements against the U.S. budget, allowance was made for (1) imports of British cargo in BOLERO sailings, (2) the effect of the bareboat chartering program, and (3) 10 customary sailings of U.S. ships monthly from North America to south and east Africa and the ANZAC area. After these allowances, the following U.S. sailings were estimated as required in the first half of 1944: (a) 10 Eastern customary sailings per month from North America to India and the Red Sea; (b) 60 sailings per month from North America (including the Gulf ports) to the United Kingdom; (c) 16 flexible customary sailings per month from North America to Italy and North Africa (equivalent to 22 sailings from North America to the United Kingdom).

These sailings were estimated to be covered by the U.S. budget, except for a small manageable deficit under (c); for the third quarter, the deficit was estimated to be equivalent to (a) and (b) above, plus 19 flexible customary sailings, equivalent to 26 per month from North America to the United Kingdom, which was expected to prove manageable.

Movement of coal to Italy was to be met by subsequent arrangements between BMWT and WSA, probably by WSA ballasters carrying coal from India during first quarter, and an allowance was therefore not carried in the British budget.

Source: CCS 428 (Rev), 15 Dec 43, title: Relation of Available Resources to Agreed Operations, Annex VII, Part II.

TABLE 26—U.S. CARGO SHIPPING BUDGET—SEXTANT CONFERENCE
(Comparable Entries in QUADRANT Shipping Budget)

	1944				
	1st Quarter		2d Quarter		3d Quarter
Requirements (sailings)					
Maintenance of war-making capacity of Western Hemisphere	137	(136)	137	(136)	137
Maintenance of war-making capacity of British Empire					
U.K. Import Program	261	(265)	223	(223)	222
Regular lend-lease allocations	30	(30)	30	(30)	30
Ships, bareboat chartered	58	(58)	35	(35)	—
Other lend-lease allocations					
Russian	120	(64)	75	(75)	75
French	12	(12)	12	(12)	12
China defense	3	(3)	3	(3)	3
French rearmament	Included in Mediterranean requirements				
Economic support of occupied countries (Italy)	64	(0)	110	(0)	110
Equipment for Turkey	Carried in British shipping				
Maintenance of prisoners of war	Included in Mediterranean requirements				
Military operations (sailings)					
Minor areas (Army and Navy)	57	(84)	54	(74)	54
U.K.-European (Army and Navy)	323	(365)	354	(340)	536
Mediterranean (Army and Navy)	174	(173)	155	(172)	154
Central Pacific					
(Army)	60	(46)	71	(57)	67
(Navy)	90	(77)	95	(90)	125
South and Southwest Pacific					
Army	165	(143)	181	(159)	194
Navy	126	(83)	117	(58)	109
China-Burma-India	56	(57)	77	(55)	100
Alaska (Army and Navy)	69	(88)	52	(87)	49
Operational retentions (average number of ships)[a]					
Mediterranean	73	—	120	—	50
U.K.	33	—	100	(80)	16
Pacific	96	(71)	121	(71)	121
Total sailings required[b]	1,805	(1,684)	1,781	(1,606)	1,977
Total sailings available[a]	811	(1,905)	1,806	(1,982)	2,035
Balance	+6	(+221)	+25	(+376)	+58

[a] Operational retentions are not included in total requirements, but are allowed for in total sailings available.

[b] Requirements cover British deficits to extent indicated in the British budget. As in the QUADRANT budget, each BOLERO cargo ship carried about 1,500 tons of British import cargo, and U.K. import vessels carried equivalent of 12 shiploads of measurement cargo each month on the U.S. Army account.

Source: (1) CCS 428 (Rev), 15 Dec 43, title: Relation of Available Resources to Agreed Operations, Annex VII, Part III. (2) Table, Summary Reqmts for Cargo Shpg . . . SEXTANT, no date, OCT HB Plng Div Studies, Misc Shpg Info, p. 96.

very top of the overseas theater priority scale—and to apply them to advance shipments as well as to equipment accompanying troops. With a 45-day lag between arrival and distribution in the theater, it was obvious that relatively little material could now be shipped in advance of troops for a 1 May OVERLORD. A uniform priority for normal and advance shipments would enable ASF to make the most of the few weeks remaining for advance shipments, thus spreading the flow of cargo as evenly as possible over the entire period.

OPD acquiesced a week later. On 21 December a formal directive established a uniform theater priority of A-1-*b*-2 for all shipments to the European theater involving items needed for the invasion. The directive specifically included supply shortages for units already in the theater, supplies preshipped against the invasion troop basis, and supplies for operational projects through D plus 90 —categories that previously had had separate and lower priorities.[14]

The way was thus paved for a massive acceleration of the build-up in the few months remaining before OVERLORD. It was late in the day. The effects of the new priority would not begin to be felt until February, bringing shipments to their peak about the same time that British ports, depots, and inland transport were swamped with outbound traffic for the assault. This was precisely what the British had feared and repeatedly warned against; it was what the preshipment program had been designed to avoid. The priority problem had been solved, but too late — which was, of course, better than not at all. Still to be dealt with were the consequences of this failure: the gap between reception and handling capacity in the United Kingdom and the flood of traffic soon to arrive.

Assault Shipping: The New American Program

Assault shipping had been the critical logistical issue at Cairo and Tehran. In their final report to the President and Prime Minister, the CCS urged that "every effort must be made, by accelerated building and conversion, to provide essential landing craft for the European Theater."[15] The estimates written into the SEXTANT resources paper, however, indicated no expectation that any additional craft would actually be provided from these sources. Along with the somewhat ritualistic characterization of assault shipping as a general bottleneck, in fact, appeared the optimistic prediction that "there should be sufficient landing craft to carry out approved operations."[16] This optimism rested, in the last analysis, on the general assumption that combat loaders, the mainstay of Pacific amphibious operations, could be shifted from one main axis to the other in the Pacific as needed, and that LST's, LCT's, and LCI(L)'s could be redeployed with similar flexibility in the Mediterranean and OVERLORD areas.

Yet the assumption that landing craft in European waters could be used, in rapid succession, in a landing on the Italian coast in December and in an assault on Rhodes at the end of February

[14] (1) See above, ch. IX. (2) TAG Ltr to CsTechSvcs, 21 Dec 43, sub: Priorities for ETO (U.K.), SPX 400.22 (21 Dec 43) OB-S-SPDDL-M. (3) Leighton, Problem of Troop and Cargo Flow, pp. 115–17.

[15] CCS 426/1, 6 Dec 43.

[16] CCS 428 (Rev), 15 Dec 43, Annex V.

ASSAULT SHIPPING ALLOCATED FOR OVERLORD AND ANVIL

Type	OVERLORD		ANVIL	
	United States	British	United States	British
LST's	23	3	36	5
LCI(L)'s	24			
LCT's	19	45	31	
Assault Transports			3	6

—and could then be assembled, refitted, and redeployed for both the OVERLORD and ANVIL assaults sometime in May, was, to say the least, tenuous. Even more tenuous was the assumption that the assault shipping allocated for OVERLORD and ANVIL was sufficient for both operations to be executed simultaneously. For the present, over and above the TRIDENT and QUADRANT allotments the planners could count on the vessels assigned from Southeast Asia, most of about two months of U.S. production of LST's, LCI (L)'s, and LCT's pledged by Admiral King on 5 November and 4 December, a few more U.S. and British assault transports, and an indeterminate number of new British LCT's. (*See table above.*) The craft allotted, the logistical planners recorded, "should provide a satisfactory lift for both OVERLORD and ANVIL."[17] With these assurances in hand, the CCS awaited the verdicts of the commanders who were to carry out the operations.

Admiral King's willingness to divert additional vessels from American production for OVERLORD and ANVIL probably owed something to the accelerated production schedules set in train in September 1943.[18] As indicated earlier, the new schedules did not actually provide for any substantial increase in time to benefit a 1 May OVERLORD: they did, however, promise a marked increase for Pacific campaigns after mid-1944. King's Cairo offer of 26 LST's and 31 LCT's for ANVIL was ostensibly based on the new target date "in May" (that is, early June), which presumably would make available another month's production. The 26 LST's were to be taken from an estimated February and March output of 48—specifically, from the 38 previously allocated to the Pacific, since 10 had already been allocated to OVERLORD. It is a reasonable supposition that Admiral King was willing to accept this diversion from Pacific allotments early in 1944 in anticipation of the increased output that would be available for the Pacific later in the year. The offer was accompanied by a warning that the operation against Truk, the main Japanese base in the Carolines, might be adversely affected. Actually, the possibility of bypassing Truk was already under discussion and in the event was realized.[19]

Moreover, by this time King may have been counting on an even greater augmentation of the landing craft program

[17] *Ibid.*

[18] See above, ch. X.

[19] See Min, 123d mtg JCS, 15 Nov 43, and 124th mtg, 17 Nov 43; also below, ch. XVI.

than the 35 percent increase ordered in October. It will be recalled that the President, evidently with a postponement of OVERLORD in mind, had cabled OWM Director Byrnes from Cairo to investigate immediately the prospects of increasing the program during the first five months of 1944 "on the assumption that [it] takes precedence over all other munitions of war." Even on this assumption, Byrnes found when he consulted the production people, only meager increases could be expected through March, but in April and May output could be raised substantially.[20]

Partly because immediate steps had to be taken to insure that the steel plate would be available in the event the President ordered the increase, Byrnes decided, in consultation with Army, Navy, and WPB officials, to go ahead with the augmented program. By the time the President replied from Tehran on 29 November that the increases would come too late to do OVERLORD any good, the vast undertaking was already in train—rolling mill schedules had been revamped to turn out 39,000 more tons of plate in December, steps had been taken to move up delivery of components by three months, and special priority assistance had been ordered. In the main, the revised program involved a three-months' acceleration of production of LST's, LCI(L)'s, and LCT's, with the aim of delivering by 31 May all vessels previously scheduled for delivery through August. The estimated increases, by month, were:[21]

	LST	*LCI(L)*	*LCT(6)*
Total	50	71	116
1944			
February	2	3	10
March	5	10	21
April	15	20	35
May	28	38	50

One more important modification in the landing craft program was made about the same time, and must be noted. In the latter part of November U.S. forces landed on Tarawa in the Gilbert Islands and after one of the bloodiest actions of the Pacific war destroyed the enemy garrison. A major lesson drawn from the experience was the usefulness of the amphibious tractor (LVT) for carrying assault troops over offshore reefs that landing craft could not surmount. Without the 125 LVT's used by the 2d Marine Division in the assault, the troops might not have got ashore at all, and, indeed, this number proved to be too few to maintain the momentum of the attack. Production of LVT's, armored and unarmored, had risen by November to slightly more than 300 per month. To double that output within the next few weeks, as was now demanded, seemed out of the question, and no substantial increase was expected before June 1944. Nevertheless, the program objective was immediately raised from 2,620 to over 6,000, and incentive sched-

[20] (1) See above, ch. XI. (2) Quoted from Msg, President to Justice Byrnes, 23 Nov 43, OPD Exec 5, Item 14. (3) Mowry, Landing Craft and the War Production Board, p. 31. (4) JCS Memo for Info 171, 27 Nov 43, title: Ldg Cft Production. (5) Memo, Ad Hoc Com for CsofS, 28 Nov 43, ABC 561 (30 Aug 43).

[21] (1) See schedules in JCS 569/5, rpt by JLC, 18 Dec 43, title: Allocation of Steel Plate for Feb–Mar 1944, app. B. (2) Mowry, Landing Craft and the War Production Board, pp. 38–41. (3) Memo, Clay for Somervell, 26 Nov 43, sub: Allocation of Steel Plate for 1944; and Memo, Styer for Somervell, 27 Nov 43, sub: Status of Allocation of Steel Plate, folder CG ASF 1943–44, Hq ASF. (4) Memo, Ad Hoc Com for CsofS, 28 Nov 43.

ules for the next few months, already impossibly high, were more than doubled.[22] Meanwhile the Army had already moved to increase DUKW production, almost doubling the schedules in effect at the time of the QUADRANT Conference.

By mid-December 1943 a series of actions had been taken which, in the aggregate, inaugurated a new landing craft program of unprecedented magnitude. Embodying the 35 percent over-all increase in ships and craft agreed to in late October 1943, the three months' acceleration of LST's, LCI (L)'s and LCT's now projected, and the huge "Tarawa" program of LVT's, it foreshadowed a monetary expenditure in 1944 57 percent greater than all previous landing craft production put together. The impact of this new demand on U.S. industry was less disruptive than might have been expected a few months earlier. Special expediting assistance by WPB would be needed, as in earlier crash programs, and the prospects of fulfilling the new LST schedules during the first six months of 1944 were uncertain, largely because the Navy had been laggard in placing new contracts and assigned most of them to firms that had performed badly in earlier programs. On the other hand, the marked improvement, described earlier, in the outlook for availability of steel plate in spring of 1944 provided a solid underpinning for the additional output now scheduled. Cutbacks in Army programs during November—notably in trucks, more recently in small coastal cargo ships—and in production of merchant shipping promised to relieve pressures in many sectors of war production. In the main, despite all the head-shaking of the experts in September and October and even the misgivings aroused by the President's message to Byrnes on 23 November, indications were that the whole program might be absorbed with little or no derangement of other war production.[23]

For OVERLORD and ANVIL, however, the augmented program still held out no prospects of a substantial increase in assault lift. Like the September and October program increases, the more recent ones promised to bestow virtually all their benefits on the Pacific war. This was the inescapable, and ironic, outcome of the President's belated recognition of the needs of the war in Europe, which had prompted his message from Cairo on 23 November. The planners at Cairo had based their allocations on the Navy's 1 November production schedules and merely added to the QUADRANT allocations for Europe the two increments bequeathed by Admiral King and the shipping ordered back from southeast Asia. Subsequent increases in American production were automatically allocated to the Pacific. Moreover, Admiral King's concessions to the needs of the European war, in effect hypothecating future increases in production, clearly implied that any further allotments to OVERLORD and ANVIL from the same source would depend on Navy officials' judgment as to how much could be spared

[22] (1) Mowry, Landing Craft and the War Production Board, pp. 28–30, 40. (2) Philip A. Crowl and Edmund G. Love, *Seizure of the Gilberts and Marshalls*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1955), pp. 164–65. (3) CCS 428 (Rev), 15 Dec 43, Annex VI.

[23] (1) See above, ch. X. (2) Mowry, Landing Craft and the War Production Board, pp. 33–52. (3) OPD MFR, 22 Nov 43, ABC 561 (30 Aug 43). (4) Memos, Clay for Somervell, 26 Nov 43; and Styer for Somervell, 27 Nov 43. (5) JCS 569/5, 18 Dec 43.

from the Pacific. In any case, under the most optimistic expectations very little scheduled U.S. production of LST's remained that could be diverted in time to be used in European operations. For the first three months of 1944 the old LST production schedules had provided for a total output of 72. The crash program raised this total expectation to 79, of which 58 had now been allocated to OVERLORD and ANVIL. It was problematical whether all vessels that came off the ways in March could reach either the Mediterranean or the United Kingdom in time for landings in late May or early June. The new program thus joined the list of measures, not too little but too late, to meet the need for assault shipping in the European war.

Postscript: The Tribulations of Shingle

During December the Allied commands in Europe were busy with arrangements for the Mediterranean operations ordered at Cairo—landings south of Rome, the assault on Rhodes, eventually ANVIL. Shipping released from the canceled operation in the Andaman Islands, now on the way back to the Mediterranean, seemed to have solved the problem of assault lift for Rhodes, but the questions of timing left unanswered at Cairo and Tehran now had to be faced. The SEXTANT decisions stipulated that the Rhodes operation must be fitted in "without detriment to OVERLORD and ANVIL," and the Americans were determined that this restriction should be rigidly enforced. The assault on Rhodes accordingly must be executed in time to permit the release of landing ships and craft for ANVIL "in May."

A related problem was the scope and timing of the amphibious operation along the Italian coast. At Cairo and Tehran it had been almost taken for granted that this operation would be launched in December and that the Allies would march into Rome by the end of January. This assumption lay behind the permission granted to Eisenhower to retain his 68 LST's until 15 January, and indeed the entire British Mediterranean program. At least some of the air power required to cover the British landings on Rhodes and to protect Turkish forces when they entered the war would have to come from Italy. Thus any delay in the advance in Italy had serious implications for the Rhodes operation and, of even grater significance, for the timing of the release of Mediterranean assault shipping for OVERLORD.[24]

In the last analysis, however, the Rhodes operation depended on the attitude of Turkey, for the British had made Turkish entry into the war a prerequisite to its execution. Negotiations with the Turks at Cairo, in which President Roosevelt also participated, had left Churchill in a hopeful frame of mind, and conversations on the military level were scheduled to follow at Ankara.[25] As the Cairo meetings ended, prospects seemed reasonably good that the eastern Mediterranean would soon be ablaze.

Then on 17 December the CCS received General Eisenhower's preliminary report on his nearly completed outline plan for ANVIL, and with it the incidental news that HERCULES, the Rhodes operation, was now tentatively scheduled for 22 March, the earliest date

[24] Ehrman, *Grand Strategy V*, 193–95, 207.
[25] *Ibid.*, p. 194.

by which the assigned British division would be ready. What particularly caught the attention of the U.S. Chiefs of Staff was Eisenhower's announced intention to use the ex-Andamans assault shipping for HERCULES, evidently without considering whether, if committed so late, it could be released in time for a May ANVIL. For the latter undertaking, the Allied commander demanded a full 3-division lift, and he blandly inquired whether the necessary shipping could be found "from any source having a priority on resources lower than ANVIL."[26]

The CCS did not at once debate the question of the size of ANVIL, since detailed requirements had not yet come in and would have to be studied in connection with those for OVERLORD, which were also being re-examined. But the U.S. planners, under instructions from the JCS, promptly produced a study purporting to demonstrate that any assault shipping used for Rhodes late in March could not be released in time for ANVIL; if the two operations were executed *seriatim,* HERCULES would have to be scheduled no later than 1 February. This conclusion was dictated by the limiting factors introduced into the problem—a full thirty-day tie-up of shipping at Rhodes, two weeks voyage time from Rhodes to the ANVIL staging area, three to four weeks for overhaul, two weeks for staging before ANVIL. As an Army officer candidly put it, the object of the study was "to prove that it will not be possible to mount HERCULES without prejudice to ANVIL." Not surprisingly, the argument was "based on the worst conditions."[27]

But it was the Turks, not the JCS, who settled the fate of HERCULES. In the military conversations at Ankara on 12 December they abruptly raised the ante on the military aid demanded as the price of intervention, influenced at least in part by a growing realization that the United States was lukewarm if not hostile to their entry into the war. Though the British made some concessions, by the third week in December negotiations had reached a stalemate. While the Americans continued to worry lest the British yield still more, or undertake unilateral action, by 23 December Churchill himself had despaired of the Turkish attitude and was ready to write off the Rhodes operation. On Christmas Day he minuted laconically to the British Chiefs of Staff, "Rhodes is not on." A few days later, when the Army staff in Washington got the word, someone scribbled an exultant finis to the whole episode "The PM has quit!!"[28]

The Prime Minister was impelled toward his decision not only by the attitude of the Turks but also by the worsening situation in Italy. By mid-December it appeared that the landings south of Rome would also be called off. This amphibious operation had been planned in

[26] (1) Msg NAF 552, Eisenhower to CCS, 17 Dec 43. Incl to CPS 131/3/D, 18 Dec 43, title: Assault Lift for ANVIL, ABC 384 (1 Nov 43), Sec 2-A. (2) Min, 138th mtg (Suppl) JCS, 21 Dec 43.

[27] (1) Army Comment on JCS 639, 24 Dec 43, ABC 381 Strategy Sec Papers (7 Jan 43) 196–213, Tab 202/1. (2) JCS 639, 23 Dec 43, rpt by JPS, title: Assault Lift for ANVIL.

[28] (1) Pencil note on draft study, 30 Dec 43, in ABC 381 Strategy Sec Papers (7 Jan 43) 196–213, Tab 209. (2) Related papers in this file. (3) Ehrman, *Grand Strategy V,* 212–13. (4) Churchill, *Closing the Ring,* pp. 430, 433. (5) Negotiations with the Turks dragged on through January, but on the 31st the British abruptly cut off all military aid to Turkey. On 7 February the CCS released forces that had been earmarked for Aegean and Turkish operations.

November as a one-division assault at Anzio to be executed on 20 December, but its timing depended on a prior advance by Fifth Army up the Liri Valley to positions within supporting distance of the beachhead. Fifth Army's drive, which jumped off on 1 December, soon bogged down and by the middle of the month it was clear that it would be nowhere near its objective in time for the scheduled landings on the 20th. By the time that date arrived, SHINGLE, as the operation was now called, had first been postponed, and then canceled.[29]

At this juncture Prime Minister Churchill, recovering at Carthage from a bout with pneumonia, intervened to demand from the British Chiefs a detailed accounting for what he termed the "scandalous" failure to employ the amphibious resources available in the Mediterranean. The result was the revival of a suggestion already made by Lt. Gen. Mark W. Clark, Fifth Army commander, that the discarded plan be reviewed and enlarged to provide for a 2-division assault, which was judged strong enough to seize and hold a bridgehead until Fifth Army could link up with it. On 23 December both Eisenhower and Alexander endorsed the idea, and by the 25th the target date had been set for 20 January.[30]

For the 2-division "cat-claw," as Churchill called SHINGLE, the bill of requirements was estimated, somewhat generously, as 8 LSI(L)'s, 88 LST's, 60 LCT's, and 90 LCI(L)'s. Finding the LCI(L)'s and LCT's presented no problem, and the six ex-BUCCANEER LSI(L)'s, now on their way back from India, were expected to reach the Mediterranean on time. At the moment, 105 LST's were in the Mediterranean, but 68 of them (56 British and 12 U.S.) were due to leave about 15 January for the United Kingdom, and 10 more were expected to require immediate repairs. Another 10 were earmarked to begin the build-up of air forces on Corsica but might be held back for a limited time. The 15 ex-Andamans LST's, not due to reach Suez until mid-January, would be too late. At best, therefore, it appeared that only 37, probably no more than 27, LST's would be on hand for SHINGLE.[31]

It was thus clear from the outset that, if the gap were to be closed, some of the 68 OVERLORD LST's in the Mediterranean would have to remain there past the 15 January departure date. The question was, how many and for how long? If some leeway could be found in the schedules for intertheater passage and repair and training in the United Kingdom for OVERLORD, some delay in departure might be accepted. By the same token, the 15 ex-Andamans LST's, and possibly even the 26 from the United States promised for ANVIL, might be turned to SHINGLE's account by proceeding directly to the United Kingdom, thus

[29] (1) Ehrman, *Grand Strategy V*, 207–209. (2) *Fifth Army History*, IV, 14–15.

[30] (1) Msg, Prime Minister to COS, 19 Dec 43, and Msg, COS to Prime Minister, 22 Dec 43, quoted in Churchill, *Closing the Ring*, pp. 429–30. (2) Ehrman, *Grand Strategy V*, 209–10. (3) *Report by the Supreme Allied Commander, Mediterranean, to the Combined Chiefs of Staff on the Italian Campaign, 8 January 1944 to 10 May 1944* (Washington, 1946) (hereafter cited as Wilson *Despatch*), p. 11.

[31] (1) Ehrman, *Grand Strategy V*, 210, 214. (2) Churchill, *Closing the Ring*, pp. 431, 435. (3) Maj. James D. T. Hamilton, The Invasion of Southern France, ch. II, "The Shadow of ANVIL," pp. 33–35, MS, OCMH. (4) CPS Memo for Info 14, 17 Jan 44, and 15, 19 Jan 44, ABC 561 (31 Aug 43), Sec 1–A.

permitting a like number to be retained in the Mediterranean for SHINGLE and, later, ANVIL.

Accordingly, the energetic Prime Minister fixed a critical eye upon the timetables for movement, docking, and training on which all the calculations rested. One of Admiral Cunningham's planners, Capt. M. L. Power, was able to provide the technical arguments he needed. Power pointed out that since the crews of the LST's in the Mediterranean were now veterans needing little additional training, the 68 OVERLORD LST's could assemble in the United Kingdom for final rehearsals and loading as late as three weeks before D-day. Adding another four weeks for refitting, and two weeks for passage, he produced a late-February deadline for departure from the Mediterranean, even if OVERLORD were to be launched at the beginning of May.[32]

In consultation with the principal commanders in the Mediterranean, Churchill ascertained that the two divisions could be ready to assault on 20 January and get ashore with necessary supplies by 5 February, leaving ample time to send the OVERLORD LST's back to the United Kingdom. On Christmas Day he cabled London his plan: hold the 56 British LST's assigned to OVERLORD until 5 February, sending 12 American LST's immediately to England, and hold the ex-Andamans LSI (L)'s and LST's in the Mediterranean when they arrived. All naval and mercantile construction in England, he exhorted, must be subordinated to the aim of speeding the refitting of LST's for OVERLORD.

On the same day, without waiting to hear from the British Chiefs, Churchill appealed directly to Roosevelt, urging that unless the 56 LST's were held back the whole Mediterranean campaign would be ruined. He assured Roosevelt that "various expedients" were under study by which the three weeks lost for OVERLORD preparations could be regained, and added parenthetically that he had decided to sidetrack his Aegean plans "in these higher interests."[33]

In London, the British Chiefs were not entirely convinced by Captain Power's arithmetic, and they dreaded the explosion they expected the Prime Minister's request to set off in Washington. The best alternative they could offer, however, was to hold back 48 instead of 56 LST's for SHINGLE, while sending the ex-Andamans LST's straight on to the United Kingdom. This would put less strain on the OVERLORD docking program than Churchill's scheme, but it would give SHINGLE, at most, only 84 LST's (against Churchill's 92) — and then only on the unrealistic assumption that all would be operational when the landings took place. Rather bluntly the British Chiefs pointed out to Churchill that he seemed to be staking everything on SHINGLE and passing all the risks on to OVERLORD and ANVIL, whereas the Cairo-Tehran decisions would seem to demand precisely the contrary. Neither plan, they thought, left an adequate margin for contingencies, although theirs was less objectionable. Moreover, they

[32] (1) Ehrman, *Grand Strategy V*, 216. (2) Churchill, *Closing the Ring*, pp. 422–23.

[33] (1) Msg, Former Naval Person to Roosevelt, 25 Dec 43, quoted in Churchill, *Closing the Ring*, pp. 436–37; also pp. 433–36. (2) Msg, Prime Minister to COS, 25 Dec 43, quoted in Ehrman, *Grand Strategy V*, 216–17.

did not expect a favorable reaction from the Americans.[34]

To the JCS, as to the British Chiefs, Churchill's proposal seemed to leave very little margin of safety for OVERLORD, and they were sceptical of the still unrevealed "expedients" by which the lost time was to be made up. On the other hand, they felt compelled to yield to what seemed the evident necessity of mounting the Anzio operation in order to get to Rome and the defensible line beyond that was considered essential for the support of ANVIL. Churchill's apparent concession on Rhodes was another lure—"we should grasp this opportunity," General Handy counseled Marshall, "to eliminate HERCULES from further consideration. . . ."[35] The upshot was that when Churchill read the President's reply on 28 December he was pleasantly surprised. Roosevelt agreed to retention of all 56 British LST's for the Anzio landings on 20 January, making only the expected reservation that OVERLORD and ANVIL must not be endangered as to timing or strength. He also wanted the 15 ex-Andamans LST's to go on to the United Kingdom, where they would arrive by mid-February, while 15 of the OVERLORD LST's in the Mediterranean would stay there for ANVIL. Churchill was quite ready to accept this amendment, and replied forthwith with a fervent "I thank God for this fine decision which engages us once again in wholehearted unity upon a great enterprise."[36]

The search for LST's for SHINGLE, which did not end with "this fine decision," played a part in the final liquidation of plans for amphibious operations in southeast Asia. Casting about for all possible sources, the British Chiefs had originally suggested to the Prime Minister that the three LST's remaining in southeast Asia after the departure of the ex-Andamans shipping might also be recalled. These vessels were British-built LST (1)'s, faster and more seaworthy than the American LST (2)'s. If they could reach the Mediterranean by 20 January, which seemed possible though far from certain, they might take part in the Anzio landings. If not, they could go on to the United Kingdom and substitute for three OVERLORD LST's, or stay in the Mediterranean for ANVIL. Since the SEXTANT Conference, however, a new amphibious project had emerged in Admiral Lord Louis Mountbatten's theater. Despite his "all-or-nothing" reaction to the query from the CCS at Cairo whether any lesser substitute for BUCCANEER might be feasible, only four days thereafter Mountbatten had submitted a plan for a new venture, Operation PIGSTICK, a small seaborne landing on the Mayu Peninsula behind Japanese lines in the Arakan. PIGSTICK might support either the original mainland operations or the more limited ones recently proposed. While it was being discussed in Washington and London, Mountbatten on 21 December offered the plan to Chiang on his own responsibility as fulfillment of the original promise of an amphibious operation. The Generalissimo, however, in his reply to the President's message of 5 December, had already in-

[34] (1) Ehrman, *Grand Strategy V*, 216–17. (2) Msg COS(W)1035, Br COS for CCS, 31 Dec 43, OPD 360 Security, III, Case 117.

[35] (1) Memo, Handy for CofS, 27 Dec 43, sub: Proposed Msg from President to Prime Minister. . . . (2) Memo, CofS for Adm Leahy, no date. Both in ABC 561 (31 Aug 43), Sec 1-B.

[36] Msg, Prime Minister to President, 28 Dec 43, and Msg, President to Prime Minister, 28 Dec 43, Churchill, *Closing the Ring*, pp. 440–41.

dicated he would prefer postponed landings "on a grand scale" to an immediate watered-down version of BUCCANEER. His reaction to PIGSTICK was wary, and the usual devious negotiations ensued.[37]

From the beginning Churchill and his advisers had considered the prospects of Chinese co-operation in a Burma offensive too remote to gamble on, and wanted to bring back all of Mountbatten's assault lift to Europe where it could be put to better use. Although Churchill was careful not to make an issue of this in his Christmas Day message to the President, as soon as American agreement to the principle of using OVERLORD LST's for SHINGLE had been secured the British Chiefs formally proposed that PIGSTICK be canceled. On 30 December, on their own initiative, they ordered Mountbatten to return his three LST's in order to get them back to the Mediterranean by 20 January. Mountbatten, in turn, had no choice but to cancel PIGSTICK immediately, since his commanders had informed him that preparations could no longer be delayed if the landings were to be made before the onset of bad weather in March. The British Chiefs followed up with an order to the Southeast Asia Command to return all remaining assault shipping to the United Kingdom or to the Mediterranean. This action, which rendered academic any further discussion of amphibious operations in SEAC, considerably annoyed the JCS, who had not given up hope of bringing the Generalissimo around to accepting PIGSTICK or something like it. Under the circumstances, they could only acquiesce in the *fait accompli*.[38]

By the end of December, SHINGLE thus appeared to have in sight a grand total of 95 LST's, of which the theater commanders hoped 90 would be operational—seemingly a more than ample allocation, since General Alexander on the 29th had thought he could make do with only 84. But it soon appeared there were other problems. General Clark informed Alexander on 2 January that after the departure of the 12 OVERLORD LST's on 5 February, allowing for losses, damage, and resumption of the build-up on Corsica, only 6 LST's would remain to carry supplies and vehicles to the Anzio beachhead. Clark said he needed at least 24 for the first two weeks, and 10 thereafter for an indefinite period. The Prime Minister made short work of this crisis. By figuring losses and damage more closely, by reducing the number of vessels assigned to Corsica, and by spacing the departure schedule of 33 OVERLORD LST's over the entire month of February (the remaining 8 were to refit in the Mediterranean before their departure), Churchill was able to assure the theater commanders that they would have 25 LST's for supply operations until the middle of February and half this number until the end of the month. With these arrangements completed, Churchill could report to Roosevelt on 8 January that "everyone is in good heart

[37] (1) Msgs, Chiang to Roosevelt, 9 and 17 Dec 43, quoted in Romanus and Sunderland, *Stilwell's Command Problems*, pp. 74–77. (2) Ehrman, *Grand Strategy V*, 222–23.

[38] (1) For the discussion of PIGSTICK, see CCS 452 series. (2) Min, 119th mtg JPS, 1 Jan 44. (3) OPD paper, 5 Jan 44, sub: PIGSTICK Should Not Be Canceled, with related corresp in ABC 381 Strategy Sec Papers (7 Jan 43) 214–27, Tab 217. (4) Ehrman, *Grand Strategy V*, 222–23. (5) Romanus and Sunderland, *Stilwell's Command Problems*, p. 81. (6) The assault vessels remaining in SEAC in addition to the three LST's, included 3 LSI(L)'s, 1 LSI(H), 12 LCI(L)'s, and 2 LSD's. See JCS 639, 23 Dec 43, app. B.

and the resources seem sufficient" — which, considering the misgivings of all the American commanders, was something of an overstatement.[39] (*Table 27*)

The effort to find LST's for the Anzio operation added a significant postscript to the Tehran compromise on OVERLORD's target date. In the interests of prudence, and for administrative purposes, the target date had continued to be regarded as early May, and fading prospects for operations in the Aegean might under other circumstances have prompted an American attempt to abrogate the Tehran agreement altogether in favor of a fixed 1 May date. It quickly became evident, however (Captain Power notwithstanding) that delaying the departure of the OVERLORD LST's from the Mediterranean until late in February would leave almost no margin against an early May date—if, indeed, it could be met at all—and would leave very little margin, as General Handy told his chief on the 27th, "even though OVERLORD is not launched until late May." Churchill himself, for all his enthusiastic endorsement of Captain Power's calculations, apparently conceded the probability.[40] By the end of December, moreover, Churchill had reason to expect that other considerations might result in stretching the Tehran agreement. Eisenhower and Montgomery, recently appointed Supreme Commander and Deputy Commander, respectively, for the cross-Channel operation, had told him that, from a preliminary look at the OVERLORD plan, they were both shocked by the weakness of the planned assault. It was likely, Churchill wrote the British Chiefs confidentially, that after the new commanders had studied the plan they would ask for a postponement of D-day to, perhaps, 3 June or even 6 June (when the moon phase would be favorable). Eisenhower had gone so far as to suggest that he would be willing to telegraph Stalin to that effect. Churchill did not pursue the matter, but the prospect of a delayed D-day offered, as he remarked, "something to veer and haul on."[41]

On 22 January the Anzio landings went off without a hitch—"a model of amphibious operations," General Wilson said of them in his report. Landing craft losses on the first and following days were negligible; the weather was fine except for two days (the planners had expected only two good days out of seven), and troops and matériel flowed into the beachhead at a phenomenal rate. By the end of the second day the assault convoy was almost completely unloaded, and within two weeks 70,000 men, 21,940 vehicles (including 380 tanks), and 27,250 tons of stores had been landed. During the last ten days of January the daily average discharge of cargo into the beachhead was over 3,600 tons, and it fell very little below

[39] (1) Morison, *Sicily—Salerno—Anzio*, pp. 326–28, app. III. According to Morison, only 74 LST's participated in the Anzio landings. (2) Msg, Prime Minister to President Roosevelt, 8 Jan 44, quoted in *Closing the Ring*, p. 447. (3) Ehrman, *Grand Strategy V*, 219–20. (4) *Fifth Army History*, IV, 17. (5) Churchill, *Closing the Ring*, pp. 446–47. (6) Wilson *Despatch*, pp. 19–22. (7) Martin Blumenson, "General Lucas' Decision at Anzio," in Greenfield, ed., *Command Decisions*, pp. 254–56.

[40] (1) Memo, Handy for CofS, 27 Dec 43, sub: Proposed Msg President to Prime Minister . . . , ABC 561 (31 Aug 43), Sec 1-B. (2) Churchill, *Closing the Ring*, p. 440.

[41] Msgs, Prime Minister to Br COS, 29 Dec 43 and 26 Dec 43, quoted in *Closing the Ring*, pp. 442, 436.

TABLE 27—PLANNED DEPLOYMENT OF LST'S FOR SHINGLE AND ANVIL
JANUARY 1944

Deployment	British	United States	Total
Estimated in Mediterranean, end of December 1943[a]	68	36	104
To United Kingdom before SHINGLE[b]	0	12	12
Remain in Mediterranean	68	24	92
To Mediterranean from Southeast Asia	3	0	3
Remain in Mediterranean	71	24	95
To United Kingdom after SHINGLE[b]	41	0	41
Remain in Mediterranean	30	24	54
To Mediterranean from United States	0	26	26
Available for ANVIL[c]	30	50	80

[a] On 1 January there were actually in the Mediterranean 69 British and 36 U.S. LST's, making a total of 105.

[b] The 53 LST's being sent from the Mediterranean to the United Kingdom, added to the 15 ex-BUCCANEER LST's which were going direct (instead of to the Mediterranean, as planned at SEXTANT), make the total of 68 LST's assigned at SEXTANT to be sent to OVERLORD from the Mediterranean. Note that the figure of 41 British LST's in the table "To the United Kingdom after SHINGLE" reflects the retention of 15 British LST's in the Mediterranean out of the 56 earlier destined for OVERLORD before the decision to send the 15 ex-BUCCANEER LST's directly to the United Kingdom.

[c] Losses, attrition, and serviceability not considered. Losses of LST's in the Anzio operation totaled 4 vessels, 3 British and one U.S.

Source: Compiled by Richard M. Leighton from various sources cited in the text.

that level during the entire following month. The landing of vehicles in a ratio of more than one to every four soldiers reflected a performance by LST's and LCT's far beyond the most optimistic expectations. It also meant that the forces holding the beachhead had, as Churchill acidly commented, "a great superiority of chauffeurs," at the expense of infantry.[42] By the end of February, even though large reinforcements had been poured into the beachhead to stem enemy counterattacks that very nearly obliterated it, the flow of supply, still dependent to a great degree on landing ships and craft, had proved more than adequate. "Plans originally made for 50,000 men," the Prime Minister gleefully wrote to Field Marshal Smuts, "are now comfortably supporting 170,000."[43] Comfortable though the support may have been, it could be continued only by keeping LST's and LCT's at Anzio to maintain the flow of supply, a fact that was to weigh heavily in the future planning for OVERLORD and ANVIL.

[42] (1) Msg, Prime Minister to CinC Med, 10 Feb 44, quoted in *Closing the Ring*, pp. 487–88. (2) Wilson *Despatch*, pp. 38, 40–42. (3) Msg, Prime Minister to Dill, 9 Feb 44, Exec 3, Item 16. (4) *Fifth Army History*, IV, 71. (5) Bykofsky and Larson, *The Transportation Corps: Operations Overseas*, pp. 209–11. (6) Ehrman, *Grand Strategy V*, 227.

[43] Msg, Prime Minister to Smuts, 27 Feb 44, quoted in *Closing the Ring*, p. 493.

PART FOUR

FINAL ASSAULT ON EUROPE

CHAPTER XIII

OVERLORD and ANVIL

With the new year, 1944, strategic planning and preparations for the European war moved into a new phase. The Americans were now reasonably confident that OVERLORD would indeed come off, and their confidence lent a new impetus to the preparations, which had by this time acquired a momentum of their own. For both sectors, northwestern Europe and the Mediterranean, the top commanders who would be responsible for the climactic operations of the months to come had been appointed by early January — Eisenhower for OVERLORD, with Montgomery as his principal ground commander; Wilson in the Mediterranean, with Alexander staying on as commander of the forces in the field. The principal subordinate commands had been filled and major questions of command relationships within the whole structure had been settled. Allocation of resources for the major competing operations could, therefore, be decided upon with a degree of finality hitherto impossible. Finally, the competition for resources—which still centered in assault shipping—had been narrowed down by the successive elimination of the small amphibious projects in southeast Asia and the eastern Mediterranean, so that the only remaining contenders, outside the special American sphere in the Pacific, were OVERLORD, ANVIL, and the campaign in Italy. Of these three, OVERLORD now enjoyed a pre-eminence, but one that still required a definition of its relationship with ANVIL, an operation which had also been accorded an overriding priority at SEXTANT, and was scheduled to be executed at the same time as OVERLORD.

The Move to Strengthen Overlord

Early in January the staffs were finally able to come to grips with the long-deferred problem of strengthening the OVERLORD assault. The impetus to do so came almost simultaneously from Montgomery, who arrived in London with instructions from his new chief to review the existing OVERLORD plan, and from General Morgan, who seized the opportunity to renew an old appeal. Montgomery's immediate reaction to his first briefing in London was to demand more punch in the assault and a broader front—specifically four or five reinforced divisions in the initial assault instead of the three then planned. He added what seemed the obvious corollary: the necessary assault shipping would have to come from the Mediterranean, at the expense of ANVIL.

The last point raised a basic issue, for Eisenhower's recommendations for ANVIL in December, made in his capacity as Commander in Chief, AFHQ, had been

for an increase in assault shipping that would permit a 3-division lift. The OVERLORD planners, however, had faced a deficit of assault shipping even after the new allotments made at SEXTANT, and before Montgomery's new demand. A conflict between the two operations was consequently inescapable. General Morgan, while he differed from Montgomery in favoring use of the additional assault lift mainly to strengthen the follow-up rather than the initial assault, agreed that the necessary resources should come from ANVIL. The southern France operation, he reminded the British Chiefs on 6 January, had been conceived in the original OVERLORD plan as a diversionary threat that would materialize into actual landings only if the weakness of enemy defenses promised easy success. He did not hesitate to recommend a return to this concept in the interests of strengthening OVERLORD.[1]

The British Chiefs found Montgomery's and Morgan's arguments persuasive since, as they informed the Prime Minister on 14 January, there seemed no other way to find additional assault lift for OVERLORD short of reducing Pacific operations, a suggestion no one in London was prepared to make. To leave OVERLORD weak in order to make ANVIL strong, they said, would create "the serious risk of our falling between two stools and of both operations failing."[2] General Smith, whom Eisenhower had retained as his Chief of Staff, was also convinced, and shortly afterward Montgomery set the top headquarters planners to work determining how best to employ resources released from ANVIL should they materialize.

The premises adopted were that ANVIL should be reduced to a one-division assault (the minimum lift General Wilson said he would need in the Mediterranean) and that the lift thus released would be made available for OVERLORD. The attempt to strengthen OVERLORD thus began, much as the plan itself had originally taken form, within the framework of a specified and arbitrarily defined, though still hypothetical allotment of resources. Logically, the allotment should have been preceded by, and based upon, an objective analysis of needs translated into concrete requirements. Instead, following a now familiar fiction, the hypothetical allotment would presently emerge unchanged from staff discussions, duly labeled as requirements, and ready to be retranslated into an allocation of resources—real ones, this time.

General Eisenhower arrived in London to assume his new command at Supreme Headquarters, Allied Expeditionary Forces (SHAEF) on 16 January. Within a week he had ruled in favor of Montgomery's plan for a broader front with a 5-division assault and a 2-division follow-up, the latter to be loaded in ordinary transports rather than landing ships and craft. On 23 January he sent the CCS his recommendations, based on the headquarters studies, presenting assault shipping requirements on that scale—6 combat loaders with full complements of small craft, 2 headquarters ships, 47 LST's, 72 LCI (L)'s, and 144 LCT's, over and above existing assets. These "requirements" were, of course, identical with the hypothetical

[1] (1) Harrison, *Cross-Channel Attack*, pp. 159–60, 165–67. (2) Ehrman, *Grand Strategy V*, 232–34. (3) Msg, NAF 552, Eisenhower to CCS, 17 Dec 43.

[2] Msg, Br COS to Prime Minister, 14 Jan 44, SHAEF SGS 560, vol. II.

allocation figures with which the London staffs had been working for the past two weeks. They included, besides all the ANVIL shipping over and above a one-division lift as then calculated, some 96 additional LCT's that could be expected from British production if the early May target date for OVERLORD were postponed a month. Eisenhower told the CCS he was willing to accept such a postponement if he could be "assured of then obtaining the strength required." Nothing was said about new American production.[3]

With regard to ANVIL, Eisenhower was in an embarrassing position in view of his recent plea for a 3-division lift for that operation and his belief that a real assault on southern France would help OVERLORD more than a feint. If means could be found, he said, the ideal would be a 5-division OVERLORD plus a 3-division ANVIL—"or, at worst, a two division ANVIL." If the only means of building an adequate OVERLORD was to reduce ANVIL to a one-division threat, Eisenhower reluctantly endorsed that solution, but "only as a last resort."[4]

From the British Chiefs came enthusiastic agreement. OVERLORD, they thought, should be built up to five divisions "whatever the cost to ANVIL or any other projected operations," and should be scheduled for late May or early June when it could better profit from the promised Soviet offensive; ANVIL should be mounted on a 2-division-plus scale, if possible. Actually the British saw little hope for ANVIL if OVERLORD were strengthened, and thought the small amount of assault shipping that would remain in the Mediterranean after the required diversions might be better employed in maintaining the impetus of the offensive in Italy.[5]



GENERAL MONTGOMERY

The date of OVERLORD was quickly settled. Churchill, confident that Eisenhower and Montgomery would recommend a target date early in June during a moon phase corresponding to the original early May date, had discussed the matter with the British Chiefs and then

[3] (1) *Ibid.* (2) Msg, Eisenhower to CCS, 23 Jan 44. (3) Msg, Montgomery to Eisenhower (eyes only), 10 Jan 44. (4) SHAEF Memo, 23 Jan 44, sub: Computation of Methods of Employment of Additional Resources. All in SHAEF SGS 560, vol. II. (5) Harrison, *Cross-Channel Attack*, pp. 166–67. (6) Ehrman, *Grand Strategy V*, 233–36. (7) Neither Ehrman nor Harrison recognizes the fictitious character of the OVERLORD assault shipping "requirements." That they were fictitious is borne out by documents cited in (1) and (3) above, and the point was explicitly commented on a month later by U.S. officers sent from Washington to participate in the planning. See below, p. 334.

[4] Msg, Eisenhower to CCS, 23 Jan 44.

[5] (1) Msg, OZ 456 COS (W) 1094, Br COS to JSM Wash, 26 Jan 44, SHAEF SGS 560, vol. II. (2) Ehrman, *Grand Strategy V*, 237.

taken it up with Roosevelt. He argued that the Tehran agreement would permit any date up to the end of May, and in any case the preliminary feints and air bombardment would mark the real beginning of the operation. The commanders, he thought, should be allowed some latitude in fixing the exact date of the landings, and he saw no need to solicit Stalin's approval. Roosevelt replied noncommittally that any decision should await the recommendations of the commanders. When the Joint Chiefs received the London proposals at the end of January, their first reaction was to accept a 31 May target date, since more assault shipping would then be available, but to resist an explicit extension into June. A few days later, they conceded that a 31 May target date would give the Supreme Commander sufficient latitude to launch the operation as late as 2 June. The concession was really little more than a formality, for by the end of January detailed planning and preparations had reached a stage where the exact date was more a question of administration than of policy. The London staffs, as General Smith told General Handy via transatlantic telephone, had already assumed that "we have a week one way or the other," and were actually figuring on 6 June as the most probable date. Handy raised no objection.[6]

The Battle of Statistics

Hardly anyone in Washington disputed the judgment of the commanders in London that OVERLORD should be mounted with at least a 5-division assault and ANVIL, if possible, with a 2-division assault. Standing in the way of a decision on appropriate measures to these ends was an administrative, largely statistical, difficulty: the inability of the staffs to agree on the amount of assault lift that could reasonably be counted upon for the two operations when the time came. The picture of both existing and prospective assets had been clouded in many ways: by successive changes in production programs and fluctuations in actual production; by redeployment of vessels within and among theaters; by the constantly shifting statistics of vessels operational and under repair; by differences in planning allowances made in each theater for loss, attrition, and immobilization by repair; by the inevitable errors and time lag inherent in theater status reporting; and especially, of course, by the rapid succession of changes in major strategic plans and assault shipping deployment during the period of the Cairo-Tehran conferences. In short, the staffs on both sides of the Atlantic and in the Mediterranean had lost track of their own calculations; the books were in a mess, and no qualified auditor was available to straighten them out.

Moreover, as had so frequently happened in the past, differing British and American approaches to the problem, colored by divergent strategic views, influenced the compilation and use of statistics. From the American viewpoint, OVERLORD and ANVIL were strategically

[6] (1) Tel Conv, Gen Handy and Gen Smith, 4 Feb 44, OPD Exec 10, Item 52a. (2) Churchill, *Closing the Ring*, pp. 442–43, 448–49. (3) JCS 658/1, rpt by JPS, 30 Jan 44, title: Recommendations of SCAEF on OVERLORD and ANVIL. (4) Msg 1478, JSM to Br COS, 1 Feb 44, SHAEF SGS 560, vol. II. (5) JCS 658/2, rpt by JPS, 5 Feb 44, title: Recommendations of SCAEF on OVERLORD and ANVIL. Approved as CCS, 1 Feb 44, SHAEF SGS 560, vol. II. (5) JCS 238, 240.

one, a proposition that seemed more real in Washington than it did in London where preoccupation with OVERLORD naturally tended to overshadow the claims of ANVIL—and where the British, at least, were inclined to see prosecution of the Italian campaign as more important to the support of OVERLORD than ANVIL would be.

The U.S. planners in Washington, convinced that nothing less than a 2-division ANVIL assault would do, critically scrutinized the assertion, hardly challenged in London except by the Supreme Commander himself, that if OVERLORD were to be strengthened ANVIL must be reduced. They started by re-examining ANVIL not OVERLORD, analyzing the estimated requirements of a 2-division assault and matching them against currently planned allotments in the hope of squeezing out a surplus to strengthen OVERLORD. Finally they proceeded to a critical re-examination of OVERLORD'S 5-division requirement and of the resources allegedly available to meet it. The findings of an inquiry undertaken in this spirit were likely to be quite different from those based on the premise that the claims of OVERLORD were unequivocally overriding. From this point of view the inclination was, first, to interpret requirements liberally for both operations, then to fatten OVERLORD while starving ANVIL; from the other, requirements would be tightly interpreted in order to squeeze both operations into the framework of available assets. Interpretation was the key, for both aspects of the calculation—the numbers of vessels and the size of forces a given number of vessels could lift—depended heavily on variable or speculative factors that could hardly fail to be influenced by the opinion, bias, and purpose of the planners.

The London proposals to strengthen OVERLORD found the staffs in Washington mired deep in the statistics of ANVIL, into which they had been drawn by Eisenhower's recommendations in mid-December for a 3-division assault. Hasty estimates, made in the absence of any statement of requirements from the theater, established little except the likelihood that the lift thus far earmarked for ANVIL would not be enough for a 3-division assault. Then on 29 December the theater's detailed requirements were received, calling for 15 LST's and 15 LCT's over and above existing allocations. With the air still thick with unsettled statistics on arrangements for the Anzio landings, no one in either Washington or London was able to reconcile the theater's availability estimates with those of the central planning staffs—not so surprising, perhaps, since the planning staffs were hopelessly at variance among themselves. The effort to find a common basis for calculation dragged on through January, while the American staffs awaited SHAEF's statement of the needs of an expanded OVERLORD.[7]

[7] The above generalities are based on a detailed analysis of the following staff papers: (1) CPS 131/5, 4 Jan 44, title: Assault Lift for SHINGLE, OVERLORD, ANVIL, with Incls, in ABC 384 (1 Nov 43), Sec 2A. (2) Min, 121st mtg JPS, 12 Jan 44. (3) JCS 639, 23 Dec 43, interim JPS rpt, title: Assault Lift for ANVIL. (4) Memo, Col Billo for Chief, S&P Gp, OPD, 22 Dec 43, sub: Assault Ships and Ldg Cft for Opn ANVIL; and Memo, 7 Jan 44, same sub, ABC 381 Strategy Sec Papers (7 Jan 43), 196–213, Tabs 202 and 202/1. (5) CCS 424, 5 Dec 43, title: Amphibious Opn Against South of France. (6) Memo, Billo for Chief, S&P Gp, OPD, 30 Dec 43, sub: Comparison of Figures Given in NAF 569 with those in JCS 639 and SS 202, with related papers in ABC 561 (31 Aug 43), Sec 1B.

What gave the American staffs most cause for concern in this statistical controversy was the low serviceability factor used by the British in their calculations. This factor, a percentage of all vessels available in a theater, was used to estimate the number expected on the basis of past experience to be actually serviceable at the time an operation was to be executed. At Quebec in August 1943 the British and American staffs had agreed to use for OVERLORD planning serviceability factors of 90 percent for LST's and 85 percent for LCT's and LCI (L)'s; and, in planning Mediterranean operations, 85 percent for LST's, 80 percent for LCI (L)'s, and 75 percent for LCT's. Since American experience in both the Mediterranean and in the Pacific had, in the meantime, consistently bettered these estimates, averaging something like 95 percent for all landing ships and craft, American planners understandably considered the QUADRANT rates as unreasonably low. On the other hand, the British, with older vessels and equipment and possibly a less efficient maintenance system, had not done nearly so well, and held to the QUADRANT rates, insisting that it was "very much better to plan on too little and then have a bonus" than to face an unexpected shortage at the last moment.[8]

The Americans insisted just as strongly on a 95 percent serviceability factor. Applied to the problem of finding means to strengthen OVERLORD without reducing ANVIL, their optimism produced spectacular, if varied, results. Eisenhower's estimates of the needs for a 3-division ANVIL had been based on serviceability rates purportedly drawn from Mediterranean experience which the U.S. planners found too low; the latter calculated that an assault force of eight regimental combat teams could be mounted with the same shipping that, according to theater estimates, would only carry seven. Similarly, one officer proceeded to show that if 95 percent of the vessels, British and American, expected to be on hand for OVERLORD could be made serviceable, additional lift for almost 9,000 personnel and 1,300 vehicles over and above current estimates would accrue. Another calculation, using the same data for vessels on hand and rated capacities, boosted that estimate to almost 26,000 personnel and 3,600 vehicles for OVERLORD and an additional 7,400 personnel and 700 vehicles for ANVIL. With no more effort than that required to punch the keys of the adding machine, here was a lift of more than 33,000 personnel and 4,300 vehicles that could be used to strengthen the OVERLORD assault. By including three BOLERO XAP's, Mountbatten's residual shipping from southeast Asia, and the surplus that would be released if ANVIL were held to a 2-division assault, the staff could predict a grand total in assault lift of 72,000 personnel and 5,900 vehicles that theoretically might be scraped together to strengthen OVERLORD — an "optimum," as the author of the computation admitted, "which undoubtedly will not be achieved"; but still something to shoot at.[9]

[8] (1) Msg, RED 445, JPS London to JPS Washington, 4 Jan 44, Incl F, CPS 131/5, 4 Jan 44. (2) Memo for ACofS, OPD, unsigned, 21 Jan 44, sub: Assault Lift for European Opns, ABC 384 (9 Jul 43), Sec 1.

[9] (1) Memo for Gen Roberts, unsigned and undated, sub: Assault Shpg for European Opns. (2) Tel Conv, Adm Bieri and Gen Roberts, 30 Dec 43. Both in ABC 561 (31 Aug 43), Sec 1-B. (3) Unsigned Memo for ACofS, OPD, 21 Jan 44. (4) In the event

Based on these computations of paper riches, the general opinion in Washington in mid-January 1944 was that there would be no need to divert any ANVIL shipping at all to OVERLORD. That Eisenhower and the British thought otherwise became apparent when the Supreme Commander's formal recommendations for a 5-division OVERLORD, closely followed by the British Chiefs' enthusiastic endorsement, reached Washington toward the end of the month. Jarred by the size of Eisenhower's listed marginal requirements (6 combat loaders, 47 LST's, 72 LCI (L)'s, and 144 LCT's), which gave no indication of the calculations behind them, the Joint Chiefs immediately sent a detailed questionnaire back to London asking the number of craft expected to be available, rated capacities, serviceability factors, and other details pertaining to the loading plan.[10]

The SHAEF reply was prompt, brusque, and not altogether enlightening. "I would *emphasize*," the message began, "that there is one main question to which an answer is required *now*. Will the additional lift asked for OVERLORD be provided?" The technical questions were answered in detail,[11] but the Washington planners found it impossible to reconcile their own figures on expected availability with those of the theater staff and hence could give no categorical answer to Eisenhower's pointed question. For instance, in the case of LCT's, the Washington planners estimated there would be 890 available for an early June OVERLORD while the theater estimated there would be only 636.[12] During the first week in February Washington and theater planners feverishly sought to clear up the discrepancies in a series of messages and transatlantic telephone conferences. By the 6th they were able to agree on figures that became the basis for calculation on both sides of the Atlantic. For the most part, the Washington planners conceded the battle and accepted theater estimates. At the same time they were able to make a few scattered, though tangible, additions to the OVERLORD lift: 3 XAP's from the BOLERO convoys (other than the 3 already allotted to ANVIL), besides 27 more LCT's and 30 more LCI (L)'s, some of the last two types partly at the expense of training but most of them from spring production. The Joint Chiefs further suggested that Mountbatten's single remaining LSI (L) should also be assigned to OVERLORD, together with two more that he had recently been ordered to send back to the Mediterranean.[13]

American optimism as to serviceability rates proved justified. Actually, 99.3 percent of all U.S. assault shipping and 97.6 percent of all British assault shipping on hand in the United Kingdom on D-day were used in the cross-Channel assault. See Harrison, *Cross-Channel Attack*, note 44, p. 171.

[10] Msg, JCS to Eisenhower, 25 Jan 44, SHAEF SGS 560, vol. II.

[11] Msg B–55, Eisenhower to JCS, 28 Jan 44, SHAEF SGS 560, vol. II. Rated capacities were set at 300 personnel and 60 vehicles per LST, 200 personnel per LCI(L), 55 personnel and 11 vehicles per LCT. There would be 2,530 vehicles per assault division and 550 vehicles per assault regimental combat team (RCT).

[12] The source of the discrepancy appears to have been the question of the cutoff date for new LCT's for OVERLORD from British production and the method of accounting for the 105 LCT's to be converted to support craft. See Msg 43, AGWAR to SHAEF (for Smith's eyes only), 28 Jan 44, SHAEF SGS 381 OVERLORD-ANVIL, vol. I.

[13] (1) JCS 658/1, 30 Jan 44, rpt by JPS, title: Recommendations of SCAEF on OVERLORD and ANVIL. (2) Ltr, Gen Handy to Gen Smith, 2 Feb 44, with attached Memo, Col Billo for Col Lincoln, 2 Feb 44, sub: Reconciliation of Figures in SEXTANT Estimates . . . , and supporting tables, ABC 561 (31 Aug 43), Sec 1-B.

The resultant estimates are shown in Table 28.

Even with conservative estimates of total availability, the U.S. staff was able, by means of the magic wand of high serviceability, to transform what London insisted was a deficit into a fat surplus. Conceding the pessimistic QUADRANT rates for British craft and applying the 95 percent serviceability factor only to American vessels, they still produced figures that showed that the shipping already allocated to OVERLORD would be sufficient to mount an assault of 6⅓ divisions by 31 May, while ANVIL would have enough for 2, maybe even 2⅔ divisions. The additional American lift proposed (3 XAP's, 27 LCT's and 30 LCI (L)'s) they thought would accommodate roughly another combat team, and the 3 British LSI (L)'s about 6,000 more troops. To these gains might be added, the staff pointed out, assault lift for another OVERLORD combat team if the British could only attain a 95-percent level of serviceability among their own vessels.[14]

London agreed to make all three LSI (L)'s available as suggested, but on the serviceability question the British Admiralty obstinately held its ground, arguing that repair facilities were already stretched to the limit and that training and rehearsals would tie up craft right to the last minute.[15] So the London planners won a second concession in the continuing battle of statistics. Accepting for the present an across-the-board application of the QUADRANT serviceability rates (90 percent for LST's, 85 percent for landing craft, 100 percent for ships), the Washington planners could still argue, nevertheless, that with the shipping already allocated and the bits and pieces to be added, OVERLORD would have an assault lift totaling about 177,000 men and over 20,000 vehicles. On the assumption that the heavily reinforced divisions would average about 24,000–25,000 men and on the reduced scale of 2,500 vehicles per division adopted by the theater planners, these totals were reckoned in Washington to be the equivalent of 7 or 7⅓ divisions in personnel lift and 8 divisions in vehicular lift. The findings stood up, moreover, under the scrutiny of the British planners in Washington so that General Handy could cable triumphantly to London on 7 February: "Combined planners agree . . . there is lift for at least seven divisions . . . leaving a two-division ANVIL lift."[16]

This optimistic conclusion, General Handy learned in a telephone conversation with General Smith on 8 February, did not coincide with that reached in

[14] (1) JCS 658/1, 30 Jan 44. (2) CCS 465/3, 31 Jan 44, memo by U.S. COS, title: Recommendations of SCAEF on OVERLORD and ANVIL.

[15] (1) Msg OZ 632, COS(W) 1127 to Britman Wash, 4 Feb 44, SHAEF SGS 560, vol. II. (2) The British did concede that the rate for LST's might be improved in the Mediterranean.

[16] (1) Msg R–9085, Handy to Smith (eyes only), 7 Feb 44. (2) Tel Conv, Handy and Smith, 8 Feb 44. (3) Msg R–9135, Handy to Smith, 8 Feb 44. (4) Msg 76, Marshall to Eisenhower (eyes only), 7 Feb 44. All in OPD Exec 10, Item 52A. (5) Msg JSM 1496, Britman Wash to War Office, 8 Feb 44, SHAEF SGS 560, vol. II. (6) CCS 465/6, 6 Feb 44, memo by U.S. COS, title: Recommendations of SHAEF. . . . (7) These conclusions do not appear altogether consistent with those in JCS 658/1, which indicated a lift, even with higher serviceability, of only about 7 divisions (6 1/3 plus 1 RCT plus 6,000 personnel). Possibly this was a result of differences in the loading capacities used in the two sets of calculations.

TABLE 28—WASHINGTON PLANNERS' ESTIMATES ON AVAILABILITY OF ASSAULT SHIPPING FOR OVERLORD AND ANVIL: 6 FEBRUARY 1944

Type	OVERLORD (15 May 1944)			ANVIL (1 or 15 May 1944)		
	U.S.	British	Total	U.S.	British	Total
AGC-LSH	1	3	4	1	2	3
APA-LSI(L)	7	[a]17	24	—	9	9
XAP	3	—	3	3	—	3
AKA	6	—	6	—	—	—
LSI(M)	—	3	3	—	1	1
LSI(S)	—	6	6	—	—	—
LSI(H)	—	21	21	—	2	2
LSG	—	2	2	—	1	1
LSD	—	2	2	—	1	1
LST	142	49	191	48	29	77
LCT	[b]190	[c]616	806	60	70	130
LCI(L)	[d]94	60	154	62	70	132

[a] Includes 1 British LSI(L) in Southeast Asia and 2 British LSI(L)'s in use as troop carriers which could be made available for either OVERLORD or ANVIL.

[b] Includes 27 additional offered by JCS on 31 January 1944.

[c] Includes U.K. production through 15 April 1944. Excludes 69 support craft.

[d] Includes 30 additional offered by JCS on 31 January 1944.

Source: (1) Memo, Col Billo for Col Lincoln, 2 Feb 44, sub: Reconciliation of Figures in SEXTANT Estimates . . . , ABC 381 Strategy Sec Papers (7 Jan 43); 227–40/10, Tab 240. (2) Memo, U.S. Secy CPS for CPS, 6 Feb 44, sub: Recommendations of SCAEF . . . , ABC 384 Eur(5 Aug 43), Sec 2-A.

the theater although both groups of planners were now using approximately the same figures on vessel availability. The difference, clarified in messages on the following day, revolved around rated capacities of the vessels. The so-called 7-division lift, General Smith carefully explained, actually was to provide for assault loading of 5⅔ heavily reinforced divisions (averaging a division slice of 31,000, not 25,000, men), 5 for the initial assault, and 2 brigade groups to be assault loaded in the follow-up. The rest of the 2-division follow-up force was to be preloaded in ordinary transports. The total force to be lifted in assault shipping was now estimated at 176,475 men and 20,111 vehicles—all of which, according to Washington estimates, would be neatly covered by the expected available lift. But the theater staff still figured a substantial deficit—(about 20,300 men and 2,200 vehicles) for which they said an additional LSI(H), 42 LST's, and 51 LCI(L)'s would be needed. These vessels were not additional to the stated requirement of 23 January, but represented the unfilled residue after deducting the resources scraped together since that date.

The issue, Washington planners decided, boiled down to the technical question of how many troops and vehicles could be loaded on the larger more valuable types of vessels, principally the LSI(L)'s. American naval experts in Washington and British naval experts in London differed on the question, and Smith and Handy concluded after a final sharp wrangle on 9 February that

it would have to be thrashed out on a higher level.[17]

The Debate Moves to London

On the strategic level, meanwhile, the differences between the British and Americans over ANVIL had hardened. At the end of January the Joint Chiefs, fortified by their staff's estimates of the lift then in sight for OVERLORD, had restated the case for ANVIL in vigorous terms:

> A successful ANVIL assault is required to make effective use of the French forces and permit the employment of U.S. divisions now in the Mediterranean. This we think is very important. We believe that ANVIL is most important to the success of OVERLORD and that the value of a mere threat in the Mediterranean is questionable. We doubt that a threat alone would contain German divisions for any appreciable length of time, whereas an actual operation would not only contain enemy divisions already there, but should draw in additional German forces which otherwise would be employed against OVERLORD.

Moreover, they reminded the British, Stalin had been promised at Tehran a supporting operation, not a threat, in southern France. On these premises, the Joint Chiefs took the stand that ANVIL must be mounted on a 2-division scale, no less, while OVERLORD should be carried out merely "with as large an assault lift as possible," and the Supreme Commander should be authorized to redistribute as he saw fit the surplus lift the American staff was confident would be available after providing for a 2-division ANVIL.[18]

"Apparently," Churchill noted when he saw the paper, "the two-division lift for ANVIL is given priority over OVERLORD."[19] Whether this interpretation could in fact be placed on the JCS move depended on which estimates of available assault lift proved correct – those produced in Washington or those produced in London. One or the other set (or both) must be wrong. The British Chiefs, after four days of discussion with the Prime Minister, still contended that the deficit was genuine, and that to meet it ANVIL must be reduced to a one-division threat. Such a threat, they still thought, would contain as many divisions as were likely to be shifted north to oppose OVERLORD anyway. They underlined the difference in their approach to the problem:

> In the first place we feel that the fundamental consideration . . . is the chance of a successful OVERLORD, and that the right approach . . . is therefore to build up OVERLORD to the strength required by the Supreme Commander and then allocate what additional resources can be found to the Mediterranean.

The British Chiefs flatly rejected, moreover, the proposal to give Eisenhower authority to reallocate shipping between OVERLORD and the Mediterranean, insisting that this authority rested exclusively with the Combined Chiefs "who alone have the means of judging every

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[17] (1) Tel Convs, Smith and Handy, 8 and 9 Feb 44. (2) Msg R-9135, Handy to Smith, 8 Feb 44. Both in OPD Exec 10, Item 52A. (3) Msgs, Smith to Handy, B-212, 8 Feb 44; and B-134 and B-135, 9 Feb 44, SHAEF SGS 560, vol. II. (4) Memo, Marshall for Dill, 9 Feb 44, Exec 10, Item 66. (5) Memo, Marshall for Leahy and King, 9 Feb 44, sub: OVERLORD-ANVIL, ABC 384 Europe (5 Aug 43).

[18] CCS 465/3, 31 Jan 44, memo by U.S. COS, title: Recommendations of SCAEF on OVERLORD and ANVIL.

[19] Churchill, *Closing the Ring*, pp. 511–12.

factor and seeing the whole war in proper perspective."[20]

Actually, as a result of the worsening situation in Italy, British opposition to ANVIL now went beyond mere anxiety about its effect on OVERLORD. By early February General Clark's forces in the Anzio beachhead were on the defensive under heavy German counterattacks, while General Alexander's main forces, not far to the south but hopelessly barred from a junction by cruel terrain and fierce resistance, were making little headway. Plainly, the German High Command had decided to hold the current Italian front at all costs. The British found in these circumstances both a compulsion and an invitation "to prosecute the Italian campaign with utmost vigor." German strategy would serve the Allied purpose of tying down all German forces then in Italy and, quite possibly, of drawing others from France. The Allies should therefore "do all we can to pin down her forces and commit them still further" even if it proved necessary to abandon ANVIL. This line of reasoning dovetailed neatly with the British view that ANVIL was simply a diversion, not "strategically interwoven with OVERLORD," that threatened to deprive the latter of amphibious resources vital to its success. The Rhône Valley, they thought, was too far from the OVERLORD area for the pincers argument used at Tehran to have much validity, and its rugged terrain possessed defensive capabilities almost equal to those of Italy. The French forces rearmed in North Africa could be used just as effectively in northern France. The British Chiefs consequently recommended that ANVIL "as at present planned," be canceled and that General Wilson's amphibious resources be reduced to a one-division lift to be used as he saw fit.[21] "The British and American Chiefs of Staff," Marshall told Eisenhower on 7 February, "seem to have completely reversed themselves and we have become Mediterraneanites and they heavily pro-OVERLORD."[22]

Army planners in Washington were not impressed by the British arguments. There were, they contended, enough landing craft for both OVERLORD and a strong ANVIL; enough air, ground, and naval forces for both ANVIL and the campaign in Italy. There was not enough shipping to move French forces out of the Mediterranean, and AFHQ estimates had consistently indicated doubt that all the forces available in the Mediterranean could be supported in Italy. Even if they could, an augmented effort in Italy would hardly be worth the price. The Germans could be contained there with forces on the spot. ANVIL, the Americans argued, would serve far more effectively to bring into action against the enemy all available forces at the climax of the European war and to pin down German divisions that might otherwise be moved immediately against the OVERLORD lodgment area. In this sense ANVIL was as "strategically interwoven" with OVERLORD as the promised

[20] (1) Msgs OZ 631, COS(W) 1126 to Britman Wash, 4 Feb 44; and OZ 632, 4 Feb 44, SHAEF SGS 560, vol. II. Quotes from former. (2) Msg RED 491, JPS London to JPS Wash, 7 Feb 44, AGC 384 Europe (5 Aug 43), Sec 2-A. (3) British staff calculations of the deficit, in terms of specific types of vessels, varied somewhat from the statement by Eisenhower's staff on 9 February but the impact was the same.

[21] Msg, OZ 631, COS(W) 1126, 4 Feb 44.

[22] Msg, Marshall to Eisenhower (eyes only), 7 Feb 44, OPD Exec 10, Item 52a.

Soviet offensive, the Italian campaign, and the strategic bombing offensive.[23]

The Joint Chiefs were sufficiently confident of the accuracy of their statistics to leave to the commanders concerned both the factual determination of resources available for the two European operations and the appraisal of their adequacy. They were willing to yield to British insistence that the allocation of resources between theaters was a matter solely within CCS jurisdiction. But they were determined not to give up ANVIL, and on this score they suffered some uneasiness during the first week in February because of indications from Eisenhower that he might be leaning toward the British position. On 7 February General Marshall bluntly asked the Supreme Allied Commander to state his views. Was he prepared to insist, Marshall queried, that OVERLORD must be assigned all available assault shipping over and above a one-division lift in the Mediterranean, even though the Combined Planners in Washington now agreed, contrary to the views of the London planners ("or Montgomery, I don't know which"), that there was sufficient lift for at least a 7-division OVERLORD and a 2-division ANVIL? "If you consider this absolutely imperative, then it should be done that way. . . . I merely wish to be certain that localitis is not developing and that the pressures on you have not warped your judgment."[24]

On the same day General Handy, under explicit instructions from his chief, inquired pointedly of General Smith: "How much of this pressure is Montgomery and how much is Eisenhower?"[25]

Eisenhower's prompt reply, despite its tone of earnest candor, did not quite face up to Marshall's query. He conceded the strategic value of a strong ANVIL, but at the same time insisted on the absolute need to insure the success of OVERLORD. His aim, as two weeks earlier, was still a 5-division OVERLORD and a 2-division ANVIL. He denied that "pressure" had been exerted or that "localitis" had set in, but he seemed not to grasp the significance or the depth of disagreement between Washington and London over ANVIL. The crucial question, whether the available lift would be sufficient for a 2-division ANVIL after OVERLORD's requirements were met remained, as Marshall dryly informed his colleagues, "in the air."[26]

A few days earlier, Prime Minister Churchill had suggested to the President that the Joint Chiefs come to London and, with their British counterparts, try to break the deadlock at the conference table. Involved at the moment in a debate on Pacific strategy with representatives of the Pacific theaters, the Joint Chiefs were unwilling to hold another full-dress conference on European strategy so soon after Cairo-Tehran. They consequently decided to designate Eisenhower as their representative to reach agreement with the British Chiefs

[23] (1) Memo, Gen Handy for Gen Roberts, 5 Feb 44, sub: OVERLORD and ANVIL, ABC 384 Europe (5 Aug 43), Sec 2A. (2) CCS 465/6, 6 Feb 44, memo by U.S. COS, title: Recommendations of SCAEF . . ., and JCS 658/2, 5 Feb 44, same title.

[24] (1) Msg 76, Marshall to Eisenhower (eyes only), 7 Feb 44. (2) Msg W–10678, Eisenhower to Marshall (eyes only), 6 Feb 44. Both in Exec 10, Item 52a. (3) CCS 465/6, 6 Feb 44.

[25] Tel Conv, Smith and Handy, 7 Feb 44, OPD Exec 10, Item 52a.

[26] (1) Msg W–10786, Eisenhower to Marshall (eyes only), 8 Feb 44, OPD Exec 10, Item 52a. (2) Memo, Marshall for Leahy and King, 9 Feb 44, sub: OVERLORD and ANVIL, ABC 384 Europe (5 Aug 43), Sec 2–A.

and to send General Hull, chief of OPD's European Theater Section, and Admiral Cooke, the Navy's chief planner, to London to present the conclusions of the Washington staffs on technical aspects of the questions involved. The decision to send technical experts grew out of a fear that Eisenhower, however loyally he might support American views on the strategic value of ANVIL, might be influenced on technical matters by the opinion of his principal naval adviser, British Admiral Cunningham. "You had better," General Smith had warned Handy, "send a senior admiral, because the whole thing hinges on loading. . . ."[27]

Arriving in London on 12 February, Hull and Cooke plunged into a round of conferences with the SHAEF planners at Norfolk House. They quite easily demonstrated that in the aggregate there was ample personnel and vehicle capacity already in sight to meet OVERLORD requirements, if full advantage were taken of the bunk capacity of LSI (L) 's, APA's, XAP's, and AKA's, and of the small boats that these landing ships carried on their davits (this despite the fact that 3 of the 21 LSI (L) 's counted on were not now expected to be converted from troop carriers in time). Landing both troops and vehicles from these vessels, the Washington representatives urged, could be greatly accelerated by organizing a ferry service immediately following the first assault wave, using all landing craft returning from their first missions. Moreover, the ferry service could be augmented by 68 additional LCM's (carrying an incidental contribution of additional vehicles) if 2 LSD's and 2 LSG's, expected to be available, were assigned to bring them to the scene.

To these expedients, evidently based on the U.S. Navy's experience in the Pacific, the British Admiralty imposed objections that large transports crammed with troops, as well as LSG's and LSD's, were too valuable to expose to enemy fire for long periods during unloading. It also objected to ferrying on the proposed scale on the ground that it would aggravate the traffic problem.[28]

General Eisenhower was sufficiently impressed by the arguments of the Washington group to order a general re-examination of the existing plan to determine whether its tactical framework could be covered by a reduced assault lift. Strong opposition was soon evident in the 21st Army Group planning staff, which found the various expedients discussed in the SHAEF meetings unsuited to the tactical plan. The lift for Commando and Ranger units, the planners pointed out, was swallowed up in the gross totals, apparently on the dubious assumption that these special troops were to be crowded into attack trans-

[27] (1) *Ibid.*(2). (2) Quote from Tel Conv, Handy and Smith, 9 Feb 44. (3) Msg, Marshall to Eisenhower, 9 Feb 44. Both in Exec 10, Item 52a. (4) OPD MFR, 12 Feb 44, sub: Recommendations of SCAEF . . ., OPD 381 Security, vol. VIIA, Case 217. (5 Matloff, *Strategic Planning, 1943-44*, p. 418. (6) Hull and Cooke were accompanied by Colonel Lincoln of the OPD staff and Capt. Donald R. Osborn, Jr., of Admiral King's staff, as principal advisers.

[28] (1) Memo for CofS, SHAEF, 13 Feb 44, sub: Personnel and Vehicle Lift for OVERLORD. (2) Memo, 13 Feb 44, sub: Comparison of Available Lift for OVERLORD with That Used for Plng Purposes. . . . (3) Min of spec mtgs at Norfolk House 0930, 13 Feb 44; 1500, 13 Feb 44; 1000, 14 Feb 44. All in OPD 560 Security, vol. III, Case 125. (4) The LSD's, of which four in all had been produced by this time, could transport loaded small craft and launch them at sea. Two were then in the United Kingdom, one in the Mediterranean, and one in SEAC; only one had actually been allocated to OVERLORD.

ports along with other forces. To use LSI (L)'s, APA's, XAP's, and AKA's crammed with troops and vehicles on the first three tides, instead of LST's and LCI (L)'s, would not merely endanger these valuable ships and their contents, but, because of the time required to discharge vehicles, would delay uniting troops and vehicles into fighting formations ashore. Slow vehicle discharge would also, they contended, seriously retard the build-up. The army group staff also strongly seconded the objections of the Admiralty to Hull's and Cooke's proposed ferry service and employment of LSD's and LSG's.[29]

How much of this opposition really stemmed from technical considerations, the Washington representatives could not be sure. The London planners were naturally reluctant to scrap the results of weeks of arduous staff work. By persistent questioning, Hull and Cooke learned for the first time that SHAEF requirements, in specific numbers and types of assault shipping, had originally borne little relation to any specific conception of the OVERLORD assault, but had been calculated simply by adding together earlier OVERLORD allocations, half of the lift assigned to ANVIL, and roughly a month's additional output of new landing craft in the United Kingdom.[30] The *a priori* assumption that ANVIL must be reduced was thus a built-in feature of the plan and was supported by the strong conviction in the London staffs that ANVIL would be of no help to OVERLORD anyway. On the fourth day of the meetings an apparent deadlock was reached when General Montgomery, supporting the 21st Army Group objections, voiced sharp protest against the whole effort to modify the current plan.

> I consider that in planning OVERLORD we must ensure initial success, and must have such a good build-up that the initial success can be rapidly exploited and maintained. I further consider that no other considerations should weigh where that success is endangered . . . these proposals compromise tactical flexibility, introduce added complications, bring additional hazards into the operation, and thus generally tend to endanger success. . . . From an Army point of view the proposals put forward are not acceptable.[31]

Yet by the following day, 17 February, the purely technical disagreement apparently had narrowed to the proposed use of attack transports instead of LST's for lifting some 2,400 vehicles in the assault, mainly on the third tide (D plus 1)—roughly equivalent to the lift of the 42 additional LST's the SHAEF planners had requested on the 9th. LST's would, of course, also solve the problem of slow vehicle discharge in the build-up. "It looks," remarked Colonel Lincoln, "as if we are throwing away ANVIL, an effective diversion during the critical period sometime after D plus 8 . . . in return for the lift of a couple of thousand administrative vehicles on the third tide in landing craft, which might perhaps be carried almost as well as in AKA's

[29] (1) Memo, Gen Smith for ANCXF, 15 Feb 44, SHAEF SGS 560, vol. II. (2) 21st Army Gp Memo on Implications of SHAEF Proposals . . . , 17 Feb 44. (3) Msg W–1152, Eisenhower to Marshall (eyes only), 14 Feb 44. Both in SHAEF SGS 381 OVERLORD-ANVIL. (4) Memo, 13 Feb 44, sub: Comparison of Available Lift. . . .

[30] (1) Msg, COMNAVEU to COMINCH, 14 Feb 44, SHAEF SGS 560, vol. II. (2) Memo, Col Lincoln for Gen Roberts, 16 Feb 44, in ABC 384 Europe (5 Aug 43), Sec 1A.

[31] Memo, Montgomery for SCAEF, 16 Feb 44, SHAEF SGS 560, vol. II.

and APA's."[32] The familiar villain of Mediterranean amphibious logistics—the LST—clearly was ready to play the same role in OVERLORD.

Early in February the U.S. Navy had given short shrift to an inquiry from London as to the possibility of providing more new LST's from spring production in the United States now that OVERLORD had been definitely set for early June. LST allocations to OVERLORD and ANVIL up to this point included most of the new production through February, plus 18 more currently being used to train LST crews. If the eight still not allocated from February output and twelve more from March output were sent to England, they might, Navy officials said, arrive before the middle of May. This might be early enough for the vessels to be used in OVERLORD, but only half a dozen LST's would then be available for training new crews during late March and none at all during most of April. Moreover, LST's from March and April production, now earmarked for the Pacific, would have to be assigned to training. The Navy concluded the cost was too high; "no more LST's," the Joint Planners were informed, "are available for OVERLORD."[33]

Few in London took this verdict as final. After all, the date of OVERLORD had been postponed a month. "Somewhere," General Smith stubbornly insisted, "there is additional production of LST's," and he indicated that the formal deadline for arrival 30 days before the operation could informally be reduced to two weeks.[34]

In the planners' meeting on 14 February, in fact, Admiral Cooke cautiously admitted the possibility that 10 new LST's might be brought from the United States for OVERLORD, but even if these did materialize in time (and Cooke made no promises), a deficit of 32 would still remain. The Americans renewed their old argument for higher serviceability rates and, since the British still refused to budge on this question, the U.S. Navy command in the theater finally undertook to assure a serviceability rate of 95 percent for the American landing ships and craft used in OVERLORD. On paper, this would produce seven more LST's. Overloading LST's by two or three vehicles each might add the equivalent of seven to ten more. But at best these expedients represented probabilities that might not materialize. The British had little faith in them, preferring the "certainties" of taking the needed LST's from ANVIL.[35]

On 18 February an uneasy compromise emerged. The 21st Army Group staff, whether relying on American assurances of higher serviceability or on a reassessment of their own needs, dropped 7 LST's from the requirement of 42, and 30 LCI (L) 's from the require-

[32] Memo, Lincoln for Hull, 17 Feb 44, sub: Pros and Cons on OVERLORD and ANVIL Assault Lift, ABC 384 Europe (5 Aug 43), Sec 1A.

[33] (1) Memo, Capt Osborn for JPS, 5 Feb 44, sub: COS(W) 1127, Comment on Further Availability of U.S. Ldg Cft, ABC Europe (5 Aug 43), Sec 1–A. (2) MFR, OPD, 14 Feb 44, OPD 560 Security, III, Case 125.

[34] (1) Tel Convs, Handy and Smith, 4 and 8 Feb 44. (2) Quotation from 8 Feb conversation. (3) Msg R–9085, Handy to Smith (eyes only), 7 Feb 44. All in OPD Exec 10, Item 52a.

[35] (1) Min of spec mtgs at Norfolk House, 1000 and 1100, 14 Feb 44, with related papers in OPD 560 Security, III, Case 125. (2) Min spec mtgs 1615, 17 Feb 44, and 1100, 18 Feb 44, SHAEF SGS 381 OVERLORD-ANVIL, I. (3) Memo, Lincoln for Hull, 17 Feb 44. (4) Memo, Lincoln for Cooke, 17 Feb 44, sub: Serviceability and Loading of Ldg Cft, SHAEF SGS 560, vol. II.

ment of 51. It was then proposed that 20 LST's and 21 LCI (L)'s be taken from ANVIL (the vessels to depart the Mediterranean for the United Kingdom not later than 1 April) and, by way of compensation for the LST's, to transfer to the Mediterranean the 6 more or less unwanted AKA's, which represented roughly their equivalent in vehicle lift and were more suitable for amphibious employment under Mediterranean weather and tide conditions than in the Channel. The remaining deficit of 15 LST's, it was hoped, might be absorbed by the various "probabilities" — higher serviceability, overloading, and new American production. Upon the last-named source Eisenhower put in a strong bid for at least 7 new LST's, which might be used in the build-up even if they could not arrive in time for the assault. The proposal was contingent also upon allocation of 3 British LSI (L)'s, 2 LSD's, and 64 more cargo ships for the build-up, as well as the necessary escort groups for the extra convoys of personnel ships that would be needed in the build-up to compensate for the reduction in LCI (L)'s. To all these arrangements Montgomery acceded, though with a marked lack of enthusiasm, and Eisenhower forwarded them to the British Chiefs as his and the American Chiefs' solution to the problem.[36]

The British Chiefs were of the opinion "that both OVERLORD and ANVIL are skimped" but were prepared to accept, though reluctantly, the proposed allocations of assault shipping—if, that is, ANVIL were to be mounted at all. Their real objection was to continue planning and preparations for ANVIL on any basis. "The shadow of ANVIL," they warned, "is already cramping General Wilson," who, they were more than ever convinced, would need the bulk of his current resources to prosecute the campaign in Italy. Events on the peninsula indeed gave cause for alarm. In mid-February, a series of fierce attacks on the heights of Cassino had failed to dislodge the enemy, and heavy enemy counterattacks at Anzio had seriously threatened the beachhead. Surveying the situation, General Alexander resigned himself to the probable necessity of regrouping, reinforcing heavily, and launching another major offensive in the spring in order to link his main forces with the beachhead, destroy the enemy forces south of Rome, and push on to the Pisa-Rimini line. Such a program, primarily because of the demand for bringing in fresh divisions, would swallow up most of the forces earmarked for ANVIL. Urging that "we must . . . make certain of one battle before preparing for another," the British Chiefs proposed that ANVIL be canceled at once, and on 22 February General Wilson sent in his own recommendation to that effect.[37]

With assault shipping resources now in sight for both OVERLORD and a 2-division ANVIL, the Joint Chiefs of Staff were not ready to consider canceling ANVIL except as a last resort. If circumstances required, they were even prepared to consider accepting a stabilized front south of Rome as an alternative. But they saw no immediate necessity for a

[36] (1) Memo by SCAEF, 18 Feb 44, sub: Assault Shpg and Cft for OVERLORD. (2) Memo, Gen Smith for SCAEF, 18 Feb 44, sub: Reassessment of Assault Shpg. . . . Both in OPD 560 Security, III, Case 125. (3) Min, spec mtg at Norfolk House, 1700, 18 Feb 44, SHAEF SGS 381 OVERLORD-ANVIL, I.

[37] (1) Msg COS(W) 1156 to JSM, Wash, 19 Feb 44, OPD Exec 3, Item 16. (2) Ehrman, *Grand Strategy V*, 230–31.

decision, and for the present they wanted to go ahead with plans for ANVIL, conceding meanwhile that all ground combat forces in the Mediterranean should be regarded as available for the drive on Rome. In the normal process of pulling tired divisions out of the line for rehabilitation, the necessary forces could be readied for ANVIL, and the whole situation could be reviewed about 1 April. In the meantime, the proposed transfers of assault shipping should be approved, and the United States would undertake to provide the requested seven LST's, largely at the expense of training new crews. The Joint Chiefs instructed Eisenhower, as their designated representative, to approach the British Chiefs again with a view to securing either agreement "or carefully stated disagreement" on the ANVIL question. To this charge they added a pointed reminder from the President that the United States was "committed to a third power" to carry out the operation.[38]

General Eisenhower, still convinced that OVERLORD needed a diversionary landing in southern France, had come to share British doubts as to the likelihood, given the situation in Italy, that ANVIL would ever come off. Worried about OVERLORD itself—as he saw German strength across the Channel inching closer to the stipulated maximum the planners would accept — the Supreme Commander sought to preserve "flexibility," a word that appeared with increasing frequency in his correspondence and speech about this time. He wanted to postpone as long as possible decisions and preparations that would make it impossible to transfer ANVIL resources to OVERLORD, to draw from Italy or elsewhere formations earmarked for ANVIL, or to make other dispositions to meet a developing situation.[39]

How far his desire for flexibility had led Eisenhower to deviate from the U.S. Chiefs' conception of Mediterranean strategy emerged on 22 February when he met with the British Chiefs to work out a final compromise. He succeeded in persuading the British to postpone cancellation of ANVIL but only by conceding on behalf of his own superiors that ANVIL was only one, even though the favored one, of various alternatives that might be undertaken to support OVERLORD after the situation in Italy had cleared. The U.S. Chiefs, he asserted, "would be prepared to regard as implementation of the undertaking at Tehran any diversionary operation, whatever its name, on the largest scale possible with the resources at General Wilson's command after meeting the requirements of the battle of Italy."[40] On this basis it was agreed that planning and preparations for ANVIL (with a 2-division assault and a 10-division build-up) would go ahead along with plans for alternative projects, but only so far as they did not interfere with the battle in Italy, which must have overriding pri-

[38] (1) Msg 151, JCS to Eisenhower, 21 Feb 44. (2) Msg 152, Marshall to Eisenhower, 21 Feb 44. (3) Msg 154, Leahy to Eisenhower (eyes only), 21 Feb 44. All in SHAEF SGS 381 OVERLORD-ANVIL, vol. I. (4) Min, 147th mtg JCS, 21 Feb 44. (5) JCS 658/3, 20 Feb 44, rpt by JPS, title: OVERLORD and ANVIL.

[39] (1) Msgs, Eisenhower to Marshall (eyes only), W-11152, 15 Feb 44; W-11500, 19 Feb 44; and W-11674, 19 Feb 44. (2) Min of spec mtgs at Norfolk House, 4, 17, 18 Feb 44. All in SHAEF SGS 381 OVERLORD-ANVIL, vol. I. (3) Tel Conv, Handy and Smith, 20 Feb 44, OPD Exec 10, Item 52a. (4) Harrison, *Cross-Channel Attack*, pp. 174–75.

[40] Min of 54th mtg, Br COS, 22 Feb 44, SHAEF SGS 381 OVERLORD-ANVIL, vol. I.

ority over all Mediterranean operations. General Wilson would assume for the present that the proposed disposition of assault shipping—exchange of 20 (mostly British) LST's and 21 British LCI (L)'s from the ANVIL allotment for the 6 OVERLORD AKA's—would go into effect about 1 April. But all arrangements and plans were to be reviewed on 20 March in the light of the situation then prevailing in Italy, and if it were then decided to cancel ANVIL, OVERLORD would get as much of its assault shipping over and above a one-division lift as could profitably be used. The whole arrangement, as Lord Ismay informed the Prime Minister with some satisfaction, supported the British position on all essential points; at the same time, in deference to the Americans, it did not "entirely close the door on ANVIL." On 26 February the President, the Prime Minister, and the Combined Chiefs approved. As far as the U.S. Chiefs were concerned, however, the agreement involved no abandonment of their preference for ANVIL over any alternative if events in Italy permitted the release of needed forces. Everything now depended on what happened in Italy during the next four weeks.[41]

Anvil Postponed

Within two days developments in the Anzio beachhead demanded new emergency measures, and the controversy over what these measures should be reagitated the assault shipping question. Once again LST's were the heart of the problem. Under the new arrangements for deployment of landing craft for OVERLORD and ANVIL, 41 LST's (almost all British) were scheduled to move from the Mediterranean to the United Kingdom, 13 at the end of February, 14 more about 20 March, and a final 14 early in April. In April, also, 26 new American LST's, each carrying an LCT piggy-back, were scheduled to arrive in the Mediterranean, earmarked and specially equipped for use in the invasion of southern France.

The crisis at Anzio upset these arrangements. General Alexander, expecting further counterattacks, proposed to relieve one tired division in the beachhead, bring in an extra division, and step up the general rate of reinforcement and supply. In a message to the British Chiefs on 29 February General Wilson asked as an emergency measure that he be allowed to retain for two more weeks the 13 LST's due to depart that day, A second message the same day asked for a further extension to 1 April, and for postponement of the departure of 14 more LST's scheduled to leave later until the 26 new American LST's arrived in the theater.[42]

Wilson's first request, for emergency retention of 13 LST's, was approved without demur, but a lively three-cornered discussion ensued among Washington, London, and the theater over subsequent provisions for carrying out

41 (1) Quotation from Memo, Ismay for Prime Minister, 23 Feb 44, SHAEF SGS 560, vol. II. (2) Related papers in same file. (3) Min, 147th mtg JCS, 21 Feb 44. (4) Matloff, *Strategic Planning, 1943–44*, p. 421. (5) Harrison, *Cross-Channel Attack*, p. 172. (6) Forrest C. Pogue, *The Supreme Command*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1954), pp. 114–15.

42 (1) Msg MEDCOS 47, Wilson to COS, 29 Feb 44. (2) Msg, Alexander to CIGS, 28 Feb 44. (3) Msg, CINCMED to Admiralty, 28 Feb 44. All in SHAEF SGS 560, vol. II. (4) CCS 379/8, 1 Mar 44, Memo by Br COS, title: Retention of LST's in Mediterranean, with Incl. (5) Ehrman, *Grand Strategy V*, 244–45.

Alexander's program at Anzio. At first the British Chiefs proposed canceling all planned LST movements from the Mediterranean and, instead, to assign to OVERLORD the 26 new American LST's allotted to ANVIL together with their deck-loaded LCT's, which would sail directly from the United States to England, and to retain in the United Kingdom 3 of the 6 AKA's recently scheduled for movement to the Mediterranean. For the precious LST's, this arrangement would avoid "wasting three weeks of their useful life" in passage to the United Kingdom during the period when the Anzio beachhead had to be nourished.[43] But the substitution of AKA's for LST's, even though providing a roughly equivalent lift, ran directly contrary to the recent verdict of the Norfolk House conferences and Eisenhower strenuously objected. The British Chiefs then reshaped their proposal, with Eisenhower's concurrence, to provide that in addition to the 26 LST's from the United States 15 British LST's would be transferred from the Mediterranean early in April.[44]

The modified British proposal provided a bonus for OVERLORD in the form of the 26 piggy-back LCT's. For ANVIL it would offer 26 older British LST's to replace 26 new American ones equipped with additional davits for carrying small boats. General Wilson objected to the substitutions and the U.S. Chiefs supported him. The latter proposed that Wilson be allowed to retain the 13 LST's until 1 April, and that further dispositions be postponed until 20 March when the whole fate of ANVIL was to be reviewed. Should ANVIL then be canceled, there would be ample time to transfer landing craft from the Mediterranean for OVERLORD. If ANVIL were not canceled, Wilson should then be permitted to retain 14 of the additional 28 LST's scheduled to depart for the United Kingdom until the first 12 of the 26 American LST's arrived. As alternatives, the last 14 of the 26 American craft could be sent either directly to the United Kingdom or by way of the Mediterranean in order to drop off their new LCT's for ANVIL.[45]

The British proposal would insure that the new American LST's would all arrive in the United Kingdom by the end of April and join the OVERLORD assault forces in the first week in May. Under the American proposal, on the other hand, the first 13 LST's, if retained in the Mediterranean until 1 April to support the beachhead, would have to refit after their arrival in the United Kingdom, and therefore could not join the assault forces until the third week in May. Both the British and General Eisenhower felt that this delay would seriously handicap OVERLORD. On 9 March Eisenhower addressed a sharp protest to the Joint Chiefs, warning against the tendency in Washington to skimp on OVERLORD assault shipping and complaining that the results of the Norfolk

[43] Undated draft msg, Br COS to JSM Wash, *ca.* 29 Feb 44, in SHAEF SGS 381 OVERLORD-ANVIL, vol. I (ser. 31 926–28).

[44] (1) *Ibid.* (2) Msgs, COS(W) 1183 and 1184, 29 Feb 44, COS(W) 1195, 7 Mar 44, to JSM Wash. (3) Min, 78th mtg Br COS, 29 Feb 44. All in SHAEF SGS 560, vol. II. (4) CCS 379/8, memo by Reps Br COS, 1 Mar 44, title: Retention of LST's in Mediterranean.

[45] (1) CCS 379/9, memo by U.S. CsofS, 4 Mar 44, title: Retention of LST's in Mediterranean. (2) JSM 1558 to Br COS, 4 Mar 44, SHAEF SGS 381 OVERLORD-ANVIL, vol. I. (3) Msg COS(W) 1195 to JSM Wash, 7 Mar 44.

House conferences had left OVERLORD "fifteen LST's short in the interest of keeping ANVIL alive." He bluntly expressed the view that ANVIL seemed more than ever a forlorn hope and that transfer of some of its landing craft to OVERLORD was "inevitable."[46]

The very next day, the U.S. Navy offered a solution to the difficulty in the form of a new sailing schedule for the 26 American LST's. The first 20 would now reach the Mediterranean by 31 March and the remainder by 10 April, assuring adequate support for Anzio until the spring offensive. On the basis of this undertaking, the Joint Chiefs suggested that the first 13 of the OVERLORD LST's now in the Mediterranean should depart for the United Kingdom about 20 March as originally scheduled, and the remaining 28 early in April after refitting, as they were relieved by LST's arriving from the United States. To this arrangement the British agreed, but on the understanding that any further losses among the 41 OVERLORD LST's would be made good by the United States and that very probably only 22 of the 28 could actually be refitted in time to meet the scheduled sailing dates.[47]

As an emergency measure, the retention of LST's at Anzio paid for itself during the month of March, when a daily average of nearly 5,100 tons of supplies was unloaded over the beaches, 1,100 tons more than the goal Alexander had set. By the end of the month the logistical situation was excellent, and even earlier than that the last serious German counterattacks had been beaten off. With improving weather and diminishing enemy fire on the beach, LCT's and DUKW's could be used more continuously to unload large freighters in the harbor, reducing the need to rely on LST's.[48] But the victory at Anzio was only a defensive one, and the situation in Italy remained a stalemate. In mid-March new Allied attacks on the Cassino front failed.

On 21 March General Wilson sent in his and Alexander's appraisal of the Mediterranean situation. The spring offensive in Italy was now planned to begin on 15 April; a junction of the southern forces with the beachhead troops, the Allied commanders believed, could not be expected before mid-May, the capture of Rome not before mid-June. Forces and assault shipping could be assembled and reorganized for ANVIL no sooner than ten weeks after the link-up with the beachhead, pushing D-day back to the end of July at the earliest. Wilson, who regarded ANVIL as a risky and unprofitable undertaking anyway, again recommended that ANVIL be canceled immediately and planning for any landings in southern France be limited to the assumption that they would be unopposed. He thought the most profitable alternative would be to continue the offensive in Italy, using a one-division-

[46] (1) Msg, Eisenhower to JCS, 9 Mar 44, SHAEF SGS 560, vol. III. (2) Msg COS(W) 1195, 7 Mar 44.

[47] (1) Msg, JSM 1564 to Br COS, 9 Mar 44. (2) Msg COS(W) 1204 to JSM Wash, 10 Mar 44. (3) Min, 82d mtg Br COS, 10 Mar 44. (4) Msg, JSM 1565 to Br COS, 10 Mar 44. All in SHAEF SGS 381 OVERLORD-ANVIL, vol. I. (5) Msg, Marshall to Eisenhower, 12 Mar 44. (6) Msg, Handy to Smith, 12 Mar 44. (5) and (6) in OPD 560 Security, III, Case 130. (7) Memo, Brig Redman to Col MacFarland, 20 Mar 44, in ABC 561 (31 Aug 43) Sec 1-B. (8) Corresp and papers, 11–18 Mar 44, in SHAEF SGS 560, vol. III.

[48] (1) Bykofsky and Larson, *The Transportation Corps: Operations Overseas*, p. 211. (2) *Fifth Army History*, vol. IV, Cassino and Anzio, 168–70.

plus assault lift for coastal end runs as needed.[49]

On the same day Eisenhower, who had not yet seen Wilson's message, delivered a similar verdict, declaring himself unwilling to gamble any longer on the diminishing prospects of ANVIL to offset the dangerous lack of flexibility in the OVERLORD assault and build-up. He asked for 26 more LST's and 40 more LCI (L)'s from the Mediterranean to be delivered in the United Kingdom by 30 April, together with three specialized types of landing ships.[50] These figures, he told Marshall, did not represent the estimated needs of OVERLORD, of which they fell far short, but rather the amount that the SHAEF planners estimated could be withdrawn from the Mediterranean and still leave a one-division assault lift. This meant, of course, reducing ANVIL once again to a threat, but Eisenhower saw no alternative in view of the stalemate in Italy.[51]

These developments sealed the fate of ANVIL as a supporting operation simultaneous with OVERLORD. Even in Washington there was little disposition to cling to a June ANVIL. But in the American view, ANVIL at a later date was still the most useful operation that could be undertaken in the Mediterranean to support OVERLORD. The Joint Chiefs feared that the Germans would react to OVERLORD by rushing part of their forces from Italy to Normandy while conducting a fighting withdrawal with those remaining. Washington estimates concluded that such delaying tactics might hold up an Allied advance to the Pisa-Rimini line for six months, and Wilson's reports indicated that only eight Allied divisions could be supported north of Rome. Thus the Americans could envisage no more profitable employment for the surplus Mediterranean forces than a strong thrust into southern France, timed to take place as soon after OVERLORD as resources would permit. Indeed, for the Joint Chiefs the capture of Rome had lost its appeal, though they conceded that the Anzio forces must be joined with the main front at all costs.[52]

Even for a delayed invasion of southern France, there remained the question whether the ANVIL assault lift should be reduced to one division in order to give Eisenhower what he wanted. Happily, the Joint Chiefs were spared a hard choice. On 23 March the Navy reported that the requested 26 LST's and 40 LCI (L)'s, if taken from the Mediterranean for OVERLORD, could be replaced by new vessels from the United States now slated for the Pacific, and that they could arrive in the theater toward the end of June.[53]

It may be more than a coincidence that this offer followed by about a week another move by General Somervell to

[49] MEDCOS 73, Wilson to Br COS, 21 Mar 44, Incl A to CCS 465/12, memo by Reps Br COS, 23 Mar 44, title: Firm Recommendations with Regard to OVERLORD and ANVIL.

[50] One landing ship, headquarters (LSH), a landing ship, emergency repair (LSE), and an LSD.

[51] Msg B-320, Eisenhower to Marshall, personal, 21 Mar 44, SHAEF SGS 381 OVERLORD-ANVIL, vol. I.

[52] (1) Memo, Col Lincoln for Gen Roberts, 22 Mar 44, sub: What Shall We Do About ANVIL, ABC 384 Europe (5 Aug 43), Sec 9A. (2) Memo, Gen Handy for CofS, 23 Mar 44, sub: German Capabilities As to Withdrawal of Divisions from Italy . . . , ABC 381 Strategy Sec Papers (7 Jan 43) 227/40/10. (3) Ltr, Gen Handy to Sir John Dill, 23 Mar 44, OPD Exec 10, Item 66. (4) CCS 465/13, 24 Mar 44, memo by U.S. CsofS, title: OVERLORD and ANVIL.

[53] Memo, Capt Osborn for Adm Bieri, 23 Mar 44, sub: Study of Ldg Cft Withdrawals from Mediterranean and Replacement for Later ANVIL, ABC 384 Med (26 Oct 43), Sec 1A.

dislodge some of the Navy's assault shipping from the Pacific on behalf of OVERLORD and ANVIL. On 14 March he had called General Marshall's attention to the disparity between allocations for the war in Europe and the "secondary effort" in the Pacific, raising the question "whether Eisenhower should be reinforced in combat loaders and landing craft at the expense of Nimitz while there is yet time to do so."[54] Even though OPD smothered Somervell's proposal with facts and figures to show that movement of assault shipping from the Pacific to Europe was not required and that in any case, it could not be accomplished in time, the demonstration of the latter point was less than conclusive.[55]

The Navy's actual offer of 23 March, however, did not involve movement of LST's and LCI (L)'s from the Pacific, but diversion to the Mediterranean of craft from new production slated for the Pacific. The most plausible explanation of the offer is to be found in the prospective mushrooming of landing craft production as a result of the decisions of December 1943. LST production shot up from a low of 18 in February 1944 to 28 in March; in April it reached 50, and in May a record high of 82, and it was to continue at an average rate of better than 40 per month through January 1945.[56] While most of this upsurge in production would come too late to benefit OVERLORD or a simultaneous ANVIL, it promised to provide LST's for the Pacific in even more ample quantities than required by JCS decisions on 12 March to accelerate the Pacific advance. It would thus leave a surplus for a delayed ANVIL. How far the Navy actually foresaw the extent of the upswing in production by mid-March 1944 is not clear, but it seems very likely that the prospect entered into the calculations on which the 23 March offer was made.

The JCS decisions of 12 March on Pacific operations provided for an accelerated advance in both major Pacific areas in 1944, with major amphibious operations against Hollandia in the Southwest Pacific in the spring, against the Marianas in the Central Pacific in June and the Palau Islands in September, and an assault on Mindanao, the entry point to the Philippines, in November. Assault and fleet shipping used at Hollandia would be shuttled northward for the Marianas and Palaus, and back again in time for the landings on Mindanao.[57] The contingent of LST's and LCI (L)'s that the Navy offered for use in the Mediterranean had been slated to arrive in the Pacific in August. Estimates indicated that even without them, barring heavy losses in earlier operations, there would be a surplus for the Palaus attack. Large numbers of landing ships and craft would begin to reach the Pacific in September from the increasing output of American yards and, it was hoped, by redeployment from Europe after OVERLORD. These would provide more than adequately for the Mindanao operation, and in all probability

[54] Memo, Somervell for CofS, 14 Mar 44, OPD 560 Security, vol. III, Case 125.

[55] (1) Memo, Col Lincoln for Gen Handy, 16 Mar 44, sub: Time Required to Ship LST's from Pacific to England, OPD 560 Security, vol. III, Case 125. (2) See Matloff, *Strategic Planning, 1943–44*, pp. 421–22.

[56] CPA, Official Munitions Production, p. 100.

[57] See below, ch. XVI.

for even more extensive amphibious operations on an accelerated time schedule.[58]

The Joint Chiefs, thus, had a strong card to play when they replied to the British Chiefs on 24 March. They acquiesced to Eisenhower's requested transfers of assault shipping from the Mediterranean, the postponement of ANVIL, and a major effort in Italy to join the bridgehead with the main front. They also laid down their own program for subsequent action—hold a line south of Rome, mount a threat against southern France to minimize the detachment of enemy forces immediately before and after OVERLORD, and launch a 2-division ANVIL assault on 10 July. For this operation they undertook to send the 26 LST's and 40 LCI(L)'s from the United States during June, and suggested that 15 of the OVERLORD attack transports also be released immediately after the cross-Channel assault. To this offer they attached a significant proviso:

> The U.S. Chiefs of Staff can agree to accept the impact of this withdrawal on the Pacific operations only on condition that it is agreed by the British Chiefs of Staff that preparations for the delayed ANVIL will be vigorously pressed and that it is the firm intention to mount this operation in support of OVERLORD with the target date indicated.[59]

This, as the British interpreted it, was more than a bribe; it was an ultimatum — "holding the pistol of withdrawing craft at our heads," Sir Alan Brooke angrily called it.[60] British tempers were not improved when the Americans pulled out all stops in emphasizing the sacrifice their offer involved for Pacific operations. There is little evidence that any real prospective shortage existed in the types of craft involved in any specific scheduled operation in the Pacific, however great the chronic shortage in that area of all types of floating equipment. The real limiting factor emerging in Pacific operations at this particular time was not landing craft and ships but ordinary cargo shipping. Ironically enough, only a few weeks later cancellation of ANVIL was to make possible a transfer of cargo shipping from the Atlantic to the Pacific that was to go far to meet that shortage.[61]

Though unaware of this situation, the British nevertheless had a strong impression that the Pacific had not been stinted on assault shipping as had the European

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[58] (1) Memo, Capt Osborn for Adm Bieri, 23 Mar 44. Requirements for the Palaus operation were set at 80 LST's, against a total of 100 expected to be available. (2) Current projections put 353 LST's and 429 LCI(L)'s in the Pacific as of 30 September 1944, but they were based on the expectation of extensive redeployment from Europe. See JCS 521/3, 4 Feb 44, title: Strategic Deployment of U.S. Forces to 31 Dec 44. There were actually 367 LST's and 465 LCI(L)'s in the Pacific on 31 October 1944, although the planned extensive redeployment from Europe did not materialize. See JCS 521/9, 23 Dec 44, title: Strategic Deployment of U.S. Forces Following the Defeat of Germany. (3) It seems clear that production rates must have exceeded those on which the earlier projections had been made, even allowing for a lower than anticipated rate of loss. In any case, the conclusion that the Navy's offer was based on the prospect of expanding production of landing craft seems justified.

[59] CCS 465/13, memo by U.S. CsofS, 24 Mar 44, title: OVERLORD and ANVIL.

[60] (1) Min, 12th mtg SCAEF, 27 Mar 44. SHAEF SGS 381 OVERLORD-ANVIL, vol. I. (2) See Brooke diary entry, 19 Apr 44, quoted in Bryant, *Triumph in the West*, p. 134.

[61] (1) *Ibid.* (2) Msg, From D 183, Dill to Br COS, personal, 1 Apr 43, OPD Exec 10, Item 66. (3) Matloff, *Strategic Planning, 1943–44*, pp. 424–25. (4) See below, Chapters XIV and XIX, on the Pacific shipping situation.

and Mediterranean theaters. Brooke told Eisenhower that

> if our basic strategy, which was to defeat Germany first, had been adhered to, the landing craft required for ANVIL would now be available and they would not be in the Pacific, as was the case. He considered that the failure to adhere strictly to the basic strategy had already resulted in a setback of approximately six months in the defeat of Germany. Furthermore . . . the lack of sufficient landing craft and other resources in the Mediterranean resulted in our failure to take full advantage of the fall of Italy.[62]

None of this resentment was evident in the carefully worded British reply; however, the Joint Chiefs still sensed in it an attempt, as Sir John Dill reported, "to accept their legacy while disregarding the terms of the will."[63] On both sides, therefore, there was an undercurrent of resentment in negotiations during the next three weeks, which may even have been decisive in the outcome. The area of agreement was, as a matter of fact, very broad and the margin of disagreement remarkably narrow. Both sides agreed that the touchstone of Mediterranean strategy must be support of OVERLORD; they agreed that the offensive in Italy must be carried out to link the main Allied forces with the Anzio beachhead; neither proposed to cancel ANVIL; and both admitted in principle that plans must be kept flexible, leaving the door open to whatever course of action events might dictate. The dispute boiled down almost entirely to a question of the timing of ANVIL, with the implications it had for the effort in Italy. It hinged on divergent views of what the enemy was most likely to do—the British expected the Germans to stand and fight in Italy; the Americans expected them to withdraw and delay. To the British a great battle south of Rome held the best promise of helping OVERLORD by holding German divisions in Italy and away from the Normandy beachhead. The Americans were convinced that only the threat, followed by the reality, of a full-scale invasion of southern France (the only place where all the remaining disposable Allied forces in the Mediterranean could be brought into action) would prevent the detachment of large enemy forces from that area and Italy for use against OVERLORD.

Thus the British thought that to agree to the JCS proviso and immediately commit themselves to preparation for ANVIL would close the door on any major effort in Italy by forcing the premature withdrawal of forces from that area. Wilson's first report indicated the spring offensive would start in mid-April and the link-up with the Anzio forces would occur in May. Under this estimate, ANVIL could not be launched before the end of July. A week later a revised theater plan postponed the spring offensive another month, pushing ANVIL even further into the future. While the British, as a concession to American insistence, agreed to set a planning date of 10 July for ANVIL, they refused to commit themselves in advance to a schedule of preparations that would involve withdrawing troops from Italy regardless of consequences.

For their part the Americans insisted that forces for ANVIL could be withdrawn from Italy without endangering the Allied position or expectations there, and that to postpone the final decision on

[62] Min, 12th mtg SCAEF, 27 Mar 44.

[63] (1) *Ibid.* (2) CCS 465/14, memo by Reps Br COS, 28 Mar 44, OVERLORD and ANVIL.

what to do after the link-up would be tantamount to surrendering the initiative to the Germans. Better, they thought, to force the enemy into the position of waiting passively, all forces committed, in expectation of Allied attacks in both Italy and southern France. They sharply criticized the postponement of the spring offensive in Italy, and urged that General Wilson be impressed with the necessity for aggressive action without "ideal arrangements." Underlying it all was a lingering suspicion, even at this late date, that British designs in Italy still reflected something less than a whole-hearted commitment to OVERLORD.[64]

"The implication," angrily wrote the British Chiefs on 31 March, "that in the British view Mediterranean strategy is any less subservient to OVERLORD than in the American view is particularly painful to us on the eve of this the greatest of our joint ventures. We fully realise and equally deplore that time is being lost, but we think a right decision is even more important than a quick one."[65] Doubtful whether the "pressure" contemplated by the Americans would measure up to their own notions of what might be required if the Germans decided to fight it out south of Rome, they remained unconvinced that an unequivocal immediate decision on ANVIL would be "right." Distressed though they were by the postponement of the beachhead battle until mid-May, they had been convinced of its necessity by General Alexander, who made a flying visit to London for this purpose.

The British had, in fact, little reason to yield. The assault shipping that constituted the American bargaining weapon was not at this point as essential to British designs in the Mediterranean as it was to American. While the British would have preferred to have a 2-division lift available for either ANVIL or further landings in Italy, they were unwilling to pay the price the Americans demanded. Churchill and the British Chiefs made their final pleas on 16 April, but by that time the Americans had made up their minds: If ANVIL was to be of any use to OVERLORD, most American staff officers thought, it must be mounted before the end of July, and forces must be withdrawn from Italy during the first half of May. On 8 April word came from General Wilson that he could no longer postpone troop dispositions for the coming offensive in Italy. These would preclude launching ANVIL before the end of July "at the earliest." Since the British were evidently determined to postpone decision, a July ANVIL seemed to be out and any support for OVERLORD must come from the weight of operations in Italy.[66]

It remained for the Joint Chiefs to decide whether to go through with their offer of additional landing vessels thus leaving open the option of a later ANVIL, or to withdraw them as they had threat-

[64] See exchange of views between U.S. and British Chiefs of Staff in CCS 465 series, CCS 465/14–20, 28 Mar–8 Apr 44, all titled: OVERLORD and ANVIL.

[65] Quoted in Ehrman, *Grand Strategy V*, 253.

[66] (1) Msg OZ 1985, Prime Minister to Dill for Marshall, 16 Apr 44. (2) Msg COS(W) 1284 to JSM Wash, 16 Apr 44. Both in Exec 3, Item 16. (3) CCS 465/21, 17 Apr 44, memo by Reps Br COS, title: OVERLORD and ANVIL. (4) SS 240/4, 8 Apr 44, sub: OVERLORD and ANVIL, ABC 381 Strategy Sec Papers (7 Jan 43) 227–240/10, Tab 240/4. (5) MEDCOS 85, Wilson to Br COS, 8 Apr 44, ABC 384 Europe (5 Aug 43), Sec 9–A. (6) Draft Msg, Marshall to Prime Minister, undated, OPD 381 TS, Case 217. (7) See Brooke diary, entries for 8 Apr, 11 Apr 44, quoted in Bryant, *Triumph in the West*, p. 132.

ened to do. Feeling, in the words of General Handy, "that a point had been reached where strong action must be taken," the JCS took the latter choice, and the British representatives were so informed at the CCS meeting on 8 April.[67] On the 18th, after a final flurry of correspondence with Churchill, the Joint Chiefs approved the directive to General Wilson drawn up by the British Chiefs, which, within the broad mission of containing German forces on behalf of OVERLORD, gave him a free hand to use the lift he would have after the OVERLORD withdrawals "either in support of operations in Italy, or in order to take advantage of opportunities arising in the south of France or elsewhere." Preparations for amphibious operations were not to interfere with the forthcoming offensive in Italy, which was to be launched as soon as possible. Nothing was said about providing additional landing vessels from the United States.[68]

Anvil Revived

Ten days later the Joint Chiefs relented. General Wilson's reply to the directive apparently revived hopes that the still-warm corpse of ANVIL might be brought back to life. The Mediterranean commander said he was planning to develop a "positive threat" to southern France during the critical OVERLORD period by air action, ostentatious assault training of unengaged divisions in North Africa, and possibly a small-scale landing on the island of Elba. Meanwhile, all his assault shipping would be held in readiness for whatever opportunity presented itself, whether in Italy, southern France, or the Adriatic. Wilson stressed the fact that the small amount of this shipping available to him (in an earlier message he had said it would suffice for only two combat teams rather than a division) would limit his ability to seize any opportunity in southern France or elsewhere except in an unopposed landing.[69]

OPD officers noted that, although Wilson stated that the Italian offensive would absorb all his army except security forces, some five divisions were specifically mentioned as not so employed. The British Chiefs had also noted this, and told the JCS they had asked Wilson to come to London to discuss with them and with Eisenhower his plans for using these divisions in the best interests of OVERLORD. They particularly wanted to know, they said, how Wilson would react if the Germans decided at an early stage of the Italian offensive to withdraw to the Pisa-Rimini line—precisely the possibility that most worried the U.S. Chiefs. Washington planners noted with interest that the British Chiefs, despite their recently expressed views, were still considering a southern France invasion, even though a small one, as early as OVERLORD D-day plus 20. This concession, however, was coupled with a new and interesting suggestion that bore the distinctive mark of Churchill's fertile mind—an alternative landing in the Bordeaux region of western France. Churchill had sounded out his military advisers

[67] (1) Min, 157th mtg JCS, 8 Apr 44. (2) Min, 154th mtg CCS, 8 Apr 44.

[68] CCS 465/22, 18 Apr 44, memo by U.S. CsofS, title: OVERLORD and ANVIL. The directive was sent as COSMED 90, 19 Apr 44.

[69] (1) MEDCOS 100, Wilson to Br COS, 23 Apr 44, Incl to CCS 561, 27 Apr 44, title: Opns in Support of OVERLORD. (2) MEDCOS 85, Wilson to Br COS, 8 Apr 44, ABC 384 Europe (5 Aug 43), Sec 9A.

on such a scheme (given the code name CALIPH) early in February, but this was the first time it had been mentioned in the councils of the CCS. The U.S. Joint Planners were inclined to throw cold water on it, citing the long haul for landing craft, the problem of air cover, the submarine menace, and the difficulties of supply. Nevertheless, the plan provided another indication that the British were now considering seriously the problem of finding useful employment for all forces in the Mediterranean at the time OVERLORD reached its climax.[70]

Implicit in all this discussion was the possibility that with more assault lift Wilson might be able to help OVERLORD more and, if the Americans provided the lift, they still might be able to influence the uses to which it would be put. At the CCS meeting on 28 April Admiral King remarked that the approaching discussions between General Wilson and the British Chiefs seemed to raise the hope that ANVIL "or some similar operation" might be revived and added that, speaking for himself, if some definite operation should eventuate "he would be prepared to recommend . . . that a month's supply of U.S. landing craft should be made available. . . ."[71] Though the offer received little further definition during the meeting, it gave the British Chiefs a strong incentive to try to meet American specifications for the projected use of additional assault shipping.

The upshot of the London meeting with General Wilson, the British Chiefs informed Washington on 7 May, was that the alternatives for Mediterranean amphibious operations were narrowed to four general areas, the final choice to depend on the outcome of the Italian offensive and OVERLORD. Two areas—the neighborhood of Sète in the Gulf of Lions, and the Riviera farther east—were in southern France; the other two—the Gulf of Genoa, and somewhere north of Rome—were in Italy. The British promised that preparations for any of the alternative Mediterranean operations would be put in train without awaiting the results of the Italian offensive. These preparations would include regrouping and retraining of American service troops, the recently arrived U.S. 91st Infantry Division and two French armored divisions. Any planning for operation CALIPH, they had decided, had best be transferred to Eisenhower's staff in London. Conspicuous by its absence from the list of projects was an Adriatic operation, discreetly omitted (though still on the theater's planning agenda) as a result of intimations from Washington that the United States planned to send no occupation forces whatever into the Balkans. The British planners calculated that for any of the alternative operations Wilson could scrape together a one-division lift — a "somewhat scratch collection" Wilson called it—and that the shipping conditionally offered by Admiral King would provide lift for another division. "It would be an immeasurable advantage," the British Chiefs tactfully observed at

[70] (1) CCS 561, 27 Apr 44. (2) Memo, Lt Col Paul W. Caraway for Lt Col William H. Baumer, Jr., 28 Apr 44, sub: Opns in Support of OVERLORD, ABC 381 Strategy Sec Papers (7 Jan 43), 240/11–240/24, Tab 240. (3) Churchill, *Closing the Ring*, pp. 692–93. (4) Ehrman, *Grand Strategy V*, 259–62. (5) JCS 843, 1 May 44, rpt by JPS, title: Opns in Support of OVERLORD.

[71] (1) Min, 158th mtg CCS, 28 Apr 44. (2) It should be noted that King's offer came toward the end of a month when LST production had reached 50.

the end of their report of the London meeting, "to be able to count on the early arrival in the Mediterranean of the 26 LST's which the U.S. Chiefs of Staff at one time had in mind to allot to ANVIL."[72]

To this formula the Americans agreed, in order, as Admiral King explained, "to keep ANVIL alive."[73] ANVIL was indeed alive, but not a July ANVIL. A month had passed with no decision and no preparations, since the early April estimate that only an immediate decision, with preparations launched promptly thereafter, would permit a July ANVIL. The 26 LST's that the Joint Chiefs had then thought of sending to the Mediterranean should have arrived before the end of June. The JCS now undertook to send 19 LST's, carrying the same number of LCT's; the last ten would not reach the Mediterranean until about 20 July. They would replace, one for one, the 19 lately withdrawn from the Mediterranean for OVERLORD in accordance with the decision of 24 March.[74] Three other LST's had been sent a few days earlier to compensate for the transfer of three Mediterranean LST's on short notice to the United Kingdom as replacements for two lost and one damaged by German E-boats in late April during OVERLORD exercises off the English coast.[75] The Navy's final additional contribution to ANVIL thus came to 22 LST's and 19 LCT's. Their diversion, Admiral King assured his colleagues, would not be felt "too seriously" in the Pacific.[76] (*Table 29*)

On the eve of OVERLORD, then, ANVIL was one of several alternative operations by which the Allied commander in the Mediterranean hoped to exploit the results of the impending offensive in Italy to the advantage of the cross-Channel attack. On 11 May the Italian offensive jumped off to a good start, and a week later Wilson sent in his appraisal of future prospects. The 2-division amphibious operation that, thanks to the recent allotment of American landing vessels, he was now able to mount, would take place, he indicated, no earlier than mid-August and possibly as late as mid-September—an estimate based on allowances for the arrival schedules of the American LST's, the involvement of all but three of his divisions in Italy at least until the beachhead and the main line were joined, and the necessary preparation and loading of assault and follow-up forces. Of the two points of entry into southern France, the Riviera and the Gulf of Lions, Wilson now favored the Riviera because of its accessibility to fighter bases and the character of its beaches and ports. With a build-up to ten divisions such an operation would leave no more than enough forces in

[72] (1) Msg COS(W) 40, Br COS to Britman Wash, 7 May 44. (2) JP 44 (100) (Final), rpt by Br JPS, 4 May 44, title: RANKIN Case C, Responsibilities of AFHQ. (3) JP 44(125) (Final), Aide-Memoire by Br JPS, 2 May 44, title: Mediterranean Opn—MEDCOS 101. (4) Min, 143d mtg Br COS, 3 May 44, and 147th mtg, 6 May 44. All in SHAEF SGS 370.2/2, Opns from Med in Support of OVERLORD.

[73] Min, 162d mtg (Suppl) JCS, 9 May 44.

[74] The JCS had yielded to British reasons for sending only 19 LST's and 19 LCT's from the Mediterranean instead of the 26 LST's Eisenhower had asked for.

[75] OPD MFR, 4 May 44, OPD 560 Security, III, Case 148. For the incident, see Harrison, *Cross-Channel Attack*, p. 270.

[76] (1) Min, 162d mtg (Suppl) JCS, 9 May 44. (2) JCS 843/2, 9 May 44, JPS rpt, title: Opns in Support of OVERLORD. (3) Msg, JSM 44 to Br COS, 9 May 44, circulated as CCS 561/3, memo by U.S. CsofS, 9 May 44. (4) Msg, Marshall to Eisenhower, 10 May 44, OPD 560 Security, III, Case 125.

TABLE 29—DISTRIBUTION OF SELECTED TYPES OF ASSAULT SHIPPING: 1 JUNE 1944
(Vessels Serviceable and Operational)

Location	APA	AKA	APD	XAP	AGC	LSD	LSI(L)	LCI(L)	LST	LCT	LCM	LCVP	LCA
U.S. in U.K. waters	7	1	0	3	1	0	0	123	168	257	216	1,089	0
British in U.K. waters	0	0	0	0	0	3	19	86	61	666	265	263	646
U.S. in Mediterranean	0	6	4	3	3	0	0	59	22	43	163	371	0
British in Mediterranean	0	0	0	0	0	1	4	32	2	64	95	2	138
East coast, U.S.	1	0	0	0	3	0	0	89	95	58	57	341	0
West coast, U.S.	3	1	0	0	0	0	0	41	0	1	60	181	0
Central Pacific	25	8	13	0	1	5	0	72	72	70	281	1,105	0
South Pacific	16	5	2	0	1	3	0	[a](13)	[a](33)	[a](60)	215	751	0
Southwest Pacific	4	1	5	0	1	1	0	56	30	70	[b]702	[b]442	0
British on East India Station	0	0	0	0	0	0	1	4	0	2	67	0	46

a Information on large landing craft for 1 June 1944 had not been reported from SOPAC and therefore figures are not included in CPS Memo for Info 24. The figures on LST's, LCI(L)'s, and LCT's for SOPAC are derived from the May figures in CPS Memo for Info 23 as supplemented by information in the June figures for other theaters on movements in and out of SOPAC. For instance, the May figure on LST's in SOPAC was 10 serviceable and operational. The June figures for SWPA show 23 LST's sent from that theater to SOPAC during the previous month, and therefore the figure of 33 would appear to be correct.

b Though not specifically stated in the source, it is assumed these figures for LCM's and LCVP's include the large numbers assigned the Army for operation by the engineer special brigades in SWPA.

Source: CPS Memo for Info 24, 19 Jun 44, title: Status Rpt of U.S. and Br Ldg Ships and Cft As of 1 Jun 44, supplemented by information on South Pacific from CPS Memo for Info 23, 23 May 44.

Italy to stabilize the front there. On the other hand, an assault on the Italian coast somewhere between Civitavecchia and Pisa might become necessary if the Germans succeeded in holding farther south than the Pisa-Rimini line. In that case, Wilson warned, he would probably need more assault shipping of the shore-to-shore type.[77] ANVIL and Italy continued to compete for resources.

If in the course of the protracted negotiations from January through May 1944 ANVIL lost its place as one of the two supreme operations for 1944 that had been decided upon at Tehran, OVERLORD was, by contrast, assured the assault shipping it needed. In place of the 191 LST's which the Washington planners had on 6 February assumed would be enough, successive transfers from the Mediterranean and a small extra increment from the United States provided a total of 234 for OVERLORD on D-day, 6 June 1944. Twenty-seven additional vessels (20 from the Mediterranean, 7 from the United States) were allocated to OVERLORD as a result of the mid-February Norfolk House conferences; 19 more came from the Mediterranean as a result of Eisenhower's representations and the postponement of ANVIL in late March; and 3 were sent from the Mediterranean to replace the 3 OVERLORD LST's lost in training. Also, 61 LCI (L)'s and a number of LCT's were withdrawn from the Mediterranean and brought to the United Kingdom as a result of decisions to strengthen OVERLORD essentially at the expense of ANVIL.

Barring a shift of assault shipping from the Pacific, an unlikely eventuality, OVERLORD could hardly have gotten its full contingent of vessels without the withdrawals from the Mediterranean that made a simultaneous ANVIL impossible. The conclusion seems inescapable that, given the supply of amphibious lift available for both northwest Europe and the Mediterranean, the Tehran scheme for simultaneous assaults was impossible from the start. The whole picture was, nevertheless, vastly complicated by Allied failure to win a timely and decisive victory in Italy either through the landings at Anzio or the attacks on the main German front in the winter of 1943–44. The Italian campaign competed with ANVIL both for assault shipping and for troops necessary to carry out the invasion of southern France. This competition played perhaps the decisive role in the decision in late March to postpone ANVIL, and it undoubtedly was the decisive factor in making impossible an invasion of southern France about a month after OVERLORD, as the Americans proposed. For this delayed ANVIL, the U.S. Navy's offer to replace the 26 LST's and 40 LCI (L)'s withdrawn from the Mediterranean for OVERLORD promised a sufficient assault lift; it was the assault forces and not the assault shipping that could not be readied in time. Uncertainties about the future in Italy and British insistence that the campaign there must have a priority over an invasion of southern France combined to leave planning for ANVIL in limbo as the date of the cross-Channel invasion approached, and the question of ANVIL versus Italy as a final issue to be settled in the long Anglo-American strategic debate on the conduct of the war in Europe.

[77] MEDCOS 110, Wilson to Br COS, 17 May 44, SHAEF SGS 370.2/2, Opns from Mediterranean in Support of OVERLORD.

CHAPTER XIV

The OVERLORD-ANVIL Build-up

While the strategic debate over European operations raged from January through May 1944, the build-up of troops and supplies for OVERLORD proceeded apace. Logistical preparations for ANVIL, meanwhile, proceeded haltingly and with considerable waste motion. Fortunately, this operation, being on a lesser scale than OVERLORD, required a less elaborate build-up, and only a marginal part of it had to be specifically separated from that or for an alternative action in Italy.

Planners had to look forward to the day when assault shipping would no longer be the main limitation on Allied strategy in Europe. Once substantial forces were ashore in France, the more familiar constraints of ports and internal lines of communication, merchant shipping, and service troop support would again dominate logistical planning. Indeed, throughout the long strategic debate, the problem of merchant shipping intruded with irritating frequency.

The Logistical Outlook

As the year 1944 opened, the Army's logistical staffs were generally satisfied with supply prospects for the year ahead. Army units moving overseas, an ASF study concluded, would be "adequately although not completely equipped"; existing overseas shortages would be filled, overseas reserves maintained, and current commitments met for lend-lease and the Navy.[1] The Army Supply Program had been cut back as a result of the decisions in late 1943, but it still promised to provide adequately for a troop basis that had also been reduced, with some reserve capacity left to meet unforeseen needs. The problems ahead, in any case, were not likely to be those of quantity per se, but of specific critical items. The ASF cumbersome machinery was being modified to permit swift adjustments of supply to demand within the limits that industrial lead time would permit. The more routine elements of logistical preparations no longer worried the strategic planners as they had earlier in the war—a consequence of more ample resources as well as of greater experience and efficiency at the lower levels of logistical organization.[2] For OVERLORD and ANVIL top priority had solved the supply problem.

There was, however, an impending shortage of military manpower. The troop basis for 1944 was tightly drawn beneath the prescribed ceiling of 7,700,000 officers and men. At the end of 1943

[1] (1) Memo, Lt Col A. J. Cooper for Chief, Strat Log Br, Plng Div, ASF, 4 Dec 43, sub: Shpg Situation Versus Supply Versus Personnel. (2) Memo, Cooper for Chief Strat Log Br, Plng Div, ASF, 7 Jan 44, sub: same. Both in folder vol. 5 Shpg vs Supply vs Personnel, ASF Plng Div.

[2] See above, chs. V and VI.

the Army was still 200,000 men short of this goal, largely because of a lag in Selective Service inductions. It was with some reluctance that General Marshall had deferred indefinitely the activation of 15 divisions in the strategic reserve, gambling that a total of 90 ground combat divisions with supporting troops would be enough to win the war. Behind the gamble was the hope that Germany could be defeated without a protracted land campaign in Europe on the scale of that in World War I.

As far as ground combat troops were concerned, the pinch would not be felt in the first stages of OVERLORD and ANVIL, but late in the year if German resistance proved stubborn. The shortage of service troops seemed to be the more immediately pressing problem. During January General Somervell bombarded the Chief of Staff with memoranda showing a clear deficit of 40,000 service troops for ANVIL and an uncertain outlook for OVERLORD, not to mention a further deficit of 112,000 for the later stages of Pacific operations. Because of the generally stringent manpower situation, Marshall turned down Somervell's pleas for revision of the troop basis, and warned theater commanders to economize in their use of service troops. At the end of January an ASF study showed a shortage of 62,500 service troops against a "balanced" troop basis for OVERLORD and ANVIL, quite apart from Pacific and zone of interior requirements.[3]

As for shipping, staff officers dared to hope that their worries were over. Troop shipping, after the chronic shortages of 1943, now seemed abundant and promised to become more so—to such an extent that zone of interior commands seemed likely to have difficulty finding trained and equipped units to meet movement schedules. Some of the expanding troop lift capacity was in converted Liberty ships that could, if necessary, be reconverted for cargo carriage at relatively low cost in time and labor, thus providing an element of flexibility. For cargo shipping, the ASF thought in January, the chief uncertainty lay in the still undefined and potentially huge demand for relief and rehabilitation supplies in the wake of conquests in Europe.[4]

The bright outlook for shipping was somewhat dimmed in the first three months of the year when construction dropped behind 1943 levels. In January 1944 Maritime Commission yards delivered only 131 ships, less than two-thirds of the peak December production, and, while output rose in the months following, throughout 1944 it stayed well under the 1943 average. Early in April the JCS took the Maritime Commission sharply to task for the slowdown, which reflected slackening effort in the yards as well as the smaller size of the 1944 building program. Fortunately, an unexpected diminution in ship losses in the same period neatly offset the reduced output, so that military authorities had at their disposal at the end of March just about the same amount of shipping they had anticipated.[5]

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[3] (1) See above, ch. VI. (2) Matloff, *Strategic Planning, 1943–44*, pp. 408–12. (3) Memo, Somervell for CofS, 19 Jan 44, sub: SEXTANT Reqmts for Service Troops, with related papers in file SOS Svc Troop Reqmts for Present and Proposed Opns, ASF Plng Div. (4) Memo, Somervell for CofS, 28 Jan 44, sub: ASF Units Required for Overseas, and inclosed Study, in History Planning Div ASF, app. 12–A.

[4] Memo, Cooper for Actg Chief, Strat Log Br, 7 Jan 44, Plng Div, ASF.

[5] (1) See above, ch. X. (2) Memo, Isadore Lubin

In any case, the real dangers ahead in spring 1944 lay elsewhere than in the shipyards. On 4 February Admiral Land, in a letter to Secretary of State Hull concerning a Brazilian request for shipping, dropped a comment that contrasted startlingly with the current optimism of the military authorities:

> May I say candidly that the shipping position, insofar as we can see it, for the next five or six months is as tight as it has been at any time since the war started. The reason is that as each theater of war has become active, huge tonnages have been necessarily retained for operational purposes.[6]

"Operational purposes," in the context in which Admiral Land used the term, covered a wide variety of uses, including not only intratheater troop and cargo movements directly involved in military operations but also all the manifold demands of theater maintenance and communications and the use of ships as floating warehouses where inadequacy of port facilities slowed discharge. Up to this time, except for a brief period in the early fall of 1943 in the Mediterranean, the retention of shipping for local use had attained serious proportions only in the South and Southwest Pacific, where the problem had become acute during December and January. By spring of 1944 the practice had spread to the Central Pacific and to India in lesser proportions, and there was every reason to believe it would appear in northwestern Europe when the invasion got under way. Shipping held overseas for extended periods, for whatever reasons, meant less shipping for moving cargo outward from the United States. Isadore Lubin, statistician for the Munitions Assignments Board, told the President early in April that he expected five million dead-weight tons of shipping to be tied up for local use during the next few months. At about the same time shipping authorities were beginning to anticipate deficits in both the Atlantic and the Pacific in April and May—the first harbingers of a situation which before the end of the year was to develop into a major shipping crisis.[7]

The Final Build-up for Overlord

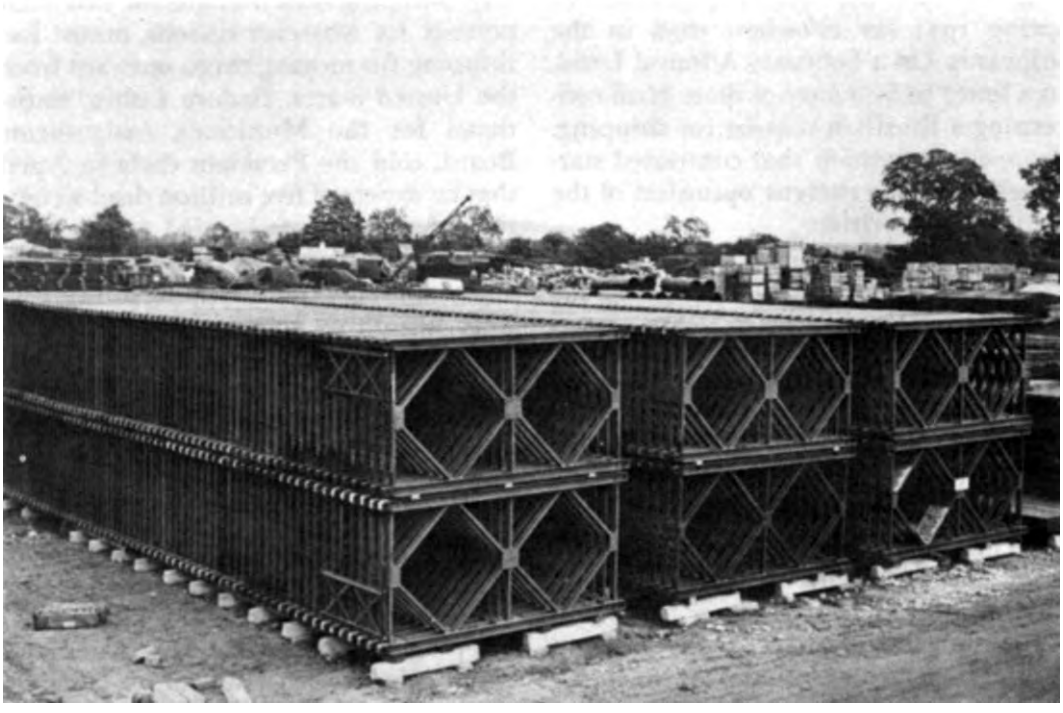
Increased demands for operational shipping for OVERLORD originated not only in the revised plan for an enlarged assault but also in a growing imbalance in the build-up, a result of the 1943 delays in the preshipment program.

The supply build-up reached its climax in the first five months of 1944, profiting from the top priority assigned to it in December. On several occasions other theaters had to be deprived of units or supplies earmarked for them in order to meet urgent demands for the invasion forces. Ports, camps, depots, and staging areas in the United Kingdom were flooded by incoming troops and supplies. With troop lift plentiful, U.S. troop strength in the British Isles rose rapidly from 774,000 at the end of December to 1,527,000 by the end of May 1944, more than had been anticipated

for President, 6 Apr 44, sub: Shpg Reqmts for Next 4 Months, WSA Conway File Misc. (3) ASF Monthly Progress Report, 31 Mar 44, Sec 3, Transportation. (4) Ltr, Gen Marshall [for JCS] to Adm Land, 8 Apr 44, JMTC Papers 1944, WSA Conway File.

[6] Ltr, Adm Land to Secy State, 4 Feb 44, folder Reading File, WSA Douglas File.

[7] (1) Memo, Lubin for President, 6 Apr 44. (2) JMT 44/M, 2 Mar 44, title: Opnl Use of Shpg by Theater Comdrs. (3) On Pacific shipping, see below, Chapter XIX.



BAILEY BRIDGE SECTIONS AND OTHER ENGINEER SUPPLIES IN OPEN STORAGE, *Ashchurch, England.*

either at Quebec or at Cairo. This total was achieved despite increasing competition for facilities, toward the end of the period, between debarking troops and preparations for outloading movement. The competition delayed the arrival of some combat and service elements recently added to the ETOUSA troop basis, but the OVERLORD forces available on D-day were clearly adequate in numbers and reasonably well-balanced.[8]

Cargo flow still lagged far behind troop flow, if matched against the QUADRANT and SEXTANT schedules. While top priority had released large amounts of cargo for BOLERO shipments, the full effects, like those of any transfusion, were not felt immediately. December shipments showed little change, and even in January only 100 ships were filled against expectations of 147. A January survey revealed, meanwhile, the extreme imbalance of the stockpile built up in Great Britain during the first eight months of the preshipment program—for example, Quartermaster equipment for 18 divisions, but Signal equipment, a more critical category, for only five.[9]

The imbalance would, of course, soon be rectified in the process of catching up with the total arrears in cargo movement. But the volume of shipments now

[8] See Ruppenthal, *Logistical Support of the Armies I*, 231–34.

[9] Leighton, Problem of Troop and Cargo Flow, pp. 120–22.

planned in the few months remaining before D-day—even an early June D-day—was greater than British ports could be expected to handle.

This was the prospect that led the theater, late in January, to propose using ships as floating warehouses, a practice abhorrent to shipping authorities under normal circumstances, but accepted in this instance because of special urgency. The scheme, commonly known as prestowage, involved loading vessels at U.S. ports with specified units of supplies to be held for discharge directly on the Continent. Deck space on the same ships would be used for cargo to be unloaded in the United Kingdom. The ships would be held in British waters until their deck cargo was unloaded, then be consigned to the Continent for selective discharge when and where needed. By March plans called for 54 prestowed ships carrying a variety of blocks of supplies. Soon afterward, the theater also proposed a variant scheme for loading additional ships almost solidly with a single commodity group or several affiliated types of cargo to be similarly held for continental discharge. Commodity loaders, as these ships were called, were easy and economical to load and discharge and lent themselves ideally to use as floating warehouses. Once the cost in immobilized ships was accepted, both prestowage and commodity loading offered an efficient and convenient solution to the problem of limited discharge capacity. By the end of May a demand for 155 commodity loaders had been added to the prestowage requirement.[10]

Neither had been anticipated in the SEXTANT estimates of operational shipping for OVERLORD, which had provided for more orthodox employment of cargo vessels—160 MT ships and 625,000 tons of coastal shipping, mostly British, for the immediate build-up on the Continent. These requirements grew as plans took shape. On 23 January Eisenhower asked the CCS, as part of the shopping list for an expanded OVERLORD assault, for 64 more MT ships, and for all 224 to be preloaded for the immediate build-up. The coastal shipping requirement held at 625,000 tons, but SHAEF planners were soon demanding that 250,000 tons be marked for retention after the original D-plus-42 release date. To supplement the coasters they also wanted up to 126 ocean-going "stores ships," 48 of them for the period before D plus 42. In all, by May the revised OVERLORD plan provided for a tie-up of over three million dead-weight tons of merchant shipping in operational service for a month or more after D-day besides the great assault armada and the huge tonnages shuttling across the Atlantic.[11]

With the utmost pressure behind them, all these requirements for merchant shipping were provided for in one way or another, and the load was divided between British and Americans on as equitable a basis as circumstances would permit. (*Table 30*)

The Uncertainties of Anvil

Logistical preparations for ANVIL posed somewhat different problems. In

[10] (1) *Ibid.*, pp. 131–40. (2) Ruppenthal, *Logistical Support of the Armies I*, 236–40. (3) See below, Chapter XX, on development of a similar system in the Pacific.

[11] (1) The foregoing material on OVERLORD shipping requirements is based on papers in SHAEF SGS 560, vols. III and IV, and folders London 1944, CMTC Papers, and Misc 1944, WSA Conway File. (2) See also Msg, Eisenhower for CCS, 23 Jan 44.

TABLE 30—OPERATIONAL SHIPPING REQUIREMENTS FOR OVERLORD

	D-day–D+30	D+30/60	D+60/-
For Cargo Movement United Kingdom to Continent			
MT ships: U.S.	136	75	40
Br.	88	65	30
Total	224	140	70
SEXTANT (allocations)	(160)	(100)	(70)
	D-day–D+42	D+42/-	
Stores ships: U.S.	20		60
Br.	28		66
Total	48		126
SEXTANT (allocations)	(0)		(0)
Coasters: U.S.	0		70,000
Br.	625,000		180,000
Total	625,000		250,000
SEXTANT (allocations)	(625,000)		(100,000)
Preloaded in United States for Movement to Continent After D-day			
Prestowed ships stores and ammunition	54		
Commodity loaders	155		

Source: Ltr, Conway to Reed, 22 May 44, folder Misc 1944, WSA Conway File.

conception the operation was expected to be mounted, in the main, with resources already in the Mediterranean. The central problem was thus one of disengaging troops, material, and shipping from the Italian campaign. ANVIL had certain additional needs, however, which the Americans, as its sponsors, had to meet—more service troops, special operational supplies for the task force and follow-up, shipping for the same kind of operational uses as in OVERLORD, and, of course, assault shipping, object of the contention described in the preceding chapter. The first two posed no insuperable problems. ANVIL's priority was high enough to dislodge the operational supplies needed, and various planned expedients were brought to bear on the service troop shortage—breaking up and reforming as service units the 2d Cavalry Division and other ground combat units, diverting others from Pacific theaters, putting pressure on the French to provide their own service support, and using Italian POW units in rear areas.[12]

To provide the operational shipping promised to be more difficult. ANVIL requirements, like those of OVERLORD, began to grow as soon as the theater staffs got to work on the plan. On 1 January AFHQ estimated its shipping needs for a 2-division assault as 227 MT ships (267 ship loadings) for the first 30 days, 147 of them to be preloaded for the initial

[12] (1) Memo, Somervell for CofS, 19 Jan 44. (2) Memo, Wood, Dep Dir P&O, ASF for CG ASF, 5 Apr 44, sub: SEXTANT Decisions, file Misc TS, ASF Plng Div. (3) Leo J. Meyer, Logistics and Strategy in the Mediterranean Theater, MS, OCMH, draft chapter, Theater Logistical Preparations for ANVIL.

assault and immediate follow-up, 120 MT ship loadings for the second month, and 80 for the third—a total of 467 loadings. This was 174 more than had been allotted at Cairo.[13]

To officials in Washington the crux of the problem appeared to lie in the first 30-day requirement, which was more than double the SEXTANT estimate. For a 1 May ANVIL, the 147 MT ships intended for the assault phase would have to be withdrawn from other employment almost immediately, especially loaded by the process known as "flatting" (that is, floored with bottom cargo on which deckloads of vehicles could be superimposed in the theater) and dispatched in time to reach the theater well in advance of D-day. The other 80 vessels would need less preparation and would not be needed so early, but the entire movement would have to be accommodated to the regular convoy schedule beginning in February. The effect, the Washington staff estimated, would be to create a deficit of 110 cargo sailings in the Atlantic area during late April and May that would have to be absorbed by other programs—British imports, the OVERLORD build-up, maintenance shipments to the Mediterranean and the Indian Ocean, or aid to the USSR.

An alternative arrangement was suggested, on the assumption of a 2½-division assault lift—100 flatted MT ships, a total of 205 MT ships in the first month, and enough shipping subsequently to provide for 173 instead of 200 loadings during the second and third months. This scheme, hopefully, would reduce the whole Atlantic deficit to a "manageable" 75 sailings spread over the three months of April, May, and June. The CCS in Washington endorsed this plan and on 25 January sent the estimates back to the theater for comment.[14]

Meanwhile, on 23 January Eisenhower had sent in his request for 64 more MT ships for OVERLORD. The demand for prestowed ships was also in the offing, and there was a good chance of increased shipping demands for Italy, where the campaign hung in the balance. The British Chiefs of Staff in London, apparently after only a cursory examination of the figures developed in Washington, on 4 February affirmed that the provision of more MT ships for both OVERLORD and ANVIL would "seriously upset allocations agreed at SEXTANT," that no British shipping was available for the purpose, and that in their opinion the major Atlantic programs could not, in the critical months of April and May, "make any significant contributions." The obvious solution, they argued, was to reduce ANVIL to a one-division threat and reallocate any shipping thus released to OVERLORD.[15]

This argument, paralleling the current British position on assault shipping for the two operations, at once injected the merchant shipping problem into the mainstream of the OVERLORD-ANVIL, debate. The American staffs distrusted British cargo shipping estimates even more than British assault shipping estimates,

[13] (1) Msg NAF 574, Eisenhower to CCS, 1 Jan 44, SHAEF SGS 560, vol. II. (2) Requirements for a 3-division assault were less, in the aggregate, because a larger amount of assault shipping would be available for use in the follow-up and build-up, in support of the same total force.

[14] (1) CCS 470, 17 Jan 44, rpt by CMTC, title: Personnel and Cargo for ANVIL. (2) Min, 142d mtg CCS, 21 Jan 44 (Suppl). (3) Msg COSMED 11, 25 Jan 44, CCS to SACMED.

[15] Msg OZ 632, COS(W) 1127 to Britman Wash, 4 Feb 44, SHAEF SGS 560, vol. II.



DECK-LOADED TANKS LASHED DOWN TO PREVENT SHIFTING

but expert opinion in Washington at the moment appeared to support the British contention. At the request of the Combined Staff Planners, representatives of WSA, the British Ministry of War Transport, and the U.S. Army Transportation Corps met hurriedly on 6 February, a Sunday, to consider the problem. Their conclusion, duly reported to the CPS two days later, was prompt, emphatic, and apparently unanimous: if the requirements of both main operations were to be met, other Atlantic programs would have to be cut during the March-June period by the equivalent of 245 cargo ship sailings.

Then on 9 February, whether after second thoughts or because of pressures brought to bear—in any case, for reasons still obscure—they issued a revised statement: Shipping *could* be found for both OVERLORD and ANVIL "without cuts in other programs of so radical a nature as to be incapable of being handled directly by agreement between the shipping authorities and claimants for shipping." They added a warning:

> These assurances are based on certain schedules of retentions and releases in theaters, definite as to both number and time, which have been furnished by the military authorities. The shipping authorities point out that under the most favorable circumstances the provision of shipping required will place a serious strain on merchant shipping resources and leave absolutely no

margin whatsoever, and that deviations from schedules or retentions and releases would necessitate cuts in some lower priority programs but would not endanger OVERLORD and ANVIL.[16]

During the next few days WSA exhorted its regional directors overseas to expedite ship turnarounds and addressed like appeals to the Army and Navy. No more was said about the deficit of 245 sailings predicted on the 6th. Meanwhile ASF, working now toward an early June D-day, was planning the special ANVIL shipments the theater had requested. The requirement for flatted ships was fixed at 96, of which 64 were to be loaded by early April. With the loading of the first of these ships in February the specific build-up for ANVIL, expected to continue through May, got under way.[17]

American plans and preparations for ANVIL went ahead, however, without British agreement. The CCS counterproposal of 25 January for meeting ANVIL shipping requirements brought no immediate decision, even after the change of heart on the part of the shipping authorities. In London the British insisted on looking at the problem in terms of the original theater requests. The whole issue was soon overtaken by the events, described earlier, that led the CCS on 25 February to give an overriding priority within the Mediterranean theater to the Italian campaign and to postpone final decision on ANVIL until 20 March.[18] This decision not only underwrote OVERLORD's shipping requirements at the expense of ANVIL if necessary, but also left ANVIL at the mercy of increased demands for the Italian campaign.

These increased demands for Italy were not long in coming. For the spring offensive General Wilson planned to move 7½ fresh divisions and replacements onto the peninsula, and certain other forces to Corsica, during the seven weeks beginning on 20 February—in all, some 276,000 troops and 44,000 vehicles. A week after the CCS decision of 25 February, he sent in additional shipping requirements for 180 MT ship sailings in the Mediterranean during March and 160 sailings during April—40 and 100 sailings, respectively, higher than the SEXTANT estimates. In so doing he entered his bid for at least the entire original ANVIL allotment of operational shipping.[19]

Washington and London staffs were to wrangle over these requirements for the next month and a half. The issues and the attitudes were the same as those involved in the assault shipping controversy. The Americans tried to save ANVIL from obliteration under the rising shipping demands of the Italian campaign, while the British were determined to support the campaign in Italy regardless of the effect on ANVIL. One of the Cairo agreements had been that the two countries would share equally the burden of

[16] (1) CMTC 53/1, rpt by Combined Military Transportation Committee, 9 Feb 44, title: Recommendations of SCAEF. . . . (2) Memo, Gen Gross for Gen Somervell, 6 Feb 44, sub: Shpg Statements in CCS 465/5, OPD 560 Security, III, Case 129. (3) CCS 465/7, 8 Feb 44, rpt by CPS, title: Recommendations of SCAEF. . . .

[17] (1) Msg, Douglas to WSA Reg Directors, 12 Feb 44. (2) Ltrs, Douglas to Gen Somervell and Adm Horne, 12 Feb 44. Both in folder Conserv of Shpg, WSA Douglas File. (3) Meyer, draft chapter, Theater Logistical Preparations for ANVIL.

[18] (1) See above, ch. XIII. (2) Memo, Stokes for Connor, 29 Feb 44, sub: ANVIL Shpg Allocations, OPD 560 Security, III, Case 125.

[19] (1) Msg, Wilson to Br COS and JSM, 20 Feb 44, ABC 384 Post-HUSKY (14 May 43), Sec 2. (2) CCS 470/1, 11 Mar 44, memo by Br COS, title: Personnel and Cargo Shpg for ANVIL, with Incls.

providing cargo shipping to support operations in Italy. The British were always willing to provide their share; dispute focused on what they regarded as the American commitment.

The JCS readily agreed to furnish their March quota of sailings, on the assurance of WSA that it could be provided without strain, but they balked at providing the April quota of 80 sailings, 50 of them additional. To do so without disturbing the ANVIL reserve, the JMTC predicted, would produce an "unmanageable" May deficit of 118 sailings in the Atlantic, more than a quarter of the total scheduled for major military and civilian programs. WSA was willing to consider an Atlantic deficit of 75 sailings in May as "manageable," and to meet it by cuts or adjustments in nonmilitary programs, but that would require furnishing only 37 instead of 80 ships for internal movements in the Mediterranean in April. After scrutinizing Wilson's requirements, the Joint Chiefs concluded that his build-up program was designed to provide forces for the whole campaign to capture Rome, not solely for the operation aimed directly at joining the Anzio beachhead with the main front, the only one that in their opinion had been granted overriding priority. They consequently recommended to the British Chiefs that Wilson be asked to review his requirements in this light, on the supposition that, once the link-up was consummated, necessary resources would be devoted to preparations for ANVIL.[20]

Before this proposal came to the top of the CCS agenda on 31 March, the whole situation had changed once more, and all that could be said with certainty about ANVIL was that it would not take place in June as a companion piece to OVERLORD. A new round of debate was under way, centering on the American offer to furnish additional assault shipping from the Pacific for a July ANVIL.[21] At Sir John Dill's suggestion, the CCS agreed to ask General Wilson to again review his shipping requirements with a July ANVIL in mind. But meanwhile the British Chiefs in London had received word that the whole shipping picture had changed, and decided that the intended message to Wilson was out of date. Only 145 of the scheduled 180 sailings in the Mediterranean had actually occurred in March and only 50 of them had been by U.S. vessels, leaving a carryover of 35 sailings to be added to the April requirement. This now totaled 195 sailings. The British Chiefs drafted a new message for Wilson asking him to reconsider his requirements for the next three months. In transmitting the draft to Washington they inquired whether the JCS, in view of the changed strategic outlook, would be prepared to provide 100 of the 195 sailings now indicated as the April requirement.[22]

By this time the first requirements for the commodity loader program for OVERLORD were coming in, BOLERO cargo shipments had been increased by 20 shiploads in May and June, and the JMTC foresaw deficits replacing surpluses in

[20] (1) CCS 470/1, 11 Mar 44. (2) CCS 470/2, 23 Mar 44, memo by U.S. CsofS, title: Personnel and Cargo Shpg for ANVIL. (3) Msg, Douglas to Kalloch, 17 Mar 44, with related corresp in folder N Africa, WSA Douglas File. (4) JCS 761, 14 Mar 44, rpt by JMTC, title: Personnel and Cargo Shpg for ANVIL.

[21] See above, ch. XIII.

[22] (1) CCS 470/3, 1 Apr 44, memo by Reps Br COS, title: Personnel and Cargo Shpg for ANVIL. (2) CCS 470/4, 3 Apr 44, memo by Reps Br COS, same title.

the Atlantic in the next three months. Moreover, a long-brewing shipping crisis in the Pacific had come to a boil, and representatives from the Pacific theaters were about to meet with the shipping staffs in Washington to seek a solution.[23] To meet the Mediterranean requirement at least in part, the JMTC recommended, in keeping with a theater proposal, that sailings of 22 ANVIL flatted ships be applied to the April requirement for Italy, but with a warning that such expedients must be carefully regulated if shipping was to be available for mounting ANVIL at a later date. These 22 sailings, with 28 American carry-overs from March and the original U.S. commitment of 30 sailings in April, would make a total U.S. contribution of 80 sailings in that month—20 less than the British had proposed, and 28 less than the U.S. quota under a 50–50 split for March and April.[24]

In the angry atmosphere of the debate over a July ANVIL, then reaching its climax, the JCS reply to the British on 7 April merely reiterated that Wilson should re-examine his requirements for the next three months with a July ANVIL in view. A few days later, however, having decided to give up ANVIL altogether, they relented to the extent of undertaking to provide the 80 sailings in April as recommended by the JMTC. But they declined to make any further commitments, even in the face of an urgent plea from General Wilson that he must have his full April shipping allocation by 14 April in order to avert an interruption of the scheduled flow of troops into Italy during the second half of the month which could have dangerous implications for the offensive due to jump off on 10 May.[25]

In the end General Wilson got his 195 sailings after all. At a CMTC meeting on 14 April WSA representatives refused to support unequivocally the Army's contention that the 20 additional sailings requested could be provided only at the expense of OVERLORD. It developed that the formidable four-months' deficit reported a few days earlier by the JMTC had already been dissipated in the ebb and flow of day-to-day requirements and availabilities. Atlantic programs for May were now in fair balance, though deficits amounting to some 80 sailings in a grand total of up to 1,500 were in the offing for June and July. An arrangement was finally worked out under which the British would provide the 20 disputed sailings in April as a loan, to be repaid in U.S. sailings during succeeding months.[26]

These arrangements to provide Wilson his operational shipping for the April build-up had a curious aftermath in the context of the continuing speculation about Atlantic deficits during this period. On 18 April a new directive was sent to General Wilson giving the *coup de grâce* to a July ANVIL. As a result, it now appeared that there would be a surplus of cargo shipping in the Atlantic even after the mushrooming demands of OVERLORD were met. Wilson had already fixed his May requirements for opera-

[23] See below, ch. XIX.

[24] (1) JCS 761/2, 6 Apr 44, rpt by JMTC, title: Shpg Reqmts, Med Theater. (2) Msg, WARX 17229, Gross to Stewart, 1 Apr 44, and Msg WSNA 645, Conway to Kalloch, 28 Mar 44, folder Algiers 1944, WSA Conway File.

[25] (1) CCS 470/5, 7 Apr 44, memo by U.S. CsofS, title: Shpg Reqmts, Med Theater. (2) CCS 470/6, 10 Apr 44, memo by U.S. CsofS, same title. (3) CCS 470/9, 14 Apr 44, memo by U.S. CsofS, same title.

[26] (1) Min, 85th mtg CMTC, 14 Apr 44. (2) Min, 155th mtg CCS, 14 Apr 44. (3) CMT 49/3, 14 Apr 44, title: Shpg Reqmts, Med Theater.

tional shipping at 135 sailings, including 10 MT ships to simulate a movement against southern France while OVERLORD was being launched. For June he tentatively estimated that he would need 60, and for July 30 sailings—always assuming that no further operations, in southern France or elsewhere, were decided upon. Under a 50–50 split, the U.S. share would come to only 68 sailings in May, 30 in June, and 15 in July, as contrasted with earlier estimates based on a southern France operation of 125, 196, and 116 sailings, respectively. The Pacific Shipping Conference, concurrently meeting in Washington to seek means of alleviating the developing shipping crisis in the Pacific, was thus presented with an unexpected windfall. U.S. shipping authorities agreed to transfer more than 200 ships from the Atlantic to the Pacific during the next several months. Even after the transfer, they found it possible to allow for an additional 50 internal Mediterranean sailings per month from July onward against the faint possibility that a post-OVERLORD invasion of southern France might still be carried out.[27]

ANVIL's uncertain future also complicated logistical preparations for it at the administrative level. These preparations slowed down immediately after Wilson's and Eisenhower's recommendations on 23 March, and with the decisions of mid-April came virtually to a halt. The first impulse in both ASF and OPD was to suspend the whole process of loading and shipping supplies and troop units for ANVIL in order to release them for operations that had been definitely approved. Before the end of March OPD had decided to cancel some shipments of operational supplies and troop units, and proposed that ANVIL's high priority for critical items be dropped to the bottom of the list of active theaters, below that for even the CBI. Early in April second thoughts took hold. ASF officials closely watching the progress of the strategic debate argued against the change in priorities, since there seemed some likelihood that the American position might prevail. If the priority were lowered only to be raised again at a later date, the momentum of preparations would be broken and difficulties certainly encountered in providing supplies on short notice. On 6 April OPD, having ascertained that the JCS still had hopes of mounting ANVIL in time to be of help to OVERLORD, decided to leave it for the present in the priority immediately below OVERLORD. Preparation of the flatted cargo vessels and their movement to the theater continued, though at a slower pace.[28]

The respite was temporary. Two weeks later OPD, reviewing the recent top level decisions, concluded that ANVIL had now been definitely ruled out and called a halt to administrative preparations. All outstanding requisitions for supplies specifically for the invasion of southern France were canceled, loading of ships was stopped, and movements suspended except for one convoy almost ready to

[27] (1) On the Pacific shipping crisis see below, Chapter XIX. (2) JCS 762/4, 26 Apr 44, rpt by JMTC, title: Shpg Reqmts, Med Theater. (3) Msg, MEDCOS 88, Wilson to Br COS, 11 Apr 44, Incl in JCS 761/3, 13 Apr 44. (4) Msg WSNA 736, Conway and Bissell to Kalloch, 28 Apr 44, folder Algiers 1944, WSA Conway File.

[28] (1) Memos, Gen Roberts for ACofS OPD, 23 Mar 44, and 6 Apr 44, sub: Shipment of Troop Units and Supplies for ANVIL, with related corresp in ABC 381 Strategy Sec Papers (7 Jan 43), 227–240/10, Tab 240/2, and 240/11–240/24, Tab 240. (2) Memo, Gen Wood for CG ASF, 5 Apr 44, sub: SEXTANT Decisions, file Misc TS, Plng Div ASF.

sail. By this time, 64 flatted vessels had been loaded and most of them had already sailed; all 64 eventually did reach the Mediterranean. OPD further ruled that both vessels and supplies could be used to support operations in Italy, as the British had contended all along. In the event the results were less devastating than might have been expected. Lt. Gen. Jacob L. Devers, U.S. theater commander and commander-designate for ANVIL, decided to freeze stocks in depots and on flatted ships that had been earmarked for ANVIL, and maintained the freeze against pressures from the War Department to make them available for operations in Italy.[29]

Devers' optimism was soon justified. The liquidation of ANVIL preparations had scarcely been ordered—and on operating levels was still being executed—when hopes for the operation were revived. ANVIL, it appeared at the end of April, still had the edge over alternative undertakings, and on 28 April Admiral King renewed his offer of assault shipping with less restrictive conditions. On 12 May Alexander's forces launched their offensive in Italy. By the 17th it was progressing so well that Wilson reported good prospects for launching a 2-division ANVIL (now definitely his first choice) between mid-August and mid-September.[30]

On 13 May, General Wilson forwarded revised estimates of shipping requirements for continuing the campaign in Italy and for a possible southern France operation in August. He added 100 sailings to the 90 earlier estimated as sufficient for internal maintenance in June and July (including those for operations in Italy). For a new ANVIL in August he said he would need 100 MT ships preloaded before D-day, 150 cargo sailings in each of the first two months of the operation, and 50 sailings in the third month. Intratheater troop lift requirements amounted to 22,000 per month during June and July for Italy, and 32,000 for the initial ANVIL movements; for the follow-up convoys, a lift of 16,000 would suffice. In conclusion he pointed out that, even though a definite decision to launch the operation could not yet be made, shipping must be assembled in the theater by the end of June if it was to be preloaded for an August ANVIL. Preparations must therefore begin immediately.[31]

In the calmer atmosphere that now prevailed, arrangements were amicably worked out before the end of May to meet these requirements and to divide the burden equitably between British and American shipping. Basically they called for an approximately even split, with the British to provide somewhat more than half the shipping for the Italian campaign, in which they were primarily interested, and the United States somewhat more than half that for ANVIL, its own primary concern. Troop shipping arrangements were complex, but the cargo shipping burden was to be equally shared, taking both operations into account. U.S.-controlled cargo shipping in the Mediterranean by this time included all 64 flatted ANVIL ships, which it was estimated in Wash-

[29] (1) Memo, Gen Handy for Dir P&O, ASF, 26 Apr 44, sub: Priority for ANVIL, with accompanying MFR, in ABC 381 Strategy Sec Papers (7 Jan 43) 227–240/10. (2) Meyer, draft chapter, Theater Logistical Preparations for ANVIL.

[30] See above, ch. XIII, and Ehrman, *Grand Strategy V*, 263–67.

[31] Msg, MEDCOS 107, Wilson to Br COS, 13 May 44, SHAEF SGS 560, vol. IV.



GENERAL DEVERS

ington would be almost enough to meet the whole American quota of sailings in June and July and most of the U.S. share of the 100 preloaders. The rest could be provided from the contingency allowance of 50 ships authorized in April and expected to become available by July.[32]

Thus, on the eve of OVERLORD, it appeared that the merchant shipping (and, as has been noted, the assault shipping as well) needed for an August ANVIL could be provided. The CCS agreed that Wilson should be informed that he could count on the necessary shipping for internal maintenance movements in June and July, and, for planning purposes, on having the shipping for a revised ANVIL in August as well, but that the shipping would not be allocated until the operation had definitely been decided upon and a target date set. He was to be reminded further that his requirements for shipping must be submitted 60 days in advance of D-day. Wilson therefore had until mid-June to decide definitely for or against a mid-August ANVIL.[33]

Before these instructions could be sent, the ASF raised a further difficulty. The cessation of preparations for ANVIL in April and the lowering of its priority had brought the expected consequences. Supplies earmarked for the operation had been released, some of the service units had been shipped to other theaters, and multiplying demands for specially loaded vessels for OVERLORD were eating into depot stocks in the United States. ASF officials thought, nevertheless, that ANVIL's supply needs could be met except for a few critical items (heavy engineer supplies and heavy artillery ammunition) if the original priority were restored. There was also a possibility that replacements for some of the diverted service units could be improvised in the theater. The crux of the matter was the time required to restore momentum to ANVIL preparations. Originally an interval of 97 days had been expected between receipt of the first requisitions (late in January) and the sailing of the final supply convoy in May. While this schedule could now be telescoped, additional allowance had to be made at the beginning of the process for preparation and dispatch of new requisitions to replace those canceled, and at the end for transit, un-

[32] (1) CCS 470/15, 26 May 44, rpt by CMTC, title: Shpg Reqmts Med Theater. (2) Msgs exchanged between Conway and Kalloch, 14–29 May 44, in folder Algiers 1944, WSA Conway File.

[33] (1) *Ibid.* (1). (2) CCS 470/16, 26 May 44, memo by Reps Br COS, 26 May 44, title: Shpg Reqmts, Med Theater.

loading, and distribution. ASF calculated a minimum of 68 days for the whole process, even assuming all supplies could be sent in a single convoy. If shipments were spaced over three convoys sailing at normal 10-day intervals, as seemed likely, 20 more days would be required. ASF concluded that a minimum of 90 days must be allowed between the time a definite decision was made to launch ANVIL and to give it the requisite priority and the date on which the operation could be launched.[34]

But ASF officials had reckoned without knowledge of General Devers' action in freezing ANVIL stocks. It soon appeared that there was enough material already in the Mediterranean to support the operation for the first month. Thus a mid-June decision would still permit a mid-August D-day, and supplies shipped directly to southern France would be in the area before the backlog of theater reserves had been consumed. All these calculations took time. Not until 11 June, three weeks after ASF had raised the problem, did the Joint Logistics Committee finally assure the JCS that the 90-day proviso would not rule out a D-day 60 days following a top-level decision.[35]

By this time German defenses south of Rome had disintegrated, the Allies had entered Rome on 4 June and were rolling northward at a steady pace. On the 7th General Wilson jubilantly reported that he could now definitely promise an amphibious operation on the scale of ANVIL, with a target date of 15 August. Somewhat ambiguously he added, "planning is being carried out on the assumption that the launching of ANVIL at this date will fit into the general European picture," and he asked for firm allocations of shipping, supplies, and troops. Two days earlier the British Chiefs had already notified him that his shipping requirements would be met under the stipulations to which the CCS had agreed. The CMTC now recommended that Wilson's whole request be approved.[36] At that moment the JCS were on their way to England to confer with the British on future strategy in Europe and to visit the beachhead that Eisenhower's forces were carving out on the Normandy coast. The future course of operations in the Mediterranean would be discussed in that context.

Atlantic Shipping on the Eve of Overlord

As one might suspect from the foregoing, the shipping situation in the Atlantic area just before the Normandy invasion had improved considerably. In the war at sea during this period Allied shipping losses stayed at a low level, and new construction climbed steadily upward from the doldrums of January. Huge net gains in tonnage were registered each month in the Allied merchant fleets.

In April the situation in the North

[34] (1) Memo, Gen Wood for OPD, 22 May 44, sub: Shpg Reqmts for Med Theater, OPD 560 Security, III, Case 126. (2) CCS 470/17, 31 May 44, memo by U.S. CsofS, title: Shpg Reqmts, Med Theater, with related papers in ABC 384 (1 Nov 43), Sec 2-B.

[35] (1) JCS 761/5, 28 May 44, memo by JMTC, and JCS 761/6, 11 June 44, titles: Shpg Reqmts Med Theater. (2) Meyer, draft chapter, Theater Logistical Preparations for ANVIL.

[36] (1) CCS 470/19, 11 Jun 44, rpt by CMTC, title: Shpg Reqmts, Med Theater, with incl msg from Wilson to Br COS. (2) CCS 470/18, 5 Jun 44, memo by Reps Br COS, same title.

Atlantic was favorable enough to permit some relaxation of protection and an acceleration of convoy schedules. Convoys between Halifax and the United Kingdom were suspended and those between New York and British ports significantly speeded up and enlarged. They were to run thereafter in three speed groups—10, 9, and 8 knots—on alternating cycles ranging from 5 to 9 days within a span of 45 days with no set limits placed on the number of ships in a single convoy.[37]

One measure of the improvement was the extent to which actual sailings exceeded WSA forecasts made early in the year. Late in February WSA was counting on 379 sailings in March and only 374 in May; three months later the May figure had increased to 539 and the forecast for June stood at 555. The improvement was not entirely a matter of more plentiful tonnage; it also reflected growing efficiency in ship operations. Whether as a result of WSA's concerted efforts following the early February wrangle over ANVIL shipping or not, there was a marked speed-up in ship turnarounds. (The British Ministry of War Transport took similar steps to speed the turnaround of British shipping.) Improvement was especially marked in the Mediterranean. During January and February, at the height of the battle at Anzio, the volume of shipping in the Mediterranean was building up at an alarming rate, and the shipping staffs began to prepare for another congestion crisis. It did not materialize, however, largely because of a rapid increase in the rate of discharge over the beaches at Anzio in March. At Naples, meanwhile, tonnages handled in March were so great that U.S. officials there could claim, with some justification, that it was the "largest allied military port in the world."[38]

Faster turnarounds in the Mediterranean were accompanied by a reduction in retentions of WSA vessels for operational purposes in April and May to well below the SEXTANT estimate of 120. The theater reported 110 retentions in mid-February; by 8 May the figure had fallen to 38, rising thereafter to 66 at the end of May as ANVIL shipping began to assemble. In any case, the net result of all factors was that the number of ships returning from the Mediterranean to the United States increased from 91 in February to 144 in April.

Comparable improvements in turnarounds were achieved during the same period by U.S. shipping in British ports. Early in January WSA vessels were spending, on the average, 26 days in these ports in an over-all turnaround time of 80 days on the North Atlantic run. In mid-April these figures had dropped to 18 days and 70 days, respectively.[39]

[37] (1) COMINCH Memo FX-3723, 31 Mar 44, sub: New Schedule for NATL Trade Convoy, folder Convoys, WSA Conway File. (2) Samuel Eliot Morison, "History of United States Naval Operations in World War II," vol. X, *The Atlantic Battle Won: May 1943–1945* (Boston: Little, Brown and Company, 1956) describes the course of the battle against the submarine during this period. (3) Control Div, ASF, *Statistical Review, World War II*, p. 37.

[38] (1) Official Commendation to the 6th Port, 13 Apr 44. The claim was true if only Army cargo was considered, but the New York port handled far more cargo of all kinds. (2) Shipping tables in folder Reqmts and Avlbles, WSA Conway File. (3) Ltr, Kalloch to Douglas, 18 Feb 44, folder N Africa, WSA Douglas File. (4) Memo, Nickell for Conway, 30 May 44, folder Italy, WSA Conway File.

[39] (1) Ltr, Conway to Reed, 15 May 44, folder Reading File 1944, WSA Conway File. (2) Corresp in folder Algiers 1944, WSA Conway File.

The general speed-up in ship turnarounds in the Atlantic area was therefore a major factor in creating a favorable outlook for OVERLORD and ANVIL during May despite the simultaneous rise in requirements for the former operation, as well as in making possible the transfer of a sizable block of shipping to the Pacific. Combined with the concomitant rise in over-all tonnages, it also made possible American contributions to the Soviet protocol and British import programs during the first five months of 1944 that substantially exceeded commitments, thus creating credits to be drawn upon later if necessary.[40]

There was one dark cloud in this generally bright sky. By the middle of May transatlantic cargo shipments were threatening to overwhelm British ports. In April the movement of cargo had reached a total of 1,637,690 tons—an increase of almost 700,000 over January and more than 300,000 tons over and above the theater's indicated capacity to receive. Shipments in May, including some prestowed ships and the first 18 commodity loaders, came to more than two million tons and were scheduled to continue at that level during June and July.[41]

The impending crisis brought a demand from U.S. military authorities for a reduction in British import movements to ease the congestion. Fortunately, with a backlog of credits already built up, the import program was well able to absorb a temporary cut. The 12½-million-ton goal set at Cairo had subsequently been reduced to 12 million, and the movement of cargo in U.S. bottoms against this goal had exceeded commitments by 45 shiploads. Although responsible British officials still insisted that they had accepted dangerous reductions in food and raw materials stocks in setting the original goals for 1944, there seemed to be some reason to suspect (as British official historians have subsequently confirmed) that the stock levels in question, in reality well above any realistic appraisal of need, had come to be regarded as sacrosanct.[42]

The British did not contest the necessity for holding back domestic imports temporarily in order to provide berthing space for incoming BOLERO shipments, asking only that they be compensated later. It was agreed that up to half a million tons of imports over a period of four months would be deferred, the vessels carrying them to be diverted to anchorages for later discharge. This expedient would make room for only about half of that amount of incoming BOLERO cargo, owing to the larger bulk of military supplies. The British also undertook to step up rail movements and the discharge rate in ports, and U.S. Army authorities agreed to turn over additional locomotives. These arrangements, worked out on the lower levels, were presented in a formal request from General Eisenhower to the Prime Minister on 24 May, and accepted by Churchill on condition the Unit-

[40] JMT 50/6, 4 May 44, title: Shpg Reqmts and Availabilities, Pac Opns.

[41] Leighton, Problem of Troop and Cargo Flow, pp. 138–40.

[42] (1) JCS 879, 27 May 44, rpt by JMTC, title: Present Critical Port Situation in U.K. (2) Min 155th mtg, Br COS, 12 May 44, Annex I: Min to Prime Minister on OVERLORD Shpg Reqmts, SHAEF SGS 560, vol. IV. (3) Postan, *British War Production*, pp. 215–16. (4) R. J. Hammond, "History of the Second World War, United Kingdom Civil Series," *Food: The Growth of Policy* (London: His Majesty's Stationery Office, 1951), pp. 271–82. (5) Behrens, *Merchant Shipping*, pp. 401–02, 406–07.

ed States would make up the import deficit later in the year. The JCS, on their part, agreed to later compensation with the proviso that it should only be sufficient to enable the British to meet their original import goals for 1944.[43]

These arrangements helped to resolve the immediate problem of discharging BOLERO cargoes needed in the United Kingdom in order to assure that troops crossing the Channel had their full allotments. On 19 May 38 cargo ships, all carrying BOLERO cargo, were awaiting discharge at anchorages in British waters for want of berthing space. Two weeks later, as the OVERLORD armada was getting under way, 67 ships were at anchor, but only 7 of them carried BOLERO cargo, and 3 of the 7 were reefers held up for lack of port storage and refrigerator capacity, not for lack of berths. Nineteen of the others were prestowed and commodity loaded ships destined for unloading on the Continent. The 48 conventionally loaded idle ships were, as a WSA official remarked, "a good measure of the excess of arrivals over and above U.K. handling and clearance capacity."[44]

All 67, nevertheless, represented the true measure of the extent to which shipping was already being used to store rather than to move cargo. The prospects were that the situation would become worse before it got better. In June 119 BOLERO ships were scheduled to reach England, and shipping officials hoped that by shunting import cargoes temporarily aside all 119 could be discharged. But the ASF had been able to keep the number down to this level only by diverting more and more cargo into commodity loaders for discharge on the Continent. At least 27 commodity loaders were already scheduled to reach the United Kingdom in June, and they were only a small fraction of the scores destined to arrive in June, July, and August. Continental accommodations would also have to be found for the gathering fleet of MT and stores ships that were to transfer cargo stored in England across the Channel. Whether the artificial harbors and whatever ports the invading forces might succeed in opening up would suffice to absorb all this shipping was the great imponderable facing shipping authorities as D-day for OVERLORD drew near. "So far," observed one WSA official with unconscious irony on 3 June, "the position does not appear unmanageable."[45]

[43] (1) *Ibid.* (1) and (2). (2) Msg, WARX 45591, JCS to Eisenhower, 2 Jun 44. (3) Msgs HAL 689, Reed to Land for Conway, 12 May 44; and HAL 312, Reed to Conway, 24 May 44; folder London 1944, WSA Conway File. (4) Msg S–52375, Eisenhower to Marshall (eyes only), 23 May 44, ABC 540 (27 May 44). (5) Churchill, *Closing the Ring*, p. 712. (6) Compare Ruppenthal, *Logistical Support of the Armies I*, 239, who holds that there was an "impasse" which was resolved only two weeks before D-day.

[44] (1) Ltr, Reed to Conway, 30 May 44, folder U.K. 1944, WSA Conway File. (2) Msgs, HAL 721 and 733, Reed to Conway, 27 May and 3 Jun 44, folder London 1944, WSA Conway File. (3) Msg, London to BMSM, 25 May 44, folder BMWT, WSA Conway File.

[45] (1) Msg, HAL 733, Reed to Conway, 3 Jun 44. (2) Behrens, *Merchant Shipping*, p. 405. (3) Msg NA 8071, Conway to Reed and Kerr, 29 May 44, folder London 1944, WSA Conway File.

CHAPTER XV

The Aftermath of OVERLORD

In June 1944 the war in Europe entered a new and climactic phase. The Allies entered Rome on the 4th, gained a lodgment on the Normandy beaches on the 6th, and in both sectors rapidly exploited their initial success. Pushing north of Rome, the U.S. Fifth Army by the end of the month had driven three-quarters of the way to Florence, while on the other side of the peninsula the British Eighth Army advanced almost to Ancona. In Normandy the invaders, after securing the beachhead on the second day, quickly overran the Cotentin, capturing Cherbourg at its tip on 26 June and eliminating the last pockets of resistance in the first days of July.

New Logistical Problems

With the invasion of Normandy the nature of the logistical problem of the war in western Europe rapidly changed. For more than a year Allied planning had been dominated by the primary requirement of landing forces on a hostile shore. Once the Normandy beachhead had been secured, the critical limitations were the capacities of ports, roads, rail lines, airfields, storage facilities, and a multitude of other elements essential to large-scale land operations.

The supply of military manpower was not an immediate problem in June 1944—although if Germany held out long enough, it could become the most critical factor of all. The major concern of the Allied high command at this point was to bring all available trained and equipped manpower to bear against Germany. On 6 June the Allies had available or in prospect for deployment in Europe, more than 100 infantry, airborne, and armored divisions, quite apart from forces already deployed or earmarked for the war against Japan. Approximately 38 divisions were British-controlled, including Commonwealth forces and Polish troops serving under British command. Nineteen of them were in the Mediterranean area—14 in Italy, the other five garrisoning far-flung points throughout the Middle East. In the United Kingdom, on the eve of OVERLORD there were 15 British, one Polish, and 3 Canadian divisions, plus 5 understrength British divisions suitable for home defense only. Thirteen British divisions and the 3 Canadian divisions formed part of the OVERLORD force, all scheduled for commitment before the end of August. These 16 divisions represented very nearly the effective limit of the British contribution to OVERLORD in ground forces, after provision for rotation and maintenance of a small reserve in the United Kingdom.

The OVERLORD reserve was primarily American and most of it was still at home. By this time the War Department

had earmarked for possible commitment in Europe 65 of the Army's 89 divisions. On D-day 28 of them were already in the European area—8 in the Mediterranean, and 20 in the United Kingdom. The 7th Armored Division was en route to England, and the 80th Infantry Division was preparing to move there in July. With these movements, 39 divisions would remain in the United States, most of them in an advanced state of training. As of mid-June up to 35 were earmarked for Europe and only 4 definitely scheduled for the Pacific. How many actually went to Europe would depend, of course, on how long it took to defeat Germany. Any forces remaining in the United States in strategic reserve at the end of the war in Europe would be deployed against Japan, and their places taken by combat weary divisions withdrawn from Europe. Additional ground forces required for the defeat of Japan, over and above those already in the Pacific or in strategic reserve, would have to be redeployed from Europe.[1] The scheme for progressive deployment into the main battle in northwestern Europe is shown in Table 31.

In addition to the American forces there were now 8 French divisions rearmed with American equipment and serving under Allied command. One, the French 2d Armored Division, had been brought to England to join the OVERLORD forces. The other 7 were in the Mediterranean, 4 of them actively engaged in Italy, and 3 in North Africa and Corsica.[2]

The dominant aim of the Army staff was to find ways to rapidly deploy enough of this latent American power to northwestern Europe to crush the German Army in the west. JCS deployment schedules in mid-June were still conservative, visualizing a movement of only about four divisions to Europe per month beginning in August. There was ample troop and cargo shipping in the Atlantic to accelerate these schedules, and, while the supply of some types of equipment was limited, the OVERLORD priority could be counted on to provide sufficient quantities. The bottleneck, it was soon apparent, was reception capacity for both troops and supplies in France, and it was to decisively influence both the developing tactical situation in Normandy and the course of the summer's debate on strategy.

In the southern theater the central problem was how best to employ the forces already in the area. There were 26 British, American, French, and Polish divisions in Italy; only 3 French and one recently arrived U.S. division (91st Infantry) remained uncommitted in North Africa. The problem was familiar: should these forces be concentrated in Italy to mount a really serious threat to the enemy's southern flank, or should the Italian front be stabilized with limited forces in order to open a new sector in southern or western France. British and American perceptions of the

[1] (1) Deployment of Allied Divisions, 31 May, 30 June, 31 July, 31 August 1944, prepared in Log Gp, OPD, Misc 320.2, folder Deployment 1941–45, OCMH. (2) JCS 521/6, 11 Jun 44, rpt by JPS, title: Strategic Deployment of U.S. Forces to 30 Sep 45. (3) Matloff, *Strategic Planning, 1943–44*, apps. D–1 and D–2. (4) Roland G. Ruppenthal, *Logistical Support of the Armies, Volume II: September 1944–May 1945*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1959) (hereafter cited as Ruppenthal, *Logistical Support of the Armies II*), Table 8, 282–83.

[2] On the French divisions, see below, Chapter XXVIII.

TABLE 31—PLANNED DEPLOYMENT OF U.S. DIVISIONS ASSUMING GERMANY NOT DEFEATED 11 JUNE 1944

Theater	30 June 1944	30 September 1944	31 December 1944	31 March 1945	30 June 1945
European	22	31	43	54	57
Mediterranean	8	8	8	8	8
Pacific	20	21	22	24	24
United States	39	29	16	3	0

Source: JCS 521/6, 11 Jun 44, title: Strategic Deployment of U.S. Forces to 30 Sep 45.

question were inevitably different. The capture of Rome and the launching of OVERLORD set the stage for the last round in the Anglo-American debate on the strategy for defeating Germany.

Follow-up

OVERLORD follow-up plans provided for one division to be shipped from the United States to England in July and 4 in August, making a total of 26 divisions in the theater. On the Continent the build-up was expected to reach 21 divisions by D plus 90 (later equated to 31 August 1944). In the initial stages the flow of combat troops would predominate but the plan envisaged a balanced combat and service force on the Continent by the end of August. Beginning in September the build-up was expected to continue at a rate of 3 to 5 divisions (with balanced supporting forces) per month, most of them to be shipped directly from the United States for discharge on the Continent.[3]

The European theater's proposed procedures to govern this build-up were received in Washington late in December 1943. For the first three months troops would be sent to the United Kingdom for transshipment to the Continent under procedures similar to those for pre-D-day movements, including preshipment of their equipment. For the second three months, during which it was expected most units would move from the United States directly to the Continent, the theater requested that all general purpose and combat vehicles be preshipped to the United Kingdom for assembly and transshipment, and that all other equipment accompanying troops be combat loaded and/or force marked to the destination of troops. For troops arriving after the first six months, the theater wanted equipment preshipped to destinations on the Continent.[4]

The War Department agreed readily to continue preshipment to the United Kingdom until 31 August. Because of congestion in British ports, however, much of the initial equipment of the June–August build-up divisions had to be loaded on prestowed ships and commodity loaders for discharge on the Continent. It soon became evident, moreover, that the other features of the theater plan could not be carried out. Equipment was still not plentiful enough to permit advance shipment on

[3] Ruppenthal, *Logistical Support of the Armies I*, 298–99.

[4] Ltr, Hq ETOUSA to WD, 24 Dec 43, sub: Preshipment of T/E Equipment, AG 400.22 (5-16-43) (1), Sec 1A.

so lavish a scale without deprivation to other theaters and troops in training, particularly if movements of combat units to Europe were to be accelerated. Vehicular requirements would have to be supplied in part by rehabilitated vehicles, which normally were shipped on wheels rather than packaged for overseas assembly. The double handling involved in preshipment to England and transshipment to the Continent could hardly be justified for vehicles on wheels, as it could for packaged ones, by savings in shipping space.

Procedures for shipping troop equipment after D plus 90 remained unsettled, therefore, until well after D-day. The theater insisted that whatever the arrangements troops must receive their equipment and be ready to go into action within 15 days after arrival. The solution ultimately devised was the so-called Red List procedure, which was to be in effect during the second three months. Equipment for each unit was assembled and shipped in bulk in cargo convoys timed to arrive about the same time as the troops themselves or a little earlier. After D plus 180, the War Department ruled, troops would move with their equipment under normal procedures. The preshipment program thus came formally to an end on 31 August 1944, though some advance shipments continued to trickle overseas as late as October to make up for units on the preshipment troop basis whose movement had been postponed.[5]

Meanwhile, almost from the start, logistical operations were plagued by inadequate reception capacity in Normandy for incoming troops and material. The problem had been foreseen but not in its magnified dimensions which resulted from weather, German demolitions, and early delays in expanding the lodgment area. On 19 June a Channel storm wrecked the artificial harbor at OMAHA Beach on which so much reliance had been placed, and disrupted discharge activity for three days. At Cherbourg the Germans had done their usual thorough work of destruction; captured on 27 June, the port did not begin to handle an appreciable amount of traffic until August. The minor ports in Normandy did not measure up to expectations. Fortunately, the facilities at OMAHA Beach, behind their breakwater of sunken blockships, proved to be capable of absorbing cargo in far greater volume than anticipated. It became the mainstay of the American sector in Normandy during the remainder of the summer.

The capture of Cherbourg was behind schedule, and the advance fell further behind during the difficult hedgerow fighting of July. Not until the end of that month did Allied armies break out of Normandy and begin the rapid advance across France that was to carry them to the German border by early September. The advance in France was thus at first slower, then faster, than anticipated. It also moved in directions not planned. The original aim had been to capture the Breton ports—Brest, Saint-Nazaire, Lorient and others – to serve as the main ports of entry for U.S. troops and supplies, and to develop secure communications from Normandy and Brittany forward before launching a general advance to the Seine and beyond. Instead, in order to smash the German

[5] (1) Leighton, The Problem of Troop and Cargo Flow, pp. 123–30, 141–46. (2) Wardlow, *The Transportation Corps: Movements, Training, and Supply*, pp. 157–59.



SCUTTLED LIBERTY SHIPS FORM BREAKWATERS AT OMAHA BEACH

armies in front of the Seine, the weight of the American offensive was thrown in that direction. The forces diverted into Brittany were smaller than planned, and the Germans clung tenaciously to the ports. Before these could be captured, the Allies had partly encircled and crushed the Germans west of the Seine, then plunged on toward the German border without the ports or the supply lines needed to support so rapid and massive an advance. Enough American forces were diverted to Brittany to take Saint-Malo (17 August) and Brest (18 September), but by the time Brest fell, badly wrecked by its defenders, the decision had already been made that the Breton ports were too far from the main axis of advance to justify their rehabilitation and use.

Thus for almost four months after the launching of OVERLORD its logistical support had to be brought in over the beaches and through Cherbourg, smaller ports in Normandy, and a few small ports on the north coast of Brittany that had not even figured in the original plans.[6]

[6] For detailed treatment, see Ruppenthal, *Logistical Support of the Armies I*, Chapters X through XIV, and Ruppenthal, *Logistical Support of the Armies II*, Chapters I through IV.

Nevertheless, the force build-up on the Continent during the first three months fell only slightly behind schedule. By early September (D plus 90) 20 of the 21 scheduled U.S. divisions were in France, and the French 2d Armored Division, supported over the American supply line, had also crossed the Channel. The initial imbalance in combat and service troops had been redressed much as planned.

There was mounting pressure, meanwhile, to speed the flow of troops in September and the months following. But by this time the lack of ports was cramping support of the forces ashore, and Eisenhower was reluctant, and the theater SOS even more so, to agree to any acceleration. For while the force build-up continued on schedule the supply build-up fell far behind. With few deep-water berths for ocean-going vessels, shipping piled up off the Normandy coast, and there was an inevitable temptation to use the ships as floating warehouses. By the end of August, moreover, Allied forward elements were racing for the German border with no assurance that they could be supported over bombed-out transportation lines. A logistical crisis was in the making.[7]

Anvil Versus Italy

Against the background of this developing situation in northwestern Europe the debate over ANVIL and operations in Italy moved toward its conclusion. The Americans were soon to find their principal justification for an invasion of southern France in the prospect of securing additional ports of entry for American divisions. This would, they hoped, lead to a consolidated single-front drive into Germany and an end to the European war in 1944. The British, even more anxious to end the war in Europe quickly because of growing strains on their economy and manpower, took a different view. With all their forces committed soon after the launching of OVERLORD and a large proportion of them in Italy, the British looked to an exploitation of the gains of May and June in Italy as the most effective complement to OVERLORD in breaking through Germany's last defenses in 1944.

To General Alexander the long-delayed break-through in Italy created for the first time a real prospect of striking at, or at least threatening, areas as vital to Germany as those menaced by the cross-Channel invasion. In the first week of June he was confident that if allowed to keep his forces intact he could push on without a pause to the line Pisa-Florence-Ancona by the end of July, and in another month could break through the Gothic Line defenses (anchored on Pisa and Rimini) and into the Po Valley. From there he would be in a position in September to turn either west toward Turin and Genoa and thence into France, or east toward Padua, Venice, and through the Ljubljana Gap into the Danube Basin. The latter threat, Alexander estimated, would compel the Germans to reinforce in Italy by at least ten more divisions, regardless of the cost to other fronts, and in his opinion would assist OVERLORD far more powerfully, as well as sooner (since the threat would become apparent to the Germans long before September) than any entry into southern or western France.

[7] Ruppenthal, *Logistical Support of the Armies II*, 1–8, 276–83.

Alexander's ideas gained no immediate support, even from his superior, General Wilson. On 7 June Wilson, although he had already read Alexander's report, notified the British Chiefs that he was now definitely prepared to carry out an amphibious operation with a 15 August target date and asked for the needed additional resources. The British Chiefs were not yet ready to settle finally on ANVIL as the choice, but agreed that it was necessary to proceed with the allocation of shipping, supplies, and service troops.[8]

The CCS considered the matter at some length during the second week of June while the JCS were in England to take stock of the new situation. Both sides rejected Alexander's views. It was agreed that he should pause at the Pisa-Rimini line to disengage forces for a separate amphibious operation elsewhere in at least 3-division strength. Neither side took a rigid position on the alternatives presented, the same ones discussed in May, although more interest than formerly was expressed in the possibility of landings at the head of the Adriatic in the event the Russians decided to strike southward through the Carpathians into the Danube Basin. The Americans insisted that the target date should be moved up from 15 August to 29 July.

Accordingly, the CCS on 14 June notified General Wilson that after achieving his main objective—destruction of German forces south of the Pisa-Rimini line—he should halt and launch an amphibious operation against southern France (either in the Toulon-Marseille area or at Sète), on the Bay of Biscay coast, or at the head of the Adriatic. The choice would depend upon the progress of OVERLORD, the direction and progress of the impending Soviet offensive, and German reactions. As the Americans desired, the target date would be 29 July, provided this did not prejudice the campaign in Italy, and the assault would be on a scale of 3 divisions, perhaps with a one-division airdrop. Wilson and Eisenhower were asked to confer and submit their views without delay.[9]

Insofar as the CCS showed a preference, they deplored the difficulties of the advance from Marseille up the Rhône Valley and noted the advantages to be gained by early capture of Bordeaux either by overland movement after a landing at Sète or by direct assault in the Bay of Biscay. The expressed preference for Bordeaux reflected growing concern in Washington and at SHAEF over the reception capacity in western France for incoming U.S. divisions, a concern that temporarily dampened the old American enthusiasm for the Toulon-Marseille version of ANVIL. Bordeaux was, after all, closer to the United States, to England, and to the beachhead than was Marseille.

Meanwhile, the old problem of providing a 3-division amphibious lift for ANVIL had seemingly been solved. On the basis of lighter than expected losses in the Normandy landings, SHAEF estimated that 15 attack transports, 24 LST's, 24 LCI (L)'s, one AKA, and one LSD could be released and sent to the

[8] (1) Ehrman, *Grand Strategy V*, 345–46. (2) See above, ch. XIV. (3) CCS 561/5, 10 Jun 44, memo by Reps Br COS, title: Opns in Support of OVERLORD.

[9] (1) Info notes of 163d mtg CCS, 11 Jun 44, at Stanwell, Middlesex, England, prepared by U.S. Secy, OPD Exec 9, Book 19, Item 838. (2) Ehrman, *Grand Strategy V*, 268–70. (3) Matloff, *Strategic Planning, 1943–44*, pp. 467–69.

Mediterranean in time for the assault. The JCS promised to send 9 more LST's and 23 to 25 LCT's from rising U.S. production. With what he already had in the theater, Wilson would then have well over the required 3-division lift.[10]

The range of choice was soon narrowed. By now, despite the on-again-off-again decisions, preparations for ANVIL had generated a momentum of their own. The build-up of air forces on Corsica was far advanced, western Mediterranean ports were ready to assume their outloading functions and, partly as a result of General Devers' action in retaining his ANVIL stockpiles intact, necessary supplies were on hand or in prospect. Only the Toulon-Marseille operation had been planned in detail, and the theater staff believed it was the only one that could be carried out by 29 July; the earliest date for either a Bay of Biscay or an Adriatic landing would be mid-August. While the ANVIL landings might be shifted westward to the Sète area, the beaches there were far more strongly defended than those east of Toulon, the lodgment area would be hard to hold against a counterattack, the ports were inadequate, and the route of advance toward Bordeaux was infinitely more difficult than that up the Rhône Valley.[11]

Both operations aimed at Bordeaux thus seemed too risky. The choice narrowed down to one between an invasion of southern France near Marseille and Alexander's proposed nonstop offensive up the Italian peninsula combined with landings at the head of the Adriatic later on. The British commander in Italy, ordered on 14 June to begin the withdrawal of forces for the new amphibious operation, protested vigorously against the lost motion and delay involved in shifting direction and opening a new front. By August, he argued, he could push all the way to the Ljubljana Gap, within striking distance of the Hungarian plain and Vienna beyond.

By 19 June General Wilson, though buffeted by competing influences in his own staff, had made his own choice in favor of Alexander's plan.

He reached this decision despite a message from Eisenhower expressing an emphatic preference for a southern France operation over one in the Adriatic and pointing out that Marseille, though inferior to Bordeaux as a port and base, would serve the forces in northern France almost as well.[12] Eisenhower's views were reinforced by Generals Marshall and Arnold, who visited Wilson at his advance headquarters at Caserta on 17–19 June.

Ironically, Marshall's main argument —the need for another port through which to funnel into France the mass of the U.S. Army — apparently helped Wilson to decide in favor of the advance in Italy. The British commander had decided, after analyzing the views of his subordinate commanders and staff, that forces could not be withdrawn from

[10] (1) Memo, SHAEF, 12 Jun 44, sub: Release of Shpg and Ldg Cft from Opn NEPTUNE, ABC 384 Europe (5 Aug 43), Sec 9-A. (2) Memo, Deputy Dir, P&O, ASF, for Gen Somervell, 17 Jun 44, sub: Opn ANVIL, OPD Exec 9, Book 19, Item 832. (3) Table, Status of Assault Shipping, Med, ANVIL, 16 Jun 44, ABC 384 Med (26 Oct 43), Sec 1-A. (4) The total lift available was estimated to be 77 LST's, 128 LCI(L)'s, 134 LCT's, and 24 attack transports.

[11] (1) AFHQ Med JPS, Msg to SACMED concerning operations in support of OVERLORD, 19 Jun 44. (2) Brief for SACMED, 15 Jun 44, sub: Implications of Alternative Opns in Support of OVERLORD. Both in ABC 384 Europe (5 Aug 43), Sec 9-A.

[12] Hamilton, draft ch. IV, On Again, pp. 55, 60–63.

Italy in time to execute ANVIL before 15 August. Assuming that the process of feeding new American divisions onto the Continent would probably extend well into 1945, he concluded that the Americans must have given up hope of ending the European war in 1944. As Wilson explained to the British Chiefs on 19 June, Marshall's argument seemed "to face the Combined Chiefs with a decision as to whether our strategy in the coming months is to be aimed at the defeat of Germany this year, or . . . at ensuring his defeat in the first half of 1945." In the latter case the proposed 3-division landing in the Toulon-Marseille area and an advance up the Rhône seemed the best course. If, on the other hand, the high command wanted "to strike a blow which may cause the enemy to divert or withdraw divisions from France and at the same time face him with the prospect of defeat this year," Wilson favored Alexander's plan of driving through northeastern Italy to the Ljubljana Gap.[13]

A drive pointed toward southern Hungary would, in Wilson's opinion, force the Germans from early August onward to evacuate the Balkans and to draw divisions from northern France. In September the threat would be emphasized by amphibious landings near Trieste, and Wilson was confident that despite German reinforcements the Allies would reach the Ljubljana Gap that month. ANVIL, on the other hand, would produce no effect at all until mid-August, and the best that could be expected from it was a slow withdrawal of German forces up the Rhône Valley until they established a common front with those in the north. The Italian operations, Wilson assured his superiors, were logistically feasible, and as a by-product would result in opening ports in northern Italy through which fresh divisions from the United States might be funneled.[14]

The arrival of Wilson's message in London coincided with the Channel storm of 19 June. With over-the-beach supply of the forces ashore suddenly endangered, Eisenhower's advocacy of the southern France operation took on a new urgency. ANVIL, he argued, promised to provide a good port and the most direct route to eastern France, "where the great battles for the Ruhr will be fought." Alexander's forces did not directly threaten any vital area and their advance, though perhaps of some containing value, would neither surely divert German divisions from France nor open up ports for deployment of forces from the United States—"one of the most important considerations." Nor would it, Eisenhower thought, have much positive effect before 1945—a neat reversal of Wilson's case for Italy against southern France.[15]

If, however, the dangerous situation on the Normandy beachhead heightened Eisenhower's zeal for ANVIL, it also imposed limits on the assistance he felt he could render at the very time the requirements were being raised. For a 15 August ANVIL, Wilson requested 50

[13] (1) Msg, B–12995, Wilson to Eisenhower and Br COS, 19 Jun 44, SHAEF SGS 370.2/2, Opns from Med in Support of OVERLORD. (2) SAC Conf, Min of Spec Mtg with Gen Marshall and Gen Arnold, 17 Jun 44, ABC 384 (5 Aug 43), Sec 9–A.

[14] *Ibid.* (1).

[15] Msg S–54425, Eisenhower to CCS, 23 Jun 44, SHAEF SGS 370.2/2, Opns from Med in Support of OVERLORD, vol. II.

OVERLORD LST's rather than the 24 offered, and he wanted them released by 10 July to allow time for overhaul and arrival in the theater two weeks before the ANVIL target date. Wilson also wanted enough airborne lift for a full division. Meanwhile, Eisenhower's naval staff reported the build-up of vehicles in Normandy already 58,000 in arrears, and saw little hope of reducing the backlog until the latter part of July even if all the OVERLORD LST's could be retained. Reluctant to part with either the LST's or any of his airborne troop carrier reserves, Eisenhower suggested as an alternative that if ANVIL could not be launched with good prospects before the end of August, one or two of the American divisions and all of the seven French divisions assigned to ANVIL might be sent instead to reinforce the Normandy beachhead.[16]

Meanwhile, staff opposition in Washington to Wilson's proposed Italian drive had hardened. It rested not only on the objections voiced by Eisenhower, but generally on revived fears of involvement in the Balkans, and, more specifically, on doubts whether the French could be persuaded to engage in an operation leading away from their homeland or whether any sizable forces could be supported logistically north of the Apennines. In a note to London on 24 June the JCS again insisted that ANVIL was the only operation that would assure rapid concentration of maximum forces in France. They maintained that, even after withdrawal of the ANVIL contingent, more than sufficient forces would remain in Italy to exert "a very heavy pressure on the enemy."[17]

The debate was soon joined along familiar national lines. While the British Chiefs took a far less optimistic view than Alexander or Wilson of the prospects of driving into the Danube Basin from northeastern Italy, they still thought that a threat in that direction would compel the Germans to withdraw forces from other areas. After some wavering they decided to support Wilson—influenced apparently by Field Marshal Smuts who strongly urged this course on Churchill after conferring with Wilson and Alexander.[18] There followed a brief exchange of notes between the British and American Chiefs and between Churchill and Roosevelt, ending on 2 July. The whole affair took place in a tense atmosphere dominated by the consideration that, according to Wilson's estimate, large-scale withdrawals of forces from Fifth Army (small ones were already in progress) would have to begin on 28 June if ANVIL were to be launched by 15 August.

The basic tenets of the British position, as presented to the Americans were two. First, the British agreed that the essential requirement was the support of OVERLORD and the earliest possible exploitation of its successes. Sec-

[16] (1) *Ibid.* (2) Msg, Gammell to Smith, 15 Jun 44, with related papers in SHAEF SGS 370.2/2, Opns from Med in Support of OVERLORD, vol. II.

[17] (1) CCS 603, 24 Jun 44, memo by U.S. CsofS, title: Opns to Assist OVERLORD. (2) Memo, Lt Col F. S. Henry for Chief, Strategy Sec OPD, 20 Jun 44, same sub, ABC 381 Strategy Sec Papers (7 Jan 43), 240/11–240/24, Tab 240/17. (3) Unsigned Memo for Gen Handy, 23 Jun 44, sub: Courses of Action in Med, ABC 384 Europe (5 Aug 43), Sec 9–A.

[18] (1) JP 44 (161) (Final), rpt by Br JPS, 15 Jun 44, title: Exploitation from N Italy, ABC 384 Eur (5 Aug 43), Sec 9–A. (2) Winston S. Churchill, *Triumph and Tragedy* (Boston: Houghton Mifflin Company, 1953), pp. 57–62. (3) Bryant, *Triumph in the West*, pp. 164–66.

ond, they held that within the context of the whole European war it was imperative at this stage to "engage the enemy on the largest scale with the greatest violence and continuity" in order to hasten his collapse.[19]

They denied that ANVIL was the best way to achieve either objective. To withdraw forces from the peninsula in order to seize and develop another beachhead in southern France would give the enemy a badly needed respite and throw away a priceless opportunity to destroy his forces in Italy. Far better, the British thought, to leave the Allied armies in Italy intact and concentrate on the effort to funnel new U.S. divisions directly to the OVERLORD front by increasing intake capacity in western France from the Loire northward. The early capture of the Breton and Channel ports would do far more to help OVERLORD than would development of a distant line of communications from Marseille. In the interim, the British pointed out, much could be done to develop smaller ports in Normandy that had not figured in the OVERLORD logistical plan as well as increasing intake capacity at ports along the western coastline as they were taken.

To this end they urged that Eisenhower be allowed to retain all the assault shipping scheduled to move to the Mediterranean for ANVIL. They further proposed—seizing on Eisenhower's alternative proposal—that the seven French divisions and at least one U.S. division be brought around from the Mediterranean to western France. Churchill also pointed to the heavy preponderance of service "tail" in the July-September movement schedules for the American build-up and pleaded for a higher proportion of ground combat troops. Neither Churchill nor the British Chiefs, significantly, attempted to defend Alexander's proposals for an advance beyond the Ljubljana Gap into southern Hungary; they rested their case on the havoc they hoped to wreak on the enemy south of the Alps, where they fully expected him to stand and fight. The British proposals thus hinged on two assumptions: first, that the Germans would in fact make a major effort to hold northern Italy and, second, that the intake capacity of ports, beaches, and the transportation network of western France could be expanded sufficiently to accommodate the additional U.S. and French divisions. Churchill tersely summed up the case: "Let us resolve not to wreck one great campaign for the sake of winning the other. Both can be won."[20]

The Americans refused to see the issue in this light. To them the heart of the British position was abandonment of ANVIL, still regarded as an essential prop for OVERLORD, and an all-out prosecution of the offensive in Italy with ultimate objectives north of the Alps. Hasty logistical studies persuaded them that, as the President told Churchill, it was doubtful whether "within a decisive period, it would be possible to put into the fighting beyond the Ljubljana Gap more than six divisions," and the bare possibility of an advance "into the Balkans" (that is, across the northern tip of

[19] (1) CCS 603/1, 27 Jun 44, memo by Reps Br COS, title: Opns to Assist OVERLORD. (2) Msg 718, Prime Minister to President, 28 Jun 44, ABC 384 Europe (5 Aug 43), Sec 9–A. (3) The quoted phrase appears in both papers.

[20] Msg 718, Prime Minister to President, 28 Jun 44.

Yugoslavia) raised emotional hackles.[21] The American staff denigrated British contentions that withdrawals for ANVIL would seriously impair Alexander's chances of reaching the Pisa-Rimini line and maintaining strong pressure on the Germans thereafter. They also heavily discounted the likelihood that the Germans would reinforce in Italy, and held to this view in the face of an intelligence report to the contrary produced by the British on 28 June. "The desire," asserted the Joint Chiefs, "is to deploy as many United States divisions in France and as quickly as possible. A successful advance by Alexander's force in Italy does not promote this possibility."[22]

The Americans made no attempt to answer the British argument for expanding the reception capacity along the west coast of France other than to insist that it was "definitely Eisenhower's responsibility." "The forces we are sending him from the United States," the President wrote, "are what he has asked for. If he wants divisions ahead of service troops he has but to ask—the divisions will be ready." Until these forces in the United States were exhausted, Roosevelt said, he was "opposed to the wasteful procedure of transferring forces from the Mediterranean to OVERLORD."[23]

The twin problems of acceleration and balance had, in fact, been under study in Eisenhower's headquarters for some time, and Churchill's remarks about administrative "tail" gave them new point. The prevailing view in SHAEF toward the end of June was that no marked acceleration of the flow of combat troops at the expense of service elements was feasible. The planned emphasis on service-troop build-up from July to September was aimed at offsetting the predominance of combat over service troops in the early movements, looking to an eventual division slice of about 40,000; this was the slice originally planned for and generally prevalent in other theaters. Theater planners were justifiably apprehensive that when a break-through came insufficient service troops would be available to operate the longer line of communications that would be needed.

These conclusions were, of course, tentative. The possibility of an accelerated flow continued to be studied in SHAEF and the War Department, but there was little expectation of a major expansion of intake capacity for both combat and service troops, as the British had proposed.[24] In any case, the decision on ANVIL had to be made at once. Both the JCS and the President, reminding the British that the southern France operation was part of the grand design promised to Stalin at Tehran, firmly demanded acquiescence to the American proposals. On 30 June the British Chiefs advised Churchill that although their views were unchanged they were prepared to yield "in the broadest interests of Anglo-American cooperation." Churchill, in a final message to Roosevelt on 1 July, submitted on a note of warning to what he styled "the first major strategic and political error for which

[21] (1) Msg, President to Prime Minister, 29 Jun 44, quoted in Ehrman, *Grand Strategy V*, 353–55. (2) CCS 603, 24 Jun 44.

[22] (1) JCS msg 27 June, quoted in Ehrman, *Grand Strategy V*, 352. (2) CCS 603/2, 27 Jun 44, memo by U.S. CsofS, title: Opns to Assist OVERLORD.

[23] *Ibid.* (1).

[24] Ruppenthal, *Logistical Support of the Armies I*, 421, 449–53.

we two have to be responsible"—his annoyance seeping over in a barbed reminder of Roosevelt's earlier interest in an Adriatic operation and the observation that the British did not now contemplate, nor had they ever contemplated, "moving armies into the Balkans." Stalin, he added, would probably be pleased with the decision since it would open up eastern, middle, and southern Europe to Soviet control. On 2 July the CCS directed Wilson to execute ANVIL, if possible on 15 August.[25]

Dragoon and Its Aftermath

The die was thus cast for ANVIL, now renamed DRAGOON. Logistical preparations once more went ahead at full speed. Early in July the withdrawal of the three American and four French divisions from Italy began. Meanwhile, the allotment of assault shipping had been amicably arranged between Eisenhower and Wilson, the latter deciding he could make do with only 24 (instead of the requested 50) OVERLORD LST's after all and Eisenhower promising to release them on 15 July rather than the 10th, along with some additional miscellaneous assault and naval craft. Eisenhower also promised the necessary troop carrier aircraft and gliders. On the whole DRAGOON seemed to be comfortably provided for—so comfortably indeed that Wilson found himself unable to say in good conscience that his promised 6 LSI (L)'s were really essential for the immediate follow-up movement, and as a consequence had to accept ordinary troop transports instead.[26]

The debate had a final, rather anticlimactic, chapter. The spectacular Allied break-through in Normandy at the end of July seemed to the British to alter the whole situation and led them to a last-minute revival of the scheme to feed the ten DRAGOON divisions through Breton ports, the capture of which, at the moment, seemed imminent. On 4 August Churchill personally appealed to the President urging this diversion, and the next day the British Chiefs urged the same course upon the JCS. The American staff rejected the proposal out of hand, arguing that since OVERLORD was still somewhat behind its original schedule, the need for the southern France operation had not lessened; capture of the Breton ports was still uncertain, and, in any case, there were plenty of divisions in the United Kingdom and the United States to funnel into France whenever it became possible to do so.[27]

Churchill, meanwhile, had asked Wilson to report on the technical feasibility of the project. Wilson replied on 6 August that shipping was immediately available, including the vessels in which some of the DRAGOON assault forces had already embarked, to move seven of the ten divisions to Brittany with their assault ships and craft; they could arrive

[25] (1) Ehrman, *Grand Strategy V*, 355–56. (2) Matloff, *Strategic Planning, 1943–44*, pp. 471–73. Churchill also pointed out that Istria and Trieste were in Italy, not the Balkans.

[26] (1) Papers in SHAEF SGS 370.2/2, Opns from Med in Support of OVERLORD. (2) Robert Ross Smith and Charles F. Romanus, The Riviera to the Rhine, a MS in preparation for the series UNITED STATES ARMY IN WORLD WAR II. (3) Meyer, draft chapter, Theater Logistical Preparations for ANVIL.

[27] (1) CCS 603/16, 5 Aug 44, memo by U.S. CsofS, title: Opns to Assist OVERLORD. (2) Ehrman, *Grand Strategy V*, 363–65.

by the end of the month or by the first few days in September. Eisenhower would have to provide the reception capacity and any small craft that might be necessary. Sensing a new prospect for ending the European war in 1944, Churchill again appealed to Washington—this time to Harry Hopkins, since the President was on a trip to the Pacific—stressing the impact that would be produced by thrusting ten fresh divisions into the main front. The Prime Minister also approached General Eisenhower with a variant undertaking aimed farther south at Bordeaux. But although some of the SHEAF staff were taken by the idea Eisenhower and Hopkins held firm. Hopkins advised Churchill on 7 August:

> While I have seen no analysis of the logistics involved, I am absolutely certain you will find the supply problem insurmountable. Divisions are already available for Eisenhower's immediate build-up which will tax the ports to the limit. Then, too, no one knows the condition of the Brittany ports. . . . To change our strategy now would be a great mistake and I believe would delay rather than aid our sure conquest of France. . . .[28]

On the following day Roosevelt added his voice to the chorus of dissent. Churchill yielded and the debate finally ended. Exactly one week later Allied assault craft touched down on the beaches of the French Riviera.

As Hopkins had indicated, no careful study was ever made of the logistical feasibility of the Brittany operation, much less the one against Bordeaux. Yet, if the American decision seemed arbitrary at the moment, the turn of events on the European battlefield soon justified the decision against redeployment of the DRAGOON forces to Brittany or the Bay of Biscay. Instead of sweeping into Brittany to seize the ports, American armies threw the main weight of their offensive toward the Seine and beyond. SHAEF soon decided that the Seine and Channel ports, principally Le Havre and Antwerp, would have to provide the main support for Allied forces advancing rapidly toward the German border. Brest and Saint-Malo were not used after their delayed capture, and Saint-Nazaire and Lorient remained in German hands until the end. British forces took Antwerp on 4 September and Le Havre on the 12th. Le Havre was badly damaged and the Germans remained in control of the approaches to Antwerp for two months. The reception capacity in western France through which to feed the divisions from the Mediterranean, or for that matter those waiting in the United States, simply did not develop.

Then, in the rapid advances across France in August and September 1944, the problems caused by lack of port capacity were compounded by lengthening lines of communication. During the critical period in September, when advance Allied elements struck into the Siegfried Line, the limiting factor was not the number of divisions on the Continent but the ability to support the divisions already there at the farthest reaches of their advance.

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[28] (1) Quoted in Ehrman, *Grand Strategy V*, 367. The episode is treated in some detail on pages 363 through 367. (2) See also Churchill, *Triumph and Tragedy*, pp. 67–71; Butcher, *My Three Years with Eisenhower*, p. 634; Eisenhower, *Crusade in Europe*, pp. 281–84; Matloff, *Strategic Planning, 1943–44*, pp. 473–74; Pogue, *Supreme Command*, pp. 224–26.

In mid-August Eisenhower finally yielded, with some misgivings, to War Department proposals to accelerate the movement of divisions from the United States. Under the new plan, the 5 divisions originally intended to arrive in October were to be shipped in September, 2 of them to go directly to Cherbourg. The War Department proposed to ship in October the six divisions scheduled for shipment in November and December, thus bringing the European build-up to 42 divisions some two months earlier than originally anticipated. The whole acceleration was premature, for the divisions arriving in September could not be supported over the existing line of communications and were forced to sit idle in Normandy or to assume logistical functions. The accelerated movements in October could be accommodated only by diverting some of the arrivals to the United Kingdom and to Marseille.[29]

Given these circumstances, it is highly doubtful that the effort to feed the DRAGOON divisions through the Breton ports or Bordeaux would have been justified. It would not have solved the crucial logistical problem of August and September – sustaining the hot pursuit across France—any more than did the accelerated movements from the United States in September.

Contrary to British fears, the landings in southern France were a resounding success. The invaders swiftly captured Toulon and Marseille and swept up the Rhône to a junction, early in September, with Third Army elements that had penetrated to the area of Dijon. This success owed much, of course, to the swift advance of Eisenhower's armies across France, which threatened the rear of German forces in the south and forced them to disengage and withdraw. On the other hand, DRAGOON contributed nothing to OVERLORD itself except as the threat served to keep German forces in southern France while the main invasion was being launched, and it did not, any more than the Brittany or Bordeaux projects would have done, provide a solution for the major logistical problems in Europe in the critical months of September and October. Later, the new line of communications up the Rhône Valley did help to relieve the shortage of port capacity in northwestern Europe, which, even with this addition, continued to cramp operations on the western front until December. The ports in southern France were used to handle three divisions that sailed directly from the United States in October under the accelerated schedule, thus relieving the load on the ports and beaches in northwest France and in the United Kingdom. By the end of the year the divisional build-up in the European theater had reached 49 as opposed to the originally scheduled 43, not counting the 3 U.S. assault divisions in DRAGOON and the 7 French divisions that followed. By that time only 5 more American divisions remained in the strategic reserve for possible commitment to Europe. The deployment of U.S. ground combat power into the main front in northwestern Europe had been accelerated, but logistical limitations prevented its full employment when it was most needed. For by November the Germans had dug in along the Siegfried Line and the prospects of ending the war in Eu-

[29] Ruppenthal, *Logistical Support of the Armies I*, 449–58, and *II*, 276–89.

rope in 1944, which had seemed so bright in August and September, had gone glimmering.[30]

To the campaign in Italy, however, DRAGOON dealt a blow that may well have been decisive (though this, of course, cannot be proved) by prolonging the war in that sector through the winter and following spring. Seven divisions were withdrawn for southern France at the precise moment that the Germans were reinforcing their Italian front with eight fresh divisions; soon thereafter, as Allied pressures weakened, the Germans were able to withdraw four divisions.[31]

In acquiescing to ANVIL early in July, the British Chiefs had clung to the hope that the Italian offensive might still be salvaged. Approving Wilson's revised plans for a drive through the Apennines to the Po, then north and northeastward to a line running from Venice westward to Brescia, they asked the Americans to support the campaign in the same spirit that they themselves were supporting ANVIL. For their part the British managed to scrape together from various corners of the Mediterranean the equivalent of two more divisions and nine air squadrons. But the Americans by now regarded the Italian front purely as a holding operation, and were already considering a transfer of the Fifth Army into France as soon as the Po Valley had been gained—or sooner, if General Alexander's drive should bog down in the Apennines. Accordingly, they declined to sanction any particular line of advance beyond the Po Valley so as to keep open the option of a westward movement along the Ligurian coast. Reinforcements to the Fifth Army were limited to divisions already scheduled to move to the Mediterranean—an American Negro infantry division (the 92d) and a Brazilian division, both scheduled to reach the theater in September and October. In August the U.S. 91st Infantry Division, which had arrived in North Africa in the spring, was also committed in Italy.[32]

Despite the ANVIL withdrawals during July, Alexander's two armies pushed steadily forward during that month, reaching the Gothic Line by the beginning of August. There they had to pause to regroup, and did not resume the offensive until the 25th. For a time the operation went well; Pisa and Lucca fell to Fifth Army while Eighth Army pushed almost to Rimini on the Adriatic coast. On the eve of the second Quebec conference in September, Wilson and Alexander were confident that the Gothic Line could be breached and the Allies would be in the Po Valley before winter. But time and momentum had been lost, and these hopes were to be dashed before the end of September.[33] The battle in Italy settled down into a long stalemate that was to endure until nearly the end of the war.

[30] (1) Ruppenthal, *Logistical Support of the Armies II*, 280–83. (2) See also Ruppenthal, "Logistics and the Broad-Front Strategy," in Greenfield, ed., *Command Decisions*, pp. 419–27.

[31] Ehrman, *Grand Strategy V*, 350–51, 384.

[32] (1) CCS 603/8, 10 Jul 44, memo by Reps Br COS, title: Opns to Assist OVERLORD. (2) CCS 603/9, 12 Jul 44, memo by Reps Br COS, same title. (3) CCS 603/11, 24 Jul 44, memo by U.S. CsofS, 24 Jul 44, same title. (4) Related papers in ABC 384 Europe (5 Aug 43) Sec 9-A. (5) Ehrman, *Grand Strategy V*, 358–59. (6) Matloff, *Strategic Planning, 1943–44*, p. 475.

[33] Ehrman, *Grand Strategy V*, 359–61, 529–31.

Portents of a New Shipping Crisis

For four months following the Normandy landings the immense pool of Allied shipping concentrated in British waters and plying the North Atlantic sea-lanes proved more than adequate to its tasks. Preparations and shipping allocations for the southern France operation went forward, moreover, despite the uncertainties surrounding it. The mounting of DRAGOON in August raised no unforeseen problems in the provision of ocean-going tonnage.

Ultimately, nevertheless, the failure to secure adequate port capacity in northwestern Europe brought the inevitable penalty. By the end of June the American supply build-up on the Continent was about 30 percent behind schedule and the vehicular build-up about 35 percent behind. To speed up movements from the United Kingdom to the Continent the theater received an additional allotment of 34 MT ships and authorization to retain the entire complement (258 all together) through the second month of the operation. The net effect was to add 118 ocean-going MT ships to the 140 already counted on for July. At the same time, because Cherbourg was still not in operation and there were very few deep-water ports anywhere else in the beachhead, the transfer of coasters servicing the American sector back to the British domestic trade was postponed; coasters were indispensable not only in the small ports and on the beaches but for full utilization of the capacity of the larger ports as well. Almost all the coasters assigned to the American and British sectors in fact remained in service right to the end of the campaign. Their retention did permit the release of some of the ocean-going shipping. By the end of August the Americans were using only 35 of the 60 stores ships originally allocated to supplement and replace coasters, and the MT ship allocation had been reduced to 62. This was still 22 more than the original MT ship allotment, and no further releases were in prospect before mid-September.[34]

Thus the pool of shipping engaged in moving supplies across the Channel diminished very little before late August. Meanwhile more and more ships were being assigned to the transatlantic service with an increasing number each month destined for discharge directly on the Continent. The spectacular advances of July and August, moreover, gained much ground but few ports. As early as July the inevitable consequence had begun to appear—a growing accumulation of cargo shipping ostensibly awaiting discharge but actually serving as mobile depots from which the forces ashore drew supplies selectively as needed.

At the end of June approximately 200 ships were scheduled to reach the European theater from the United States during July and 200 more during August. The theater proposed to unload 100 on the Continent in July and 125 in August—mostly commodity loaders. By mid-July it was becoming ever more evident that all these commodity loaders could not be unloaded on the Con-

[34] (1) On the original allocations, see above, Chapter XIV. (2) Ruppenthal, *Logistical Support of the Armies I*, 415–22, 426, and *II*, 124–26. (3) Papers in folders London 1944, Cont M and S Com, U.K., BMSM 1944, WSA Conway File. (4) JMTC Memo No. 8, 24 Jun 44, title: Additional Cargo MT Shpg for OVERLORD. (5) CMT 57/8, 29 Jul 44, rpt by CMTC, title: Shpg Reqmts for OVERLORD.

tinent, and WSA began to view the situation with alarm. Even by optimistic theater estimates, 76 commodity loaders would still not be discharged at the end of July, and 129 more were scheduled to arrive in August, making a total of 205 to be unloaded during the latter month. It was difficult for WSA officials to accept the theater's estimate that 133 ships could be discharged in August, 120 of them on the Continent. Even if continental discharge could be stepped up to that extent, it appeared that at the end of August there would still be from 160 to 170 idle ships in northwestern Europe.[35]

These fears were well-founded. Only 76 cargo ships from the United States were discharged on the Continent in August, and by the end of the month 207 commodity loaders, loaded or awaiting return convoy, had accumulated in northwestern Europe. Meanwhile the July–August offensives generated even greater demands. In late July the theater hoped that, with Saint-Malo and probably other Breton ports coming into operation, and higher intake through the small ports, an average continental discharge rate of 27,000 tons per day might be attained in September (10,000 tons above the daily average in July) and 40,000 in October. With this expectation the theater first asked for 285 arrivals in September; pressed by the War Department it finally settled for 250 as the "irreducible" minimum. Of these 175 were for discharge on the Continent, 50 more than the theater staff really expected to be able to unload. Discharge of all the ships would depend, admitted Lt. Gen. John C. H. Lee, the communications zone commander, "on tactical advances and capture of additional anchorages and ports." Whether these materialized or not, he felt that it was "the theater's responsibility to provide a flow of supplies."[36]

During August, ASF and WSA tried hard to meet the theater's demands for September, even as requests came in for additional September retentions for the build-up in southern France, and indications appeared of another rise in Pacific requirements. At first it seemed likely that the European demand could only be met by nearly suspending nonmilitary programs in the Atlantic, including both the U.K. Import Program and USSR Protocol sailings, and by reducing departures for the Mediterranean and Pacific. The War Department joined WSA in attempting to persuade the European theater to curtail its demands, pointing to the large backlog of ships awaiting discharge and the generally slow turnaround in that theater, but the only concession they could get was a reduction of ten vessels in each of the six convoys sailing between 12 September and 10 October. Requirements for arrivals in September were not affected, and were met in full.[37]

[35] Msgs exchanged between WSA, Washington, and WSA, London (Conway and Reed) 17–27 Jul 44, folder London 1944, WSA Conway File.

[36] (1) Memo, CG COMZ ETOUSA for CG ASF, Attn Gen Gross, 28 Jul 44, copy in folder Army 1944, WSA Conway File. (2) Msg, Conway to Kerr, 27 Jul 44, and other corresp in folder London 1944, WSA Conway File. (3) Ruppenthal, *Logistical Support of the Armies II*, 126–27.

[37] (1) Msg W–76034, AGWAR to ETOUSA, 5 Aug 44, SHAEF AG 400.2 Shipments and Tonnage Allocations. (2) Ruppenthal, *Logistical Support of the Armies II*, 126–28. (3) Msg, Wylie to Lee, 15 Aug 44, folder War Dept 1944, WSA Conway File. (4) Ltr, Monroe to Kerr, 30 Aug 44, folder U.K., WSA Conway File. (5) Msg, Somervell to Lee, 31 Aug 44, folder Navy 1944, WSA Conway File.

As it happened, only a moderate reduction had to be made in British import sailings, partly because a number of MT and stores ships were released from the cross-Channel cargo shuttle in August and reached U.S. ports in time to be loaded and join convoys arriving in Europe in September. But this proved to be merely a transfer from one pool tied up in the theater to another. On the Continent, only 95 ships were discharged in September. Before the end of the month the theater, in desperation, agreed to discharge some of the commodity loaders in British ports for later transshipment to the Continent. This was only a palliative. By the beginning of October, with Le Havre not yet in operation and the approaches to Antwerp still in enemy hands, the pool of idle and fully-loaded shipping in the area still numbered 180 ships.[38]

By late September 1944, then, a new Atlantic shipping crisis was in the making, a part of the broader logistical dilemma created in the European theater by the rapid advance of Allied armies eastward without adequate lines of supply. It coincided with a similar crisis in the Pacific resulting from the accelerated advance in that theater— particularly the decision to invade Leyte ahead of schedule.[39] These developments, together with new shipping requirements for civilian relief in Europe now in prospect, and the supply build-up in Siberia in anticipation of Soviet entry into the war against Japan, in October were to combine to make cargo shipping again, after almost two years of relative plenty, the principal limitation on Allied strategy.[40]

When the Western Allied leaders assembled at Quebec on 12 September 1944, the logistical crisis developing in northwestern Europe was only a cloud on an otherwise bright horizon as far as the war with Germany was concerned. The Germans were retreating on all three European fronts; in Italy and France, indeed, they seemed about to disintegrate. In eastern Europe Soviet armies had swept through Bulgaria and Romania and had reached the Yugoslav frontier near Belgrade. Finland had dropped out of the war. Only in Poland had the Soviet armies temporarily halted. In Washington and London, Germany's collapse before the end of the year was confidently predicted, though Churchill himself had serious doubts.[41]

The final decisions on the grand design for defeating Germany had been made and resources had been allocated to execute them. The only major questions still awaiting decision at the highest level concerned the possible transfer of the U.S. Fifth Army from Italy to the western front, and future (necessarily limited) undertakings in the eastern Mediterranean. The second Quebec conference therefore dealt mainly with the war against Japan and political ques-

[38] (1) Msg NA 9037, Conway to Reed, 8 Sep 44. (2) Msg NA 9008, Conway to Reed, 6 Sep 44. Both in folder London 1944, WSA Conway File. (3) Ltr, Conway to Monroe, 24 Aug 44, folder Reading File 1944, WSA Conway File. (4) Min, 35th mtg Cont M and S Com, 13 Sep 44, folder M and S Com 1944, WSA Conway File. (5) Memo, Donald for Conway, 16 Sep 44, folder Reqmts and Avlbles 1944, WSA Conway File. (6) Ltr, Conway to Gross, 29 Sep 44, folder Army 1944, WSA Conway File.

[39] See below, chs. XVI and XIX.

[40] See below, ch. XXII.

[41] (1) Ehrman, *Grand Strategy V*, 377–84, 395–403. (2) Churchill, *Triumph and Tragedy*, pp. 195–96.

tions relating to postwar adjustment.[42] To bring these developments into perspective, it is now time to turn to the logistics and strategy of the war against Japan in 1943 and 1944.

[42] On the second Quebec conference, see below, Chapter XXII, and Matloff, *Strategic Planning, 1943–44*, pages 508–31.

PART FIVE

THE WAR AGAINST JAPAN
1943–44

CHAPTER XVI

Pacific Strategy and Its Material Bases

The Question of Priority

The over-all Anglo-American strategy for the conduct of the war, reiterated time and again at every major international conference from ARCADIA to Yalta, gave first priority to the war against Germany. The concurrent objective in the war against Japan, agreed finally after a considerable verbal battle with the British at TRIDENT, was defined as "to maintain and extend unremitting pressure against Japan with the purpose of continually reducing her military power and attaining positions from which her ultimate surrender can be forced." Upon the defeat of Germany, the "full resources" of the United States and Great Britain were to be directed toward bringing about at "the earliest possible date" the unconditional surrender of Japan.[1] The word *extend* in the formula stood as a pointed reminder of American determination not to allow the priority accorded the war in Europe to prevent allocation of sufficient resources for the war against Japan to enable the allies to seize and maintain the initiative in the Pacific and southeast Asia. The Americans did not, indeed, agree to accord OVERLORD an "overriding" priority over Pacific operations, as opposed to those in the Mediterranean area, until SEXTANT late in 1943.[2]

In terms of the allocation of American resources, the priority given the European war was never quite so overweening as even the TRIDENT formula, interpreted literally in terms of the traditional military principle of concentration of force, might have indicated. During 1942, in order to establish defensive positions strong enough to blunt the force of initial Japanese drives, American troops were committed in the Pacific in as great numbers as in Europe and North Africa. These initial dispositions generated pressures of their own, and the strategy of "unremitting pressure" was interpreted on the American side as dictating continuous augmentations, particularly as long as the major Allied effort against Germany was in the Mediterranean, which Americans considered a peripheral theater. Admiral King and his staff became the confirmed supporters of aggressive action in the Pacific; and Army planners, aware of the advantages to be gained by exploiting every opportunity to hasten victory over Japan and under similar pressures from their own theater commanders in Pacific areas, seldom found it either neces-

[1] (1) CCS 242/6, 15 May 43, title: Final Rpt to President and Prime Minister (TRIDENT). (2) See above, ch. III. (3) See also CCS 319/5, 24 Aug 43, title: Final Rpt at QUADRANT, and CCS 426/1, 6 Dec 43, title: Final Rpt at SEXTANT.

[2] See above, chs. III, VIII, XI.

sary or expedient to recommend curtailment of the commitments required to carry out an aggressive strategy in that area.

Whether the resulting scale of American commitments to the war against Japan constituted any conscious violation of the "Germany first" principle is a moot question. It would be more accurate to say that the commitments reflected a liberal interpretation of the TRIDENT formula. Moreover, in no small measure they reflected the power generated by the American military machine once the economy of the nation was fully geared to war, a power that enabled the Americans to wage war successfully on two fronts. A considerable part of the resources committed in the Pacific could not be used to great advantage in Europe in any case. The principal resource in this category was the rapidly growing U.S. fleet, the main body of which could find no profitable employment in the Atlantic. In this sense, the scope of the commitment to the Pacific war was determined in production plans and priorities dating back to 1940 that provided for a two-ocean Navy. The very existence of a large fleet in the Pacific served as a magnet for other resources—Army troops and planes, merchant shipping, landing ships and craft, and all the paraphernalia of supporting elements needed to put them to use. It was for these other resources, and principally assault shipping, that marginal needs in the Atlantic and Pacific were in clear competition.

During 1943 the flow of Army troops and other Army resources to the areas of the war against Germany was considerably greater than that to the areas of war against Japan, a sharp contrast to the situation a year earlier, but the flow to the Pacific was still considerably greater than originally anticipated. If naval resources are also counted, the general distribution of American military power between the two major areas two years after Pearl Harbor was still about even.[3] Nor did the momentum of the build-up in the Pacific slow perceptibly during the first six months of 1944, despite the demands of OVERLORD. While Army divisions in the European theaters were increasing from 17 to 28 during this period, they rose from 13 to 20 in the Pacific. Only after the launching of OVERLORD and the final commitment of the great mass of the U.S. Army in Europe did the effects of the "Germany first" strategy begin to show. After June 1944 the Army planned to send only 4 more divisions to the Pacific until after the war in Europe ended. The rest of the 39 divisions in the United States were scheduled for progressive commitment to the European front should the conflict there continue into 1945.[4]

By mid-1944, in general the Army's concentration was in the war against Germany, while that of the Navy was in the war against Japan. On 30 June 1944, Army personnel strength in the theaters of war against Germany stood at 2,398,000; in theaters of war against Japan it was 1,232,000; in contrast, the Navy had approximately 1,200,000 men in the Pacific, and a total of 800,000 in the Atlantic, Europe, and the Mediterranean. Marine Corps units overseas were almost entirely in the Pacific. While the

[3] For a strategic inventory at the end of 1943 see Matloff, *Strategic Planning, 1943–44*, pp. 388–401.

[4] (1) *Ibid.* (2) See above, ch. XV, especially Table 31.

ratio of Army-controlled shipping serving the two areas fluctuated from 3-2 to 5-4 in favor of the Atlantic front, the total cargo shipping serving both Army and Navy was in relative balance between the Pacific and Atlantic fronts by the fall of 1944. Total figures for aircraft, Army and Navy, show a slight preponderance in the Atlantic theaters after mid-1943, but it should be noted that the AAF's most significant new plane, the B–29 bomber, was committed only in the war against Japan. Most important of all, the largest, newest, and best units of the U.S. Navy—aircraft carriers, battleships, heavy and light cruisers, destroyers, and submarines—were concentrated in the Pacific, together with an immense supporting establishment afloat and ashore. Along with the fleet went almost all the Navy's assault transports (APA's) and assault cargo ships (AKA's) with their smaller craft, and they were the mainstays of amphibious operations over the long ocean distances of the Central Pacific. When the Normandy landings were made, the European and Mediterranean theaters had more LST's and LCT's, then the truly critical types in those areas, although this had not been true of LST's during most of the period immediately preceding. Amphibious vehicles were divided between the two areas on a roughly equal basis in accordance with suitability and peculiar need. The European and Mediterranean theaters got a clear priority on Army-produced DUKW's, but the lion's share of the Navy-produced amphibious tractors, peculiarly suited for use in operations against coral atolls, went to the Pacific.[5]

About the main area in which the competition for resources between Atlantic and Pacific vitally affected strategy in 1943–44, that of assault shipping, much has already been said and little more need be added here. American assault shipping was finally supplied in ample quantities for European operations, some at the expense of operations in the Pacific, but failure to make a timely decision to provide those ample quantities complicated strategic planning for both OVERLORD and ANVIL at every turn and seriously weakened the American position in the long strategic debate with the British. The accelerated building program of fall 1943, pushed through at the insistence of the Navy, promised an increasing supply in the Pacific as the year 1944 wore on, and enough by mid-1945 to make possible a 10-division assault on the Japanese homeland without any substantial redeployment from Europe.[6] When the rapidly broadening scope of Pacific operations began to put a strain on available resources late in 1944, the critical area was not assault shipping, but rather ordinary cargo shipping and Army resources necessary for support of large-scale land operations.

The "Germany first" strategy, in any case, as modified and interpreted in American councils, left enough sinews for maintaining and extending "unre-

[5] (1) Army figures are taken from ASF, *Statistical Review, World War II*, and from STM–30, 1 Jan 48, Strength of the Army. (2) Navy figures are from JCS 521/6, 11 Jun 44, title: Strategic Deployment of U.S. Forces to 30 Sep 45. (3) The comparison of cargo shipping in fall 1944 is based on JCS 1173, 11 Nov 44, title: Remedies for Existing and Prospective Shortages in Cargo Shipping. (4) On the division of assault shipping in mid-1944 see Table 29 at the end of Chapter XIII.

[6] See above, chs. X and XII.

mitting pressure" in the Pacific in 1943–44. The war against Japan was kept going during that crucial period at almost the same level of intensity as the war against Germany. The year 1943 was a year of preparations and limited offensives in Europe and the Mediterranean as well as in the Pacific. During the summer and fall of the next year, 1944, the advances of American forces in the Pacific were just as spectacular, at times more so, than those in Europe. At the same time in 1944 that the supreme operation of the year, OVERLORD, was being mounted from the British Isles, Operation FORAGER against the Marianas was being mounted in the Pacific, involving in its assault phases almost as many troops and almost as much amphibious lift as the Normandy invasion.[7] The really decisive campaigns against Japan were fought simultaneously with those against Germany. Though by the end of 1944 American forces were only as far as the Philippines—about 1,800 miles from Japan—attrition of Japanese air, naval, and merchant marine strength in these supposed preliminary campaigns had reduced Nipponese power to a shell. If in the basic strategy these advances had been designed only to secure bases from which a final decisive assault could be launched, they did in fact bring Japan so close to the brink of defeat that, when joined with the development of new and more destructive instruments of war, they rendered actual invasion of the industrial heart of Japan unnecessary.

The remarkable progress of the war in the Pacific was attributable, for the most part, to the steady growth of the U.S. Fleet in that area. The Army nevertheless did commit to the Pacific in 1943 and 1944 at least one-third of its resources overseas — a smaller commitment proportionately than in 1942, but it still meant more troops, more aircraft, more shipping, and better and more systematic supply support. This is not to say that the war in the Pacific ever became one of unlimited means. Inevitably, shortages limited the scope of operations, but resources did prove sufficient to permit several successive accelerations in the timetable.

Insofar as priority affected the availability of means in the Pacific, it was largely a matter of Army resources and merchant shipping. In the Army's formal supply priorities structure, the European and Mediterranean theaters normally rated higher than the Pacific theaters, and this inevitably affected both the quantity and quality of support furnished troops in the Pacific.[8] It meant that on newer and better types of equipment and on critical items of all sorts the Atlantic theaters got first call if they could definitely prove they needed them. This was particularly true after SEXTANT, when OVERLORD was given overriding priority. That it worked certain hardships on the Pacific theaters and was a prime factor in creating a dual standard of living in the Pacific, a higher one for the Navy, and a lower one for the Army, is undeniable. It also meant that the Central Pacific, primarily a naval theater, was apt to suffer less for want of resources than the South-

[7] For the forces engaged in Operation FORAGER, see Samuel Eliot Morison, "United States Naval Operations in World War II," vol. VIII, *New Guinea and the Marianas* (Boston: Little, Brown and Company, 1953), 156–57.

[8] On the priorities structure, see above, Chapter VI.

west Pacific, where the predominant forces and the commander were from the Army. Yet the volume of American production after mid-1943 went far to negate the effects of lower priority. Truly critical matériel shortages became fewer and fewer and resulted primarily from maldistribution. The Pacific theaters were more likely to be short particular items than total quantities.

A similar situation existed with regard to Army troop units and merchant shipping. As long as there was a large uncommitted pool of Army units in the United States, Pacific needs could be met quite satisfactorily if shipping could be found to transport and support them, but by mid-1944 the military manpower situation was becoming increasingly stringent as overseas deployment to both Europe and the Pacific mushroomed. With most of its remaining available units slated for Europe, the Army could not furnish the service and supporting troops needed for Pacific operations. In this way the pinch of the "Germany first" strategy was finally felt. Similarly, allocations of merchant shipping were more adequate after QUADRANT for Atlantic than for Pacific areas. Each shipping crisis in the Pacific was solved by diverting a temporary surplus from the Atlantic pool. In the fall of 1944, however, the mounting shipping demands for support of the large Army forces deployed in Europe seemed to rule out any further transfers.

In any case, low priority only aggravated logistical problems that geography created. Vast ocean distances and primitive facilities created demands for shipping, construction, supplies, and service troops, that for all practical purposes were insatiable. The development of policies, procedures, and techniques best suited to the Pacific areas was necessarily slow. In the last analysis, it was the China-Burma-India area that suffered most acutely from the priority given the European war, for it was the CBI that was most frequently in direct competition for the very resources already committed to Europe — a large land army with all its accouterments and British naval resources.

A Strategy of Opportunism

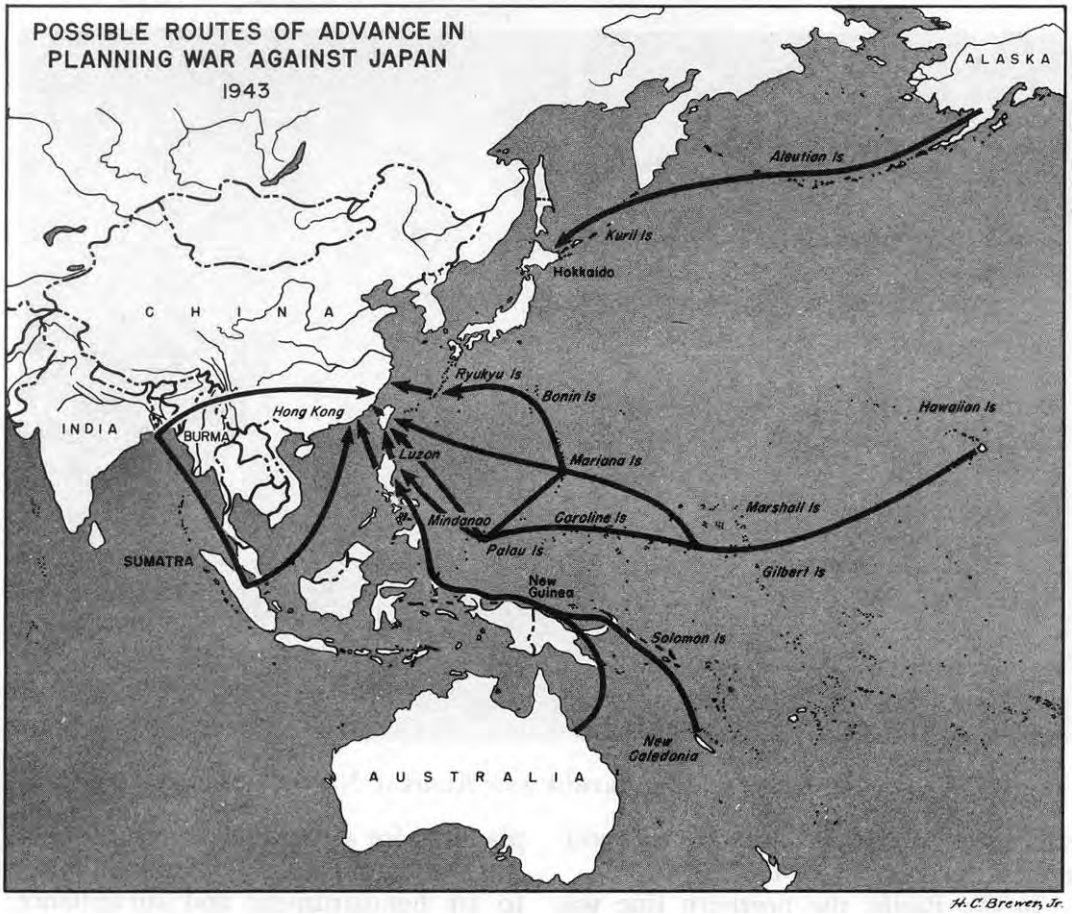
Pacific strategy during the middle war years was largely opportunistic.[9] Though efforts began as early as the TRIDENT Conference in May 1943 to develop an over-all plan for the defeat of Japan, it proved easier to agree on specific operations some months in advance than on any grand design. Elaborate timetables of operations prepared for each great international conference were generally outdated by the time the next conference met. The mobility of the Pacific Fleet, particularly its supply bases and its great floating carrier air bases, and the development of new techniques for employing land-based aircraft along the fringes of Pacific islands made this approach a most feasible and successful one. Moreover, the inability of Army

[9] The various Army and JCS papers concerned with the development of Pacific strategy are not all cited here individually except where they are quoted or developed in some detail. Complete accounts of the development of Pacific strategy in this period are to be found in Matloff, *Strategic Planning, 1943–44* and Louis Morton, *Strategy and Command: The First Two Years*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1962) (for the earlier part of the period covered), and in Grace Hayes, Section IV: The War Against Japan, 2 vols., in History of the Joint Chiefs of Staff in World War II, MS, JCS Historical Sec. When not otherwise indicated, this section is based on these three works.

and Navy staffs to agree on any single line of attack made temporary *modi vivendi* a necessity. The fact that almost all resources in the Pacific were under American control and therefore subject to the direction of the JCS alone without consultation of the British facilitated rapid decision. After one final challenge at QUADRANT, the British Chiefs left questions of Pacific strategy and accompanying allocations of American resources entirely for American decision. Combined debate on matters relating to the war with Japan was confined largely to the questions of operations in southeast Asia and China and of the over-all strategic plan for the ultimate defeat of Japan in which it was initially expected these areas would play an important role.

Roughly five different lines of advance figured in strategic planning for the ultimate defeat of Japan, three across the Pacific and two from India. The northern route across the Pacific ran from Alaska along the Aleutian chain and the Kurile Islands directly to Hokkaido, the northernmost of the Japanese home islands. All the other routes had as their vital objective the Luzon-Formosa-China coast area, from which Japan could be brought under devastating air attack or actually invaded by Allied ground forces. One Pacific line to these objectives proceeded northwest from Australia along the New Guinea coast and through the Bismarck Archipelago to the Vogelkop, thence to Halmahera Island, the Palaus, and Mindanao (the southernmost of the Philippine Islands). The second ran across the Central Pacific from Hawaii through the Gilberts, Marshalls, Carolines, Marianas, and Palaus, directly to Luzon in the Philippines, or to Formosa. From India the first route was an overland one through Burma and China to Canton, Hong Kong, and Shanghai on the coast; the second was a sea route around southeast Asia through the Strait of Malacca and the South China Sea. *(Map 4)*

The disposition of Allied forces in early 1943 militated against concentration on any one line of advance for some time to come. This disposition, primarily defensive, had been made to counter the Japanese outward push in all directions in early 1942. Defense bastions were established and held in Australia and the South Pacific islands, in Hawaii, Alaska, and in India, and each of these bastions could serve as a starting point for a counteroffensive. The first such counteroffensives were actually begun in the South and Southwest Pacific in 1942, and resulted in the ejection of the Japanese from Guadalcanal and the north coast of Papua. By early 1943 the planners were beginning to explore other possibilities. At Casablanca an offensive from India against Burma was tentatively agreed upon, the Americans presented a plan for an attack on either Attu or Kiska in the Aleutians, Admiral King revived the classical naval concept of a drive across the Central Pacific to the Philippines, and the British indicated their desire to move ultimately against Sumatra and Singapore. The earliest over-all plan for the defeat of Japan, presented by the Combined Staff Planners at TRIDENT, envisaged an attack converging on the China coast from all directions save the North Pacific. This plan assumed a long war against Japan, to continue for three years after the defeat of Germany. There was no agreement on it either at TRIDENT or



MAP 4

at QUADRANT, where a revised and more detailed version was presented.

The JCS at QUADRANT specifically rejected the concept and asked the planners for a new accelerated plan that would provide for the defeat of Japan within one year after the surrender of Germany.[10] The search for such a formula inevitably drew attention away from China and southeast Asia where a maze of conflicting national purposes—American, British, and Chinese—plagued every effort, and to which areas resources (large ground forces and the British Navy) could not be made available until the end of the war in Europe. It fixed attention on the Pacific where the bulk of American naval strength lay and where American resources could be massed under the unilateral direction of the JCS. Though no specific plan for the defeat of Japan within one year after the surrender of Germany was ever approved, the stage was set for decisions at SEXTANT that would finally and definitely subordinate the campaigns in

[10] See above, ch. VIII.



GENERAL MACARTHUR AND ADMIRAL NIMITZ

southeast Asia and China to an accelerated advance across the Pacific.[11]

In the Pacific the northern line was quickly ruled out as a main route of advance. The cold climate and dense fogs of the Aleutians and Kuriles hindered both air and naval action, and the barren islands and rocky harbors were unsuited for major base development. In May 1943 Attu was taken in a bloody fight and in August Kiska was occupied without bloodshed. When these fundamentally defensive positions had been acquired, the advance stopped. The possible necessity for a northern line of supply to the USSR, should that country enter the war against Japan, kept planning for a possible advance through the Kuriles alive but activity was limited to air bombardment and surveillance. The future lay rather with the Central, South, and Southwest Pacific. In the Central Pacific naval forces could be most profitably employed, and in the South and Southwest the principal Army forces in the Pacific had already been committed.

Until some time after the QUADRANT Conference, the South and Southwest Pacific continued to be the only active areas of operation. Although the South Pacific was a part of Admiral Nimitz' Pacific Ocean Areas command, the campaign waged there in 1943 was so integral a part of that waged by General MacArthur in the Southwest Pacific Area

[11] On strategy in China, Burma, and India see below, Chapter XXI.

that the JCS finally agreed that over-all strategic direction of the effort should be entrusted to MacArthur, thus settling the troublesome Pacific command problem for the operations of the next year and a half. The Pacific Military Conference in March 1943 had set the goals for the entire campaign, tailoring them to the resources available. The SWPA goal for the year 1943 was the occupation of the north coast of New Guinea as far west as Madang and of Cape Gloucester on the south coast of New Britain Island; meanwhile the South Pacific forces, under tactical control of Admiral William F. Halsey, were to advance up the Solomons ladder as far as the southern end of Bougainville. The ultimate goal, defined in a JCS directive that dated back to July 1942, was the Japanese stronghold of Rabaul on the northeastern tip of New Britain. Because the resources Halsey and MacArthur thought necessary were not available, the final reduction of Rabaul was postponed to the next year.[12]

The converging operations on Rabaul, designated CARTWHEEL, involved a series of major landings beginning in June 1943 and ending in March 1944. In SWPA successive amphibious assaults were successfully mounted against the islands of Kiriwana and Woodlark, along the coast of New Guinea at Nassau Bay, Lae and Salamaua, Finschhafen, and Cape Gloucester, against Arawe on New Britain Island, Saidor (also on the New Guinea coast), and Manus Island. In the South Pacific assaults took place against New Georgia, Vella Lavella, and Arundel islands, the Treasury Islands, Bougainville, and Emirau Island.[13] In each of these areas similar techniques were used. Japanese strongpoints were bypassed to the maximum extent possible, and attacks undertaken against weakly defended areas where air bases were then captured or constructed and base and harbor facilities set up. The strongpoints were then neutralized from the air bases, leaving the Japanese in bypassed areas to be slowly mopped up or to simply wither on the vine. The key to success lay in the establishment of air and naval supremacy that enabled the Americans to choose the point of attack and, once it had been chosen, to effectively isolate the Japanese forces holding it. The technique was so successful that, applying the doctrine of strategic opportunism, the JCS decided that Rabaul could be neutralized and bypassed. Yet, even with these techniques, the advance during 1943 was slow, and not until the spring of 1944 was the Bismarcks Barrier broken and Rabaul neutralized, opening the way for the advance along the north coast of New Guinea toward the ultimate objective in the Philippines.

The Navy meanwhile was looking to the Central Pacific as an area in which the Pacific Fleet could be far more profitably employed than around the islands to the south, and the pace of the advance thereby tremendously speeded. There was little argument about the eventual desirability of a drive across the Central Pacific; the issue was rather its timing and the emphasis to be placed upon

[12] On these decisions of the Pacific Military Conference and the reasons for them, see Leighton and Coakley, *Global Logistics and Strategy, 1940–43*, pages 694–95.

[13] For a detailed account of these operations see John Miller, jr., *CARTWHEEL: The Reduction of Rabaul*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1959).

it in relation to the campaign in the southwest. The Navy at first conceived that the advance in the Central Pacific should begin with an operation directly against the Marshalls, to be followed, when the situation permitted, by assaults on the far more difficult strongholds of the Caroline group, including the principal Japanese naval and air base at Truk. From thence two possible lines suggested themselves, one through the Mariana, Bonin, and Ryukyu Islands toward the Japanese home islands or Formosa, the other through the Palaus to the Philippines, Formosa, and the China coast. The second line was the one generally accepted until early in 1944, providing as it did for much closer co-operation with the forces advancing in SWPA toward the Philippines. MacArthur saw this advance toward the Carolines and Palaus as merely flank protection for the main attack from New Guinea northward, but Admiral King saw it as the main effort and he had important support for his viewpoint even from members of the Army staff. Perhaps the majority of resources necessary to support two lines of advance were available in, or peculiarly suited to, one area or the other; yet, for certain vital elements—notably trained and experienced amphibious divisions, assault shipping, and aircraft—there was clear and unmistakable competition. There was also in the offing competition for ordinary troop and cargo shipping between two theaters equally dependent upon water transport and for the resources of the South Pacific Area when its mission was completed by the neutralization of Rabaul.

The Central Pacific advance was approved in principle at the TRIDENT Conference. In June 1943 the Joint Planners began to work on schemes for direct assaults against Kwajalein, Wotje, and Maloelap in the Marshalls. Weighing the requirements for these assaults, they soon concluded that to meet a November target date the 1st Marine Division would have to be withdrawn from SWPA and the 2d Marine Division from the South Pacific along with assault shipping to move them, and that one heavy and one medium bomber group of the AAF from SWPA would be necessary to supplement the Navy's carrier task forces. These proposals evoked strong protests from MacArthur, who sensed a shift in strategic direction in the Pacific. He urged that the advance from SWPA, firmly supported by land-based aircraft, offered a far less hazardous method of approach to the Philippines than amphibious attacks through the mandated islands with only carrier-based support. General Marshall pointed out to Admiral King the high shipping cost involved in moving the 1st Marine Division from Australia and replacing it with an amphibiously trained Army division from the United States. On the other hand, the elder statesmen of the JSSC bluntly proposed that the Central Pacific drive be accorded clear first priority since it offered the quickest and least expensive approach to the vital objectives along the China coast.

The JCS decision in July was the first of a long series of compromises involving the priority of the two lines of advance. It approved a less expensive first effort in the Central Pacific against the Gilbert Islands and Nauru to be launched on 1 December 1943 as a prelude to an attack on the Marshalls a month or two later. At this time the ultimate objective of CARTWHEEL was

also revised to provide for the neutralization rather than the reduction of Rabaul, at least partially on the reasoning that neutralization would require fewer resources and would enable the South Pacific to release the 2d Marine Division and some amphibious lift. In place of the 1st Marine Division from SWPA, the Army's amphibiously trained but inexperienced 27th Infantry Division then in Hawaii would be used.

These decisions were consolidated and extended in a timetable of specific operations presented by the JCS at the QUADRANT Conference. In this timetable the advance along the two axes in the Pacific was to be synchronized with the reconquest of Burma and the overland advance through China to the coast. The target date for the Gilberts was moved up to 15 November 1943, the assault on the Marshalls to follow on 1 January 1944, then Ponape in the Carolines on 1 June, Truk on 1 September, and the Palaus at the very end of the year. It was expected that in SWPA, meanwhile, the neutralization of Rabaul would have been completed by 1 May 1944, followed by attacks on Manus Island 1 June, Hollandia 1 August, Wakde 15 September, Japen Island 15 October, and Manokwari on the Vogelkop 30 November, bringing both lines of advance to the approaches to the Philippines at the end of 1944. No definite priority between the two was set, but the JCS stipulated that "due weight" was to be given to "the fact that operations in the Central Pacific promise more rapid advance."[14]

This carefully stated conclusion gave rise to the British question whether it would not be better to curtail Southwest Pacific operations, concentrate on the Central Pacific, and free more resources for the war against Germany. While General Marshall's answer minimized this competition on the ground that most of the forces and reserves for the continuing offensive in the Southwest Pacific were already deployed, he did not really set British doubts at rest.[15] And the competition Marshall so minimized flared up briefly immediately after QUADRANT as the costs of launching the Central Pacific drive were evaluated more closely.

The major issue was personnel and cargo shipping, both ordinary and assault. The Navy's fleet of APA's and AKA's in the Pacific was still, in mid-1943, meager, and the new production program was not yet launched. To assemble the vessels required for the Gilberts invasion necessitated withdrawals from the South Pacific and the Mediterranean and the swift return of transports used in the Kiska landings. The Marshalls operation would require more, most of them to come from new production in the United States. Analyzing the operational shipping requirements for both assaults—32 APA's, 16 AKA's, 9 AP's, and 33 AK's—on 31 August 1943, the Army Transportation Corps claimed that they exceeded the amount of assault shipping used in either TORCH or HUSKY, and that they (or acceptable substitutes) could be provided only at considerable expense to either the BOLERO-SICKLE build-up or outward troop movements to the South and Southwest Pacific, already well in arrears. At Somervell's behest, the matter was referred to the JCS

[14] (1) JCS 446, 6 Aug 43, title: Specific Operations in the Pacific and Far East, 1943–44. (2) See also above, ch. VIII.

[15] (1) Min, 110th mtg CCS, 17 Aug 44, Item 4. (2) See above, ch. VIII.

and by that body to the Joint Staff Planners for study.

By the time the planners submitted their report, the issue had narrowed to the question of nine ordinary troop transports (AP's), since it appeared that requirements for both assault vessels and ordinary cargo ships (AK's) could be met. And in the light of a recent JCS decision to ask the Maritime Commission to accelerate and augment the program for conversion of freighters to transports, the planners ruled that the 9 AP's for the Central Pacific could be provided by taking them off the transpacific run for four months. They admitted this would result in a continuing deficit in troop movements to the South and Southwest Pacific (mounting to 33,900 places by February 1944), but they felt that this deficit could be rapidly made up afterward as the fruits of the conversion program were realized and would not prevent the scheduled execution of operation CARTWHEEL. The planners calculated that the deficits in Pacific troop lift could be erased by April 1944 and SWPA provided with ample troops for post-CARTWHEEL operations.[16]

The planners' optimism was only partially justified by events. By October 1943 both troop and cargo shipping schedules for all Pacific areas were so far behind that shipping of both types had to be diverted from the Atlantic to meet a growing crisis. Yet by the end of the year the situation had cleared and by April 1944, as predicted, the personnel shipping problem had been generally solved, at least insofar as transpacific lift was concerned. The cost to the CARTWHEEL operation of undertaking the new Central Pacific offensive could be measured in terms of the extent to which MacArthur and Halsey were forced to improvise and get along with what they had rather than in any operational failure.[17]

The greatest impact, in terms of assault shipping, was felt during the Bougainville operation, which was roughly contemporaneous with the Gilberts landings. For this operation Halsey had to make do with a total of only eight APA's and four AKA's, enough lift to carry only one division, for it was considered too dangerous to expose LST's and other large beaching craft to anticipated violent air attacks in the initial landings in Empress Augusta Bay. Eight LST's and eight APD's were used to bring in reinforcements, and some of the large assault ships returned to Guadalcanal for a second load. By these expedients "Operation SHOESTRING No. 2," as some naval officers called it in memory of Guadalcanal, was carried out successfully. Meanwhile, in SWPA MacArthur was getting along with the smaller shore-to-shore landing craft of the 2d Engineer Special Brigade, the assault shipping attached to the Seventh Fleet, and an improvised fleet of merchant shipping. In

[16] (1) Memo, Dep Chief Plng Div OCT for Gen Somervell, 31 Aug 43, sub: Shpg for Seizure of Marshall Is, folder Transportation SOS 1943, Hq ASF. (2) JCS 471, 6 Sep 43, memo by CofS, USA, title: Pacific Opns and Availability of Shpg. (3) JCS 471/1 23 Sep 43, rpt by JPS, same title. (4) Min, 113th mtg JCS, 7 Sep 43, Item 10. (5) JCS 493, 10 Sep 43, title: Provision of Adequate Trooplift for Movement of U.S. Forces Overseas. (6) Samuel Eliot Morison, "History of United States Naval Operations in World War II," vol. VII, *Aleutians, Gilberts, and Marshalls: June 1942–April 1944* (Boston: Little, Brown and Company, 1951), pp. 109–10. The AP's and AK's were used in lieu of AKA's and APA's for the follow-up or "garrison" elements.

[17] For greater detail on the Pacific shipping situation during this period, see below, Chapter XIX.

the Central Pacific operation against Makin and Tarawa, the major shortage that developed was of LVT's, the amphibious tractors—the only type of amphibious equipment, it proved, that could negotiate the barrier reefs off the coral atolls.[18]

The balance between resources and requirements in Pacific areas was most precarious as the Central Pacific drive got under way. Afterward, the situation improved. There was a slow but steady growth in the fleet of assault personnel and cargo shipping. On 1 November 1943 there were 30 APA's, 11 AKA's, and 12 APD's (converted destroyers) in all Pacific areas. By 1 May 1944, six months later, there were 45 APA's, 14 AKA's, and 17 APD's.[19] The augmented APA-AKA, LST, landing craft, and amphibious tractor programs, developed in the closing months of 1943, promised to provide much more ample quantities of assault shipping by fall 1944 to support increasingly large-scale amphibious operations. Two more Engineer special brigades with their complement of small landing craft were added in the meantime to SWPA resources. Simultaneously, the Navy successfully was resisting all attempts to cut back its overall construction program as had been suggested by some as a result of the waning submarine menace and the fact the French and Italian Navies had been eliminated from the war. The strength of the Pacific Fleet increased rapidly. The Army, profiting from the improved personnel shipping situation, dispatched eight new divisions to the Pacific between January and July 1944, adding two divisions in the Central Pacific, one in SOPAC, and five in SWPA. Procedures for co-ordination between Army and Navy began to take on substance, and existing supply systems within each individual service underwent critical scrutiny and improvement. All these developments would contribute to a greatly accelerated drive in the Pacific in 1944 along both of the main fronts.[20]

When the SEXTANT Conference convened at Cairo in late November 1943, South and Southwest Pacific forces were entering the last phases of the converging operation on Rabaul and the assault against Makin and Tarawa in the Gilberts was under way. The American commitment to the Pacific and the successes promised by continuation of the practice of isolating and bypassing Japanese strongpoints had already led American planners to conclude that advances along the two mutually supporting axes in the Central and Southwest Pacific should constitute the main effort against Japan. The prospective deployment of the first new B–29 very long range bombers heightened the optimism about hastening the final defeat of Japan. At SEX-

[18] (1) Samuel Eliot Morison, "History of United States Naval Operations in World War II," vol. VI, *Breaking the Bismarcks Barrier: 22 July 1942–1 May 1944* (Boston: Little, Brown and Company, 1950), pp. 234–59, 272–305. (2) Miller, *CARTWHEEL*, pp. 234–59, 272–305. (3) Philip A. Crowl and Edmund G. Love, *The Seizure of the Gilberts and Marshalls*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1955), pp. 164–65. (4) On MacArthur's improvised fleet and small landing craft in SWPA, see below, Chapters XIX–XX.

[19] (1) CCS Memo for Info, 23 Nov 43, title: Landing Craft Rpts, 1 Nov 43. (2) CPS Memo for Info 23, 23 May 44, title: Status Rpt of U.S. and British Landing Ships and Craft as of 1 May 1944.

[20] (1) See above, ch. X, and below, chs. XVII–XX. (2) Memo, President for Secy Navy, 28 Sep 43, sub: Navy Bldg Program, with related papers in ABC 561 (7 Nov 43). (3) JCS 573, 7 Nov 43, title: Rpt on Army, Navy and Maritime Comm Shipbuilding.

TANT an "Over-all Plan for the Defeat of Japan" was adopted by the combined staffs, definitely stating that "the main effort against Japan should be made in the Pacific" with the campaigns in the North Pacific, Southeast Asia, and China reduced to subsidiary roles. The necessity for establishing air bases in China for initial deployment of the B–29's within range of Japanese industry and for general air support to the Pacific effort as it neared the China coast was recognized, but neither China nor southeast Asia was any longer considered a decisive theater of conflict. Events at Cairo and Tehran that produced cancellation of British amphibious operations in the Bay of Bengal in order to release landing craft for European operations finally sealed the fate of these theaters.[21]

Within the Pacific the central line was given a measure of favor, more than at QUADRANT but not enough to set up any hard and fast priority:

> The advance along the New Guinea–N.E.I.–Philippine Axis will proceed concurrently with operations for the capture of the Mandated Islands. These two series of operations will be mutually supporting. United Nations naval forces can be deployed to support successive operations along each Axis, and to prevent interference by hostile surface units with simultaneous operations in the two areas. Transfer of forces and resources from one area to the other is contemplated. When conflicts in timing and allocation of means exist, due weight should be accorded to the fact that operations in the Central Pacific promise at this time a more rapid advance toward Japan and her vital lines of communications; the earlier acquisition of strategic air bases closer to the Japanese homeland; and, of greatest importance, are more likely to precipitate a decisive engagement with the Japanese Fleet.[22]

The nature of the final thrust against Japan, whether by air and sea blockade or by invasion, was left purposely vague and the schedule of operations tentative in order to permit continuation of the strategy of opportunism. The SEXTANT timetable did, nevertheless, provide for a definite acceleration in the advance across the Pacific and added a new target in the Central Pacific—the Marianas. Admiral King had long insisted that the Marianas were the key to control of the Central Pacific, but had little support for his contention until the fall of 1943 when the Army Air Forces also decided, because it had legitimate doubts of ever being able to mount large-scale operations in China, that the Marianas could provide the best bases for mass employment of the VLR's. When SEXTANT convened the seizure of the Marianas had become an integral part of the plan for specific operations in the Pacific and was scheduled to begin on 1 October 1944, following the reduction of the Truk area in the Carolines, now scheduled to begin in July rather than September. VLR bombing from the Marianas would begin at the end of 1944 if this schedule could be met. The SWPA schedule was simultaneously accelerated to place the target date for operations against the Vogelkop in line with the Central Pacific schedule, to begin 15 August 1944 instead of 30 November.[23]

[21] See above, chs. XI and XII.

[22] CCS 417, 2 Dec 43, title: Over-all Plan for the Defeat of Japan.

[23] CCS 397, 3 Dec 43, Memo by U.S. CsofS, title: Specific Opns for the Defeat of Japan, 1944.

The logistical planners had serious doubts that these accelerated schedules would prove feasible, but the CCS went on to agree that resources generally would be available, with the possible exception of those required to launch the VLR program in China. To the Joint Logistical Committee it appeared the fulfillment would impose a heavy strain on supply lines, and that the program for the last half of the year could hardly be accomplished unless Germany were brought to her knees by midyear, freeing resources for redeployment to the Pacific. The committee otherwise foresaw shortages in shipping, aircraft, amphibian tractors, service troops, and critical items of organizational and project equipment. Prophetically, the JLC called attention to the tremendous demand there would be for service troops to prepare and operate bases and to the critical shortage that would result unless the troop basis were revised to provide them. Interestingly enough, it appeared there would be adequate landing craft and assault shipping, usually the critical bottleneck, if all those in the Pacific were pooled and shuttled rapidly from one area to the other in keeping with the timing of operations.[24] In general, then, the accelerated schedule rested on the premise that the mobility of the Pacific Fleet and its amphibious resources would permit the advance along two axes without exacting the full cost that supporting two separate theaters might be expected to do.

The SEXTANT timetable was mostly a shot in the dark—an estimate of future possibilities rather than an operational plan. The operational plan had to be worked out by the JCS and the theater commanders in the period following the conference, and in this process the conflicting interests of the Army and Navy and of the commanders of the two major theaters, MacArthur and Nimitz, again emerged. Nimitz submitted plan GRANITE in early January, with a target date for the Marianas one month later than the SEXTANT schedule. MacArthur's RENO IV called for concentration of resources on the New Guinea–Halmahera–Mindanao line, quite in contrast to the thinking of the JCS. At a conference held between representatives of the two commands at Pearl Harbor late in January, the general consensus seemed to favor MacArthur's views, that is, to emphasize early entry into the Philippines and to discount the importance of the Marianas as well as the potentialities of strategic bombing with the B–29's. Though no plan was set on paper, the conferees generally seemed to favor as immediate steps completion of the Marshalls campaign by taking Eniwetok in the Central Pacific, and assaults by South Pacific forces on the Japanese stronghold of Kavieng on New Ireland and on the Admiralties by SWPA forces, with more than a suggestion that the Carolines and Marianas could then be bypassed in favor of a direct thrust against the Palaus by converging forces from all theaters to be followed by a move to Mindanao and Luzon in the Philippines.

Admiral King was quick to point out that concentration on the SWPA line was not in keeping with SEXTANT decisions, and the AAF was now sold on the

[24] (1) JPS 581/3, 4 Dec 43, rpt by JLC, title: Specific Opns for the Defeat of Japan. (2) CCS 428 (Rev), 15 Dec 43, title: Relation of Available Resources to Agreed Operations.

need for the B–29 bases in the Marianas at the earliest possible date. While the argument waxed hot in the JCS, the rapidity with which Admiral Nimitz completed the next moves in the Central Pacific went far to settle it. The assault on Kwajalein, launched on 30 January 1944, went so well that the scheduled operation against Eniwetok was moved up from 1 May to mid-February on Nimitz' schedule and was actually executed on 19 February. Coupled with the Eniwetok assault came a massive carrier task force strike at Truk on 17–18 February that proved that base to be much weaker than had originally been supposed and opened up the possibility of bypassing it.[25] Not to be outdone, MacArthur also accelerated his operations. On 29 February he moved into the Admiralties—Manus and Los Negros Islands—two months ahead of the schedule that had called for this operation in April. Strategic opportunism had thus borne new fruits and made it imperative that the JCS decide on operations to be undertaken during the summer and fall of 1944.

Formosa Versus Luzon

In the discussions over a plan of campaign for 1944, based on the premise of an accelerated advance, the question of an objective in the Luzon-Formosa-China coast area held the central place. All were still agreed that American forces must be landed on the China coast rather than move directly to Japan proper, but to MacArthur and his staff it seemed axiomatic that the Philippines should be the stepping stone, while to Admiral King and the naval planners it seemed equally obvious that it should be Formosa. King and MacArthur were the two most active protagonists; the support they attracted in many cases cut across service lines. The choice of objective would necessarily shape the course of operations during 1944. If it were Formosa, the Central Pacific would get the clear-cut first priority it still lacked; if it were Luzon, the largest of the Philippines, then that priority would go to MacArthur. Existing allocations of forces and resources to the Pacific seemed sufficient to insure success of at least one line of advance—whether they were adequate to support two lines was not so clear. One central question was the disposition of South Pacific forces once the neutralization of Rabaul had phased them out of active operations; another was the extent of naval resources and assault shipping to be placed at MacArthur's disposal.

The logistical argument, nevertheless, at first revolved not so much around these issues as around that of bases. Discussions, in which representatives of both theaters took part, began in Washington in early February 1944 and continued until mid-March. The JSSC fired the opening gun by again proposing that the primary effort be made in the Central Pacific with SWPA forces in only a supporting role. Either the Marianas or Carolines should be occupied in June, and the Palaus in September; from the Marianas-Palaus line an attack should be mounted directly against Formosa, or, if it seemed necessary, against Luzon first; SWPA forces would meantime move into Mindanao, the southernmost

[25] On the Gilberts-Marshalls operation and their strategic significance, see Crowl and Love, *Seizure of the Gilberts and Marshalls*, particularly pages 372–74.

island of the Philippines.[26] This proposal raised numerous issues, most important among them being whether Truk could be successfully bypassed and whether the Marianas and Palaus could actually provide adequate bases for mounting the massive forces that would be required for assaulting points within the inner ring of Japanese defenses over 1,800 miles of open sea. The ASF logistical planners, supporting MacArthur's viewpoint, thought that they would not. "Bases from which supplies will have to be transported to support the landings," General Wood of ASF Plans Division told Somervell,

> are so far distant that movement will be slow and supplies will have to be transported in freighters and transferred at sea to small craft to be put ashore instead of being moved directly in small craft from a close-in base. . . . The line of communication will be much more exposed to raider, air and submarine attack than would the line of communication from SWPA. . . . The easy success that has been enjoyed against the Gilberts and Marshalls is an outpost action which does not adequately justify any assumption that landing operations closer in to the Japanese inner zone can be executed with equal facility. . . .[27]

Admiral King insisted that there was no intention of mounting more than a small part of the expedition against Formosa or the Philippines from the Marianas, that it should be mounted instead from such distant and separate points as Hawaii, Manus, Milne Bay in New Guinea, New Caledonia, Guadalcanal, and Espíritu Santo, with routine follow-up support coming "largely direct from the United States, via the Marshalls." Some such plan for mounting the final assault would be necessary, he thought, regardless of the route of approach.

> There are no areas along the northern New Guinea coast now built up, nor are there any . . . where facilities can be readily developed to accommodate mounting operations greater than about one division. None of the positions in New Guinea are suitably developed or situated to support the campaign. Nor does it appear that the United States should expend its resources to develop extensive facilities in this area which is off the direct lines of communication, will very soon be in the back area, and over which it will have no control after the war.[28]

The positions taken by Army and Navy logisticians in this controversy reflected in no small degree the differences in methods of operation that were emerging in MacArthur's and Nimitz' theaters. In POA the long jumps across broad expanses of the ocean required primary reliance on combat loaders — APA's and AKA's—for movement from distant bases and on the Navy's fast-moving aircraft carriers for air support. In SWPA the moves were over much shorter water distances and were frequently shore-to-shore operations depending mostly on small landing craft. Only small numbers of combat loaders were available and support for troops once ashore depended for the most part on ordinary troop and cargo ships. Air support came mainly from land-based aircraft. Similarly, the Navy was developing elaborate techniques for providing floating base support in the Pacific, using combat loaders and fleet auxiliaries, while the

[26] JCS 713, 16 Feb 44, rpt by JSSC, title: Strategy in the Pacific.

[27] Memo, Wood for Somervell, 20 Feb 44, sub: Strategy in the Pacific (JCS 713), folder Pac Theater, ASF Plng Div.

[28] JCS Memo for Info 203, 11 Mar 44, memo by COMINCH and CNO, title: Mounting an Invasion Force for Luzon-Formosa-China Area.

Army still clung to its belief in the necessity of large land bases. In advocating the long jump to Formosa King was obviously counting heavily on the output of the augmented combat loader program and on extensive use of floating bases. The ASF, by contrast, thought that this type of support would be entirely inadequate for troops engaged in a large-scale land campaign such as would be necessary either on Formosa or in the Philippines, and clung tenaciously to its stand that the Formosa operation would prove logistically infeasible unless Luzon were taken first.[29]

For the time neither the Joint Planners nor the Joint Logistics Committee could see any insuperable obstacle to a Formosa operation. Although noting that base development all along the line must be accelerated and that the whole strategic program would depend upon the Maritime Commission's meeting its combat loader construction schedules, they emphasized most strongly the necessity for an immediate strategic directive so that logistical preparations could go forward on a firm basis.[30]

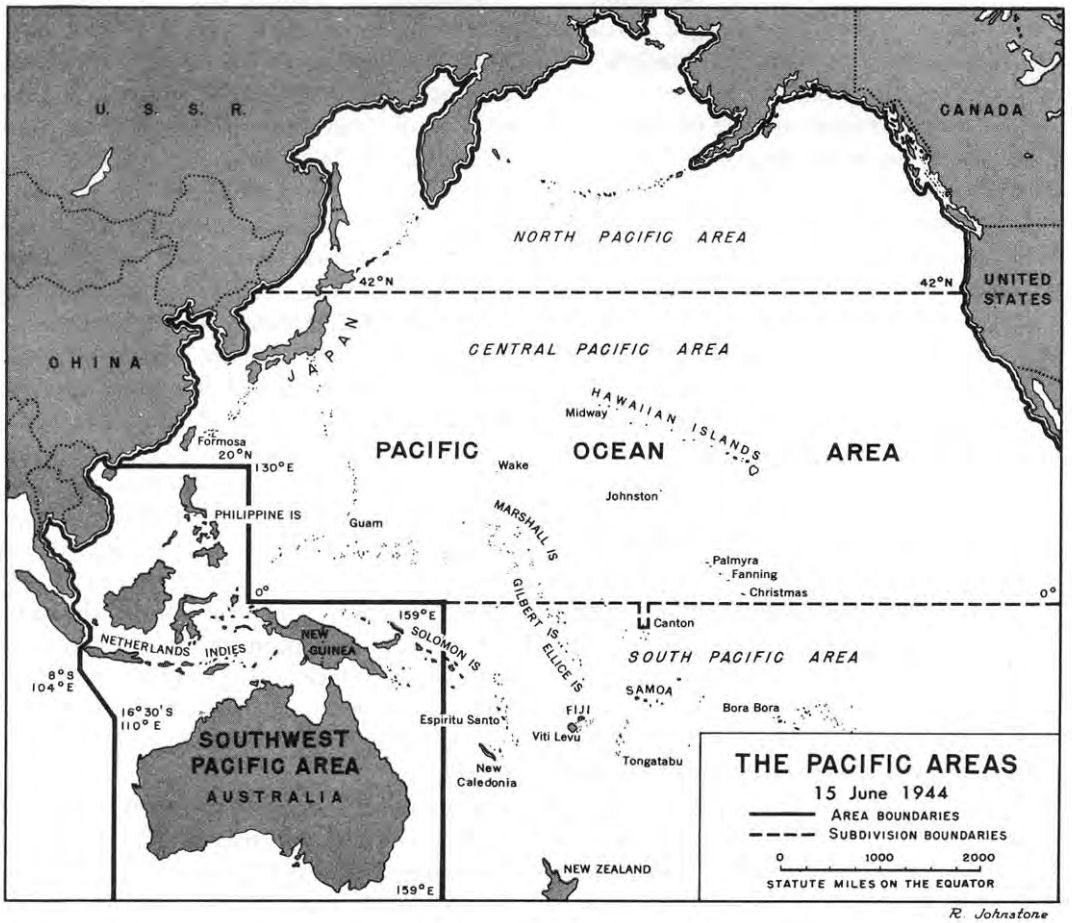
In rendering their decision of 12 March 1944, the JCS arranged the priorities by operation rather than by area, though in deference to the wishes of Admiral King and General Arnold they declared the Marianas-Carolines-Palaus area most vital to entry into the Formosa-Luzon-China triangle. They instructed Nimitz to make plans for the seizure of the Marianas (target date 15 June), and the Palaus (target date 15 September), bypassing and isolating Truk in the process. In the South Pacific the operation against Kavieng was to be canceled and that stronghold bypassed as had been Rabaul. Fleet units and assault shipping allotted for use in the Kavieng operation and in one scheduled in SWPA against Hansa Bay were to be used in a jump 350 miles further along the New Guinea coast toward Hollandia. These naval units would then be returned to POA for use in the Marianas and Palaus campaigns, while MacArthur continued such further advances along the New Guinea coast as might be feasible "with available forces" in support of the Palaus operation and in preparation for entry into Mindanao (target date 15 November). In the Mindanao operation, SWPA forces would again have the support of the main Pacific Fleet expected to be freed by that time from its major tasks in the Palaus. The schedule of major operations was thus to be Hollandia, Marianas, Palaus, Mindanao. There was a strong presumption that after Mindanao the next operation would be against Formosa, but the JCS decision was not definite, prescribing "occupation of Formosa, target date February 15, 1945, or occupation of Luzon should such operations prove necessary prior to the move on Formosa, target date February 15, 1945." Planning for Formosa was assigned to Nimitz, that for Luzon to MacArthur.[31]

The fact that neither axis of advance had a really clear-cut priority was made evident by the JCS decision some days later on disposal of the resources of the

[29] See Memo, Lutes for Somervell, 13 Mar 44, sub: Future Operations in the Pacific (JCS 713 series), History Planning Div ASF, app. 8-K.

[30] JCS 713/1, rpt by JPS in collaboration with JLC, 10 Mar 44, title: Future Operations in Pacific.

[31] (1) JCS 713/4, 12 Mar 44, title: Future Opns in Pacific. (2) Memo, Brig Gen Frank N. Roberts for Col William L. Ritchie, 19 Feb 44, OPD 381 TS, case 301.



MAP 5

South Pacific Area, where the final combat operation—against Emirau—was to be executed late in March. Early planning papers definitely favored POA, but the final version, approved by the JCS on 25 March 1944, went much further to meet SWPA's needs. *(Map 5)* MacArthur was allotted the six Army divisions from the South Pacific, the entire Thirteenth Air Force, and naval resources, including all PT boats and most of the smaller types of landing craft of the South Pacific Amphibious Force up to and including LCT's. "All other combat troops and all service and supporting troops, when not required for the operation of bases retained in the South Pacific Area," were also to progressively pass to the control of SWPA as the area was phased out. Two Marine divisions, the Marine air forces, and nearly all the major naval units of Halsey's fleet, including all its aircraft carriers, were to go to POA. The Seventh Fleet, under MacArthur's control, was nevertheless allotted a certain minimum number of

units, which Nimitz was to be obligated to maintain, including 3 light cruisers, 27 destroyers, 7 combat loaders, 60 LCI (L)'s, and 40 LST's.

The major consequence of this decision was to increase the concentration of Army resources in the Pacific under MacArthur and of naval resources under Nimitz, leaving each commander short of the balanced force needed to execute a major operation against either Luzon or Formosa. Moreover, as far as the Army forces were concerned, the division of resources was a paper affair for it would take time to move troops from one area to the other. Also, because the South Pacific retained major functions as a staging and rehabilitation area for POA and installations there had to be guarded and supplies outloaded, service troops could not be moved to SWPA in phase with the combat troops they were supposed to support. The net effect was to aggravate the shortage of service troops in SWPA at the same time that Nimitz was finding that he also lacked adequate service troops to support a land campaign on Formosa. This produced a continuing source of irritation between the two area commands lasting almost until the end of the war.[32]

In any case, the JCS directive of March 1944 did provide a blueprint for accelerated operations in the intermediate stage in the Pacific—the approach to the Philippines and Formosa—that seemed feasible within the limits of available resources. In SWPA the Hollandia assault was successfully executed in April, and MacArthur followed it with landings at Sarmi in New Guinea, the islands of Wakde and Biak in May, Noemfoor Island on 2 July, and Sansapor on the Vogelkop on 26 July. Early in September came the jump to Morotai in the Molucca Islands, northeast of Halmahera, the next-to-the-last island stepping stone on MacArthur's planned route to the Philippines. During the same period POA forces carried out their assaults on the Marianas and Palaus, attacking Saipan and Tinian successfully in June, Guam in August, and Peleliu and Angaur in the Palaus in September. Preparations were advanced for an assault on Yap to complete the isolation of Truk. The advances brought both theaters' forces by mid-September to the edges of the inner citadel of Japanese defenses, the strategic goal since early 1943—the Philippines-Formosa-China coast triangle.[33]

Concurrent operations along the two axes produced an increasing strain on resources as lines of communication grew longer, and both MacArthur and Nimitz found it necessary to augment their local shipping fleets. A midsummer shipping crisis was resolved only by diverting additional shipping from the Atlantic to the Pacific.[34] As the two lines of advance converged on the objective area shortages of all sorts began to crop up—in all categories of shipping, in troops, and in materials and labor for base construction. The need for a final decision

[32] (1) JPS 391, 10 Feb 44, JPS 391/1, 24 Feb 44, and JPS 391/2, 4 Mar 44, title: Redeployment of Forces in Pacific upon Completion of FORFARM and MERCANTILE. (2) JCS 713/5, 17 Mar 44, title: Redeployment of forces in Pacific following Opn RECKLESS. (3) Memo, Ritchie for Roberts, Chief, S&P Gp OPD, 16 Feb 44, sub: Discussion of JPS 391, ABC 320.2 (10 Feb 44).

[33] For detailed histories of these operations see Robert Ross Smith, *The Approach to the Philippines* (Washington, 1953) and Philip A. Crowl, *Campaign in the Marianas* (Washington, 1960), both volumes in UNITED STATES ARMY IN WORLD WAR II.

[34] See below, ch. XIX.

on the issue of Luzon versus Formosa that would permit a greater degree of concentration of resources became imperative.

All through the summer the controversy continued as to whether a direct jump from the Marianas and Palaus to Formosa was practicable, or whether, as MacArthur contended, Luzon must be taken first to provide a closer and more adequate base for the Formosa assault. There were those who, like Admiral King, for a time argued that the Philippines could be bypassed entirely, and in June the Joint Planners optimistically drew up a plan for the invasion of Kyushu that would bypass both the Philippines and Formosa. Neither Nimitz nor MacArthur believed such a direct assault feasible, and the plan was soon discarded. Nimitz himself agreed with MacArthur that some positions in the Philippines, if not necessarily on Luzon, must be taken to provide air bases to support the assault on Formosa, and both commanders continued to plan for an operation in the southern or central Philippines to follow the attack on the Palaus. MacArthur believed that, in addition to military reasons for taking the Philippines first, the United States had an irrevocable moral obligation to liberate these islands. He got a sympathetic reception for his views from President Roosevelt who met with the two Pacific commanders at Honolulu in July 1944, though no Presidential decision made at this conference appears to have affected the normal course of military planning for Pacific operations.

On 15 June MacArthur forwarded to the JCS his RENO V plan, which contained his ideas on how to fulfill the requirements of their March directive. In the new plan he proposed to seize only a small area around Sarangani Bay in Mindanao, late in October, and to carry out his major operation against Leyte on 15 November, the date on which the JCS had scheduled the assault on Mindanao. Leyte was selected because of its superior harbor and its central location in the Philippines, and also because air bases there would be closer to target areas in Luzon, Formosa, and China. In view of the need to neutralize the air bases on Luzon, Nimitz interposed no objection to this increase in the scope of SWPA operations, although he foresaw that it would require most of the assault shipping and naval support that the Pacific Fleet could furnish; furthermore, he considered the timing "optimistic."[35]

That the timing had indeed been optimistic, MacArthur himself soon confirmed. On 23 July, saying he had learned that the amount of amphibious lift in the Pacific would be "less than that anticipated . . . for operations toward the end of the year,"[36] the SWPA commander revised his target dates. Because the same amphibious lift would have to be used for both the Sarangani and Leyte operations, there would have to be 35 days between the two rather than 20 as originally planned. Also, because forces would have to remain at Sarangani five weeks before they could get air support from Leyte, he would have to undertake a preliminary operation against the Talaud Islands in October to secure air bases, thus postponing the date for the Mindanao invasion.

[35] M. Hamlin Cannon, *Leyte: The Return to the Philippines*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1954), pp. 2–4.

[36] Msg CX 15229, GHQ to WD and CINCPOA, CM-IN 19231, 23 Jul 44.

The new timetable read: Talaud 15 October, Sarangani 15 November, and Leyte 20 December.

Since the postponements would delay both the provision of air support and the return of amphibious lift and naval striking forces for the Formosa invasion, OPD looked diligently for some way to speed up the SWPA schedule. They found that MacArthur's figures on assault shipping were old estimates, far too low, and that there apparently would be enough in the Pacific to mount Sarangani and Leyte simultaneously. But this encouraging development only served to reveal the fact that the real bottleneck was not the quantity of assault shipping but the limited capacity of concentration areas and the timing of base and airfield development. MacArthur's revised timetable, for the moment at least, seemed the most optimistic estimate.[37]

This timetable was not developed primarily with the need for providing air support for the invasion of Formosa in mind. It was based on MacArthur's inflexible determination to go on to Luzon. On 27 August 1944 he presented the War Department with his plan, prepared in pursuance of instructions under the March directive, for securing the whole Philippine Archipelago. Following Leyte, a 5-division assault, he proposed to carry on with a 2-division amphibious assault on Aparri (on the northern coast of Luzon) on 31 January 1945, a combined airborne and amphibious operation against southern Mindoro on 15 February, and finally a 7-division assault on Lingayen Gulf, Luzon, on 20 February. These designs obviously could not be carried out unless the Formosa operation were postponed and the main strength of the Pacific Fleet and all available amphibious lift concentrated in the Philippines.[38]

As MacArthur's plan called for the use of naval resources necessary for the Formosa campaign, it soon became apparent that Nimitz' plans for Formosa in turn depended on Army resources, considerably less mobile in character which could only come from MacArthur's command. In the final round of arguments over Formosa versus Luzon, the old question of mounting from distant bases was relegated to the background and a new one emerged—whether sufficient resources in cargo shipping and ground combat and service troops were available in the Pacific to support an invasion of Formosa.

On 3 August 1944 the strength of the ground army in the Central Pacific came to only about 238,000, and Army deployment schedules contemplated no sizable augmentations anywhere in the Pacific until after the end of the war in Europe. The pinch on Army manpower occasioned by the concentration in Europe was finally being felt. There were, to be sure, enough combat infantry divisions in the Central Pacific (6) to form, in combination with Marine divisions (5), the sinews of the new Tenth Army, but there were insufficient artillery and service troops to support them. Previous operations in the Central Pacific had involved relatively small land masses and had not required the large supporting establishment necessary for an army operating with a long land line of communications. The Marine divisions were self-sufficient units with enough organic

[37] Teletype Confs, Washington–Brisbane, 9 and 25 Aug 44, OPD Exec 2, Item 1c.

[38] Msg C-16693, GHQ SWPA to WD, CM-IN 24770, 27 Aug 44.

service support to enable them to sustain themselves in short island engagements but not enough to establish a real communications zone. Estimates of the exact troop shortage for a Formosa invasion varied, depending on whether Nimitz' concept of a limited operation to seize only the southern end of Formosa and a foothold on the China coast opposite were accepted, or the generally held Army opinion that occupation of all Formosa would eventually be necessary. Maj. Gen. Clark Ruffner, chief of staff of Army forces in POA, in a conference with OPD officers on 13 August, estimated the troop shortage for even a limited operation at 181,000 and stated further that direct shipping required from the west coast to support the Formosa operation would be "well beyond the capabilities of available shipping in the Pacific unless all shipping to SWPA is stopped."[39]

Since the troops could not be had from the United States, the Navy tried to get them from SWPA, but MacArthur adamantly refused. When he reached the Philippines, MacArthur told visiting OPD officers, "his supply line would be extended to the elastic limit of the service troops available to him and . . . the release of any of these service troops would result in starvation of his own troops in the forward area."[40] Reasoning that MacArthur would still have to support the same number of divisions whether he moved forward or not, OPD endorsed his position. The other possible source for filling part of the shortage lay in the South Pacific, where approximately 44,000 service troops were scheduled for release when the divisions there were moved into SWPA. Nimitz had been eyeing this particular asset for some months but again ran up against MacArthur's adamant insistence that SOPAC's service troops were required in SWPA and irrevocably committed to that theater by the terms of the March JCS decision. OPD was more flexible in its attitude toward the South Pacific service troops, but still insisted that MacArthur's needs for the Leyte invasion must be met first.[41]

Faced with this serious shortage of service troops, and with the cargo shipping situation still a question mark, Army leaders generally came to believe that the Formosa invasion could not be carried out until resources were released from Europe. General Marshall suggested in the JCS meeting on 1 September that the most that could be done immediately was to issue a directive to MacArthur to proceed with the Mindanao and Leyte operations on schedule. Admiral King insisted that a directive ordering preparations for Formosa should also go forward arguing that the Army scale of service and artillery support was too high, that some service troops could in any case be withdrawn from the South

[39] (1) Notes on Conf at Hq, COMGENPOA, 13 Aug 44, ABC 384 Pacific (1-17-43), Sec 5. (2) Memo, Gen Magruder for Gen Wood, 22 Jun 44, sub: JPS 267/1—Seizure and Occupation of Formosa, folder Pac Theater, ASF Plng Div. (3) United States Army Forces Middle Pacific and Predecessor Commands, 7 December 1941–2 September 1945 (hereafter cited as AFMIDPAC History), vol. II, 215–20, MS, OCMH. (4) OPD Weekly Status Map, 3 Aug 44. (5) Msg 240957, NCR 426, CINCPOA to radio Washington, CM-IN 20244, 24 Jul 44. (6) Msg 180437, NCR 8754 CINCPOA to COMINCH, CM-IN 16755, 18 Aug 44.

[40] OPD Notes on Conf, 7 Aug 44 at GHQ, SWPA, ABC 384 Pacific (1-7-43), Sec 5.

[41] (1) Min, 171st mtg JCS, 1 Sep 44, Item 2. (2) Draft Memo, OPD for CofS, 1 Sep 44, sub: Opns in Western Pacific. (3) Draft Memo, OPD for CofS, 5 Sep 44, same sub. Last two in OPD Exec 2, Item 1c.

Pacific and naval construction battalions substituted for others, and that all the remaining deficit could be made up by redeployment from Europe after the defeat of Germany, then thought to be imminent. But the logistical problem was forcing King to take the defensive, and the JCS decided to first ask the Joint Logistics Committee to make a thorough study and report. Meanwhile, they ordered preparation of a directive for the seizure of Leyte with a target date of 20 December.[42]

Before the logistical planners' report was ready, events in the Pacific forced a reappraisal of the situation. Admiral Halsey, conducting carrier strikes against the central Philippines on 12–14 September 1944 in support of the Palaus operation, found resistance so surprisingly weak that he reported that there were few if any Japanese on Leyte; he therefore suggested that intermediate operations, against Yap by Central Pacific forces and against Talaud and Mindanao by SWPA forces, be canceled and a direct landing be made in Leyte Gulf. The force intended for the invasion of Yap, XXIV Corps, could be made available to MacArthur along with the amphibious craft and carriers in Halsey's task force. MacArthur accepted on the 15th and the JCS, then at the second Quebec conference, quickly instructed MacArthur to invade Leyte on 20 October, two months ahead of schedule.[43]

[42] (1) Memo, King for JCS, 4 Sep 44, JCS 713/12, title: Troops for Occupation of Formosa. (2) Min, 171st mtg JCS, 1 Sep 44, Item 2. (3) JCS 713/10, 4 Sep 44, memo by COMINCH and CNO, and JCS 713/11, 4 Sep 44, memo by same, titles: Employment of Marine Divisions in Formosa Opn. (4) JCS 713/13, 5 Sep 44, title: Proposed Directive to CINCSWPA and CINCPOA. (5) Min, 173d mtg JCS, 7 Sep 44.

[43] Cannon, *Leyte: The Return to the Philippines*, pp. 8–9.

Acceleration of the advance into the Philippines, bypassing Mindanao, gave MacArthur's arguments for moving on to Luzon an almost irresistible logic. He now reported that he could undertake the invasion of Luzon on 20 December and that reduction of that island would take no more than six weeks.

The lengthy report of the Joint Logistics Committee, submitted to the JCS on 25 September, showed that no comparable acceleration in the date for Formosa would be possible, and that the earliest date that would permit redeployment of assault shipping after Leyte would be 1 February 1945. Even then, counting on transferring the service troops from the South Pacific and a few thousand from SWPA, and using all other possible expedients, there would still be a shortage of 69,000 supporting troops for the limited operation to seize only part of Formosa if there were no redeployment from Europe. The deficit would be larger if two more divisions had to be included in the follow-up to carry out the occupation of the northern part of the island. The report stated that there would also be deficits in service troops for the Luzon operation, but they would not be so serious in character as on Formosa, and that friendly Filipino labor could be counted on to make up most of them.

These facts forced the JLC to the conclusion that adequate resources for the Formosa operation would not be available until three months after the defeat of Germany, but would be sufficient to permit an advance to Luzon sixty days after the invasion of Leyte regardless of what happened in the European war. The JMTC, studying independently the availability of cargo and

personnel shipping, foresaw deficits in cargo shipping for either operation, but generally supported the JLC conclusions as to their relative feasibility. The conclusions of the two committees, viewed in the light of a now diminishing prospect for an early end to the war in Europe, forced Admiral King to bow to the inevitable. He proposed that POA forces reorient the direction of their attack, moving against the Bonins (target date 20 January 1945), and the Ryukyus (target date 1 March). The question of whether Formosa would still have to be taken remained in abeyance, although there was ample reason to believe that it as well as the China coast could now be bypassed and, with the Philippines and Ryukyus in American hands, a final thrust against the "industrial heart of Japan" could be mounted.[44]

Plans called for the use of bases in the Ryukyus and possibly on Luzon to supplement the B–29 strategic bombing offensive being mounted from the Marianas. Any hopes that significant results could be achieved by bombers operating from China had long since been dashed by repeated logistical failures and the successful Japanese offensive against the U.S. airfields in east China.[45] Meanwhile, the decision had been taken at the Quebec Conference of September 1944 that air bombardment and blockade would probably not suffice to bring about a final victory and that invasion of Japan would be necessary. The schedule proposed at the time was based on taking Formosa on 1 March 1945 and moving from there to the China coast, the Bonins, and Ryukyus between March and June, then mounting a final assault on southern Kyushu in October and on Honshu (the Tokyo Plain) in December 1945.[46] This schedule was of course tentative, and was based on a hoped-for German surrender in fall 1944. It had to be adjusted immediately to the decision to take Luzon instead of Formosa, and again later to the prospect of a long extension of the war in Europe. Yet the main outlines of the plan for the final campaign against Japan had taken clear shape.

When informing Admiral King of his final decision that he considered the Luzon operation better than Formosa, General Marshall on 22 September 1944 remarked: "The major difficulty in planning for the coming months is a shortage of resources, particularly those which must be furnished by the Army, such as service troops, and those required to support land forces, such as cargo shipping."[47] King's rejoinder that "both at the present time and throughout our campaign the major shortage has been Naval amphibious resources"[48] was a more accurate appraisal of the past than of the present or future. Augmentation of the amphibious lift in the Pacific was now going on so rapidly that it would soon no longer be a real limiting factor, except insofar as it had to be used for

[44] (1) Msg C–18103, GHQ SWPA to WD, CM–IN 19803, 21 Sep 44. (2) JCS 1070, 26 Sep 44, rpt by JLC, title: Availability of Resources for Pacific Operations. (3) JCS 1070/1, 30 Sep 44, rpt by JMTC, same title. (4) JCS 713/19, 3 Oct 44, title: Future Operations in Pacific.

[45] See below, ch. XXI.

[46] (1) CCS 417/8, memo by U.S. CsofS, 9 Sep 44, title: Opns for the Defeat of Japan, 1944–45. (2) On the OCTAGON decision see below, Chapter XXII.

[47] JCS 713/15, 22 Sep 44, memo by CofS, USA, title: Future Opns in Pacific.

[48] JCS 713/16, 25 Sep 44, memo by COMINCH and CNO, title: Future Opns in Pacific.

logistical purposes. The campaigns in the Philippines and in the Ryukyus were to put far greater strain on cargo shipping resources than on assault shipping. Looking to the ultimate invasion of Japan, the great need was for rapid construction of bases and development of a large supporting establishment for the major land, sea, and air forces to be engaged in the bombardment and invasion of the enemy homeland. Viewed in this light, the priority given to the European theater was finally beginning to exact its price.

CHAPTER XVII

Joint Logistics in Pacific Operations: The Continental System

The Nature of Pacific Logistics

Geographic factors and the nature of operations in the Pacific generated logistical problems different in many respects from those in Europe. Although both major theaters had to be served by a sea supply line from the United States, not only was the Pacific line longer, but it did not end at any major overseas port or ports. Pacific lines of internal theater transport were also primarily water lines. European ports like Naples, Cherbourg, Marseille and Antwerp, once taken and rehabilitated, were entrepôts capable of handling the large tonnages necessary for the support of massive mechanized land armies. In the vast ocean triangle formed by Hawaii, Australia, and the Philippines, the arena of the Pacific war in 1943–44, no such ports existed. Pacific operations had to be mounted and supported from distant bases on the west coast of the United States, or from Hawaii, Australia, or such undeveloped, unfamiliar, and uninviting points as Guadalcanal, Espíritu Santo, Makin, Kwajalein, Saipan, Ulithi, Manus, Milne Bay, Finschhafen, and Hollandia. Battlefronts separated from one another by long expanses of water made it difficult to operate the kind of supply pipeline that funnels men and materials to the front in normal military operations on large land masses without an inordinate investment in shipping and service personnel. In Europe well-developed roads and rail lines, storage depots, and multiple other facets of an industrial economy could be quickly adapted to military use; in the Pacific in 1943–44 virtually all these facilities had to be started from scratch as the advance moved rapidly from island to island. Almost everything necessary for the support of military forces had to be imported—construction materials and labor, land and water transport, and elements of public utility systems, as well as combat supplies—and most of it from the United States. While Australia and New Zealand continued to be important sources of supply in the South and Southwest Pacific, they were not the mainstay after mid-1943 as the American forces, and hence their needs, multiplied, and as the front moved further and further away from the Australian base.

The battles of 1943 and 1944 in the Pacific were fought either for small island atolls or for coastal fringes of larger islands well-suited to development of airfields, ports, and other base facilities. Along the Central Pacific line particularly, battles between U.S. and Japanese forces were usually short, though violent; although these contacts were more pro-

longed in the South and Southwest Pacific, decisive victories frequently came quickly after the landings. For the most part only small combat forces, at least in comparison with those engaged in Europe, were involved in each operation. Simultaneously, other combat forces carried out mopping-up operations and prepared base defense lines, while service forces feverishly prepared the bases required for the next campaign. The construction effort was in many ways the key to the pace of the advance, particularly in the Southwest where land-based aircraft were necessary to neutralize Japanese strongholds and isolate Japanese garrisons in the next target area. If the Japanese were not, in the last analysis, such formidable opponents as the Germans, their preference for death to surrender, and the mere physical difficulties of mounting operations against their entrenched positions, combined to make them seem so. The war in the Pacific was a naval, air, and engineers' war more than a land war conducted along orthodox lines. The battle was, as always, the payoff; however, much of the secret of American victories lay in the successful marshaling of superior resources to conquer the logistical problems involved in island-to-island assaults. The massive resources of an industrial economy that they managed to so marshal dwarfed the Japanese effort, even though, to Americans accustomed to the best of everything, logistical support seemed at times to be woefully inadequate.

In a theater of vast ocean distances shipping, large and small, was the prime element in logistics, for ships were the main method of transport within the theaters as well as from the United States to Pacific bases. Much of this shipping had to be of amphibious types—combat loaders and landing craft—because the first phase of every Pacific operation was an amphibious assault. Theater pools of other types of shipping were also required. These local fleets of personnel and cargo vessels of all denominations absorbed much of the shipping that might otherwise have been used for the movement of troops and supplies from the United States to Pacific theaters. Yet these pools were never large enough to give the kind of mobility to the Pacific logistical establishment that would allow rear establishments to be dismantled and moved forward in a timely manner.

Shipping, of itself, was not the only problem. Simply loading more ships led only to congestion at the receiving end if the development of unloading facilities did not keep pace. The problem was one of balance, of properly scheduling and synchronizing movements of troops and supplies with the development of bases to receive them. Troop labor—always in shorter supply in the Pacific than fighting troops—was of paramount importance. In short, this war of island engagements imposed interlocking demands for shipping, troop labor, and base construction that were for all practical purposes insatiable.

Another distinctive feature of the Pacific war was the continuous intermingling of Navy, Marine Corps and Army forces on land, sea, and in the air. The primary function of the Navy in the war in Europe was to secure and protect the supply line across the Atlantic and support landings on hostile shores. Neither Navy nor Marine forces were involved to any great extent in the land battles in Europe and Africa once the beaches had been secured, nor did naval aviation participate in the strategic bombing offen-

sive. In the Pacific, on the contrary, Marine and Army units shared in landings, Army and Navy planes bombed the same targets, and base facilities were built side by side on the same or adjacent islands. Naval surface craft and submarines teamed with AAF units in battling Japanese Fleet vessels, cutting Japanese supply lines, and isolating island battlefields from reinforcement. In these circumstances, logistical arrangements, of necessity, had to incorporate a modicum of joint action.

Any logistical system must be based on the system of military command. To recapitulate briefly, the Pacific command system involved a division into two primary theaters, the Southwest Pacific under General MacArthur and the Pacific Ocean Areas under Admiral Nimitz. Nimitz' POA command was subdivided into three areas, the Central, South, and North Pacific, over the first of which he exercised direct command while entrusting the North and South Pacific Areas to subordinate commanders—in late 1943 Admiral Halsey in SOPAC and Vice Adm. Frank J. Fletcher in the North Pacific. The South Pacific Area operated for all practical purposes as an independent theater.[1]

Within each area, the commander was entrusted with complete operational control over all U.S. and Allied ground, sea, and air forces under the principle of unity of command as formally defined by JCS in April 1943. Joint commanders in areas involving joint Army-Navy operations were to have the same responsibilities "as if the forces involved were all Army or all Navy." They were to organize joint staffs composed of officers from both services and were not to function in the dual capacity of joint force commander and commander of a service component of the force unless so directed by the JCS. The joint force commander would normally exercise his command through assigning missions to service or task force commanders, giving his subordinates the responsibility for determining the "tactics and technique of the force concerned"; he would also leave administrative matters in the hands of service commanders to the maximum extent possible.[2]

Under this system Nimitz and Halsey disposed of large Army forces, while MacArthur had under his command Marine Corps units and the U.S. Seventh Fleet. MacArthur was also a supreme Allied commander with sizable Australian forces at his disposal. The naval forces in SWPA were also Allied and Admiral Thomas C. Kinkaid doubled in the role of Allied naval commander and commander of the U.S. Seventh Fleet. Nimitz had few Allied components in his command (only the New Zealand units in the South Pacific), but he also had a double role (by consent of the JCS) as Commander in Chief, POA (CINCPOA) and Commander in Chief, Pacific Fleet (CINCPAC). As CINCPAC he exercised strategic control over the entire U.S. Pacific Fleet, shifting its resources as circumstances required. While the permanent components of the Seventh Fleet in SWPA were excepted from this arrangement, they were supplemented for major op-

[1] For full treatment of the Pacific command set-up see Morton, *Strategy and Command: The First Two Years.*

[2] (1) JCS 263/2/D, 20 Apr 43, title: Unified Command for U.S. Joint Opns. (2) Unified commands had been governed by the principles set forth in Joint Action of the Army and Navy, prepared by the Joint Board in 1927 and last revised in 1935.

erations by major units from the main fleet that remained subject to Nimitz' call. Army commanders in Nimitz' area, Lt. Gen. Millard F. Harmon in the South Pacific (COMGENSOPAC) and Lt. Gen. Robert C. Richardson in the Central Pacific (CG, USAFISPA, later COMGEN, USAFPOA), did not exercise operational control over troops except as Halsey or Nimitz dictated; they were primarily administrative commanders responsible for training and for logistical support of Army forces in their areas. In SWPA Admiral Kinkaid exercised operational command by virtue of his position as the Allied Naval Commander rather than as Commander, Seventh Fleet, a position that, again, was primarily administrative in character.

Leaving the North Pacific out of consideration, since it rapidly became an inactive theater, there were still three almost completely separate theaters during 1943 and the early part of 1944, which meant three competitors for shipping, supplies, and personnel from the mainland. All attempts to unify command in the Pacific, and there were many, collapsed on the simple barrier of the reluctance of either service to accept an overall commander from the other. The only substantial change in 1944 was the liquidation of the South Pacific Area and the distribution of its resources between the two remaining giants—SWPA and POA.

Given these conditions—scattered bases and battlefronts, primitive base facilities, vast water distances, and divided and complicated command channels—the Pacific war fronts were peculiarly susceptible to the combination of scarcity and waste that inevitably characterizes modern war. The calculation of supply requirements for any particular operation, force, theater, or base is at best an inexact science, and a balance of supply and transport is even more difficult to achieve. Even under conditions of general plenty, in the critical battle area there is almost inevitably too much of one thing, too little of another. Requirements for both supplies and shipping may be best predicted and their flow best regulated when operations have been planned well in advance, when large numbers of troops are involved on a single broad front, when the necessity for special construction, rehabilitation, or development of facilities is least, when requisitions flow back and supplies flow forward in response to them through a single well-established channel, and when the whole supply line is relatively free of bottlenecks. These ideal conditions, nonexistent in any theater, were the direct obverse of those obtaining in the Pacific in 1943 and 1944. Strategic opportunism imposed heavy burdens on the logistical planners. With battlefronts and bases scattered and separated by expanses of ocean, backlogs of supplies inevitably developed in the rear while the front suffered from want. Special requirements for base development were many, varied, and difficult to predict in advance. Separate supply lines for three different theaters and for two separate services complicated problems of allocation, of requisitioning, and of loading. Lack of ports and receiving facilities at the end of the line produced shipping congestion and delays in turnaround that inevitably hampered both logistical planning and operations. In many cases the real crux of the logistical problem in Pacific operations was less in any over-all shortages of supplies, or even of shipping, than in difficulties in a distribution proc-

ess that had to achieve balance among theaters, bases, and services—in short, provide the right men and right supplies at the right time and place.

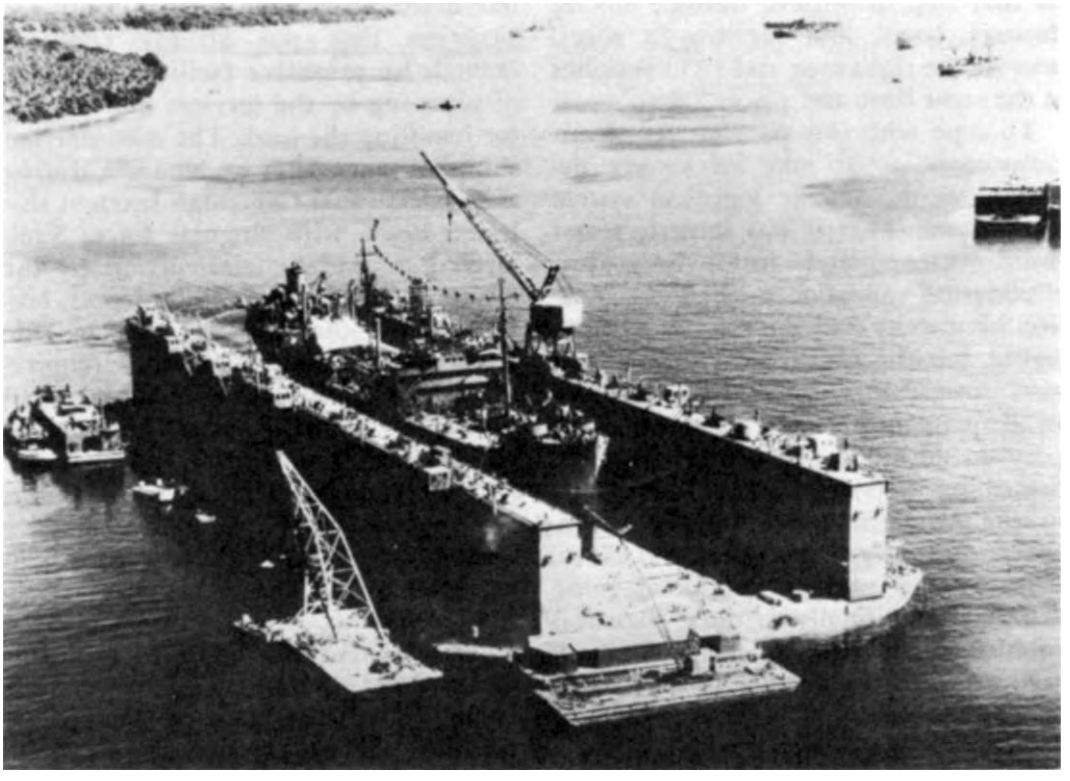
To cope with this peculiar set of circumstances, what may be loosely described as the Pacific logistical system was shaped. That it was imperfect and could not completely fulfill the goal of eliminating imbalance—the combination of scarcity and waste—goes without saying, but the system as it evolved did work toward this end and did produce an adequate measure of efficiency to make possible the rapid advances of 1944. In describing the system we shall turn first to the arrangements for logistical cooperation between the Army and Navy, then to the problem of ocean-going shipping, and finally to those logistical problems that were of particular concern to the Army alone

The Problem of Joint Logistics

The first year of the war in the Pacific brought an effective challenge to the traditional separation of Army and Navy supply and administrative systems. During that year it became evident that two separate and parallel supply lines to the same area produced waste and duplication in nearly every aspect of logistical operations, most of all in the utilization of ocean shipping. Outloading to the same areas and bases by two separate organizations in separate ships without either over-all control of priorities between them or co-ordination in the use of personnel or cargo space was obviously inconsistent with the need for conserving shipping space. Unloading at the receiving end by separate organizations in accordance with their individual and peculiar needs could only further confuse a situation that was already confused enough by primitive facilities and lack of planning by the services individually for handling the load. The monumental shipping congestion at Nouméa during the Guadalcanal Campaign brought this lesson home with singular force. Similarly, independent construction by the Army and Navy of airfields, depots, hospitals, and other facilities side by side on the same islands pyramided requirements for construction materials and labor. Also, by any standard distribution of common commodities and performance of common services by each service separately on each island base was uneconomic. Though the supply and servicing of the fleet afloat was a sufficiently distinct problem to warrant a separate system, the logistical problems of Army and Navy forces ashore were like enough to dictate a large measure of unity in the supply line serving both. And even in the case of the fleet, logic would seem to dictate that commodities like food and oil should come from a common storehouse. Elementary justice was involved as well as economy of effort, for in the interests of good morale it was desirable that both services have a common standard of living.[3]

By the end of 1942 such prominent Army logisticians as Generals Somervell and Lutes had come to the conclusion that the logic of a unified supply and transportation system to serve both Army and Navy was irrefutable. Indeed, before the end of the war Somervell was supporting the creation of one massive

[3] (1) See Leighton and Coakley, *Global Logistics, 1940–43*, ch. XV. (2) Memo, Dir Opns, ASF, for Gen Wood, Dir Reqmts Div, 5 Jul 43, folder Unified Supply: Army-Navy 1942–43, Lutes File.



FLOATING DRY DOCK WITH CARGO SHIP UNDER REPAIR

service organization for all military forces, ground, air, and naval.[4] That the ASF chiefs were never able to put their ideas over is testimony to the strength of the tradition of separation and to the counterlogic arising from the fundamentally different philosophy and purpose of Army and Navy logistical systems.

The Army system was developed primarily for the support of ground forces ashore, the Navy system primarily for support of the fleet afloat. The Army turned much earlier in World War II to a fundamental reorganization of its supply services and developed a more centralized system of planning and controlling the flow of supplies to theaters scattered over the globe. The Navy clung to its older concepts longer because its expansion was not so rapid and violent and because less centralized control seemed to provide more adequately for the support of the fleet. For fleet support, the best system was a decentralized one, which involved the stocking of a series of major bases within reasonable distance of the areas of operations to which fleet units could return for refueling, replenishment of stocks, and servicing and repairs.

Beginning in 1942 the Navy carried this concept of mobility a step further with the development of fleet service

[4] See Millett, *The Organization and Role of the ASF*, pp. 27–80.

squadrons. One of the really great logistical innovations of World War II, these squadrons were mobile logistics bases composed of all sorts of fleet auxiliaries that carried fuel, provisions, ammunition, and other types of supplies to the fighting ships at sea, and performed essential repair and other services for them, enabling the fleet to move almost at will without fear of failure for want of logistic support. The Navy's advance bases thus became mobile and the Navy in the Pacific far less dependent than the Army upon the progressive development of land installations close behind the line of advance.

The Navy's concept of flexibility and mobility conditioned the development of its logistical system. Requirements for the fleet, or at least so the Navy contended, could not be fixed in time and place to the extent that requirements for land troops could. The Navy therefore preferred to place its depot system in the United States in the ports, and to stock both depots and forward bases generously so that no fleet unit or service squadron should want for anything when it put into port. Moreover, the Navy tried to adapt this system to the supply of Marine Corps forces ashore, and to its shore installations in forward areas, maintaining to the maximum extent possible the concept of mobility, of floating rather than fixed depots, and of keeping the impetus of supply from the rear. Continental and forward base establishments enjoyed a measure of autonomy unknown in the Army; the Navy's bureaus, counterparts of the Army's technical services, went their own ways without that measure of centralized control exercised by General Somervell's ASF headquarters. Despite some moves in that direction, the Navy never developed any over-all supply program such as the Army Supply Program, but relied mainly on consolidation of individual calculations by its bureaus.

To the Navy Somervell's proposals for unified logistics seemed to carry an implied threat of absorption of a system developed to meet naval needs within a large monolithic Army organization hardly adaptable to supporting the fleet. To Army observers, on the other hand, the Navy's system seemed unbelievably haphazard and chaotic. Any operational flexibility gained by concentrating depots in the ports, they thought, produced a lack of flexibility in the zone of interior either in regulating the flow of supplies into port or in transferring shipments from one seaboard port to another. Overseas shipments seemed to be governed less by proven theater requirements than by the amount of cargo available in seaboard depots.

That the system was uneconomic even the Navy's leaders themselves were ready to admit before the end of the war. But it did provide support for naval forces that, even if at times wasteful, was also superior in some respects to support furnished by ASF to the Army. And in the Pacific where the Navy was very much at home decentralization and mobility led to development of procedures within the theater that often were better adapted to the situation than the more precise but more cumbersome procedures of Army supply.[5]

[5] (1) See Rear Adm. Worrall Reed Carter, *Beans, Bullets and Black Oil* (Washington, *circa* 1953); also see Duncan S. Ballantine, *U.S. Naval Logistics in the Second World War* (Princeton, N.J.: Princeton University Press, 1947), especially pp. 132–51, 160–66. (2) Ltr, Lt Col Richard D. Meyer to C. C. Wardlow, OCT Historian, 21 Jul 49, OCT HB folder A–N Jt Logs. (3) Min, 79th mtg JMTC, 1 Jul 44, Item 6; 80th mtg, 14 Jul 44, Item 1.

Another factor influencing the situation was the wide variance in the emphasis the two services placed on the Pacific war. Whatever the theory, for the Navy the Pacific war was the most important one, for it was in the Pacific that the largest part of the Navy and its best units were concentrated, and it therefore tried to support its units in the Pacific as well or better than those in the Atlantic and the Mediterranean. The Army —for whom the war in Europe was paramount in fact as well as in theory—perforce placed the Pacific theaters in lower priority. The Navy was never ready to apply the Army's rigid standards of economy to its Pacific establishment. Consequently, the development of common standards of support, particularly in the area of troop comforts, was difficult if not practically impossible. All these considerations serve to explain why the Lutes-Somervell proposals for genuine unity in the service supply line to the Pacific theaters, however logical they may have seemed, were never put into effect during World War II—were, in fact, never even seriously considered after early 1943[6]—and why the joint logistical system that took shape and hardened emphasized, instead, co-ordination in the interest of eliminating duplication of effort.

Joint Planning and Procurement

At the top military level, the JCS and its various committees performed the very broad functions of balancing the Army and Navy's manpower and procurement programs within the limits of feasibility as indicated by civilian agencies, and of co-ordinating the logistical plans of the two services and relating them to strategy. The joint committees were the essential link between the JCS and the operating administrative agencies of the War and Navy Departments, bringing together the plans and requirements developed by these agencies (and often the people who drew them up), weighing them in the balance of strategic priorities, and determining the guidelines for adjustments. It was their task to preserve the connection between joint strategic plans and independent service logistical plans and policies. The work of the committees was, nevertheless, largely of a co-ordinating and advisory nature. In certain cases they allocated scarce resources, acting under the authority of the JCS, but they did not initially determine the requirements on which these allocations were usually based nor did they exercise any supervision over the processes of production and distribution.[7]

Of greatest importance in the field of Pacific logistics were the Joint Military Transportation Committee and the Joint Logistics Committee. The JMTC, acting for the JCS, progressively asserted its control over the allocation of shipping to the various Pacific areas.[8] The Joint Logistics Committee conducted a continuing study of Pacific logistics, attempting to anticipate requirements in the light of strategic plans, to place the spotlight on critical problems, and to prevent duplication between the services in procurement and in development of base facilities. Nevertheless, there was never any agreed formula for the use

[6] On the Lutes-Somervell proposals and their fate see Leighton and Coakley, *Global Logistics, 1940–43*, Chapter XXIV.

[7] For a complete discussion of joint committee functions, see above, Chapter IV.

[8] See below, ch. XVIII.

of these studies in the actual determination of requirements by the War and Navy Departments, whose planners relied principally on advice from theater commanders and on projections made independently by service logistical planners. The studies served more frequently the broader purpose of keeping the Joint Staff Planners, the Joint War Plans Committee, and the JCS themselves informed of the relationship between requirements and resources, present and projected, in the Pacific.[9]

Co-ordination at the operating level in the continental establishment was more frequently a product of direct contact of ASF and the naval supply agencies or the work of a multiplicity of more ephemeral joint committees, great and small, sometimes formed under the aegis of the JCS but more frequently independent of it. In June 1943 the JCS appointed a committee to study the problem of overlapping and duplication in Army-Navy functions, but differences in approach by the two services prevented any effective action.[10] Other committees achieved a greater measure of success but the answer in every case was co-ordination, not unification.

Co-operative arrangements for the procurement of common articles were numerous, many of them antedating the war. The Army, for example, by arrangements of long standing, procured Marine Corps requirements for small arms, tanks, machine guns, ammunition, and other common items of ground ordnance. During the war arrangements were made for the Army Chemical Warfare Service to procure chemical warfare equipment for both the Navy and the Marine Corps. By the same sort of arrangement the Navy procured large quantities of heavy ammunition and rockets for the Army, and took care of the landing craft requirements of the Engineer special brigades. The Army Quartermaster placed about 90 percent of the Navy's contracts for subsistence through its Quartermaster market centers and field buying offices, though the Navy usually had representatives at these agencies to compile requirements and handle payments. Lumber procurement was eventually fully integrated by a central procuring agency in the Corps of Engineers, staffed jointly by Army and Navy personnel. Petroleum requirements of the two services were consolidated by the Army-Navy Petroleum Board and presented to the Petroleum Administrator for War, but actual purchasing was separate. Bulldozers were procured by the Army Engineers and then allocated among the two services and lend-lease claimants by a War Department conference group working under the auspices of the Munitions Assignments Committee (Ground); DUKW's were procured by the Army and amphibious tractors by the Navy, and were al-

[9] (1) See JLPC 3 and JLC 31 Series, titles: Logistical Aspects of Bases and Phases, Pacific Campaigns 1943–44; Logistic Support, Pacific Campaigns, 1944 and Beyond; Availability of Resources for Pacific Opns. (2) Diary, Theater Br, entries for 27 Nov and 26 Dec 43, ASF Plng Div. (3) Memo, Magruder for Wood, 29 Jun 44, sub: Logistic Support, Pacific Campaigns, 1944 and Beyond (JLPC 3/8), with related papers, folder Pac Theater, ASF Plng Div. (4) Memos, G–3 and G–4 for OPD, 7 Jul 44, sub as in (3). (5) DF, G–4 for OPD, 4 Aug 44, sub as in (3). (4) and (5) in OPD 400 TS, Cases 189/3 and 5. (6) Memo, Tansey for Handy, 7 Sep 44, sub: Joint Over-all Logistics Plan, OPD 400 TS, Case 224.

[10] (1) JCS 351/5, 21 Jun 43, title: Proposed Revision of Navy and Marine Corps Aircraft Program. (2) Memo, Col Ray T. Maddocks, OPD, for Gen Wood, ASF, 30 Jun 43, sub: Duplication or Overlapping of Activities in the A and N. (3) Memo, Dir Opns for Wood, 5 Jul 43. (2) and (3) in folder Unified Supply: Army-Navy 1942–43, Lutes File.

located by MAC(G) under generally similar arrangements.

Efforts were made, with varying degrees of success, to extend joint arrangements into such fields as construction materials and machinery, motor vehicles, diesel engines, electronics, post exchange stores, and boats and other floating equipment. The Joint Army-Navy Standardization Committee for Vehicles and Construction Materials was formed in mid-1943 and continued to sit throughout the rest of the war. It reached agreements on standardization of much of the Army's automotive equipment for both services, and by mid-1944 the Army was procuring only slightly less than 50 percent of the Navy's vehicles; but the Navy procured the rest independently. Procurement of many individual types of construction machinery was also consolidated, but the committee was able to make little progress toward establishing common construction standards.[11]

The development of joint procurement practices in some fields was balked by difficulties over establishing specifications and common standards, and in others by fear of relinquishing control over critical items. The Navy, for instance, consistently refused to lower its standards of construction in the Pacific to conform to those of the Army, and the Army felt unable to raise its own. On the other hand, it seemed logical that the Navy should procure all small boats and floating equipment, but General Gross, apparently with MacArthur's interests in mind, objected strenuously, fearing, as he put it, that it would reduce Army commanders to the role of "petitioners."[12] Gross's logic convinced his superiors and it stuck despite sporadic pressure from civilian authority for a unified requirements and procurement program. In August 1944 the JLC and JMTC in a joint report to the JCS noted that although there was informal collaboration and central procurement of certain particular types, no joint procedure had been established for calculating requirements or for placing contracts for small craft and floating equipment generally, and concluded that "a more complete and formalized method . . . would . . . result in substantial economies in requirements, in standardization of design and in more intensive use of facilities already in each theater."[13] But apparently action had gone too far along independent lines to permit many changes. A joint small craft subcommittee was formed, but found about all it could do was to check re-

[11] (1) Memo, Capt Lewis L. Strauss, USN, and Col William H. Draper for Secy Navy and Under Secy War, 8 Feb 45, sub: Final Report on Coordination of Procurement Between War and Navy Departments (hereafter cited as Draper-Strauss Rpt) (February, 1945), 3 vols., ICAF Library. This voluminous study of the problem of co-ordination in procurement was undertaken at the direction of the secretaries. (2) Millett, *Organization and Role of the ASF*, pp. 268–77, contains a summary of the Draper-Strauss Report. (3) On the work of the Joint Army-Navy Standardization Committee see Memo, Gen Lutes for Brig Gen Minton and Col R. M. Osborne, OCOrd, 8 Oct 43, CofS ASF, file Navy Dept; Ltr, Somerville to VCNO, 24 Mar 44, Hq ASF, file Navy 1942–44; Memo, Robert P. Patterson, Under Secy War, and H. Struve Hensel, Assistant Secy Navy, for CG ASF, 15 Feb 45, sub: Joint Procurement Study—Construction Machinery and Mechanical Equip, folder 1-a-1, Jt Sup Prog, ASF Plng Div.

[12] (1) Memo, Gen Gross for Gen Somervell, 22 May 43, sub: Gen Lutes' Memo of May 21 re Army-Navy Coordination, file 5a C1 IV Supplies SOPAC, ASF Plng Div. (2) Memo, Lutes for Somervell, 21 May 43, Lutes Diary.

[13] (1) JLC 119/1, 9 Aug 44, title: Army, Navy, Maritime Comm Shipbldg Program. (2) Diary, entries for 18 and 21 Aug 43, Strat Log Br, Plng Div, ASF.

quirements of one service against the surpluses of the other. It seems to have met only twice.[14]

The case of small boats was typical of many other fields—co-operative arrangements for procurement of one type, no arrangements for another type, and no over-all system for joint determination of requirements. As a rule, then, co-operation in procurement was sporadic and haphazard with no institutional device to promote or direct it. A committee appointed to study the matter noted early in 1945 that "in general . . . the services and bureaus have worked together to meet specific problems as they have arisen. As a result, the methods used have usually been designed to meet the immediate need and have followed no consistent plan."[15] Even when there was joint procurement it generally was based on separate determinations of requirements, and deliveries most frequently were made by each service with material flowing into two different service depots unless arrangements had been made within the theaters for delivery of specific commodities by one service directly to the other. Also, except in the latter instance, the Army had to be reimbursed for material procured on Navy account, and vice versa. With no genuine system for joint procurement or joint processing of requirements, outside of a very limited sphere, the flow of supplies had necessarily to go through separate channels, with the only semblances of unified control exhibited in the handling of shipments outward from the ports, in the establishment of priorities, the distribution of materials, and the performance of services within theaters of joint operations.

The Basic Logistical Plan

The obvious effects of duplication in this distribution phase impelled the Army and Navy to come to a more fundamental agreement. On 7 March 1943 the chiefs of the two services promulgated a joint directive titled "Basic Logistical Plan for Command Areas Involving Joint Army and Navy Operations," more familiarly known as the "Basic Logistical Plan." The stated purpose of the plan was to insure "coordinated logistical effort and procedure . . . to the end that the combined personnel, equipment, supplies, facilities, shipping and other services of the Army and Navy are most effectively utilized and adequately provided." Joint commanders were entrusted with "full responsibility for all logistical services within their areas" and instructed to organize "suitable unified logistical supply staffs" or provide for "joint staff planning and operations on the part of respective Army and Navy staffs." Each area logistical organization, whichever form it took, was to establish procedures for:

a. Keeping the Commanding General, Services of Supply, U.S. Army and the Vice Chief of Naval Operations, U.S. Navy, informed of future service requirements and of the state of readiness and adequacy of available services, facilities and personnel.

b. Making recommendations to the Commanding General, Services of Supply . . . and the Vice Chief of Naval Operations . . . relative to levels of supplies, including reserve stocks, to be maintained in the area.

[14] (1) *Ibid.* (1). (2) Min, 83d mtg JMTC, 17 Aug 44; 84th mtg, 21 Sep 44. (3) Memo, Maj Gen John M. Franklin, ACofT, for JLC and JMTC, 10 Aug 45, sub: Joint Small Craft Subcom Rpt of Activities, ABC 561 (7 Nov 43).

[15] Draper-Strauss Rpt, 8 Feb 45.

c. Wherever possible, supply items or services common to both Army and Navy by a single agency.

d. Establishing liaison with the adjacent Area Commanders to provide for interchange of emergency logistical support.

e. Furnishing timely information to responsible supply and shipping agencies relative to:

(1) Current status and prospective needs of services and supplies for all naval and military forces within the area.

(2) Priority of Army and Navy shipments arranged in a single list for each area, sub-divided into three categories, i.e., specially requisitioned items of immediate urgency, "must" or automatic supply items, and other items arranged in the order of relative urgency.

(3) Availability of existing storage by types and localities and status of projected storage with probable dates of completion.

(4) Port of discharge facilities and capabilities at shipping destinations.

(5) Items obtainable locally which can be screened out of requisitions submitted to mainland agencies.[16]

On the basis of this information and "acting upon identical copies of shipment priorities" seaboard shipping agencies were to effect the necessary co-ordination to meet fully the combined requirements of both services with respect to allocation, loading, and routing of ships.

The charter was a compromise, the result of three months of negotiations that had begun with the far more radical proposals of Somervell and Lutes for a genuine union of the overseas supply lines of the two services. The compromise, which prescribed co-ordination as the remedy for the ills of duplication and put the main burden for it on the theater commanders, at least by implication set certain limits beyond which even co-ordination could not go. The directive failed to provide any joint system for procurement, storage, or movement in the United States or for any real union of supply lines from U.S. ports to Pacific theaters. Without unity at the source of supply, there was little prospect that there could be unity further along the line. Nevertheless, however weak the plan was in positive and compulsive arrangements, it was still a practical achievement of considerable import. It left a great deal to the discretion of theater commanders so that co-ordinating arrangements could go ahead at the pace they deemed practicable and desirable. In the last analysis, the plan was perhaps the best that could be achieved in mid-war without creating a series of dislocations more harmful than helpful in their effect. It prescribed co-ordination for areas where joint action was clearly most needed, and left service supply lines to operate with a maximum of independence in theaters where that was the most practicable way.

The West Coast Establishment

The establishments of both services principally concerned with moving men and materials to the Pacific were centered on the west coast. Here the port of San Francisco occupied the same preeminent position that New York did in the East. San Francisco was the site of the Army port of embarkation charged with the supply of all three of the major Pacific theaters; it was also the site of the headquarters of the Twelfth Naval District, and of the Navy's Service Force

[16] TAG Ltr to Major Army Comds, 7 Mar 43, with Incl, sub: Basic Logistical Plan for Command Areas Involving Joint Army and Navy Operations, AG 381 (3-5-43) OB-S-E-M.

Subordinate Command, Pacific (the main headquarters of the Service Force Pacific was at Pearl Harbor). The Naval Transportation Service also maintained its major Pacific coast port command at San Francisco; nearly all supply shipments for the Navy and Marine Corps in the Pacific went from this port. At Los Angeles the Army first maintained a subport, which was elevated to the status of a full POE in mid-1943. Earlier, in May 1943, responsibility for supply of the CBI had been transferred from Charleston, South Carolina, to Los Angeles; Los Angeles also handled some of the overflow from San Francisco for the South, Central, and Southwest Pacific. The main naval facilities in the southwest were at San Diego, where most Marine Corps units were outloaded; others were at San Pedro, and at Port Hueneme, newly activated for staging naval construction battalions (Seabees), their impedimenta, and supplies. In the northwest a second area centered around Seattle and Tacoma, Washington, and Portland, Oregon. Seattle was the site of another major Army port of embarkation, with subports at other points in Washington, Oregon, and at Prince Rupert in British Columbia. The Seattle port was charged primarily with support of the North Pacific, but, under the general aegis of the responsible port at San Francisco, was also used extensively for cargoes moving to Hawaii. Headquarters for the Thirteenth Naval District were at Seattle and a major naval advance base for the support of the North Pacific at Tacoma.[17]

The establishments within each service at San Francisco exercised a certain measure of control over facilities at all the other ports serving the far Pacific, and the main instruments for Army-Navy co-ordination took shape there. Because shipping was the most critical factor in Pacific logistics, west coast coordination involved primarily means of assuring an economic utilization of that resource. The shipping congestion that developed at Nouméa in the fall of 1942, which started the chain of events that produced the Basic Logistical Plan, also led to the formation of the Joint Army-Navy-WSA Ship Operations Committee at San Francisco in early 1943. The committee was composed of the commandant of the Twelfth Naval District, Vice Adm. J. W. Greenslade (later Pacific Coast Coordinator of Logistics), the commanding general of the Army's San Francisco Port of Embarkation, Maj. Gen. Frederick Gilbreath, and the senior WSA representative in San Francisco, John A. Cushing. Its duties, as informally agreed in February 1943, were "to consider all matters pertaining to the handling of shipping of cargo and personnel . . . to the end that the maximum use will be made of ships and facilities available."[18]

[17] (1) Chester Wardlow, *The Transportation Corps: Responsibilities, Organization, and Operations*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1951), pp. 97–100. (2) Ltr, Col Frederic H. Nichols to Maj Gen Edmond H. Leavey, 5 Feb 47, inclosing Precis of Joint Overseas Transportation Problems, OCT HB, folder POA. (3) Memo, Capt Milton S. Davis, Regional Shpg Dir NTS, San Francisco, for Dir NTS, Washington, 26 Apr 44, sub: Estimate of West Coast Shpg Sit, WSA Douglas File, Navy Allocations. (4) Bureau of Yards and Docks, Navy Department, *Building the Navy's Bases in World War II*, 2 vols. (Washington, 1947), I, 194–207.

[18] (1) Memo, A. R. Lintner, WSA, for Adm Greenslade, Gen Gilbreath, Mr. Frazier A. Bailey, 4 Feb 43, folder Pac Coast Opns Com, WSA Douglas File. (2) Leighton and Coakley, *Global Logistics, 1940–43*, pp. 398–404.

Until early 1944 the committee functioned unofficially, without formal charter. Though it had no powers of compulsion over the services, it made itself an indispensable instrument for co-ordination of loading and scheduling. It served as a collecting point for information on shipping requirements for the Pacific theaters, on the potential availability of ships from returners and new construction, and on port capacities at overseas destinations. Once over-all allocations had been determined in Washington, it became the effective executive agency for carrying them out on the west coast, designating the individual ships to be employed on each run and arranging for interchange of cargoes and personnel between services where practicable. It also kept its finger on the stevedore situation on the west coast, the greatest limiting factor in outloading capacity, and worked with west coast labor authorities in shifting stevedores or loadings from one port to another. However, unanimous agreement of Army, Navy, and WSA representatives was required on all issues affecting the conflicting interests of the three agencies, and this limited the committee's sphere of action. That it was not and could not be the type of joint supply and transportation agency Lutes and others had advocated is apparent; its functions were limited to co-ordination and in this field the committee served its purpose well. As with most such organizations it generated a plethora of subcommittees to take care of details—among them the Vessel Allocation and Cargo Subcommittee, the Joint Personnel Priorities Committee, and a joint subcommittee handling priorities on towing operations to the Pacific theaters. A number of other committees also took shape on the west coast to provide joint action along other lines; the most important of them was the Joint Ship Repair Committee, formally chartered by the War and Navy Departments in mid-1943 to establish schedules for ship repair.[19]

In the fall of 1943 the Navy Department decided it should establish closer co-ordination of all the elements in its own logistical organization on the west coast, (including bureaus, naval districts, the Naval Transportation Service agencies, and the Subordinate Command, Pacific Service Force), and proposed to make Admiral Greenslade Pacific Co-ordinator of Logistics. In communicating this plan to General Somervell, Admiral Horne proposed a realignment of the joint organizations on the coast to conform. He would combine the Joint Ship Repair Committee with the San Francisco Ship Operations Committee, officially charter the new organization, and extend its purview to cover the entire Pacific coast. To Somervell this looked like the kind of autonomous west coast authority the Army had always resisted as contrary to its system of maintaining control in Washington. He finally did agree to formally charter the San Francisco Ship Operations Committee, but would restrict its functions to those it was already performing. The Joint Ship Repair Committee remained separate, and separate ship operations committees were established at Los Angeles and Seattle. The Army's refusal to adapt its west coast organization to that of the Navy was one more evidence

[19] Minutes of the Ship Operations Committee, on which this summary is based, are filed in OCT Records, OCT 334, Jt A-N-WSA Ship Opns Com, San Francisco.

of the difficulty of marrying two incompatible logistical organizations. The whole effort to provide unity in west coast operations, even within the Navy's own sphere, proved only partially successful. The San Francisco Committee did, nevertheless, greatly overshadow the committees at the lesser ports and to some extent did regulate shipping from all of them to the major Pacific theaters.[20]

The Joint Priority List

In the basic Logistical Plan the central feature of joint logistics in the Pacific was conceived as the formulation of joint requirements in the theaters and the forwarding of joint priority lists for both personnel and cargo to the seaboard shipping agencies. These shipping agencies, though separate, could, by acting on "identical copies of shipment priorities"[21] and by effecting necessary co-ordination through the ship operations committee, actually achieve the same economies in utilization of shipping that would be possible under a joint seaboard transportation and supply agency.

The development of joint priority lists proved to be a slow and difficult task. In Washington, long conferences during April and May 1943 failed to produce any agreement on procedures for allocating cargo space and the matter was allowed to lapse while the theaters themselves worked out the application of the Basic Logistical Plan.[22] Under the pressure of an acute shortage of personnel shipping space, considerably greater success was achieved in regulating the flow of personnel.

By March 1943, when the Basic Logistical Plan was promulgated, there was already a critical shortage of troop shipping in the Pacific. By using its combat loaders for troop movements, the Navy had enough to meet its own deployment needs, but the Army foresaw a deficit of some 40,000 troop spaces for April. The Transportation Corps began to press for some more equitable distribution of troop shipping under a system of joint priorities such as the Basic Logistical Plan provided. In April Admiral Halsey precipitated action in that direction by forwarding a single consolidated priority list to Washington for both services for May shipments to the South Pacific, instead of following his former practice of sending separate priority lists for each service. The War and Navy Departments instructed their port agencies on the west coast to honor Halsey's preferences, and on 26 May followed up with a directive extending the principle to cover all Pacific theaters except the North and Southeast Pacific.

A long shake-down period ensued before any definite formal procedures could be agreed to for the operation of the joint personnel priority system, but during that time at least rudimentary lists for each month's shipments were compiled. By early June a Joint Army-Navy Surface Personnel Transportation Committee had taken shape in San Francisco. It functioned as part of the Joint

[20] (1) Ballantine, *U.S. Naval Logistics in the Second World War*, pp. 210–13. (2) Exchange of Correspondence, Adm Horne with Gen Somervell, 15 Dec 43–11 Feb 44, with related papers in folder POE Jt Coms, OCT HB Gross File.

[21] Basic Logistics Plan, 7 Mar 43.

[22] Memo, Gen Gross for Adm Smith, 30 Apr 43, and voluminous related papers in OCT HB File A-N Jt Logistics.

Ship Operations Committee, and was charged with operating a single pool of personnel shipping as well as insuring that all available accommodations were used to the fullest advantage. Nimitz, MacArthur, and Halsey were instructed to forward joint priority lists to Washington for their respective theaters each month, which Army-Navy authorities would use to work out a single list for the entire Pacific. This list became the basis for action in San Francisco.[23]

The system was not yet strong enough to weather the crisis arising out of the vast increase in movements to the Central Pacific beginning in August 1943. By early September shipments against the Joint Priority Lists were 45 days in arrears and in emergencies both the Army and Navy were prone to move new units at the expense of those listed. The Navy moved personnel on its combat ships quite independently of the priority system, and all the theater commanders, desperately trying to meet their most urgent requirements, sent ships from their own pools to the west coast to move personnel to their theaters without regard to assigned priorities. "The confusion caused," reported the San Francisco Committee later, "was considerable and actually scuttled the basic plan of applying *all* troop carrying vessels to the agreed over-all Pacific requirements as indicated in the Joint Single Priority List."[24]

The general improvement in the personnel shipping situation that resulted from emergency shipments to the Pacific from the east coast enabled the Army and Navy in December to turn to the problem of systematizing procedures in a calmer atmosphere. Nimitz agreed that he should consolidate the lists for the South and Central Pacific before forwarding them to Washington, and it was further agreed in Washington that a separate list should be submitted by MacArthur for Army and Navy forces in SWPA. On the basis of these two lists, a joint Army-Navy committee would draw up the master Joint Priority List for the entire Pacific. Overruling Nimitz' suggestion that the Navy continue to use fleet ships as it desired, the Washington authorities decided that these vessels and any additional "windfall shipping" should be "distributed equitably to all areas involved." Only assault-loaded troops destined for direct shipment to combat areas, supercargoes, and ships' complements were to be excluded from the list. Changes in the list, once promulgated, were to be made only when absolutely required by operational urgency or when exchanges of similar size units were involved; small emergency quotas were allotted the Chief

[23] (1) Memo, Brig Gen Robert H. Wylie for ACofS, OPD, 13 Mar 43, sub: Shpg for South and Southwest Pacific. (2) Memo, ACofS OPD for ACofT, ASF, 29 Mar 43, same sub. Both in OPD 370.5 PTO, Sec II, Case 120. (3) Memo, Gen Handy for Gen Harmon, 1 Nov 43, sub: Troop Availability List . . . , OPD 370.5 PTO Sec IV, Case 278, (4) Rough draft of Navy Plan OP-39-T-O-CC, *circa* 1–7 May 43, sub: Joint Priority Lists—Pacific Joint Directive, Gen McNarney and Adm King, 26 May 43, sub: Joint Priority List for Pacific Shipments. (5) Ltr, Dir NTS and CofT to Comdt, 12th Naval Dist and CG SFPOE, 7 Jun 43, sub: Transportation of Army and Navy Personnel . . . to Pacific Areas. OCT HB folder Jt A-N Logistics. (6) Min, Joint A-N-WSA Ship Opns Com, San Francisco, 2 Jun 43, Item VI. (7) Rpts of Joint Surface Personnel Transportation Com, San Francisco, 1 Jun–1 Nov 43, in OCT 334, Jt A-N-WSA Ship Opns Com, San Francisco.

[24] (1) Min, Joint A-N-WSA Opns Com, San Francisco, 21 Apr 44. (2) See also other minutes of San Francisco Committee and of the Joint Surface Personnel Transportation Committee, Aug–Dec 43, in OCT 334, Jt A-N-WSA Ship Opns Com, San Francisco.

of Staff, Chief of Naval Operations, CINCPOA, and CINCSWPA to meet unexpected contingencies, and a small quota was set aside for civilians traveling to Hawaii. The Chief of Naval Operations was made responsible as the agent of the JCS for promulgating the list each month.[25]

The system worked generally as follows. The Navy Department, drawing on OPD for the necessary information on the readiness of Army units, informed CINCPOA on the 17th of each month of all units available for shipment to his theater during the second succeeding month (i.e., on 17 January for units to be shipped in March). In the same way, the War Department, drawing on the Navy for necessary information, furnished a complete list of units available to CINCSWPA. The two theater commanders then indicated by the 5th of the next month the units on these lists that they desired and the relative priorities of shipment. A joint Army-Navy committee matched the commanders' choices against availability of transports in the light of approved strategic and operational plans and consolidated the two lists into a single Joint Priority List. The final list agreed to between the War and Navy Departments was promulgated by the Chief of Naval Operations on or about the 13th of each month preceding the month of movement (i.e., 13 February for March movements).[26]

In general, by mid-1944 the joint personnel priority system was working smoothly, although there remained some discontent in the Army over continued use of fleet vessels primarily to transport Navy personnel. The system had other imperfections, without doubt, but it did provide a pool of troop shipping in the Pacific that effectively prevented one service or one theater from asserting its priority independently over the others. Occasional shortfalls occurred in any given month, but as long as the backlogs did not mount too high (and they were kept to manageable proportions during 1944) they could be handled by carrying them over to the next month. The greatest difficulty in the operation of the system lay in the lack of any established priority between Nimitz' and MacArthur's theaters. Fortunately, during 1944 the availability of personnel shipping outran that of cargo, and consequently decisions on this question were seldom necessary.[27]

Troop unit priorities carried with them corresponding priorities for unit equipment and other impedimenta. Beyond this the two services were never able to arrive at any procedure for drawing up a single joint cargo priority list comparable to the one in effect for personnel. The extent to which Army and Navy requirements for cargo tonnage were screened or consolidated by joint commanders varied from area to area. The question of priorities between theaters or areas was left hanging in mid-

[25] (1) Msg 101609, CNO to CINCPAC, 2 Dec 43. (2) Msg 132235, CINCPAC to CNO, 2 Dec 43. (3) Ltr, CINCPAC/CINCPOA to CNO, 21 Nov 43, sub: Joint Personnel Priority List, POA, serial 001553. (4) OPD MFR attached to above documents. All in OPD 370.5 PTO, Sec VI, Case 266. (5) Joint Priority List of February 1944, OCT 370.5, Jt Priority List, 12 Jan 44.

[26] (1) Joint Priority List of February 1944, OCT 370.5 Jt Priority List, 12 Jan 44. (2) Ltr, CNO to Distr List, 13 Oct 44, sub: Joint Priority List ... Nov 44, Incl A, OCT 370.5 POA, Jt Priority List, 13 Oct 44.

[27] See minutes of Jt A-N-WSA Ship Opns Com and Joint Surface Personnel Trans Com during 1944; also series of OPD 370.5 POA Joint Priority List files covering that year.

air to be decided largely in terms of bulk cargo shipping allocations by the JMTC, and even then these allocations had normally to be made by service within each area. One factor militating against joint cargo priority control was the fact, previously noted, that much of the Navy's demand for cargo space originated with the bureaus in the United States rather than with the theater commanders. Also, in the recurrent shipping crises of 1943 and 1944 Atlantic shipping from east and Gulf ports was frequently used to fill Pacific deficits, making it difficult for either service to strictly follow theater priorities. Moreover, even within the theaters, the genuine unification of logistical systems, a prerequisite for any sound system of joint cargo priorities, proved impossible of achievement.

CHAPTER XVIII

Joint Logistics in the Pacific Theaters

Though Pacific theater commanders exercised that measure of central control over logistics in their theaters so lacking in the United States, no real unification of the Army-Navy logistical effort existed even there. True unification would have been practically impossible as long as supply lines from the United States remained separate, even had Pacific commanders been inclined to push for it. Nevertheless, logistical co-ordination in the theaters was much closer than in the continental establishments. The limited capacity of supply lines, particularly in the early stages of assault operations, made joint control and utilization of supplies, facilities, and services imperative; and joint arrangements at the front necessitated close co-ordination at the rear bases. Arrangements differed in the three main Pacific areas, and in each area they were adapted to the local situation and to the personalities involved.

Joint Logistics in SWPA

In MacArthur's theater in the Southwest Pacific, logistical co-ordination was primarily achieved through centralized planning and direction at the top rather than through detailed arrangements at the operating levels. Very little of the SWPA system grew out of the Basic Logistical Plan. Over-all control was exercised by MacArthur's staff at GHQ, a staff both joint and combined, as was SHAEF in Europe; it included American and Australian personnel from all services and a small complement of Dutch officers. The fact that the theater was an Allied command vastly complicated the problem of logistical organization, for co-ordination of logistical support of Australian and American forces assumed a place every bit as important as that of co-ordination of Army and Navy supply. The solution adopted by General MacArthur was to leave supply lines of the various national service components separate and to exercise control largely through the dictation of priorities.

Five major commands were functioning under GHQ during 1943 and 1944 —Allied Land Forces, Allied Air Forces, Allied Naval Forces, ALAMO Force (U.S. Sixth Army), and U.S. Army Forces in the Far East (USAFFE). The relations between these commands and their component parts were complicated and viable, too much so to permit of any comprehensive description here. Australian forces in all commands maintained their own supply lines separate from the Americans'. The major U.S. Army supply command was the theater Services of Supply (USASOS), a subordinate headquarters of USAFFE, charged generally with operation of a communica-

tions zone (though one was not formally organized) in support of advancing Army forces. Service Force, Seventh Fleet, occupied a similar position in the Navy. Neither of these American administrative headquarters owed more than a shadowy allegiance to the intermediate Allied headquarters of the three services. Channels of communication for administrative matters and of requisitioning on the United States went from USASOS or USAFFE to the San Francisco port and the War Department on the Army side, and from Seventh Fleet to Hawaii, the west coast, and the Navy Department on the Navy side.

GHQ determined the nature, scope, and goal of operations, assigned responsibilities to each of the major commands under it, determined priorities on supplies and shipping, and exercised general supervision and control over both the planning and execution of each operation. ALAMO Force Headquarters, a U.S. organization under Lt. Gen. Walter Krueger (virtually the same as the headquarters of U.S. Sixth Army), rather than Allied Land Forces, normally handled detailed planning for major operations, setting up task forces as the situation demanded. In co-operation with naval and air commanders, ALAMO Force determined supply and transportation requirements for the assault force, which, after GHQ approval, then became the responsibility of the various administrative echelons to meet. Operational control of the amphibious phase of an assault usually rested with Allied Naval Forces, as did control of shipping for the movement of the assault and supporting forces and for resupply during the first phases. Once forces were safely ashore command passed to ALAMO Force Headquarters and control of supply movements to the normal administrative echelons of which USASOS was the most important. As soon as practicable after a landing the task force commander turned over the support function to an Army base commander who was in turn responsible to USASOS headquarters. The naval component set up its own separate base organization and facilities.

As can be seen, there was no unity of organization with respect to supply, administrative services, communication, transportation, or construction below the GHQ level, and only limited arrangements for cross-servicing or joint procurement. Local procurement in Australia was handled by the General Purchasing Board, a joint agency with an Army chairman. Marines in SWPA task forces were supplied through Army channels except for items peculiar to the Marine Corps. The Navy furnished marine spare parts for landing craft operated by the Army. Army and Navy headquarters were located in close proximity, as were their respective service echelons (USASOS and Service Force, Seventh Fleet), facilitating a modicum of close co-operation, interchange of information, and mutual assistance. But of formal system of joint logistics there was none; rather, two separate Army and Navy systems operated under the central direction and co-ordination of GHQ SWPA.

For instance, in the case of transpacific shipping, the Seventh Fleet and USASOS computed their requirements separately and submitted them to GHQ. GHQ then made an over-all allocation of shipping to each service and forwarded it as a request to the War and Navy Departments. Ships for the Seventh Fleet

were procured by the Navy through the JMTC, loaded, and sailed by the Navy, while the Army handled USASOS requirements in the same manner. Co-ordination in loading and dispatch had to be achieved almost entirely through the San Francisco Ship Operations Committee.[1]

In view of an extensive intratheater sea line of communications, responsibility for manning and operation of seagoing craft in the local fleet was an issue of particular importance in SWPA. It had long been accepted in traditional joint service doctrine that the Navy should operate all seagoing vessels in actual theaters of war, but this principle was never fully applied in SWPA. MacArthur's local fleet was originally a makeshift affair. Some Dutch merchantmen and a few others of miscellaneous national origins that had escaped the Japanese dragnet in early 1942 were pressed into service during the early stages of the New Guinea Campaign. Most of the small boats and harbor craft came mainly from Australian sources. Larger ships and small boats were manned by their own native crews. WSA ships retained in the theater to supplement this fleet kept their American civilian crews. The small boats and Lake steamers sent later on from the United States were normally operated by Army Transportation Corps personnel or civilians hired for the purpose in the United States or Australia. The Navy was in no position, during this formative period, to man any of these vessels nor to replace them with Navy-manned craft.[2]

In April 1943 the JCS reaffirmed the general principle that "merchant ships habitually under theater commander control in direct support of naval and military operations should be commissioned in the naval service and manned by naval crews."[3] Almost immediately, however, the directive was rendered inoperative by exceptions made for SWPA, and to a degree for other theaters, because the Navy obviously was still not prepared to assume its complete responsibility. The issue remained dormant until August 1943 when MacArthur presented requests for 71 Liberty ships and for 14,000 men to operate small boats and harbor craft in the impending campaign in New Guinea. He specifically requested that 30 of the Liberty ships be manned by Navy crews and that Army Transportation Corps composite companies and boat companies be furnished to man the small boats and harbor craft. Shortly thereafter, on 16 October 1943, the JCS issued a new directive stipulating that all merchant ships under control of a military commander and operating within 400 miles of the combat zone should be manned by Navy crews; and, somewhat alarmed at the vast differential in pay for civilians and servicemen operating small boats,

[1] (1) For a brief sketch of SWPA organization and a chart showing the main lines of command see Smith, *The Approach to the Philippines*, pp. 14–16. (2) Bykofsky and Larson, *The Transportation Corps: Operations Overseas*, pp. 425–43. (3) Carter, *Beans, Bullets and Black Oil*, pp. 63–67. (4) Memo, Col Hugh C. Johnson, Chief, Pac Sec, theater Gp, OPD, for Maj Gen Howard A. Craig, 29 Dec 44, sub: Command, Pacific. (5) Memo, Brig Gen George A. Lincoln for Gen Hull, 18 Mar 45. (4) and (5) in OPD 384 TS, Cases 1 and 1/26 (2945 file). (6) Answers by USASOS Hq to Somervell Questionnaire, Sep 43, in Control Div, ASF, folder SWP Questionnaire, Somervell Trip file.

[2] James R. Masterson, U.S. Army Transportation in the Southwest Pacific Area, 1941–47 (hereafter cited as Transportation in SWPA), OCT HB Monograph, MS, OCMH, ch. XI.

[3] JCS 240/2/D, 23 Apr 43, title: Auxiliary Ships Operated Regularly in Combined Areas.

the JCS also ruled that these vessels and harbor craft should be manned by military personnel from one service or the other.[4]

MacArthur's request and the new directive brought the issue of responsibility for vessel operation in SWPA to a head. OPD, seeing the disparity between the apparent intent of the JCS directive and conditions prevailing in SWPA, took an aggressive attitude. The staff planners insisted that the Navy should man all the merchant vessels in the theater fleet. Furthermore, they argued, the Army troop basis would not permit furnishing service troops to man small boats and harbor craft and that the Navy should furnish these personnel. The Navy was willing to go no further than to meet MacArthur's specific request to man 30 Libertys, insisting, on its own part, that it could not furnish men for the small boats without putting some of its own vessels out of commission. At this point, WSA, ever sensitive to Navy manning of merchant ships, muddied the water further by insisting that transpacific Liberty ships retained in SWPA could not be taken over by the Navy. The JCS finally reached a compromise arrangement in March 1944. Navy manning was to be confined to the "larger seagoing types" to include 5 Libertys already delivered and 25 C1-M-AV1's to be delivered to SWPA later in the year; the Navy would also provide Coast Guard crews for craft from 99 to 182 feet in length; the Army Transportation Corps would continue to man and operate craft up to 47 feet. For all other ships and craft, including the rest of the merchantmen in the SWPA local fleet, maximum use would be made of civilian personnel — American, Australian, and Dutch. In effect, the Navy let its prerogative of vessel operation in SWPA go by default, and the central role in the operation of MacArthur's local fleet fell to the Army Transportation Corps in co-operation with WSA and Australian shipping agencies.[5]

Requirements for boats and floating equipment were forwarded to Washington through separate channels by Seventh Fleet and USASOS. It was mainly because of the large requirements generated by the Army in SWPA that General Gross so stoutly maintained that the Army boat procurement program must be kept separate from that of the Navy.

The situation with regard to landing craft was dissimilar only in that procurement in the United States was consolidated under the Navy. JCS directives also provided that the Navy should man and operate all landing craft in theaters of operations, but again an exception was made for SWPA because of

[4] (1) JCS 240/5/D, 27 Oct 43, title: Auxiliary Ships Operated Regularly in Combined Areas. (2) Masterson, Transportation in SWPA, pp. 637–38.

[5] (1) JLC 42/3, 14 Mar 44, title: Manning of Sea Transportation and Harbor Facilities in SWPA. (2) JCS Decision Amending JCS 644/1, 22 Mar 44, same sub. (3) Memo, Maj Gen Ray E. Porter, G–3, for OPD, 22 Oct 43, sub: Shortage of Manpower, ABC 570 (3-1-43). Sec 4. (4) Memo, CofS, USA, for Secretariat, JCS, 27 Dec 43, sub: Manning of Cargo Vessels with Navy Crews (JCS 641); Manning of Sea Transportation and Harbor Facilities in SWPA (JCS 644). (5) Memo, Wylie for Somervell, 28 Dec 43, sub: JCS 644. . . . (4) and (5) in folder CsofS, Jt and Comb, Hq ASF. (6) Ltr, Adm Land to CNO, 6 Jan 44; Ltr, VCNO to CG ASF, 11 Jan 44, sub: Assignment of Navy Manned Auxiliary Vessels in Service of Army in Combat Areas, folder Navy 1942–44, Hq ASF. (7) Memo, Col Magruder for Gen Wood, 8 Mar 44, sub: Manning of Sea Transportation and Harbor Facilities in SWP, folder Pac Theater, ASF Plng Div. (8) Masterson, Transportation in SWPA, pp. 640–47.

the proven utility of the Army's Engineer special brigades in the type of shore-to-shore operations conducted in that area. The Southwest Pacific was the only U.S. theater in World War II in which operation of landing craft was not exclusively a Navy function. Instead, the special brigades manned and operated the landing craft assigned to them as table of organization equipment and the Navy handled craft attached to the Seventh Fleet. In amphibious assaults the services pooled amphibious resources, while GHQ exercised the usual co-ordination over determination of requirements. Until mid-1943 these requirements were actually calculated separately and forwarded to Washington through separate Army and Navy channels. In August 1943 MacArthur agreed that Seventh Fleet and amphibian brigade requirements should be consolidated and forwarded through Navy channels to the Navy Department in Washington, but this still did not produce any fundamental change in the SWPA system. There was no organizational consolidation of the amphibious forces in the theater, and MacArthur continued to rely on the War Department to see that his landing craft requirements for the amphibious brigades were met. Shipment of craft for the brigades went on through Army channels. Mainly involved were small craft, such as LCM's and LCVP's; LCT types and larger craft were normally assigned to the Seventh Fleet. While this in general resulted in the Navy operating most of the large landing craft in SWPA and the Army most of the smaller craft, the lines of demarcation were never quite so distinct, for the Seventh Fleet also had its share of LCM's and LCVP's and the Army had at least a few of the larger craft.[6]

Thus the whole SWPA system embraced only a minimum of unified requirements determination or functional division of responsibility between services. In justice to the SWPA command, it must be noted that the system was as much a product of circumstances as of design. The existence of an extremely complicated Allied structure made common channels of supply for all forces practically impossible. American naval forces in SWPA were never stable; major fleet units were shuttled back and forth between SWPA and POA and had to receive much of their support from mobile service squadrons based on POA. Shore-based naval personnel represented only a small proportion of the SWPA command. The theater had been a going concern for more than a year before the Basic Logistical Plan was promulgated, and its established policies and procedures were not susceptible to much change. Local circumstances dictated the division of function in the operation and control of water transportation far more effectively than could abstract directives from the JCS.

Yet, circumstances were not the only explanation. MacArthur himself was not convinced that unification of Army and Navy supply lines was advisable. British observers, who visited the theater in 1944 put it quite succinctly: "General MacArthur believes that each separate

[6] (1) Memo, Adm King for CofS, USA, 25 Apr 43, sub: Small Landing Craft in SWPA. (2) MFR OPD, accompanying draft msg to CINCSWPA, 17 Aug 44. Both in OPD 560 SWPA, Case 6. (3) Msg CM-OUT 5133, AGWAR to CINCSWPA, 12 Jun 43. (4) Msg C-4468, Brisbane to WAR, CM-IN 2395, 4 Aug 43. (5) For a more detailed account of landing craft supply for SWPA see below, Chapter XX.

service should retain its own line of communication in order to retain mobility."[7]

Under a system in which each national service did retain control of its own line of communications, priorities control necessarily became the essential element of GHQ co-ordination. A priorities system for the shipment of cargo into the theater, including Army, Navy, and lend-lease shipments from the United States and Australian service material from the United Kingdom, was instituted by MacArthur in August 1942 and continued thereafter. It was evidently considered good enough to meet the standards of the Basic Logistical Plan. Still, because vessels for all these different purposes were assigned and loaded separately, there was in reality no single unified priority list. Moreover, priorities seldom were geared to available shipping, with the result that each seaboard shipping agency tended to ship in response to the theater agency it served.

Given limitations on port capacity even greater than those on transpacific cargo shipping, priorities control became even more a matter of regulating movements into theater ports. In Australian ports, control was first exercised by the Australian Government in close co-operation with MacArthur's headquarters; in the forward ports in New Guinea, however, there was at first no clearly established system and much of the control over movements was left to be independently adjusted by the several transportation agencies at each port. Incoming and outgoing supplies and personnel were soon competing for the limited port facilities, and the inevitable confusion and congestion resulted.

The obvious answer seemed to be over-all control of movement priorities. At one time or another this was entrusted to various USAFFE and USASOS agencies, but the logic of the situation called for control at the GHQ level, and in November 1943 a chief regulating officer (CREGO) was established in that headquarters. CREGO was given responsibility for assigning priorities on all personnel and cargo movements within the theater by water, air, or rail, except those of naval combatant vessels and auxiliaries supporting them. While the chief regulating officer was a U.S. Army officer, his staff was drawn from all the Allied services, as were the staffs of the subordinate regulating officers set up in all the important ports in SWPA. CREGO was intended to be the impartial referee, to determine what supplies and personnel should be moved and unloaded over limited facilities, basing his decisions on policies and plans established by G–3 and G–4, GHQ. CREGO responsibilities were eventually extended to include surveillance of the priorities system on movements into the theater from points in the Central and South Pacific. Liaison officers from CREGO were established in Hawaii, in Nouméa, and in the Overseas Supply Division of the San Francisco POE.

However valid the theory, in practice CREGO's system of regulation left much to be desired, as frequent instances of ship congestion along the New Guinea coast and in the Philippines attest. The task was a difficult one at best, in view of the primitive port facilities in the operations area and the numerous agen-

[7] (1) Memo, Wood for Somervell, 11 May 44, sub: British Rpt on Problems of War versus Japan, folder Gen and Misc Pac Theater, vol. I, ASF Plng Div. (2) See also MacArthur's views as expressed to the War Department late in 1944, below, Chapter XXIII.

cies whose claims had to be considered. And CREGO occupied an awkward position as an independent agency in GHQ —he was referee over movement priorities but had no functions in the operation of transportation; he was the purveyor of G–3 and G–4 decisions but had no part in their determination. USASOS, the principal supply and transportation agency, was continually at odds with CREGO, insisting that the regulating function of the GHQ agency was exercised at so low a level and in so detailed a manner as to interfere with the normal exercise of the operating transportation function, and that CREGO was too far divorced from this function to make such detailed decisions intelligently. Neither USASOS, nor the Seventh Fleet, nor G–4, GHQ, were ready to accept CREGO's authority without qualifications, and in the instances of worst congestion there is every evidence that CREGO's control over movements broke down. The WSA representative in the theater, Herbert Schage, continually criticized CREGO's activities.

The difficulties of the regulating system clearly reflect the want of any really unified control of the logistical function in SWPA. GHQ determined over-all plans but left the determination of requirements to fulfill them up to subordinate commands. Then GHQ screened the requirements and, through CREGO, acted as monitor over the movement of supplies and personnel to meet them. The various service administrative agencies at the intermediate level generally went their own way, which inevitably reacted so as to limit the effectiveness of GHQ co-ordination. Requisitions were placed on the United States, on Australia, and on other sources of supply largely in terms of need and without much regard for limitations on transportation. As large backlogs of requisitions mounted in San Francisco, the priority system for shipment tended to break down, and the Army as well as the Navy began to ship the material most readily available. The dispatch of the CREGO liaison group to the San Francisco port does not seem to have appreciably improved that situation. As late as December 1944 Brig. Gen. Robert H. Wylie of the Transportation Corps was complaining that the theater supply echelon seemed to have little understanding of the theater's shipping problems, and pointing out the "absolute necessity of tieing together transportation and supply in the Southwest Pacific Area."[8]

Informal Co-operation in the South Pacific

In the South and Central Pacific, areas of naval responsibility, arrangements for joint logistics were considerably more detailed and far-reaching than in SWPA. The problem was also more acute, for in these areas Army and Navy forces were deployed ashore in almost equal numbers. In the South Pacific the first steps toward a joint logistical system were taken very early. In May 1942 a Joint Purchasing Board was established to exploit New Zealand resources and those of the smaller Pacific islands, with

[8] (1) Memo, Wylie for Wood, 19 Dec 44, sub: SWPA Shpg Situation, OCT HB, Folder Shpg in Pacific, Wylie File. (2) On CREGO generally see Larson and Bykofsky, *The Transportation Corps: Operations Overseas*, pp. 437–46; Masterson, Transportation in SWPA, pp. 744–808; History of the General Headquarters Regulating System, prepared by Office, CREGO, GHQ. (3) Ltr, Schage to Capt Granville Conway, 25 Dec 44, folder Pac Area (1944), Box 122893, WSA Conway File. (4) See below, ch. XX.

the Navy responsible for delivering the supplies procured from these sources to both services; later the Army was entrusted with procuring necessary supplies from the United States mainland for all shore-based forces except those in the Samoan Islands, the Navy similarly for furnishing all POL. As a result of the confusion during the Guadalcanal Campaign and particularly the congestion at Nouméa, Admiral Halsey put into effect further joint arrangements for handling incoming shipments and movements to forward areas. The Army service commander on New Caledonia, Col. Raymond E. S. Williamson, was given responsibility for port and unloading operations at Nouméa; the Army area commander, Maj. Gen. Robert G. Breene, was put in charge of co-ordination of logistical support for Guadalcanal. Breene was to be advised in determining priority of shipment by a priorities board composed of Army, Navy, and Marine Corps representatives.[9] Halsey's philosophy, apparently, was to entrust each service with certain responsibilities at each base and to develop co-ordination through meetings of major commanders. Harmonious relations were established early between Admiral Halsey and General Harmon and this informal method of co-operation proved highly effective in combat operations. "Our relations with the Navy," wrote General Breene in May 1943, "have been so cordial that it has been possible to get many things done by pure co-operation without even a scratch of the pen."[10]

Admiral Halsey, like General MacArthur, at first proposed to make no change in this informal system of co-ordination to meet the Basic Logistical Plan, but Nimitz overruled him, and on 20 May 1943 he issued a formal Base Logistic Plan for the South Pacific Area. Halsey's plan established a Joint Logistics Board composed of the principal Navy, Army, and Marine Corps service commanders who had been meeting in informal fashion. The board never actually functioned as such but operated as a supervisory body over a Joint Working Board composed of subordinates who, grouping themselves into various subcommittees, attempted to extend the sphere of joint logistical action. The board gave way in early 1944 to a joint logistical staff, following again the precedent set by Nimitz in Hawaii, but the joint logistical staff in the South Pacific was never more than a façade. The principal achievements in the direction of logistical co-ordination were made either by informal co-ordination or by the Joint Working Board.

The board extended existing co-operative arrangements in several fields. The agreements on cross-servicing for provisions and POL were refined and extended, the Army assuming responsibility for ordering all dry provisions for units afloat as well as ashore and for fresh provisions for units ashore, the Navy for ocean delivery of fresh provisions in its reefer ships. The Army took over the operation of all cold storage facilities ashore, responsibility for all antimalarial supplies, and for salvage for both services. Progress along the line of cross-servicing also included Army operation of such installations as major repair facilities for both services at some bases and

[9] Leighton and Coakley, *Global Logistics, 1940–43*, chs. VII and XV.

[10] Ltr, Breene to Lutes, 20 May 43, folder So Pac 1942–43–mid-44, Lutes File.

the Navy at others, and establishment of common stocks of some types of motor vehicles and spare parts and of certain types of ammunition.[11]

Arrangements for handling incoming cargo shipments and outloading cargo for forward destinations were also extended as the advance into the Solomons proceeded. In general, control and operation of all vessels save certain harbor craft and other small vessels was vested in the Navy; the Navy thus controlled convoys and routing to forward areas, but the control of ports, both forward and rear, was arranged as the occasion demanded. General Breene continued, with the advice and assistance of the priorities board, to control the forward movement of cargo and the scheduling of shipping from the United States to Nouméa and other rear bases. The Navy controlled priorities for personnel movement within the theater, although the Army's Theater Transportation Division issued instructions for loading in accordance with the priorities. The Navy also controlled all assault shipping and scheduled its movement during the amphibious phase of combat operations. In sum, then, the system for shipping controls was a joint one, based on a complicated, often informal, division of responsibility between the services and dictated by Admiral Halsey by and with the advice of his service and task force commanders.[12]

These achievements were not inconsiderable; however, they still left major areas of joint interest untouched. The basic principles of joint action in the South Pacific were almost entirely those of cross-servicing and exchange of supplies rather than genuine unification. Army and Navy housing facilities, depots, hospitals, and recreational facilities remained separate; even though in some cases they were jointly used, the opposite was more frequently true. In the vital field of construction, almost no progress was made either in developing common standards or in pooling supplies. Not only did the two services use different types of material and different terminology but the Navy's standards were far higher than those of the Army. Navy men lived in roofed barracks with wooden floors in New Caledonia while Army troops had to be satisfied with thatched huts with dirt floors. Similarly, the Navy was far better supplied with such luxury items as beer and had far better recreational facilities. It also seemed to have more machinery and power facilities; no sight, one observer remarked, was better calculated to set a doughboy cursing then to see a machine digging slit trenches for Navy personnel. If combat conditions tended to reduce everyone nearer to a common standard, the generally higher Navy standard of living in rear areas was a continuing testimonial to the failure of the system of informal co-operation to produce even an equitable division of resources, much less a unified logistical system.[13]

[11] History of the United States Army Forces in the South Pacific Area from 30 March 1942 to 1 August 1944 (hereafter cited as USAFISPA History), MS, OCMH, pp. 337–55.

[12] Larson and Bykofsky, *The Transportation Corps: Operations Overseas*, pp. 501–09.

[13] (1) USAFISPA History, pp. 346–47. (2) Wesley F. Craven and James L. Cate, eds., "The Army Air Forces in World War II," vol. IV, *Pacific: Guadalcanal to Saipan* (Chicago: University of Chicago Press, 1950) (hereafter cited as Craven and Cate, *AAF IV*), pp. 270–73. (3) Memo, CG ASF, for Adm Horne, 25 Aug 43, folder 2d Pac Trip, Lutes File. (4) Answers made by SoPac Army Hq to Somervell Questionnaire, Sep 43, in folder SoPac Questionnaire, Control Div, ASF, Somervell Trip file.

The most serious defects in the South Pacific system, however, lay in the lack of any satisfactory mechanism for determining joint supply requirements on the United States, for planning base development, or for exercising inventory control. While the Joint Logistical Board pioneered and managed to perfect a mechanism for working out the joint personnel priority list each month, it met with little success in developing a similar cargo priority list. The area Joint Screening Board, established to exercise close supervision over requisitions for supplies for both services, never had sufficient personnel to function adequately and soon found itself merely passing on requisitions received from each service with little examination. Nor was the Joint Traveling Inventory Board able to do much more than arrange for readjusting local surpluses. And the Joint Base Planning Board, charged with developing integrated plans for base development, never managed to establish anything more than a loose co-ordination in this field.[14]

Some of the difficulties arose because it never proved possible in the South Pacific to anticipate operations far enough in advance to lay out development plans carefully. An atmosphere of emergency characterized the South Pacific theater during most of its existence. The development of planning procedures and of a stable supply system, even by each service separately, had to go ahead in the hectic atmosphere created by the rapid forward advance in the Solomons. The theater had concluded its mission before it really had time to settle down and develop routine procedures and systems; by that time the pressing need for them had almost passed.

In this atmosphere perhaps informal co-operation was the best and most effective instrument—at least all observers had nothing but praise for the effectiveness of co-operation in the island campaigns. The close control maintained over shipping to and within the theater by Halsey's headquarters, although exercised through many different organizations, produced over-all economy in the use of that controlling element in theater logistics—water transportation.

The Central Pacific System

In the Central Pacific joint logistics reached their highest point of development during World War II, despite the existence of a strong tradition of separatism in Hawaii. Since operations there did not get under way until November 1943, eight months after the promulgation of the Basic Logistical Plan, there was a considerably longer time for necessary preparations. After a slow start, Admiral Nimitz gradually extended the province of joint action in his theater, taking a very liberal view of the "full responsibility"[15] assigned him for development of logistical plans and policies.[16]

Nevertheless, the basic decision, taken early and maintained ever after, was for co-ordination and not unification of logistical systems—"in general, each service would continue to procure its own materials; either this or change the entire system from Washington on down."[17]

[14] USAFISPA History, pp. 351–75.

[15] Basic Logistical Plan, 7 Mar 43.

[16] AFMIDPAC History, pp. 1138–54.

[17] Notes on Meeting of Joint Working Com of Joint Logistics Supply Board for CPA held 19 March 1943 . . . Pearl Harbor, quoted in AFMIDPAC History, p. 1034.

On 6 April 1943, acting on the basis of recommendations of a joint Army-Navy committee that had devoted some time to the study of the implications of the Basic Logistical Plan, Nimitz established a Joint Logistics Board, composed of the Commander, Service Force Pacific Fleet, the Commanding General, Hawaiian Department, and the Commandant, 14th Naval District, with a Joint Working Board under it that was charged with "coordinating logistical effort and procedure."[18]

This organization served as the prototype for the board Halsey established in the South Pacific, but Nimitz went further in formally laying down the principles under which it would operate. In Hawaii, the Army was given primary responsibility for ground defense and for military government, the Navy for the great fleet base at Pearl Harbor. In Hawaii, also, each service would be responsible for meeting its own needs for all classes of supply save POL, which would be a Navy responsibility, and for its own services and facilities. Every effort would be made to promote free interchange of supplies, services, and facilities to meet strategic and tactical needs, and co-ordination of procedures of procurement, requisitioning, and issue, subject always to limitations set by higher authority. Where one service had practically exclusive requirements for a given item that service would, if possible, supply it to the other. Existing co-ordination in the use of port and terminal facilities under supervision of the military governor (General Richardson) would continue. At three of the outlying island bases — Canton, Christmas, and Fanning—supply responsibility was to be divided between Army and Navy; at the others—the French Frigate Shoal, Midway, Johnston, and Palmyra—the Navy would assume complete responsibility. Shipping for outlying bases would continue for the present to be operated by the owning service and loading co-ordinated to insure best use of space, but as soon as arrangements could be perfected, the Navy would take over, man, and operate all vessels in this service. Each service would continue to requisition separately on mainland sources, with only a collation of data to prevent duplication.

The plan clearly did not prescribe any radical change in the method of doing business in Hawaii. Insofar as future operations forward of Hawaii were concerned it lacked detail, but such outlines of a joint logistical plan as it did contain were highly disturbing to ASF officials. Exponents though they had become of unified logistics, they looked on the proposed Navy control of shipping to forward bases with some alarm, fearing that it presaged Navy control of the Army's line of supply. Without adequate Army representation on Nimitz' staff, ASF did not believe any system of joint logistics for the Central Pacific campaigns would be workable. General Lutes, on his Pacific trip in the fall of 1942, had urged on Nimitz the creation of a genuine joint staff organization, but there seemed no indication in the plan that Nimitz intended to carry out this suggestion. Somervell took the ASF case to Admiral Horne and to Adm. William L. Calhoun, Commander, Service Force Pacific Fleet, when Calhoun visited Washington in April

[18] Ltr, CINCPAC to Distr List, 6 Apr 43, sub: Basic Logistics Plan—Establishment of in CPA, Ser 987, in History Planning Div ASF, Text, IV, 18–26.

1943. Fearing that merely drawing personnel from General Richardson's staff in Hawaii, accustomed as they were to independent Army and Navy action, would foredoom any joint staff to failure, Somervell insisted on fresh blood from the ASF. He was finally able to persuade Calhoun to accept two ASF officers for joint logistical planning in POA, Brig. Gen. Edmond H. Leavey for the CINCPOA staff and Col. David H. Blakelock for Calhoun's staff for advance base planning. Somervell's insistence on fresh blood had important consequences, for Leavey was to prove his ability to take an independent position as a member of Nimitz' staff and his support of joint action provided an effective balance to General Richardson, who was far more prone to uphold traditional service prerogatives of the Army.[19]

For the moment just what Nimitz' staff organization was to be and what role Leavey would play in it remained undetermined. Leavey was first dispatched on a tour of Pacific supply establishments beginning in San Francisco and extending into Halsey's command in the South Pacific. He returned to Hawaii with a bad impression of both the Navy's command system and its logistical system, pointing out that Nimitz' staff was organized as a fleet rather than a theater staff. "From the logistics and supply standpoint," he wrote, "there seems to be no section, and not even an officer, on the Commander-in-Chief's staff, charged with supervision . . . of the overall logistics and supply situation in the theater. . . . From my observations so far I am convinced that in order to have a complete and coordinated operation in the Pacific Theater, it will be necessary for Admiral Nimitz to set up a GHQ type of theater headquarters with a combined Army, Navy and Marine Corps staff, including Air officers, for both operational and service functions."[20]

Leavey's views were endorsed by Lutes who, on a second trip to the Pacific a few weeks later, reported he found that the Joint Logistical Board in Hawaii was working satisfactorily for local supply matters but that there was a definite lack of joint planning for impending operations. As did Leavey, Lutes thought Nimitz should give up his dual role of Commander in Chief, Pacific Fleet, and direct command over the Central Pacific Area, and should restrict himself to the over-all command of POA; and he should exercise POA command through a joint theater staff and through area commanders with similar joint staffs in the North, Central, and South Pacific.[21] While Lutes suggested that Leavey and Blakelock should "sell" the Navy on the GHQ

[19] (1) Memo, Gen Wylie for Gen Gross, 16 Apr 43, OCT HB folder A-N Joint Logistics. (2) Memos, Somervell for Horne, 25 Mar and 2 Apr 43, sub: Detail of Officers with Staffs of Adm Nimitz and Halsey. (3) Memo, Horne for Somervell, 1 Apr 43. (2) and (3) in folder SoPac 1942–43–mid-44, Lutes File. (4) Memo, Horne for Somervell, 22 Apr 43. (5) Memo, Somervell for Horne, 22 Apr 43. (4) and (5) in folder Navy 1942–44, Hq ASF. (6) Memo, Dir Opns ASF for Gen Leavey, 11 Jun 43, sub: Detail to PTO, folder POA 1942 thru Nov 45, Lutes File. (7) And compare Leavey's views expressed in an interview with Joseph Bykofsky, OCMH, on 30 October 1950, with those of Richardson in his letter to CofS, USA, 15 Mar 46, sub: Final Rpt of CG AFMIDPAC. Both in folder Pac Gen, OCT HB Overseas Comd file.

[20] Ltr, Gen Leavey to Gen Somervell, 29 Jul 43, folder Theaters of Opn, Pacific (A and N) 1944, Hq ASF.

[21] (1) Ltr, Lutes to Somervell, 11 Aug 43, sub: Attached Ltr from Gen Leavey, folder POA 1942 through Nov 45, Lutes File. (2) Ltr, Lutes to CG ASF, 17 Aug 43, sub: Report. (3) Ltr, Lutes to CG ASF, 18 Aug 43, same sub. (2) and (3) in folder 2d Pac Trip . . . , Lutes File.

staff plan and "gradually increase the number of Army officers on the staff to accomplish the work," General Somervell decided to try at a higher level.[22] He forwarded Leavey's and Lutes's reports to General Marshall who in turn sent them to Admiral King with a suggestion that the conditions reported were "a clear indication . . . of the urgent necessity of creating a Combined Theater Staff as quickly as possible."[23]

King's blistering reply castigated Leavey for not making a "forthright report through his responsible superior" (Admiral Nimitz) and concluded that it would not be "either appropriate or wise to force on Admiral Nimitz any staff organization on the basis of reports by officers who have had very limited opportunity to observe, or know of, the overall situation in his command, and who have none of the responsibility therefor."[24] General Marshall decided it was best to let the matter drop and Admiral Nimitz was left to work out his own arrangements without further directives from Washington.

Apparently, Nimitz was himself convinced of the necessity for a stronger instrument than the Joint Logistical Board in the forthcoming campaigns in the Gilberts and Marshalls. In September, whether influenced by General Leavey's recommendations or not, he decided to create a joint staff and designated Leavey as J–4. He announced that CINCPOA would exercise his authority to co-ordinate and control logistical services through this joint staff, with the subcommittees of the Joint Working Board to continue to function under its aegis.[25]

With the formation of the joint staff with its J–4 section headed by an Army officer, the logistical system in the Central Pacific began to take final form for the campaigns to follow. Although considered a step in the right direction, it was not entirely satisfactory to the Army staff in Washington. Nimitz retained his position as Commander in Chief, Pacific Fleet, and continued to exercise direct command over the Central Pacific Area instead of designating a subordinate as area commander; he did not take many steps to exercise closer control over the South and North Pacific Areas nor to integrate requirements for these subareas into joint plans for the whole POA. No attempt was made to provide a joint special staff such as Leavey favored, containing representatives from the Army's technical services. The whole command setup in both the Central and South Pacific continued to have a predominantly Navy flavor that Army leaders felt never gave them a voice proportionate to Army strength in these areas. But after some abortive efforts to convince the Navy that Nimitz should divorce himself from immediate command of any of the subordinate elements in POA, the Army at last decided to give up and await a more propitious time to raise the issue again. They had at least gained one major point —the Central Pacific would have a joint logistical staff with an Army officer at its head. A general desire not to rock the

[22] Quote from Ltr, Lutes to Somervell, 11 Aug 43.

[23] (1) Memo, Marshall for King, 10 Aug 43, folder Theater of Opns Pacific (A and N) (11) 1944, Hq ASF. (2) Memo, Marshall for King, 26 Aug 43, OPD 384 PTO Sec 2.

[24] Memo, King for Marshall, 30 Aug 43, Ser 001801, OPD 384 PTO, Sec 2.

[25] (1) AFMIDPAC History, pp. 1050–53. (2) Ltr, CINCPAC/CINCPOA to Distr List, 17 Sep 43, sub: Control of Logistical Services, CPA, folder 13a Diary CenPac, 4 Oct 43, ASF Plng Div. (3) Msg, Richardson to Marshall, 7 Sep 43, OPD 384 PTO Sec 2.

boat at a critical moment left further development of this joint logistical system in theater hands.[26]

For all its supposed defects, the POA joint staff proved a satisfactory instrument for the purposes for which it was designed—in Leavey's words it "succeeded in achieving an unprecedented correlation of logistical effort."[27] By the time it was formed the emphasis had shifted in the Central Pacific from static defense of Hawaii to preparations for the advance into the Gilberts and Marshalls. These island groups, composed of small atolls, had limited space for base development, a factor that undoubtedly influenced development of plans for joint utilization.

The basic charter for joint logistics in the coming campaigns was announced by Admiral Nimitz on 20 September 1943 in the form of a basic logistic supply policy for advanced bases.[28] The joint logistical system for the Central Pacific advances established by this directive and its numerous supplements and revisions was a very complicated affair; the most that can be done here is to describe the main lines of responsibility and control in the simplest possible terms, keeping in mind that it was never a completely static affair.

The central feature of the system was unified control of both operations and logistics forward of Hawaii by Admiral Nimitz as joint theater commander; he exercised this control through the joint staff and through assignment of missions to Navy, Army, and Marine Corps task and garrison force commanders. In Hawaii and on the adjacent islands held by the United States before the Central Pacific offensive began, the separation of Army and Navy logistics stayed much as it had been—a testimonial to the strength of tradition. The heart of the joint logistical system was in the arrangements for furnishing support to shore-based forces in the areas wrested from Japanese control, from Makin and Tarawa to Iwo Jima and Okinawa.

As officially defined in CINCPOA directives there were normally three phases in each operation—the first, an assault phase, under an amphibious task force commander; the second, a land operations phase, under a ground force commander; the third, a garrison phase, under a base or garrison commander from the service furnishing the major part of the garrison. The garrison force commanders on Makin in the Gilberts, Kwajalein in the Marshalls, Saipan in the Marianas, and Angaur in the Palaus, for instance, were from the Army, and the Army had major responsibility for development of these bases; most of the other atolls or islands were a Navy or Marine Corps responsibility. The commander in each phase exercised over-all control of logistics subject to plans and policies laid down by the POA joint staff. There was no genuine unified supply line. Each service continued to requisition separately through its own channels on rear bases and on the mainland,

[26] (1) Memo, Somervell for Marshall, 12 Sep 43, folder CofS 1943, Hq ASF. (2) Personal Memo, Gen Handy for Adm Cooke, 20 Sep 43, OPD 384 PTO, Sec 2. (3) Memo, Somervell for Marshall, 22 Sep 43, ABC 322.01 Pacific (Aug 43). (4) Memo, Col Godwin Ordway, Jr., for Gen Hull, 16 Nov 43, sub: Comments of South and Central Pacific Officers Made to Undersigned During Period 20 Sept to 23 Oct 43, OPD Exec 9, Item 13.

[27] Interview, Bykofsky with Gen Leavey, 30 Oct 50.

[28] Ltr, CINCPOA to Distr List, 20 Sep 43, sub: Advance Base Logistic Supply Policy—Promulgation of, CINCPOA Ser 02248, folder 1-a-1 Jt Supply Program, ASF Plng Div.

but each service was assigned certain specific responsibilities for supply and services and for development of facilities at each base. As far as possible joint requirements were anticipated in the joint staff planning that preceded each operation. CINCPOA also controlled movement of all shipping through all three phases of each campaign.

Army, Navy, and Marine Corps forces involved in assault operations were accompanied by their normal table of basic allowance equipment subject to the peculiar needs of any particular operation or the limitations on shipping; as soon as the tactical situation would permit, specific levels of supply were established; these were common to all forces ashore, and increased to a maximum of sixty days for all classes as the operation progressed. TBA equipment for the initial landing forces was made available at the loading port by the service concerned in accordance with the plans of the amphibious force commander, who also arranged for joint loading. These theater loading plans were normally followed regardless of where various parts of the task force were outloaded, whether from Hawaii, the west coast of the United States, or other ports in the Pacific. The Navy (Service Force, Pacific Fleet) was charged with delivery of all supplies to the beaches; from that point they were handled by the receiving service. The two services were assigned certain definite responsibilities for each class of supply: the Army, as usual, for all subsistence; the Navy for fuel and lubricants; ammunition, bombs, and pyrotechnics for aircraft were supplied by the Army except for special Navy items; medical supplies were the responsibility of whichever service operated the hospital in a given area; the Army was first made responsible for spare parts and motor maintenance for common type vehicles but the arrangement proved unsatisfactory and was abandoned. Each service furnished and maintained all equipment and supplies of its own special type, notably clothing, unit equipment, and construction supplies.

Service Force, Pacific Fleet, handled all shipping to advance bases and arranged convoys and routing. Under it a Joint Overseas Shipping Control Office (JOSCO), composed of Army, Navy, Marine Corps, and WSA representatives, co-ordinated terminal operations in Hawaii and arranged booking, loading, and forward movements of cargo. This office was considered to be something of a counterpart to the Joint Ship Operations Committee in San Francisco. Port operations and cargo handling were assigned to one service at each base, usually according to the predominance of force.

The J–4 section of the POA joint staff exercised general supervision over the entire logistical effort, reviewing service requirements in the light of tactical plans, assigning priorities on both supplies and shipping, developing the plans and policies for joint base development, and scheduling forward movement of shipping in accordance with the capacity of the receiving ports or beaches. The J–4 Transportation Section's control of shipping provided the essential link that bound two separate systems of requisitioning supplies together and provided a means of reconciling conflicting demands of services and bases. The J–4 section, acting for CINCPOA, consolidated tonnage requirements for the advance bases and determined the over-all

requirements that should be placed against the United States for cargo shipping, either for direct shipment from the United States or for the theater pool to be used in the movement of supplies from the rear to forward bases.[29]

The system used in the Central Pacific to control the flow of shipping into forward areas minimized the importance of requisitioning during the early and intermediate stages of any campaign, and placed the emphasis on advance joint planning of requirements for both supplies and shipping. Support shipping was divided into three categories—assault, garrison, and maintenance—following the planned phases of operations and base development. For the assault phase, ships were combat loaded under direction of the task force commander, and carried the troop units participating in the assault and their TBA equipment. Once the assault forces and their initial supplies were safely ashore, the garrison shipping procedure was placed in effect. This procedure provided for echeloning of shipping, each separate echelon to move into the advance base in step with the progress of operations and the development of beach and port capacity to discharge supplies. Succeeding echelons carried both troops and supplies to build up prescribed levels and to provide for planned base development; all were loaded in accordance with a prearranged plan worked out by J–4 in consultation with service and task force commanders. Garrison forces designated to relieve combat task forces were organized into groups sixty days in advance and moved into the area with their initial equipment on a time schedule. Control or regulating points were established—at Eniwetok during the Marianas campaign and at Saipan later—where ships could be held pending favorable developments for movement into the discharge area. The whole principle was one of automatic supply, which was to continue until the base was sufficiently developed to permit institution of what the Navy called "maintenance shipments" sent in response to specific requisitions.[30]

Automatic supply was of course no new thing in theater logistics, nor was the principle of echeloning shipping in the early phases of assault landings on a hostile coast; both were used generally in all theaters of war. The difference was that in the Central Pacific they were used more extensively and for longer periods than anywhere else. And as the advance moved forward and operations had to be mounted and supported from several different areas echeloning plans became more and more elaborate. On the islands of Saipan, Tinian, and Guam in the Marianas, for example, approximately 2,831,000 tons of material came in under the garrison shipping procedure in 32 echelons in the year begin-

[29] (1) *Ibid.* (2) See Ltr, CINCPAC/CINCPOA to Distr List, 26 Jun 44, sub: Advance Base Logistic Policy—Revision of, CINCPOA Ser 02775, and other CINCPAC/CINCPOA directives amending this advance base plan in folder 1-a-1 Jt Sup Prog, ASF Plng Div. (3) AFMIDPAC History, pp. 1054–1132. (4) Memo, Col Morrill W. Marston, G–4, USAFICPA, for Gen Richardson, 11 Sep 43, sub: Notes on CINCPAC Conf . . . , OPD 384 PTO, Case 57. (5) Larson and Bykofsky, *The Transportation Corps: Operations Overseas,* pp. 513–16. (6) Interview, Bykofsky with Gen Leavey, 30 Oct 50. (7) Ltr, Nichols to Leavey, 5 Feb 47.

[30] (1) Ballantine, *U.S. Naval Logistics in the Second World War,* pp. 233–37. (2) Larson and Bykofsky, *The Transportation Corps: Operations Overseas,* ch. X. (3) Notes prepared by Col. David H. Blakelock for Lecture, Joint Overseas Transportation Problems Which Confronted CINCPOA, 27 Jan 44, OCT HB files. (4) AFMIDPAC History, pp. 1083–89.

ning June 1944, about 57 percent of the total supplies shipped to that area.[31] At first the system applied only to outward movements from Hawaii, but when direct shipments from the west coast to forward bases began in early 1944 it was extended to include them, and still later to those originating in the South and Southwest Pacific.

The echeloning system regulated the flow of shipping better than it did the flow of supplies because, as the Army had learned by bitter experience in North Africa, any automatic supply system involved the dangers of waste and unbalanced stocks. One Army Transportation Corps officer, commenting after the war, thought J–4's loading plans "far too elaborate, far too detailed, and far too generous."[32] The system was, without doubt, better geared to the Navy's method of doing business than to the Army's, for, as pointed out earlier, the Navy preferred to rely on anticipation of need by the various supply bureaus at west coast and Hawaiian ports rather than on theater requisitions. The POA procedure for advance bases was typical of the whole Navy supply system, and if POA procedures involved waste of materials it was certainly in part because the Navy never, during World War II, applied the same critical standards of economy to Pacific requirements that the Army felt compelled to do because of the competition of Atlantic theaters and the limitation on over-all national resources.

The POA echeloning procedure involved waste in some respects, but it promoted economy in others. If efficient use of shipping may be judged by the relative absence of congestion and of long turnarounds, then that use in the Central Pacific was among the most efficient of all American theaters of World War II. There was also a clear economy in the use of material when loading plans for both services had to be determined in advance, for in advance determination a great deal of the customary duplication in Army and Navy requirements could be eliminated and joint loading arranged. The garrison shipping procedure was therefore of fundamental import in producing something resembling a unified supply line in the absence of any genuine unification of Army and Navy logistical organizations. It also provided, as the Okinawa operation in 1945 was to demonstrate, perhaps the most feasible means of mounting and supporting an assault from many scattered points. Even before that time SWPA had adopted one of the principal features of the system—block loading of ships for a particular destination in accordance with a prearranged plan.[33]

The garrison shipping procedure applied only to operational requirements of forces forward of Hawaii, and not to routine maintenance shipments either to Hawaii or to other rear bases as the tide of battle moved forward. Maintenance shipments often began to arrive at any particular base before garrison shipments

[31] Ballantine, *U.S. Naval Logistics in the Second World War,* p. 235.

[32] (1) Ltr, Col Richard D. Meyer to C. C. Wardlow, 21 Jul 49, OCT HB folder A-N Jt Logistics. (2) Colonel Blakelock commented also that the system "required use of the crystal ball by J–4 and usually resulted in scheduling more supplies than were actually required," in Notes for Lecture, 27 Jan 44.

[33] (1) For the complicated arrangements for mounting the Okinawa operation, see Roy E. Appleman, James M. Burns, Russell A. Gugeler, and John Stevens, *Okinawa: The Last Battle,* UNITED STATES ARMY IN WORLD WAR II (Washington, 1948), pp. 36–43. (2) On block loading see below, Chapter XX.

ended, just as garrison shipments began before the assault phase had ended. CINCPOA control extended to maintenance shipments to forward areas such as the Marshalls and Gilberts but not to shipments from the mainland into Hawaii and the Line Islands for the Army or for the civilian economy; requirements for these purposes were calculated separately by General Richardson and shipping allocations made to the Army by the JMTC to meet them. Similarly, after the South Pacific reverted to rear area status in mid-1944, shipping for support of troops in bases there was allocated directly to the Army and controlled by it. Also, whereas the Navy operated all shipping to forward areas, the Army procured and operated coastal and interisland shipping that served its garrisons in the Hawaiian group and the outlying islands such as Christmas, Fanning, and Canton; this shipping was also procured through Army, not CINCPOA, channels.[34]

This system was not satisfactory to either Nimitz or Richardson, though for different reasons. Nimitz thought control over shipping too divided to permit the "degree of flexibility necessary in the coordination and utilization of dry cargo shipping required for the heavily increased scope of operations in POA."[35] Richardson, on the other hand, felt his lack of control over shipping to support the sizable units of Army troops at forward bases left him without the necessary authority or means to fulfill his mission. In late October 1944 Nimitz sent to Washington a proposal that he be assigned control over all dry cargo shipping within POA, his staff to determine requirements, furnish all information to the JCS on which allocations would be based, and suballocate shipping to Army, Navy, and subarea commanders in accordance with the requirements of the over-all military situation. General Richardson, then in Washington, called this a "bold move on the part of the Navy to obtain complete control of all dry cargo shipping in POA," and objected violently to further encroachments on his authority.[36]

In view of their general support of centralized control of shipping in all theaters, it was hard for the ASF chiefs to give Richardson much support. A compromise of a sort was reached and approved by the JCS in December that met most of Nimitz' desires as to the allocation system but left the Army free to present its shipping requirements directly to the JMTC through the Office of the Chief of Transportation, ASF. Nimitz was given responsibility for determining all operational requirements for both dry cargo and refrigerator shipping including retentions, for allocations within POA to subordinate elements, and for furnishing information to the ASF, the Naval Transportation Service, and the west coast port authorities on which all shipping requirements, including those for maintenance, were to be based. But the Office Chief of Transportation, ASF, was to be responsible for actual presentation of nonoperational re-

[34] (1) Larson and Bykofsky, *The Transportation Corps: Operations Overseas*, p. 514. (2) Ballantine, *U.S. Naval Logistics in the Second World War*, p. 236. (3) Blakelock, Notes for Lecture, 27 Jan 44.

[35] Ltr, CinC U.S. Pacific Fleet and CINCPOA, to COMINCH and CNO, 20 Oct 44, sub: Centralization of Control of Dry Cargo Shpg in POA, folder 10a Shpg Cen Pac, ASF Plng Div.

[36] (1) *Ibid.* (2) Quote from Memo, Lutes for Wood, 31 Oct 44, sub: Control of Cargo Shpg in POA, folder 10a Shpg Cen Pac, ASF Plng Div.

quirements for Army shipping to the JMTC, including requirements for the Hawaiian civilian economy and other nonmilitary purposes; the Naval Transportation Service was to have similar responsibility for the Navy's nonoperational requirements. The JMTC would make allocations in bulk to CINCPOA based on the requirements stated by all these sources; the extent to which CINCPOA would be bound to follow the statements of requirements in making final allocations was not clearly stated, the only provision being that deficits against requirements should be applied to maintenance shipments, not to operational ones. For accounting purposes ships for individual voyages were to be assigned to the Army or to the Navy as before. The net effect was a definite strengthening of Nimitz' control over all shipping in POA, but his control was still left somewhat less positive than the POA commander had proposed.[37]

Neither before nor after the establishment of CINCPOA control over all cargo shipping to POA, was there any complete joint cargo priority list covering the entire area. True, J–4 of the CINCPOA staff established priorities on the operational requirements and on maintenance shipments to forward areas, but to a great extent fleet supply and Army supply in Hawaii continued separate to the end. Moreover, though J–4 determined priorities on operational requirements, it did not itself requisition supplies from the United States. These requisitions continued to flow through the separate channels of the two services, the Army including those supplies it was to furnish the Navy in its calculations and the Navy those it was to provide the Army.[38]

The joint logistical system in the Pacific, then, was far from simple, or even uniform for all theaters. It might best be described as a congeries of local arrangements, varying in nature and effectiveness, for furnishing supplies and personnel and for transporting them to the points where needed scattered throughout the Pacific theaters, for reconciling the conflicting demands of theaters, areas, and bases, and for providing at least an element of cohesiveness to the widely differing supply systems of the Army and Navy. If the committees of the JCS and the supply authorities of the War and Navy Departments presided over the whole process, they did not, and could not, dictate the exact form the Pacific logistical system would take.

[37] (1) JCS 762/9, 30 Nov 44, memo, COMINCH and CNO, title: Procedure for Allocation and Control of Dry Cargo Shpg in POA. (2) Memo, Somervell for CofS, 11 Dec 44, sub: Procedures for Allocation and Control of Cargo Shpg in POA, ABC Pac (6 Sep 43), Sec 1–B. (3) JMT 50/18, 19 Dec 44, title: Procedures Relating to the Allocation and Control of Cargo Shpg in POA. (4) JCS Memo of Policy No. 8, 26 Dec 44, title as in (3).

[38] This required the establishment of a principle of nonreimbursement between services for supplies so furnished. Sec: (1) WD Memo W-35-14-43, 10 Jun 43, title: Nonreimbursement Policy in Respect to Authorized Transfer of Material, Equipment Supplies and Services between Army and Navy Components Outside Continental U.S. (2) TAG Ltr to Distr List, 7 Jan 44, sub: Transfer of Army Supplies and Equipment to Navy in Overseas Theaters; Ltr, CNO to Distr List, 31 Jan 44, sub: Transfer of Navy Supplies . . . . (3) Ltr, CINCPOA to CG, USAFICPA *et al.*, 12 May 44, sub: Interchange Without Reimbursement of Material . . . in CPA. Last two in OPD 400 Hawaii, Sec 2, Case 36. For accounts of transfers in POA rendered each month see monthly letters, CINCPOA to CofS and CNO, sub: Exchange of Materials, Services and Supplies Without Reimbursement between A and N, in folder 12a Genl CPA, and OPD 400 Hawaii, ASF Plng Div Theater files.

The most they could do was to lay down general plans for guidance, such as the Basic Logistical Plan of March 1943, and determine priorities when critical resources were involved. Perhaps the system's greatest strengths were in its flexibility and its adaptability to peculiar conditions, to personalities, and to changes in operational plans. Any examination of the system shows, as might well be expected from the nature of the Pacific theaters, that its central feature was the control exercised over shipping at the several echelons of command. Through control of shipping the JCS committees exercised priority control over supply shipments to the Pacific theaters, and theater commanders in their turn controlled the movement of those supplies in support of operations and provided for the co-ordination between Army and Navy that could not be achieved in the actual operation of supply lines.

CHAPTER XIX

Shipping in the Pacific War

The demand for ocean-going shipping in the Pacific was, as has already been noted, almost insatiable. It was compounded of dual requirements for transporting personnel and supplies from the United States and for local theater fleets for transport within and between theaters. Primitive facilities at the end of the line caused long delays in ship turnarounds that increased requirements for both purposes. The facilities—or lack of them—also created a great temptation to use ocean-going ships for floating storage. Putting ships to this use had a certain rationale in the Pacific, but it was expensive of shipping and ran contrary to the philosophy under which the whole great Allied pool of merchant shipping was operated in World War II.

Ships retained for use in local fleets or delayed in their return to the Pacific coast inevitably reduced the number available for transpacific voyages. These internal theater demands made Pacific requirements difficult to predict; after 1943, they were largely responsible for the major shipping crises in the Pacific—crises that several times threatened to interfere with the execution of strategic designs.

The problem of the local fleet was always more acute in MacArthur's theater than in Nimitz'. Nimitz had at his disposal most of the combat loaders and auxiliary vessels of the Pacific Fleet, while MacArthur had to rely on a miscellaneous collection of merchantmen. For this reason, MacArthur found it necessary to retain WSA ships in his theater almost from the start. But Nimitz' demands for supplementary merchant shipping also played their part in producing the shipping crises of 1943–44.

Ship losses to submarine action were practically nonexistent in the Pacific, so that new construction normally represented a net gain to the Pacific pool. Moreover, there was little competition from commercial or lend-lease services except for the Soviet Pacific program, which absorbed approximately ninety cargo vessels and tankers during the war. These vessels were formally transferred to the Soviet flag and thus never formed part of the pool available for military service.[1] A few vessels were absorbed in transporting lend-lease supplies to Australia and New Zealand and in commercial service to the west coast of South America, but their numbers were never sufficient to affect the situation appreciably. If there was little competition, neither were there any commercial or lend-lease services to draw from to meet military shortages, leaving the Atlantic pool as the only source from which emergency demands could be met.

[1] See below, ch. XXVII.

Fortunately, surpluses turned up in the Atlantic shipping pool at certain critical junctures, and diversions from that pool helped to solve a shipping crisis in the Pacific in late 1943 and another one in early summer 1944. By fall 1944, in the face of a new and more formidable crisis, it appeared once more as though the Atlantic pool would have to be tapped to meet a deficit that had become, in the language of the shipping authorities, "unmanageable."

In each recurrent crisis, the JCS and JMTC sought to tighten the reins of control over the use of transpacific shipping by theater commanders for local purposes. Their efforts were never completely successful, nor could the JMTC determine any effective strategic priorities between theaters as long as the advance was authorized along two axes on what amounted to equal priority. The allocation of merchant shipping was carried out, much like the determination of strategy, largely on an *ad hoc* basis. Each crisis was met as it occurred, and long-term calculations of shipping requirements proved ephemeral. No system for definitely controlling theater retentions was established until June 1944, and no really effective pressure was exerted to prevent theater commanders from using ships as floating warehouses until the very end of that year.

The prosecution of the advance along two lines in the Pacific was expensive in terms of cargo and personnel shipping, for these resources could not be used, as were parts of the Pacific Fleet and its amphibious adjuncts, alternately in one theater and then in the other. The Pacific pool was constantly augmented during 1943 and 1944 by new construction and transfers from the Atlantic, and ships diverted usually stayed in the Pacific service. But, grow as it might, the demand for ships grew even faster as the size of forces to be maintained, the magnitude of operations, the numbers of bases, and their distance from the United States also increased.

The Crisis of Fall 1943

The balance between requirements for merchant shipping in the Pacific and American ability to meet them swung back and forth throughout 1943 and 1944. Of the two principal types, it was generally true that personnel shipping caused the greatest difficulties during 1943 and cargo shipping during 1944. After the acute crisis of fall 1942,[2] the cargo shipping situation eased during the first half of 1943, certainly in part because scheduled personnel shipments fell far in arrears cutting down on the number of troops to be supported in far Pacific areas. The cumulative deficit in troop shipments to the South and Southwest Pacific had mounted to 55,900 places by August, and hopes that it could be eased during the fall were dashed when nine transports had to be removed from the transpacific run for use in the Gilberts-Marshalls invasion.[3]

Meanwhile, a shortage of cargo shipping had begun to develop. In May, when there appeared to be a surplus of cargo shipping on the west coast, CBI shipments were shifted from Charleston to Los Angeles, imposing an additional drain on the Pacific pool. Shortly thereafter some west coast shipyards began the conversion from production of Lib-

[2] See Leighton and Coakley, *Global Logistics, 1940–43*, pp. 395–98.

[3] See above, ch. XVI.

ertys to that of Victorys and output was cut back drastically while the yards retooled. Also, the program for converting cargo ships to transports and tankers took some ships out of the pool. Moreover, transfers to the Soviet flag were particularly heavy during the first six months of 1943.[4]

In this situation, the demands of the Central Pacific offensive combined with the need to retain ships in SWPA to supplement the local fleet to produce a shipping crisis. The calculations of the JCS after QUADRANT, based on the premise that Central Pacific operational requirements could be met by temporarily cutting back personnel (and consequently cargo) shipments to the South and Southwest Pacific, allowed only a narrow margin of error. Even as the planners calculated, the Ship Operations Committee at San Francisco was noting a mounting deficit of both types in prospect for the ensuing months. The cargo shipping situation seemed the less serious of the two only because the committee reasoned that if the troops could not be shipped then their impedimenta would necessarily stay in the United States. At about the same time, Lewis Douglas wrote Admiral Land from Quebec in a pessimistic vein:

> our position in the Pacific for September, the final quarter of this year and the first quarter of the next is extremely tight, almost dangerously so. Moreover, the operations that may commence in that theater may require more than is at present estimated. Against this we should have some unpublished reserve. This we do not have; indeed, we have a deficit against the presently calculated requirements.[5]

Douglas proved to be a good prophet. Both the Army and the Navy had to increase their requirements for cargo sailings to the Central Pacific—the Army, for instance, from 14 to 27 for the month of November. In the meantime, prospects that even the Quebec schedule could be met had been considerably diminished by an increase in operational requirements in MacArthur's theater and by the failure of ships to return from voyages to SWPA on schedule.[6]

Since mid-1942 MacArthur had been sporadically holding WSA ships in his theater for use in transporting troops and supplies between Australian ports and from Australia to New Guinea. Though WSA protested continually, he really had little alternative if he was to continue his offensive—the few combat loaders he had and the permanent local fleet at his disposal were totally inadequate for his needs. The permanent local fleet was made up mostly of small vessels ranging from 2,000 to 5,000 tons, Dutch vessels and Lake steamers sent from the United States, though it also included a few Libertys on permanent assignment to the Army. It was growing and would continue to do so, but never fast enough to keep pace with the theater's needs. At the time of the Quebec Conference SWPA was retaining 21 transpacific Libertys. If the practice were to continue, it clearly had to be

[4] (1) Memo, Chief, Ocean Traffic Br, Water Div, OCT, for Control Div, OCT, 4 Dec 43, sub: Action Required by "Survey of Supply of Pacific Theaters," OCT HB File Pac Areas. (2) See above, ch. X. (3) On transfers to the Soviet flag see Leighton and Coakley, *Global Logistics, 1940–43*, pages 564, 586, 591.

[5] (1) Ltr, Douglas to Land, 22 Aug 43, WSA Conway File Quebec (1943). (2) Min, Joint A-N-WSA Ship Opns Com, San Francisco, 6 Aug 43. (3) On the JCS decision, see above, Chapter XVI.

[6] Ltr, Ralph Keating, WSA to Adm Smith, Chief, NTS, and Gen Wylie, ACofT, 8 Oct 43, folder Shpg 1943—SWPA, OCT HB Overseas Comd File.

regularized, and MacArthur took the first step in that direction in mid-August. Pointing to the need for moving 75,000 additional troops with their supplies from Australia to New Guinea to complete the CARTWHEEL operation, he asked the War Department that he be permitted to retain the 21 Libertys he already had and to increase this number to 71 by 15 October. He also asked for 10 freighter transports of an average 1,500–2,500 capacity, and reiterated that he would need all the accretions to his permanent fleet that had been promised. "It is coming to be evident," said MacArthur,

> that sustained effort may be impossible in this theater because of lack of mobility which effectively prevents taking advantage of hostile weaknesses developed or successes gained. Each successive operation will be delayed for purposes of concentration, thus allowing the Japanese to reconsolidate ahead of our offensive effort. This results from lack of shipping. If any form of limited offensive is to be continued, heavier concentrations must be on hand closer to the combat zone and ships must be on hand to carry these concentrations to forward staging areas and maintain them there. Because of the inadequacies of port facilities in the forward areas and the considerable period of time required to build them, reserves of supplies, equipment and personnel must be held afloat, immediately available to follow our offensive efforts.[7]

Despite the imminent shortage of transpacific shipping, ASF and OPD went as far as they could to meet MacArthur's requests. The theater was informed that it could build its retention level to the equivalent of 71 Libertys if certain impending additions to the permanent local fleet were counted, other cargo ships arriving in SWPA returned expeditiously, and the prospect of further cutbacks in sailings from the United States accepted. In the more critical field of passenger ships, they could promise MacArthur only four of a relatively undesirable type and of considerably less than the required capacity. MacArthur accepted the solution, except for the part pertaining to further reductions in sailings to his theater, which he insisted would result in "operational failure."[8]

The promised quick turnaround of ships in SWPA failed to materialize, and for some time afterward accounting of the number of retentions remained in a muddle. There seems to have been some confusion in Washington circles as to the distinction between vessels permanently allocated to the SWPA local fleet and temporary retentions, and the War Department lacked information on departures from SWPA ports. By mid-October, the ASF was contending that MacArthur had his quota of 71 Libertys, while MacArthur insisted he was still well below it.[9] In any event, the effect on the availability of shipping on the west coast was the same, and the failure of ships to return from SWPA, together with the increased demand for the Central Pacific, compounded an already existing deficit. The deficit was

[7] (1) Msg, MacArthur to CG ASF, CM-IN 10721, 14 Aug 43. (2) Masterson, Transportation in SWPA, pages 319–76, contains a full discussion of MacArthur's local fleet.

[8] (1) Msg C–4907, MacArthur to WAR, 19 Aug 43, CM-IN 14061. (2) Msg 74-WAR-75-W-36, Somervel to MacArthur, 18 Aug 43, folder Australia Mar 1942–Aug 1944, OCT HB Wylie File. (3) Msg 57, Hull to Handy and Somervell, QUADRANT-KKAD, 15 Aug 43, OPD Exec 5, Item 11.

[9] (1) Exchange of msgs between Somervell and MacArthur, 19 Oct–31 Nov 43, folder Australia March 1942–August 1944, OCT HB Wylie File. (2) Masterson, Transportation in SWPA, pp. 319–76.

further accentuated by increased Army requirements for shipments to the CBI as a result of the QUADRANT plan for acceleration of the development of the line of communications there.[10]

The result was an extremely muddled situation. By mid-September troop movements to the Central Pacific were running 45 days behind schedule and, though cargo shipping was sufficiently plentiful to synchronize movements to that area with troop movements, there was, in the aggregate, a shortage of both types. At the same time, cargo for the South and Southwest Pacific piled up in ports and at holding and reconsignment points, and long-standing requisitions went unhonored. The cutback in shipping schedules for SWPA in particular had not been synchronized with the requisitioning of supplies, causing confusion that was not cleared up for some months.[11] The supplies and equipment projected for the CBI, the lowest priority theater, also began to pile up. The need for the "unpublished reserve" that Douglas had stipulated was more than evident.

Fortunately, an unpublished reserve did develop in the Atlantic. "We are short of tonnage on the Pacific Coast and long on the Atlantic Coast," a WSA official noted on 8 October.[12] But utilizing the Atlantic surplus was not so simple a matter as it at first might seem. WSA first proposed to move CBI shipments back to the east coast but the Army Transportation Corps protested that this would necessitate reversing an already established flow of troops and equipment through staging areas and depots. The ultimate decision was to use east coast facilities for shipping bulk loads of subsistence, construction supplies, and other special project materials that did not have to accompany troops, not only to the CBI but also to the Pacific theaters. Besides a number of troop transports, 63 cargo ships sailed from east and Gulf coast ports to Pacific and Far East destinations in October, November and December 1943, and in early January 1944. Some of the freighters were adapted to carry small numbers of troops. Nearly all the ships returned to the Pacific coast at the end of their voyages to join the Pacific pool.[13]

The crisis was thus resolved. The needs for the build-up for the Gilberts and Marshalls were met, the shipments for the CBI line of communications went forward as planned, and even the deficits for the Southwest Pacific did not prove as serious as anticipated. By 22 December the San Francisco Committee could report that there were more cargo vessels on the Pacific coast than were needed to meet military demands. The converted freighters becoming available after 1 January 1944 were expected to overcome quickly the deficit in troop movements to the South and Southwest Pacific. Meanwhile, at the SEXTANT Conference the planners boosted Pacific allocations for 1944 well over

[10] See below, ch. XXI.

[11] For the effects of this situation on the Pacific supply situation see below, Chapter XX.

[12] (1) Ltr, Keating to Smith and Wylie, 8 Oct 43. (2) See also above, ch. IX.

[13] (1) Min, Joint A-N-WSA Ship Opns Com, San Francisco, and Vessel Allocation and Cargo Subcom, Sep-Dec 43. (2) Memo, Chief Ocean Traffic Br, for Control Div, OCT, 4 Dec 43. (3) Memo, Col Magruder, Dir Opns ASF, for Gen Lutes, 3 Nov 43, sub: Cargo Movement to Pacific Areas, folder 10a Shpg Cen Pac, ASF Plng Div. (4) Memo for Diary, Col Vissering, OCT, 9 Oct 43, sub: Policy Covering Shipments from the East Coast, folder Pac Areas, OCT HB.

the quantities assigned at QUADRANT, taking advantage of a much improved shipping situation to provide for the needs of an accelerated advance.[14]

Shipping Congestion in SWPA

With the advent of the new year, 1944, the critical area shifted from personnel to cargo shipping. The cargo shipping situation also seemed good in early 1944 but one shadow darkened the picture—excessive retentions and slow turnaround in the Southwest Pacific. To obtain more adequate information on the utilization of shipping in SWPA, in November 1943 the War Department instituted a system of semimonthly reports on retentions, which, although useful, did not clear up misunderstandings because the definition of "retentions" was still obscure. It is clear, nevertheless, that by early 1944 SWPA retentions had reached the prescribed total of 71 Libertys by any accounting, and they were still mounting. The whole matter of retentions was by this time becoming obscured by ship congestion at New Guinea ports where serious delays in ship turnarounds exerted an even more significant influence in cutting down on the number of returners to the Pacific coast.

The problem of ship congestion and slow turnaround in the far Pacific theaters was of course no new phenomenon; it did not disappear when the situation at Nouméa cleared up in fall of 1942, but continued sporadically in both the South and Southwest Pacific throughout 1943 — an inevitable concomitant, it seemed, of rapid projection of operations into areas having no developed port facilities. In the South Pacific the alleviation of the situation at Nouméa was followed by increasing troubles at Espíritu Santo and Guadalcanal during the spring months of 1943. The lesson of Nouméa was taken to heart in the South Pacific, nevertheless, and immediate steps were taken when congestion appeared further forward to temporarily cut back shipments into those areas. For instance, in April General Breene instituted an embargo on further shipments into Guadalcanal, the main forward base for the New Georgia assault, until most of the ships already in the harbor had been unloaded. Again in November 1943 during the Bougainville campaign, when incoming shipments outran discharge capacity at Guadalcanal, many ships were diverted to the Russell Islands where development of new port and transshipment facilities was under way. Even then a severe tropical storm on Guadalcanal in January so damaged docks and piers that congestion appeared anew at this point, coinciding with its development in more serious proportions in New Guinea.[15]

It does not appear that SWPA authorities properly appreciated the lessons of Nouméa, Espíritu Santo, and Guadalcanal. The main ports in use on the New Guinea coast by fall 1943 were Port Moresby on the southern coast, Milne Bay on the eastern tip, Oro Bay some 200 miles further west, and Lae, further along but more an unsheltered beach than a port. In most of the operations of late 1943 and early 1944, Milne Bay was the key point, used as the main advance port for supporting op-

[14] (1) See above, Chapter XII, for SEXTANT schedules. (2) Min, Vessel Allocation and Cargo Subcom, San Francisco Opns Com, 22 Dec 43.

[15] Bykofsky and Larson, *The Transportation Corps: Operations Overseas*, pp. 501–06.

erations on the Huon Peninsula and the Cape Gloucester area, pending the development of Finschhafen. To avoid uneconomical transshipment from Australia, USASOS instituted in mid-1943 the policy of direct shipments from the United States into Milne Bay. By September 1943 Frazier Bailey of WSA thought he saw "a repetition of what occurred at Nouméa" shaping up at Milne Bay as shipping poured into a port area as yet not ready to handle large tonnages.[16] By January 1944 his predictions had been borne out—by at least one count 140 vessels were in the harbor at one time, some of them having been there for more than a month. WSA, the San Francisco Committee, and the War Department, all showed signs of alarm as delayed turnarounds produced a smaller number of "returners" to the Pacific coast.

Admonitions to MacArthur poured out from the War Department thick and fast during January and February, highlighted by a message from General Marshall on 17 February advising the SWPA commander to review all manifests of ships in the harbor to see what could be diverted to other ports and to defer all shipments of material from the west coast to Milne Bay that were not urgently needed. Explanations from the theater flowed back just as thick and fast. Milne Bay had been used as a regulating point for shipments to all forward points in the theater and much of the shipping held there was not intended for immediate discharge. SWPA authorities tended to view the congestion as an inevitable result of the shift from Australia to New Guinea as the receiving point for supplies from the United States. By the time Marshall's cable was received they were able to point to a much improved situation as ports further forward, particularly Finschhafen, opened up to receive the shipping held at Milne Bay, and port operations at Milne Bay itself were vastly improved by development of facilities and arrival of more service troops. By the end of March Marshall was congratulating MacArthur on his success in clearing up the situation, citing it as an "outstanding example of vigorous and effective action in the solution of a difficult problem."[17]

The problem was, nevertheless, not entirely solved, as sporadic congestion continued both at Milne Bay and in forward areas such as Finschhafen, and later at Hollandia.[18] The Leyte operation was to prove that SWPA had not yet learned the lesson of close scheduling of shipments to forward areas but evidently preferred to take the risk of tying up shipping in order to insure adequate supply. And from mid-1943 onward the long delays in the return of ships from the Southwest Pacific, either because of failure to unload rapidly or because of retention in the theater for operational purposes, seriously affected the entire Pacific shipping situation. To a lesser degree the same held true of the

[16] (1) Ltr, Bailey to Douglas, 15 Sep 43, folder SWPac, WSA Douglas File. (2) Masterson, Transportation in SWPA, pp. 433–51.

[17] (1) Msg WAR 15402, Marshall to MacArthur, 28 Mar 44. (2) Messages exchanged between AGWAR and SWPA in period 21 Jan–28 Mar 44, and other correspondence in OCT 565.2 SWPA 1944. (3) Min, Joint A-N-WSA Ship Opns Com, San Francisco, 4, 11, 18, 25 Feb, 17 Mar 44. (4) Msg 313, Douglas to Brown, WSA, Sydney, 18 Feb 44, folder Australia, WSA Douglas File. (5) Douglas Diary, 4 Mar 44, Record of Telephone Conversation with Brig Gen John M. Franklin, folder SWPac, WSA Douglas File. (6) Masterson, Transportation in SWPA, p. 781.

[18] Masterson, Transportation in SWPA, p. 782.

South Pacific up through the spring of 1944, but cancellation of the Kavieng operation and passage of that area to an inactive status brought an end to the acute phase. In the Central Pacific the problem of retentions, congestion, and slow turnaround never reached such alarming proportions, but delays did occur at Eniwetok, Saipan, Guam, and other points. And almost every month naval requirements for shipping to and within this theater expanded.

The Cargo Shipping Shortage of Mid-1944

Slow turnaround, combined with increased demand for operational shipping attendant on the speed-up in Pacific operations in early 1944, made the favorable shipping situation on the west coast at the turn of the year short lived. On 16 February the San Francisco Committee foresaw a shortage of vessels for March loading possibly as high as 25 to 30 ships "due in part to a decrease in the number of new deliveries, but for the most part . . . the result of ever-increasing . . . retentions and greater length of retentions of vessels in the South and Southwest Pacific areas."[19] The committee also noted that the increasing number of troop ships becoming available from conversions would require a proportional increase in the number of freighters to operate with them, and it foresaw an even more serious shortage of cargo ships in April and the ensuing months unless remedial steps were taken.

With the decisions in early 1944 to accelerate the advance in both main Pacific theaters, the shortage soon took on crisis proportions. A request from Nimitz for shipping to supplement the combat loaders and auxiliaries of the Pacific Fleet in the Marianas operation arrived in early March, just about the time that operational shipping requirements for OVERLORD and ANVIL were mounting. CINCPOA asked for 18 AK's and for 2 AP's of the Liberty type capable of carrying 1,100 troops each for April; 18 AK's and 17 AP's capable of carrying 1,600 troops each for May; and an additional 17 AK's for June. On 14 March Admiral King recommended to the JCS that these ships be provided substantially as requested.[20]

It was soon obvious that meeting King's and Nimitz' request would necessarily involve some curtailment of other Pacific services. On 25 March WSA informed the JCS that Pacific requirements from April onward could not be met and presented a tabulation showing deficits of 23 cargo sailings in April, 28 in May, 47 in June, and 48 in July. With the large military commitments in the Atlantic incident to mounting OVERLORD any considerable aid from that quarter seemed out of the question. The west coast program for construction of combat loaders, WSA pointed out, would cut heavily into new deliveries of merchant ships in coming months. "Should the heavy tonnage of ships held awaiting discharge in forward areas (approximately 1,360,000 dead-weight tons as of March 1, 1944) be promptly released," Land and Douglas pointedly reminded the military leaders, "the cumulative deficiency might be substantially reduced but not, we believe, eliminat-

[19] Min, Vessel Allocation and Cargo Subcom, Joint Ship Opns Com, San Francisco, 16 Feb 44, Item 3.

[20] JCS 762, 14 Mar 44, memo, COMINCH and CNO, title: Amended Shpg Reqmts for Pacific Opns.



A LIBERTY SHIP UNLOADING AT A DOCK IN ORO BAY, NEW GUINEA, *while other vessels wait their turn.*

ed."[21] The JMTC, studying the problem, came up with somewhat different figures but approximately the same conclusions. They found there would be little problem in furnishing the necessary troopships for Nimitz, but that cargo shipping could only be supplied by drastic curtailment in programs not directly related to military operations. They would limit conversions for the present to minor alterations that required minimum time out of service, impress on Pacific commanders the necessity of returning vessels as rapidly as possible, and nudge the Maritime Commission on the delays in ship construction. Nevertheless, they estimated deficits of 37 sailings in May, 54 in June, and 26 in July, and recommended that the War and Navy Departments review their prospective shipments to see what items could be postponed. The JMTC did not recommend any positive theater priorities as a basis for apportioning the deficit; it simply adopted the principle that needs for major operations should, when reduced to minimum essentials, be given an inviolate priority, while any reduction should be applied against routine maintenance requirements for all Pacific theaters.[22]

While the JMTC proposals were

[21] Memo, Land and Douglas for JCS, 25 Mar 44, folder JCS 1944, Box 122894, WSA Conway File.

[22] (1) Min, 65th mtg JMTC, 27 Mar 44, Item 1. (2) JCS 762/1, 29 Mar 44, rpt by JMTC, title: Amended Shpg Reqmts for Pacific Opns.

pending before the JCS, the ASF turned to an evaluation of Army requirements with a view to making desired reductions. General Gross queried MacArthur on the possibility of reducing retentions, by this time well above the approved limit of 71 Libertys. MacArthur came back with a request for an increase. He pointed out that in the advance along the New Guinea coast a large proportion of his supplies must be transshipped from Australia—the bulk of the rations, POL and some construction supplies for American forces, and virtually all the supplies for Australian troops—across approximately 2,200 miles of water to forward bases. He said he would need to retain, besides his permanent fleet, 99 Libertys in April, 145 in May, 153 in June, 148 in July, 146 in August, 161 in September, 149 in October and November, and 195 in December. Faced with these estimates, General Marshall asked that the JMTC reconsider the Pacific shipping situation in order to bring the increased requirements of both Nimitz and MacArthur into their proper relation. The JMTC could no more question MacArthur's operational requirements than it could Nimitz'; they therefore decided that any deficits must be absorbed by outward sailings from the United States. None would result in April, it now appeared, but in May the deficit was assessed at 56 sailings, at 85 in June, and 35 in July—about one-third of scheduled Pacific sailings during those months. "Only by a sterner approach to the doctrine of bare necessities," reported the JMTC, "can cargo shipping support the contemplated operations in both theaters."[23] The committee suggested a conference of representatives of all three Pacific areas on ways and means of absorbing the deficits.

The Pacific Shipping Conference, held 18–25 April 1944, subjected the whole situation to a searching review by Army, Navy, WSA, and theater representatives. All approaches were discussed — reduction of requirements, improved turnaround, reduction of retentions and diversions, and increased direct loading on the west coast for forward areas—but none of the suggestions elicited any really positive response from theater representatives or pointed the way to any real solution. Spokesmen for Nimitz and MacArthur insisted that their requirements, both for retentions and outward sailings, had already been reduced to a minimum. The first suggestions from WSA that some shipping might be available from the Atlantic were therefore doubly welcome. The solution to the Pacific shipping problem at last was found when the final decision to cancel a July invasion of southern France freed something over 200 vessels for diversion from the Atlantic to the Pacific during the rest of 1944. With this prospective windfall, the conferees were able to draw up a shipping schedule that con-

[23] (1) JCS 762/2, 4 Apr 44, rpt by JMTC, title: Amended Shpg Reqmts for Pacific Opns. (2) Memos, Gen Wood, Dep Dir Plans and Opns, ASF, for Dirs Supply and Plng Divs, ASF, 30 and 31 Mar 44, sub: Amended Shpg Reqmts for Pacific Opns (JCS 762/1), folder Shpg Conf, ASF Plng Div files. (3) Msg, WAR 14990, AGWAR to CINCSWPA, 28 Mar 45. (4) Msg, C–10245, CG Rear Echelon, GHQ SWPA, to AGWAR, 31 Mar 44, Incl B, JMT 50/2/D, 31 Mar 44, title: Amended Shpg Reqmts for Pacific Opns. (5) OPD notes on JCS 762, 30 Mar 44. (6) Memo, Lt Col Florence T. Newsome, Asst Secy WDGS for Secy JCS, 1 Apr 44, sub: Amended Shpg Reqmts for Pacific Opns. Last two in ABC 561 Pacific (6 Sep 43) Sec 1A. (7) Min, 156th mtg JCS, 2 Apr 44, Item 1. (8) Ltr, Gen Marshall to Adm Land, 8 Apr 44, folder JMTC Papers Jan–Mar, Box 122894, WSA Conway File.

siderably reduced the previously estimated deficits in outward movements from the United States while providing the operational requirements of both Nimitz and MacArthur in full. The deficits then amounted to only 9 sailings in May, 26 in June, and 38 in July; by November, it appeared, there would actually be a surplus of cargo shipping in the Pacific.[24] (*Table 32*)

While the remaining deficit in the Pacific was of far more manageable proportions, it still required apportionment among the various theaters—something the JMTC did not attempt to do. The Joint Staff Planners tried to evaluate the deficits in the light of strategic necessity, but found it difficult since they as yet had no information on MacArthur's specific plans for operations between Hollandia and Mindanao. The ASF Planning Division, meanwhile, looking at the situation in its worst light, and, assuming that the entire deficit would have to be borne by the Army, concluded it could be absorbed by a temporary reduction of reserve supply levels in all Pacific theaters with serious but not crippling consequences. The JPS, however, found new means of reducing the deficit before making any final decisions on its apportionment. MacArthur's unexpectedly rapid success at Hollandia in May enabled him to reduce his retention requirements by 20 ships per month in June, July, and August; the JPS also found suspect 32 sailings set up for the CBI for an air commando project. On 5 May they directed the JMTC to make adjustments for these factors and then to proceed with allocations to the Pacific theaters for May, June, and July in accordance with the recommendations of the shipping conference, with the proviso that the Marianas assault, the subsequent development of B–29 bases in those islands, and MacArthur's reduced retention requirements should have an absolute first priority, with deficits to be apportioned among all Pacific theaters, including the CBI, against maintenance tonnages. Theater commanders were instructed to set up priorities immediately on cargo for their areas, dividing them into (1) indispensable, (2) necessary, and (3) desirable, as a guide for mainland shipping agencies. Commanders were warned that retentions should be kept under "continual examination" and reduced when possible. MacArthur was asked to forward detailed plans for operations between Hollandia and Mindanao on the assumption that forces in his area would not be increased beyond temporary diversion of naval combat ships and assault transport from POA when feasible.[25]

Following these decisions, the JMTC was able to reduce the deficit in May

[24] (1) Min, Pacific Shpg Conf in: 68th mtg, JMTC, 18 Apr 44; 69th mtg, 20 Apr 44; 70th mtg, 22 Apr 44; 72d mtg, 25 Apr 44. (2) JCS 762/3, 25 Apr 44, rpt by JMTC, title: Shpg Reqmts and Availabilities for Pacific Opns. (3) For papers on much of the spadework of the conference, see folder Shpg Conf, ASF Plng Div. (4) On the background of the shift from the Atlantic see above, Chapter XIV.

[25] (1) JCS 762/4, 5 May 44, rpt by JPS, title: Shpg Reqmts and Availabilities for Pacific Opns. (2) Memos, Gen Roberts, OPD, for Rear Adm Donald B. Duncan, 28 Apr 44; Memo, Gen Tansey for Chief S&P Gp, OPD, 1 May 44, sub: Shpg for CBI. Both in ABC 561 Pac (6 Sep 43) Sec 1A. (3) JPS 445/1, 2 May 43, title: Shpg Reqmts and Availabilities for Pacific Opns. (4) Memo, Wood for Somervell, 1 May 44, sub: JCS 762/3 . . . , and related papers in ASF Plng Div File Shpg Conf. (5) JMT 50/6, 4 May 44, title: Shpg Reqmts and Availabilities for Pacific Opns. (6) Ltr, Capt Conway, WSA, to Adm Smith, Dir NTS, 3 May 44, Reading File—Apr–May 44, Box 122893, WSA Conway File.

TABLE 32—PACIFIC SHIPPING REQUIREMENTS AND AVAILABILITIES
MAY–DECEMBER 1944
(Estimates at Pacific Shipping Conference)

	May	June	July	August	September	October	November	December
Retentions								
Central Pacific								
Total requirements	25	30	30	30	35	35	35	35
Navy AK's	19	19	19	19	19	19	19	19
C1-M-AV1's (forecast deliveries)	0	0	0	0	0	1	3	4
Required WSA retentions	6	11	11	11	16	15	13	12
South Pacific								
Total requirements	27	22	22	22	22	22	22	22
Navy AK's	17	17	17	17	17	17	17	17
Required WSA retentions	10	5	5	5	5	5	5	5
Southwest Pacific								
Total requirements	144	187	161	171	168	156	183	202
SWPA Fleet	15	15	15	15	15	15	15	15
Seventh Fleet AK's	4	4	4	4	4	4	4	4
C1-M-AV1's	0	0	0	0	0	1	2	5
Required WSA retentions	125	168	142	152	149	149	162	178
Sailings From U.S. Ports—Requirements								
Central Pacific	74	84	77	101	112	101	80	81
South Pacific	40	40	35	30	25	25	25	25
Southwest Pacific	65	74	66	68	66	62	65	65
China-Burma-India	20	16	29	33	30	30	31	32
Total military	199	214	207	232	233	218	201	203
Total civilian and Lend-Lease	13	10	10	10	10	10	10	10
Total Pacific requirements	2'2	223	217	242	243	228	211	213
Sailings From U.S. Ports—Availabilities								
WSA sailings—Pacific coast	174	171	139	181	188	175	190	183
Atlantic berthings for Pacific destinations	15	21	32	32	34	26	26	26
From CINCPOA and NTS	9	0	1	1	0	2	0	2
AKA's and misc	5	5	7	1	3	4	4	3
C1-M-AV1's	0	0	0	0	2	4	4	6
Total	203	197	179	215	227	211	224	220
Deficit or surplus	−9	−26	−38	−27	−16	−17	+12	+7

Source: JCS 762/3, 25 Apr 44, title: Shipping Requirements and Availabilities for Pacific Operations.

from 9 to 7, in June from 26 to 24, in July from 38 to 25. These deficits were then allocated proportionately to the Pacific theaters, and the JCS sent the resulting figures to the San Francisco Committee as the ship allocations for the months of May, June, and July. The net effect of the shipping crisis, therefore, was to produce neither any curtailment of scheduled operations nor any clear priorities on shipping among the Pacific areas. At the same time it did result in impressing on Pacific commanders the "critical shortage of ships" and brought the JMTC, acting for the JCS, much more actively into control of Pacific allocations.[26]

A by-product of the conference was the development of a system for classification and control of shipping in theater pools. Vessels available to theater commanders were to be divided into three groups: permanent local fleets, rotational retentions, and transport diversions. Vessels in the first category would be assigned permanently to the theater and were to be completely under theater control. Rotational retentions, that is, cargo ships held for temporary periods, would be subject to control by the JMTC, acting for the JCS. Requests for rotational retentions in each area for both Army and Navy would be consolidated by the theater commander and presented to the JMTC for review. The JMTC, with approval of the JCS, would establish quotas for each theater for definite periods of time. Theater commanders would be responsible for holding retentions within the quotas set for them, though in case of "emergency military need" they might make arrangements for temporary additional retentions directly with WSA representatives in their theater. When vessels were retained to haul supplies between areas (as from the South Pacific to SWPA or Central Pacific), they would be charged to the theater of destination. Retention pools were to be maintained by interchanging vessels arriving from the United States from time to time in such a way as to permit all vessels to return periodically to the United States. Transport diversions (covering vessels with troop capacity over 500) would be controlled by the JMTC under a similar system.[27]

The JMTC exercised its tighter control by periodic review and revision of schedules arranged after the shipping conference. In early June a final review of June–July figures produced a further reduction in deficits because of the shift of 15 additional vessels from the Atlantic to the Pacific. At the same time tentative allocations were set up for the period August–December and, to give the San Francisco Committee more lead time in designating individual ships, the system of making final allocations for two months in advance rather than one was adopted. The June figures still showed deficits of 21 sailings for that month, 17 for July, 32 for August, 23 for September, and 7 for October to be apportioned among the theaters, but there is little evidence that these deficits actually ma-

[26] (1) JCS 762/5, 13 May 44, rpt by JMTC, title: Shpg Reqmts and Availabilities for Pacific Opns. (2) JMT 50/7/D, 8 May 44, same title. (3) The contingent requirement for the CBI air commando project was retained.

[27] Min, Pacific Shpg Conf, app. C, approved by JCS as app. G of JCS 762/7, 7 Jun 44, title: Shpg Reqmts and Availabilities for Pacific Opns.

terialized during the summer months.[28] By persuading the Navy to permit fast ships to proceed unescorted on the Caribbean run, WSA was able to produce still more ships from the Atlantic; then too, both Army and Navy requirements proved somewhat inflated. At least on 16 July Capt. Granville Conway of WSA could write that the Pacific crisis had "evaporated" after the "heroic measures" taken to meet it (partly, he thought, because the Navy had overestimated its July requirements) and during that month the Army found itself searching for cargo to fill all ships presenting on the Pacific coast.[29]

The Deficits Become Unmanageable

The favorable situation was again short lived. Very soon the pendulum began to swing again as retentions and congestion delayed turnarounds and a new acceleration of Pacific operations produced larger and larger requirements. By August a greater and more serious deficit, rather than a surplus, seemed in store for the fall. The first disturbing element was an increased operational requirement from the Central Pacific received on 28 July for some 17 additional sailings in August and 20 in September for the Palaus operation. The JMTC, following the principle that operational requirements must get first priority, had little choice but to meet Nimitz' request and apportion the resulting deficit on maintenance shipments to all theaters. The deficit tended to grow as ships going out to both SWPA and POA took increasingly long periods to return. For the time, the congestion problem seemed equally serious in the two theaters, centering at Hawaii and Eniwetok in the Central Pacific and at Milne Bay and Finschhafen in the southwest. A WSA analysis of Pacific shipping at the end of August 1944 showed some 229 vessels en route and 301 in port in far Pacific areas. When weighed against a total requirement of 182 outward sailings, a requirement barely met, the heavy cost of long turnarounds is evident.[30] But the trouble was only beginning in August. The mid-September decision to again accelerate

[28] (1) JCS 762/7, 7 Jun 44, rpt by JMTC, title: Shpg Reqmts and Availabilities for Pacific Opns. (2) JCS 762/8, 21 Aug 44, rpt by JMTC, title: Notice of Approved Allocation of Sailings to Pacific Areas. (3) Decision Amending JCS 762/8, 4 Sep 44. (4) Memo, Brig Gen Carl A. Russell for Gen Handy, 25 Aug 44, sub: JCS 762/8. . . . (5) Memo, Gen Roberts for Asst Secy, WDGS, 26 Aug 44, sub: Notice of Approved Allocations of Sailings to Pacific Areas. (4) and (5) in ABC 561 Pac (6 Sep 43) Sec 1A. (6) The JMTC first proposed to make these allocations and notify theater commanders on its own authority, but the JCS decided that it must be done through regular Army and Navy channels. See (3), (4), and (5), and JMT 50/16, 7 Sep 44, same title, with related papers in ABC 561 Pacific (6 Sep 43) Sec 1A.

[29] (1) Ltr, Conway to Reed, Mission for Economic Affairs, London, 16 Jun 44, Reading File June–July 44, Box 122893, WSA Conway File. (2) Memo, Lutes for Somervell, 2 Jul 44, sub: Backlog of Cargo, Pacific Coast, folder POA 1942 thru Mar 1945, Lutes File. (3) Memo, Adm Smith for Rear Adm F. S. Low, CofS, 10th Fleet, 9 Jun 44, sub: Alterations to the Convoy System, folder Navy 1944, Box 122894, WSA Conway File. (4) Min of Joint A-N-WSA Ship Opns Com, San Francisco, May–Jul 44. (5) On the improvement of the situation in the Atlantic during this period, see above, Chapter XIV.

[30] (1) Min, 81st mtg JMTC, 27 Jul 44, Item 3; 82d mtg, 31 Jul, Item 1; 83d mtg, 17 Aug 44, Item 4; 84th mtg, 21 Sep 44, Item 1. (2) Memo, Adm Smith for JMTC, 27 Jul 44, sub: Increased Shpg Reqmts for Pacific, folder JMTC Papers Jul–Aug 44, Box 122894, WSA Conway File. (3) Monthly Rpt #2 for Aug 44, T. J. White, WSA Rep, POA, to F. M. Darr, Dir of Traffic, WSA, folder Traffic Dept Monthly Rpts, Box 122876, WSA Conway File. (4) Min, Joint A-N-WSA Ship Opns Com, San Francisco, 4 Aug 44, Item 1.

operations and invade Leyte two months ahead of schedule soon threw off all previous calculations and expanded the Pacific shipping deficit to unmanageable proportions.

The JMTC issued stern warnings in August that meeting the schedule of Pacific shipping would depend upon prompt return of vessels to the U.S. west coast, but its warnings had no real teeth in them and in the logistical confusion that followed the sudden switch to the Leyte plan, SWPA found it necessary to disregard them. The decision to invade Leyte in force in October posed an almost impossible burden on SWPA's logistical planners who had previously had their sights set on smaller operations in October and November against Talaud and Mindanao. The introduction of XXIV Corps from the Central Pacific further complicated the problem and there was little time to plan the flow of shipping. What plans they had were thrown out of kilter by the difficulties encountered after the landing in developing exit roads from the beaches, so that ships were held as floating storehouses for want of facilities ashore. The result was shipping congestion that dwarfed previous tie-ups at Nouméa, Guadalcanal, and Milne Bay.

It first reached considerable proportions at the principal regulating and transshipment point at Hollandia, and soon spread out. The system operated by the Chief Regulating Officer, GHQ, worked badly by all accounts, and the movement of shipping into both Hollandia and Leyte Gulf was poorly coordinated, with subordinate elements ignoring CREGO's priority orders. CREGO was, nevertheless, perhaps more the victim of circumstances than a prime mover in the situation. Some months afterward MacArthur, defending his theater before ASF officers, "accepted full blame for any congestion of shipping by stating that it was on his orders to move ahead in spite of the fact it would cause logistic confusion, that his own staff officers had advised him he would have congestion, but that he felt that the goal of getting into Manila ten months ahead of schedule was worth some supply difficulties." General Wylie of the Transportation Corps felt constrained to add that "what he did not mention was that his own staff was very slow in adjusting themselves to the change," and in canceling shipping from the zone of interior that could not be unloaded in the theater anyway.[31]

Whatever the cause, the situation rapidly took on crisis proportions. On 18 October, with the Leyte task force en route, 86 vessels were in Hollandia harbor—12 discharging, 33 awaiting discharge, 24 awaiting call to Leyte, 3 loading, 5 waiting to load, and 10 simply classified "miscellaneous." Of the 45 vessels awaiting discharge or actually discharging, 38 were cargo ships of which only 9 had actually been scheduled by the Chief Regulating Officer, according to his statement. He thought the supplies on the other 29 ships "could just as well have remained in the United States, because they are no closer to being in the hands of troops while idly awaiting dis-

[31] (1) Quoted in Rpt, ACofT for Opns (Gen Wylie), undated, sub: Notes on Trip from Washington to POA and SWPA, 19 March to 22 April 1945, folder Pacific–Rpts of Visits, OCT HB, Wylie File. (2) Masterson, Transportation in SWPA, pp. 782–84. (3) Min, 83d mtg JMTC, 17 Aug 44, Item 4. (4) Cannon, *Leyte: The Return to the Philippines*, pp. 184–87.

charge in the Hollandia harbor than if they had been held in San Francisco."[32] As the Leyte operation developed the congestion worsened. On 5 December 1944 the Transportation Corps found the situation as follows: 72 vessels in Leyte harbor of which only 5 had completed discharge, 12 more en route from New Guinea, 39 awaiting call at other ports in SWPA, 70 en route from the United States, 28 loaded and awaiting call in the South and Central Pacific—a total of 221 ships tied up in the Leyte operation. Also, rotational retentions in SWPA had mounted to 195, some of which undoubtedly were tied up in the Leyte congestion.[33]

This shipping congestion in SWPA began to develop at precisely the same time as, on the other side of the world, similar congestion was mounting in European waters as a result of the failure to take and develop adequate ports to support the rapid advance across France.[34] To add to these pressures, there were competing demands for merchant shipping for civilian relief in Europe and for the new program to provide Siberian reserves for the USSR against the day of its entry into the war with Japan. A global cargo shipping crisis of larger proportions than any since 1942 thus appeared to be taking shape. In the immediate context of the Pacific shipping situation, an actual deficiency of 10½ notional sailings occurred in October 1944 against stated requirements, and by early November Somervell was estimating the prospective military deficit in that area for November at 79 sailings, at 83 in December, 64 in January 1945, 64 in February, and 57 in March. These figures, representing 30 to 40 percent of total requirements for outward sailings in the Pacific during these months, obviously represented what the shipping authorities usually called "unmanageable" deficits. They were a central consideration, along with the shortage of service troops, in leading to the choice of Luzon over Formosa. They threatened to make even the former impossible unless additional shipping was transferred from the Atlantic or the idle theater pools of shipping were broken up. The JCS, WSA, and the President were soon to have to face up to this problem in the context of a full-scale war on two fronts that placed ever-increasing strains on American military resources.[35]

[32] Memo, Dep CREGO GHQ, for DCofS GHQ, 18 Oct 44, sub: SWPA Shpg Sit, folder Shpg in Pacific, OCT HB Wylie File.

[33] Memo, Col Ronald A. Hicks for Gen Wylie, 5 Dec 44, sub: Shpg Sit at Leyte, folder Shpg in Pacific 1944, Correspondence ASF-WSA, OCT HB Wylie File.

[34] See above, ch. XV.

[35] (1) Monthly Rpt #4 for Oct 44, White to Darr, WSA, 4 Nov 44, folder Traffic Dept Monthly Rpts, Box 122876, WSA Conway File. (2) Msg, Somervell to MacArthur, 5 Nov 44, copy in folder SWPac 1942 thru Apr 1945, Lutes File. (3) Ltr, Conway, WSA, to Gross, 2 Oct 44, folder Reading File Aug–Nov 44, Box 122893, WSA Conway File. (4) JCS 1173, 17 Nov 44, memo by CofS, USA, title: Remedies for Existing and Prospective Shortages in Cargo Shpg. (5) For the steps taken to resolve the crisis, see below, Chapter XXII.

CHAPTER XX

Supplying the Army in Pacific Theaters

Though the over-all logistical problems in the Pacific were those requiring joint action of one sort or another, the task of supplying Army forces in these theaters was still, by and large, primarily an Army problem handled by Army agencies. Its dimensions were formidable. During 1943 and 1944 the Army moved some 1,300,000 passengers and over 23 million tons of cargo to major Pacific areas. By the end of 1944 there were roughly 1,200,000 Army troops in these areas—700,000 in SWPA, 440,000 in POA, and 60,000 in Alaska and western Canada. Over 800 ocean-going ships were serving the Army in the Pacific.[1]

Supplying forces that were scattered over vast expanses of ocean required some adaptation of the general Army system for overseas supply.[2] Normal procedures were better suited to the support of large bodies of troops operating on a continuous land front. Excessive dispersion made it difficult, if not impossible, to establish central reserve stocks or a systematized flow of supplies through a series of depots from rear to front. The normal distinction between wholesale and retail supply was blurred. By the end of 1944 the Army was making shipments direct from the United States to over 70 different Pacific destinations. This required a degree of coordination between theaters and ports thousands of miles distant extremely difficult of attainment, as well as innovations in ordering and loading practices that forced the ports to assume some of the burden of retail distribution.

Procedural Problems

Difficulties began in the very first stage of overseas supply—the shipment of troop units from the United States with their initial equipment and maintenance allowances. Seldom was either unit or convoy loading possible; to make full use of shipping space, equipment all too frequently followed troops in bits and pieces, shipped on many different vessels destined for different ports in the South and Southwest Pacific. In SWPA the practice of assigning all incoming units the code designation of Brisbane and actually designating other ports when the transports arrived at Wellington, New Zealand, further complicated the situation. Marrying up troops and equipment in the theaters was seriously delayed, and sometimes was never accomplished. The Army commander on Guadalcanal, when asked by General Somervell in September 1943

[1] (1) Control Div, ASF, *Statistical Review, World War II.* (2) OPD Weekly Status Map, 9 Nov 44.

[2] For a description of the general system, see above, Chapter VI.

what would be the greatest help from the United States replied simply: "Ship equipment with units when they are sent from the States. One air service unit arrived June 23rd and is just now receiving its equipment."[3] In a similar vein, the chief Engineer officer in SWPA complained that many vital Engineer units could not go to work for as much as five months after arrival because equipment had been loaded on a multiplicity of ships and sent to scattered destinations in Australia and New Guinea.[4]

General Somervell, alarmed about the situation, suggested a three-point solution—unit loading to the maximum extent practicable, advance naming of ports for which units were destined, and preshipment to those ports of equipment and maintenance supplies that could not be unit loaded. Only the second point really proved practicable. Unit loading as a regular practice simply was not conducive to efficient utilization of troop transports in the Pacific and had to be reserved for urgent cases. Nor was equipment available to permit a BOLERO-type preshipment program without deleterious effects on training. The only known instances of preshipment to a Pacific theater involved cases when a division moving from Hawaii to the Southwest Pacific left its equipment behind for a fresh division moving from the United States to Hawaii. In these cases the ASF shipped a complete new divisional set of equipment to SWPA in advance.

The principal result of Somervell's intervention was a tightening of co-ordination between theater and port in arranging shipments. The War Department agreed to notify commanders in SWPA and SOPAC as far in advance as possible of troop units available in any given month; the theater commanders in turn, when designating their selections, would notify the San Francisco port of the destination of each unit. Cots and tentage would either be shipped in advance or on the same ship with the troops; the rest of troop equipment and maintenance supplies would be sent out on as few ships as possible, timed to arrive at approximately the same time as the troops and at the same destination.[5]

Under this system, fewer instances of separation of troops and equipment occurred after the fall of 1943, but it would be too much to say that the problem was ever completely solved. As late as the Philippine campaign, service troops at times could not do their jobs properly because their equipment had been shipped to the wrong base.[6]

The same factors of distance and excessive dispersion created even greater

[3] (1) Somervell Questionnaire, Guadalcanal, Question 12, Control Div, ASF, Somervell Trip file. (2) Masterson, Transportation in SWPA, pp. 270–77. (3) Alvin P. Stauffer, *The Quartermaster Corps: Operations in the War Against Japan*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1956), pp. 147–50.

[4] (1) Memo, Brig Gen Hugh J. Casey, Chief Engr SWPA, 18 Sep 43, sub: Shpg of Equipment with Units, Control Div ASF, Genl Engr Problem, Somervell Trip file. (2) Somervell Questionnaire, SWPA, Question 191, Control Div, ASF, Somervell Trip file.

[5] (1) Masterson, Transportation in SWPA, pp. 277–82. (2) The procedure was in consonance with that developed for the Joint Priority List; see above, Chapter XIII. (3) On the triple division move of the 33d, 24th, and 40th Infantry Divisions see ASF History of Mobilization Division, ASF, MS, OCMH, vol. VI, Sec 1, and papers in OPD 370.5 PTO Sec 3, Case 99.

[6] Stauffer, *The Quartermaster Corps: Operations in the War Against Japan*, pp. 148–50.

difficulties in the succeeding stages of the supply process. Both automatic and semiautomatic supply had serious disadvantages. The automatic method, based as it was on highly doubtful maintenance and consumption factors and often on inaccurate forecasts of the numbers of troops to be in each theater or at each base, produced badly unbalanced stocks. Semiautomatic supply based on the Monthly Materiel Status Report, Class V Ammunition Report, and Selected Items Report, depended on inventories that were usually inaccurate and on requisitions that had to be filed as much as six months in advance in order to take care of the excessively long processing time and shipping cycle. Maintenance factors, days of supply, and projected troop bases continued to be as unreliable as before. It was some time before any special factors based on Pacific experience could be compiled; and even then there was so much variation in activities at different times and places in the three theaters that the factors were, at best, educated guesses. To gather the data for the supply reports from the bases and forward it to San Francisco took time; more time was needed for the port to process the reports and set up shipments to fill the shortages reflected in them. At first this time lag, an average of four months in SWPA, was not recognized when setting the requisitioning objective for editing purposes. The general shortage of shipping in the late summer and fall of 1943 made the time lag even longer. For some time, too, the San Francisco port was slow and inefficient in its handling of Pacific requisitions, many of which, it seemed to the theaters, got lost in the supply machinery. The imbalance that semiautomatic supply was supposed to correct tended to become a chronic condition.[7]

Minimum levels of supply for most classes, prescribed by the War Department in July 1943, were 90 days in SOPAC and SWPA and on the outlying islands in the Central Pacific, 75 days in Hawaii. Operating levels were set at 90 days in SWPA, 60 days in the South and Central Pacific. Maximum levels thus varied from 135 to 180 days. By mid-1943 the minimum levels had been generally achieved in the Pacific theaters for most classes of supply. At the same time the operating level, except in a few cases, was not very high. Moreover, so many critical shortages existed of individual items and of types and quantities specifically needed that the generally satisfactory over-all levels were deceptive. Then standard T/E and TBA allowances of equipment for many units were insufficient, quantitatively as well as qualitatively, and requisitions for additional quantities, or types better suited to the terrain, had to undergo extremely critical scrutiny by OPD and ASF.[8]

Lack of balance in types was aggravated by imbalance in geographical distribution. Satisfactory over-all supply levels for each theater did not neces-

[7] (1) See above, Chapter VI, on the development of these procedures. (2) History Planning Div ASF, Text, II, 190–91. (3) Stauffer, *The Quartermaster Corps: Operations in the War Against Japan*, pp. 134–47. (4) Somervell Questionnaire. (5) Office of the Chief Engineer, General Headquarters, Army Forces Pacific, "Engineers of the Southwest Pacific, 1941–1945," vol. VII, *Engineer Supply* (hereafter cited as *Engineers of SWPA*, VII) (Washington, 1947), p. 104.

[8] (1) Leighton and Coakley, *Global Logistics, 1940–43*, app. F–1. (2) See above, ch. VI. (3) Stauffer, *The Quartermaster Corps: Operations in the War Against Japan*, pp. 134–40. (4) Somervell Questionnaire, particularly answers to Question 13, Control Div, ASF, Somervell Trip file. (5) *Engineers of SWPA*, VII, 75–76, 108–12.

sarily mean satisfactory levels at each individual base. Transportation was never certain enough to make the reserve in Australia or New Caledonia available to meet shortages at such places as Oro Bay or Vella Lavella. Neither in the South nor in the Southwest Pacific was there any good central distributing point where supplies could be stocked in sufficient volume and variety and distributed through a theater supply system to both forward and rear bases. The two theaters struggled to establish orthodox theater distribution systems but not with outstanding success. In the South Pacific a general depot was established at Nouméa in mid-1943 that stocked 30 days of reserve supply for all classes and complete replacement equipment for one regimental combat team, but it served mainly as a source of emergency supply rather than as the normal source on which outlying bases requisitioned.[9]

Large ports in Australia, such as Sydney and Brisbane, could serve as receiving points for most supplies from the United States and collecting points for those procured in Australia, but their utility as distributing centers was limited by inadequate overland transportation to points northward and by their distance from the eventual scene of operations in New Guinea and the Philippines. A new succession of base establishments along the New Guinea coast—Port Moresby, Milne Bay, Finschhafen, and Hollandia, to mention the most important—became new entrepôts for direct shipments from the United States. With the advance into the Philippines, first Leyte Gulf and finally Manila became the principal ports of entry. Still, no one port ever assumed the full burden, and Pacific operations always were mounted and supported from a number of different bases that, in the aggregate, furnished the combined capacity that one of them alone did not possess. Until SWPA forces became firmly established in the Philippines, Australia continued to be the site of the major reserve bases in the theater, and in early 1945 theater stocks were scattered all the way from Sydney to Lingayen Gulf.

Similarly, Hawaii served the Central Pacific as a distribution center for some supplies forwarded to advance bases, but never completely fulfilled the role of a central receiving and distributing point for all Army forces in the theater. General Richardson at first proposed to build up reserves on Hawaii in preparation for the Gilberts-Marshalls offensive and, with the support of Admiral Nimitz, secured a 2-division stockpile of replacement equipment over and above his normally allotted levels.[10] But even in the Gilberts and Marshalls, it proved necessary to make direct shipments from the U.S. west coast, and very soon the whole idea of using Hawaii as the principal supporting base was abandoned in favor of shipping all supplies possible directly to advance bases from the port of embarkation. Nevertheless, the role of Hawaii continued to be an important one. The joint staff there prepared its logistical support plans based on co-ordinated shipments from both the United States and Hawaii to the Gilberts, Marshalls, Marianas, and Palaus; ships going out from the United States stopped

[9] (1) Leighton and Coakley, *Global Logistics, 1940–43*, pp. 406–07. (2) USAFISPA History, pp. 696–91.

[10] Charles H. Owens, Jr., Logistical Support of the Army in the Central Pacific, 1941–44, unpublished dissertation, Georgetown University, Washington, D.C., June 1954, pp. 77–78, copy in OCMH.

at Hawaii to top off their loads with supplies necessary to meet any deficiency between the actual requirements of the forward base and the amounts loaded on the west coast. As the advance moved farther across the Pacific, bases in the Marianas, the Palaus, and in the South Pacific took over some functions formerly performed in Hawaii.[11]

The operation of such a diffuse distribution system inevitably involved a tremendous amount of waste, and made over-all theater control difficult. Multiple handling and transshipment at several points took their toll in breakage, deterioration, and pilferage. Storage north of Australia or New Caledonia was usually inadequate, and deterioration in open storage in a tropical climate appallingly swift. Rations spoiled, canvas rotted, ammunition became unusable, and machinery rusted. "There has been considerable wastage in all types of supplies . . . ," wrote Somervell from the South Pacific in September 1943. "This loss has been particularly high in ammunition and rations. No one really knows how much food has been spoiled. It is certain, however, that as much as 50 percent of some types of ammunition has gone to waste and hundreds of thousands if not millions of rations have been lost."[12] In June 1943 an observer thought at least 40 percent of the rations in SWPA spoiled or unconsumable.[13]

Moreover, as once vital bases like Port Moresby, Milne Bay, the Fiji Islands, and Kwajalein lost their importance, large backlogs of excess supplies built up. Because of the difficulties of selecting items needed at forward bases and the poor condition of much of the equipment left behind, commanders were inclined to reorder from the United States. The forward areas had neither the personnel nor the facilities for handling these supplies in bulk. The roll-up of bases during 1943 and 1944 was therefore usually impracticable, and to some degree uneconomical. The port at San Francisco was far better equipped to provide loads tailored to the needs of each base and each operation.

Another complicating factor was the general lack of effective supply control. Accurate accounting or inventory control by theater headquarters over the many widely scattered bases in each area proved to be all but impossible during periods of intense combat; and even at rear bases neither was perfect. As long as most American forces remained in Australia, inventory control in SWPA seems to have been relatively good, but once the movement to the more primitive bases on New Guinea began the situation got out of hand. "It was practically impossible for me," observed General Lutes on his visit to SWPA in August 1943, "to determine what items are critically short in this theater . . . a shortage of some item at Port Moresby does not mean that the item is short in SWPA. Specific information at the front is not helpful due to the fact that no one there can tell me whether a shortage is due to failure in the States or to inability to get the item forward from some Australian base. . . ."[14]

[11] (1) AFMIDPAC History, Part IV, ch. III, app. 2. (2) ASF Hq Staff School, Lesson on Special Procedures, Overseas Supply, 12 Apr 44, Log File, OCMH.

[12] Ltr, Somervell to Marshall, 27 Sep 43, Hq ASF File, Gen Somervell's Trip.

[13] Stauffer, *The Quartermaster Corps: Operations in the War Against Japan*, p. 189.

[14] Memo, Lutes for CG ASF, 30 Aug 43, sub: Report, folder 2d Pacific Trip, Lutes File.

In the South Pacific matters from the very beginning were even worse. General Lutes continually urged General Breene, the South Pacific SOS commander, to establish effective inventory control, and Breene made herculean efforts to comply, but simply did not have the personnel to accomplish the task for the eleven different bases and 400 separate organizations under his administrative control. Not until October 1944, when the South Pacific had become a rear base, did supply accounting become relatively accurate. At the advance bases in the Central Pacific the story was much the same as in New Guinea, with the added complication that Navy officers, in command at some bases, did not understand the intricacies of the Army's system of calculating days and levels of supply.[15]

Given this inaccuracy in theater inventories, the supply status reports on which semiautomatic shipments were based obviously did not contain the sort of exact computations the ASF desired. Similarly, theater requisitions were more apt to reflect a general estimate of future need than a close reckoning of materials required to build up, balance, and maintain stock levels. Requisitions for totally unreasonable quantities though infrequent were not unknown, and their presentation strengthened the ASF conviction that all orders had to be carefully edited on the basis of projected troop strengths, allowances, and prescribed maintenance factors. To the theaters, on the other hand, the need to create reserves outweighed the need for careful accounting. "It is assumed," the South Pacific SOS responded to a question from Somervell, "that from the standpoint of the War Department the main purpose of stock control is to prevent excessive accumulations of critical items in any given theater, at the expense of other theaters. In this connection, it can be stated that an excessive or unusable quantity of major critical items does not now exist in this Theater nor has it at any time in the past. In general, the reverse situation prevails."[16]

The same was true of the Southwest and to a lesser degree of the Central Pacific. Requisitions based on what the Pacific theaters conceived to be their needs piled up at San Francisco. ASF agencies were slow to adapt the supply machinery in the United States to filling them, particularly when they involved any unusual items or quantities. The shipping shortage in the summer and fall of 1943 made matters worse. Pacific theaters complained bitterly of overcritical editing and overlong delays in processing requisitions. In mid-August General Richardson, immersed in preparations for the forthcoming Gilberts and Marshalls offensive, told Lutes that the San Francisco port was editing his requisitions to the bone, to the point where he could not properly outfit task forces then being formed or meet other demands being placed on him from areas outside Hawaii. Port personnel, he said, had no knowledge of forthcoming operations that would permit them to edit intelligently; he asked that they therefore refrain from editing at all and fill his requisitions to the best of their ability.

The request for cessation of editing was familiar, having been heard from

[15] (1) USAFISPA History, III, 513. (2) Lutes-Breene Corresp in folder SPA 1942–43–mid-44, Lutes File. (3) Ltr, Leavey to Lutes, 31 Mar 44, file 10a Shipment File 1 Feb to ———, ASF Plng Div.

[16] Somervell Questionnaire, South Pacific Area, Question 37, Control Div, ASF, Somervell Trip file.

Atlantic as well as Pacific theaters on numerous occasions, but the War Department could hardly relinquish this established control over the flow of supplies. Richardson's immediate complaint was met by instructions to forward a list of materials for secret operations directly to the War Department; approved materials on the list were assigned a secret code designator, and the port authorized to honor requisitions identified by the code against the approved list.[17]

Richardson's complaints, in any case, had less justification in the fall of 1943 than those from the South and Southwest Pacific, for during this period preparations for the Gilberts and Marshalls offensive got a higher priority on both supplies and shipping.[18] From the South Pacific, General Somervell wrote in September 1943:

> The level of supply fixed for the theater has been placed at ninety days and it required one hundred and twenty days to process a requisition. In addition to this, the Theater has never built up a reserve of T.B.A. equipment. Much of the equipment now in the theater was subjected to grueling use; some motor equipment, for example, has been in use for over three years and will need replacement. Owing to the wide-spread activities (some 3,000 miles across the area), it is necessary for the Theater Commander to have enough material in stock to effect prompt replacements for these items without having to await their arrival from the United States. All requisitions should be edited on the basis of providing for this stock. An examination of the time required to fill some of the requisitions placed on us does not reflect any credit on the Army Service Forces. Engineer materials are particularly bad. There has been too much disposition to get into exchanges of telegrams and not of supplies. . . .[19]

The situation Somervell found in SWPA was, if anything, worse. There had been unconscionable delays in meeting requisitions and a huge backlog of SWPA orders had built up at San Francisco, many of them dating back to the early months of 1943. Despite the fact that over-all levels were satisfactory (between 90 and 180 days) for most classes, SWPA officials could present a typewritten list of critical shortages several pages long. Engineer and transportation materials, the two most critical categories in theater operations, were farthest in arrears.[20]

Improving the System

The growth of such a heavy backlog of requisitions at San Francisco had already been noted by General Somervell when passing through that port on his way to the Pacific, and he ordered immediate action to determine the causes and prescribe remedies. Control Division, ASF, accordingly undertook a thorough study, which was completed on 24 November 1943. The report, called "Survey of Supply of Pacific Areas," revealed that of the total requisitions received at San Francisco from March 1942 through September 1943 some 40 percent were still outstanding at the end of the period. Fifteen percent of all outstanding requisitions were 90 days old or more. Figures for the technical services furnishing the

[17] Correspondence in folder 2d Pacific Trip, Case Cen Pac, Lutes File.

[18] See above, ch. XVII.

[19] Ltr, Somervell to Marshall, 27 Sep 43.

[20] Somervell Questionnaire, SWPA, particularly Questions 64–70, and comments thereon in indorsement by Col Harry A. Montgomery, Actg Chief, Supply Div, OCE, 28 Oct 43, Control Div ASF, Somervell Trip file.

most critical items were more startling—53 percent for Signal equipment, 55 percent for Ordnance, 58 percent for Engineers, and 85 percent for Transportation. The survey concluded that though shortages of supplies and of shipping were the primary factors behind the delays, numerous other causes contributed—mislocation of stocks, inadequate planning, inept operations, cumbersome organization, faulty procedures, and improper record keeping, less specifically in the port than in the whole complicated supply network controlled by the technical services. When requisitioned materials were in port stocks they were normally shipped quickly; only occasional delays occurred when they were available at installations directly supporting the San Francisco port. The real troubles came when the materials had to come from other sources. The whole process tended to degenerate into

> hundreds of transactions, each involving numerous extracts, re-extracts, teletypes, requisitions, back orders, and other correspondence and record-keeping . . . until the transaction is finally so complex that it challenges comprehension. Instances were noted where supply on requisition was made in driblets for more than a year after the original receipt of the requisition. The possibility of these supplies being received, related to the proper requisition, and utilized for the purpose requisitioned is considered remote. The more complex the transaction becomes the more difficult it is to control: the greater is the possibility of failure.[21]

If the San Francisco port was not initially responsible, the survey found that the port's follow-up of extracted requisitions was perfunctory and ineffective, and that its liaison with supply sources on the one hand and theaters on the other was entirely inadequate. Because it lost track of extracted requisitions it could not keep the theater posted on their fate. Cargo planning had to be confined to routine and automatic shipments and to expediting critical supplies singled out by the theaters. Priorities originally assigned by the theaters became outdated and meaningless. "Shipments . . . are largely based," wrote General Goodman of the New York port in a follow-up of the survey, "on whatever items the depots send in first, regardless of whether or not such items are most urgently needed by the theater."[22]

The Control Division report stimulated an intensive effort at improvement. Port stocks at San Francisco were enlarged and stocks at west coast filler and backup depots brought up to authorized levels; chiefs of technical services were instructed to make every effort to reduce the practice of dispersing extractions to numerous regional depots and to speed up the operation of their distribution machinery. Procedures modeled on those at the New York port were installed at San Francisco. The port's Overseas Supply Division was strengthened and its follow-up system revamped; the dateline system was instituted with its specific cutoff dates for completion of the various steps in processing a requisition; back orders were reviewed and requisitions canceled where they were no longer applicable; the port was instructed to set up a simpler and more comprehensive system of keeping the theaters informed of the status of their requisitions. Lastly, and

[21] Survey of Supply of Pacific Areas, 24 Nov 43, Control Div, ASF.

[22] Ltr, Gen Goodman to CG SFPOE, 16 Nov 43, sub: Action Necessary to Attain Objectives Directed by General Gross, OCT 401 POA 1943–44.

most important, the port established a definite system of cargo planning based on theater priorities, designed to regulate the flow of supplies by periods in accordance with the theater commander's wishes.[23]

These procedural reforms were not the kind that could be carried out in a day, nor would their effects be felt after they were instituted in any sudden and dramatic manner. They were, in the end, but imperfectly realized. Another Control Division survey conducted a year and a half later, in May 1945, still rated the follow-up of extracted requisitions by the San Francisco port as "unsatisfactory" and its liaison with both the Pacific theaters and its own backup depots as inadequate. It also pointed out that the Overseas Supply Division at the port, badly undermanned, had been unable to exercise proper supervision over its outports or to co-ordinate its cargo planning with theirs.[24] All of this notwithstanding, the 1945 survey recognized that there had been a vast improvement in the handling of Pacific supply at San Francisco in 1944, resulting mainly from a new emphasis on cargo planning in keeping with theater priorities. The port no longer merely forwarded whatever supplies it had on hand but, within the limits of availability of supplies and shipping, was sending to the Pacific theaters supplies and equipment they considered most essential.

Other improvements in procedures and greater mutual understanding of need among the theaters, the port, and ASF headquarters also played their part in producing smoother supply operations in the Pacific. With the inclusion of order and shipping time in the requisitioning objective, the problem of time lag in making semiautomatic shipments and filling requisitions became less acute, and the effect of the reductions in supply levels brought about by the McNarney Directive of 1 January 1944 was cushioned. Specific deficiencies in Pacific supply were pinpointed by General Somervell during his tour in the fall of 1943 and the ASF took corrective action in hundreds of specific instances to fill shortages, to supply types better suited to theater conditions, and to provide quantities in excess of TBA and T/E allowances when justified. In the theaters themselves, a better understanding developed of the proper methods of filing requisitions and preparing the Monthly Materiel Status Report. Even inventory control, though it had by no means reached perfection, was at least improved. Then, too, by the end of 1943 production of war materials in the United States had reached its peak, eliminating many of the over-all shortages that always played a more important role than procedural difficulties in preventing timely shipment of types and quantities of supplies needed in the Pacific.[25]

Naturally, all the delays and frustrations in handling Pacific supply, many of them growing out of fundamental

[23] (1) Leighton, Development of Overseas Supply Policies and Procedures, pp. 166–97. (2) Larson, Role of the Transportation Corps in Overseas Supply, pp. 194–97. (3) Ltr, Gen Gross to Gen Gilbreath, CG SFPOE, 27 Nov 43. (4) Ltr, Gen Gilbreath to CofT, 15 Dec 43, sub: Overseas Supply Division. (3) and (4) in OCT 401 1943–44. (5) See above, Chapter VI, on the dateline system and the general move to standardize port procedures at this time.

[24] Survey of Pacific Supply, 15 Jun 45, Control Div, ASF.

[25] (1) History Planning Div ASF, Text, II, 204–05. (2) Somervell Questionnaire, Control Div ASF, Somervell Trip file. (3) On war production see above, Chapter V; on order and shipping time and the effects of the McNarney Directive, see above, Chapter VI.

facts of geography, could not be eliminated. West coast ports were more distant from centers of American industrial production than ports in the east. Rail connections to western ports were far less adequate. Communications between port and theater over the long distances in the Pacific remained imperfect. The effects of a priority lower than that of the European theaters were felt in many ways. Limited cargo shipping, or, perhaps more accurately, limitations on reception capacity for this shipping at the far end of the line, combined with all the other factors to keep the Pacific supply situation, particularly in SWPA, from ever approaching what might, by American standards, be considered ideal.

New Methods of Shipment

If the over-all availability of supplies was vastly improved, the old problem remained of providing, within theaters having limited internal distribution facilities, adequate quantities at the right time and place. By early 1944 the trend was clearly toward direct, tailor-made shipments from the United States rather than the accumulation of theater reserves and development of elaborate intratheater ocean supply lines. By that time, any real danger of Japanese interruption of Pacific shipping lanes had passed, making the maintenance of large reserve stocks for emergencies unnecessary. Authorized levels of supply in Pacific theaters were therefore progressively reduced during 1944 until at the end of the year the maximum authorization for most classes stood at 90 days, including both minimum and operating levels.[26]

The trend toward direct, specially loaded shipments from the United States to forward bases placed a far greater burden on the San Francisco port and the technical service installations serving it. The Control Division's 1945 survey cited the port's success in handling these kinds of shipment in 1944 as its outstanding achievement.

Both of the main Pacific theaters moved in the same direction in this respect; the transition in POA, however, was more rapid than in SWPA and its procedures were more precise and systematic. POA stipulated the specific supplies to be shipped in each scheduled convoy for advance bases and forwarded its requisitions to the port on or shortly before the cutoff date. The supplies were then assembled from port and depot stocks insofar as they were available, and forwarded in accordance with the loading plan furnished by POA; if certain items were not available or were not forwarded by the depots in time, the requisitions normally were canceled. If the supplies were still deemed essential by the theater, it could requisition them again for the next convoy.

SWPA's orders were not at first so closely related to either a specific loading plan or the prospective availability of shipping. Requisitions were presented in the first instance simply with a priority designation indicating relative urgency at the time of ordering. The volume of supplies ordered constantly exceeded the shipping space available, and a chronic backlog of unfilled requisitions resulted,

[26] (1) TAG Ltr, 29 Dec 44, sub: Overseas Sup Levels, AG 400 (12 Dec 44), OB-S-E-I. (2) History Planning Div ASF, Text, I, 142, and II, 203–05. (3) Stauffer, *The Quartermaster Corps: Operations in the War Against Japan*, pp. 150–51. (4) History AFMIDPAC, Part IV, ch. III, app. 2. (5) Survey of Pacific Supply, 15 Jun 45, Control Div, ASF.

mounting to something over a million tons by the end of 1944. These unfilled requisitions were not automatically canceled but stayed in effect until revoked by the theater. Priorities originally assigned were soon outdated, and the theater began to operate a priority system within a priority system, calling for specified material from the backlog for each month's loading to be shipped to a specific base. Thus the San Francisco port edited SWPA's requisitions and forwarded them to the depots, but there they were held in suspense pending instructions from the port to forward specific supplies for loading within a given time period. In this way SWPA also came to require tailor-made loads, but within the framework of an older system that did not provide adequately for adjusting orders to available shipping space.[27]

Direct shipments to forward bases in themselves did not take the burdens of sorting, storage, and distribution off the theater services of supply. To further minimize these burdens the Central Pacific developed a special type of direct shipment designed to bypass the theater depot system and relieve its supply organizations of handling and sorting. This was the system of block-loaded ships, first used in the Gilberts and Marshalls operations. The theater determined the size of each standard block, estimating on the basis of its experience supply requirements of all types for a given number of men for a given number of days—usually 1,000 men for 30 days. Once the port was informed of the composition of a block, the theater could order shipment of so many blocks to any designated advance base. The port then had to initiate the necessary requisitions on its supporting depots and assemble and load the shipments.

Block loading lent itself to any number of variations. The standard block load was most useful for staging supplies in the early phases of an assault. For replacement supplies solid block ships were instituted, each block containing the initial requirements for 1,000 men for a particular class of supply for 30 days. All types of supply could be spread out over a number of ships sailing in a given convoy or a specified shipping period. The numbers and kinds of blocks and the combinations of them tended to increase as the system came into more general use. In the Central Pacific requirements for the several types of blocks were established as part of CINCPOA's loading plan; ships carrying them moved to a regulating point from where they could be called forward into the area of operations for unloading at a pace determined by the development of reception capacity. Knowledge of the contents of each block enabled commanders in the forward area to know exactly what was on each ship and to call forward the ships in combinations best suited to their needs.

In SWPA block loading was first used on a small scale in the Hollandia campaign and in increasing volume thereafter. It was employed extensively in the Philippines though the ships were actually designated resupply ships. Because Army operations in the Philippines were of larger proportions than any of its previous campaigns in the Pacific, the standard loads on the resupply ships consisted of all items required to support 10,000 men for 30 days. In addition

[27] (1) Survey of Pacific Supply, 15 Jun 45, Control Div, ASF. (2) History Planning Div ASF, Text, I, 159.

to the standard loads, SWPA's resupply ships also carried, as deck loads, DUKW's and landing craft to facilitate discharge over beaches or in ports wrecked by a fleeing enemy.

Block loading was a partial solution to the problem of lack of facilities to establish an orthodox theater supply line. It was not a panacea for all ills, but a form of automatic supply that could be as wasteful as other forms if not carefully regulated. The determination of the composition of blocks was as difficult as that of any other type of requirements, a difficulty reflected in the constant change orders with which the San Francisco port had to cope. For the Army supply agencies in the United States also, it was a special supply procedure that had to be fitted into the existing system of reporting and requisitioning. Moreover, block shipments were adapted only to supplying routine needs that could be precalculated; other arrangements had to be made for special operational requirements. Nonetheless, Planning Division, ASF, concluded at the end of the war that block-loaded and resupply ships were the best method of providing supplies in the early stages of operations:

> The usage made of these methods showed they had the advantages of automatic supply and relieved theaters of the administrative load of preparation of requisitions. They provided adequate quantities of supplies immediately behind the assault forces but still permitted theaters to control quantities and the rate of flow by ordering blocks forward as needed, thus reducing excesses.[28]

Engineer Supplies and Special Project Material

The Engineer effort in all three Pacific theaters was the most important single feature of logistics once troops were ashore. Since island battlegrounds had to begin with almost none of the installations required for the support of either air or ground forces, construction of a whole nexus of facilities was necessary at each new base—airfields, harbor and dock facilities, roads, hospitals, depots, water supply systems, maintenance facilities, troop housing, and so forth. The pace at which this construction proceeded affected every other aspect of the logistical process. For example, waste was always greatest where supplies had to stay in the open for any length of time; where roads were nonexistent supply had to depend upon the expensive process of airdrop.

In the beginning, in both the South and Southwest Pacific, the shortage of both Engineer troops and equipment and of construction supplies was acute. In 1942 greatest reliance was on local procurement in Australia and New Zealand and on distress cargoes originally intended for the Dutch East Indies that were landed in Australia. By mid-1943 the source of supply was shifting rapidly to the United States. The shift coincided with the development, in Washington, of the keyed projects system as the primary method for ordering special operational supplies over and above authorized allowances for base construction and development.[29]

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[28] (1) History Planning Div ASF, Text, II, pp. 197–200. (2) Stauffer, *The Quartermaster Corps: Operations in the War Against Japan*, pp. 150–59. (3) AFMIDPAC History, Part IV, ch. III, app. 2. (4) Lesson at ASF Hq School on Special Supply Procedures.

[29] See above, Chapters V and VI, for a description of this system.

It was not solely a problem of special operational supplies, however, but also one of adequacy of TBA and T/E allowances for Engineer units, and of the whole range of Engineer supply. The first Engineer units sent out were too lightly equipped; they did not have either adequate quantities of equipment or heavy enough equipment for clearing jungles and building in jungle terrain. The initial conception, in fact, was apparently that much of the construction work in the Pacific would be pick and shovel work. It soon became clear that one of the principal points of American superiority over the enemy lay in heavy construction equipment—bulldozers, cranes, rollers, graders, crushers, drilling equipment, power shovels, power saw mills, and so forth—that could do the work of many men. The shortage of both machines and labor subjected existing equipment of this sort to excessively hard use in round-the-clock operations. Excessively hard usage produced frequent breakdowns; repair was difficult and sometimes impossible for lack of adequate parts and maintenance personnel. Moreover, in the Solomons and on New Guinea it was almost impossible to establish major maintenance facilities on each island, and movement back to rear bases in Australia or New Caledonia was impracticable.[30]

Requisitions for heavier equipment, for unit equipment in excess of TBA, and for larger and better balanced quantities of spare parts were presented as early as the fall of 1942 but there were long delays in filling them. Even the principle that extra quantities and heavier equipment were required was inadequately recognized until after Somervell's trip to the Pacific in the fall of 1943. At that time he noted that the Army engineers in the South Pacific had made a "particularly bad showing," attributable at least in part to failures in Engineer supply, and that the situation had been saved only by the presence of a large number of naval construction battalions in the area.[31]

In SWPA, where the Army engineers carried the main construction burden, Somervell received a long bill of complaints from Brig. Gen. Hugh J. Casey, theater chief of engineers. Not only was TBA equipment too small and too light, Casey said, but also spare parts supply was poor, authorized supply levels too low, and supplies on hand in all too many cases below those levels. Requisitions on the United States were too critically edited or were filled too slowly to permit building a supply reserve. Along with improvements in supply procedures, Casey urged immediate shipment of heavy equipment in excess of TBA for all Engineer units in SWPA, more construction equipment for the Engineer special brigades so they could perform a dual role, increased stocks of spare parts, and establishment of a theater re-

[30] (1) Office of the Chief Engineer, General Headquarters, Army Forces Pacific, "Engineers of the Southwest Pacific, 1941–45," vol. I, *Engineers in Theater Operations* (hereafter cited as *Engineers of SWPA*, I) (Washington, 1947), pp. 90–93, 134–35; *Engineers of SWPA*, VII, 63–78. (2) USAFISPA History, pp. 587–92. (3) Ltr, Maj Gen Eugene Reybold for CG ASF, 16 Nov 43, sub: Engineer Personnel and Sup in SOPAC Theater, file 5b C1 IV Supps Engr SPA, ASF Plng Div. (4) Memo, ACofS, G–2 for Grnd, Genl and Spec Staff Secs, Hq AGF, 25 Aug 43, sub: Observations in SW and SPac Theaters During Period 5 Apr 43 to 14 Jul 43, file SWP. ASF Plng Div. (5) Karl C. Dod, *The Corps of Engineers: The War Against Japan*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1966).

[31] Ltr, Somervell to Marshall, 27 Sep 43.



SHEEPFOOT ROLLER AND MAINTENANCE GRADER *preparing an airstrip, New Guinea.*

serve stockpile of Engineer equipment and construction supplies.[32]

The ASF had to recognize the justice of Casey's complaints but to remedy the deficiencies he cited was no easy task. Much of course was accomplished in the general improvement of the Pacific supply system in 1944. But heavy engineering equipment was in short supply and its allocation was handled on a strict priority basis by the Munitions Assignments Committee (Ground). Demands for it from every corner of the globe had been largely unanticipated. Quantity production was slow to get under way. Production lead time was long, and raw materials requirements were heavy.

Thus improvement was once again a gradual process. It did prove possible to speed the flow of heavy equipment beginning in late 1943. TBA allowances were revised upward, and much equipment shipped in excess of TBA. The Engineer special brigades got their additional allotment. But General Casey was never able to create the reserve stockpile he wanted, and the supply of spare parts continued to be a major problem. Engineer supply levels generally remained low in SWPA until April 1944; from April to October they were built up considerably though there continued to be critical shortages, and problems of internal theater distribution were acute.

[32] Memo, Casey, 18 Sep 43, sub: General Engineering Problems, with separate memos on individual problems, Control Div, ASF, Somervell Trip file.

Then, beginning in October, the shipping situation led to a large backlog of unfilled requisitions for Engineer supplies. This contributed to a fairly critical shortage in certain specific categories in the invasion of the Philippines.[33]

Meanwhile, the keyed projects system established by the War Department in mid-1943 was causing its own complications. Under that system, theaters were supposed to calculate their special project needs for base development and present bills of material well in advance as a guide to both long-range procurement and shipping plans. To do so required that they foresee the course of operations a year or more ahead, and determine the bases to be developed and the specific special supply requirements at each base. Pacific commanders were not gifted with such clairvoyance. Objectives of each operation were seldom determined far enough in advance. The operations themselves were all too frequently planned on such short notice that projects with their accompanying bills of material had to be presented almost simultaneously with the requisitions against them and indeed sometimes the requisitions preceded the bills. Major projects in the South and Central Pacific were almost invariably presented too late to affect procurement plans, and usually allowed only a short time to assemble the shipments themselves. The project for one of the most extensive, for instance, the development of a B–29 base on Saipan, was sent in on 3 June 1944 with a deadline date for the first shipment of materials on 1 July. Operational project requirements for the Palaus invasion, scheduled for September 1944, arrived in ASF on 23 May, and most of the project requisitions on 4 June with a deadline for arrival of the first materials at port on 1 July.[34]

SWPA did provide estimates further in advance, but on a "typical," not a "specific," basis. Twelve projects were presented in 1943, each representing not the needs of any given area or operation but of those for particular types of construction such as airdromes, hospitals, port and harbor facilities, water supply systems, camps, storage and warehousing facilities, and so forth, that might be required in any typical objective of the SWPA advance. The twelve SWPA projects were really little more than bulk advance estimates of requirements, calculated on a very generous basis. They were accepted in Washington as a basis of procurement planning but not for supply action. Each requisition against them had to be reviewed by ASF headquarters before the San Francisco port was authorized to ship materials to meet it—a system of double ordering extremely irksome to SWPA engineers.[35]

In mid-1944, the twelve SWPA projects were finally approved for supply as well as procurement, but SWPA was informed that for the forthcoming invasion of the Philippines, it must present its projects by area and not by type. Meanwhile in an effort to refine the

[33] (1) *Engineers of SWPA*, VII, 102–12, 124–40, 143–84. (2) Somervell Questionnaire, SWPA, Questions 64–70, Control Div, ASF, Somervell Trip file. (3) Memo, Actg Dir Plng Div, for Dep Dir Pls and Opns, ASF, 13 Dec 43, sub: Engineer Personnel and Sup in SOPAC Theater, file 5b C1 IV Sup Engr SPA, ASF Plng Div. (4) History Planning Div ASF, Text, I, 158–59.

[34] (1) History Planning Div ASF, Text I, 139–40, 147–50; text, II, 195–96, 213–22. (2) *Engineers of SWPA*, VII, 103, 146–47.

[35] (1) *Engineers of SWPA*, VII, 103, 147. (2) History Planning Div ASF, Text, I, 143.

project system, the ASF had transferred part of the "crystal ball" function to Washington, and itself was engaged in considerable planning for Philippine base development as a basis for procurement action.[36]

In the event, the invasion of Leyte was launched two months ahead of schedule, and operational supplies in the first stages had to come from materials ordered by SWPA for earlier campaigns in New Guinea or by the Central Pacific for the assault on Yap. Hurriedly prepared SWPA projects specifically designed for base development on Leyte were received in the War Department on 6 October 1944, only two weeks before the invasion, with a requested time schedule for shipment beginning in December and running through May 1945. Preparation of projects for the invasion of Luzon was only slightly less hurried.[37]

SWPA engineers were inclined to attribute much of the blame for the shortages of Engineer supplies and special project material that did develop in the Philippines to the cumbersome project system. Their historian has characterized it generally as "one of the major reasons for the tremendous difficulties experienced in engineer supply."[38]

This kind of criticism should not be allowed to obscure the considerable success achieved by the ASF in meeting operational requirements of Pacific theaters in 1943–44, though it was achieved very largely by not following the project system in any literal sense. For the most part the ASF was able to meet special demands on short notice and without any previous detailed blueprint of the base establishments. Special construction supplies were usually bulky, and shipping problems caused more delays than did inability to meet bills of materials presented late in the game. In the Philippines, for instance, after inevitable early delays because of the two months' acceleration of the invasion, project supplies ordered by SWPA were always available in much greater quantity than was shipping to move them or reception capacity in the Philippines to unload them. The real difficulties on Leyte and Luzon were the confused shipping situation, already described, which prevented movement of the supplies available, and the failure of SWPA authorities themselves to adjust their requests for supplies to available shipping space. And the major impact, in any case, was not to delay operations in the Philippines but to disrupt the timetable for further advances against Japan.[39]

Clearly, the keyed projects system did require a level of detailed calculation that was practically impossible either in Washington or in the Pacific theaters, given the general lack of advance knowledge of geographic features of Pacific islands and the ever-accelerating pace of advance that produced shifting objectives and rendered time schedules quickly obsolete. Some method of anticipating special project requirements was essential, however, and the Pacific theaters had to bear their share of the burden. The projects system did force them to anticipate their requirements more than they might otherwise have done, and

[36] (1) See above, ch. V, and below, chs. XXIII and XXIV. (2) History Planning Div ASF, Text, I, 156; text, II, 219–20. (3) *Engineers of SWPA*, VII, 148.

[37] (1) *Engineers of SWPA*, VII, 146–49. (2) History Planning Div ASF, Text, I, 155–59; text, II, 232–39.

[38] *Engineers of SWPA*, VII, 103.

[39] See above, ch. XIX, and below, ch. XXIII.

perhaps kept these requirements within more reasonable bounds.

The Navy used a considerably different system of determining its requirements for construction and base development in the Pacific, and a far less specific and complicated one. For the most part, bases were prepared in prepackaged units (called Lions, Cubs, and Acorns) with a large number of variations on each individual package. Procurement was based on an over-all estimate of the total number of units of each type, and theater commanders were authorized to order the units by type, or separate functional components of type units, prescribing in each case such tailor-made variations as were necessary.[40] It is true that this system was not entirely suited to Army operations, for Army requirements tended to vary a great deal more and the need for individual tailor-made requirements was greater. Yet SWPA engineers, the major Army construction force in the Pacific, found establishment of requirements by type rather than area far more convenient. If the Navy system was wasteful in certain respects—the over-all requirement for Lions, Cubs, Acorns, and their components were established on a generous basis and parts of the type base were useless in specific locations—the ASF achieved its own success in meeting Army requirements in the Pacific largely by generous provision in the Army Supply Program for as many contingencies as possible.

Water Transportation Equipment

A second critical category of supply in the Pacific was water transportation equipment for local use. The supply of this equipment in both the Central and South Pacific was mostly a naval affair, though the Army did have specific requirements in these areas for various types of small boats, barges, and port equipment. The major requirements for water transportation equipment for Army use, however, arose from SWPA. SWPA's requirements ran the whole gamut of types; as two observers noted in early 1944, the theater's needs were so great it could use "anything that floats."[41] In general, though there was some overlapping, these needs may be divided into two categories. The first was ocean-going vessels used for transport over long distances, and the second, smaller or less seaworthy craft for lighterage and other harbor work, amphibious landings, personnel and supply transport over shorter distances, towing, and floating storage.

Of the local fleet of ocean-going vessels in SWPA, something has already been said. It started as a miscellaneous collection of Dutch, Chinese, and Siamese merchant ships in 1942 and was gradually expanded over the next two years by the addition of Liberty ships, Lake

[40] BuDocks, *Building the Navy's Bases in World War II*, I, 120–28. See especially p. 120: "It soon became apparent . . . that . . . detailed planning for specific locations was impractical, because it was not possible to draft the complete plans in sufficient time to permit procurement and shipment. . . . With the establishment of . . . typical bases, accumulation of stocks at the advance base depots was simplified; requirements could be determined in terms of the number and kind of unit needed."

[41] Memo, Col Frank A. Bogart for Dir, Plng Div, ASF, 12 Feb 44, sub: Floating Equip and Small Cft Being Sent Overseas, folder Floating Equip, ASF Plng Div.

steamers, and vessels procured from other private sources in the United States and Australia. In late 1944 and early 1945 it was further augmented by the arrival of Baltic coasters from the West Indian trade, concrete steamers, and new C1-M-AV1's constructed in the United States. The total number of vessels in service in SWPA increased from 52 on 1 December 1943 to 94 on 9 May 1945. The Baltic coasters and the C1-M-AV1's were by far the most satisfactory types, and their failure to arrive until very late in the war left MacArthur with only the old Dutch and Chinese vessels and the unsatisfactory Lakers during most of 1943 and 1944. These vessels were constantly in need of repair and neither the parts nor the facilities for this work were available anywhere north of Australia. The lack of either adequate quantity or quality in the local fleet was the principal factor forcing SWPA to rely so extensively on the retention of Liberty ships.[42]

Ocean-going vessels were not an item of Army procurement, but were built by the Maritime Commission or the Navy or if, like the Lakers, they were old ships of long service, their assignment was controlled by WSA. Extensive demands for smaller steamers for domestic service and the runs to the Caribbean, South and Central America, and Alaska left few available for diversion to SWPA.

Most of the host of types of smaller vessels in use, with the exception of landing craft, were procured either in Australia or by the Transportation Corps in the United States. The Australian production program, launched early in 1942, provided by the end of 1944 2,712 small craft ranging from 25 to 80 feet in length. It was delayed by slow delivery of suitable marine engines from the United States, and the final product represented a considerable cutback from an original goal of over 5,000. There were even greater delays in the procurement of marine equipment by the Transportation Corps in the United States. The Survey of Pacific Supply in September 1943 showed the Transportation Corps had met only 15 percent of SWPA's requisitions. The explanation lay not in any faulty procedures but in the difficulties of procurement. The Transportation procurement program was a new one, hardly well under way until early 1943; the corps had no depot stocks, and each SWPA order for marine equipment normally required initiation of procurement action after the requisition was received. In procuring marine equipment the Transportation Corps had to compete with the Maritime Commission and the Navy who had already placed capacity orders with most of the established shipbuilding firms. Furthermore, Army requirements had to undergo the critical scrutiny of WPB when it came to the allocation of necessary steel and other raw materials. For some time after September 1943 SWPA's requisitions for floating equipment — barges, tugs, floating cranes, freight supply vessels, launches, marine tractors, Y tankers, rescue boats, lifeboats, cargo boats. and so forth—continued to pile up with little to show in the way of end-products shipped to the theater. Not until 1944 were the orders themselves consolidated and placed in the Army Supply Program in a systematic manner. This done, Gen-

[42] Masterson, Transportation in SWPA, pp. 338–52.

eral Lutes ordered that further requirements be placed as parts of keyed projects rather than through Transportation Corps technical channels as had been done formerly. The program was subjected to considerable critical review and reduction, which coincided with a similar reduction of the production of engines for the Australian boat program.

In mid-1944 end-products began to come forth in volume, and by early 1945 the numbers of small craft delivered to SWPA began to approach the requirements the theater had presented in early 1943. But the production and shipment of spare parts still lagged, making it difficult to keep the boats in operation. The shortage of floating equipment plagued SWPA to the very end.[43]

Amphibious vehicles, both DUKW's and LVT's, served to alleviate the shortage of small craft in SWPA and fulfilled a very essential role in amphibious operations in the Central Pacific. The first DUKW's arrived in the Pacific in the spring of 1943—50 in the South Pacific and 25 in SWPA. The Central Pacific did not get any until shortly before the Gilberts invasion. They were received with great favor in all areas but the supply was not adequate until well into the middle of 1944. Until mid-1943 the North African theater got first priority on production, receiving 1,099 out of a total of 1,535 produced through the end of June. In the last half of 1943, however, under the priorities distribution system operated by Munitions Assignments Committee (Ground), all Pacific areas did much better, the South Pacific receiving 480, SWPA 885, and the Central Pacific 250, of a total production of 3,924. Because of the success of the DUKW, production was greatly accelerated during 1944, when a total of 11,316 were turned out. By midyear production was sufficient to meet most needs; nevertheless, distribution continued under the strict control of MAC (G).[44]

The supply of amphibian tractors, an article procured by the Navy, followed a generally similar course. A few went to the Army in SWPA in early 1943 and were used principally as cargo carriers in close support of landing operations. Then in the Gilberts offensive in November the LVT came into its own as the only amphibious craft that could successfully negotiate the reef barrier at Tarawa, and the Navy greatly expanded its production program. While by the fall of 1944 LVT's were, like DUKW's, generally becoming available in sufficient numbers to fill all essential needs, distribution was closely controlled. The lion's share of LVT's was assigned to either the Army or the Marine Corps for operations in the Central Pacific because of their peculiar utility in that area; SWPA and ETO received more limited numbers for use primarily as cargo carriers.[45]

[43] (1) *Ibid.*, pp. 368-79. (2) Survey of Supply of Pacific Theaters, 15 Nov 43, ASF Control Div. (3) Memo, Lt. Col. William B. Bunker, Dir of Sup, OCT, for Deputy Chief, Control Div, OCT, 8 Dec 43, sub: Comments on "Survey of Supply of Pacific Theaters," OCT 401 POA 1943-44. (4) Materials in file Floating Equip, ASF Plng Div. (5) Min, 71st mtg, JMTC, 22 Apr 44. (6) Materials in series of OCT 565.4 SWPA files.

[44] (1) Min, WD Conf Gp on Amphibious Vehicles, 11 Oct 43, 9 Feb 44, 13 Mar and 17 Apr 44, file Amphibious Vehicles Confs, ASF Plng Div. (2) Crawford and Cook, Statistics: Procurement.

[45] (1) See above, ch. XI. (2) JCS 754, 10 Mar 44, title: Monthly Rpt of LVT, with series of reports in ABC 561 (30 Aug 43), Sec 2.



LVT's Operating Over Reefs in the Central Pacific

Landing Craft in SWPA

Of all types of floating equipment, landing craft were the most vital in the Southwest Pacific, useful not only for their primary function as personnel and cargo carriers in assaults on hostile shores but for dozens of other functions. They were produced under the auspices of the Navy, but a large proportion of the small landing craft in SWPA were operated by the Army's Engineer special brigades, and these craft the Navy turned over to the Army for shipment. To conserve shipping space, the Army shipped them in sections for assembly in the theater.

At the beginning of 1943, however, there were no Engineer special brigades or landing craft assembly plants in SWPA, and few landing craft of any sort under either Army or Navy control. The first of three special brigades arrived in March 1943, followed by a second in January 1944, and a third a few months later. Troops and material for assembling landing craft were rushed to the theater early in 1943, and by late May a plant was operating at Cairns, Australia, capable of handling sectionalized LCVP's. The plant at Cairns was expanded rapidly to handle LCM's and other types, and a second one was established at Milne Bay, New Guinea, closer to the scene of operations.

In May 1943 the Army's initial requirements for landing craft for opera-

tion by the brigades had been set at 1,620 LCVP's (540 per brigade), 1,509 LCM's (503 per brigade), and 135 LCS (S)'s (45 per brigade). Five hundred of the LCVP's were already en route or set up for shipment at the end of April 1943. The Army asked the Navy to make available 100 more LCVP's each month beginning in May, 75 LCM's in May with an increase to 100 per month as soon as possible, and 45 LCS (S)'s per quarter beginning with the third quarter of 1943.[46]

The Navy accepted the requirements and the delivery schedule for LCVP's, though with a caveat from Admiral King that the number seemed excessive. "Naval experience indicates," he wrote, "that they are unsuitable for ocean trips for ferrying troops of more than a few miles."[47] The warning went unheeded, perhaps because MacArthur felt that for the time being he must accept any craft that could be made available in quantity. For the Navy, in July 1943, said it could furnish only 50 of the more satisfactory LCM (3)'s per month up to a total of 450 in 1943, and possibly 450 more in 1944 if steel and engine requirements could be met. In response to MacArthur's protests, however, the Bureau of Ships was persuaded to step up production. On 19 August the Navy agreed to the total of 1,509 LCM (3)'s and to an accelerated delivery schedule promising 100 for SWPA in October 1943 and 150 per month thereafter until the requirement was met.[48]

Meanwhile, in the theater the 2d Engineer Special Brigade was struggling along with only the initial shipments of LCVP's and a few LCM (3)'s. SWPA officials themselves soon confirmed the Navy's warning about the LCVP's. "Experience . . . has shown," SWPA reported on 13 September 1943, "that LCVP's are not suitable for transporting troops, equipment, and supplies over the open sea, and that a larger craft, namely the LCM (3)'s and the LCT (5)'s are better suited for this form of transportation."[49] Accordingly, the theater recommended that the 4th Engineer Special Brigade, the last scheduled for shipment to SWPA, be initially equipped with 63 LCT's in lieu of 270 of the LCVP's, and that the equipment of the other two brigades be gradually replaced on the same basis. SWPA also asked that an additional 6-foot section be added to the LCM (3)'s to increase capacity and speed. On 6 October MacArthur further informed the War Department that a total of 620 LCVP's should be eliminated from his requirements program and, if the LCT's could not be furnished, LCM's should be used as substitutes in ratio of four for one or a

[46] (1) Masterson, Transportation in SWPA, pp. 416–18. (2) Memo, Brig Gen John E. Hull, OPD, for VCNO, 24 May 43, sub: Ldg Cft Reqmts for SWPA, OPD 560 SWPA, Case 6. (3) Ltr, Hq, Engr Amphib Comd to Chief of Engrs, 2 Jun 43, sub: Progress Rpt on Assembly of 26-Foot Ldg Cft in SWPA. . . , file 5d C1 IV Amphib SWPA, ASF Plng Div.

[47] Memo, Adm King for CofS, USA, 25 Apr 43, sub: Small Ldg Cft in SWPA, OPD 560, Case 6.

[48] (1) OPD Diary, 11 Jul 43. (2) Msg C–4404, Brisbane to WAR, 19 Jul 43, CM–IN 13234. (3) MFR, 2 Aug 43, sub: Conf on Ldg Cft Reqmts for SWPA. (4) Ltr, VCNO to Chief, BuShips, 19 Aug 43, sub: LCM(3)'s—Delivery to Army Sectionalized. (3) and (4) in File 5d C1 IV Amphib SWPA, ASF Plng Div.

[49] (1) Ltr, AG GHQ, SWPA, to TAG, 13 Sep 43, sub: Supplemental Equipment for 4th Engineer Special Brigade, file 5d C1 IV Amphib SWPA, ASF Plng Div. (2) Msg CA 44, Port Moresby to WAR, 13 Sep 43, CM–IN 20611, 14 Sep 43.



LANDING CRAFT ASSEMBLY PLANT, MILNE BAY

total of 252 additional LCM's per brigade.[50]

The request for LCT's brought the amphibian brigades into competition with requirements for OVERLORD and the Mediterranean. OPD merely passed MacArthur's requests on to the Navy, anticipating the refusal of LCT's that came in due time. The Navy did agree, however, to apply engines made available by reduction of the LCVP program to production of LCM's and said it would be able to deliver 165 additional craft of this type by 1 June 1944. After some experimentation the LCM (6) was developed with the added 6-foot section as the desired improvement on the LCM (3). Also, MacArthur having found the LCS (S) unsuitable as a command and navigation craft, the Navy agreed to substitute 45-foot boats and 63-foot pilot boats in equivalent numbers for most of the initial requirement for 135 of these craft.[51]

This proved to be far from the final word. MacArthur insisted on the full quota of LCM's for the amphibian brigades and added a requirement of 212

[50] Msg C 6423, Brisbane to WAR, CM-IN 3493, 6 Oct 43.

[51] (1) See above, ch. VIII. (2) Memo, OPD for VCNO, 9 Oct 43, sub: Ldg Cft for SWPA; Ltr, CNO to CofS, 5 Nov 43, same sub. Both in OPD 560 SWPA, Case 6. (3) Memo, Col Bunker, OCT, for CNO, 2 Nov 43, sub: Addition of 6-Foot Section of Tank Lighters (LCM-3). (4) Ltr, OCT to CNO, 18 Nov 43, sub: Crash, Picket and LCS(S) Boats. Last two in folder 5d C1 IV Amphib SWPA, ASF Plng Div.

for operation by USASOS Transportation Corps. By the end of February 1944 his total requests for LCM's for 1944 operations stood at 2,334, excluding craft for the Seventh Fleet. In July 1944 he presented a request for 450 LCVP's to be shipped in the fall, saying all those in the theater would be worn out by that time. In September he asked for 2,160 more LCM (6)'s and 600 more LCVP's for use by the Army in 1945, 240 of the LCM's for USASOS. Although the Navy protested the scale of these requirements on several occasions, it eventually accepted them, for the production problem had been largely overcome. LCM shipments to SWPA during 1944 proceeded at a rate of between 150 and 200 a month except for a brief period in midyear when the theater itself asked a temporary discontinuance in order to permit assembly facilities in Australia and New Guinea to prepare for movement to the Philippines.[52]

The allocations were generous enough as far as they went. The difficulty arose from the long time lags—one between allocation and arrival in the theater; and another between arrival, and assembly and delivery to the Engineer special brigades. Not until well along in 1944 were the brigades adequately equipped with LCM's, and even then the number out of operation for lack of spare parts was unduly high. The naval channel for supply of spare parts was never satisfactory to SWPA engineers; not until the fall of 1944 were adequate scales of replacement parts accepted by the Navy and channels of procurement and distribution clearly defined.[53]

In any case, the main complaint from SWPA after mid-1944 was not of a lack of adequate smaller craft for the amphibian brigades to carry out scheduled amphibious assaults, but of insufficient craft of any size to speed up other troop and supply movements and to facilitate unloading. MacArthur succeeded in obtaining some LCM's for USASOS for these purposes but he was again turned down on a bid made in spring 1944 for LCT's as a substitute for ordinary freight and passenger vessels destined for his theater. Nor was he ever able to obtain the LCT's he desired for use by the amphibian brigades.[54]

The Navy's refusal to furnish LCT's for Army use in SWPA did not, nevertheless, mean that the theater was being denied these craft entirely. Instead, they were furnished to the Seventh Fleet to form part of its amphibious force, and at least occasionally were available for supply work when not engaged in amphibious assaults. The build-up of the Seventh Fleet's amphibious force went on as slowly during 1943 as did that of the Engineer special brigades. Original CCS allocations for the year included 80 LCT's, 36 LST's, and 80 LCI (L)'s, but as of March 1944 only 59 LCT's, 30 LST's, and 33 LCI (L)'s were available in the theater. The agreement on

[52] (1) Msg C 2219, Brisbane to WAR, CM-IN 20110, 29 Feb 44. (2) Msg U28218, Brisbane to WAR, CM-IN 16174, 20 Jul 44. (3) OPD Summary Sheet, 4 Sep 44, sub: A and N 1945 Reqmts for LCM. (4) Memo, DCofS, for Adm King, 6 Sep 44, sub: LCM(6); Reqmts for SWPA. Last two in OPD 560 SWPA, Case 32.

[53] (1) *Engineers of SWPA*, VII, 136–39. (2) OPD draft msg for CINCSWPA, 17 Aug 44, with accompanying MFR,, OPD 560 SWPA, Case 6.

[54] (1) Msg C-2901, Brisbane to WAR, CM-IN 10673, 15 Mar 44. (2) Memo, Gen Clay, Dir Materiel ASF, for CNO, 29 Mar 44, sub: Availability of LCT(6) and LST for the Army. (3) Memo, Adm Cooke, DCofS, COMINCH, for CofS, USA, 8 Apr 44, Navy Ser 001109. Last two in OPD Exec 10, Item 68.

division of South Pacific amphibious resources in March 1944 set the major landing craft strength for the Seventh Fleet at a minimum of 40 LST's and 60 LCI (L)'s, plus any scheduled later additions from U.S. production. Almost immediately thereafter the Navy started to accelerate the shipment of large landing craft to the Seventh Fleet, as production soared in the United States. In April the schedule was set at 26 LST's, 31 LCI (L)'s, 35 LCT's from May production, almost equal quantities from that in June and July, and after July regular increments of approximately 14 LST's, 8 LCI (L)'s, 13 LCT's, and 18 LSM's per month. May production, however, was not expected to reach the theater until September.[55]

The rapid augmentation of both Army and Seventh Fleet amphibious resources after mid-1944 did provide an adequate supply of landing craft in SWPA during the Philippine campaign. After the landing on Luzon, the main reliance for many weeks was on supply by these craft over the beaches. Yet the theater's full demands for landing craft for logistical use were by no means satisfied. The tremendous problem of rolling up rear bases and bringing men and material forward to the Philippines led to greater and greater demands for the LST's and LSM's that could be used for those purposes.

[55] (1) Msg 768, AGWAR to CINCSWPA, CM-OUT 10852, 31 Jan 43. (2) Memo, VCNO for CG SOS, 15 Mar 43, sub: LST's for SWPA, folder SWPA 1942 thru Apr 45, Lutes File. (3) Msg, CG SFPOE to WAR and Brisbane, CM-IN 5405, 8 Apr 44. (4) Memo, Gross for Somervell, Mar 44, sub: Combat Loaders and Ldg Cft, OCT HB, folder Shpg Capabilities and Reqmts, Gross File. (5) Memo, Lt Col Gallant for Cols Tasker and Pennypacker, 6 Jul 44, sub: Assault Shpg, Availability of, SWPA, ABC 320.2 (10 Feb 44). (6) JCS 713/5, 17 Mar 44.

Service Troops

Whatever the shortages of equipment that may have remained in the Pacific by the fall of 1944, none was so serious as the shortage of troop labor to perform the thousand and one tasks involved in the operation of a supply line in territory where facilities were primitive and native labor either nonexistent or totally unskilled. The shortage of service troops in the Pacific was a chronic condition—one that began with the arrival of the first American troops and endured until the end of the war. It was a contributing factor to practically every other problem of Pacific logistics. The shortage of port battalions contributed to every instance of ship congestion, the shortage of Quartermaster troops to every instance of spoiled rations, that of Engineer construction battalions to every instance of failure to build airfields, roads, and other facilities on time. The inadequate supply of service troops imposed far more severe limitations on the pace of the Pacific advance than did the supply of combat units. As General Somervell wrote from the South Pacific in September 1943, it was not "a case of 'frills'—but one of getting beans, shoes and bullets to the men who are fighting and to save those fighting from being laid out with pestilence," of building facilities at primitive bases which the Japanese did not have the resources or ability to match. "It would be a great mistake," he said, not to supply service troops "in full measure and make the most of this advantage."[56]

Supplying service troops "in full measure" was easier said than done. Each

[56] Ltr, Somervell to Marshall, 27 Sep 43, Control Div ASF, Somervell Trip file (1).

soldier sent to the Pacific theaters, be he in an infantry division or a Quartermaster salvage company, represented a charge against allocated personnel shipping to transport him and against cargo shipping to support him. Theater commanders were seldom willing to sacrifice combat units and replacements to make room for service troops, preferring to rely on the chance of getting additional shipping allocations to move the latter. "As General Harmon says," wrote the SOS commander in the South Pacific, "combat personnel can be used for performing service functions in a second class fashion, but service personnel cannot perform combat functions."[57]

The shipping factor, nevertheless, was more a cause of delay in movement of service personnel than an effective cause of the ultimate serious shortage in the Pacific in 1944. The real problem lay in the composition of the troop basis itself. By the end of 1942 the initial error of the General Staff in not providing for an adequate number of service units had been at least partially corrected, but the struggle over a proper balance between combat and service troops continued throughout 1943 and 1944. "Four times have I had to ask for augmentation of the service unit list," wrote General Lutes in August 1943, "and four times the General Staff has had to admit that the units were needed, but had they only approved such lists in the beginning units would be all trained and ready to go."[58] All too frequently the activation, training, and shipment of service units was not a carefully planned routine but resulted from an emergency demand from the theaters, so that half-trained units were dispatched and hasty revisions made in the troop basis. By early 1944 such emergency action was becoming less and less feasible. The Army troop basis for the year was tightly drawn, with the balances closely calculated among air, ground combat, and service units, and almost every unit activated or scheduled for activation earmarked for one theater or another or for essential ZI service. The provision of a single construction battalion, or even a depot company, became increasingly a matter of reviewing and re-reviewing service troop requirements around the globe.

Simply to say that the various troop bases did not provide enough service units for Pacific operations does not do justice to OPD and G–3, the staff agencies primarily responsible for their determination. They recognized the pressing needs for service units in the Pacific, but had to weigh them against over-all troop requirements in a developing manpower crisis, and strive to maintain a judicious measure of balance. To counter the continued pressure of the ASF for an increase in service units the advocates of austerity, such as General McNair, continually fought against proliferation of the service establishment. There was, in fact, after the end of 1942, very little net increase in the size of the ground combat forces, while service forces increased twofold. The 1944 Troop Basis as finally developed included a higher proportion of service units than any previous version.[59]

[57] Ltr, Breene to Lutes, 12 Nov 43, folder SP 1942–43–mid-44, Lutes File.

[58] Ltr, Lutes to Breene, 4 Aug 43, folder SP 1942–43–mid-44, Lutes File.

[59] Greenfield, Palmer, and Wiley, *Organization of Ground Combat Troops*, pp. 161, 219, 252–59.

Within the limits of available manpower, then, there seemed no better solution than to furnish the minimum essential units necessary to support operations and to accept the necessity for continued use of combat troops to perform service functions when occasion demanded, for imperfect performance of many of these functions, and for a certain amount of waste. Any other solution seemed likely to involve sacrifice of combat units essential for operations in both Europe and the Pacific. Though there was general agreement that Pacific operations required a higher proportion of service troops than did those in Europe, actually the ratio in effect in the two areas in mid-1944 was roughly the same, testimony to the general practice of furnishing service units, like supplies, in standard proportions to the number of combat troops.[60]

The result was the chronic shortage of service troops in the Pacific already noted. No theater suffered quite so severely as did the South Pacific during its year and a half of intense combat activity. The ratio of combat to service troops in the theater at the beginning of 1943 was about 6 to 1, a result of the emphasis task force commanders had initially placed on building up combat strength. Since the first tasks turned out to be almost entirely construction and development of island bases, combat troops had to be diverted to these functions, and island commanders were soon crying for service troops of all kinds. But the basic error proved difficult to correct. The first major step in that direction was taken by General Lutes who, after his visit to the South Pacific in fall 1942, persuaded OPD to agree to send additional service units to each South Pacific base. Actual shipments, delayed because the units simply were not ready, never quite caught up with the demand. Before they arrived General Breene was asking for still more units for Guadalcanal, where a new base was being developed for the advance further up the Solomons. OPD at first insisted he must move troops forward from rear bases but Breene pointed out that this would not be possible without completely disrupting logistical operations. OPD made piecemeal concessions totaling in the end something over 10,000 men, but delays

[60] Any exact computation of the proportion of combat and service troops in any theater is one of the more difficult statistical problems of World War II because of the dual nature of many units such as combat Engineers, and because of the use of U.S. Army ground service units to support the AAF, the Marines, and Allied combat forces. Some selected ASF calculations of the proportion of both air and ground service troops in the entire troop bases of three theaters in 1944 showed the following: MTO, 30 Sep 44—44.81 percent; SWPA, 31 Dec 44—39.81 percent; Central Pacific, 30 Jun 44—33.71 percent. History Planning Division ASF, app. 12–E, Tabs F, J, K.

Another computation made by the ASF after the war, based on projected troop bases for all major theaters for 30 June 1945 showed the following percentages of service troops: ETO—43.65 percent; MTO—44.65 percent; SWPA—42.29 percent; Central Pacific—42.29 percent. Using another measure, the proportion of ASF troops to the total ground force in both Europe and the Pacific was approximately the same (around 30 percent) both at the end of June 1944 and at the end of December. ASF Manual M–409, Logistic Data for Staff Planners, 1 Mar 46; JCS 521/6, 11 Jun 44, title: Deployment of U.S. Forces to 30 Sep 45; JCS 521/9, 23 Dec 44, title: Deployment of U.S. Forces Following Defeat of Germany.

The division slice in each area (excluding air forces) appears to have been roughly similar, if all extraneous factors such as the partial support of French and Brazilian divisions in Europe and of Marine divisions in the Pacific by U.S. Army service units are excluded. ASF Manual M–409, and OPD Weekly Status Map, 19 Oct 44.

in activation, training, and movement in the summer and fall of 1943 kept supply still a step behind demand. The same general process was repeated when the theater forwarded in July 1943 requests for 14,000 service troops to complete development of rear bases and for 20,000 for the New Britain–New Ireland area. Finally convinced, OPD approved the requirements, but most of the troops did not reach the area until the spring of 1944 when the South Pacific's combat mission was rapidly coming to an end. In the interim, the theater simply had to use combat troops for service functions in rear as well as in forward areas.[61]

The imbalance between combat and service troops never existed to quite the same degree in SWPA, but the shortage there was real and chronic nonetheless, and became increasingly serious as the advance moved along the New Guinea coast. The shortage affected all the supply services, but was most serious for the Engineers responsible for the massive construction effort required with each step of the advance. A very great proportion of this effort, about 80 percent by one estimate, had to be devoted to construction of airfields and other facilities for the Air Forces. Australian military and civilian labor continued to be the mainstay of the labor force until well into 1943, but as the advance in New Guinea got under way in earnest, the shortage of U.S. troop labor became critical. In his bill of complaint to Somervell, General Casey pointed out that for over a year he had had but one Engineer aviation battalion and four Engineer general service regiments, a construction force "woefully deficient to execute the extensive amount of work which had to be performed."[62] Casey thought that Engineers should constitute at least 20 percent of the command. This optimum figure was never reached, although the flow did increase rapidly during the fall of 1943. By April 1944 there were 62,061 Army Engineers in the theater as opposed to only 7,600 a year earlier, and by the end of the year the number had reached 97,000, or about 13.4 percent of the command—an impressive number but something less than General Casey's initial request. Moreover, as in the South Pacific, the supply was always a step behind the demand. The gap was filled by various expedients. Australian engineers and Navy construction battalions played important roles in SWPA. Heavy machinery did the work of many men; Engineer combat battalions and the Engineer special brigades were employed in heavy construction work.[63]

The story of the other services in SWPA is much the same as that of the Engineers—enough service forces to perform minimum essential services but never sufficient to prevent delays and waste. The redistribution of South Pacific resources in 1944 further intensified SWPA's service troop problem. The

[61] (1) See the Lutes-Breene correspondence along with related papers in folder SPA 1942–43–mid-44, Lutes File. (2) Somervell Questionnaire, South Pacific, Control Div, ASF, Somervell Trip file. (3) USAFISPA History, I, ch. XV.

[62] Memo, Gen Casey, 18 Sep 43, sub: General Engineering Problems.

[63] (1) Office of the Chief Engineer, General Headquarters, Army Forces Pacific, "Engineers of the Southwest Pacific, 1941–1945," vol. II, *Organization, Troops, and Training* (hereafter cited as *Engineers of SWPA*, II) (Washington, 1953), pp. 88–90, 120–22, 144–46, 184–87. (2) Memo, Chief Plans Br, Plng Div, ASF, for Dir Plng Div, 17 Jan 46, sub: Recapitulation of Troop Bases, History Planning Div ASF, app. 12–E, Tab J.

six combat divisions were transferred from the South Pacific with little service support, for most of the service troops had to stay behind to man the installations remaining in the South Pacific, pack and ship supplies, and service the POA divisions that were staged or rehabilitated in the area. The South Pacific became a large service command with a heavy preponderance of service troops, an asset promised MacArthur by the JCS directive redistributing resources of the theater but also coveted by Nimitz because of a growing service troop shortage in his own area.

The shortage in the Central Pacific developed later and in somewhat different fashion. The Hawaiian base was initially well manned. The late start of offensive operations allowed more time for careful requirements planning and the needs of each new island base were normally met. The large naval establishment, including the major proportion of naval construction battalions, was on hand to make up Army deficiencies, particularly of Army Engineers. Up through the invasion of the Palaus, service troops were available in adequate numbers though by that time they were stretched quite thin as each new island garrison exacted its drain on units available in Hawaii or earmarked in the United States. And in the end it was in the Central Pacific that the most serious deficit developed, one that played an important part in the cancellation of the Formosa operation.

The deficit came about in large part because, though the ASF warned that there would be a shortage of over 100,000 service troops for the latter stages of Pacific operations, General Marshall ruled against sacrificing combat units to include them in the 1944 Troop Basis. When the specific requirement for service troops for the Formosa operation began to take shape in July, there were consequently few uncommitted service units available to fulfill them.[64] There was serious question that even the smaller scale requirements for operations on Iwo Jima and Okinawa could be met. Any hopes that service forces could be withdrawn from either SWPA or the South Pacific to relieve the situation were ended with the decision to invade Luzon, for MacArthur would also be short of what he needed for this operation. By the last of 1944 the shortage of service troops was weighing as heavily on the minds of the planners as that of cargo shipping. On 3 November, General Marshall informed the JCS:

> In both the Southwest Pacific and Pacific Ocean Areas there has been a continual shortage of Army service units to support the large base establishments and the combat task forces required for the progressive operations undertaken. This shortage will continue to exist into the foreseeable future until such time as the cessation of hostilities in Europe permits redeployment of Army forces to the Pacific.[65]

The service troop shortage notwithstanding, the Pacific supply situation by the end of the year 1944 was, for all the difficulties inherent in the geography of the theaters, generally good. Sufficient of the outpourings of the American industrial machine had reached Pacific destinations to overcome most of the acute shortages that had existed earlier. Procedures for gearing shipments to the

[64] See above, chs. XIV and XVI.

[65] JCS 1149, 3 Nov 44, memo by CofS, USA, title: Economy in Use of Svc Units in SWP and POA.

specific demands of Pacific commanders had been developed, and in block loading at least a partial solution to the problem of excessive dispersion had been found. Fleets of vessels for intratheater transport, if still inadequate, had been vastly augmented. Maj. Gen. Walter A. Wood, Jr., Deputy Director of the ASF Plans and Operations Division, in a tour of the Pacific in the fall of 1944 reminiscent of Somervell's trip a year earlier found the "overall equipment situation . . . operationally adequate and the quality and character of items generally excellent."[66] Wood noted old problems touched on by every other visitor to the Pacific since 1942—maldistribution within theaters and unbalanced stocks at different bases, delays in developing bases because of climatic conditions, excess supplies at rear bases, lack of the newest types of equipment because of the priority of European theaters—but gave every indication that even these problems were less acute than formerly. The very fact that Wood cited as the major shortage that of reefer ships and shore refrigeration facilities to make fresh foods available to the soldiery, indicates the extent to which Pacific supply had been improved. In 1942 and 1943 these luxuries could seldom be considered.

A civilian observer had somewhat earlier grasped the enormity of the American logistical achievement in the Pacific. Mr. Warren H. Atherton, National Commander of the American Legion, wrote General Marshall, on returning from a Pacific tour, on 5 July 1944:

> I was impressed by the fact that we excel the Japs mostly in our ability to meet the logistic demands of all-out war. In two years of occupation the Jap had established puny little bases and inferior air strips; 60 days after capture of these bases, caterpillars and bulldozers had moved the jungle; warehouses, roads and wharves had been built and a modern soldier city of 100,000 or more established; 12 or 14 air strips had been completed and everything was in motion to support the next advance; marvellous planning and execution and adaptation of the mechanical ingenuity have been used in making our supply system the model of modern warfare. . . .[67]

[66] Memo, Wood for Dir Pls and Opns, ASF, 15 Nov 44, sub: Rpt of Inspection of Pac and SWPac Ocean Areas, File Actions Resulting from Pacific Trip, ASF Plng Div.

[67] Memo, Gen Styer for Dir Pls and Opns, ASF, 6 Jul 44, inclosing quotation from Atherton Ltr, CofS ASF File Pls and Opns 1943–45.

CHAPTER XXI

China, Burma, and India

The China, Burma, India theater, rather than the Pacific, suffered most markedly from the European orientation of Allied strategy in World War II. Once the demands of higher priority theaters, both the European and the Pacific, had been satisfied, there was all too little left to support operations on the Asiatic mainland. The effective use of what could be committed to the theater was prevented by disagreements over strategy arising out of divergent national interests and conflicting personalities. While the Pacific drive gained momentum in 1943 and 1944, British, Chinese, and American forces in China and India, stymied both by paucity of means and lack of agreement on how to use those few available, made little progress toward getting even a preliminary offensive under way. As a result, the campaign in Asia was eventually relegated to a subsidiary role in the war against Japan.

This was quite in contrast to American expectations at the outset of the war. Indeed, throughout 1942 and 1943, the JCS placed an inordinate emphasis on the importance of China as a factor in the war against Japan, as evidenced by Admiral King's continued insistence that China's manpower and geographical position held the key to final victory in the Far East.[1] It was axiomatic that Allied air power, once firmly established in China, could subject the Japanese lines of communication and the Japanese mainland to devastating attack; it was equally clear that to prevent such a contingency the Japanese Army would have to fight a life or death battle in China. The back-door route to Japan via the Asiatic mainland therefore appeared to offer a shorter, if inherently more difficult, approach to areas vital to Japan than did the advance across the Pacific.[2]

Despite the importance the Americans attached to China, they sought to achieve their great aims on the Asiatic mainland at small cost, while committing their major resources to Europe and the Pacific. The JCS envisaged no large military investment in the CBI, except perhaps eventually in American air power, once Germany was defeated. In the meantime, they looked to the British in India, and the Chinese themselves, with their vast reservoirs of manpower, to achieve the necessary objectives in the theater with a limited amount of American air and logistical support. In essence, American policy in the Far East centered on support to China in the firm belief that the China of Generalissimo Chiang Kai-shek was capable of eventually exerting an effective effort against Japan if given a sizable infusion of Amer-

[1] Min, 84th mtg CCS, 14 May 43, and 131st mtg, 26 Nov 43.

[2] See Roosevelt's remarks at QUADRANT, 1st Citadel Mtg, 19 Aug 43.

ican know-how and American logistical support.

The Japanese conquest of Burma early in 1942, which cut the last overland supply route to China, frustrated the initial American design for equipping and training an effective Chinese Army. It left a long, difficult airlift from Assam to Kunming over the high peaks of the Himalayas as the only remaining avenue for the flow of supplies. The Americans assumed responsibility for the airlift, but its development was slow, hampered by a scarcity of air fields, transport planes, and trained pilots. Its capacity at the end of May 1943 was only 3,000 tons monthly, most of which was required to support the small American air force in China. With few supplies coming in from the outside, the economy of Free China continually tottered on the brink of collapse. The Chinese Army, though a massive force on paper was nevertheless ill-organized, ill-equipped, poorly led, and generally incapable of offensive action.

The U.S. Joint Chiefs early took the stand that the only solution was to retake Burma and reopen the land supply line. Their ambitious plan for this purpose (ANAKIM), largely the work of General Stilwell, American commander in the theater, called for a British amphibious attack on Rangoon, a British land offensive in central Burma, and a converging attack on northern Burma by Chinese forces operating from Yunnan Province in China (YOKE, or Y-Force) and from Assam Province in India (X-RAY Force).

The plans for the two Chinese forces formed an integral part of Stilwell's overall plan for carrying out the mission assigned him of increasing the efficiency



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of the Chinese Army. The X-RAY Force, initially two divisions, was made up of Chinese troops assembled in India, trained in American methods, fed and clothed by the British, and re-equipped with American material. The YOKE Force was planned as a much larger one, which, with X-RAY forces in India, would make a total of thirty Chinese divisions. Stilwell hoped to persuade Chiang to concentrate scattered and understrength divisions in Yunnan, there to create effective divisions and to train them in American methods. Although they were to be supplied at first primarily from Chinese sources, certain selected items of American ordnance, vital to their operations, would have to be brought in over the Hump air line. Once the land supply line was open, the YOKE divisions would be given their full com-

plement of American equipment. Meanwhile, a start would be made on a similar 30-division program in east China. Stilwell hoped that sixty American-trained and -equipped divisions would be able to take the offensive against the Japanese, drive to the coast, and open a port through which additional supplies could be poured. At the very least they should provide an adequate protective force for airfields in south and east China.

Neither the British nor Chiang had any real enthusiasm for Stilwell's plans. Chiang feared the risk involved in committing his own forces in Burma without the massive American and British support that would assure victory. He was dilatory in concentrating troops in Yunnan. The British did not share the American faith that Chiang's China could or would play any significant role in the war, and therefore regarded the reopening of the land route to China as of less strategic importance than early preparations for an attack against the East Indies and Singapore with the eventual goal a sea attack on the China coast in the vicinity of Hong Kong. India was an inadequate and undeveloped base for a campaign in Burma, the line of communication to the Burmese border particularly poor. Burma was a particularly inhospitable area in which to conduct a campaign. In the British view an early ANAKIM was a logistical impossibility if the concentration on the war against Germany was to be preserved.

Thus lack of resources combined with a lack of enthusiasm on the part of the British and Chinese to prevent even a start on ANAKIM in the 1942–43 dry season (November through March), the only period of the year suitable for campaigning in Burma. And while the British, with obvious reluctance, agreed at Casablanca to schedule a full-scale ANAKIM in November 1943, they soon showed signs that they still considered it both logistically infeasible and strategically unprofitable.

Meanwhile, a serious division had arisen in American councils, when General Chennault, commanding the U.S. Fourteenth Air Force in China, came up with a plan to mount an air offensive from Chinese bases without opening the overland supply line. Chennault would concentrate on enlarging the capacity of the Hump air line and use its entire capacity to support air operations against Japanese-held coastal cities and Japanese supply lines to the exclusion of any attempt to re-form and re-equip the Chinese Army. He contended, in contrast to Stilwell, that with assured air supremacy the Chinese Army in its existing state could protect his airfields against Japanese attack. The two commanders were soon at odds. The British, the Chinese, and the American President were all mightily attracted by Chennault's promises of great results at small cost. Only the American Joint Chiefs stood behind Stilwell in support of ANAKIM.[3]

The Trident Decisions and Their Aftermath

At the TRIDENT Conference all these issues were debated at great length.[4] The upshot was a compromise both between British and American positions and be-

[3] (1) For a summary of these events see Leighton and Coakley, *Global Logistics, 1940–43*, pp. 525–50. (2) For a more detailed account see Charles F. Romanus and Riley Sunderland, *Stilwell's Mission to China*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1953). (3) See also above, ch. I.

[4] See above, ch. III.



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tween the conflicting viewpoints on the American side. It was largely dictated by the President's avowed belief that Stilwell's and Chennault's projects were not mutually exclusive, but that the airlift could be developed to supply enough tonnage for both the air effort and the Chinese divisions in Yunnan. First priority on resources within the theater was accordingly given to increasing the capacity of the air route to 10,000 tons monthly, with a view to (a) intensifying air operations against the Japanese in Burma; (b) maintaining increased air forces in China; and (c) maintaining the flow of airborne supplies to China. While the British point of view was accepted and a full-scale November ANAKIM ruled out as beyond Allied resources, the CCS approved a limited offensive to free central and north Burma. They also directed that administrative preparations for an operation of the general size of ANAKIM should continue, and that the British should undertake the amphibious operations against the port of Akyab and Ramree Island already scheduled and originally designed as a prelude to the amphibious attack on Rangoon.[5]

The limited offensive in Burma, including the converging attack of X-RAY and YOKE forces, was designed to open a new supply route from Ledo in Assam via Myitkyina in Burma to a junction

[5] CCS 242/6, 25 May 43, title: Final Rpt to President and Prime Minister.

with the old Burma Road at Bhamo. The Americans had assumed responsibility for building the Ledo Road in the rear of advancing Chinese troops in December 1942 and starting shipping necessary materials and Engineer troops in response to Stilwell's requests early in 1943. Though first designed as a supplement to the old supply line running north from Rangoon, after TRIDENT the Ledo Road rapidly assumed the position of a substitute. Although the Americans continued to insist that all of Burma must eventually be recaptured and, indeed, that scarce assault shipping must be diverted from the Mediterranean to India for that purpose, their logistical planning from TRIDENT onward concentrated entirely on development of the airlift and the Ledo Road as the avenues for supply to China.

The airlift had to be the immediate reliance. Tonnage targets were set at 7,000 for July 1943 and 10,000 for September, the latter in keeping with an earlier Presidential promise to Chiang. Immediately after TRIDENT the President, in an agreement with Dr. T. V. Soong, Chiang's brother-in-law and influential adviser, granted Chennault an absolute priority on 4,700 tons of this prospective capacity in July and August and 7,000 in September.[6] Viewed in this light the TRIDENT decisions were not a compromise between Stilwell and Chennault, but a clear victory for the latter. For if the airlift did not, in fact, meet its tonnage goals then obviously preparations for the ground attack must suffer.

This indeed proved to be the case. In the weeks following TRIDENT an intensive effort was devoted to providing transport planes and preparing airfields for Hump operations. Transports were rushed to India in sufficient quantities to meet the tonnage targets, but the preparation of airfields soon fell behind, although given the highest priority on theater resources. In support of the British effort on the airfields, native labor, construction equipment, and service troops earmarked for the Ledo Road were shifted to airfield projects. Additional construction supplies and Engineer troops were rushed from the United States. But the movement of supplies into Assam for construction, for the airlift, and for routine support of British, American, and Chinese troops there and on the British front at Imphal, proved more than the line of communication north from Calcutta could handle. Moreover, heavy rainfall, difficulties with native labor, and a thousand other obstacles inherent in the climate and geography of the region, all contributed to the failure to build the airfields at the rate necessary to meet tonnage goals over the Hump.

The airlift actually carried 3,100 tons in June, 4,338 in July, 5,764 in August, 6,719 in September, and 8,632 in October, thus meeting neither the 7,000-ton target in July nor the 10,000-ton target in September. Chennault's priority prevented delivery of anything more than the most minute quantities of supplies for YOKE Force. Similarly, the priority given to movement of air materials over the Assam line of communication (Assam LOC) cut into the build-up at Ledo and Imphal for Chinese and British land offensives from these points. It soon be-

[6] (1) Memo, Maj William H. Martin for Maj Gen James H. Burns, 28 Jul 43, sub: China Air Priorities, ID 400.318, Chinese Stockpile in India, I. (2) Romanus and Sunderland, *Stilwell's Mission to China*, pp. 341–45.



FERRY PUSHING TRUCK-LOADED BARGES ACROSS THE BRAHMAPUTRA RIVER, *Assam, India.*

came clear that the TRIDENT decisions had been based on an incomplete appraisal of the logistical problems involved—that a necessary preliminary to development of a supply line into China from India would have to be improvement of the line within India itself, a problem to which not enough attention had previously been given.[7]

The Assam LOC that had thus come to occupy center stage ran northeast from Calcutta, India's largest port and commercial center, to Manipore State and Assam, the respective centers of British and American military activity. Calcutta, itself a port of tremendous capacity, was nevertheless overcrowded and inefficiently organized, and had neither adequate storage facilities for military supplies, nor enough personnel to handle a large volume of cargo. Calcutta, however, was not the real problem in mid-1943 — more critical was the line of communication to the north which was made up of a network of rail and barge lines, of which the Bengal and Assam Railway was the most important. The railway consisted of broad-gauge lines running northward from Calcutta to Santahar and Parbatipur, whence meter-gauge lines, almost entirely single

[7] (1) *Ibid.* (2) Craven and Cate, ed., *AAF IV*, 443–45. (3) Msg 2701, AGWAR to AMMISCA, 21 May 43, OPD 400 CTO, I, Case 47. (4) History of the Services of Supply in China-Burma-India Theater, Feb 1942–24 Oct 1944 (hereafter cited as History, SOS in CBI), chart facing p. 300, MS, OCMH.

track, ran eastward to Ledo, with connecting spurs to barge lines on the Brahmaputra River and to a second meter-gauge line running northward from Chittagong through Manipore State to Ledo. The facilities for transshipment of freight at Santahar and Parbatipur were limited, and there was no rail bridge, only a ferry at the Brahmaputra River crossing. Operation of the whole line had been traditionally leisurely, designed to serve the tea gardens in Assam. The British had withdrawn much rolling stock from India for use in the Middle East in 1941, and by mid-1943 the line had, even with lend-lease assistance, only been rebuilt to its regular prewar capacity. That this capacity was inadequate was amply demonstrated in June and July 1943 when the pressure was on to complete the Assam airfields.[8]

Quadrant: A Logistical Charter for the CBI

The whole situation was reflected in the pessimistic appraisal of the possibilities of meeting TRIDENT objectives forwarded to the British Chiefs by General Sir Claude J. E. Auchinleck, British Commander in Chief, India, just before the QUADRANT Conference in August 1943. The very minimum requirement in Assam and Manipore to build the airfields and the Ledo Road, to furnish supplies for the airlift, and to support the British and Chinese drives from Imphal and Ledo respectively, Auchinleck reported, had been calculated at 3,400 tons daily. Actual movements over the Assam LOC during June and July had averaged only 1,700 to 1,800 tons daily, and it now appeared that planned improvements would not result in the necessary increase, at least in part because of the devastating effects of floods on the Brahmaputra that had breached the rail line at several points. Meanwhile, requirements had increased, and Auchinleck calculated there would be a net deficit of 128,000 tons in movements north of Calcutta by March 1944, or an average deficit of 600 tons daily over the intervening period. If the air program were to be continued in the priority assigned at TRIDENT, he stated flatly, then either the advance from Ledo or that from Imphal, or both of them would have to be called off. His personal recommendation was that neither be undertaken; that instead resources should be concentrated on air supply to China and on building up forces and bases for amphibious operations in Malaya.[9]

Neither the Americans nor, for that matter, the British Chiefs of Staff themselves, were willing to accept Auchinleck's pessimistic appraisal. The British Chiefs came to QUADRANT prepared to support land operations to open a supply line through northern Burma if the logistical obstacles could be overcome, but determined to make no fixed commitment on an amphibious operation to accompany the limited ground offensive. They offered as an interesting new aspect of their plans for the area the proposals of Brigadier Orde Charles Wingate for operations of long-range penetration groups behind Japanese lines in Burma supported only by air.[10] Accordingly, the CCS referred the Assam LOC prob-

[8] History, SOS in CBI, pp. 37–38, 48–51.

[9] CCS 305, 14 Aug 43, title: Effects of Floods on Burma Campaign.

[10] Min, 107th mtg CCS, 14 Aug 43; 110th mtg, 17 Aug 43; 113th mtg, 20 Aug 43.

lem to a subcommittee on which Somervell and the British Quartermaster General and chief supply officer, Lt. Gen. Sir Thomas Riddell-Webster, were the principal members. From this subcommittee and from other actions at QUADRANT emerged a concrete logistical plan for developing a supply line through India and north Burma to China in step with the limited operations for opening a ground supply line approved at TRIDENT.

Somervell and Riddell-Webster early agreed that the Assam LOC was the "key to the whole situation," controlling the pace at which both the airlift and land operations could proceed.[11] Somervell promised to speed U.S. lend-lease aid in the form of rail cars, locomotives, and barges, and suggested the Americans might take over operation of parts of the rail and barge line. With this aid and the improvements already under way, it was estimated that the goal of 3,400 tons of dry cargo daily (102,000 tons per month) could be met by 1 November 1943. This would provide the minimum tonnage necessary in Assam for building the airfields, meeting the needs of troops preparing for the offensive, and an additional 10,000 tons to move over the Hump into China. By 1 March 1944, the capacity should be increased to 140,000 tons monthly, by 1 January 1945 to 170,000 tons, by 1 May 1945 to 200,000 tons, and by 1 January 1946 to a final target of 220,000 tons monthly. The plan was based on the assumptions that the Ledo Road could be completed by 1 January 1945 and developed to full capacity as a two-way road within a year, and also that the airlift would be doubled on an earlier time schedule. Thus, of the eventual capacity of 220,000 tons on the Assam LOC, 65,000 tons were to be delivered in China over the Ledo Road and 20,000 by the airlift.[12]

To supplement the capacity of the Assam LOC, the airlift, and the Ledo Road, a network of POL pipelines was also proposed. These, like the Ledo Road and the airlift, were also to be an American responsibility. The main elements in the pipeline system were to be a 6-inch line running from Calcutta to the Dibrugarh terminal west of Ledo, and a 4-inch line paralleling the Ledo Road from Dibrugarh into Kunming. Plans for the 4-inch line were already well advanced. To these essentials, in highest priority, the ASF now added projects for a second 6-inch line eventually to run all the way from Calcutta to Kunming and for a second 4-inch line from Assam to Kunming via Fort Hertz over wild, mountainous territory unoccupied by the Japanese, to be used exclusively for delivery of aviation gasoline. The last, rather visionary, scheme had been suggested by General Stilwell in July.

The net requirement for delivery in Assam once all lines were completed was set at 96,000 tons of POL monthly —72,000 via the two 6-inch lines, 15,000 on the barge line, and 9,000 to be procured locally from the Digboi refineries

[11] Ltr, Riddell-Webster to Somervell, 16 Aug 43, folder QUADRANT Conf, Hq ASF File.

[12] (1) *Ibid.* (2) Memos, Somervell for Riddell-Webster, 17 and 20 Aug 43. (3) Memo, Somervell for CofS, 23 Aug 43. (2) and (3) in folder QUADRANT Conf, Hq ASF File. (4) CCS 305/1, 18 Aug 43, title: Interim Rpt of Ad Hoc Com Appointed to Examine CCS 305. (5) CCS 325, 21 Aug 43, title: Supply Routes in NE India. (6) Ltr, Somervell to Maj Gen Raymond A. Wheeler, 24 Aug 43, Stilwell Personal File, Book 4, Item 240.

in Assam. Some 54,000 tons would eventually be sent into China by the lines running into Kunming. Meanwhile, the 4-inch line paralleling the Ledo Road would be used to support both road construction and the advancing Chinese troops.[13]

In sum, then, the logistical plan evolved at QUADRANT envisaged development of a supply line through India that by 1 January 1946 would provide 220,000 tons of dry cargo and 96,000 tons of POL monthly in Assam; 85,000 tons of the dry cargo and 54,000 tons of the POL would move on into China via the Ledo Road, by airlift, and by the pipelines. This was still a small tonnage, sufficient only to support limited air operations and provide a minimum quantity of modern equipment and transport for the Chinese Army. It would not be enough to support any considerable numbers of American or British troops in China. Further development of operations in China would depend on the opening of a port on the China coast either by an overland advance by the Chinese Army or by attack from the sea.

The British Chiefs still took the position that the proposed improvements in the Assam LOC could not be effected in time to permit timely launching of the limited offensives in Burma without some reduction in the airlift. They proposed that the main effort must be placed on opening land communications at the expense of the airlift, or on expanding the airlift at the expense of the ground effort, or that both be curtailed in the interest of concentrating on improving the line of communications in 1943–44.[14] The Americans would not admit of the necessity for such a hard choice. In their own councils they were divided on the issue, and the President was determined that the priority for the ground campaign should not be allowed to obscure the air effort entirely. General Somervell, reflecting the views of the American SOS in the CBI, insisted that the proposed improvements in the Assam LOC could be accomplished speedily enough to permit land operations to go forward on a delayed schedule without crippling the airlift. The final CCS decision was not unequivocal. Although highest priority was accorded "offensive operations with the object of establishing land communications with China and improving and securing the air route," the decision stipulated that priorities between the ground and air effort could not be rigidly fixed.[15]

There could be little doubt, nevertheless, that even this equivocal decision shifted the emphasis back from Chennault's immediate air effort to the limited ground offensive in Burma. The logistical plan prepared by the subcommittee was approved, and the target date for the land offensive in Burma reset at 15 February 1944. A brand new combined command, long under discussion, was formed to carry it out—the Southeast Asia Command (SEAC) with Vice Adm. Lord Louis Mountbatten as Supreme Commander and Stilwell as his

[13] (1) CCS 312, 18 Aug 43, Rpt by JAdC, title: Pipeline from India to China. (2) CCS 312/1, 21 Aug 43, same title. (3) Min, 115th mtg CCS, 23 Aug 43, Item 4.

[14] CCS 327, 23 Aug 43, memo by Br COS, title: Opns from India.

[15] (1) CCS 319/5, 24 Aug 43, title: Final Rpt to President and Prime Minister (QUADRANT). (2) Memo, Gen Somervell for CofS, 23 Aug 43, folder QUADRANT Conf, Hq ASF File. (3) Min, 115th mtg CCS, 23 Aug 43.

deputy—entirely separate from the British Command in India under General Auchinleck, which was now to become principally an administrative headquarters. Directives issued to Mountbatten and Auchinleck immediately after QUADRANT ordered them to take the necessary action to bring the Assam LOC to the target figures on which Somervell and Riddell-Webster had agreed.[16]

There remained the question of an amphibious operation, originally the very center of ANAKIM and something Chiang had always insisted on as a condition for committing his own armies in Burma. The Americans still contended Rangoon must eventually be captured and that Akyab and Ramree Island must consequently be the first objectives. The British believed the retaking of south Burma no longer to be in step with the strategy of the war against Japan and wished to move toward Sumatra and Malaya; they suggested as a first step a landing on the Andaman Islands. In the end the choice was deferred, and Mountbatten was merely instructed to continue preparations for an operation similar to that planned at TRIDENT. But meanwhile, in response to American insistence, the transfer of assault shipping from the Mediterranean to India was directed, with all its implications for the campaign in Italy.[17]

In sum, then, the result of QUADRANT for the CBI was a clarification of TRIDENT decisions accompanied by a shift in emphasis from the airlift to the overland route. The conference decisions finally centered logistical planning on the concrete problem of the line of communications within India and from India to China, establishing a charter for the development of this LOC in step with the proposed course of military operations in Burma.

The concrete logistical plan was late. The whole scheme for the CBI rested on the tacit premise of a long-drawn-out war against Japan, such as was in fact envisaged in the original over-all plan submitted by the Combined Staff Planners at Quebec providing for converging attacks on the China coast from the Pacific, China, and southeast Asia. But the JCS did not accept this plan and asked for a new one looking toward the defeat of Japan within a year after the defeat of Germany.[18] The Pacific advance was to offer opportunities for short cuts in generous measure, while the only opportunity in China seemed to lie in another "premature" air effort, this time with the very long range B–29 bombers. There was a legitimate question then whether the continued postponements of the first year and a half had not already rendered the Burma campaign excess baggage.

The ASF Follow-up on Quadrant

With the goals more clearly defined, the ASF initiated a vigorous program for meeting them. General Somervell on 1 September directed the establishment of

[16] (1) Directives to SEAC and CinC, India, are appendixes to CCS 325, 21 Aug 43. (2) On the formation of SEAC see Romanus and Sunderland, *Stilwell's Mission to China*, pp. 355–57, and Ehrman, *Grand Strategy V*, pp. 135–46. (3) Min, 114th mtg CCS, 21 Aug 43.

[17] (1) On the amphibious issue and its relation to the war in Europe, see above, Chapters VII, VIII, and IX. (2) Min, 107th mtg CCS, 14 Aug 43; 113th mtg, 20 Aug 43; 115th mtg, 23 Aug 43. (3) Min, 1st Citadel Mtg, 19 Aug 43.

[18] See above, chs. VIII and XVI.

an ASF India Committee with General Lutes as its head, characterizing the development of the line of communications in the CBI as likely to be "the greatest engineering undertaking of the war and perhaps the major effort insofar as supply is concerned."[19] Somervell adopted the approach that because of the urgency of the projects, much of the basic planning must be done in the ASF rather than in the theater, where no really adequate logistical planning staff existed.

The task did not require an entirely fresh start. Matériel requirements for the Ledo Road and its accompanying pipeline were already in the Army Supply Program and service troop requirements in the troop basis. Shipments of men and materials had begun in January 1943 in response to Stilwell's requests for support for a March offensive, and were continuing. For instance, 500 of the 1,100 miles of pipe required for the Ledo Road pipeline had been shipped by 1 September 1943 and the rest was either at port or en route. Some 8,000 truck-tractors with 5-ton semitrailers, especially designed for the Ledo Road, were included in the Army Supply Program with production to begin in May 1944.

Requirements for the other pipelines, the barge line, and the railroad, and those for additional service troops, of more recent origin, promised to create more difficulties. But much material of the sort required was also in the Army Supply Program, initially earmarked for use on the old supply line north from Rangoon contemplated in the planning for ANAKIM or as British lend-lease for use in India or Burma. Other material could be diverted from BOLERO and replaced later. By the end of September, all American pledges of locomotives and freight cars for the Assam Railway had been fulfilled. And it appeared that most of the needed service units and other matériel could be shipped by early 1944.[20]

While the ASF plans were still maturing, competition for the still limited capacity of the Assam LOC flared anew in the theater, raising old unresolved questions of priority. General Auchinleck, charged with administrative preparations for the forthcoming Burma campaign pending Mountbatten's arrival, interpreted the QUADRANT decisions to mean top priority for ground operations, particularly for support of the British force at Imphal. Still insistent that the Assam LOC could not support both the land offensives and the continued build-up of the airlift, he proposed in September 1943 to move British engineers from the Assam airfields to Imphal and to reduce shipments into Assam for airfield construction and air transport over the Hump. Generals Stilwell and Marshall also wished to place the highest emphasis on ground operations, but they had to regard supply to the YOKE Force—possible only by air transport—as of equal

[19] Memo, Somervell for Lutes, 1 Sep 43, sub: Establishment of India Com for ASF, ASF Plng Div, file Pol Pgms, Obj, Pls & Gen Scope of Work, Col I. G. Horowitz.

[20] (1) Memo, Gen Heileman, Dep Dir Opns, ASF for Gen Somervell, 30 Aug 43, sub: LOC Project Commitments for USAF, CBI, folder LOC Projs CBI, ASF Plng Div. (2) Memo, Heileman for Dir Personnel, ASF, 1 Sep 43, sub: Personnel for Pipeline Cos and Hqs, CBI, folder Future Opns, ASF Plng Div. (3) Msg GW 781–T–1, Wheeler to Styer, 20 Sep 43, folder CM–IN CBI Sep 1 to Nov 1, 1943, ASF Plng Div. (4) Min, 2d mtg India Com, ASF, 7 Oct 43, folder India Com Mtgs, ASF Plng Div.

importance with support of ground operations from the India side. The American staff thought the QUADRANT decisions hardly established so positive a priority. Moreover, the President's interest in the airlift had to be reckoned with. Chennault and Soong, faced with possible reduction in the airlift and with cancellation of the previous absolute priority on 4,700 tons for air operations in China (Stilwell proposed to reduce it to 40 percent, giving 60 percent to YOKE), complained to Roosevelt. The President in turn asked Marshall to investigate, intimating in terms that could hardly be mistaken that his earlier promise to Chiang (given after TRIDENT) that the Hump lift would be raised to 10,000 tons must be met. The JCS consequently took the position that any decisions by SEAC or the India Command affecting the airlift must be presented to the CCS for approval in the light of "political implications" of Roosevelt's promises to Chiang.[21]

General Somervell remained convinced that the capacity of the Assam LOC could be increased to accommodate both the airlift and ground operations. In mid-October, following his trip to the Pacific, he went on to India and China under instructions from the Chief of Staff and the President to look into the state of affairs there. On arrival in the theater he received a message from Marshall informing him of the President's concern about the airlift and instructing him to "give special consideration and attention to this whole business" and to put "real punch behind it."[22]

There was more than a suspicion in Somervell's mind that neither Auchinleck nor the Government of India was pursuing the goal of increasing the capacity of the Assam LOC with anything like enthusiasm, a fact of which he informed both Chiang and Mountbatten in the course of a conference on 20 October. Turning to the concrete problems involved, he found that lack of hardstands on the airfields was having a less serious effect on Hump operations than lack of proper organization, adequately trained pilots, radios, and motor transport. Throughout the U.S. sector in Assam on the airfields, pipelines, and the Ledo Road, he found the shortage of service troops the most important delaying factor and urged speed-up in shipments, particularly of engineers, and addition of new units to the CBI troop list. Selecting certain key items of construction equipment and spare parts, he requested a special cargo vessel be dispatched to the theater to bring them. Moving on to Delhi, he found the British "do-nothing" spirit the chief reason for the slow movements over the Assam LOC. The head of the Indian Railway Commission had, Somervell reported to Marshall, "made the very naive remark that they could secure more tonnage but that . . . they had never been asked to move more than the figure previously fur-

[21] (1) Msg 3208, AGWAR to AMMISCA, 27 Sep 43, Stilwell Personal File, Book 4. (2) Msg 72666/COS, Auchinleck to Stilwell, 22 Sep 43. (3) Memo, unsigned, for Gens Handy and Hull, 24 Sep 43, sub: Gen Auchinleck's Msg Regarding Removal of Engineer Units from Assam Airdrome Construction. (4) Msg AMMDEL AG 1929, New Delhi to AGWAR, 23 Sep 43. Last three in OPD Exec 1, Item 22. (5) Msg 765, Stilwell to Marshall, 24 Sep 43, OPD Exec 1, Item 22. (6) Romanus and Sunderland, *Stilwell's Mission to China*, pp. 375–76.

[22] (1) Msg 3619, Marshall to Stilwell for Somervell, 16 Oct 43, OPD Exec 1, Item 23. (2) On Somervell's instructions see Romanus and Sunderland, *Stilwell's Mission to China*, p. 381.

nished by the India Command." This remark, Somervell went on, "put the discussions for the first time on a hopeful and common sense basis."[23] Mountbatten soon took a hand, reversing Auchinleck's previous decision and accepting the American offer to operate a section of the Bengal and Assam Railway —804 miles of meter-gauge lines from Katihar to Ledo.[24]

Somervell's trip resulted in a speed-up in the pace of the CBI build-up and a general refinement in the project planning the India Committee was conducting. Concrete plans for all the projects involved in the land line of communications had taken relatively final shape by early November 1943. Of the pipelines, the 6-inch line from Calcutta to Dibrugarh was accorded first priority with a target date for completion set at 1 July 1944. Second priority went to the 4-inch line along the Ledo Road, while third was accorded the Fort Hertz Line, or, as this seemed likely to be impractical, to a second 4-inch line from Ledo to Kunming. The last line, the heavy 6-inch one to run all the way from Calcutta to Kunming, was placed in last priority with a target date for completion of 1 July 1945. Meanwhile, a barge line to run from Sirajganj Ghat to Dibrugarh (also to carry mainly POL) was to be completed 1 April 1944. Shipments of both matériel and troops for both the high priority pipelines and the barge line were well advanced by mid-November.

Moreover, plans for U.S. operation of a sector of the Bengal and Assam Railway were already well along by the time the British accepted the offer. Col. Paul Yount, formerly head of the Military Railway Service in the Persian Gulf, conducted a survey in late October and recommended improvements which, he said, together with American operation of the Pandu-Ledo sector, would raise the capacity of the road to 220,000 tons monthly (the goal the CCS had set for January 1946) by April 1944. Yount's plan was accepted in Washington with some diminution in the 4,600 troops he asked for the U.S. sector. The target date for American assumption of control was set, however, at 1 March 1944, somewhat later than Yount had hoped. British and Indian officials went ahead in the meantime with some of the recommended improvements, though the increase in tonnage capacity continued slow and well below Yount's estimates.[25]

The tight shipping situation on the west coast attendant on the launching of the Central Pacific offensive at first threatened to slow the CBI build-up, but the transfer of shipping from the Atlantic during the fall months saved the day. Thus while the CBI retained the lowest priority of all active theaters, it was nevertheless possible to furnish men and materials on an emergency basis. Its low priority was, in fact, still a higher one than that currently accord-

[23] Msg 2810 KM 2863, Tehran to AGWAR, Somervell to Marshall, 25 Oct 43, OPD Exec 1, Item 23. Somervell's other messages on the airlift, pipelines, need of service troops, etc., are also in this file.

[24] (1) *Ibid.* (2) Memo, Lutes for OPD, 4 Oct 43, sub: Bengal-Assam RR, AG 617 (9–28–43) (1). (3) History, SOS in CBI, pp. 53–59.

[25] (1) Memo, Somervell for OPD, 4 Nov 43, sub: QUADRANT Decisions; Rpt by Col F. S. Strong on CBI Projects, 13 Nov 43, folder Burma, ASF Plng Div. (2) Min, 3d mtg India Com ASF, 14 Dec 43, folder India Com Mtgs, ASF Plng Div. (3) Memo, Lutes for OPD, 4 Oct 43. (4) Army Service Forces Activities in the Supply of China, Burma and India, 1942–43, MS, OCMH, pp. 105–12. (5) History, SOS in CBI, pp. 56–63.

ed the preshipment program for the United Kingdom. OPD approved numerous diversions from the ETO of specialized troop units needed in the CBI, enabling Somervell's additional requests and emergency requisitions from Maj. Gen. Raymond A. Wheeler, CBI SOS commander, to be met, and permitting two railway operating battalions to depart in December to operate the meter-gauge railway.[26]

New Air Projects

Meanwhile, a new air project had taken shape which, though it was conceived as self-supporting, could not help but impose new burdens on the already overstrained logistical facilities of the CBI. By August 1943 it appeared that ten groups (28 planes each) of the AAF's new very long range (VLR) bombers, the B–29's, would be ready for operations by October 1944. These and the squadrons to follow would be too late to play any important role in the strategic bombing of Germany, but might have decisive effects in the war against Japan. Since no Pacific bases were then in prospect by October 1944 within effective bombing radius of Japan, the Air Staff turned its attention to China. The use of B–29's from Chinese bases offered one hope for speeding up the timetable for defeat of Japan, and at QUADRANT Brig. Gen. Laurence S. Kuter, Chief of the Air Staff, presented a plan for a massive air assault on Japan from the Changsha region of east China. The first ten groups of B–29's would be moved into that area and begin operations in October 1944; ten more would follow by May 1945. The plan presupposed that the land route to China would be secured by mid-1944 and that, with the supplies carried over it and over the airlift, Chinese ground forces and Chennault's air force would be capable of protecting the exposed bases in east China. Supply of the B–29 bases themselves would be entirely by airlift from Calcutta, utilizing 4,000 B–24 bombers converted to transports (C–87's). Some 596,000 tons of supplies would have to be laid down at Calcutta monthly for the strategic air force alone; about 40 new airfields would have to be constructed around the Indian port and a similar number in east China.[27]

ASF staff planners took one look at the plan and declared it logistically impossible. The massive shipments of personnel and equipment would have to be at the expense of other planned operations; the port capacity of Calcutta was too small, the construction of the airfields impossible without early commitment of additional large numbers of service troops to the CBI; it was doubtful if the Chinese Army could be prepared to protect the bases in time for operations to begin on the dates scheduled.[28]

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[26] (1) See above, chs. IX and XIV. (2) Diary, Theater Br, Plng Div, ASF Asiatic Sec, 17 Nov 43. (3) Msg TIGAR GW 1112, Wheeler to Somervell, 11 Nov 43, folder CM–IN Nov to Dec 1943 CBI, Plng Div ASF. (4) Memo, Gen Heileman for Gen Styer, 13 Nov 43, sub: Status of Railway Units for CBI, folder CBIT, ASF Plng Div.

[27] (1) CCS 323, 20 Aug 43, memo by U.S. CsofS, title: Air Plan for the Defeat of Japan. (2) Wesley Frank Craven and James Lea Cate, eds., "The Army Air Forces in World War II," vol. V, *The Pacific: MATTERHORN to Nagasaki: June 1944–August 1945* (Chicago: The University of Chicago Press, 1953) (hereafter cited as Craven and Cate, ed., *AAF V*), pp. 3–17.

[28] Memo, Col Magruder for Gen Somervell, 20 Aug 43, sub: AAF Plan for the Defeat of Japan . . . , file QUADRANT Conf, Hq ASF.

General Stilwell's air commander, General Stratemeyer, echoed the ASF objections, but on Washington's insistence submitted an alternate plan called TWILIGHT conceived to be within the logistic capabilities of the theater. Under TWILIGHT, the main bases for the B–29's would be near Calcutta, with advance bases only in east China. The B–29's would be partly self-supporting, hauling their own fuel and bombs into China; other supplies would be brought in by converted B–24's and transports also directly from Calcutta. The theater proposed that ten B–29 groups might be supported in this manner by April 1945 if in the meantime the overland supply route had been secured, fifty U.S.-trained and -equipped Chinese divisions put into the field, and more fighter forces assigned to protect the B–29's and their bases.

The timetable in the TWILIGHT plan was too slow for the AAF. By October 1943 it appeared that four B–29 groups might be readied by March 1944 and General Arnold was anxious to put them into action as soon as possible. Out of these circumstances grew the MATTERHORN plan, largely the work of Brig. Gen. Kenneth B. Wolfe, AAF, a pioneer in the B–29 program. Wolfe proposed that three or four groups of B–29's begin operations from advance bases in the Cheng-tu area west of Chungking, a much less exposed position than the fields in east China, by April or May 1944. The main bases would be, as in TWILIGHT, at Calcutta, but the operations were to be completely self-sustaining and independent of the theater line of communications. Two giant planes would be used to transport supplies from Calcutta to the Cheng-tu fields for every three engaged in flying combat sorties. The existing Chinese armies and Chennault's air force would provide protection, with the addition of only two fighter groups specifically earmarked for defense of the B–29 bases. While from Cheng-tu fewer profitable targets would be within range than from east China, the main concentration of Japanese coke ovens on which their steel industry was dependent could be bombed from the Cheng-tu fields.[29]

Stilwell and Stratemeyer thought the plan preferable to TWILIGHT, since it would require little additional protection for the airfields, but Stilwell, at least, regarded the whole B–29 scheme, like Chennault's earlier plan, as premature. The President, however, was enthusiastic about the prospects of destroying the coke ovens. On 10 November he asked Churchill to arrange with the Government of India to render every possible assistance in the construction of bases around Calcutta, and he asked Chiang to provide necessary labor and materials for constructing the fields in Cheng-tu under American technical supervision. "This is a bold but entirely feasible project," Roosevelt told the Prime Minister. "Together, by this operation, we can practically cripple the Japanese naval and military power and hasten the victory of our forces in Asia."[30] Churchill and Chiang agreed. Though there was no formal CCS approval until some weeks later at SEXTANT, the War Department began im-

[29] Craven and Cate, ed., *AAF V*, 17–21.

[30] (1) Msg CM-OUT 417, President to Prime Minister, 10 Nov 43. (2) Msg 3811, AGWAR to AMMISCA, President to Chiang Kai-shek, 11 Nov 43. (3) Msg 876, AMMISCA to AGWAR, 14 Nov 43. (2) and (3) in Stilwell Personal File, Book 4, Items 1235, 1259. (4) Craven and Cate, eds., *AAF V*, 21–22.

mediately to plan the movement of the necessary men and materials for construction of fields and facilities at Calcutta. Four Engineer aviation battalions, four Engineer dump truck companies, and two pipeline companies were added to the CBI troop basis. A May target date was established for completion of five B–29 fields near Calcutta.[31] The addition of the MATTERHORN fields completed the complex pattern of American projects in the CBI.

Sextant: The Plans Disrupted

Some 59,000 troops and 950,000 tons of cargo were shipped from the United States to the CBI from August through December 1943. U.S. troop strength in the theater rose from 46,000 to 94,500. The build-up was expected to continue at about this rate during the first six months of 1944.[32] In terms of numbers, the CBI command was still small and would remain so for some time to come. But its strategic importance was still conceived to be out of proportion to the numerical strength of the American soldiery present. Its fundamental mission was to make possible the use of highly strategic territory in China for an air assault against Japan and to call forth and make effective the tremendous manpower of a hitherto ineffective ally in the Pacific war.

On the eve of the SEXTANT Conference late in 1943 the prospects for success in this endeavor were brighter than ever before. The airlift was finally approaching its target of 10,000 tons monthly. If the Assam LOC still lagged, new spirit and energy infused into its operation by the work of Somervell and his staff promised to produce better results in the not-too-distant future. New techniques of air supply promised to make possible more effective operations against the Japanese in Burma. In November Stilwell launched the drive of the Chinese Army in India toward Myitkyina. Mountbatten was putting new drive and spirit into the British and proposed to present at SEXTANT a plan of operations for the following year that by combined Chinese-American-British action would finally break the land blockade of China. Even Chiang, in November 1943, seemed ready to give in to Stilwell's persistent prodding and launch the attack of the YOKE Force across the Salween River.[33]

The Allied conferences at Cairo and Tehran completely changed these prospects. Old conflicts among American, British, and Chinese interests reemerged, were given a new turn by Stalin's promise to enter the war against Japan, and the conferences ended in failure to agree on any strategy for the coming year that would achieve the purposes enunciated at QUADRANT of opening an overland supply route to China.

The story of SEXTANT and EUREKA has already been told[34] and needs little elaboration here. At Cairo, for the first and last time, Chiang Kai-shek met with Churchill and Roosevelt and their staffs. As a plan for operations in the CBI, Mountbatten presented CHAMPION, in-

[31] (1) Diary, Strat Log Br, Plng Div, ASF, 16 Nov 43. (2) Memo, Col G. H. Williams, Actg Chief, Strat Log Br, for Dir Plng Div, ASF, 24 Nov 43, sub: Implementation of TWILIGHT Plan, file Future Opns, ASF Plng Div.

[32] (1) ASF Control Div, *Statistical Review, World War II.* (2) STM–30, Strength of the Army, 1 Jan 48.

[33] See Romanus and Sunderland, *Stilwell's Command Problems,* chs. I and II.

[34] See above, ch. XI.

cluding two separate operations respectively designated TARZAN and BUCCANEER. TARZAN was to include the completion of the Chinese drive already underway from Ledo toward Myitkyina, the advance of the YOKE Force from Yunnan to meet it, a British land drive toward the Chindwin, and an airborne offensive in the Indaw-Katha region of central Burma. BUCCANEER was to be a British amphibious landing on the Andaman Islands in the Bay of Bengal. Chiang made the British amphibious operation a prerequisite to the participation of YOKE Force and the course of events that led to the cancellation of BUCCANEER to provide landing craft for the Mediterranean consequently led also to the cancellation of the other parts of CHAMPION. Mountbatten's belated second entry, PIGSTICK, combining a smaller amphibious operation against the Arakan coast and a TARZAN that included an attack on Mandalay as a substitute for the airborne offensive in the Indaw-Katha area, also went by the board when Chiang vacillated and the British withdrew practically all the amphibious shipping remaining in SEAC. Any prospect of a campaign that would open an overland supply route to China before the 1944 monsoon season disappeared and with it any chance that either a full-scale air attack against Japan could be mounted from China in 1944 or that the Chinese could move to the coast and seize a port before American forces advancing across the Pacific arrived.[35]

Though these SEXTANT decisions were but the last of a long series of delays in launching operations on the Asiatic mainland, this time they had an air of finality. The new over-all plan for the defeat of Japan, in recognition of the growing American conviction that an accelerated advance across the Pacific offered a quicker and easier way to defeat Japan, relegated the campaigns in China and SEAC to a secondary position in support of the main line of advance.[36]

To OPD's planners, the problem now seemed largely one of finding a way to realize a reasonable return on a sizable military investment with a minimum additional commitment. Recording his views on the "future military value of the China Theater" on 8 January 1944, Brig. Gen. Frank N. Roberts, head of OPD's Strategy and Policy Group, opined that air support of the Pacific advance from bases in territory already under Chiang's control would be the probable limit of the CBI's contribution. There seemed little possibility that an overland route could be secured and readied in time to prepare a Chinese Army to seize and hold forward bases before July 1946, a full year after it was anticipated Pacific forces would have reached the Philippines. Therefore, Roberts suggested, the American effort should be concentrated on building up the air supply route to China and air bases in China, using the airlift entirely for the latter purpose. The effort should be continued to seize and hold Myitkyina in order to shorten the air route and to place forces in a position to exploit a road to China should the oppor-

[35] For a full account see, in addition to Chapter XI above, Romanus and Sunderland, *Stilwell's Command Problems*, pp. 49–82; Matloff, *Strategic Planning, 1943–1944*, pp. 347–52, 369–73; and Ehrman, *Grand Strategy V*, 155–95, 211–23.

[36] (1) CCS 417, 2 Dec 43, title: Over-all Plan for the Defeat of Japan. (2) See above, chs. XII and XVI.

tunity develop, but any further land advance or development of the road seemed to Roberts of doubtful value. The effort to equip a Chinese army in China should also be deferred until Pacific forces reached the China coast, presumably late in 1945, and undertaken then only if deemed "desirable to accelerate the defeat of Japan."[37]

While Roberts' superiors in OPD refused to accept the full implications of this position, insisting that existing commitments to China must be met for political if not military reasons, it became essentially the position of the Joint Staff Planners. In a paper on Pacific strategy on 10 March, they put it bluntly:

> It now appears that the Pacific advance to the Formosa-Luzon-China Coast area cannot, except for air support, be materially aided by the SEAC and CBI theaters. . . . It would seem logical then, that all efforts in that area should be directed toward nourishing the air forces in China so that they, by an all-out effort, can support our assault from the Pacific.[38]

The British meanwhile had drawn their own inferences from the SEXTANT decisions. In early January they proposed that the effort in Burma be cut to the bare minimum necessary to seize Myitkyina and build and hold airfields there, and that the major line of attack be diverted toward Sumatra and Malaya as soon as amphibious resources were available for the purpose. Mountbatten argued that the Ledo Road was now "out of step with global strategy" and should be halted at Myitkyina.[39] The end run around Malaya would, he and the British Chiefs contended, bring SEAC forces to a port on the China coast earlier than an overland drive through China.

In the American view, the proposed end run was equally out of step with global strategy and an even less profitable investment than the Burma campaign. Amphibious resources for an attack on Sumatra could not possibly be made available until the end of the war against Germany; thus SEAC forces could not possibly arrive on the China coast as early as those advancing across the Pacific. Moreover, the Americans argued, unless the British advanced against the Japanese in central Burma and seized the area south of Myitkyina the airfields to be built there could not be held. In the end the U.S. Chiefs brought the British over, and by late March there was general agreement that "nourishing the air forces in China" would be the primary mission of SEAC, with the land offensive to be conducted with this purpose in mind.[40]

If this proposed line of action constituted a clear and logical strategy, there remained too many strands of past plans still hanging in the air to permit its execution with single-minded purpose. No directive was issued to Mount-

[37] Memo, Gen Roberts for ACofS, OPD, 8 Jan 44, sub: Future Military Value of China Theater, Somervell Black Book, Strat Agenda for Asiatic Conf, Tab 4, Hq ASF File.

[38] (1) JCS 713/1, 10 Mar 44, rpt by JPS, title: Future Opns in Pacific. (2) Matloff, *Strategic Planning, 1943–1944*, pp. 436–38.

[39] Msg AM 38, New Delhi to AMMISCA and AGWAR, 6 Jan 44, Stilwell Personal File, Book V, Item 1602.

[40] (1) Memo, SAC, SEAC for CCS, 4 Feb 44, and related materials in OPD Exec 1, Item 23a. (2) JCS 774, 16 Mar 44, rpt by JPS, title: Strategy in SEAC. (3) This controversy may be followed in detail in Hayes, The War Against Japan, II, 198–214, History JCS.

batten until June while American leaders debated among themselves and with the British on just what should be done in the CBI to carry out their agreed purpose. Even the air plan required as a minimum the capture of Myitkyina in order to shorten the airlift; to many it seemed folly not to continue once three-fourths of the battle to open a land route had been won; the American investment required to get the road into Myitkyina would be largely lost unless the road were continued over the much easier trail to Kunming; even if the road were not completed, the pipelines at least could play their role in transporting POL for the air forces. There was, too, the long-standing American commitment to aid China that could not be lightly pushed aside. Stilwell was still operating under his original directive prescribing his mission as one of increasing the combat effectiveness of the Chinese Army. After SEXTANT, moreover, the President changed his attitude toward Chiang and began to put pressure on him to undertake the offensive against Burma from Yunnan, threatening him otherwise with the cut-off of lend-lease supplies. If Chiang moved, then there was a clear American commitment to open the road. ASF staff planners, deprecating the chances of rapid success in the advance across the Pacific to the Philippines or Formosa, continued doggedly to insist that the war against Japan could not be won without a campaign on the Asiatic mainland. "In my opinion," one wrote, "as long as there is a possibility of our requiring a port in China, the construction of an overland route into China from Burma should be pressed to the utmost, so that a strong tactical air force and some Chinese ground forces can assist in the capture of the port."[41]

Meanwhile the JCS were working out a scheme for stockpiling POL, bombs, ammunition, and other supplies in China for air missions to be flown in support of Pacific operations (PAC-AID) against Formosa where, in accordance with recent decisions on Pacific strategy, American forces were expected to land early in 1945. A JCS directive on 2 May 1944 instructed Stilwell "to commence immediately the progressive stockpiling in China of supplies to be used for these supporting operations."[42] It had the effect of giving PAC-AID supplies first priority on the Hump airlift, and in specific terms indicated that it would undoubtedly require curtailment of support of ground forces in China.[43]

Stilwell, evidently puzzled, cabled Marshall on 24 May expressing some uncertainty about what the theater mission was, stating his view that "ultimately the Japanese Army must be fought on the mainland of Asia," and renewing his old request for an American corps to assist in opening the land route to China.[44] Marshall's reply was tactful but firm:

Japan should be defeated without undertaking a major campaign against her on

[41] (1) Memo, Col Magruder for Chiefs, Theater Br and Strat Log Br, Plng Div, ASF, 10 Feb 44, sub: Future Opns SEAC, folder CBI Theater, ASF Plng Div. (2) For a detailed exposition of the ASF view see Strat Log Study 58, sub: Opns Versus Japan, Support from CBI, Rpt 13, Part 4, 10 Aug 44, ASF Plng Div.

[42] JCS 839/1, 2 May 44, title: Instructions to CG, USAF in CBI, Regarding Air Support of Pacific Opns.

[43] (1) *Ibid.* (2) Min, 161st mtg JCS, 2 May 44 (Suppl), Item 2.

[44] Unnumbered Msg, Stilwell to Marshall, 24 May 44, Stilwell Personal File, Book VII, Item 2740.

the Asiatic mainland if her defeat can be accomplished in this manner. Subsequent operations against the Japanese ground army in Asia should be in the nature of a mopping up operation. Timely support of Pacific operations requires that priority be given during the next several months to a build-up of our air effort in China. The heavy requirements for our operations against Germany and for our main effort in the Pacific preclude our making available to you the American Corps you request to assist you in re-opening of ground communications with China.[45]

Yet Marshall reaffirmed that Stilwell's mission vis-à-vis the Chinese was to continue to be that of increasing the combat efficiency of the Chinese Army in accordance with current plans for equipping 33 divisions and that, while primary emphasis "for the present" should go to the Hump airlift and its security and to development of maximum effectiveness of the Fourteenth Air Force, he should be prepared to "exploit the development of overland communications to China."

The directive issued by the CCS to Mountbatten on 3 June 1944 was of the same equivocal character. Though he was given as his primary mission

> to develop, maintain, broaden and protect the air link to China, in order to provide the maximum and timely stock of petrol and stores to China in support of Pacific operations. . . .

he was also instructed:

> So far as is consistent with the above, to press advantages against the enemy, by exerting maximum effort, ground and air, particularly during the current monsoon season, and in pressing such advantages to be prepared to exploit the development of overland communications to China.[46]

The last paragraph, vague as it was, had the net effect of keeping the Ledo Road alive as part of the CBI logistical plan. It was added largely at the insistence of General Somervell in the face of British opposition and the apparent indifference of OPD.[47]

On 5 April Stilwell had written to General Arnold: "We can't do everything so why not get down to cases and make out a priority list. . . . Right now, everybody is frantically scrambling to do everything, and another load will necessarily cause trimming everywhere."[48] If the first priority for PAC-AID seemed to be a step in that direction, it did not in practice provide any solution, for the demands of existing projects in the CBI soon totally negated the effects of the priority and rendered PAC-AID simply "another load" on the already overburdened facilities in the theater. Everybody continued to scramble to do everything with the result that almost nothing was really done well.

Matterhorn

Of the existing CBI projects that had a part in preventing any real concentration on a single objective in the theater, none played a more significant role than MATTERHORN, approved finally by the CCS at SEXTANT. If MATTERHORN was fundamentally in keeping with the new

[45] WARX 42202, Marshall to Stilwell, 27 May 44, Stilwell Personal file, Book VII, Item 2562.

[46] *Mountbatten Report*, p. 64. On the framing of the directive, see Hayes, The War Against Japan, II, 210–14, History JCS.

[47] See Memo, Somervell for CofS, 31 May 44, sub: Strategy in SEAC, ABC 384 (8-25-42), Sec 6.

[48] Memo, Stilwell for Arnold, 5 Apr 44, OPD 381 (TS), Case 375.

concept that placed the primary emphasis on the air effort, its logistical demands furnished one of the stumbling blocks that made the stockpiling of supplies for PAC-AID missions impossible.

MATTERHORN, in its final conception, was definitely experimental in character, a product of the desire to put the four available B–29 groups into action as soon as possible. With the speed-up in the Central Pacific timetable, it was agreed that the main strategic bombing offensive by the B–29's would be undertaken from the Marianas. Even with an accelerated advance, however, these islands were not expected to be in American hands before October 1944. The use of bases in China for the first four groups thus promised an earlier start.

MATTERHORN got the highest priority of all CBI projects in the early months of 1944. Yet even MATTERHORN had to go ahead on the basis of a CCS decision that it should be carried out "without materially affecting other approved operations."[49] The planes themselves, and their crews and air service personnel were especially earmarked for the project, but furnishing the required shipping, ground service personnel, and construction equipment for the airfields introduced complications. The restrictive clause in the CCS decision had to be given a liberal interpretation. Shipping requirements—20,000 troop spaces, 200,000 tons of dry cargo space in the first six months of 1944, and after April at least 20,000 tons of tanker capacity monthly—were met by juggling schedules at some expense to the movements of men and material for other CBI projects. Even then there was considerable delay in moving construction materials and equipment, necessitating establishment of special priorities in February 1944. Meanwhile, both equipment and troops had to be borrowed from the airfields in Assam, from the British, and from the Ledo Road and pipeline projects.[50]

By dint of these expedients and the best efforts of the theater SOS, two of the five airfields contemplated for the Calcutta area were readied to receive the giant B–29's by early April 1944, and two more were prepared by 1 June. The fifth field, built to accommodate transports, was not, however, completed until 1 October, nor were all the runways on the others finished until that time. Pipeline facilities to bring aviation gasoline from terminals at Calcutta were constructed in step with the progress of the fields. Meanwhile, in China, the construction of five similar fields in Cheng-tu kept pace by dint of the labor of thousands of Chinese coolies. The B–29's were able to fly their first mission —a trial run against railway shops in Bangkok—on 5 June 1944.[51]

The four squadrons of B–29's stayed in China until January 1945, flying both strategic bombing missions and tactical missions in support of Chinese, SEAC, and SWPA forces. In the words of an

[49] (1) CCS 397 (Rev), 2 Dec 43, title: Specific Opns for the Defeat of Japan. (2) Craven and Cate, ed., *AAF V*, 22–32.

[50] (1) Craven and Cate, *AAF V*, 74–75. (2) Msgs between Marshall and McNarney (SEXTANT and AGWAR) 20 Nov–7 Dec 43, in OPD Exec 5, Item 13. (3) Memo, Col Williams, Strat Log Br, for Dir, Plng Div, ASF, 23 Nov 43, sub: TWILIGHT Plan for Strategic Bombing of Japan, file Future Opns, ASF Plng Div. (4) Materials in file Spec Proj CBI, ASF Plng Div. (5) Ltr, Maj Gen William E. R. Covell to Gen Somervell, 21 Jan 44, file Gen Covell's Ltrs from CBI, ASF Plng Div.

[51] (1) Craven and Cate, ed., *AAF V*, 59–73, 92–98. (2) History, SOS in CBI.

Air Forces historian, the results obtained in the strategic missions "did little to hasten the Japanese surrender or to justify the lavish expenditures poured out in their behalf."[52] The tactical missions were of more value but of hardly enough to justify the drain MATTERHORN inevitably imposed on the limited logistical facilities of the CBI. MATTERHORN logistics proved to be a nightmare. It was impossible to make the force self-sustaining as Wolfe had originally visualized, for the B–29's could not, in their shuttle runs between Calcutta and Cheng-tu, bring in enough fuel, bombs, and other supplies to support more than a minimum of missions. Transports and converted bombers were early placed on the run but they, too, proved insufficient. The B–29's were soon competing with Chennault's Fourteenth Air Force and Chinese ground forces for the capacity of the Hump airlift.

The presence of the B–29's in the theater had its impact in other ways—in absorbing a goodly portion of the cargo shipping space allotted the CBI, in increasing congestion at the port of Calcutta, and in producing diversions of both service troops and supplies from other projects. The expenditures attending the construction of the airfields at Cheng-tu speeded the inflation of Chinese currency. Bales of Chinese dollars, printed in the United States, had to be flown over the Hump, further taxing the limited capacity of that line. The obligation the Americans assumed to pay for the fields led to an acrimonious dispute over the rate of exchange.

The situation was complicated by the command set-up. The MATTERHORN force (XX Bomber Command) was directly under control of the Twentieth Air Force headquarters in Washington, not under the theater commander. The latter had no right to use MATTERHORN supplies for any purpose other than the B–29 operations without permission from Washington, nor to direct the operations of the bombers. Even though Stilwell did control the priorities on the Hump air line, he was under constant pressure to be as generous as possible with the XX Bomber Command.

In short, logistical support could not be provided to enable the long-range bombers to fulfill the role for which they were designed, while their demands cut into support for other theater projects. Also, the presence of the B–29's in China stirred the Japanese, in mid-1944, to launch a campaign to overrun the airfields in east China to which they feared the bombers would ultimately be deployed.

It was the logistical considerations, together with the increasing Japanese threat to the Cheng-tu bases themselves, that finally decided the Twentieth Air Force in January 1945 to abandon MATTERHORN and move the B–29's back to India, leaving the Hump line to support Chennault and the Chinese army and the airfields to B–24's that could be used to support tactical operations. Two months later they were removed from the theater altogether and sent to Saipan where the major strategic bombing offensive against Japan was by that time being mounted.[53] If in China they had

[52] Craven and Cate, ed., *AAF V*, 171. See pages 92–175 for the whole story of B–29 operations from Chinese and Indian bases.

[53] (1) *Ibid.*, 33–57, 81–91. (2) Romanus and Sunderland, *Stilwell's Command Problems*, pp. 109–15, 297–302.

been able to contribute little to the winning of the war, the B–29 pilots and crews had gained valuable experience.

The End of the Assam Bottleneck

Meanwhile, the LOC projects in the CBI included in the QUADRANT charter went ahead on a much reduced priority. Immediately following SEXTANT five Engineer combat battalions earmarked for Ledo Road construction and five pipeline companies designated for various projects in the CBI were diverted to the ETO along with considerable matériel, including 1,750 of the truck-tractors and 3,500 semitrailers originally designed for Ledo Road operations. Other diversions followed. General Somervell asked OPD to replace them but met with little success, and in the existing confusion about strategic aims in the theater there seemed to be no fixed policy on the matter.[54]

Despite the resultant shortage of service troops in CBI, the build-up did continue at a sufficient rate to enable the solution, one by one, of the major logistical problems in India. And if Ledo Road and pipeline construction were slowed, they were still pushed ahead about as fast as the tactical situation would permit. Airfields were built alongside the road that permitted progressive support by airdrop of the advancing Chinese forces and of the small American contingent known as Merrill's Marauders. The major implications of the diversions to ETO lay in the future when the opportunity finally was to unfold for opening the land supply route to China.[55]

In any case, the most pressing problem in early 1944 was still the Assam LOC rather than the Ledo Road. The plans of fall 1943 in this regard were largely unaffected by the SEXTANT decisions. Yet the effects of an intensive effort were nowhere visible in early 1944 as the Assam line continued in a muddle. The bottleneck shifted back from the meter-gauge line to the broad-gauge line running out of Calcutta to Parbatipur and to the port of Calcutta itself. To the American command, the problem of facilities seemed less important than that of control. There was no military director for either the port or the rail and barge lines and no priority, it seemed, for military material. On 29 January, Marshall wrote the President urging him to ask Churchill's intervention to secure adoption of "forceful measures" to clear up the situation.

> The situation on the Calcutta-Assam LOC feeding our bases in Northeast India is precarious. Civil administration directs and controls all transportation in India. The Indian authorities have failed to operate the means at their disposal efficiently, the port of Calcutta is tied up, the broad gauge railroad connecting Bengal with Assam has been interrupted, the barge lines most inexpertly handled. At this time three of our ATC fields in India are without gas; . . . Levels of supply are at dangerously

[54] (1) Memo, Gen Wood for CG ASF, 4 Jan 44, sub: SEXTANT Decisions, Folder of same name, ASF Plng Div. (2) Draft Memo, Somervell for CofS, 4 Jan 44, sub: Opns in CBI, Folder CBI Theater, ASF Plng Div. (3) Memo, Gen Handy for Gen Somervell, 16 Apr 44. (4) Memo, Somervell for Handy, 19 Apr 44. (3) and (4) in OPD 320.2 (TS), Case 264. (5) Ltr, Covell to Somervell, 27 Jan 44, Folder Gen Covell's Ltrs from CBI—1944, ASF Plng Div.

[55] On the general progress of theater projects in CBI during this period see History, SOS in CBI, and Romanus and Sunderland, *Stilwell's Command Problems*, pp. 275–93.

low levels at all bases in Assam. Military control of the Calcutta-Assam LOC is the only solution to this problem. . . .[56]

Whether by the intervention of the Prime Minister or not, in mid-February steps were taken along the lines the Americans urged. While the port of Calcutta was not placed under military control, a single civilian controller was appointed with full powers and the Americans were allotted the King George V docks for their own military operation. In March a similar system of semimilitary control was worked out for the Assam LOC, with a panel in Calcutta to allocate monthly tonnage among using forces. In the same month the Americans took over the operation of the meter-gauge railroad. Maj. Gen. Daniel I. Sultan's appraisal on 21 March that the "Assam LOC is and always will be a frightful headache," proved pessimistic.[57] Improvements under the new system soon became evident, and on 20 April Maj. Gen. William E. R. Covell, the CBI SOS commander, reported the Calcutta problem solved with the King George docks cleared completely for the first time in March and a total of 211,415 measurement tons of cargo unloaded during that month. "No special concern need be given to the capacity of the port of Calcutta," wrote Covell, "nor has any indication been given at this time that it has reached its saturation point."[58]

Less than a month later, Covell could also report to Somervell the final conquest of the Assam LOC:

> Within the last four weeks the results of all the hard work in the previous five months on the Assam LOC have finally begun to show up and to show up in almost a flood. The bottleneck on the meter gauge railway has been completely broken by the operation of our railroad battalions. The Control Panel in Calcutta over which we fought and bled is now functioning with the complete and enthusiastic cooperation of the British. As a result the tonnage capacity for June for the first time in history was equal to the sum of the bids of American and British forces. During the first ten days of May the LOC not only met its high targets but exceeded it by 700 long tons per day. In fact both the British and my people are beginning to complain that supplies are arriving too fast. I believe it is safe to say that, at the present writing at least, the problem of the Assam LOC is licked and should remain so except for acts of God and of the public enemy.[59]

Only one postscript need be added. The tonnage allocations for military purposes for the month of July were set at 229,000 short tons, slightly more than the QUADRANT planners had agreed as the goal for January 1946. With additional improvements planned, there was every prospect of a further increase. The 6-inch pipeline from Calcutta to Dibrugarh was also completed in August, one month behind schedule, further increasing the capacity of the line.[60] Had these achievements been made one year earlier the whole history of the CBI might have

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[56] Memo, Marshall for President, 29 Jan 44, sub: Failure of Assam LOC, file CBI 1944, Hq ASF.

[57] (1) Memo, Sultan for Stilwell, 21 Mar 44, Stilwell Personal File, Book 3. (2) On these procedural improvements see Larson and Bykofsky, *The Transportation Corps: Operations Overseas*, pp. 563–77.

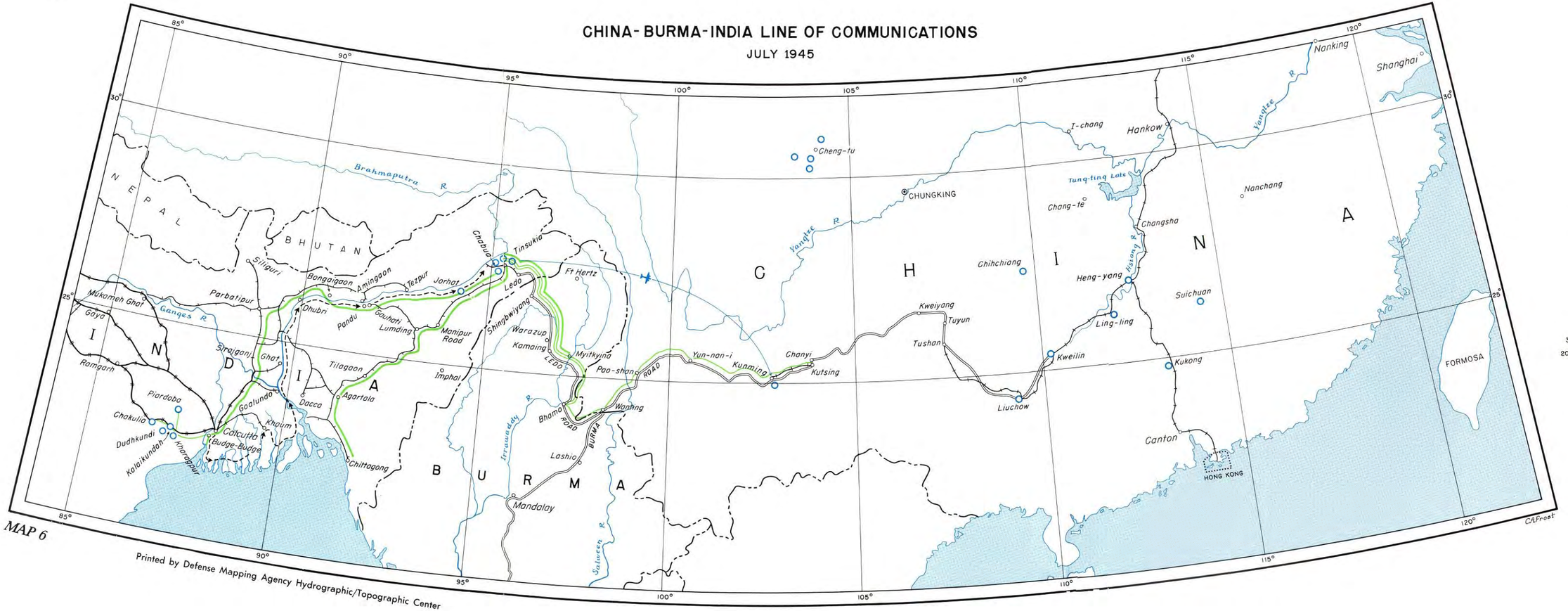
[58] (1) Ltr, Covell to Somervell, 20 Apr 44, OCT HB, Gross Day File 1944. (2) For the story of the Calcutta port see Larson and Bykofsky, *The Transportation Corps: Operations Overseas*, pp. 563–67.

[59] Ltr, Covell to Somervell, 14 May 44, sub: Assam LOC, file Gen Somervell, ASF Plng Div.

[60] (1) Memo, Brig Gen Thomas B. Wilson, Chief Trans Service, CBI, for Gen Somervell, 15 Jul 44, sub: Assam LOC, file CBI 1944, Hq ASF. (2) Ltr, Covell to Somervell, 19 Aug 44, file Gen Covell's Ltrs . . . 1944, ASF Plng Div.

CHINA-BURMA-INDIA LINE OF COMMUNICATIONS

JULY 1945



LEGEND

RAILROADS:

- BROAD GAUGE, DOUBLE TRACK
- BROAD GAUGE, SINGLE TRACK
- METER GAUGE, SINGLE TRACK

- BARGE ROUTE
- PIPELINE (6 INCH)
- PIPELINE (4 INCH)
- AIRLIFT TO CHINA
- MAJOR AIRFIELDS

100 0 100 200 MILES

30° 25° 20°

STATUTE MILES

CAFroat

MAP 6

Printed by Defense Mapping Agency Hydrographic/Topographic Center

been different. As it was they came too late. The elimination of the Assam bottleneck, nevertheless, was perhaps the principal factor making possible the achievements of the last year of the war in the CBI. *(Map 6)*

The Problem of Air Transport

Forward of the Indian railheads operational supply was heavily dependent upon air transport. By early 1944 supply by airdrop had become almost the accepted method of supplying troops actively engaged in Burma. The roads newly hewn out of the jungle could neither keep pace with the advancing troops nor provide supplies to the scattered points at which Chinese, British, and American soldiers were operating, many of them behind Japanese lines. Transport planes in the CBI became the principal limiting factor on ground operations, while at the same time they remained the only method of moving supplies into China. Competition for transports between the Hump line and operations in Burma was therefore inevitable.

The CCS were first made aware of this issue when Mountbatten at SEXTANT said he would need 535 additional transport planes for TARZAN if he were to execute that operation while continuing the Hump airlift at its planned levels. Not hopeful of securing so many--Arnold was able to promise only 35—he proposed to divert planes from the Hump as required on the theory that these were part of the total resources allocated his theater. The JCS demurred, as they had earlier, at allowing any British commander to make decisions affecting the Hump airlift without reference to the CCS. That body finally came up with a schedule of diversions that would result in a serious diminution of the airlift only in March and April, though the scale of air transport promised for TARZAN was hardly that the SEAC commander had originally asked.[61]

Cancellation of TARZAN ended consideration of diversions from the Hump momentarily. Then in February 1944 the Japanese struck in the Arakan, isolating a complete Indian division and leaving them dependent on air supply. To meet the need for air transport, Mountbatten had again to apply to the CCS for permission to divert planes from the airlift to China, though he continued to insist that it was within his prerogatives to do so anyway. The JCS were sympathetic but firm in their insistence that transports on the Hump must remain under CCS control. They agreed to divert 30 C–47's as an emergency measure but, when Mountbatten proposed to remove 70 more, told the British Chiefs to make a more determined effort to provide the aircraft from their own resources in other theaters. The British already had 12 transport planes earmarked for delivery to SEAC in April, and they managed to scrape up 45 more from the United Kingdom and the Mediterranean. However, they still asked for an additional temporary diversion from the Hump to fill the gap until these planes could arrive in India. The JCS instead decided to send one American troop carrier squadron (64 planes) from

[61] (1) Msg 10059, SEXTANT to AGWAR, Arnold to Gen Barney M. Giles, 26 Nov 43, OPD Exec 5, Item 13. (2) CCS 411/2, 2 Dec 43, title: Opns in SEAC. (3) CCS 411/5, 7 Dec 43, memo by Br COS, same title. (4) Chiang, it will be recalled, had made an issue of the 535 transports. See above, ch. XI.

the Mediterranean on 30-day loan, with the understanding that all Hump transports should be returned and any further requirements be met by the Air Transport Command in India.[62]

When the 30 days expired, the loan had to be extended for 30 more despite the anguished outcries of the Supreme Allied Commander, Mediterranean. The continuing need for tactical air transport in India and Burma clearly indicated there must be a more permanent solution. The AAF was, in fact, already considering one. General Arnold indicated in March that in view of increased transport production and a lessening requirement for transport planes for training airborne divisions, he would be willing to send to SEAC four combat cargo groups (100 C–47 transports each) and four air commando groups, one group of each type to arrive in the theater monthly beginning on 1 July 1944.

The project had to be sharply curtailed almost immediately. There were not enough personnel available at the time to organize more than two air commando groups, and insufficient supporting service troops to enable either these or the four combat cargo groups to operate in the theater. And it appeared unlikely, because of the critical shipping situation in the Pacific, that cargo space could be found to carry the necessary supplies to India. Finally, the Navy indicated it could not provide tankers to carry gasoline. In desperation, Arnold suggested that four combat cargo groups and two air commando groups be shipped as skeletonized units with the necessary planes, and that the units be filled up in the theater with key American personnel and about 20,000 selected Chinese soldiers. This proposal General Stilwell rejected as impractical. The upshot was that one combat cargo group with 100 transports was dispatched in May, earlier than planned, to meet the immediate SEAC emergency and the JCS decided to withhold decision on the rest. In early July, they reached the tentative conclusion that only one additional combat cargo group would be sent to SEAC, this in August, while the other two and the air commandos would go to the Southwest Pacific.[63]

Airlift, PAC-AID, and the East China Crisis

By the expedients adopted the crisis on the Indian front was met without too great interference to movement of supplies over the Hump, and the troop carrier squadron returned to the Mediterranean to take part in the battle in Italy and the invasion of southern France. The Hump lift did fall below 10,000 tons in March, but rose again to 11,000 in April and to nearly 16,000 in June.[64]

These Hump tonnages were far from enough to meet the demand in China,

[62] Hayes, The War Against Japan, II, 214–21, History JCS.

[63] (1) Memo, Maj Gen Howard A. Craig, Acting Chief Air Staff for OPD, 11 Apr 44, sub: Air Commando Project, with related material in OPD 320.2 (TS), Case 267. (2) Memo, Col W. H. Wood for Gen Handy, 12 Apr 44, sub: Air Commando Opn, OPD 381 (TS), Case 342. (3) OPD MFR, 6 May 44, OPD 381 (TS), Case 365. (4) Memo, Gen Arnold for Gen Handy, 17 May 44, sub: Opn of U.S. Air Units from China Bases, OPD 381 (TS), Case 375. (5) Draft msgs, AGWAR to CG USAFCBI and CINCSWPA, 4 Jul 44, OPD 381 (TS), Case 418. (6) On the Pacific shipping situation at the time, see above, Chapter XIX.

[64] (1) Craven and Cate, ed., *AAF V*, 220. (2) Hayes, War Against Japan, II, 220–21, History JCS.

particularly after the XX Bomber Command was added to the list of claimants and the competition for Hump tonnage among using forces became especially severe in mid-1944. With the air line hard pressed to meet Chennault's increasing operational needs, while at the same time providing a necessary minimum for the U.S. overhead in China and token quantities for the YOKE Forces, the supposed first priority build-up of a PAC-AID stockpile fell hopelessly behind. In early April Stilwell had been ready to cut off YOKE Force supplies entirely; on the 10th of that month Chiang, under continuing pressure from Roosevelt to strike while the Japanese were extended in India, finally agreed to launch the offensive from Yunnan into Burma. Under the circumstances, Stilwell not only could not cut off lend-lease to China but also had to provide transport planes to support the Chinese advance. At almost the same time the Japanese began their advance into eastern and southern China with the evident purpose of seizing Chennault's air bases and possibly overrunning the Hump terminal at Kunming. Chennault was compelled to devote his forces almost entirely to the defense of the airfields, and found his supplies totally inadequate for that purpose. In fact, finding air action insufficient, he also began to demand American supplies for the Chinese ground forces in east China and air transports to serve on the line of communication running from Kunming to his bases.

Remembering Chennault's earlier claims that he could prevent a Japanese advance with air power alone, Stilwell was something less than sympathetic. He did, however, allot to Chennault the lion's share of Hump tonnage. Under these circumstances the Fourteenth Air Force was obviously in no position to stockpile PAC-AID supplies and indeed it soon appeared that the bases from whence it could launch PAC-AID missions would be lost. The XX Bomber Command had made a small accumulation of supplies, but in June the Generalissimo appealed to the President to turn this stockpile over to Chennault to meet the emergency in east China. Though the request for the stockpiles was disapproved by the JCS, MATTERHORN's Hump tonnage had to be cut in June and July in order to give the utmost possible support to Chennault and provide the most critical supplies needed for YOKE forces. In sum, then, the situation in the theater negated the priority the JCS had established for PAC-AID. The only solution appeared to be an immense increase in Hump tonnage.[65]

The AAF came up with a plan for this purpose in mid-July, General Arnold proposing to furnish sufficient additional transports to bring Hump capacity to 31,000 tons monthly by December 1944. In approving this plan, the JCS once again tried to set Hump priorities. This time, taking a more realistic view, they made them less rigid and shaped them only as recommendations for the theater commander. PAC-AID stockpiling was placed in a second pri-

[65] (1) See messages in Stilwell Personal File, Books V and VI, particularly the messages exchanged between Roosevelt and Chiang: Book V, Items 1613, 1629, 1697; Book VI, Items 2031, 2109, 2145, 2151, 2164, 2186, 2194, 2202, 2214. (2) For detailed treatment see Romanus and Sunderland, *Stilwell's Command Problems,* Chapters VIII, X, XI. (3) Msg, CM-OUT 53610, AGWAR to AMMISCA, AMMDEL, and SEAC, 20 Jun 44. (4) Memo, Gen Handy for CG AAF, 19 May 44, sub: Opns of Air Units from China Bases, OPD 381 (TS), Case 375.

ority to that of "supply of the Fourteenth Air Force (including the Chinese-American Wing) to develop the maximum effectiveness consistent with minimum requirement for support of other activities in China and Burma."[66] Below these two, in order, came the operational requirements of MATTERHORN and requirements of Chinese air and ground forces other than the minimum placed in first priority.

The effects of augmentation were not to be felt until November. But meanwhile, as a result of improvements in operational efficiency and of the capture of the airfield at Myitkyina, hump tonnage rose to 23,000 tons in August. Soon afterward new airfields were built at Myitkyina for refueling operations, making it possible for transports to carry more cargo and less fuel on their flights. With a less difficult run and the addition of transports in November, Hump tonnage shot up to 35,000 in that month. Neither of these increases added significantly to the amounts that could go into PAC-AID stockpiles. Chennault's share was maintained at a steady 12,000–14,000 tons from June onward; the increases largely went to the XX Bomber Command and to the growing numbers of U.S. troops in China engaged in operating a theater headquarters and a supply line to the eastern air fields, in training Chinese troops, and in supervising the use of American materials in China. (*Table 33*)

The principal explanation for failure to give Chennault more supplies lay in the poor transportation facilities within China itself. Supplies set down at Kunming by transport planes still had to be moved forward to the Fourteenth Air Force bases over the so-called Eastern Line of Communications (ELOC) by a combination of rail, road, and river transport. On this route coolies, animals, and Chinese junks played as important a part as motor vehicles and rail cars. The roads were rough and the few motor vehicles in China mostly old and in poor operating condition. For want of gasoline they had to use alcohol for fuel. The scarcity of trucks in China put a high premium on their value and led to the same sort of graft and inefficiency in operation that characterized Chiang's government generally.

This, the final bottleneck in the whole effort to aid China, the Americans belatedly started to grapple with in 1944. In May they placed their own supervisory staff over the Chinese transportation agency. At the same time, a project was developed (TIGAR 26–A) to fly 700 trucks. 2,000 tons of spare parts, and American drivers and maintenance personnel into China, but the priority for ammunition and POL for the air force delayed its completion until September and by then it was too late. The Japanese had already captured the eastern airfields and were moving threateningly in the direction of those in central and south China. Existing motor transport had to be absorbed in evacuation and the ELOC was so thoroughly disrupted that it was impossible to move any sizable tonnages over it until March 1945 when the Japanese, under pressure from all sides, began to withdraw. A final desperation effort to move trucks from the Persian Gulf to Kunming over a long and difficult route through Soviet Turkestan and Sinkiang Province (TIGAR 26–B),

[66] (1) JCS 959/1, 25 Aug 44, title: Strategy in CBI. (2) JCS 959, 15 Jul 44, memo by CG AAF, same title.

TABLE 33—DISTRIBUTION OF HUMP TONNAGE CARRIED INTO CHINA JANUARY–DECEMBER 1944

Month	Total	Fourteenth Air Force	XX Bomber Command	Other United States	Chinese
January	13,399	7,601	—	1,177	4,621
February	12,920	7,071	383	1,640	3,880
March	9,587	4,379	3,603	940	665
April	11,555	6,757	1,693	1,772	1,333
May	11,383	6,231	1,532	1,826	1,794
June	15,845	12,537	350	1,033	1,925
July	18,975	13,213	1,070	2,664	2,028
August	23,676	13,871	3,055	3,919	2,831
September	22,315	13,245	3,452	2,686	2,932
October	24,715	13,014	7,037	2,557	2,107
November	34,914	14,476	7,881	9,081	3,539
December	31,935	12,805	4,348	13,188	1,594

Source: Craven and Cate *AAF V*, p. 220.

to which the Soviets finally agreed in fall 1944, also was abortive.[67]

The phenomenal development of the air transport line in late 1944 thus came too late to save the air bases in east China. And the necessity for moving service troops, trucks, and supplies for the troops over the line led to an ever-mounting overhead in China that also had to be supported over the Hump. The air line it seemed could never be developed as fast as the demands for supplies in China increased. And the difficulties on the ELOC very definitely proved that merely laying down supplies in Kunming could not, in itself, solve the logistical problem of supporting either air or ground forces in China.

Meanwhile, the steady and inexorable Japanese advance against the airfields in east China, though it did not put an end to Chennault's operations, forced him to withdraw to fields further in the interior and to use his limited supplies primarily for tactical missions. This crisis was the main influence shaping American strategy on the Asiatic mainland in the last year of the war. It prevented realization of the plan to use Chinese bases to any considerable extent for support of Pacific operations, and left the staff in Washington in something of a quandary as to just what use their investment in Burma and China could be put. There was no inclination to liquidate this investment, nor was there any desire to increase it significantly. The east China crisis provoked Roosevelt to urge Chiang Kai-shek to place his armies under the command of General Stilwell; Chiang eventually refused and asked for Stilwell's recall, a request the President honored.[68] Maj. Gen. Albert C. Wedemeyer was appointed commander of the American theater in China, and the India-Burma Theater

[67] On these projects see Larson and Bykofsky, *The Transportation Corps: Operations Overseas*, pp. 591–603.

[68] On the relief of Stilwell, see the detailed account in Romanus and Sunderland, *Stilwell's Command Problems*, pp. 399–471.



COOLIES PULL SAMPANS LOADED WITH U.S. ARMY SUPPLIES *upstream through the swift rapids of the Wu River.*

separated from it and placed under General Sultan (now a lieutenant general). Wedemeyer's mission was defined as that of carrying out air operations from China and assisting Chinese air and ground forces in operations, training, and logistics, somewhat different from that given Stilwell of "improving the efficiency of the Chinese Army." Wedemeyer was also, by agreement with Chiang, to be his chief of staff, but the whole matter of command of the Chinese Army was dropped.[69] If Wedemeyer's appointment and mission indicated that the Americans were not ready to abandon China, they also carried in them a note of resignation, of final abandonment of high hopes once entertained that China's role in the war would be an important one.

[69] Charles F. Romanus and Riley Sunderland, *Time Runs Out in CBI*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1959), pp. 15–24.

PART SIX

SHIFT TO A ONE-FRONT WAR

CHAPTER XXII

Stresses and Strains of a Two-Front War

At the beginning of September 1944 optimism ran high among Allied leaders that the war with Germany would be finished before the end of the year. Much of their planning, indeed, was geared to the expectation that that happy event would occur sometime in October. The rapid advance across France and the apparent collapse of the German armies on the western front, the easy success of DRAGOON, the breaching of the Pisa-Rimini line in Italy, the sweep of Soviet forces across Poland, and the defections, one after another, of German satellites gave this high optimism a solid basis. Had these optimistic hopes been realized the American war machine would have been subjected to no considerable strain in the final achievement of victory on both fronts. Redeployment from Europe to the Pacific and Far East would mainly have involved naval and air forces since the ground army elements for the defeat of Japan could have been taken for the most part from the strategic reserve in the United States. A much earlier start could have been made on the rehabilitation of war-torn or exhausted European economies. The British, in particular, pinned their hopes for an early partial reconversion of war industry and recovery of their foreign trade on the defeat of Germany in 1944.

This expectation of an early victory over Germany proved an illusion. The Allied armies forging ahead into Belgium, the Netherlands, and Germany in September outran their logistical support and the drive lost its momentum. The Germans were able to regroup, reinforce, and man their fixed defenses along the Siegfried Line. A bloody and difficult campaign, lasting through the fall and winter was necessary to dislodge them. A similar stalemate developed along the front in northern Italy. Not until March 1945 were Allied forces to reach and cross the Rhine barrier and begin, in combination with Soviet forces advancing into eastern Germany, the final drive to victory in Europe.

As a result, the U.S. Army had to commit almost all of its reserve forces in the United States to the European front. Meanwhile, in the Pacific, the Army and Navy were engaged in equally bloody and difficult campaigns in the Palaus and Philippines and in the progressive destruction of Japanese naval and air power. Preparations began for the seizure of final forward positions in the Bonins, Ryukyus, and possibly on Formosa and the mainland of China, and for the invasion of the home islands of Japan. The strategic bombing campaign against Japan was mounted from the Marianas.

American military resources were thus subjected to the stresses and strains of

full-scale commitment on two major and excessively broad fronts, and they were stretched to the practical limits of the American economy in its existing state of mobilization. This period of full-scale war on two fronts was not, however, like the early phase of the war in which the shortage of military resources threatened to have, and sometimes did have, disastrous consequences. Victory was clearly in sight on both fronts and such shortages of resources as did develop principally affected its timing.

Second Quebec

During the period when optimism was at its height, the sixth great Anglo-American conference of the war (OCTAGON) took place at the Chateau Frontenac in Quebec, 12-16 September 1944. In terms of vital decisions, OCTAGON was perhaps the least consequential of the wartime conferences. All the major strategic decisions on the war in Europe had already been made. The Russians did not attend and the postwar political questions that were to hold the center of the stage at Yalta a few months later did not come up for extended discussion. Major strategic questions remaining involved the war with Japan, and these had largely become matters for unilateral American decision. The main issue was, in fact, the extent and nature of the British role in the final campaign in the Pacific, an area over which the Americans had no intention of surrendering their strategic responsibility. On nearly all the issues considered, position papers had already been exchanged between the British and American staffs and decisions were already in the making. Perhaps for all these reasons, and perhaps also because of the prevailing high optimism, no effort was made to cast the usual balance sheet of resources and requirements nor, in particular, to project the allocation of merchant shipping, a resource upon which the pressures of a two-front war were to be most severe in the months following.

The questions involving European strategy were settled with an ease and harmony that contrasted markedly with the long, sometimes acrimonious, controversy over OVERLORD and ANVIL. The British came to Quebec fearing that the Americans would insist on withdrawing part of the U.S. Fifth Army from Italy, or on directing Alexander's offensive to the northwest into France, or at least on sending all the assault shipping in the Mediterranean to the Pacific or India. At this point British hopes were still high that Alexander would be able to breach the Gothic Line quickly. Churchill and the British Chiefs were determined that he should press onward through northeastern Italy via Trieste to Vienna should the opportunity offer, and they wanted to retain enough assault lift in the Mediterranean to carry out landings in Istria.

Actually, by the end of August the Americans were no longer hostile to a northeastward advance in Italy nor, for that matter, to British re-entry into the Balkans with any forces they could scrape together in the Mediterranean area. Eisenhower's needs by this time were less for additional divisions than for ports and adequate lines of communications to support the forces already in northwest Europe. The great boost in American production had made the supply of landing craft considerably less critical. And it was now obviously too late for

any major campaign to be mounted in the Balkans. By the time the Quebec Conference convened, therefore, the Americans were already disposed to go along with the British on the essential points of their Mediterranean program. Admiral King promptly indicated that the assault lift in the Mediterranean, though earmarked for the Far East, could be used in the Istrian venture, and it was agreed that General Wilson should report his decision by 10 October. The JCS also assured the British that no major U.S. forces would be withdrawn from Italy until the outcome of the current offensive could be evaluated. No objection was raised to a drive toward Vienna, and British proposals for action in southeastern Europe in the event of a German collapse, including the immediate dispatch of a small expeditionary force to Greece, were approved without discussion. General Wilson was also ordered, in event of a German withdrawal, to occupy Venezia Giulia. To all appearances, controversy over Mediterranean strategy had at long last disappeared in a golden haze of Allied harmony.[1]

Discussions on the British role in the final offensive against Japan were hardly so harmonious. Anxious to secure as important a place as possible, the British were in a difficult position, for the theater in which they had originally expected to make their major effort—southeast Asia—had, since SEXTANT, been relegated to a subsidiary status. Within British councils, the whole question was subjected to searching examination during the first eight months of 1944. Churchill doggedly insisted on an Indian Ocean strategy with Sumatra, Singapore, and Hong Kong as objectives, but the British Chiefs were convinced that any advance through the South China Sea to Hong Kong would be too late, and that the American drive across the Pacific would effectively cut communications to southeast Asia and render a campaign against the Indies and Malaya no more than a mopping-up operation. In the end their opinion prevailed. Some three and a half weeks before OCTAGON the British presented their final views to the Americans. They proposed to concentrate in southeast Asia on eliminating the Japanese from Burma in expeditious fashion so as to secure the land and air routes to China, while making their major contribution to the final campaign against Japan by transferring fleet units and possibly air and ground forces to the main drive in the Pacific.[2]

The British position on operations in southeast Asia represented a capitulation to American views, but in reality the JCS no longer considered the freeing of all Burma as a matter of great strategic consequence. The opportunity for a timely reopening of the old supply line north from Rangoon had long since passed, and all American resources available for this theater were committed to the Hump air line and the Ledo Road in the north. The British presented two plans—CAPITAL and DRACULA. CAPITAL involved simply a British offensive in

[1] (1) Ehrman, *Grand Strategy V*, 384–91, 510–11. (2) Matloff, *Strategic Planning, 1943–44*, p. 505. (3) Churchill, *Triumph and Tragedy*, pp. 122–26. (4) Min, 1st Plenary Mtg, OCTAGON, 13 Sep 44; 2d Plenary Mtg, 16 Sep 44. (5) Min, 172d mtg CCS, 12 Sep 44. (6) CCS 680/2, 16 Sep 44, title: Rpt to President and Prime Minister.

[2] (1) Ehrman, *Grand Strategy V*, 421–504, contains a lengthy account of the internal British debate on this issue. (2) See also Bryant, *Triumph in the West*, pp. 111–24, 198–205, and Churchill, *The Hinge of Fate*, pp. 571–81.

north Burma, in close co-operation with the U.S.-sponsored Chinese forces, aimed at overrunning the territory necessary to protect and expand the airlift to China and to open the road from Ledo. DRACULA would be a seaborne and airborne attack on Rangoon, combined with a lesser offensive in the north and an eventual push northward to eliminate the Japanese from Burma entirely. CAPITAL could be launched immediately mainly with resources already in the theater. DRACULA would require as many as six additional divisions and amphibious resources from Europe, as well as more air transport including the combat cargo and air commando groups originally allocated to SEAC that the JCS now proposed to redirect to the southwest Pacific.

Even under the optimistic assumption that Germany would be defeated before the end of 1944, it appeared that the time required for the necessary redeployment of divisions would delay DRACULA until March 1945. To the Americans the immediate execution of CAPITAL appeared to be the best means of employing the resources already in the theater, and they were far from anxious to make any of the additional commitments DRACULA might require. The JCS tactfully turned down Churchill's request for two U.S. divisions for SEAC, though they did consent to the dispatch of one of the two remaining combat cargo groups and one air commando group to that theater rather than to SWPA. The CCS went on to agree that the reconquest of all Burma should be the objective of operations in SEAC and approved both CAPITAL and DRACULA, the latter with a target date of March 1945. But, on American insistence, the approval of DRACULA was coupled with a proviso that the British would launch CAPITAL immediately and that preparations for the larger operation would not be allowed to interfere with it.[3]

If the British abandonment of plans for any major offensive against the Indies and Malaya also represented a concession to a trend of events in the Pacific dominated by the Americans, their proposal to contribute major naval and air units for the main drive in the Pacific was not entirely welcome to the JCS. The SEXTANT over-all plan had stipulated they should do so, but in the interim both Admiral King and General Arnold had had sober second thoughts. They could already count on more than ample U.S. air and naval power to accomplish the final defeat of Japan once the war in Europe was over, and the introduction of a British fleet and air force in the Pacific would bring complicated problems of command and logistics. The Joint Chiefs had long been framing Pacific strategy without consulting the British and they did not wish, in the last stages of the war, to surrender their exclusive jurisdiction over that area to the CCS. General MacArthur, although ostensibly anxious to have British forces of any sort in SWPA, was willing to accept them only if they were placed unequivocally under his command. He was extremely suspicious that the British wanted to take over command in SWPA and unalterably opposed to surrendering any part of the area to SEAC.

[3] (1) CCS 452/17, 31 Jul 44, memo by Reps Br COS, title: Plans for Opns in Burma. (2) CCS 452/31, 22 Sep 44, title: Directive to SAC, SEAC. (3) JCS 774/7, 12 Sep 44, rpt by JPS, title: Allocation of Two Remaining Combat Cargo Gps and Two Remaining Air Commando Gps. (4) Min, 2d Plenary Mtg, OCTAGON, 16 Sep 44. (5) Romanus and Sunderland, *Time Runs Out in CBI*, pp. 81–85.

In sum, then, the American military staffs theoretically wanted the British to do their part in the war against Japan, but they were unable to stipulate just what that role should be outside Southeast Asia where the campaign was now regarded by both sides as decidedly peripheral.[4]

American plans for the final blow against Japan had matured considerably since SEXTANT. In June and July 1944 the Joint Planners had drawn up, and the JCS had approved, a plan for operations subsequent to Formosa (then still envisaged as the main operation in early 1945) that incorporated the idea of invasion of the Japanese homeland, rather than blockade and bombardment, as the means for eventually forcing unconditional surrender. Specifically the concept was as follows:

a. Concurrent advances through the Ryukyus, Bonins and Southeast China coast for the purpose of intensifying the blockade and air bombardment of Japan and creating a situation favorable for:

b. An amphibious assault on Kyushu for the purpose of further reducing Japanese capabilities by engaging and fixing major enemy forces and establishing a tactical condition favorable to:

c. A decisive stroke against the industrial heart of Japan by means of an amphibious attack through the Tokyo plain assisted by continued pressure from Kyushu.[5]

In this concept the British part was still presumed to be an advance through the Malay barrier to the southeast China coast to begin shortly after the invasion of Formosa, roughly concurrent with a mounting air offensive on Japan from the Marianas and China, and invasion of the Ryukyus and Bonins. The timetable provided for mounting the assault on Kyushu by 1 October 1945, to be followed two months later by landings on the main Japanese island of Honshu.

The British were, at the time, only informed of the revised objective—invasion of the industrial heart of Japan—and to this they agreed after seeking assurances that it would not upset existing priorities for European operations. They were well aware, however, of the implications of the current American strategic thinking, if not informed of its details, and their decision to abandon plans for the advance through the Malay barrier and seek a place for the British fleet in the main drive against the Japanese homeland was shaped as a result. In their proposals made before OCTAGON, they suggested two alternatives. The first, for which they expressed preference, was that a detachment of the British fleet operate as a part of the main U.S. fleet under Admiral Nimitz, the second that a British Empire task force be formed to operate from Australian bases under the supreme command of General MacArthur. The U.S. Chiefs on 8 September accepted the second preference as the least complicating, though some private fears were expressed lest this give the British the naval command in SWPA.[6]

At OCTAGON, the principal American paper on the war against Japan discreetly omitted any significant reference to British participation. It set forth quite simply the new objective of invasion and the timetable in the June–July plan

[4] (1) See Matloff, *Strategic Planning, 1943–44*, pp. 513–16. (2) Hayes, War Against Japan, II, 279–90, History JCS.

[5] JCS 924, 30 Jun 44, rpt by JPS, title: Opns versus Japan Subsequent to Formosa.

[6] (1) Ehrman, *Grand Strategy V*, 498–502. (2) Hayes, War Against Japan, II, 276–78, 283–89, History JCS.

based on a Formosa invasion on 1 March 1945, while indicating that no decision had actually been reached on whether Luzon should be invaded instead of Formosa. The Americans said a different schedule was under study in case the choice fell on Luzon.[7]

The British accepted the American schedule without argument though they were skeptical of its timing, and they secured a concession that the planning date for the defeat of Japan should be eighteen rather than twelve months after the defeat of Germany. Meanwhile, also, they had decided to insist on their first alternative, that the British Fleet be employed in the main drive against Japan. Behind this lay their own misgivings about the complications of the command question in the Southwest Pacific and their own doubts that they could provide a balanced task force in time to exert much effect, or support it adequately from Australian bases. The Prime Minister adroitly secured Roosevelt's agreement in the first plenary session and the JCS, over Admiral King's vehement protests, were forced to acquiesce. Yet, by stressing the requirement that the British fleet units must be balanced and self-supporting, they were able to defer more than a general decision. In their final report to the President and the Prime Minister, the CCS stipulated that the "method of employment of the British Fleet in these main operations in the Pacific will be decided from time to time in accordance with prevailing circumstances." Similarly, in response to a British offer of air units, the British Chiefs were invited to put forward as a basis for planning "an estimate in general terms" of the contribution the Royal Air Force might be prepared to make.[8]

There was little discussion, and no recorded decision, at Quebec on redeployment of British ground forces from Europe for the war against Japan except for six British and Indian divisions for DRACULA. The British presented no concrete plans for further redeployment, though they refused to accept the divisions for Burma as the upper limit of their ground force contribution. Obviously, still to be considered was the question of further operations in SEAC once Burma was retaken, even if only of a mop-up nature, and the question of a ground element for a task force in SWPA was still alive. In the absence of specific plans, the CCS simply noted that British operations "not yet approved," would require "allocation of resources," and should be borne in mind in planning production.[9]

The OCTAGON plans for the war against Japan were clearly based on the hope of Germany's defeat in 1944. In any realistic appraisal of the tentative schedule of operations, the major logistical problem was that of redeployment of forces from Europe. The CCS recognized this, but, beyond a preliminary investigation of the availability of shipping for personnel movements, there was no detailed consideration of the problem at OCTAGON. Instead the matter was referred to the Combined Planners, the Combined Administrative Commit-

[7] (1) CCS 417/8, 9 Sep 44, memo by U.S. CsofS, title: Opns for the Defeat of Japan, 1944–45. (2) On the Formosa versus Luzon debate, see above, Chapter XVI.

[8] (1) CCS 680/2, 16 Sep 44. (2) Ehrman, *Grand Strategy V*, 504, 518–24. (3) Min, 1st Plenary Mtg, OCTAGON, 13 Sep 44. (4) Min, 174th mtg CCS, 14 Sep 44.

[9] (1) CCS 680/2, 16 Sep 44. (2) Hayes, War Against Japan, II, 283–84, History JCS.

tee, and the Combined Military Transportation Committee for detailed study and report. The Americans had, in fact, already begun to prepare their own plans for redeployment, the scope and intent of which were such as to leave little place for the British in the war in the Pacific.[10]

Early Plans for Redeployment

Some sort of planning for redeployment went back almost to the time the first large numbers of U.S. troops moved to the European theater, though it first began to assume a prominent place in joint staff circles early in 1944. Redeployment promised to present logistical problems of challenging magnitude. It would involve troop and supply movements of unprecedented size over longer distances and in a shorter period of time than in any previous operation. Moreover, it would require reversing the logistical processes of the European theaters and a shift in the center of gravity in the United States from the east to the west coast. The most precise advance planning for efficient use of shipping, of inland transport, and of staging areas and ports stretched around the entire globe was clearly prerequisite to its successful execution.

The scope of redeployment from Europe, as opposed to shipment of troops to the Pacific from the United States for the final stage of the war against Japan, depended on the timing of the defeat of Germany. As long as the war in Europe continued, the Army was obligated to exhaust the reserve pool of troops in the United States in that direction. The earlier this flow could be stopped, the more troops would remain in the United States available for Pacific service, and the less imposing the problem of redeployment. Conversely, the longer the war in Europe continued, the more difficult and complicated the problem would become.

In either case, the load on west coast installations resulting from a shift to concentration on the war against Japan would be heavy. This was a matter of some concern. The rail net serving the west coast ports was decidedly inferior to that serving those on the east and Gulf coasts. The capacity of the principal ports—San Francisco, Los Angeles, Seattle, and Portland—was hardly comparable to that of New York, Boston, Philadelphia, Baltimore, Norfolk, Charleston, and New Orleans. As a result of hurried wartime industrial expansion, labor was a continuous and plaguing shortage. Storage facilities for Army supplies and staging areas for Army personnel would obviously require considerable expansion at the same time that the Navy, as it also shifted almost its entire effort to the Pacific, would need to enlarge its west coast establishment.

The earliest specific preparations for redeployment, begun by the ASF in 1943, were concentrated for the most part on planning the use of the limited transcontinental rail net and the expansion of west coast facilities. Until the JCS agreed on the deployments that

[10] (1) Min, 174th mtg CCS, 14 Sep 44. (2) CCS 679, 14 Sep 44, memo by U.S. CsofS, title: Redeployment of Forces after the End of the War in Europe. (3) CCS 675, 12 Sep 44, memo by Br COS, title: Priorities for Personnel Shpg Subsequent to Termination of Hostilities in Europe. (4) CCS 675/1, 13 Sep 44, title: Combined Memo on Troop Movements Covering Period Oct 44 to Mar 45. (5) CCS 675/2, 15 Sep 44, Note by Secys, title: Combined Personnel Movement Problem Arising During First Year after Defeat of Germany.

would be necessary for the final phase of the war against Japan, these preparations had to be based on general estimates. Shipping requirements, which promised to be gargantuan, could hardly be estimated at all.

In early April 1944, the JCS approved the first general plan for redeployment, worked out by the Joint Planners in the preceding two months. It was admittedly something of a shot in the dark, since no firm strategic concept for the final stage of the war existed as yet. Based on the alternate assumptions of German defeat by 1 July and 1 October 1944, and on the expectation that the USSR would subsequently enter the war against Japan, the concept projected deployment forward in quarterly estimates for the 9-month period following each of the two theoretical dates of Germany's defeat. In both cases the Joint Planners surmised that only air and naval forces need be directly redeployed, that there would be "sufficient Army combat units in the United States to meet the requirements of Pacific operations in late 1944 and early 1945."[11]

Under the more reasonable assumption—defeat of Germany by 1 October—the planners provided for a progressive reduction of European forces from 42 divisions and 149 air groups to 12 divisions and 20 groups by 30 June 1945, with a corresponding build-up in the Pacific from 22 divisions and 56 air groups to 42 divisions and 178 groups. On the same date 36 divisions and 34 air groups would be in the United States, 15 of the divisions to constitute a strategic reserve for possible employment in the war against Japan, the rest to be either used as a replacement and training pool or demobilized. Eight of the divisions in the Pacific were earmarked for an operation against the Kuriles or Hokkaido to keep open the line of communication to the USSR. As soon as possible after 30 June 1945 the European force was to be reduced to the total agreed to as necessary for occupation, 8 divisions and 20 air groups, or approximately 400,000 men. Virtually all naval forces were to be redeployed to the Pacific except for a few vessels necessary in the Atlantic for local defense and mine sweeping.

The main movements contemplated for the nine months following the defeat of Germany, apart from naval vessels, were: 102 air groups from Europe direct to the Pacific and CBI; 27 air groups and 30 ground force divisions from Europe to the United States; and 20 divisions and 20 air groups from the United States to the Pacific. All divisions and air groups would be accompanied by normal complements of supporting troops. A basic premise of the plan was that these movements would receive priority over all others, military or civilian, during the 9-month period. On that premise, and assuming the British *Queens* would continue available to the United States, the planners anticipated that transport shipping would be sufficient to carry out the movements.

The ASF was also ready, by early April 1944, with its own administrative and logistical plan for redeployment, based largely on the concurrent deliberations in the joint committees but differing in some respects from the final joint plan. The ASF was disturbed by the prospective shortage of service troops in the final phase in the Pacific, since

[11] JCS 521/5, 2 Apr 44, rpt by JPS, title: Strategic Deployment of U.S. Forces to 31 Dec 44.

the General Staff had ruled against including the additional allotment of 100,000 or more, the ASF estimate of the need, in the troop basis. The supply planners consequently decided service troops must be provided by early direct redeployment from Europe and included a provision for this movement in their plan. They also proposed to accelerate the movement of troops out of Europe, so that only the 400,000-man occupation force would remain in Europe nine months after the defeat of Germany. The whole redeployment movement during the first nine months, they estimated, would involve moving 1,354,000 soldiers from Europe to the Pacific, 1,597,000 from Europe to the United States, and 1,088,000 soldiers and 343,000 naval personnel from the United States to the Pacific. The ASF planners optimistically predicted that troop shipping would be available to carry out the accelerated movements and that Pacific bases would be capable of receiving the men and supplies. The greatest bottleneck, they thought, would be on the west coast of the United States. They proposed to overcome it by enlarging berthing capacity at Pacific coast ports and storage capacity nearby, by eliminating all nonessential rail movements into the area, and by taking steps to relieve the labor shortage.[12]

At the time neither the joint agencies nor the ASF investigated the availability of cargo shipping to support the redeployment moves. The general assumption that there would be enough was predicated on a very low estimate of requirements for civilian relief in Europe and on a supposition that civilian relief demands would take second place to military needs. The JMTC did undertake a study of the problems involved in moving fighter planes and light bombers from Europe to the Pacific (heavy and medium bombers would go by air) and concluded it could be accomplished by extensive use of tankers to carry deck loads of aircraft.[13]

The whole question of shipping, cargo and personnel, required combined consideration with the British. The premise that the British *Queens* would be available for redeployment of American troops could hardly be taken for granted since the British would themselves want to carry out extensive personnel movements after V–E Day. Attempts by the Combined Staff Planners to draw up a combined redeployment plan, however, came to nought, and protracted negotiations during the summer of 1944 failed to produce more than the vaguest of assurances from the British on the subject of the *Queens*. The British planners insisted that an over-all evaluation in the light of agreed strategy and other Allied objectives in the post-V–E Day period must precede firm shipping plans or commitments, and no such agreed strategy existed as yet. Moreover, time was to prove that the British had entirely different ideas on the scope and priority of civilian relief in Europe than did the Americans.[14]

[12] Strat Log Br, Plng Div ASF Study, 8 Apr 44, sub: Redeployment of U.S. Forces After Fall of Germany, ASF Plng Div.

[13] JMT 53/1, 6 May 44, title: Transport of Aircraft by Water, Redeployment Plng.

[14] (1) CPS 120/2, 21 Feb 44, title: Redeployment of Forces Against Japan after the Defeat of Germany. (2) JWPC 189/4, 5 May 44, same title. (3) JCS 930, 4 Jul 44, title: Combined Use of Troopships after Defeat of Germany. (4) Min, 167th mtg CCS, 14 Jul 44. (5) CCS 615 series, title: Combined Use of Troopships after Defeat of Germany.

Going ahead therefore without British agreement, the JPS produced another redeployment forecast in mid-June 1944. It was little more than an up-dating of the earlier plan, based this time on Germany's defeat on the alternate dates 1 October 1944 and 1 January 1945, with deployments projected forward to 30 September 1945 in each case. The figures in the 1 October plan differed from the earlier ones only in that they reduced the deployment of air groups to the Pacific from 178 to 170 and deferred movement of 13 of them by three months. The 1 January plan, though it recognized that at least 14 more divisions would be deployed from the United States to Europe by the end of the year, still contemplated no substantial redeployment of ground troops from Europe to the Pacific. The plan did stipulate that six divisions for the North Pacific operation, should it prove necessary, would have to come from the strategic reserve reconstituted in the United States by troops returning from Europe. Although the detailed breakdown indicated some redeployment of service troops, the joint planners did not attempt to analyze that problem either. Nor did they indicate, for air or for service troops, whether redeployment would be directly from Europe to the Pacific, or indirectly by way of the United States.[15]

Up to this point, then, joint redeployment planning had largely been order-of-magnitude planning. The question of service troops was unresolved; redeployment of aircraft, despite the reduction, was calculated at near maximum without sufficient consideration of actual need or requirements for construction of bases from which they could operate. Policies and procedures were still undefined; principles on which any partial demobilization would proceed after the defeat of Germany unstated. In essence, planning was still divorced from any agreed joint or combined strategy for the final phase of the war on which firm force calculations and firm logistical plans could be based. The ASF, attempting to lay the detailed groundwork for redeployment, found itself operating on too many premises that would later prove false.

By August 1944 the prevailing atmosphere of optimism about the early end of the war with Germany had given redeployment planning a new air of urgency. On 12 August OPD established a special redeployment committee to recommend, after consultation with other interested agencies, basic policies for redeployment of the Army. Meanwhile, the War Department Personnel Readjustment Plan had, after long discussion, been developed to govern the selection of men for discharge from the Army after V–E Day. It established an elaborate point system based on length of service, overseas service, dependency, combat experience, and decorations as criteria for determining each individual soldier's eligibility for separation. It promised to complicate the whole process of redeployment considerably by requiring extensive adjustment of personnel in units before their movement from Europe to the Pacific.

On 6 September the OPD committee submitted its recommendations. Following cessation of hostilities against Germany, no further forces or means were to be moved to the European-African

[15] JCS 521/6, 11 Jun 44, rpt by JPS, title: Strategic Deployment of U.S. Forces to 30 Sep 45.

area other than the minimum essential for support and maintenance of occupation forces. Bases were to be closed out or reduced as rapidly as possible; service requirements of occupation forces were to be met to the maximum extent possible by civilian labor. Insofar as possible, units and individuals remaining in the United States when the war in Europe ended were to be employed in the Pacific before any similar types were redeployed from Europe, but "certain critical units and individuals, not immediately available in the United States" were to be "moved promptly from the European-African and other relatively inactive areas." Only the most critical, however, would move directly: "When time and other considerations permit, units which have been overseas an appreciable length of time, and which are scheduled for redeployment, will be returned to the United States for rehabilitation and conditioning before being moved to the Pacific." Conversion of units from one type to another, when necessary, was to be accomplished in the United States. Except when military necessity dictated otherwise, selection of both units and individuals for redeployment from Europe to the Pacific was to be governed by the point system; personnel were to be returned from the Pacific to the United States for discharge on the same basis. In order to keep requirements for new production at a minimum, surplus supplies in Europe and other inactive theaters were to be transferred directly to the Pacific. Units directly redeployed were to be accompanied by full T/E; units indirectly redeployed via the United States were to bring only minimum essential equipment but the rest of their T/E was to be shipped directly from Europe to their Pacific destination to the extent that the theater could accomplish it.[16]

Detailed redeployment planning within ASF had previously been going ahead on the premise that veteran units would proceed intact directly from Europe to the Pacific theaters. Adoption of the committee's recommendations would, the ASF insisted, result in loss of logistical efficiency. The reshuffling of units required by application of the point system would cause a delay of as much as a month in starting movements; indirect redeployment via the United States would add to the time lag in placing these units in action and increase the shipping load and the burden on U.S. ports and railroads. But these protests were to no avail. The preponderance of opinion among the General Staff was that public support was more important than logistical efficiency. Unless troops were redeployed via the United States, the redeployment committee noted, there was a "strong likelihood" of "restrictive legislation . . . upon the War Department, forcing the issue and possibly hampering the redeployment."[17]

[16] (1) Memo, Col Maxwell W. Tracy, Lt Col Harvey H. Fischer and Lt Col Edward M. Harris for Gen Handy, 6 Sep 44, sub: Redeployment of U.S. Forces Upon the Defeat of Germany, ABC 320.2 (3-13-43) Sec 5. (2) On the War Department Personnel Readjustment Plan see Maj. John C. Sparrow, *History of Personnel Demobilization in the United States Army*, DA Pamphlet 20–210 (1952), pp. 64–84.

[17] (1) *Ibid.* (1). (2) Memo, Gen Wood for Gen Roberts, 29 May 44, sub: JPS 193/8—Strategic Deployment of U.S. Forces. (3) Memo, Gen Somervell for ACofS, OPD, 2 Sep 44, sub: JCS 521/7—Redeployment of Forces Re-Oriented from Europe Against Japan. Both in ABC 320.2 (3-13-43) Secs 3 and 5. (4) Memo, Wood for Roberts, 15 Aug 44, sub: WD Plan for Readjustment of Personnel after Defeat of Germany, ABC 381 Strategy Sec Papers (7 Jan 43) 297–313, Tab 308.

These new procedures were not the only factors dictating revision of the existing joint redeployment plan. The ASF continued to harp on the service troop theme, and the appearance of a shortage for the Formosa operation gave their warnings a force that could not be ignored. The Joint Logistics Committee, moreover, in an exhaustive analysis of the joint plan found that the airfield capacity in the forward areas in the Pacific would be inadequate until the large land masses of Luzon or Formosa were taken and developed, and it pointed to the need for early dispatch of construction troops for this purpose. By late August the Joint Planners themselves were ready to admit that the high priority given the redeployment of the AAF must be reappraised and consideration given to moving service and supporting troops first to prepare the way. "The shortage of service units . . . ," the JWPC noted on 7 September, "is tending to dictate our strategy in the war against Japan."[18]

The Joint Military Transportation Committee, meanwhile, studying the shipping implications, expressed doubts that shipping would be available to support the deployments envisaged. No real assessment could be made, the committee pointed out, until a combined redeployment plan had been agreed to with the British within the CCS, for redeployment would depend on the "utilization of combined shipping resources."[19]

Formulation of a combined deployment plan for the final phase of the war on which a combined shipping plan could be based depended on development of a combined strategy in which the British role in the war against Japan would be carefully spelled out. The plans that emerged from OCTAGON were much too general to provide that basis; seeming agreement cloaked a basic divergence in national views and aims. In reality the American redeployment plan provided all the forces likely to be necessary for the final blow against Japan, and more, it appeared, than Pacific bases would be able to accommodate. If U.S. redeployment plans were carried out, British naval and air participation in the Pacific would be really unnecessary, and to some extent embarrassing. The British also had reservations about single-minded concentration on the war with Japan once the war with Germany was over, feeling that the need for reconstruction of their own war-shatttered economy and the economies of the liberated nations of Europe would preclude giving unlimited first priority on shipping to movement of troops and supplies to the Pacific. What the Americans really wanted was a simple promise that the British *Queens* would be available for American redeployment after V–E Day. The British were unwilling to consider this problem outside the whole framework of a combined strategy for the defeat of Japan and over-all consideration of civilian as well as military

[18] (1) JWPC 259/17, 7 Sep 44, title: Reorientation of U.S. Resources to the War Against Japan. (2) Memo, Somervell for OPD, 2 Sep 44. (3) JCS Memo 283, 17 Aug 44, title: JLC Study. (4) JCS 521/7, 30 Aug 44, rpt by JPS, title: Redeployment of Forces Re-Oriented from Europe Against Japan.

[19] (1) JCS 521/8, 8 Sep 44, rpt by JLC in collaboration with JMTC, title: Deployment of Forces Reoriented from Europe Against Japan. (2) JLC 183, 2 Sep 44, title: Logistical Study of Strategic Deployment of U.S. Forces.

demands to be placed on troop and cargo shipping after victory in Europe.[20]

In the preliminary studies of availability of personnel shipping at OCTAGON, the British Chiefs therefore rejected every American effort to formulate a specific schedule of combined movements, objecting with particular vehemence to one prepared by Somervell and Lord Leathers based on the premise that the principal British movement after V–E Day would be of the six divisions to India for DRACULA. The combined committees, to whom the problem was referred, wrestled unsuccessfully with it in the ensuing two months. The U.S. planners were not ready to proceed without a clear determination of what the British part in the war against Japan would be, and the British were apparently not ready to present a specific plan and to fight for it within the committee structure. Finally, in November the British proposed to postpone the study "until the defeat of Germany is clearly imminent and a realistic date can be firmly accepted as the basic assumption of the paper," and the Americans readily accepted, fearing that insistence on completing it "might result in the acceptance of British operations for planning purposes that will add little to the early defeat of Japan but will provide a basis for new demands on U.S. resources in direct conflict with U.S. requirements."[21]

The deadlock in the combined committee seems to have delayed any revision of the American joint plan. At least, no new plan appeared until late December, and in the meantime 1 October came and went without the hoped-for German surrender. Preparations on the operating level were quickened during September. Pacific coast stocks were boosted to the extent European operations would permit, and old inactive stocks cleared out; ASF teams were prepared for dispatch to Europe to help in the outshipping program; operating procedures and plans were elaborated and codified. But it was clear by mid-October that the war in Europe still had a long time to run. As the combined committees postponed their studies, the joint committees had to recast their own plans in the light of recent developments in both wars. For some months redeployment planning no longer seemed to have the same urgency as it had had in August and September. The movement of both combat and service troops to Europe was accelerated as the fighting on the Siegfried Line took its inevitable toll of American manpower and the lengthened continental supply lines made their demands felt. The prospect that redeployment from Europe would permit meeting the service troop crisis in the Pacific rapidly faded as did the prospect that the major portion of Pacific ground force needs could be met from troops remaining in the United States at the end of the war with Germany.

At the height of the discussions of the Formosa versus Luzon issue in September 1944, the JCS dispatched a message to U.S. commanders in Europe and North Africa asking whether any air and service units urgently needed in the Pa-

[20] On the civilian relief issue, see below, Chapter XXXI.

[21] (1) Memo, Maj J. A. Davison, British Secy, CPS and CAdC, for U.S. Secy, 15 Nov 44, sub: (a) Redeployment of Forces after War in Europe, (b) Relation of Available Resources to Agreed Opns. (2) Memo, C. H. Donnelly, U.S. Secy CPS and CAdC, for U.S. Members, 22 Nov 44, same sub. Both in ABC 320.2 (3-13-43) Sec 7. (3) CCS 675, 12 Sep 44; CCS 675/1, 13 Sep 44; CCS 675/2, 15 Sep 44; and CCS 679, 14 Sep 44.

cific could be spared before the end of the war with Germany. At the same time the CCS asked combined commanders to release landing craft at the earliest possible date. The replies were for the most part disappointing. Neither General Eisenhower nor General Devers felt he could spare any air or service troops. A few antiaircraft artillery units were reassigned but nothing else of significance. Of amphibious resources, SHAEF reported 18 LST's on their way from Europe to the Pacific and 20 British LCI (L) 's outbound for SEAC, but even the movement of amphibious craft was on a far smaller scale than the planners had supposed it would be after completion of DRAGOON. Either the craft were unserviceable, or they were needed for port operations, or they were assigned for the British eastern Mediterranean program. And in the last analysis, amphibious craft were no longer the most critical items in the Pacific. On 3 October the Joint Logistics Committee reported that instead

> the most critical shortages required to support further operations in the Pacific . . . are in medium and heavy artillery, truck units, motor maintenance units and engineer units, particularly portable bridge units. These shortages in the Pacific have been caused primarily by the high priority given to the provision of resources to the ETO as compared to other theaters. Units of the type required to reduce critical shortages in the Pacific are also essential to the continuation of operations in Europe. No possibility of redeploying medium and heavy artillery battalions or portable bridge units will exist until major German opposition is reduced. The greatly extended lines of communications and rapidity of movement have caused the theater to request expedition of the flow of truck companies and railway units and the shipping of engineer, signal, and medical units prior to the competion of their normal training.[22]

Strains on Manpower and Production

The critical shortages the Joint Logistics Committee noted in the Pacific in October 1944 were a measure of the strains full-scale war on two fronts was imposing on U.S. military resources, particularly on military manpower, cargo shipping, and Army supplies. These strains can be fairly assessed, however, only in terms of the basic programs that had been agreed on during the preceding three years, not in terms of the full capabilities of the American economy. Practically no significant adjustments could be made in these programs to meet the immediate situation, regardless of the theoretical capacity for further expansion of war production. Moreover, the whole question of adequacy of existing production programs was continually obscured by difficulties in the distribution process growing out of shortages of shipping for transoceanic movements and inadequate internal theater supply lines in both Europe and the Pacific. In cases of some specific types of supplies, production programs were probably inadequate; more frequently the distribution machinery failed to insure the arrival of supplies, produced in adequate quantity, at the time and place required. Only in the

[22] (1) JCS 1051/1, 6 Oct 44, rpt by JLC, title: Reorientation of U.S. Resources to the War Against Japan. (2) JWPC 259/17, 7 Sep 44, same title. (3) JCS 1051, 12 Sep 44, title: Early Reorientation of U.S. Air and Service Units from the ETO to Pacific. (4) Memo, Gen Roberts for Assistant Secy, WDGS, 8 Oct 44, sub: Reorientation of U.S. Resources to War Against Japan, ABC 320.2 (3-13-43) Sec 6.

case of military manpower did the limitations take on something of an absolute character hardly susceptible of solution by any kind of administrative action.

By October 1944 total Army strength had reached 8,103,000 officers and men, 400,000 above the 7.7-million ceiling established by the President a year earlier, and very nearly the practical limit of Army expansion. A net increase of only 200,000 men was to be registered by the end of May 1945. Army expansion went ahead during this period under special dispensations and without any formal establishment of a new ceiling. Meanwhile, the Navy sought and received sanction from the JCS and the President to expand from 2,900,000 men to 3,200,000 by the end of 1944 and to 3,396,000 by June 1945. The Navy's actual strength stood at 3,228,000 on 31 December 1944. The effects of heavy drafts for the military services and the tendency of individual members of the labor forces in 1944 to seek employment offering greater security and permanence produced increasing labor shortages in key war industries.[23]

The Army's overstrength did not permit activation of additional units in the troop basis over and above those originally calculated for a 7.7-million-man army, however numerous the internal adjustments within that troop basis. The overstrength was absorbed in providing for the "pipeline," that is, men in hospitals, replacement and reassignment centers, in transit, or on furlough under rotation policies—in short, what General MacNair once called "the invisible horde of people going here and there but seemingly never arriving."[24] The overstrength was insufficient to cover this "invisible horde," and the Army was hard put to maintain its schedule of activations. With mounting demands for special types of units for service functions, 90 divisions and supporting troops remained the fixed limit on ground combat forces. The inactivation of the 2d Cavalry Division to provide service troops for DRAGOON actually reduced the eventual total to 89. Drastic action was required to keep the divisions filled at all and to meet mushrooming demands for overseas infantry replacements. The drain on divisions in the United States for overseas infantry replacements in 1944 seriously handicapped the AGF divisional training program and led to the dispatch overseas of the last few of the 89 divisions filled with soldiers who had gone through only a short training cycle. The Army Specialized Training Program was very nearly liquidated, and 150,000 men in the program were funneled into the AGF; an additional 73,000 surplus aviation cadets were summarily sent back to ground units; ZI establishments were combed for men fit for combat duty, and troops engaged in housekeeping functions cut to a bare minimum; antiaircraft artillery and tank destroyer units were disbanded, and the men retrained mainly as infantry; forces at nearby base commands were progressively reduced.[25]

Insofar as manpower was available, the European theater got first call. At the end of October 1944 nearly 3 mil-

[23] (1) STM-30, Strength of the Army, 1 Jan 48. (2) Maj William P. Moody, Planning the Troop Bases for All Services for 1944 and Beyond, Sec IIC, ch. VII, pp. 39–43, History JCS.

[24] Greenfield, Palmer, and Wiley, *Organization of Ground Combat Troops*, p. 236.

[25] *Ibid.*, pp. 237–51.

lion Army troops were deployed in the European, Mediterranean, Middle East, and African theaters and about 1,335,000 in the Pacific, CBI, and Alaska. Another 215,000 were in nearby Atlantic base commands, making a total of roughly 4.5 million troops outside the continental United States with some 132,000 more en route. About 800,000 remained to be deployed before May 1945 when Army overseas strength was to reach its peak of 5.4 million men. Of these 800,000, about three-fourths went to the European theater and the rest to the Pacific and CBI.[26]

Despite this priority the European theater, as well as the Pacific and CBI, suffered from manpower shortages. As the divisional build-up on the Continent progressed the proportion of service troops fell until, in terms of its eventual troop basis of 61 divisions, the European theater calculated that it would be short something over 150,000 service troops. The War Department was unable to make up this deficit, despite ETOUSA pressure. The theater finally agreed to sacrifice ten heavy artillery battalions in order to get the equivalent in service troops, but a substantial shortage remained and made necessary more extensive use of civilian and prisoner-of-war labor.

An even more serious shortage of infantry replacements developed late in 1944, reaching its most critical stage at the time of the Battle of the Bulge. Unable to meet the demand for replacements, the War Department put pressure on the theater to squeeze men out of its own rear establishment. Efforts along this line were generally successful in meeting the immediate problem though in large part because casualty rates started falling after the successful repulse of the German Army in the Ardennes.[27]

Concomitant with its manpower shortages, the European theater suffered from supply deficiencies that played their part in producing and prolonging the fall and winter stalemate on the Siegfried Line. How far the supply deficiencies in ETO were the product of faults in the theater distribution process and troop wastefulness, how much the product of lack of port capacity and adequate lines of communication, and how much of failure of sufficient quantities to arrive in the theater is difficult to determine in every instance. Each supply problem constitutes a long and involved story in itself. The shortage of POL, for instance, so important in halting the drive to the German border in September, was entirely a result of lack of port and line of communication capacity. The same can be said of sporadic shortages of particular types of rations and small arms ammunition. Shortages of Class II and IV equipment, on the other hand, and of artillery ammunition derived at least in part from failure of the Zone of Interior agencies to ship adequate quantities. This failure in turn was a compound of inadequate production and theater failure to anticipate specific needs. The most persistent shortages of Class II and IV equipment were—and this is by no means an exhaustive list—field wire, radios, bridging material, winter clothing, trucks, tanks, tires, and gasoline drums. The causative factors varied from case

[26] STM-30, Strength of the Army, 1 Jan 48.

[27] See Ruppenthal, *Logistical Support of the Armies II*, 289–347, for a detailed account of the manpower problem in ETO during this period.

to case. The winter clothing situation, for instance, was as much a result of disagreements over design between the theater quartermaster and the Office of The Quartermaster General as it was of the failure of either the theater or the ASF to take adequate and timely action to provide for an unanticipated winter campaign. The shortages of trucks, field wire, and bridging material resulted from demands far in excess of anything anticipated; of these, the shortage of trucks, at least, was accentuated by delays in unloading ships carrying motor vehicles to the theater. The tire shortage was worldwide, and was produced by a rubber shortage that the new synthetic rubber plants were only beginning to make up. Too many gasoline drums were lost, strayed, or stolen, partly because of troop carelessness. On the other hand, the Army Supply Program for 1944 had simply not included enough tanks to provide an adequate reserve against combat losses and excessive wear and tear, and the day of supply for most types of artillery ammunition was set too low to provide for the kind of fighting that occurred on the Siegfried Line. The Americans had to borrow back lend-lease tanks from the British in December 1944, and almost all U.S. tank production earmarked for the British in 1945 was diverted to the U.S. Army to build up its reserves. Artillery ammunition for a time was strictly rationed.[28]

In any case, the large demands for supplies that appeared with the extension of the campaign in Europe reversed the earlier trend toward production cutbacks that had been dominant since the McCoy Board and the Richards Committee had rendered their reports early in 1943. The warning the latter group had issued against the "specious wave of optimism . . . sweeping the country," in the face of the fact that reserves had not yet been "subjected . . . to the prodigious demands of large successful offensives on several fronts," proved amply justified.[29] But since the optimism prevailed, even in military circles, up through the end of September 1944, the reversal could not take full effect until after the real crisis was over.

The cutbacks in Army production reflected in the 1 February 1944 Army Supply Program had already been reversed to some degree in the intervening months because of increased demands for heavy artillery and ammunition and for various types of operational supplies attendant on the European invasion and the accelerated pace of the advance in the Pacific. The dollar value of required ASF production had risen in interim revisions from $21.6 billion in the 1 February ASP to $24.8 billion by 30 June 1944.[30] The tendency in August and September, however, was once again toward economy, particularly in calculating reserves, for hopes were high that the war with Germany would soon be over. In calculating production requirements for 1944 and 1945 in the 1 October edition of the ASP, the 15 divisions over and above the 90-division ceiling for which equipment was being procured were dropped, and the strategic reserve thus reduced to only 10 divisions and supporting troops. At the same time stock levels for ZI depots were calculated on the basis of 60 days of expected issue

[28] (1) *Ibid.*, pp. 188–275. (2) On the diversion of British lend-lease tanks, see below, Chapter XXV.

[29] (1) Levels of Supply, app. F, p. 89. (2) See above, ch. V.

[30] See above, ch. V.

for items vital to combat and 45 days for all other items in lieu of the previous provision for 90 days of all items. The total ASF procurement program for 1944, predicated on continuation of the war with Germany, in October 1944 stood at $23.5 billion in dollar value and that for 1945 at $23.6 billion.[31] A special ASP to cover the first year of a one-front war provided for significant reductions in these goals should the war with Germany come to an end in the interim.

The increasingly critical supply situation of many items during October, November, and December 1944 forced progressive upward revision of these goals. The program for 1945 received the main impact because there was not enough lead time to reaccelerate production in 1944. Nevertheless, by the end of 1944 required ASF production for that year had been boosted upward to $24.5 billion and, in response to urgings from the European theater, pressure was being exerted to increase current production of artillery ammunition, tanks, field wire, engineer construction and bridging equipment, radios, and numerous other items. By February 1945 programed procurement for that year (based on continuation of the war with Germany) rose to nearly $28 billion.[32]

Meanwhile, actual production rates rose only slowly, reflecting, first, the difficulties of restoring or expanding production lines on short notice, and second, the scarcity or lack of mobility of necessary skilled labor. Few of the proposed boosts were realized before new evidences of the impending defeat of Germany again brought cutbacks. Any significant boosts that did occur were in the production of such items as mortars, heavy artillery and artillery ammunition, medium and heavy trucks, bombs, and airborne radar, and took effect mainly in the early months of 1945. The most dramatic effort was exerted to increase the rate of production of artillery ammunition, which the European theater represented as the most serious shortage it was facing. But only limited acceleration of production on short notice was possible because of the lead time required to prepare new facilities. Some boosts in the artillery ammunition program had been begun much earlier in 1944 following the appearance of an artillery crisis in Italy. The most the War Department could do in the emergency of late 1944 and early 1945 was to push for maximum output with existing facilities. And as so frequently happened, the demand in the ETO eased some time before the effects of these efforts could be fully felt.[33]

In summary, then, the supply shortages that developed in overseas theaters as a result of full-scale commitment on two fronts produced a flurry of plans for expansion of production of Army supplies, but their practical effect was limited to a very few lines. They also produced a considerable diminution of lend-lease to the British.[34] Since most of the expansion plans were not carried into effect because of the rapid dissipation of the crisis in early 1945, they im-

[31] Frank, Army Supply Requirements, pp. 145–54.

[32] (1) ASF Monthly Progress Reports, Sep–Dec 1944, Jan–Feb 1945, sec. 1–C, Procurement, and sec. 6, Analysis. (2) ASF, *Annual Report for the Fiscal Year 1945*, pp. 173–74.

[33] See Ruppenthal, *Logistical Support of the Armies, II*, 247–75.

[34] See below, ch. XXV.

posed no heavy additional strain on American productive facilities, which, after the cutbacks early in the year, were operating at something less than their maximum capacity. In this light, it seems likely that the limitation on the American war effort, had further expansion been necessary, would have been in the supply of military manpower rather than the production of military material.

The Fall Shipping Crisis

The principal contributing factor to supply shortages in both the major areas of the war in the fall and winter of 1944 was not the shortage of supplies in the United States, but rather the difficulties of transporting the supplies to the using troops at the end of the line. In Europe and the Pacific, supply lines had been stretched to their elastic limits as a result of rapid advances. The lack of port facilities in both areas had produced shipping tie-ups that inevitably had their repercussions on the availability of cargo shipping for outward movement from the United States at a time when requirements for outward movements were mounting to their zenith. The large pools of shipping being employed for transport of supplies within the theaters themselves added to the drain. In Europe the effects of limited port capacity were compounded by the inadequacy of inland clearance facilities. While this latter factor was not so important in the island warfare in the Pacific, it had a part in producing shipping congestion in the Philippines.

By early October more than 200 ships, mostly commodity loaders, awaited discharge in European waters. The theater was still insisting, in the face of a discharge rate of only 95 ships in September, that new arrivals should continue at an average rate of 265 per month through the end of the year. If these requests were completely unrealistic in terms of ability to discharge, they still represented the theater's calculations of supply requirements for the operations it had to support. At the same time Pacific requirements were also expanding for operational shipping to be used in the invasion of the Palaus and of Leyte as well as for outward sailings from the United States. Concomitant with the decision to invade Leyte two months ahead of schedule, shipping congestion was already appearing in Hollandia harbor, and the actual invasion on 20 October was to produce a tie-up of monumental proportions.[35]

Merchant shipbuilding, meanwhile, though it had recovered from the doldrums of the early months of the year, was still running considerably behind the schedule that called for construction of 18.4 million dead-weight tons of cargo shipping in 1944, largely because of labor shortages, which were particularly prevalent in the yards on the west coast. Indications were, by the fall of 1944, that the slippage would amount to between one and two million dead-weight tons. Although the JCS on numerous occasions during the spring and summer had expressed concern to the Maritime Commission about this slippage, at the behest of Admiral King, they reserved their heaviest pressure for the combat loader program, which in midsummer was about one month behind schedule. The manpower priority granted the combat loader program, and the even higher

[35] (1) See above, chs. XV and XX. (2) Ruppenthal, *Logistical Support of the Armies II*, 126–30.

priority assigned companies producing B–29 aircraft, had some effect in slowing cargo vessel production on the west coast. More significant factors, however, appear to have been the tendency of skilled laborers in the yards to seek employment elsewhere, which they believed offered better postwar opportunities, and the growing shortage of manpower for both the military services and war production.[36]

In producing the shipping crisis of fall 1944 the slippage in the construction program was, in any case, of less importance than the growing retention of shipping in overseas theaters. The slippage had been more than balanced by a low loss rate and savings effected through reduced convoy requirements. As General Somervell noted in sounding a warning on 24 October, new tonnage was being added to the Allied merchant fleet at a rate of 500,000 tons per month, but there had still been an actual reduction of two million tons since the first of the year in shipping available for outward movements from the United States.[37]

Somervell's specific purpose was to call attention to the impending requirements for shipping civil relief supplies to Europe—for grain to Italy to raise the bread ration and for a large national import program for France. Only a few days later a further complication was to appear in the form of a concrete Soviet requirement for shipments of supplies to Siberia to stockpile against the day the USSR would enter the war against Japan. This new, and seemingly imperative, demand presented at the October Foreign Ministers Conference in Moscow, was initially calculated at 130 ship sailings in the Pacific over the next six months. Demands for civil relief needs and the Soviet program not only added to the dimensions of the resulting shipping crisis, but gave it strong political overtones.[38]

Even before the Russians made their demand, the situation looked serious enough. In terms of already reduced theater requirements, deficits were being predicted in both the Atlantic and Pacific, 20 sailings in October and 80 in November, for instance, just to northwest Europe. But in the light of the proven inability of the European theater to unload ships, these deficits on the Atlantic side simply could not be taken at face value. The ASF had already instituted cuts to take effect in October and November in spite of protests from the theater, but new requirements in the Mediterranean, the Western Hemisphere, and the Pacific, together with a lag in returners from the Mediterranean, combined to absorb most of the assets made available in this way. Early in October, therefore, Captain Conway of WSA proposed that substantial further cuts be made in sailings to the ETO and the ships be ballasted to the west coast to provide for Pacific deficits. Reviewing the dismal record of ETOUSA in forecasting its own discharge capacity

[36] (1) JCS 896/3, 8 Jul 44, memo by Adm King, title: APA-AKA Program. (2) Ltr, Gen Marshall to Adm Land, 16 Jul 44. (3) Ltr, Adm Land to JCS, 9 Aug 44. (2) and (3) in ABC 561 (7 Aug 43), Sec 2A. (4) JCS 896/5, 12 Aug 44, rpt by JLC, title: Effect of Recruitment by WMC on APA-AKA Program. (5) JLC 163/5, 13 Oct 44, rpt by JLC, title: APA-AKA Program.

[37] Memo, Gen Somervell for Gen Hull, OPD, 24 Oct 44, sub: Increased Requests for Shpg, ABC 560 (4 Jul 44) Sec 2.

[38] (1) On the Soviet aid program, see below, Chapter XXVII. (2) On the civil relief issue, see below, Chapter XXXI.

(125 in August as opposed to actual discharge of 76, 180 in September as opposed to actual discharge of 90) Conway called the current theater forecast that it could discharge 260 vessels in October "fantastic." The weather was bound to deteriorate, which meant that any increase of intake through Le Havre would be offset by declining performance over the beaches. Antwerp, it was now evident, could not be in operation before November at the earliest. Conway proposed, therefore, to reduce scheduled convoys to Europe by another 113 sailings over the next three months, and to divert 86 cargo ships to the Pacific. This would provide, he estimated, 118 arrivals in October, 88 in November, and 156 in December; these, he thought, would be sufficient, with the existing backlog of an estimated 180 idle ships in the theater, to keep continental discharge facilities fully employed. Assuming a discharge rate of 150 ships in October, 175 in November, and 200 in December, there would still be a backlog of 18 unloaded ships at the end of the year. Conway admitted the risk involved in thus reducing the offshore floating warehouses in Europe. "The decision to assume this risk," he wrote Gross, "is obviously a strategic one which must be made by the military authorities."[39] He indicated that in the meantime 24 vessels had already been diverted from the British Import Program and that he would pursue negotiations to secure further releases from that source.

The military authorities accepted Conway's solution in principle if not in detail, and promptly cut back scheduled sailings to the ETO in October, November, and December. The theater's protest that it needed 139 more sailings than offered, based on the frank admission that if forecasted discharge capacity did not develop they would be used for floating warehouses, was disregarded because of the need for ships on the other side of the world. During October the process of ballasting ships to the Pacific began and the deficit for that month was held to about 10 sailings. When on 20 October the discharge situation in Europe had not improved and there remained some 240 ships in European waters, Somervell informed the theater that it would get no more commodity loaders until the bank of such ships had been reduced to reasonable levels. He was willing to let the theater keep a bank of around 70 to 80 ships for selective discharge, but he was not willing to accept assurances of an improved discharge rate in the future as a basis for increasing the flow of shipping to ETO until the bank had actually been brought down to this figure.[40]

Meanwhile, the bank of ships off Leyte awaiting selective discharge was also mounting, and the situation in SWPA soon paralleled that in Europe. Into the deepening crisis was injected the Soviet demand for shipments to Siberia, eventually calculated on a reduced scale as requiring 85 sailings from the west coast from December 1944 through March 1945. Taking into account the sailings for Soviet aid, Somervell in mid-November estimated the prospective military deficit in the Pacific in succeeding months as 79 sailings in November, 83

[39] Ltr, Conway to Gross, 2 Oct 44, Reading File Aug–Nov 44, WSA Conway File.

[40] (1) Ruppenthal, *Logistical Support of the Armies II*, 128–30. (2) Monthly Rpt #4 for Oct 44, White to Darr, WSA, 4 Nov 44, folder Traffic Dept Monthly Rpts, Box 122876, WSA Conway File.

in December, 64 in January, and 57 in March. These figures, representing 30 to 40 percent of total requirements for outward sailings in the Pacific during these months, were, in the terms of the shipping authorities, "unmanageable." Somervell pressed on MacArthur the need to release ships for return to the Pacific coast, and warned him of drastic reductions in November sailings for lack of returners. Admiral King took similar steps to warn Nimitz. At the same time an obvious need to increase shipping to Europe once Antwerp was opened made it apparent that deficits on the Atlantic side would become even more "unmanageable" since so much cargo shipping was in process of being diverted to the Pacific. Somervell's mid-November estimates showed deficits of 25 sailings against an already reduced schedule in the Atlantic in November, 113 in December, 162 in January 1945, 142 in February, and thereafter at only a slightly reduced rate during the next four months.[41]

To reduce the deficits on both fronts to "manageable" proportions, Somervell on 11 November proposed to the Chief of Staff that drastic reductions be made in the nonmilitary programs in the Atlantic, beginning in December 1944. He would eliminate entirely American assistance to the U.K. Import Program, currently running at 40 sailings per month, and reduce assistance to other lend-lease programs by 12 sailings per month. Moreover, he would cut civilian relief sailings to the Mediterranean by 25 per month, those to northwest Europe by 9, and Russian Protocol shipments in the Atlantic by 10. These expedients, he suggested, together with some curtailment in military sailings to the Mediterranean, would provide an average of 200 sailings per month to northwest Europe in the months December through March 1945 and would concurrently reduce the Pacific deficit to an average of 50 sailings per month. As there would still be, he said, a deficit for all areas of 9 sailings on military account in December, 75 in January, 108 in February, 36 in March, and 53 in April, he proposed that the Maritime Commission step up its building program and WSA try to secure even more shipping from British sources. In connection with the last suggestion he noted that the chairman of the Maritime Commission had indicated that if a labor shortage of 35,000 men in the shipyards could be overcome by 1 January, shipbuilding could be accelerated by about five additional cargo ships per month. Somervell asked for a decision "at the highest level."[42]

Somervell's proposals became the basis for a JCS request to the President on 18 November "that the Executive action necessary to bring about these results be taken." Before forwarding it, the Joint Chiefs scaled down the deficit figures slightly and at the suggestion of Admiral King added a proviso that "if the full number of ships proposed cannot be obtained from the Atlantic or other sources, the deficit will be applied to the pro-

[41] (1) JCS 1173, 17 Nov 44, Memo by CofS USA, title: Remedies for Existing and Prospective Shortages in Cargo Shpg, forwarding Memo by CG ASF. (2) Msg, Somervell to MacArthur, 5 Nov 44, folder SWPac 1942 thru Apr 1945, Lutes File. (3) Min, 87th mtg JMTC, 3 Nov 44, Item 2. (4) Msg, CNO to CINCPOA, 9 Nov 44, copy in Navy (Year 1944), Box 122894, WSA Conway File.

[42] *Ibid.* (1).

posed Russian requirement and not to shipping for Pacific areas."[43]

The President Decides

The Somervell proposal constituted, as Colonel Lincoln, the Army's chief planner, noted, "another wallop" for the British.[44] The civilian shipping authorities were by no means ready to deliver the "wallop" for it would upset long standing arrangements on American aid to British shipping programs. They believed the idle pools of shipping in overseas theaters to be the real root of the trouble. In a JMTC meeting on 14 November Captain Conway asserted that "the present critical shortage of ships is wholly due to the retention of large numbers of vessels in the four major theaters of war," and told the assembled military shipping experts that they must take immediate steps to control more effectively the use of shipping by theater commanders. A system should be placed in effect, he said, that "would bring about promptly and automatically a reduction in sailings from the United States to any theater that is failing to turn vessels around promptly, unless the theater has a specified and authorized reason for failing to do so."[45]

Since there was no mention of any such action in the final JCS memorandum to the President, Conway enlisted the aid of the ailing Harry Hopkins in getting his own views before Roosevelt. In a letter to Hopkins he proposed that the President should tell the JCS:

> Until we can show that our own shipping is being efficiently used, I can not request the British Government to make a major sacrifice for the purpose of giving us assistance. There is every evidence that their shipping is being well used and used only for essential purposes. While our assistance to them should be held to the lowest level which will meet their urgent needs, we can not be in the position of asking them to bear the brunt of our failure to utilize our ships properly. For the same reason we must grant the Russian request to ship additional supplies from here beginning in December.[46]

On 22 November, Admiral Land, chairman of the Maritime Commission, took up the cudgels, presenting to the JCS chapter and verse on the military misuse of shipping:

> As of 15 November there were nearly 400 WSA controlled vessels retained for local operational use and . . . approximately 350 Army and Navy allocated ships idle awaiting discharge. . . . The extent of miscalculations by theater commanders is indicated by the fact that if the WSA had been able to meet in full the stated requirements of the Army and Navy, the number of vessels put on berth for dispatch to the four principal theaters in October, November and December would be 520 greater than it actually was. . . . The rate of discharge rather than the availability of shipping has been the ultimate limitation on supply in every major theater. . . . It is essential that theater commanders be held accountable for making realistic appraisals of reception capacity and reducing their requirements if congestion develops.[47]

[43] JCS 1171/1, 18 Nov 44, title: Remedies for Existing and Prospective Shortages of Cargo Shpg.

[44] Memo, GAL (Col George A. Lincoln) for Gen Hull, 16 Nov 44, sub: Shpg Situation, ABC 560 (4 Jul 44) Sec 2.

[45] (1) Min, 88th mtg JMTC, 14 Nov 44, Item 1. (2) For Conway's full statement see unsigned memo dated 13 Nov 44, sub: Recommended Action to Reduce Shpg Congestion in Major Theaters, folder Harry L. Hopkins, Box 122891, WSA Conway File.

[46] Ltr, Conway to Hopkins, 20 Nov 44, folder Harry L. Hopkins, Box 122891, WSA Conway File.

[47] Memo, Land for JCS, 22 Nov 44, Incl to JCS 1173/3, 22 Nov 44, title: Remedies for Shortages in Shpg.

Roosevelt accepted neither the JCS nor the WSA position in its entirety. Acting quickly on 20 November, the President asked WSA to negotiate with the British for release of 40 sailings per month from their Import Program during December, January, and February; instructed that use of American shipping for civilian purposes be cut to the bone; and suggested that if shipyards could be given assurances that they would be used to capacity throughout 1945 the manpower situation would improve. In a separate memorandum to Justice Byrnes, now director of the Office of War Mobilization and Reconversion (OWMR, formerly OWM), he urged the utmost efforts to solve the manpower situation in the shipyards; and in another memorandum, this one to Admiral King, he suggested that 10 to 12 sailings from the United States per month might be saved by reducing the Mediterranean convoy cycle from 10 to 5 days. Finally he told the JCS that they must make the "most urgent representations" to the theater commanders to break up idle shipping pools and to gear the number of sailings into their areas to reception capacity. He indicated that he would go no further in seeking transfer of British-controlled shipping until he was satisfied that these steps had been taken. Meanwhile, he wanted the shipments to the USSR started in December.[48]

The President and WSA had, quite obviously, put the burden of proof that shipping was being efficiently utilized on the military services. On 24 November, the JMTC, with the President's directives and the letter from Admiral Land in hand, reviewed somewhat defensively the steps that had already been taken to bring ship arrivals and discharge capacity in line and concluded that: "There remains the acceptance by all agencies, both in the United States and the theaters, of the fundamental principle that the use of ships from the United States in retained pools for storage purposes is prohibited."[49] Recognition of this "fundamental principle" was, of course, what WSA was insisting on. After some further discussion in the JMTC and among the Joint Chiefs themselves, the JCS finally took strong action on 9 December, issuing a positive prohibition to theater commanders against the use of ocean-going ships for storage, whether loaded in the United States or in the theaters. They also directed that requirements for cargo shipping must be adjusted to discharge capacities and selective discharge discontinued. Reports were to be made to Washington on compliance, the War Department to be charged with supervision of ship utilization in European theaters and in SWPA, the Navy with that in POA. Each theater was to establish a shipping control agency to co-ordinate the use of shipping within the theater in accordance with the directive. On 6 January 1945 the JCS added a definite penalty, which provided that any ships held in the theater more than 30 days would be counted either as rotational retentions against quotas or as an accretion to the local fleet.[50]

[48] JCS 1173/2, 21 Nov 44, title: Remedies for Shortages in Shpg. The memo from the President to JCS is inclosed with this paper; the other three Presidential memos are appendixes to it.

[49] JCS 1173/4, 25 Nov 44, rpt by JMTC, title: Remedies for Shortages in Shpg.

[50] (1) Msg WARX 74985, JCS to CG's of All Theaters and Sea Frontiers, 9 Dec 44. (2) Min, 90th mtg JMTC, 7 Dec 44, Item 3. (3) JCS 1173/7, 5 Dec

Even before the JCS decision the ASF had already been putting pressure on MacArthur, informing him on 23 November 1944 that he must cut his retentions by 20 ships and that many of the shipments scheduled for December must be postponed. MacArthur protested at first and pleaded for deferment of the cuts until the critical phase in operations in the Philippines was over; he said cuts could be accomplished only at serious cost to the Leyte operation and the scheduled Luzon operations. But in light of the JCS directive, the known backlog awaiting discharge and the extremely black picture of SWPA shipping practices as painted by the WSA representative there (". . . all barrels and buckets full and the taps still running . . . ," he wrote),[51] the ASF could hardly accept his representations at face value. MacArthur was forced to cut his retentions and accept deferment of 10 sailings from the mainland in December; in January retentions were cut back more, reducing them all together from 195 in mid-November to 145; and shipping requirements on the United States continued to be rigorously pared for some months afterward. These measures, combined with a normal improvement attendant on the stabilization of the situation on Leyte brought the worst of the SWPA shipping tie-up to an end. While it continued to be a bone of contention between the theater and Washington during the Luzon Campaign, never again did it reach such crisis proportions.[52]

The results in Europe were generally similar. In November the theater discharged only 115 ships on the Continent and in December only 130 despite the opening of Antwerp. The German counteroffensive in mid-December forced the theater to embargo shipments into the forward areas, thus producing a glut of supplies in the ports that inevitably reacted on the rate of unloading. The pool of idle ships remained unliquidated until March, while scheduled sailings for December, January, and February were cut back severely. Moreover, at General Somervell's insistence, in December 25 of the 35 Libertys retained for cross-Channel movements were returned to the United States along with 21 other partially unloaded Libertys. Not until March did port discharge capacity in the ETO finally reach a point where it ceased to be a limitation on the rate of flow of supplies.[53]

44, rpt by JMTC, title: Remedies for Shortages in Shpg. (4) JCS 1173/8, 8 Dec 44, memo by COMINCH and CNO, same title. (5) JCS 1173/9, 9 Dec 44, rpt by JMTC, same title. (6) App. C, JMT 82/7, 6 Jan 45, title: Dry Cargo and Refrigerator Ships as Retentions.

[51] Ltr, H. L. Schage to F. W. Isherwood, WSA, San Francisco, 27 Nov 44, sub: Shpg in SWPA, OCT HB, folder Shpg in Pacific 1944–45, Corresp ASF-WSA, Wylie File.

[52] (1) Msg 54876, MacArthur to Somervell, CM-IN 14952, 15 Dec 44; Msg C-54712, MacArthur to Somervell, CM-IN 12436, 13 Dec 44; Msg WARX 76544, Somervell to MacArthur, 13 Dec 44; Msg, WARX 77844, Somervell to MacArthur, 15 Dec 44 and WARX 80467, 21 Dec 44. Copies of all in OCT HB, folder Ships for Pac Theaters Nov 44–Feb 45, Wylie File. (2) Memo, Gen Wylie for Gen Wood, 19 Dec 44, sub: SWPA Shpg Situation, OCT HB, folder Shpg in SWPA 1944–45 Corresp with ASF, WSA, Wylie File. (3) Ltrs of Herbert Schage to Capt Granville Conway, Dec–Jan 1945 in folders Pac 1945 Box 122891 and Pac Area (1944) Box 122893, WSA Conway File. (4) Msg CX-56311, MacArthur to OPD and OCT, CM-IN 15325, 16 Jan 45, OCT HB, folder Ships for Pac Theater, Nov 44–Feb 45, Wylie File. (5) Memo, Wylie for Gross, 22 Jan 45, sub: Summary of Actions and Msgs, SWPA–OCT, ASF, OCT HB Overseas Comd file, folder Shpg, 1945 SWPA. (6) Msg, Gross to MacArthur, CM-OUT 22708, 17 Jan 44. (7) Masterson, Transportation in SWPA, pp. 782–808.

[53] Ruppenthal, *Logistical Support of the Armies II*, 131–133.

The results then, were both a curtailment of military requirements for cargo shipping and, beginning in December 1944, an increase in the number of ships returning to the United States for outward voyages. The shipping crisis gradually dissipated without resort to anything like so drastic a curtailment of civilian shipping services as General Somervell had initially proposed. The Soviet program was begun with 16 sailings from the west coast in December as the President had requested, and the demands placed on the British were held to much smaller proportions. Following the President's instructions, WSA immediately began negotiations with the British for the release of 40 sailings per month in December, January, and February. The British protested that they had already released some 80 sailings in the previous three months; they agreed to accept some further reductions in December, but said they could not accept those proposed in January and February 1945. On 9 December Admiral Land proposed to President Roosevelt a more flexible approach. Citing the gains already made in breaking up idle military pools and diverting ships from the coastal and South American trade, Land proposed to tell the British that the United States would "provide as many sailings as possible for their program but will have to reduce our assistance rather than allow military operations to be interfered with."[54] By adopting this flexible approach it proved possible to avoid any drastic cut in assistance in the British Import Program even in December, and by the end of the month prospects were very bright that it would not be necessary to ask for any of the 40 ships in January and February. At this time Captain Conway wrote with some satisfaction of the results of the JCS directive to the theater commanders:

> I informed Mr. Hopkins when the paper was written that I believed it would be equivalent to the construction of 200 new ships within two months. I believe now that I underestimated the results.
>
> For December, we supplied the military with all the ships they could use and also provided the British with the number of sailings they requested. In January, not only the military program will be met but also the civilian and liberated areas will be provided for in full, and I am sure that we will also meet the entire British program, including 40 ships for the British imports.[55]

The British Import Program did suffer some curtailment in the last four months of 1944. The level of U.S. aid fell from 4 million dead-weight tons in continuous employment in the third quarter of the year to 3.5 million tons in the fourth quarter. But the total British Import Program in 1944 exceeded by a few hundred thousand tons the 25-million-ton goal established at the beginning of the year, and this in the face of much criticism of the high stock levels of food in the British Isles. Moreover, American shipping assistance actually rose to the equivalent of 4.3 million dead-weight tons of shipping continuously employed in the first quarter of 1945 and to 5 million in the second quar-

[54] (1) Memo, Adm Land for Roosevelt, 9 Dec 44, sub: Merchant Shpg, Reading File Nov–Dec 44, Box 122893, WSA Conway File. (2) Ltr, William O. Hart, BMSM, to Conway, 8 Dec 44, BMSM 1944, Box 122869, WSA Conway File.

[55] Ltr, Conway to W. Averell Harriman, Moscow, 29 Dec 44, Reading File Nov–Dec 44, Box 122893, WSA Conway File.

ter. The "wallop" to the British that the shipping crisis seemed to portend thus never materialized.[56]

The British, nevertheless, had sufficient reason to be worried, in December 1944, about the scale of future American shipping assistance, and about the effect that the overriding priority the U.S. Chiefs of Staff proposed to give to military operations in the Pacific would have on shipments of relief and rehabilitation supplies to liberated areas in Europe after the war with Germany was over. Regretting now their failure to secure the sort of commitments in the form of a combined shipping budget at OCTAGON that they had gotten at previous conferences, in early December they proposed a new over-all review of the cargo shipping situation on the combined level and dispatched a special mission to the United States for the purpose. Negotiations were to drag on through the conferences at Malta and Yalta. The principal issue around which these negotiations would turn, however, was that of the relative priorities of European civilian relief and military requirements for the war against Japan rather than that of the British Import Program.[57]

The concentration on shipping congestion in overseas theaters as the real root of the shipping crisis also brought into question the proposals advanced for accelerating and extending the cargo ship construction program. In commenting on Admiral Land's severe criticisms of military shipping practices, General Somervell admitted that he had presented "a factual story . . . in agreement with our statistics," but pointed to the slippage in the Maritime Commission's 1944 shipbuilding program as an additional causative factor of which the admiral should be pointedly reminded.[58]

Pointed reminders had little effect, however. The basic issue was the President's proposal to extend shipbuilding contracts through the end of 1945 at approximately the same rate as planned for the first six months of the year, which, in turn, was approximately the same rate as originally scheduled during 1944. The purpose was clearly to assure a continuing supply of labor in the shipyards rather than to meet any needs then specifically calculated for the second half of 1945. Justice Byrnes, in replying to the President's memorandum proposing this step, questioned whether it had any real pertinence to the existing shortage, which, following the WSA line, he described as "an artificial appearance" caused by military waste. Noting that no deficits were predicted for the latter half of 1945 even if Germany continued undefeated, Byrnes concluded that extension of the existing rate of ship construction would merely result in overbuilding. He suggested that the JCS and WSA undertake a study of the shipbuilding program for the last half of 1945 based on requirements anticipated for that period and the prospective availability of shipping to meet them, not in terms of the existing crisis, which construction in late 1945 could do nothing

[56] For the British viewpoint on the crisis, see Behrens, *Merchant Shipping*, pages 409–19. Figures on American aid are from the table on page 419.

[57] For treatment of these negotiations, see below, Chapters XXIII and XXXI.

[58] Memo, Somervell for CofS, 1 Dec 44, sub: Memo from Adm Land on Merchant Shpg, ABC 560 (26 Feb 43) Sec 1A.

to alleviate. Meanwhile, he agreed, efforts should be pushed to accelerate ship construction under existing contracts.[59]

This reasonable proposition was accepted by all concerned, and the studies were soon closely tied in with the overall review of the cargo shipping situation on the combined level. Pending completion of the studies, Byrnes went ahead on 27 December to authorize a much-reduced construction program for the second half of 1945, including 102 Victorys but no Libertys at all. Meanwhile, actual production of cargo shipping in 1944 amounted to 16.3 million dead-weight tons, more than 2 million less than projected in December 1943. Efforts to accelerate production in the fall crisis apparently had little effect.[60]

Effects of the Crisis

The effects on military operations of the 1944 cargo shipping crisis are difficult to assess; it is impossible to say whether there was ever any genuine shortage of shipping. Certainly all theater commanders in the fall of 1944 and the winter of 1944–45 had to make do with considerably less shipping than they thought they needed. Obviously, however, their stated requirements were vastly inflated, and their reduction had none of the disastrous consequences so often predicted. While all theaters had to absorb some cuts, the heaviest impact was on the European and the Southwest Pacific theaters, where congestion reached its most serious proportions.

In assessing the effect on the European theater, it must be kept in mind that the curtailment of sailings to the Continent had been begun by the War Department long before the civilian authorities intervened, and that the effect of this curtailment was felt from late September 1944 onward. That the ETO suffered from supply shortages of various kinds throughout the fall and winter is undeniable, and failures in the distribution process, not lack of volume of production, were the principal factors in producing them. The shortage of shipping for outward movements to the ETO, however, was not the cause of these failures in the distribution process. It was, rather, the reverse, for the shortage of port facilities and an adequate supply line forward to the armies in ETO was the prime factor in producing the shortage of shipping. Out of these circumstances grew an idle pool of cargo shipping larger than any that occurred in any other theater during World War II. Granted that the idle pool, with individual ships used as floating warehouses for selective discharge, provided critical supplies necessary for operations, it still does not follow that meeting the theater's full requirements for cargo shipping would have had any appreciable effect in solving the logistical crisis in ETO. The root of the crisis was failure to take and develop ports in pace with the rapid advance across France. It was the lack of discharge capacity and

[59] Memo, James F. Byrnes for President, 25 Nov 44, Incl in JLC 249/D, 20 Dec 44, title: Review of Shpg Situation for 1945.

[60] (1) JCS 1173/9, 9 Dec 44, title: Remedies for Shortages in Shpg. (2) Decision Amending JCS 1173/9, 11 Dec 44, ABC 560 (26 Feb 43), Sec 1A. (3) JLC 239/D, 11 Dec 44, title: Remedies for Shortages in Shpg. (4) JLC 249/D, 20 Dec 44, title: Review of Shpg Situation for 1945. (5) JLC 249/1/D, 27 Dec 44, same title as (4), with Incl, Ltr, Byrnes to Adm Leahy, 23 Dec 44.

of an adequate depot system, and not the shortage of transoceanic shipping, that produced the logistical difficulties in ETO that undoubtedly in turn played their part in prolonging the war in Europe until May 1945. And it was this prolongation of the war in Europe that produced the excessive strains on cargo shipping for use in supporting the war in the Pacific and for civilian relief and economic rehabilitation programs.

The situation in the Southwest Pacific admits of less positive conclusions. The reaction to worsening ship congestion in connection with the Leyte operation was quicker than in Europe, and the use of ships for floating warehouses in SWPA was consequently of shorter duration. Yet, supply on Leyte, like that in Europe, was marked more by shortages of suitable types of equipment, for instance Bailey bridges, than by an over-all shortage of all types that could be laid at the door of the shipping shortage. The subsequent assault on Luzon was postponed for three weeks, from 20 December 1944 to 9 January 1945, but because of delay in building airfields on Leyte and generally slow progress of the advance there (in turn a result of bad weather and terrain difficulties) rather than because of lack of shipping. More than one of SWPA's logistical planners welcomed the respite the three weeks delay offered for preparation of adequate plans and schedules for Luzon and for requisitioning the specific types of supplies that would be needed to develop facilities on the island. In the Central Pacific there was also a delay in launching the operation against Iwo Jima—from 20 January to 19 February 1945—but this in turn was mostly a by-product of the delay in the Philippines, whence the necessary air support was to come.[61]

The major impact of shipping cutbacks in the Pacific fell on plans for operations after Luzon and Iwo Jima. By late 1944 plans were taking shape for the development of a great base in the Philippines from which the invasion of Japan would be mounted. Concomitantly, the rear areas in the South and Southwest Pacific were to be rolled up, troops and matériel moved forward to the new base. The Philippine base development plan required enormous tonnages both from those rear areas and from the United States. The cutback in outward sailings from the United States forced long delays in the shipment of material from the west coast and the cutback in SWPA retentions caused similar delays in the roll-up of rear areas. Another casualty of the shipping shortage was MacArthur's plan to move rapidly into the Netherlands Indies once he had gained a foothold on Luzon; subsequently this operation was so reduced in scale that it bore little resemblance to MacArthur's original plan. Yet these costs cannot be ascribed to the shortage of shipping alone. They leave unanswered the legitimate question whether, had the shipping been available, it could have been used effectively in view of the lack of ports, unloading facilities, and assembly areas.

In the last analysis, then, the "shipping crisis" was really more a product of a shortage in discharge facilities than one of merchant shipping itself. Still, the verdict of Justice Byrnes that the

[61] (1) Hayes, War Against Japan, II, 315, History JCS. (2) *Engineers of SWPA*, I, 229. (3) Cannon, *Leyte: The Return to the Philippines*, pp. 184–92.

shortage was "an artificial appearance" caused by "waste of merchant shipping" on the part of the military services seems unduly harsh.[62] Shipping congestion in both the Pacific and Atlantic in the fall of 1944 was a product of rapid advances as theater commanders tried to end the war as quickly as possible. To them, a certain amount of waste of shipping seemed justified if required to speed the tactical advance. In their view, time was of greater importance than efficient logistical management. The basic psychology that led commanders to seize tactical advantage and worry about good logistical management later, the psychology that produced the shipping congestion, also undoubtedly played its part in hastening the end of the war on both fronts.

In any case, merchant shipping seemed to have become, at the end of 1944 as it had been shortly after Pearl Harbor, the most critical of Allied resources. The JCS directive of 9 December, inspired by WSA, forbidding the use of cargo ships for floating warehouses in either the Pacific or Europe went far to ameliorate a rapidly mounting crisis and to provide for more equitable distribution of these resources, not only for strategic military needs but for political ends (such as civilian relief and the British Import Program) that with the approach of the end of the war were taking on increasing importance. Despite the amelioration, the cargo shipping question weighed heavily on the minds of the military staffs as they turned to the problems of the final phase of the war in the Pacific, where the increasing scale of operations threatened to impose demands that, simply because of geography, would assume astronomic proportions.

62 (1) Memo, Byrnes for President, 25 Nov 44. (2) See also the severe strictures on the waste of merchant shipping by the U.S. military services in Behrens, *Merchant Shipping*, pp. 409–30.

CHAPTER XXIII

The Pacific in Transition

By the end of November 1944 the joint planning staffs had at least tentatively agreed on the basic outlines of a strategy for the final phase of the war against Japan. In the Philippines, the occupation of Leyte was to be completed, Luzon taken, and operations conducted to reduce isolated Japanese garrisons on other islands in the group. Meanwhile POA forces would proceed with assaults on Iwo Jima and Okinawa. Once positions in the Philippines, Bonins, and Ryukyus were secured, the strategic bombing campaign and naval blockade would be stepped up and preparations advanced for a final assault on the Japanese home islands. Tentative plans scheduled the final assault in two phases: the first, Operation OLYMPIC against Kyushu; the second, Operation CORONET against Honshu, the principal island of the Japanese homeland. OLYMPIC and CORONET were to be the Pacific counterparts of OVERLORD in Europe and the culminating strokes in the long offensive against Japan that had begun on Guadalcanal in 1942.

As far as OLYMPIC and CORONET were concerned, these were planning decisions. Only the operations in the Philippines, Bonins, and Ryukyus had actually been directed by the JCS. And if the planners had been able to agree on the main outlines of strategy, it was with many reservations by the Navy. Questions about subsidiary operations continued to be very much alive in their discussions. In Nimitz' ICEBERG plan, the invasion of Okinawa was to be followed by further expansion in the Ryukyus requiring progressively larger forces. He hoped then to go on to seize a base on the China coast, most probably in the Chusan-Ningpo area (Operation LONGTOM). MacArthur had designs to move rapidly into the Netherlands Indies once his foothold on Luzon was secure. The planners in Washington also had to consider the possibility that if the USSR entered the war against Japan, it would be necessary to advance in the north Pacific through the Kuriles to Hokkaido to maintain a supply line to Siberia. Invasion of Hokkaido was also considered as a prelude, or even as a substitute, for the assault on Kyushu. Some thought was given to the possibility of moving from the Philippines against the island of Hainan and thence to the Liaotung Peninsula on the mainland of China.

Ostensibly these questions were debated in terms of the necessity of securing further bases for invasion of Japan and for maintaining unremitting pressure on the Japanese. Actually they involved a basic conflict of viewpoint between the Army and Navy about the necessity of the invasion itself. The Navy placed a much greater emphasis on subsidiary operations along the China coast

and in the north Pacific as a means of obtaining bases from which Japan could be strangled by naval blockade and air bombardment. The Army insisted on subordinating all subsidiary operations to preparations for mounting the final assault against Japan at the earliest possible moment.

That final victory over Japan was assured, there was no longer any doubt in U.S. councils. Timing was the vital question. American staffs, reflecting the temper of American public opinion, were impatient. Their impatience, nevertheless, did not permit them to underestimate Japanese ability to resist. To the Army staff, at least, mass invasion seemed the quickest way, indeed the only way, in which Japanese capitulation could be assured. It was also undoubtedly the costliest way both in human lives and resources, and the way that would require the most extensive redeployment of the forces from Europe. The tentative plans of November 1944 established an almost unbelievably tight timetable. The invasion of Luzon was to begin in December, Iwo Jima to follow in mid-January, and the first phase of ICEBERG, the attack on Okinawa, on 1 March. The second and third phases of ICEBERG, seizure of Ie Shima and Miyako Jima and adjacent islands, respectively, were to follow between March and mid-August. OLYMPIC, the invasion of Kyushu, would begin in September 1945; CORONET, the assault on Honshu, in December.[1]

This tight schedule certainly left little leeway for any subsidiary operations. The demands of the major phases of the program already directed – Luzon and Okinawa – promised to put a heavy strain on Army resources and cargo shipping in the Pacific as long as the war in Europe continued. Yet there was always the possibility that a long delay in victory in Europe would require subsidiary operations to maintain pressure on the Japanese; and the Navy constantly pressed for a fast pace in the Pacific regardless of events in Europe.

The period of transition in the Pacific from its assigned status as a secondary theater in a two-front war to that of a primary theater in a one-front war, extending roughly from November 1944 to May 1945, was thus a peculiarly difficult one for Army strategists and logisticians alike. They had to give first priority to the continuing war in Europe while providing the essentials for Pacific operations that were larger and more demanding than ever before. Simultaneously, the planners had to lay the groundwork for the even more massive assaults of the final phase of the war when Army forces could be redeployed from Europe to provide a better balanced force in the Pacific. In retrospect, there can be little question that the difficulties were overestimated, that the planned commitments of resources were far too generous, and the various shortages exaggerated. Yet the problems were real enough in the perspective of the time. The planners could not afford to underestimate Japanese capabilities, for all their previous experience had taught them to expect fanatical resistance to the bitter end. Few of them had any knowledge of the magic brewing in the MANHATTAN Project, and therefore could not, even conditionally, base any plans

[1] (1) JCS 924/8, 23 Nov 44, rpt by JPS, title: Opns for the Defeat of Japan. (2) Hayes, War Against Japan, II, 312–16, History JCS.

for victory on the use of new atomic weapons.

The Problem of Bases and Roll-up

By the end of November 1944 both SWPA and POA forces were thousands of miles ahead of their rear bases in Hawaii, the Gilberts and Marshalls, the South Pacific, Australia, and the eastern end of New Guinea. For the impending final blows against Japan, the most urgent problem was the establishment of new bases closer to the inner ring of Japanese defenses, primarily in the Philippines. Many of the facilities and supplies at the rear bases were now frozen assets in areas the war had left behind. In this light, a certain amount of redeployment of forces and supplies within Pacific areas was a necessary prelude to redeployment from Europe.

The South Pacific area had been earmarked by the JCS for roll-up as early as March 1944, with almost all the Army resources in the theater to pass progressively to SWPA as South Pacific bases were reduced or phased out. Only a small force was scheduled to remain in the area to maintain bases for the staging and rehabilitation of POA divisions and for other minor functions.[2] As the transfer was worked out in conferences between SWPA and SOPAC representatives, part of it would be accomplished by simply extending SWPA's boundaries eastward to include the Upper Solomons in MacArthur's command. By this rearrangement, effected on 15 June 1944, Bougainville, New Georgia, Vella Lavella, Choiseul, and the Treasury Islands became rear bases in SWPA; four divisions and supporting troops and a considerable proportion of the Thirteenth Air Force were transferred to SWPA in place. The conferences also established a tentative schedule for movement of nearly 75,000 more troops from the rest of the old SOPAC area to SWPA during the ensuing months, leaving only about 55,000 troops in the command, an indeterminate number of which were also to be transferred at a later date.[3]

Troop movements began in June 1944 but they proceeded slowly. MacArthur decided it would be more economical to leave the troops in their original positions until they could be mounted out directly for operations along the New Guinea coast and in the Philippines. To do otherwise would place an intolerable burden on shipping, base facilities, and service support available further forward in SWPA, for when combat elements moved forward they usually had to leave their supporting service elements behind to close out facilities. MacArthur found that while the combat-service troop ratio in the South Pacific had been 70 to 30, the ratio in transfers to SWPA was about 90 to 10.[4]

The roll-up of supplies in SOPAC proceeded at an even slower pace. The War Department on 13 June authorized transfer of all surplus Army supplies in the area to SWPA, but MacArthur could spare neither ships to bring in badly balanced loads of South Pacific surplus nor docks and service personnel to unload them. In the South Pacific itself, there were inadequate numbers of service personnel to inventory, sort, and load sup-

[2] See above, ch. XVI.

[3] USAFISPA History, pp. 256–63.

[4] Msg CX–1567, GHQ SWPA to WD, CM–IN 4316, 5 Aug 44.

plies. When General Wood of the ASF visited the area in October 1944 he found "dumps scattered all over the Nouméa area . . . much of the stocks . . . surplus to . . . theater needs and much of it in critical categories."[5]

The delays in movement, however justified, almost inevitably led to a reassertion of POA's claim on some of the Army resources left in SOPAC. The War Department decided not to let troop movements proceed automatically on MacArthur's call, but to retain power to divert units to meet urgent needs elsewhere. And by midsummer 1944, Nimitz felt that his needs for service troops were urgent. His policy, unlike MacArthur's in SWPA, was to move troops from combat areas into rear rehabilitation and staging areas after each campaign, and at this time he decided to expand the role of South Pacific bases as rehabilitation and staging areas for POA divisions. Late in June he proposed that 1 September be set as a terminal date for movement of South Pacific troops to SWPA and that any not physically transferred by that time be permanently assigned to POA to operate the staging areas and provide a reserve for the prospective invasion of Formosa. MacArthur protested vigorously, citing the terms of the JCS directive promising all surplus troops in the South Pacific to SWPA and the serious imbalance in units already transferred. OPD at first sought to effect a compromise by stipulating a later terminal date but, swayed by MacArthur's arguments and the apparent reluctance of the Navy to accept a later date, finally decided to drop the matter and let the terms of the JCS directive stand.[6]

The decision to invade Leyte two months ahead of schedule and then to move on to Luzon rather than Formosa gave the situation a new turn. The 3-division XXIV Corps from POA joined SWPA forces in the invasion of Leyte. It was scheduled to return to control of POA for the Okinawa operation and obviously would have to stage out of the Philippines. Moreover, the Philippines would be a better base for mounting any later operation against Formosa, the China coast, or Japan proper than would the South Pacific. At a conference at Hollandia on 3–4 November 1944, representatives of Nimitz and MacArthur agreed that SWPA would provide support for XXIV Corps in the Leyte operation, and staging, rehabilitation, and mounting facilities for its subsequent movement to Okinawa. MacArthur would also set up staging and rehabilitation facilities in the Philippines for nine additional POA divisions to be engaged in later operations, and naval bases for about one-third of the Pacific fleet, all to be ready by May 1945. In return Nimitz agreed to relinquish any claims on Army service units in the South Pacific except for certain specified troops needed to support the 81st In-

[5] (1) Ltr, Gen Wood to Gen Lutes, 18 Oct 44, folder SWPac 1942 thru Apr 45, Lutes File. (2) WARX 50192 to CG's, USAFISPA and SWPA, 13 Jun 44.

[6] (1) USAFISPA History, pp. 263–68. (2) Msg 270200, NCR 8395, CINCPOA to COMINCH, WD CM–IN 22076, 27 Jun 44. (3) Msg, CX–13810, GHQ SWPA to WD, CM–IN 22773, 28 Jun 44. (4) Ltr, CINCPOA to COMINCH, 20 Jul 44, sub: Final Date for Compliance with JCS 713/5 . . . , Navy Ser 00058, OPD Exec 10, Item 68. (5) Memo, ACofS Pls, COMINCH, for ACofS OPD, 28 Aug 44, sub: Termination Date for Transfer of Troops from SOPAC to SWPA; OPD Draft Msg to CINCSWPA with MFR, 1 Sep 44. OPD 320.2 TS, Case 240/7. (6) OPD MFR, 6 Sep 44, OPD 381 TS, Case 392/15.

fantry Division in the Palaus and to construct B–29 bases in the Marianas.[7]

This so-called FILBAS Agreement temporarily ended the controversy over South Pacific service troops and established the principle that the Philippines would be the main base for the final campaign against Japan. About the same time, policies were established on the disposition of surplus Army supplies in the South Pacific. The new base commander, General Gilbreath, ordered a complete inventory and on his recommendation the SOPAC supply level was cut to 75 days. The base command was instructed to dispose of supplies above these levels. Some of them, it was decided, could be used to re-equip POA divisions withdrawn from combat in the Palaus and sent to the South Pacific for rehabilitation; the rest became part of the scattered stocks to which SWPA lay claim, stocks stored in Australia and at all the way stations in New Guinea as well as in the South Pacific.[8]

By November 1944 the problem of rolling up the South Pacific had merged into the larger problem of rolling up all the rear bases in SWPA and the establishment of a new base in the Philippines. Meanwhile, POA was also facing its own roll-up problem in moving men and supplies forward from the Gilberts, Marshalls, and Hawaii. Although the FILBAS Agreement provided that the Philippines would be the main base for mounting POA ground forces (Army and Marine), Nimitz planned to develop smaller bases in the Marianas and Ryukyus for this purpose. The main air bases for strategic bombardment of Japan would be in the Marianas and Ryukyus, and the Navy had its own plans for installations in these island groups and in the Palaus. In October 1944, in a mammoth towing operation, the Navy transferred the main base for its mobile Service Squadron Ten from Eniwetok to Ulithi.[9]

A complete roll-up could mean long-term economies in the use of service troops, shipping, and supplies, but the short-term expense could be high. The same service troops needed to sort and ship supplies from rear bases were also required to prepare the forward bases. Loads of ill-assorted supplies from rear areas made the same demand on limited port receiving capacity as did specially tailored loads coming from the United States. The shipping used in the roll-up counted against theater retentions or absorbed part of the local fleet. When theater retentions were cut back, there was an inevitable tendency to move service troops forward, leave supplies behind, and order new material from the United States. To a Pacific theater commander at the beginning of the year 1945 sacrifice of time seemed too high a price to pay for long-term economy.

Quite apart from the shipping problem, the roll-up in SWPA could hardly even begin until bases were prepared in the Philippines to receive men and material. This was the conclusion the Joint Logistics Committee reached when, at the behest of General Marshall, it un-

[7] GHQ, SWPA, Rpt of Conferees as to Logistic Support in the Philippine Islands for POA Forces, 4 Nov 44, Theater Files, Pac Sec, 11/1/44, ASF Plng Div.

[8] (1) Ltr, Hq, SPBC to CGPOA, 22 Sep 44, with Incls, sub: Surplus Supplies. (2) Memo, Gen Hull for TAG, 20 Nov 44, same sub. Both in OPD 400 TS, Case 271. (3) TWX Conf, Col Krueger and Col Bogart, 21 Oct 44, POA 1942 thru Mar 45, Lutes File.

[9] See Carter, *Beans, Bullets and Black Oil*, pp. 213–15.

dertook a study of the consolidation of staging and rehabilitation areas in the Pacific as a means of economizing on the use of service troops. The committee, somewhat critical of Nimitz' policy of sending divisions to rear areas to rest and recuperate, suggested that a saving of some service troops might be achieved immediately by a consolidation of Army staging areas in the South Pacific at either New Caledonia or Espíritu Santo, and by squeezing more men out of the Hawaiian establishment. But it could foresee no further savings until the Philippine base could be readied. As soon as possible, they thought, facilities in the South Pacific should be closed out. For the final assault on Japan, the committee foresaw a need for the construction of staging and rehabilitation facilities for 19 divisions and of mounting facilities for 15 divisions in the Philippine group, for the continuation of existing facilities for 3 divisions in the Marianas and 4 on Hawaii, and for the addition of a new area for 3 divisions in the Ryukyus. The facilities for 4 divisions in the Aleutians, established in 1943, should be maintained on a standby basis for the contingency of a north Pacific operation. These staging and mounting areas would accommodate the 21 Army and 6 Marine Corps divisions already in the Pacific—a sufficient force, the planners estimated, to mount the initial assaults in both OLYMPIC and CORONET. Follow-up divisions and garrison divisions, the committee thought, could be mounted in the United States and staged through facilities vacated by the divisions involved in the initial assault. This JLC projection, the first comprehensive base plan for mounting the final assault on Japan, followed the lines of the FILBAS Agreement, and neither MacArthur nor Nimitz raised any appreciable objection to it. Both commanders warned, however, that the rapidity of Philippine base development would determine the pace at which the plan could be carried out.[10]

The speed of Philippine base development depended on a number of factors. First, the base sites must be taken by American troops. Leyte was almost entirely in American hands by the end of December, but the invasion of Luzon was not launched until 9 January 1945, twenty days behind schedule. This delay clearly portended further delays in taking other islands in the Philippine group necessary for the full development of the facilities required. Granted that the islands would eventually be retaken, much still depended on the speed with which ports (particularly the largest, Manila) could be put into operation, on the availability of cargo shipping to bring in materials either from rear bases or from the United States, and on the supply of labor to prepare the installations. As 1945 began the outlook for none of these things was bright; port reception capacity loomed ahead as the ultimate limiting factor on the speed of Philippine base development, but the shortage of troop labor and of shipping also promised to contribute to delays that would prevent meeting the May 1945 target date established in the FILBAS Agreement.

Early in November 1944, pending formulation of a keyed project, SWPA forwarded to the War Department req-

[10] (1) JCS 1149, 3 Nov 44, memo by CofS, USA, title: Economy in Use of Service Units in SWP and POA. (2) JCS 1149/1, 2 Dec 44, rpt by JLC, same title. (3) JLC 217/3/D, 16 Jan 45, same title. (4) JPS 595/1, 20 Jan 45, same title.

uisitions for some 1,300,000 measurement tons of material for Philippine base development. These requisitions were in addition to project requirements already submitted for the Leyte and Luzon operations against which large backlogs of material had long been piling up in ports and holding and reconsignment points in the United States. The ASF found the quantities of materials in the SWPA requisitions well within the limits of requirements anticipated for Philippine base development in its own separately prepared plan and agreed they should be approved for supply. Recognizing, however, that, owing to the large backlog of construction materials already in existence and to the impending cutback in sailings to SWPA, nothing could be shipped for many months, ASF officers did not bother to make any detailed analysis of availability of particular items.[11]

Approval for supply had little meaning, as the theater soon recognized. In the light of the shipping situation, MacArthur adjusted his requirements downward. In early January SWPA, presenting its formal keyed project, requested that the earlier series of requisitions be canceled. The new plan, MacArthur said, provided for the "irreducible minimum facilities required for the logistic support of future operations," based on the assumption that "the bulk of U.S. forces in the Pacific will be concentrated in the Philippines." He would provide naval installations for support of the Seventh Fleet and one-third of the Pacific Fleet, facilities for 51 air groups (17 to be redeployed from Europe), and for receiving, staging, and garrisoning 19 ground divisions and simultaneously mounting 15 divisions. To provide these facilities would require rehabilitation and expansion of port and transportation installations, particularly around Manila, building of new staging and mounting areas, airfields, and naval bases on Luzon, Leyte, and in the Visayan group. Matériel requirements were cut to the bone, and the need for "full utilization of service forces, materials and equipment which can be made available on time by the roll-up of rear bases, and of Australian and Philippine procurement" was fully recognized. Of a total dead-weight tonnage requirement of 825,816 tons for all services, 480,869 tons were to come from theater resources, only 344,947 tons from the United States.[12]

Based on these minimum tonnage requirements, MacArthur hoped to complete the staging and rehabilitation areas by May 1945, as provided in the FILBAS Agreement, and the whole project by July. But these optimistic hopes soon went aglimmering. The ASF, working with a theater mission, found that SWPA had seriously underestimated its needs for the kind of base proposed, and when the final bills of material were completed, the total requirement for shipments from the United States had once again risen to 1,100,000 tons, including about 690,000 tons of engineer materials. Assuming, as the theater proposed, that shipments of engineer materials started in March 1945 and continued at the rate of 100,000 tons per month, the projects

[11] (1) Memo, Gen Wood for OPD, 6 Dec 44, sub: Requisitions for Manila and Central Luzon Rehabilitation and Construction Project, History Planning Div ASF, app. 8-S. (2) See above, ch. XXII.

[12] Ltr, GHQ SWPA to CofS, USA, 2 Jan 45, sub: SWPA Base Development Plan, PI, ABC 384 Philippines (16 Jul 44) Sec 4.

could hardly be completed before the end of the year. And this rate of shipments, the ASF predicted, could not be achieved unless many of the Engineer requisitions outstanding were canceled or adjusted to the new plan. The supply planners also found, though they could not pinpoint units or numbers because of uncertainties as to what would come from the South Pacific, "a definite shortage of service troops . . . prior to V–E Day which will adversely affect the completion date."[13]

MacArthur himself was soon forced to admit that Philippine base development would be delayed. American troops entered the city of Manila on 3 February but it took more than a month to subdue Japanese resistance, and the port was so severely damaged by the Japanese that its rehabilitation was to take a much longer time. Meanwhile, supply for Luzon was carried on over the beaches, limiting reception capacity for ordinary cargo shipping and putting a premium on amphibious cargo carriers of all types. MacArthur could not move material forward from the rear bases as he had planned; failure to develop adequate port capacity acted as an effective counter to his arguments against the cutbacks in his shipping retentions and in outward sailings to SWPA from the United States; shortages of service troops and materials at the same time acted to increase the delay in developing port capacity. The theater was caught in a triple squeeze by shortages of receiving capacity, service troops, and cargo shipping, all in a continual process of interaction.

On 26 February MacArthur informed both Nimitz and the War Department that he could not fulfill the terms of the FILBAS Agreement, and he placed the blame squarely on the cutback in cargo shipping for his area. With the shipping that remained available, he said, he could do no more than "strive to carry out [SWPA's] own essential operations." He would, he said, "give domicile to the POA divisions by a mere allocation of adequate land area but POA would have to undertake all responsibility for moving them, supplying them, and providing necessary installations."[14]

This was not to be the final word, though it did end hopes that facilities for the POA divisions would be readied in the Philippines by May 1945. Nimitz, faced with virtual abrogation of the FILBAS Agreement, began to enlarge his own base plans and to again show reluctance to release SOPAC service troops to SWPA. Planning for eventual Philippine base development on the scale MacArthur originally proposed continued in Washington; indeed, the ASF by this time was also preparing contingent plans for a considerable expansion. For the moment, however, logistical limitations and operational delays had combined to frustrate the progress of the roll-up and timely preparation of bases for the final blow, to again confuse the relations of SWPA and POA, and to call into question the optimistic schedule for OLYMPIC and CORONET.

The Service Troop Shortage in POA

If the delay in Philippine base development was one measure of the effects

[13] (1) History Planning Div ASF, p. 156 and apps. 8–S and 8–T. (2) *Engineers of SWPA*, VII, 151–53.

[14] Msg, CAX–50687, GHQ SWPA to WAR, CM–IN 27167, 26 Feb 45.



PORT CONGESTION AT MANILA

of the shortage of Army resources in the Pacific, the service troop problem in POA was another measure, and one that seemingly posed even more serious limitations. When the JCS in October 1944 had decided on Luzon rather than Formosa, a primary consideration had been the lack of sufficient Army service and supporting troops for a land operation of any magnitude. The subsequent decision to direct the POA effort at Iwo Jima and Okinawa did not lay the issue to rest. While these operations would require a lesser scale of service support than Formosa, the basic shortages remained, and they weighed heavily on all POA plans from October 1944 onward.

The newly seized bases in the Palaus had to be manned, and in the Marianas the plans for the B–29 fields were in a continual process of expansion. More fields would be built in the Ryukyus when they were taken, adding further to the need for construction troops. The FILBAS Agreement ended any hope of using the service troops from the South Pacific other than a few units specifically excepted, and SWPA's increasing need for service forces made it unlikely that any could be drawn from that source. The War Department painfully dug up a unit here and a unit there, and Richardson stripped the Hawaiian establishment down to what he conceived to be the limits of safety. In this manner enough service troops were scraped up to provide the minimum essential re-

quirements for the first phase of ICEBERG, and a start was made at finding units for the second phase. The JCS committees devoted a great deal of study to the problem in December 1944 and January 1945, but were forced to the ultimate conclusion that service troops would just not be available for anything beyond the second phase of ICEBERG and that further exploitation of successes in POA would depend upon rapid redeployment of troops at the end of the hostilities in Europe.[15]

The Navy, anxious to follow Okinawa with an attack on the China coast, pressed the Army vigorously to take measures to furnish the necessary troops for POA. On 4 January 1945 Rear Adm. Donald B. Duncan of the Navy planners called OPD "to express his concern over the lack of service and supporting troops, which is apparently going to stop our advance in the Pacific and may thus result in having the Japs quickly kick back."[16] There was more than a hint that the Navy wanted the Army to convert combat units to service units, but the Army response was almost entirely negative. Few Army staff officers any longer feared that the Japanese had a real capability of "kicking back," and on the other side of the world the Germans had demonstrated a capacity for doing just that in their offensive in the Ardennes. The last two divisions earmarked for Pacific deployment, the 86th and 97th, were diverted to Europe and the deployment of seven other infantry divisions, along with supporting troops, already intended for the European theater, speeded. The strategic reserve was thus finally depleted. Until forces could be freed from Europe, POA would have to rely on its own resources to meet its service and supporting troop needs with only driblets of assistance from the United States.[17]

The over-all manpower shortage for the two war fronts hardened Army opposition to any subsidiary operations in the Pacific and even raised doubts as to whether all the phases of the main POA operation planned, the invasion of Okinawa, could be executed. On 16 January 1945 the JCS issued a final directive to Nimitz for the Okinawan campaign, instructing him to make preparations for further expansion in the Ryukyus following the seizure of Okinawa but making no definite commitments as to whether resources would actually be available for Phase III. At the same time the target date for ICEBERG was postponed from 1 March to 1 April because of the 20-day delay in MacArthur's move on Luzon, whence air support was to come. And, though the JCS authorized the POA commander to

[15] (1) JCS 1149/1, 2 Dec 44, title: Economy in Use of Service Units . . . (2) JLC 247, 20 Dec 44, title: Service Units to Support Major Amphibious Opns in the Pacific in the Spring of 1945. (3) JCS 1209, 23 Dec 44, title: Availability of Forces in Pacific after Directed Opns. (4) Memo, Col Lincoln for Asst Secy, WDGS, 10 Jan 45, sub: Availability of Forces in Pacific after Directed Opns, ABC 320.2 (10 Feb 44). (5) JLC 217/3/D, 16 Jan 45, title: Economy in Use of Service Units. . . . (6) JPS 595/1, 20 Jan 45, title: Economy in Use of Service Units. . . . (7) OPD MFR, 7 Feb 45, OPD 320.2 TS, Case 9/11.

[16] Memo, Lincoln for Chief, Strategy Sec, OPD, 4 Jan 45, ABC 320.2 (3-13-43) Sec 8.

[17] (1) Memo, Col Billo for Col Lincoln, 4 Jan 45. (2) Memo, Col E. J. Rehmann, Troop Movements Sec, OPD, for Chief S&P Gp, 5 Jan 45. Both in ABC 320.2 (3-13-43) Sec 8. (3) JCS 1225, 8 Jan 45, title: Immediate Allocation of 86th and 97th Divs to European Theater. (4) JLPC 46/11, 16 Jan 45, title: Availability of Forces in the Pacific after ICEBERG.

continue planning for a China coast operation, he was not to make any actual preparations for it.

On 6 March Nimitz reported that Army troop requirements for Phase II—seizure of Ie Shima—had been met to an extent that would permit that operation to proceed but that a deficiency of 91,000 Army troops, 60,000 of them of service types, would remain for Phase III, the assault on Miyako Jima and adjacent islands. The Army was, in the end, able to fill part of the deficiency, but Phase III of ICEBERG was never carried out. Cancellation of Phase III was only partially due to the service troop shortage; however, the long period of doubt illustrates the restrictive effect the shortage was having.

The same considerations affected planning for a North Pacific operation. Army resources could certainly not be provided to carry it out before redeployment, and, if executed after redeployment began, it would inevitably delay OLYMPIC and CORONET. While contingent planning continued, no actual preparations were instituted and the chances that it would ever be executed rapidly diminished. At the conferences at Yalta in February 1945, the Americans offered the Russians little assurance that they could or would maintain a supply line to Siberia if the USSR entered the war against Japan.[18]

[18] (1) Msg WARX 22012 to CINCUSAF POA, CG USAFCBIT, CT, CINCSWPA, JCS to CINCPOA, 16 Jan 45. (2) Hayes, The War Against Japan, vol. II, The Advance to Victory, pp. 315–16, 333–39, History JCS. (3) JCS 713/22, memo by COMINCH and CNO, 10 Mar 45, title: Army Troops for Phase III ICEBERG. (4) Memo, Brig Gen George A. Lincoln for Asst Secy WDGS, 26 May 45, sub: Pacific Logistic Studies, ABC 320.2 (3-13-43) Sec 9. (5) Min, 2d Plenary Mtg, ARGONAUT Conf, 9 Feb 45.

Cargo and Assault Shipping

Ostensibly, the other critical problem of early 1945, cargo shipping, also exercised its influence to constrict Pacific operations. The studies undertaken by the JCS in October and November 1944 of the cargo shipping shortage, it will be recalled, in December merged into an over-all combined study with the British of the prospective cargo shipping situation for the next six months.[19] The American military authorities brought into these negotiations figures showing deficits both in the Pacific and in the Atlantic of from 7 to 9 percent against estimated requirements. Corresponding British figures showed deficits of from 4 to 8 percent. The CCS quickly moved to issue on the combined level directives to theater commanders restricting retentions of cargo ships in their theaters and prohibiting their use for floating storage, along the lines of the directive that the JCS had already, at the behest of the President, issued to U.S. theater commanders. The problem of allocating the deficits nonetheless remained. On the method of doing this there was no agreement. Liberation of various nations of Europe had produced demands for civilian relief that would require cargo shipping commitments of as yet undetermined proportions. The British, with the support of the American civilian shipping authorities, argued that these civilian requirements could not be completely subordinated to military ones, that any curtailment in shipping made necessary by the deficits would have to be spread over all programs, military and civilian. The JCS, on the other

[19] See above, ch. XXII.

hand, with the tremendous and ever-growing cargo shipping requirements of the Pacific war in mind, held out for an overriding priority for military demands.

The controversy delayed any agreement on an over-all combined cargo shipping budget until basic decisions had been reached at the Malta-Yalta Conference (ARGONAUT). At the conference the President and Prime Minister, the latter reluctantly, agreed on a formula giving first priority to basic undertakings, and included in that category supplies to liberated areas only to the extent that they would effectively contribute to the war-making capacity of the United Nations. It was a decision that generally conformed to the JCS view but one that was open to varying interpretations. Certain specific allocations for initiation of national import programs for the liberated nations preserved these programs in principle and made it certain that their demands would be reasserted in the future. Also, military priority or not, the projections for the next six months showed continuing though reduced deficits based on the assumption that the war with Germany would last through the end of June 1945. These deficits against stated requirements amounted to 161 sailings in the Pacific between March and June.[20]

The prospective deficits emphasized the need for continuing restrictions on both outward sailings to and retentions within SWPA. An almost immediate casualty was MacArthur's plan to invade the Netherlands Indies in force. On 5 February the SWPA commander forwarded to the War Department a plan for using a corps of three Australian divisions in an assault on north Borneo in April, the forces to be mounted in New Guinea and supported by direct shipments of supplies from Australia. Among other things, MacArthur argued, there was a need for new sources of oil in the final stages of the war against Japan. He asked permission to retain 57 transpacific Liberty ships and 10 troop-carrying vessels for the operation; these, he said, represented almost the total cost in terms of American resources. It was cost enough in view of the deficits in cargo shipping, and Somervell calculated that, once launched, the operation would demand much more. The operation would be timed almost simultaneously with the invasion of Okinawa and might well interfere with that assault, already approved by the JCS. Moreover, studies indicated that Netherlands Indies oil would not be necessary to supply Allied needs in the war against Japan; there was, moreover, considerable doubt that the oil fields could be rehabilitated before the war ended. Consequently, the War Department refused MacArthur's request for shipping. He was told to go ahead with such operations in both the Philippines and the Indies as he could carry out with the shipping already allotted. OPD later pointedly inquired whether he could not, with the same shipping needed for even limited operations in the Indies, bring in the supplies and personnel from the rear necessary to enable him to fulfill the FILBAS Agreement.[21]

[20] (1) On the civilian relief shipping issue see below, Chapter XXXI. (2) CMT 66/3, 12 Jan 45, rpt by CMTC and CSAB, title: Over-all Review of Cargo Shpg. (3) CCS 746/10, 2 Feb 45, same title. (4) CCS 746/11, 8 Feb 45, title: Over-all Review of Cargo and Troop Shpg Position for Remainder of 1945.

[21] (1) Memo, Somervell for OPD, 6 Feb 45, sub: Shpg Implications of Proposed SWPA Opn, OPD

This action reflected War Department concern about shipping for ICEBERG. The ICEBERG supply and movement plan was the most elaborate one of its kind developed during World War II, and the requirements for all types of shipping were prodigious. Troops were to be mounted at widely distant points—Leyte, Guadalcanal, Espíritu Santo, the Russell Islands, Saipan, Tinian, Guam, Hawaii, and the west coast of the United States. In the initial movement of troops and supplies almost all the available assault lift in the Pacific would be absorbed—111 APA's, 47 AKA's, 184 LST's, and 89 LSM's, plus innumerable smaller craft. Initial supplies were to accompany troops in the assault and follow-up convoys, but most of the resupply ships were to sail directly from the United States. The operational plan, similar in its principles to plans for all the earlier operations in POA, set up an elaborate schedule for the arrival of the resupply ships in staggered echelons at 10-day intervals over a period extending up to 210 days after the landings. Assembly and regulating points, where shipments of all kinds might be held awaiting forward call to Okinawa, were established at Eniwetok, Saipan, and Ulithi. The first loaded maintenance ships were to sail from the west coast on 20 February 1945 and arrive at regulating stations five days before the assault.[22]

Like all such prearranged plans involving automatic supply, the ICEBERG plan promised to produce its share of waste. The scheduled shipments of Army supplies would raise theater levels far above those authorized, clear evidence that POA was making little attempt to use its own rear area surpluses. And although the plan promised to insure quick turnaround of ships in the target area, it involved the risk, should development of port capacity not proceed according to schedule, of shipping congestion at regulating stations and the emergency discharge of cargoes especially tailored to needs on Okinawa at some other point. Both types of waste did occur—some cargoes were unloaded in the Philippines nearly a year later. But, once again, at the time no one was ready to stress economy if it involved loss of time. The Army, though it made some objections to the generous scale of supply for ICEBERG, in the end accepted and supported CINCPOA's stated requirements for the operation.[23]

The large shipping requirements for Okinawa were a major factor in producing the forecast of deficits in the Pacific from March to June 1945. And shipping was available to meet these requirements in large part only because of the breakup of shipping congestion in SWPA and the subsequent cutbacks in sailings to that theater. In March, for instance, 20 scheduled sailings to the Philippines were canceled and most of the ships re-

Exec 9, Book 25. (2) Memo, Gen Tansey for Gen Hull, 25 Feb 45, sub: Oil and Rubber Exploitation in East Indies, with related papers in OPD 381 TS, Cases 52/8, 10, 13. (3) Min, 189th mtg JCS, 7 Feb 45. (4) Hayes, War Against Japan, II, 365–66, History JCS.

22 Appleman, Burns, Gugeler and Stevens, *Okinawa: The Last Battle*, pp. 36–41.

23 (1) Memo, Gen Heileman, Dir Sup ASF, for OPD, 3 Jan 45, sub: Request for Advance Shipment of Maintenance to CPBC, OPD 400 TS (1945 file) Case 4. (2) MFR's, 28 Jan and 20 Feb 45, sub: Supplies for ICEBERG, OPD 400 TS, Cases 16/2 and 16/4. (3) Msg WARX 29425, to COMGENPOA, 28 Feb 45. (4) WSA Rpt No. 10 from Cen Pac to Capt Granville Conway, folder Pac 1945, Box 122891, WSA Records, WSA Conway File. (5) Ltr, Col Meyer to Mr. C. C. Wardlow, 21 Jul 49, OCT HB folder A–N Jt Logs.

allocated to POA. The delays in the roll-up and in Philippine base development and the restriction on expansion into the Netherlands Indies were thus not without their compensating advantages for Nimitz' theater. Moreover, some ships were loaded for Pacific destinations on the Atlantic coast, 15 ships were diverted from the Soviet Pacific program, and sailing time was speeded by the removal of convoy restrictions as far west as the Palaus. Some minor reductions were effected in Nimitz' schedules, but for the most part he got what he asked for. Indeed, if measured against capacity to receive, the heralded deficits in the Pacific never materialized, a fact that gives much weight to WSA contentions that they were only the result of inflated requirements in the first place.[24]

The problems of the SWPA roll-up and Philippine base development, nonetheless, remained. Though the War Department insisted MacArthur could not use any more ordinary cargo shipping effectively if he had it, the SWPA commander continued to lay the blame for delays on the cutback in his retentions. The War Department stuck to its guns in holding back retentions, but was soon casting an eye on the huge fleet of assault shipping in the Pacific, mostly under naval control, as a possible resource for effecting the roll-up. After all, this shipping could unload over the beaches. At General Marshall's behest, the Joint Logistics Committee undertook a study to determine the "practicability of using assault shipping of the LST type and larger, not required for directed operations," to speed the SWPA roll-up.[25] The first JLC study, mainly the work of Logistics Group, OPD, showed that Pacific assault shipping ought to be available to speed it a very great deal. The committee estimated the minimum availability of such shipping, assuming subsidiary operations against north Borneo and the China coast, as enough to move more than 800,000 troops and over 4 million tons of cargo from SWPA rear areas to the Philippines within six months after the initial assault on Okinawa; it suggested that the maximum, assuming neither of these operations, would be considerably greater.

The Army members of the JLC recognized these were rough estimates but thought they served to establish the point that the assault shipping now in the Pacific was a potential resource of immense importance that should, after Okinawa, be returned to the control of the JCS who were in the best position to judge the most essential use to which it could be put. At the same time, they recognized that their estimates were based on the premise that this shipping would be used only in the assault phases of "directed operations," and that both Nimitz and MacArthur already were using much of it for other purposes. They consequently admitted that "the actual extent of availability can be determined only by the theater commanders."[26]

[24] (1) Min, 91st mtg JMTC, 22 Feb 45, Item 2; 92d mtg, 24 Mar 45. (2) Memo, Gen Hull for CofS, 19 Mar 45, sub: Reduction of 20 Ships in Sailings to Gen MacArthur for March. . . . (3) Memo, Lt A. M. Smith, USNR, for Adm Carter, 22 Mar 45, folder Navy 1945, Box 122891, WSA Conway File. (4) On the Soviet Pacific program see below, Chapter XXVIII.

[25] JCS 1286, 9 Mar 45, memo by CofS, USA, title: Pacific Logistical Studies.

[26] JLC 279/2, 17 Mar 45, title: Pacific Logistical Studies, Use of Assault Shpg for Logistical Support.

When the Navy planners finished with the study this recognition of the need for consulting the theater commanders was about all that was left of it. The estimates were eliminated, and even the message that went to Nimitz and MacArthur was so watered down by Admiral King that it amounted to a simple request to examine their requirements to determine what assault shipping could be spared either for the SWPA roll-up or for redeployment of forces from Europe. The replies were not encouraging. MacArthur said that virtually all his LST's and LCT's and the few APA's and AKA's of the Seventh Fleet would be needed for continuing operations in the Philippines and for the small-scale expeditions he planned against the Netherlands Indies. Only 20 LST's could be diverted to the roll-up. Nimitz, in the midst of the Okinawan assault, first sent back a totally negative reply, but on 27 April he agreed to send MacArthur 8 APA's and 6 AKA's, all he felt he could spare from the more than 150 combat loaders that had carried the assault divisions to Okinawa. Further efforts by Marshall and Somervell to get the JCS to assert its control and dislodge more assault shipping from POA ran up against the solid wall of Admiral King's opposition. The only further concessions made by King and Nimitz were of a few more LCT's and LST's.

The fact was that almost all available assault shipping in POA was tied up in support of the forces on Okinawa in much the same manner that the lesser fleet in SWPA was tied up in supporting forces in the Philippines, and for much the same reasons — lack of port facilities and the need to unload over beaches where combat loaders and landing craft were the only vessels that would serve. Still, the failure of the JCS to assert its control left both commanders with no one to account to but themselves for the efficient use of these vessels.

In any case, with these limited additional resources the SWPA roll-up continued haltingly, while the whole matter of assault and cargo shipping became merged in the larger considerations of redeployment and a new system of Pacific command.[27]

The New Redeployment Plan

Joint planning for redeployment had slowed perceptibly in fall 1944 when it became apparent that the final defeat of Germany would be delayed for some months. On 23 December 1944, the Joint Staff Planners finally presented to the JCS the first new plan produced since late June. At least ostensibly it took into consideration all the new factors that had appeared in the interim—the War Department Personnel Readjustment Plan, the commitment of virtually the entire U.S. ground force reserve in Europe, and the service troop shortage in the Pacific. It was based on the outline strategic concept of November for the final phase of the war, that is, operations

[27] (1) Memo, Gen Lincoln for Asst Secy, WDGS, 31 Mar 45, sub: SM–1013, with accompanying note from Lincoln to Hull, ABC 320.2 (3-13-43) Sec 8. (2) MFR, OPD, 5 Apr 45, sub: Staging Facilities in Philippines, OPD 400 TS, Case 46/2. (3) JCS 1286/1, 9 Apr 45, title: Pacific Logistical Studies. (4) MFR, OPD, 10 Apr 45, sub: Ldg Cft for SWPA Opns, OPD 560 TS, Case 16/3. (5) JCS 1286/2, 24 Apr 45, memo by CofS, USA, title: Cargo and Assault Shpg for Roll-up in Pacific. (6) JCS 1286/3, memo by COMINCH and CNO, 30 Apr 45, same title. (7) In a memo to Marshall on 16 May 1945, Somervell proposed a far stiffer stand with the Navy than Marshall took in (5) above, ABC 320.2 (3-13-43), Sec 9.

OLYMPIC and CORONET to be executed in September and December 1945 respectively.

Deployment was projected for eighteen months ahead on the alternate assumptions that redeployment would begin on 31 December 1944 or 31 March 1945, the one plan to apply if Germany was defeated before 15 January 1945, the other if it were defeated afterward. Total force goals in both plans remained much the same as they had been in earlier projections. Army combat forces in the Pacific would be built up from 21 divisions and 71 air groups to 40 divisions and 178 air groups within 12 months after the defeat of Germany, and the strategic reserve in the United States simultaneously rebuilt to 15 divisions and 31 air groups. The difference was that major reinforcements for the Pacific must now come from Europe, not directly from the United States. In the 31 March plan, about half of the Pacific increment was to move directly from Europe to the Pacific, the other half by way of the United States.

The planners allowed thirty days for personnel adjustments in units in Europe before major redeployment of Army forces could begin. But the most essential service units would move immediately after V–E Day, while other units were readjusting personnel. Moreover, the new plan proposed a build-up of ASF troops in the Pacific and CBI from 325,000 to 750,000, an increase of 130 percent as opposed to only 78 percent of AGF troops.

In adhering to the optimistic fall target dates for OLYMPIC and CORONET, the assumption was that OLYMPIC (the invasion of Kyushu) would be mounted with forces already in the Pacific, supplemented only by the service troops to be redeployed in first priority. The big build-up would take place while the battle on Kyushu was being fought.

The necessity for larger scale redeployment to the Pacific meant a long delay in the reduction of the garrison in Europe to the 400,000-man occupation force and in bringing high-point men home for discharge. The plan provided for no very great reduction in the size of the Army as a whole until at least the fourth quarter after Germany's defeat.[28]

Like earlier redeployment plans, much of the new one was outdated before it was presented. The target dates for the defeat of Germany, if vague and flexible, were still unrealistic; the shipping estimates were based on no thorough study and included the as yet unwarranted assumption that sizable amounts of British troop shipping would be available to assist in the move. The plan was nevertheless urgently needed to provide a working basis for detailed logistical planning, and its presentation to the JCS served to bring into focus many of the other problems to be involved in mounting the final assault on Japan, most important among them the long-smoldering question of Pacific command.

In preparing the paper, the Joint Planners had allocated the forces for the invasion of Kyushu and Honshu to POA. The Army Planner, Colonel Lincoln of OPD, quickly perceived that the Navy might assume that the final assaults would be under Nimitz' command and that MacArthur's role would be only one of

[28] (1) JCS 521/9, 23 Dec 44, rpt by JPS, title: Strategic Deployment of U.S. Forces Following Defeat of Germany. (2) On earlier planning, see above, Chapter XXII. (3) For discussion of the point system, see below, pp. 594–95.

carrying out mop-up operations within the territorial limits of SWPA. Lincoln warned General Marshall that the Navy must understand the allocation had only been made for convenience, that Army troops must actually be assigned to "whatever headquarters is directed to conduct the operation." For any major land campaign he thought this headquarters ought to be under an Army commander.[29]

On 6 January 1945 General Marshall informed the other members of the JCS that though he did not regard the new redeployment plan as "completely realistic," he accepted it as a basis of planning on the understanding that "the troop basis planning for Army forces . . . will be done by General MacArthur in necessary collaboration with Admiral Nimitz and the Twentieth Air Force . . . and that the breakdown of Army air, ground and service forces between existent areas . . . will be revised in the light of studies of the commanders concerned."[30]

Marshall's condition produced an almost immediate demurrer from Admiral King, who insisted MacArthur could not be allowed to do any troop basis planning for any area or operation outside SWPA unless directed by the JCS. King suggested the time had come to establish a "planning command" for the invasion of Japan, using that set up for OVERLORD as a model.[31] Despite objections of the Army staff that King was interfering in matters wholly within the province of the Army, the Admiral was adamant. The December redeployment plan was never formally approved by the JCS. It did serve for a time as the basis of Army planning while the Joint Planners diligently labored to produce a more realistic revision. Meanwhile, the command issue, having been raised, had to be settled; until it was, there could be little finality about any logistical plans for the last phase in the Pacific.[32]

The Pacific Command Question

By January 1945 the Army staff had swung around to the position that all Army forces and resources in the final phase of the war in the Pacific should be placed under the control of General MacArthur. The Army's argument, stated in its simplest terms, was that under the existing area commands Army resources were too compartmentalized to permit their most efficient use. The tug of war between Nimitz and MacArthur over South Pacific service troops and the misunderstandings over Philippine base development seemed ample proof of the thesis. Continuation of compartmentalization, they thought, would not be conducive to success in the final assault on Japan.

There was, also, no little dissatisfaction with the extent to which the Army was subordinated to the Navy in POA. General Richardson, the Army commander in that area, was particularly resentful. He regarded the POA joint

[29] Memo, Col Lincoln for Asst Secy, WDGS, 4 Jan 45, sub: Strategic Deployment of U.S. Forces Following Defeat of Germany, ABC 320.2 (3-13-43) Sec 6.

[30] Memo, Secy JCS for Leahy, King, and Arnold, 6 Jan 45, sub: Strategic Deployment of U.S. Forces . . . , OPD 320.2 (3-13-43) Sec 6.

[31] JCS 521/10, 17 Jan 45, memo by COMINCH and CNO, title: Strategic Deployment of U.S. Forces . . . , Incl B.

[32] (1) JCS 521/11, 22 Jan 45, memo by CofS, USA, title: Strategic Deployment of U.S. Forces. . . . (2) Undated OPD Memo, same sub, ABC 320.2 (3-13-43) Sec 6.

staff as a completely Navy dominated staff, and thought CINCPOA looked on the Army in POA as just another Navy "type command." The decision in late 1944 to entrust Nimitz with almost complete control of military shipping in the area was for Richardson virtually the last straw. His views were shared in varying degrees by Army staff officers in Washington. Though they acquiesced in the POA system as long as the Army component of Nimitz' command remained small, they had no intention of allowing it to continue once redeployment had increased Army forces. Inevitably, also, the higher Navy standard of living in the Pacific produced Army suspicions that the Navy was using scarce service troops to build an elaborate postwar establishment for itself on Guam and other islands and that CINCPOA's practices in other ways were wasting Army resources. One OPD officer thought the service troop shortage primarily "the result of paving our way across the Pacific with Army garrisoned bases, and making a practice of withdrawing so-called assault troops to rear areas between active phases of operations." The POA system of logistics, which emphasized direct shipment of tailor-made loads from the United States without regard to authorized levels of supply or normal Army procedures of requisitioning, seemed unnecessarily wasteful of Army supplies and upset the normal routine procedures of the ASF. Frequent POA project orders for complete divisional sets of equipment for troops withdrawn from combat also seemed excessive.[33]

As the Army saw it, Nimitz, in his role as commander in chief of the Pacific Fleet, already exercised virtually complete control over all naval resources in the Pacific, including the vast assemblage of assault shipping now in that ocean. The control MacArthur exercised over the permanent elements of the Seventh Fleet, in the Army view, hardly balanced the major Army resources committed to POA. Since Nimitz doubled in the roles of over-all naval commander in the Pacific and commander of POA, it seemed to the Army only just that MacArthur should double in the roles of over-all Army commander as well as commander of SWPA. As such he could provide the centralized control hitherto lacking over Army troops and other resources in the Pacific.

There was no lack of recognition that a unified joint command for the entire Pacific would be the ideal solution. But almost no one on the Army staff believed that agreement could be reached with the Navy on either a joint commander or a joint system of command. With large-scale land operations in prospect, the Army had no intention of entrusting their direction to a naval commander. In turn, the Army staff hardly expected the Navy to turn over direction of its tremendous sea forces to an Army commander. To protect Army interests there seemed no other solution than the old prewar concept of separate Army and Navy commands, each exercising control over its own resources and co-ordinating operations in furtherance of a common strategy. Such a system had the unqualified support of General MacArthur,

[33] (1) Quoted from undated and unsigned OPD comments on JLC 247, ABC 320.2 (3-13-43) Sec 7. (2) Min, 192d mtg JPS, Six Sessions, 10–15 Mar 45. (3) Memo, Gen Richardson for CofS, 3 Nov 44, sub: Organization of High Comd in POA, OPD 384 TS, Case 78.

who did not even give lip service to the principle of unified command. His view, presented to the Chief of Staff on 17 December 1944, was:

> We have fairly strong Ground Forces and Air Forces in the Pacific supported by inadequate service forces for the type of warfare that is being waged. Only through the most careful planning by a single responsible commander can these troops be used in sufficiently efficient manner to justify the hazards of a major operation. They are now scattered, inequitably employed and not susceptible of efficient grouping . . . I do not recommend a single unified command for the Pacific. I am of the firm opinion that the Naval forces should serve under Naval Command and that the Army should serve under Army command. Neither service willingly fights on a major scale under the command of the other. . . . The Navy with almost complete Naval Command in the Pacific, has attained a degree of flexibility in the employment of resources with consequent efficiency that has far surpassed the Army. It is essential that the Navy be given complete command of all its units and that the Army be accorded similar treatment. Only in this way will there be attained that complete flexibility and efficient employment of forces that is essential to victory. . . .[34]

On 26 February 1945 General Marshall presented a plan embodying the Army's views to the JCS. The Navy finally agreed to accept it but only after a long, hard fight. Admiral King insisted on unified command. He did not propose such a unified command for the entire Pacific but would set up a third area around the Japanese home islands and appoint a commander in chief, Japan Area (CINCJAPA), to both plan for and carry out the final invasion, leaving the old area commands to carry out operations already directed and to provide administrative and logistical support for the final assault. In the protracted and difficult negotiations the Navy placed its main emphasis on the greater efficiency of a unified area command and on the disruptions that any change in the existing system would undoubtedly produce in the execution of the Okinawa operation and of the assault on the China coast with which Nimitz hoped to follow it. The Army spokesman claimed that the creation of a Japan Area would simply lead to the addition of still another compartment, and would therefore complicate rather than solve the basic problem. There were strategic overtones to the controversy, the Navy clearly visualizing that the China coast operation would be carried out, the Army insisting on subordinating it to preparations for the assault on Kyushu. Though the final agreement of the JCS followed Army lines on both command and strategic issues, there were concessions to the Navy viewpoint that rendered the Army victory something less than complete.[35]

The JCS directive, issued on 3 April 1945, designated MacArthur Commander in Chief, U.S. Army Forces, Pacific (CINCAFPAC), and placed all Army resources there under his command save those in Alaska and the southeast Pacific. Similarly, all naval resources were placed under Nimitz as Commander in Chief, Pacific Fleet (CINCPAC). The

[34] Msg C-55018, GHQ SWPA to WAR, CM-IN 16870, 17 Dec 44.

[35] (1) JCS 1259, 26 Feb 45, memo by CofS, USA, title: Comd in Pacific. (2) Min, 192d mtg JPS, Six Sessions, 10–15 Mar 45. (3) Memo, Gen Lincoln for Gen Hull, 12 Mar 45, sub: Rpt on Progress in Pac Comd Negotiations, OPD 384 TS, Case 1/7fl (4) JCS 1259/4, 3 Apr 45, title: Command and Opnl Directives for the Pacific.

JCS were themselves to act as the unified command for the theater, determining strategy, assigning missions to the two commanders, and "fixing command responsibilities for specific major operations and campaigns." Normally CINCAFPAC would be charged with primary responsibility for land operations and CINCPAC with responsibility for sea campaigns. In order to permit completion of existing operations the old area commands were to be retained and the changeover to the new system was to be gradual:

> Until passed to other command by mutual agreement or by direction of the JCS, the localities under command of CINCSWPA and the naval forces allotted to him will remain under his command and similarly the areas under command of CINCPOA and the army forces allotted to him will remain under his command. Changes in command of forces or localities and changes made in existing joint logistical procedures will be effected by progressive rearrangements made by mutual agreement, or as may be directed by the JCS.
>
> CINCPAC and CINCAFPAC are each authorized to establish joint forces or designate commanders to exercise unified command for the conduct of operations for which they have been made responsible, and may also do so by mutual agreement. They will also determine by mutual agreement when forces or localities revert or pass to the appropriate commander following operations.[36]

The plan for a gradual transition "by mutual agreement" meant that MacArthur would not be able to assert his control over the Army resources in POA for some time, and that in all probability the controversies over service troops and Philippine base development would continue. The strategic directive that accompanied the directive on command similarly lacked finality. As immediate tasks, Nimitz was to complete his campaign in the Ryukyus, MacArthur his in the Philippines. Each was to make plans for certain subsidiary operations —Nimitz for the Chusan-Ningpo assault; MacArthur for occupying north Borneo. Both commanders were to make plans and preparations for the final invasion of Japan—Nimitz for the naval and amphibious phase, MacArthur for the land campaigns—with necessary co-ordination to be exercised between them. The directive thus seemingly gave the preference to the Army view that after Luzon and Okinawa the next move should be to the Japanese home islands, but it did not specifically direct either the Kyushu or Honshu invasions.

In promulgating its directives on command and strategy, the JCS paid singularly little attention to the immense complications that must result in logistical arrangements from the change in Pacific command. No new logistical directive replaced the Basic Logistical Plan of March 1943. This plan had led to the development of an elaborate system of joint logistics in POA though it had not been applied to the same extent in SWPA. Yet even in SWPA the control of shipping and the assignment of movement priorities had been on a joint basis. The new command system would mean that logistics in the Pacific could no longer be based on the concept of joint control over joint areas embodied in the Basic Logistical Plan, but that a new system must be evolved whereby each service should control the flow of supplies and personnel for its own forces throughout the Pacific.

[36] *Ibid.* (4).

That the JCS did not attempt to resolve this question is perhaps the best measure of the difficulty it presented. Agreement on broad principles had been hard enough to reach, and any effort to spell out the details would have delayed agreement indefinitely. In the discussions between the Army and Navy planners, the question of logistical complications came up repeatedly. The Army planners were prone to look at these matters from the vantage point of the Southwest Pacific theater and to dismiss them rather lightly, for in SWPA the separation of Army and Navy supply lines promised to be a problem of little consequence. The Navy planners, on the other hand, were well aware that the separation of Army and Navy logistical functions in POA would be like unscrambling eggs. Yet their major concern was to preserve the existing system intact for Nimitz' current operations in POA and for a possible China coast assault, and they made no proposals for a revision in the Basic Logistical Plan. In the end, the Navy accepted the provision for gradual transition as sufficient to protect Nimitz' interests.[37]

General Somervell, a leading exponent of joint logistics, went along with the orthodox Army view in support of the Pacific plan for separate commands. When asked to comment, he did point to the need for "some centralized logistics staff closely associated with the Army and Navy commanders in the Pacific,"[38] but he did not make clear just how such a staff could serve two different commanders. In an ASF plan drawn up toward the end of March, a joint logistics board was substituted for the joint staff, and there was a suggestion that the Joint Logistics Committee, acting for the JCS, should screen requirements presented either by the joint board in the Pacific or by the Pacific commanders. The whole proposal, a somewhat nebulous one in the first place, got nowhere. The Navy preferred to rely on a system of co-operation between ASF and Navy supply officers in Washington and between MacArthur's and Nimitz' staffs in the field. The obvious inference is that the Navy considered unified supply without unified command impossible.[39]

The thorniest issue of all involved control of shipping, always the center of the entire system of joint logistics in the Pacific. Previously it had been the area commander's prerogative to determine the shipping requirements of both services, to assign shipping priorities to meet them, and to schedule the movement of ships to and within his area. Nimitz had been able to assert his prerogative to the extent that all control of operational shipping for destinations west of Hawaii had been centered in him as theater commander; MacArthur

[37] (1) See discussions in 192d mtg JPS, 10–15 Mar 45. (2) The most thorough OPD study of logistical implications of the command change is contained in memo, Col H. C. Johnson, Chief, Pacific Sec, Theater Gp, OPD, for Gen Craig, 29 Dec 44, sub: Comd Pac, OPD 384 TS, Case 1 (1945 file). (3) Memo, Marshall for King, 22 Mar 45, sub: Draft of Directive for Reorganization and Future Opns in Pacific Theater. (4) Memo, Gen Hull for Adm Cooke, 28 Mar 45. (3) and (4) in OPD 384 TS, Case 1/20. (5) Memo, Cooke for Hull, 27 Mar 45, ABC 323.31 POA (1-29-42) Sec 3A.

[38] (1) Memo, Somervell for Handy, 27 Feb 45, sub: Comd in Pacific. (2) Memo, Somervell for CofS, 23 Feb 45, sub: Procurement Plng for Pacific Opns. Both in WDCSA 323.36 (27 Feb 45).

[39] (1) Memo, Dir Pls and Opns, ASF, for Dir Reqmts and Stock Control Div, 16 Mar 45, sub: Jt A and N Reqmts for Pacific Opns. (2) Memo, Actg Dir Pls and Opns, ASF, for Gen Lutes, 24 Mar 45, same sub. (3) Memo, Lutes for Somervell, 25 Mar 45. (2) and (3) in Folder POA 1942 thru Mar 45, Lutes File.

had left the Navy in SWPA to determine its own requirements and shipping schedules subject only to the regulation of movement priorities by GHQ. One of the points the Army had hoped to gain by the new system was control over its own shipping in POA, but Nimitz was by no means ready to relinquish that control so long as he continued to be responsible for operations within the existing POA command. The provision for gradual transition gave him ample leeway to assert his rights, and the whole question of a new system of shipping control in the Pacific was not resolved for some time. The settlement of the command issue was therefore neither absolutely final nor an entirely unmixed blessing.[40]

The Final Plan for Redeployment

While the question of command was being threshed out, the planners were also working feverishly on a realistic plan for redeployment. In the Army view, the redeployment plan had to be the capstone of the whole structure of preparations for the final phase in the Pacific, for redeployment was the necessary prelude to mass invasion. And while the planners worked, Somervell continually bombarded both OPD and the Chief of Staff with memoranda demanding a firm detailed redeployment troop basis on which supply and movement plans could be based. All OPD could do was put him off with tentative answers to his questions.[41]

At the Malta-Yalta conferences, the CCS provided a realistic planning date for the end of the war with Germany—1 July 1945—and directed the Combined Staff Planners to present a combined redeployment plan by 1 April 1945.[42] Promptly on 9 February a subcommittee of the Joint Staff Planners began work on the American part, using the unapproved December plan as a starting point. In order to proceed, the planners had to make strategic assumptions and presuppose a schedule of operations to which redeployment movements would be geared. In so doing they accepted the Army concept of mass invasion and the general sequence of operations—ICEBERG, OLYMPIC, CORONET—envisaged in the previous redeployment plan with a North Pacific operation fitted in immediately following the completion of ICEBERG. Attempting to tailor these strategic objectives to the logistical limitations that had made themselves felt in the Pacific since November 1944, and prospective delays in redeployment, the members of the subcommittee at first estimated that OLYMPIC could not be executed until 1 April 1946 and CORONET not until 1 July. Then, pressed by the JPS to speed up the schedule, they dropped the North Pacific operation completely and cut force requirements for the others. By these means, and by exploiting additional sources of personnel shipping, the subcommittee was able to work the target dates back to 1 December 1945 and 1 April 1946, respectively.[43]

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[40] (1) Memo, Gen Lincoln for Gen Hull, 18 Mar 45, OPD 384 TS, Case 1/26. (2) Ballantine, *U.S. Naval Logistics in the Second World War*, pp. 270–71.

[41] Somervell's numerous memos and OPD's replies are in OPD 320.2 TS, Case 67/1–4.

[42] Min, 186th mtg CCS, 7 Feb 45, and 178th mtg, 8 Feb 45.

[43] Diary Entries, 20 Feb, 5, 8, 12, 14, and 20 Mar 45, Strat Log Br, Plng Div, ASF.

The Army force goals were reduced considerably from the December plan—divisions from 40 to 36, air groups from 178 to 142, and the total personnel augmentation (for the Pacific and CBI) from 1,694,500 to 1,074,600. The service troop basis was most drastically cut, from a 138 percent augmentation to a 72 percent one; the cut in ground combat force augmentation was less drastic, from 78 percent to 64 percent.

The new force goals and the movement schedules to meet them were geared to the target dates for OLYMPIC and CORONET. For the invasion of Kyushu it was estimated that 13 divisions would be required, 8 in the assault and 5 in the follow-up; for Honshu, 23 divisions, 12 in the assault, 2 in the follow-up, and 9 in the subsequent build-up. In addition, 6 divisions would be required to fulfill garrison requirements and constitute a forward area reserve, making a total of 42. The 21 Army and 6 Marine Corps divisions already in the Pacific would suffice for the initial assault and follow-up on both Kyushu and Honshu. Fifteen divisions from Europe would be required to complete the build-up on Honshu and provide the garrison forces and forward reserve. Meanwhile, 21 more divisions would be moved from Europe to the United States (instead of the 15 in earlier plans) to reconstitute the strategic reserve; these would be moved to the Pacific only as the course of operations after the initial assault and build-up dictated.

The number of AAF groups in the Pacific was to be virtually doubled despite the cutback, and many of the heavy bomber groups redeployed from Europe were to be reconstituted as very heavy bomber groups and equipped with B–29's in the United States before dispatch to the Pacific. The major units to be moved to the Pacific totaled 15 divisions and 63 air groups, along with the additional service and supporting troops necessary to make up existing deficiencies and provide a proper ratio for the additional major units. Meanwhile, more than 2 million more men would have to be moved from the inactive theaters to the United States to reconstitute the strategic reserve and for discharge as the European theater force was cut to the agreed 400,000 occupational requirement and most other areas were closed out.

As had been provided in the December plan, the troops to make up existing deficits in the Pacific and complete the troop basis for OLYMPIC were to move directly from Europe to the Pacific during the first quarter following V–E Day. Other movements, either through the United States or direct from Europe, were arranged in accordance with the required operational readiness dates in forward areas for CORONET. (*Table 34*) No troops would be repatriated for demobilization or to form the strategic reserve until the end of the first quarter save 75,000 hospital patients. Thereafter the pace of repatriation would be controlled by the shipping space available after higher priority movements to the Pacific were carried out. Troop movements to the Pacific would have to be completed within ten months after V–E Day (assumed as 1 July 1945); repatriation for the strategic reserve and for demobilization would take from 3½ to 7½ months longer.[44]

[44] (1) JCS 521/12, 29 Mar 45, title: Strategic Deployment of U.S. Forces Following Defeat of Germany. (2) JCS 521/13, 29 Mar 45, title: Factors Underlying the Strategic Deployment of U.S. Forces Following Defeat of Germany.

TABLE 34—SCHEDULE OF REDEPLOYMENT TROOP MOVEMENTS

Purpose	Strength	Operational Readiness Date in Forward Staging Area
Direct From Europe to the Pacific		
Total	395,900	
AAF for OLYMPIC	48,000	September 1945–November 1945
AAF for CORONET	30,000	December 1945
AGF for OLYMPIC	32,900	September 1945–November 1945
AGF for CORONET (2 divisions)	66,000	December 1945–January 1946
5 divisions for Pacific garrisons	70,200	November 1945–December 1945
ASF for OLYMPIC	75,900	September 1945–November 1945
ASF for CORONET	72,900	November 1945–January 1946
From Europe Through United States to Pacific		
Total	408,200	
AAF for CORONET	63,000	October 1945–March 1946
AGF for CORONET	263,600	October 1945–April 1946
ASF for CORONET	81,600	March 1946–April 1946
AAF for reconstitutions as VHB groups	75,200	To arrive in U.S. September 1945
Originating in United States to the Pacific		
AAF for VHB program (including 75,200 from Europe)	102,500	August 1945–April 1946
Attrition replacements	5 percent of overseas strength at start of each quarter	
Rotation replacements	36,000	monthly
Return from Europe To Remain in United States		
Hospital patients	75,000	First quarter after V-E Day
Demobilization and retention in strategic reserve	2,180,000	To begin at end of first quarter of redeployment and to be completed between 13½ and 17½ months after V-E Day depending on availability of shipping.

Source: JCS 521/13, 29 Mar 45, Factors Underlying the Strategic Deployment of U.S. Forces Following Defeat of Germany.

Meeting the schedule, the planners estimated, would require the concentration of all available troop-carrying vessels and planes in the redeployment move, including all U.S. troopships then in use in both the Atlantic and Pacific, 236 U.S. cargo ships presently fitted to carry 350 troops each, 100 U.S. cargo vessels to be converted to carry 500 troops each, all hospital ships in the Atlantic on V–E Day, and the maximum number of naval assault personnel carriers that could be made available in the Pacific. In addition, combat aircraft would be used to move air crews when types of planes and routes of movement

were suitable, and enough Air Transport Command planes and troop-carrier groups were to be employed to provide a lift of 15,000 monthly across the Atlantic. The naval assault shipping was to be used only on the Pacific run. It was estimated that a total of 80 APA's could be spared to transport some 195,000 men from the United States to the Pacific between July and December 1945, which would still leave a minimum of 105 operational APA's with the Pacific Fleet to take care of interarea and intra-area troop movements.

With this American lift alone, the planners predicted that the movements to the Pacific could be executed within the ten months stipulated, but they visualized considerable delay in repatriation without the assistance of British troop shipping and captured enemy vessels converted to that use. It would take 17½ months to return all personnel to the United States without this assistance, the planners thought, and only 13½ months if the British would provide 70,000 spaces monthly in the Atlantic (the assistance they had provided for OVERLORD), and if 39,000 additional spaces could be furnished in captured and converted German liners. In short, if the proposed first priority for movements to the Pacific could be maintained, the success of OLYMPIC and CORONET would not be dependent upon the disposition of British and captured liners, though the speed of the whole redeployment movement would. And the military planners were well aware that public pressures might easily force a change in the priorities.

The plan also provided for extensive redeployment of supplies. Eighty percent of initial equipment for troops redeployed would have to come from Europe, including almost all general purpose vehicles; the other 20 percent, plus maintenance for vastly increased Pacific forces and project materials, would have to be shipped from the United States. At least 17 fast cargo ships would have to be loaded in Europe in August and 18 in September, besides routine slow cargo shipments, to provide the needs of the troops shipped in first priority. The strain on available cargo shipping then could be expected to continue despite the cutbacks in European requirements on V–E Day. The CCS, however, had directed at ARGONAUT that a combined cargo shipping study be made an integral part of the combined redeployment plan. The JPS subcommittees consequently made no extensive study of their own, but reserved that problem for combined consideration with the British.[45]

Just as important as the shipping question was that of base and staging facilities—in Europe, in the United States, and in the Pacific. In Europe facilities for staging and outward movement of 400,000 men per quarter would have to be set up; in the United States the west coast installations must be made ready to handle 180,000 troops at a time. Neither requirement seemed to create excessive difficulty. The ports in Europe had the necessary capacity; the only problem would be the time needed to prepare assembly areas in back of them. To provide the necessary capacity on the west coast required only the addition of space for 15,000 men at Fort Lewis, Wash-

[45] (1) JCS 521/13, 29 Mar 45. (2) CCS 746/11, 8 Feb 45, rpt by CMTC and CSAB, title: Over-all Review of Cargo and Troop Shpg Positions for Remainder of 1945.

ington. The really difficult base problem was in the Pacific. "Economic use of shipping," the planners thought, "appears to result from movement of forces to forward mounting areas in the Pacific rather than moving them from the United States direct to the objective."[46] Based on this premise, the Philippine Base Development Plan retained its preeminent place as the most important aspect of preparations in the Pacific itself for the final assault. Of the 36 Army and Marine divisions to be engaged in OLYMPIC and CORONET, 30 were to stage and mount in the Philippines, 3 in the Ryukyus, 2 in Hawaii, and 1 on Saipan. Also, 3 or 4 divisions would be employed as a garrison in the Philippines, 2 or 3 in the Ryukyus. The planners calculated that there would have to be facilities in the Philippines to handle a peak load of 22 divisions by November 1945 and for simultaneously mounting 11 divisions for CORONET in February 1946.

All in all, the Joint Planners thought the schedule of redeployment and of Pacific operations could be met, but left little margin of error in terms of ground force deployment. They noted that target dates for OLYMPIC and CORONET could hardly be moved forward in the event Germany were defeated before 1 July 1945, since there would not be enough time to make necessary preparations in Europe, return assault shipping from Okinawa, or to develop the Philippine and Okinawan bases. If the war against Germany were prolonged beyond 1 July, the planners thought target dates for the two main operations would simply have to be postponed accordingly.[47]

The joint redeployment plan took little note of any British contribution to the war in the Pacific. And the combined plan, for which the CCS had asked at ARGONAUT, was not based on any clearly defined combined strategy. This plan, presented by the Combined Staff Planners and the Combined Administrative Committee to the CCS on 2 April, one day after the deadline and only four days after the American plan had been presented to the JCS, consisted simply of the two national plans, British and American, placed end to end with the points of conflict noted.[48]

The British refused to project their deployments for a period longer than six months after V–E Day. During this six months they planned to move six divisions to southeast Asia, a VLR bomber force to the Pacific, provide 246,100 replacements for their armed forces at overseas stations, and repatriate 122,600 Commonwealth forces, including 42,700 Canadian and New Zealand troops for reorganization for the Pacific war. By sacrificing any further repatriation of Commonwealth forces and some other movements, the British said they could make available the two *Queens* and the *Aquitania* for transatlantic movements of U.S. troops for the six-month period, providing a total monthly lift of 50,000 instead of the 70,000 for which the Americans had hoped. They did not include any captured lift in their calculations and urged that the Americans should likewise exclude it, reasoning that all shipping recovered after Germany's surrender would be subject

[46] JCS 521/13, 29 Mar 45.
[47] *Ibid.*
[48] CCS 679/1, 2 Apr 45, memo by CPS and CAdC, title: Redeployment of U.S. and British Forces after Defeat of Germany.

to disposition by the four-power European Advisory Commission.

Moreover, the British also refused to proceed with a combined analysis of cargo shipping even for the first six months. They insisted it must be postponed until food conferences then under way could determine the source of food supply for European civilian relief. Reflecting their long-standing concern lest the cargo requirements for the Pacific war preclude large-scale relief shipments to Europe and the limited revival of their own export trade, the British would not agree to set a priority on the redeployment movement, thus indicating they did not regard the ARGONAUT decision as final.

Several weeks of negotiations failed to persuade the British to abandon their positions. The cargo shipping study, consideration of the use of captured shipping, and combined redeployment and repatriation after the first six months were consequently all deferred. With captured shipping (39,000 spaces per month) excluded, and the British offer of personnel lift, even for the first six months, less than expected (50,000 rather than 70,000 spaces per month), the American planners estimated that it would take fifteen months to complete redeployment and repatriation of their forces, and that the rate of formation of the strategic reserve for operations in the Pacific would be dangerously slow. Hastily a new expedient took shape—conversion of 100 more fast American cargo ships to carry 1,500 troops each. The conversions would reduce the cargo-carrying capacity of the U.S. merchant fleet by about 9 percent and leave only the bare minimum of fast cargo ships in the Atlantic required to carry out the immediate post-V–E Day supply movements from Europe to the Pacific. But the JCS decided they must accept this cost and persuaded WSA to undertake the conversions. By this expedient and by finding additional airlift across the Atlantic, the JPS estimated that the whole redeployment could be executed in ten months if the British ships continued available beyond the six months for which they were promised.[49]

Within American circles critical eyes were in the meantime being cast on the redeployment plan. To some the scale of effort contemplated for a one-front war seemed entirely too great. If ground and service force deployment to the Pacific had been calculated at the bare minimum required for mass invasion, even in terms of this strategy the size of the strategic reserve and the slow rate of Army demobilization were suspect. Air Force and Navy deployment seemed to be calculated more in terms of a strategy of bombardment and blockade than in terms of mass invasion. Air and naval forces in the Pacific were to be increased right up through the end of 1946, long after the time it might reasonably be expected the Japanese Navy

[49] (1) *Ibid.* (2) CCS 746/14, 3 Apr 45, memo by USCOS, title: Over-all Review of Cargo and Transport Shpg Position, Remainder of 1945. (3) CCS 746/16, 5 Apr 45, memo by Br COS, same title. (4) CCS 679/2, 23 Apr 45, title: Redeployment of U.S. and British Forces after Defeat of Germany. (5) CMT 66/7, 4 Apr 45, title: Conversion of Dry Cargo Shpg after V–E Day. (6) Memo, Col Stokes, Chief, TC Plns Div, for Gen Somervell, 5 Apr 45, sub: Effect of Additional Conversions on Repatriation Performance, ABC 320.2 (3-13-43) Sec 9. (7) JCS 1306, 8 Apr 45, rpt by JMTC, title: Acceleration of Repatriation from Europe After V–E Day. (8) JCS 1306/1, 22 Apr 45, same title. (9) Diary entries, 12, 14, and 18 Apr 45, Strat Log Br, Plng Div, ASF. (10) JMT 72/3, 3 May 45, title: Revised Estimate of Personnel Shpg Including Air Transport.

and Air Force would have been completely destroyed.

Justice Byrnes first raised the issue of the size of the air forces with the Joint Production Survey Committee, inquiring as to the necessity for maintaining almost as large an aircraft program for a one-front war as for a two-front one. But the JPSC, torn by conflicting service interests, failed to agree on any positive recommendations. Maj. Gen. Richard C. Moore, Army representative on the committee, privately informed General Marshall that he could see little reason for "assisting in the overall problem by proposing a reduction in AAF deployment," when it was the Navy that was "pressing a far greater relative preponderance." Moore wrote:

> The size of the Navy has apparently been based on not what was the minimum force necessary to bring the war to a successful conclusion, but what was the limit of productive capacity that could be assigned naval construction. This relative preponderance has increased to such an extent that the existing Japanese naval and air strength is only the equivalent of one of our task forces and this condition obtains eighteen months prior to the assumed conclusion of the war. In spite of past victories and present position, it is proposed . . . that naval air carrier strength be increased by 48% by 31 March 1946 and an additional 15% by 31 December 1946, plus British naval deployment in this area.[50]

General Marshall, seriously concerned about the proposed slow rate of demobilization, secured some minor reductions in the over-all Army troop basis and determined to raise the question of reductions in all components with the JCS. Admiral King preceded him on 7 April with a blast at the AAF deployment schedules:

> The deployment of air forces set forth . . . appears to be based on an effort to deploy all aircraft which can be built, or will be in existence at specified dates, rather than on an evaluation of what will be required at the time, and what can be supported in the areas at specified times . . . approximately 30% more air [are deployed] in December 1946 than in December 1945. This in the light of current progress of events and planning seems quite unrealistic and unnecessary.[51]

King accompanied this blast with criticism of the mounting plan for the Philippines and questions concerning the reinforcements to be sent to the CBI. He did approve, however, the recommendations for deployments through the end of 1945 "for planning purposes," subject to examination with a view to revision "without delay."[52] General Marshall agreed, but with a tactful reminder to Admiral King that it was not merely the size of the AAF that should be called into question:

> There are elements in the paper which are highly questionable and which the JCS may be unable to support before the American people. . . . I agree with Admiral King that . . . the deployment of air forces appears quite unrealistic and unnecessary. This statement applies not only to air forces, both Army and Navy, but also to deployment of Naval forces and perhaps also to ground forces . . . the total number . . . in the armed forces shows an increase from VE-Day until six months after VE-Day and no decrease worthy of mention until 12 months after the assumed VE-Day, with

[50] Memo, Gen Moore for CofS, 31 March 45, sub: Military Aircraft Reqmts after Defeat of Germany, ABC 320.2 (3-13-43) Sec 8.

[51] JCS 521/15, 11 Apr 45, memo by COMINCH and CNO, title: Strategic Deployment of U.S. Forces Following Defeat of Germany.

[52] *Ibid.*

11,000,000 men under arms 18 months after VE-Day. . . .[53]

With these qualifications on both sides, the JCS approved the redeployment plan on 22 April 1945 as a basis for planning, directing at the same time that separate joint studies be made of the possibilities of reduction in the Army's strategic reserve, in the AAF, and in the Navy.[54]

The Place of Philippine Base Development

When presenting his opinions on the redeployment paper, Admiral King had called into question its provisions for staging 30 divisions for OLYMPIC and CORONET in the Philippines. The Philippine Base Development Plan, as incorporated in the redeployment study, had undergone some change since it had been originally presented by MacArthur in January. On 24 February General Marshall had forwarded it to the JCS as a matter of joint concern. There the Joint Logistics Committee and Joint Staff Planners had revised it to bring it in line with the strategic concept underlying the redeployment plan.

MacArthur's plan had been based on fulfilling the FILBAS Agreement by providing facilities for 9 divisions from POA (6 Army and 3 Marine) and gathering the scattered divisions in SWPA into a new concentration area; it made no provision for staging or mounting divisions to be redeployed from Europe. By 30 March 1945, when the JLC rendered its report, any hopes that the May target date of the original plan could be met had long ago gone into discard. The 3 divisions of XXIV Corps were even then mounting out of bases on Leyte for the invasion of Okinawa, but MacArthur had decided a month before that he could not provide facilities for the 9 POA divisions for later operations. As a result, Nimitz had canceled his requirements for staging 4 of the 6 Army divisions from POA in the Philippines and had decided to provide the necessary facilities on Saipan and Okinawa. The joint planners assumed, nevertheless, that a requirement remained for staging 2 Army and 3 Marine divisions from POA in the Philippines, though at a later date than May 1945. They also now foresaw a need for staging and mounting 10 divisions to be moved from Europe to the Philippines for OLYMPIC and CORONET. The base development plan was consequently revised to provide for staging and rehabilitating facilities for 22 divisions in the Philippines, to be ready by November 1945, and facilities for simultaneously mounting 11 divisions to be ready by February 1946. The plan for air facilities was also changed to provide for fields for only 28 regular groups rather than 34 and for an eventual build-up to 12 very heavy bomber (VHB) groups, both on a delayed time schedule. The plan for naval bases remained unchanged.[55] The

[53] (1) JCS 521/16, 11 Apr 45, memo by CofS, USA, title: Strategic Deployment of U.S. Forces Following Defeat of Germany. (2) Memo, CofS for Gen Moore, 10 Apr 45, sub: Military Aircraft Reqmts after Defeat of Germany, ABC 320.2 (3-13-43) Sec 8.

[54] (1) The decision on approval was reached without recorded discussion in the JCS. (2) For the continuing redeployment studies, see JWPC 49/26/M, 28 Apr 45, title: Continuing Redeployment Studies, ABC 320.2 (3-13-43) Sec 9.

[55] (1) JCS 1258, 24 Feb 45, memo by CofS, USA, title: SWPA Base Development Plan, Philippine Islands. (2) JCS 1258/1, 30 Mar 45, rpt by JLC in collaboration with JPS, same title.

changes in the time schedule now coincided with ASF shipping forecasts while the material requirements stayed basically the same, so that detailed project planning went on without interruption. The JLC recommended that the JCS approve.

Admiral King was not convinced. He questioned both the requirement for staging three Marine divisions in the Philippines and the advisability of also staging there the ten Army divisions from Europe. For the latter he suggested it might be "more economical of shipping to stage and mount these divisions from the United States direct to operations."[56] Marshall agreed to send the plan back to the JLC for study and possible revision, but he said it would be necessary for the Army to use it for the time being as a planning basis "in connection with preparations, the initiation of which cannot be further postponed."[57] The Army staff reasoned that shipments must be started, and that necessary adjustments in quantities could be made later as plans were developed in the Pacific theater under the new command system for the final invasion of Japan. The JPS and JLC, reporting to the JCS, noted that the method shown was only one solution to the problem of staging and mounting divisions and that final resolution would be subject to final plans from the theater. A JCS message to Nimitz and MacArthur on 23 April stated:

> The question of the number of divisions to be staged through the Philippines requires further consideration with the particular object of reducing the number and the facilities required to be provided by mounting and staging divisions from other areas where facilities already exist, specifically by mounting and staging the maximum number of units directly from the United States, Hawaii, the Marianas and Okinawa.[58]

The whole master plan for redeployment thus could clearly be labeled "for planning purposes only." General Somervell's continued pleas for adequate data on which to base procurement, supply, and movement schedules for the Army undoubtedly influenced Marshall heavily in his final determination to get a planning decision accepted and to leave the details for further study. Also, Admiral King, in accepting the strategic premises on which the plan was based, quite certainly did so with the feeling that it would be better to make all the preparations for invasion of Japan and then cancel the operation later than to be caught short should invasion really prove necessary. By the end of April King himself was urging that a directive be issued to the Pacific commanders for OLYMPIC, and only the continuing difficulty of resolving the question of how command of the amphibious phase of the assault should be arranged held it up until 25 May 1945. The directive was held up nevertheless, and in the meantime Nimitz continued under his earlier

[56] Memo by COMINCH and CNO, 6 Apr 45, sub: SWPA Base Development Plan, Philippine Islands; Factors Underlying Strategic Deployment of U.S. Forces . . . , app. to JPS 193/12, ABC 320.2 (3-13-43) Sec 9.

[57] Memo, Secy JCS for Leahy, King and Arnold, 11 Apr 45, sub: SWPA Base Development Plan, Philippine Islands, SM-1161, ABC 384 Philippines (16 Jul 44) Sec 5.

[58] (1) Memo, Secy JCS for CINCSWPA and CINCPOA, 23 Apr 45, sub: SWPA Base Development Plan . . . . (2) OPD MFR, Lt Col H. W. Ebel, 13 Apr 45, sub: SWPA Base Development Plan. . . . Both in ABC 384 Philippines (16 Jul 44) Sec 4.

directive to make plans for moving onto the Chusan Archipelago and at least to some extent to gear his logistical preparations to that end. Just before the issuance of the final JCS directive for Kyushu, Somervell was still complaining about the lack of strategic guidance, pointing out that while LONGTOM remained on the books, Nimitz would withhold both Army resources in POA and assault shipping from MacArthur.[59]

Somervell's expressed concern over the matter had been increased by the fact that in proposing the directive for OLYMPIC, King had moved the target date forward a month from 1 December to 1 November 1945 in keeping with the feeling of MacArthur and Nimitz that weather conditions in November were more suitable for an invasion of Kyushu. Fortunately, in the interim the surrender of Germany had actually occurred on 8 May 1945, almost two months ahead of the 1 July estimate in the redeployment plan, and with this development it appeared that the advanced OLYMPIC target date would necessitate no speed-up in the redeployment schedule, but would require acceleration in the pace of base development in the Pacific.

By the time the German surrender took place, the plan for redeployment at least had been approved and the necessary movements could begin within its framework. The many questions that remained about logistics in the Pacific in the final phase—the scope of Philippine base development, the disposition of assault shipping, and the new logistical system to conform to the new command set-up—would simply have to be arranged while redeployment and preparations for the final assault were under way. These unresolved issues and uncertainties were in large part a result of interservice disagreements that had their roots in different concepts of strategy and in ancient convictions of service prestige and prerogatives. Together, they made impossible a realistic approach to the question of the size of a balanced force necessary to defeat Japan, as each service inflated its requirements in the interest of exercising a vital role, and they forced the adoption of a system of separate Army and Navy commands in the Pacific at variance with the proven efficacy of unified command experienced in all other theaters of the war. Moreover, it seems curious in retrospect that, even apart from considerations of the atomic bomb, there was never any planning for the collapse and surrender of Japan as there had been, even in 1942, for the collapse of Germany.

[59] (1) JCS 1331/3, 25 May 45, title: Directive for Opn OLYMPIC. (2) Hayes, War Against Japan, II, 374–81, History JCS. (3) Memo, Somervell for CofS, 21 May 45, sub: Logistical Support of Pacific Opns, OPD 400 TS, Case 80.

CHAPTER XXIV

Logistics of a One-Front War

The long-hoped-for surrender of Germany on 8 May 1945 freed the United States of the burden of fighting a war on two fronts. The commands in Europe became reservoirs of both manpower and supplies for the war against Japan. This one-front war, in the event, lasted for only a little more than three months after the surrender of Germany and during that time no new major operations were undertaken in the Pacific or the Far East. The conquests of Okinawa and of Ie Shima were completed, and in the Southwest Pacific MacArthur's forces carried out the final reduction of organized resistance in the Philippines and undertook small-scale invasions of the Netherlands Indies. In China and southeast Asia, now almost outside the pale of major strategic decision, plans for subsidiary operations against Sumatra and Singapore and for a Chinese drive to seize a port on the China coast never came to fruition. Principal emphasis during the period was on preparations for the final assault on Japan, operations OLYMPIC and CORONET, which in the end did not have to be executed. These preparations, nevertheless, represented one of the major logistical challenges of World War II and merit some description.

Procedures, Policies, and Problems in Army Redeployment

The development of policies and procedures for redeployment of the Army followed a smoother course than did the joint redeployment planning described in the previous chapter. The basic principles agreed on by the OPD committee in September 1944 and approved by the Chief of Staff at that time were still the guiding lines in May 1945.[1] The procedures were codified in the War Department Basic Plan for Period I, which was first published in early November 1944 and subsequently modified to meet changing conditions. The plan established the basic procedures for movements to the Pacific and for the limited demobilization that was to take place before the defeat of Japan.[2]

Personnel readjustment in the Army subsequent to V–E Day was to proceed under a "point" system. Each individual soldier would receive a point score based on length of service, overseas service, battle participation, decorations, and dependency. Subject to a military necessity clause, the men having the highest point scores would be discharged, those with the lowest would be assigned to duty in the Pacific or to occupation forces in Europe. In the European and

[1] See above, ch. XXIII.

[2] (1) TAG Ltr to Maj Comds, 4 Nov 44, sub: WD Policies and Procedures Governing Redeployment of Army Upon Cessation of Hostilities in Europe, AG 400 (30 Oct 44) OB-S-E-M, and revisions. The last revision was on 7 April 1945. (2) ASF Booklet, Basic Plan for Period I (Redeployment, Readjustment and Demobilization), 31 Oct 44, and revisions. The following description of Army procedures is based on these two sources.

Mediterranean theaters and in the United States, immediately after V–E Day, units were to be readjusted into four different categories. Category I units would include men to be retained for continued service in their current commands; Category II, those to be redeployed to the Pacific either directly or indirectly; Category IV units would be made up of high-point men to be sent home for discharge. Category III was to consist of units to be reorganized in a great reshuffling of personnel and then brought under Categories I or II. In the Pacific theaters and the CBI, there was to be no categorization of units, but, insofar as was "consistent with the build-up and projected operations," high-point men were to be returned to the United States for discharge on the same basis as those in Europe as soon as replacements were available.

The determination of the number of men to be discharged, the number required for the war against Japan, for occupation, and for the strategic reserve in the United States would be governed by a new War Department Troop Basis for a one-front war, to be published as soon as possible after the defeat of Germany. Similarly, movement of Category II units to the Pacific and the United States and of Category IV units home for inactivation would be controlled by a Redeployment Forecast drawn up by OPD.

The supply plan envisaged a cutback in military production with the requirements for the first twelve months of a one-front war incorporated in a Special Army Supply Program. Maximum use was to be made of supplies in inactive theaters. Levels of supply in these theaters were to be cut to a maximum of 60 days of all classes for troops remaining; all supplies above that level were to be considered as surplus either for shipment to the Pacific or for return to the United States. As far as possible, units being redeployed to the Pacific were to be furnished by the theater of origin with initial issue of combat serviceable individual and organizational equipment plus 60 days of Class I and certain kinds of Class III maintenance. Of this, only minimum essential equipment (MEE) was to accompany troops redeployed, whether directly or by way of the United States; the rest would be shipped directly to the theater of destination. These bulk shipments for the high priority units redeployed directly after V–E Day for participation in OLYMPIC were to move by fast cargo ships and arrive at their destinations as nearly as possible at the same time as the units; shipments for units indirectly redeployed would proceed by slow cargo ships, permitting less hurried assembly and dispatch. Initial equipment would be shipped to the United States for units returning to reconstitute the strategic reserve, but no maintenance shipments were required for them. Category IV units returning for inactivation would carry only allotted quantities of individual equipment and organizational equipment needed for housekeeping.

Redeployment was not to be delayed "because of shortages of any items of supply or equipment" in theaters of origins. On receipt of reports of such shortages, the ASF would see to it that they were made up in timely manner by direct shipment to the Pacific or supplied in the United States to troops remaining in the strategic reserve. Only combat serviceable equipment would be

shipped to the Pacific; items that did not meet that standard could be returned to the United States to be placed in a reserve pool. In the European and Mediterranean theaters, troops being redeployed would have first priority on all such combat serviceable equipment, the permanent occupation force second priority. Any supplies or equipment surplus to those two priority requirements were to be shipped in bulk either to the Pacific or the United States, or, if not needed in either place, disposed of locally as surplus.

These procedures were to go into effect on a designated R Day, the day redeployment was to begin, that might or might not be the same as V–E Day. On V–E Day itself, the plan provided, units under orders to move to the European or Mediterranean theaters were to be held and rerouted to the Pacific; units en route were to continue to their destination. Normally, supplies en route to Europe were also to continue to their destination, though in isolated instances requirements of the war against Japan might necessitate rerouting. Supplies and equipment slated for Europe in ports, depots, and holding and reconsignment points were to be held, except for subsistence, medical, and recreational supplies, Army Exchange supplies, supplies for civilians in liberated areas, and a few miscellaneous categories. With the noted exceptions, requisitions and shipping orders were to be canceled and theater commanders instructed to submit new requisitions only for items essential in the new situation.

Since the procedures were relatively stable from fall 1944 onward, and only the dimensions of redeployment continued in doubt, the theaters in Europe had ample time to become acquainted with them and to make some of the preparations for the execution of the redeployment moves. A constant interchange of ideas and personnel between the War Department and ETOUSA and MTOUSA, aimed at educating the theaters in the problems involved in reversing the flow of personnel and supplies, was kept up. In Europe a special redeployment planning group was established in the communications zone, and a special command was set up to begin preparation of assembly areas back of the ports for staging outgoing troops. A start was made in the categorization of units in both theaters, though the "critical score" above which men would be entitled to discharge was not determined until after V–E Day. Marseille was designated as the principal ETO port for direct shipments to the Pacific, and Le Havre, Antwerp, and Liverpool as the principal ports for shipments to the United States. In the MTO, Naples was to be the principal port for all outshipments. That these ports would be adequate, there was never any question. The major problems, the theaters early recognized, would be to carry out the timely readjustment of personnel, to get battle-worn equipment into combat-serviceable condition, and to pack and mark equipment so that it could be identified and used upon arrival in the Pacific.[3]

[3] (1) Min of Conf on Distribution and Maintenance of Equipment for Units Deployed to Pacific Areas, with Reps of ETO, 20 Mar 45, file 319.1 Rpts and Confs, ASF Plng Div. (2) Addendum to Diary, 30 Apr 45, sub: Summary of Conf, ETO Comments on Redeployment, Strat Log Br, Plng Div, ASF. (3) European Comd, Historical Div, Redeployment, prepared by Mildred C. Hester for "Occupation Forces in Europe Series, 1945–1946," MS, OCMH, pp. 17–18.

Though the European and Mediterranean theaters were to take over some of the burden of outshipment of personnel and supplies to the Pacific, the center of control remained in the United States, with over-all co-ordination of redeployment and establishment of policies and procedures the responsibility of OPD, and the detailed implementation the concern of ASF. "Our mission," Somervell told key members of his staff on 15 May,

> boiled down to its simplest terms . . . is to bring together in the active theaters the units, supplies and equipment required, and to marry them there at the right time. We are dealing with distances half way around the world. We are dealing in personnel by the million. We are dealing with supply in millions of tons. A mass of detail and delicate timing is involved. . . . The defeat of Germany imposes new conditions in the planning and implementation of the supply program. . . . While there may have been unavoidable reasons for shortage of supply of some critical items during the two-front war, there can be little excuse for shortages from now on. From here out, there must be the maximum possible tightening-up to insure that we have enough but not too much. . . .[4]

Even before the end of the war in Europe, the ASF moved to curtail Army procurement in line with computations of the special program for a one-front war. By 30 June 1945 total ASF procurement scheduled for the year had dropped from the January figure of $28 billion in value to $21 billion, a reduction of about 24 percent. The reduction was even greater, about one-third, in scheduled production for the last eight months of the year. Expectations were that if the war with Japan lasted longer than twelve months, production could be cut back considerably further once supply reserves in the Pacific had been built up to authorized levels.[5]

Meanwhile the ASF recognized that not supplies of themselves, but transportation, storage, housing, and port facilities in the United States and the Pacific were likely to be the critical factors in determining the speed and efficiency of redeployment, and lengthy studies were conducted in all these areas. By V–E Day the ASF had reached the conclusion that facilities in the United States could handle the load, if it were properly distributed. To alleviate the heavy burden on rail lines leading to west coast ports, on the ports themselves, and on the depots and holding and reconsignment points in that area, certain judicious adjustments were planned. On R Day shipments to the China and the India-Burma theaters were to be moved from Los Angeles back to New York, and those to the North Pacific shifted from Seattle to Prince Rupert in Canada, enabling both Seattle and Los Angeles and their subports to render full assistance to San Francisco in handling the load for the main Pacific theater. The distribution was calculated at approximately 37 percent for San Francisco, 26 percent for Los Angeles, 28 percent for Seattle, and 9 percent for Portland. The load for each of these ports was to be geared to the capacity of the transcontinental rail lines, to the availability of stevedores, and to the amount of berthing space; rail capacity and labor supply impended as the principal limiting factors. To avoid overloading, the Transportation

[4] Remarks of Gen Somervell to Key Personnel of ASF, 15 May 45, file 319.1 Rpts and Confs, ASF Plng Div.

[5] ASF, *Annual Report for the Fiscal Year 1945*, p. 174.

Corps estimated that approximately 16 percent of total Pacific shipments during the first six months of redeployment and about 40 percent by the middle of 1946 would have to be shifted to east and Gulf coast ports to move to the Pacific via the Panama Canal.[6]

Storage space was a more critical question. The ASF estimates showed that it would be adequate only if the inflow to depots in the United States could be balanced by outflow to the Pacific within three months after V–E Day. The prospects for such a balance were not bright, for at the main Pacific destination in the Philippines neither progress in rehabilitating the port of Manila nor in carrying out the base development plan was encouraging. Searching for alternatives, the ASF found considerable reserve capacity on Oahu but only the most primitive facilities on Saipan and other forward island bases. MacArthur meanwhile had decided that once the invasion of Kyushu was under way, supply shipments could be made directly to that area rather than to intermediate depots in the Philippines. This prospect of a larger volume of direct shipments on a delayed time schedule, however, promised to contribute to congestion in continental depots during the period preceding the launching of OLYMPIC.[7]

Ultimate success in achieving a smooth and orderly flow of personnel and supplies to the Pacific could depend then largely on the uncertain factor of reception capacity, hardly at this point susceptible of accurate prediction. And this problem indicated the extent to which redeployment planning on V–E Day still lacked the finality which could only come when the Pacific theaters' estimates were in and a firm troop basis and firm supply requirements had been established. OPD, faced by the stall in redeployment planning at the joint level, found it impossible to issue a firm Redeployment Forecast, despite the continual pleas of General Somervell for a reliable guide for supply planning. The staff agency in February did dispatch a tentative Atlantic Section of the Redeployment Forecast to ETOUSA and MTOUSA for comment, and in early March followed with a Pacific Section that went out to SWPA and POA; but both rested on the unsound foundation of the joint committees' December estimates then undergoing drastic revision. The only firm forecast in the hands of the European theater on V–E Day was a special list of service units to be shipped to the Pacific during the first 30 days of redeployment. Once the master redeployment plan had been approved by the JCS, OPD hastily got out a second edition of the Redeployment Forecast, but this did not arrive in the theaters until well after V–E Day. MacArthur in the meantime was working on comments and revisions on the earlier, more or less obsolete, forecast. Since the whole question of command and respon-

[6] (1) Diary entries, 3, 12, 18, 25 Apr 45, Strat Log Br, Plng Div, ASF. (2) Memo, Col Stokes, Chief Plans Div, OCT, for CG AAF, 1 May 45, sub: POE to Serve Theaters After V–E Day, OCT HB File Port Cap and Util.

[7] (1) *Ibid.* (1). (2) Remarks of Gen Somervell, 15 May 45. (3) Memo, Gen Lutes for Dir Pls and Opns, ASF, 31 Mar 45, sub: Review of Plans for Pacific War. (4) Memo, Gen Wood for Actg CofS, ASF, 5 Apr 45, same sub. (5) Memo, Wood for Dir Supply, ASF, 7 Apr 45, sub: Logistical Situation in Pac Theaters. Last three in folder 1a Policy CenPac, ASF Plng Div Theater Files. (6) OPD MFR, 9 Apr 45, sub: WD Policies and Procedures for Redeployment. . . , OPD 400 TS, Case 55.

sibility was still being argued in the JCS and MacArthur had no firm operational plan on which to proceed, his comments and revisions were also bound to rest on uncertain bases. Redeployment had to begin, and to continue for some time, without benefit of a carefully considered troop basis from the responsible theater commander.[8]

There were also uncertainties about logistical arrangements under the new command system. The Army staff went ahead on the assumption that under arrangements made in April MacArthur would formulate the final plans for the Army's part in OLYMPIC and CORONET and that supply and shipping procedures would be readjusted to conform to a division of command along service rather than area lines. But in conferences with the Navy barely a week before V–E Day the Army learned that its sister service had rather different ideas.

The Army-Navy Shipping and Supply Conference

With the Army and the Navy both engaged in planning for a major shift of forces to the Pacific theaters, and each ready to impose parallel demands on continental supply and service facilities, the need for co-ordination somewhere below the joint planning levels was obvious. The impetus for a conference on logistical problems involved in the last phase of the war came from the Navy, which by the end of February 1945 was facing a crisis in its own support operations on the west coast. Concomitant to the increased scope of Pacific operations and the cutback in shipping to all Pacific theaters in early 1945, congestion began to appear in the Navy's west coast depots, which were nearly all concentrated in the ports. Supplies flowed in more rapidly than shipping could be furnished to move them. The Navy sought additional shipping, and in March 20 ships were ballasted from the Atlantic to the Pacific to meet its requirements, despite the protests of the Army and WSA. The log jam of naval supplies at west coast shipping centers continued to mount notwithstanding; at Port Hueneme it reached a million tons. Without the benefit of holding and reconsignment points to store this tonnage until ships were available, the situation threatened to become worse as the demands of the constantly growing fleet mounted. The Army had for some time previously authorized naval use of space within its holding and reconsignment points, but took a dim view of any extensive exercise of this privilege because the Navy often left the material there for long periods.

The Navy decided the situation called for a much more extensive use of east and Gulf coast ports for shipments to the Pacific and more careful planning for the division of the load among ports along all coasts (it was already using east coast ports for a limited number of sailings to the Pacific, mainly ships carrying routine maintenance). To plan the necessary adjustments the Navy Department established a Material Distribution Committee. The committee, conducting studies similar to those prepared on the Army side by the ASF, found that the average monthly requirement for supporting the Navy in the Pacific

[8] See materials in OPD 320.2 TS, Cases 58, 58/5, 58/9, 58/17, 58/24, 58/38, 58/39, 58/43, 58/51, 67, 67/2, 67/3, and 67/4, too numerous to cite individually.

during the first year after V–E Day would be 1,815,000 measurement tons. Of this tonnage it estimated an average of 1,167,000 tons monthly, or about 68 percent, could be handled on the west coast. The committee then produced a plan in some detail for the types and quantities of supplies in the other 32 percent that would have to be shipped from the east and Gulf coasts.[9]

Out of consideration that these plans might well cut across those of the Army grew the call for a conference, issued by the Chief of Naval Operations to the Commanding General, ASF, on 31 March. The Navy at first proposed a restricted agenda dealing only with the proposed distribution of continental stocks, methods of integrating shipments from the continental United States into CINCPOA shipping plans and schedules, and the establishment of a single clearing agency for requisitions from POA. In subsequent exchanges the agenda was broadened to include almost all the relevant topics pertaining to logistic support of forces in the Pacific in which both the Army and Navy were concerned. The initial Navy proposals, nevertheless, raised some apprehension within the Army that the purpose of the conference was simply to assure continued Navy control of shipping in POA, and both G–4 and AAF insisted that the Chief of Staff issue instructions to the Army representatives that no agreement or commitment be made at the conference without the approval of his office.[10]

The conference met in the Navy Department in Washington 1–6 May 1945. Admiral Royal E. Ingersoll, commander of the Western Sea Frontier, presided, and representatives of most of the staff agencies and commands concerned with Pacific logistics were in attendance. The Army contingent included Lt. Gen. Wilhelm D. Styer, Somervell's chief of staff who had received a new assignment as service commander under MacArthur, General Gross, Brig. Gen. Harold Eastwood of SWPA, Col. Rush B. Lincoln, Jr., of the Army in POA, and Brig. Gen. Charles K. Gailey, Jr., of OPD. On the Navy side the Office Chief of Naval Operations was generously represented as were most of the bureaus and the Naval Transportation Service. Both Army and Navy representatives from the Joint Staff of POA attended.[11]

In its final form the agenda provided for a broad "review of forecasted logistics support required to conduct the Pacific War" in relation to continental U.S. supply and transshipment capabilities, reception capacity in the Pacific, and the availability of shipping, and for a "study of integration between Army, Navy and Marine Corps requisitioning and shipping procedures" necessary to promote the most efficient use of facilities, supplies, and shipping.[12]

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[9] Ballantine, *U.S. Naval Logistics in the Second World War*, pp. 255–63.

[10] (1) Ltr, CNO to CG ASF, 31 Mar 45, sub: Study of Supply and Shpg Problems Relevant to Support of Pacific War, OCT 401 POA, 1944–45. (2) Ltr, Adm Horne to CG AAF, 17 Apr 45, sub: Joint Supply and Shpg Conf . . . —Agenda For. (3) Memo, Maj Gen Laurence S. Kuter, Actg Chief of Air Staff for CofS, 24 Apr 45, sub: Supply and Shpg for Pacific Opns. (4) Memo, DCofS for CG's ASF and AAF, 29 Apr 44, sub: Joint Supply and Shpg Conf. (2), (3), (4) in G–4 400.22. (5) Diary entry, 19 Apr 45, Strat Log Br, Plng Div, ASF, 19 Apr 45. (6) Memo, Gen Lincoln for Gen Hull, 1 May 45, ABC 320.2 (3-13-43) Sec 9.

[11] Min, Army-Navy Shpg and Supply Conf, 1–6 May 45, ABC 337 (1 May 45).

[12] *Ibid.*, Proposed Agenda, pp. 1–3.

The development of the forecast proceeded harmoniously. It was largely a matter of placing Army and Navy estimates together and matching them against available resources. When this was done, total requirements on the United States for the Pacific war for one year were found to amount to 53,880,000 measurement tons of supplies, 32,100,000 for the Army and 21,780,000 for the Navy. Against this total, west coast capacity was estimated at 11,000,000 tons per quarter or 44,000,000 tons over the course of the year. Army-Navy plans provided for shipments of 33,957,000 tons out of west coast ports, with the balance, 19,923,000 tons, to be shifted to the east and Gulf coasts. The conference concluded that "the contemplated shift of military loadings to the East and Gulf Coast ports will permit the West Coast to handle the load," thus generally confirming the existing distribution plans of the two services. Existing storage plans were also generally confirmed, and the Army agreed to continue to provide space for Navy supplies in its west coast holding and reconsignment points, on assurances from the Navy that it would not use the space for dead storage. The only divergence of opinion developed on the matter of distributing the load on the west coast, the Army prodding the Navy to emulate its example and show more flexibility in shifting shipments out of the San Francisco–Los Angeles area to Seattle and Portland.[13]

Based on these supply requirements, the conference calculated that total shipping space needed for military cargo movements in the Atlantic and the Pacific would average about 25,000,000 dead-weight tons per quarter against an average WSA quarterly inventory of approximately 32,000,000 dead-weight tons. This would leave an average of 7,000,000 dead-weight tons per quarter (a little over 20 percent of U.S. cargo tonnage) for all other purposes, but considerably less than that amount during the period of peak shipments in the last six months of 1945. Relying on the overriding military priority for which they had long been contending, the conferees assumed that the requirements could be met by cutting back where necessary in civilian supply movements.

In evaluating the final element in the forecast, reception capacity in forward areas in the Pacific, the conference was not able to arrive at quite so precise or positive conclusions. Though estimates indicated 15,000,000 measurement tons capacity in the third quarter of 1945 and 16,725,000 per quarter during the following three quarters counting ports in the Philippines, Marianas, and Palaus, and on Iwo Jima and Okinawa, the responsible committee readily admitted that its estimates might prove far from accurate since "demand requirements by destination" were unknown.[14]

In developing these estimates some cognizance had to be taken of the additional capacity required to accommodate the roll-up and other problems associated with it. The conference noted that 3.5 million measurement tons still had to be moved forward in SWPA and about 900,000 measurement tons in POA, and that there would be a continuing requirement for moving forward 65,000 measurement tons of provisions

[13] *Ibid.*, Rpt by Com I, p. 5.

[14] *Ibid.*, Rpt by Com II, p. 6.

monthly from Australia. The Army representatives came to the conference determined to drive home their demand for assault shipping from POA to help with the SWPA roll-up, and succeeded in getting the Navy to agree in principle that an increase in LST's, AKA's, and smaller craft suitable for lightering was absolutely essential in the Philippine area if the forecasted reception capacity was to be developed in time. The theater commanders, it was also agreed, must be furnished in advance with firm figures on shipping that would be available for the roll-up. The conference itself, however, produced no such firm figures.

The estimates of reception capacity in the Pacific, in any case, represented a hope, not a promise. If that hope were realized, and assuming that maintenance supplies for troops on Kyushu and Honshu would be forwarded by direct shipment as well as that much of the Navy's support would come from its mobile service squadrons, it appeared that reception capacity would be adequate. Still, these estimates were undoubtedly the most tenuous part of the logistic forecast.

In making the logistic forecast, neither service was being asked to sacrifice its own plans, for, though the margin was narrow, it appeared that resources would be ample to fulfill the combined requirements of Army and Navy as long as military demands were given priority over civilian needs. When the conferees turned to the consideration of procedures, the situation was quite different and a clear conflict emerged. The Army representatives came prepared to insist on logistical procedures in the Pacific to conform to the new command system. The Navy representatives, in contrast, had apparently given little thought to the requirements of the command change, and wanted to discuss mainly the proper shipping and supply procedures to support the CINCPAC-CINCPOA command as then constituted.

The Navy was determined that Nimitz' system, which it regarded as the most efficient one in use in any theater of war, should not be disturbed. The Army was just as determined that autonomous Army control must be asserted over shipping for all its forces in the Pacific and that normal Army supply channels be substituted for Nimitz' system in the area then known as POA. Very clearly the Army visualized the abolition of area commands and the Navy tenaciously clung to them. When Navy representatives asked how priorities were to be determined and the flow of shipping regulated in areas of joint operations, the Army answers were just as fuzzy as were the Navy answers to Army queries as to how the area system was to be preserved when the JCS had directed a changeover to a functional system of command. General Gross stated the Army position quite positively:

> Now that General MacArthur has been given a wider command authority over all troops, it is most natural that he should extend the system that he is now using to the one system the Army has used, at its initiative, for its supply and transportation system. . . . If there was ever any thought that the CINCPOA system of supply . . . is satisfactory to the Army now—it should be very clear that it is not satisfactory and never was entirely satisfactory. The Army adjusted to it because, after all, Admiral Nimitz was in command and the command functions gave him that authority. The command system having been changed, the Army wishes to control its system of requisi-

tioning, its system of transportation or shipments, as it does all over the world, for troops, according to the central system that has thus far governed. . . .[15]

But neither Gross nor any of the other Army representatives could answer very satisfactorily Admiral Ingersoll's queries on how, under separate service control, supplies and services common to both Army and Navy would be handled or how priorities were to be determined in cases of conflicting service demands. "Supposing that the requirements submitted by the various Army and Navy commanders for something amounted to say 250 ships," asked Ingersoll, "and the total capacity to receive is only 200 ships. . . . Who makes the decision as to where the reduction to 200 ships should be made?"[16]

These were the questions the Army itself had been asking back in early 1943 when the original Basic Logistical Plan that assigned logistical control to each area commander was under discussion. Since then, however, it had been in POA, a theater in which the Navy had over-all command, that the Basic Logistical Plan had been applied, while MacArthur's policies had been much closer to the old prewar conception of co-ordinated but parallel supply lines. To a certain degree at least the War Department had been forced into the position of championing the MacArthurian viewpoint that emphasized a minimum of joint arrangements in the field of logistics. But in a larger sense, the confusion over logistical arrangements was simply a product of the failure to agree on a single unified commander for the Pacific, for the Navy's position was no more defensible if the old area commands were to be abolished than was the Army's insistence on separate supply lines if area commands were to be kept intact. Each side was emphasizing the part of the JCS command directive that happened to fit its position—the Navy using the part prescribing a gradual transition to insist on the preservation of the area commands indefinitely; the Army using the part prescribing a new command setup to insist on as rapid a transition as practicable.

Lengthy discussion served only to clarify the respective Army and Navy positions. Finally two separate committees were appointed, one from the Army and the other from the Navy, to draw up their views on what the procedure for shipping control should be. The Navy proposal provided for the continuation of the existing area system indefinitely for delivery of supplies to bases and mounting areas with shipping control to be exercised in the final assault on Japan by an agency acting jointly for CINCPAC and CINCAFPAC, "except that since CINCAFPAC's requirements for supplies will be paramount at the objective ports, he should control all unloading at these ports."[17]

The Army proposal, on the other hand, argued that with separate Army and Navy commands, "separate Army and Navy supply controls follow." It pointed to a "solid core of command functions embracing supply in the Pacific almost wholly a matter of Army concern" and another solid core "almost wholly a matter of Navy concern," each sphere susceptible of separate control. But the Army also recognized that there

[15] *Ibid.*, 3d mtg, pp. 48–49.

[16] *Ibid.*, 3d mtg, pp. 63–64, 72–73.

[17] *Ibid.*, 4th mtg, Attachment E, Rpt of Navy Ad Hoc Com on Shpg Control.

were "inherent in the Pacific situation . . . localities and operations where Army and Navy interests are so closely interwoven that reconciliation by joint or unified control is and will be required by mutual agreement between the commanders concerned or by direction of the J.C.S."[18] To handle these matters, the Army report proposed temporary joint co-operative arrangements between Nimitz and MacArthur.

Between these widely divergent views there proved to be no common meeting ground. The Shipping and Supply Conference merely included the two opposing statements of position as a part of its final report and there let the matter rest.

Efforts to Resolve the Shipping Issue

At the JCS level, where the shipping issue was concurrently being debated, there was even less agreement. The JCS discussions of shipping control grew out of the controversy over the use of Pacific assault shipping for logistical purposes. Despite Admiral King's earlier refusals, General Marshall continued to hammer away at the proposition that there should be a study by the JCS committees of the availability of assault shipping for the roll-up of rear areas. Admiral King continued as adamant as before, insisting that the theater commanders alone could properly estimate the availability of assault craft for logistical uses, and ended by suggesting an over-all study of cargo shipping requirements in the Pacific for the OLYMPIC operation. Despite Somervell's desire to continue the fight, General Marshall, on the advice of OPD, decided it would be best not to insist on treating the assault shipping issue separately. Once the OLYMPIC directive had been approved on 25 May 1945, he agreed to King's proposal for a study of over-all cargo shipping requirements to support it, but not without a polite suggestion that the study should also include naval assault shipping in its purview.[19]

Marshall's proposal followed by only a few days the receipt of a message from MacArthur summarizing the state of the SWPA roll-up. Between 15 June and 15 September 1945, MacArthur said, he would have to move 150,000 troops and 1,780,000 tons of Army supplies, and 11,000 naval personnel and 622,000 tons of naval supplies, from rear bases to the Philippines. Moreover, as a result of an agreement with Nimitz that a large portion of the AAF in the Pacific should be based in the Ryukyus rather than the Philippines, 112,000 men, 24,000 vehicles, and 160,000 dead-weight tons of supplies had to be moved from the Philippines to Okinawa. To assist in these moves, he said, Nimitz had made available 24 LSM's in April to be used until mid-July, and 7 APA's and 6 AKA's to be available from late May until 1 July. Limited numbers of LST's from the Seventh Fleet could be used in July, August, and September. With the

[18] *Ibid.*, 4th mtg, Attachment F, Rpt of Army Ad Hoc Com on Shpg Control.

[19] (1) JCS 1286/2, 24 Apr 45, memo by CofS, USA, title: Cargo and Assault Shpg for Roll-up in Pacific. (2) JCS 1286/3, 30 Apr 45, memo by COMINCH and CNO, same title. (3) JCS 1286/5, 28 May 45, memo by CofS, USA, title: Cargo and Personnel Movement Required for OLYMPIC. (4) Memo, Gen Lincoln for CofS, 1 May 45, OPD 560 TS, Case 26/2. (5) Memos, Somervell for Marshall, 16 May 45, and 29 May 45, sub: Co-ordination of Troop and Cargo Lift for Redeployment and Support of OLYMPIC, ABC 320.2 (3-13-43) Sec 9.

ordinary shipping available to him and these amphibious resources, MacArthur said, he could move only 50,000 men and 1,600,000 tons of Army supplies from rear areas to the Philippines by the September 15 target date. For the additional 100,000 troops and 180,000 tons of supplies, for the naval roll-up in SWPA, and for the movement to Okinawa, he stipulated he must have more shipping from outside. The SWPA commander admitted that Nimitz would be willing to send more APA's to carry the personnel; he had already been forced to turn down some offered for lack of cargo shipping to integrate personnel and supply movements. The critical need was for LST's, AKA's and ordinary cargo shipping, particularly vessels that could carry vehicles.[20]

In the Army view, the magnitude of MacArthur's requirements for the roll-up and their close relation to the preparations for OLYMPIC clearly justified the inclusion of assault shipping in any over-all review, but King was unmoved. Replying to Marshall's memorandum on 5 June 1945, he restated emphatically his position on theater control of assault shipping, and at the same time presented at the JCS level the Navy's proposal, made at the Shipping and Supply Conference, that control over other types of shipping in the Pacific should be exercised by a joint agency under Nimitz and MacArthur.[21]

If this was a way, as General Somervell had earlier put it, of telling the Army "that Admiral Nimitz will give you the LST's when he makes up his mind to do so,"[22] there was little the Army could do about it. King's second proposal, for a joint agency to control other types of shipping in the Pacific, served as an effective counterbalance and shifted the whole basis of the JCS controversy. King would make the establishment of a joint shipping agency by CINCAFPAC and CINCPAC a necessary prerequisite to any over-all study of Pacific shipping requirements and availabilities. This joint agency should submit, he said, as soon as possible "a study of their coordinated shipping requirements for the remainder of the year, into which is integrated estimated use of such assault craft as can be made available for general lift from time to time."[23] On this basis the JMTC and JLC would prepare their over-all shipping study, taking into consideration the OLYMPIC directive and other requirements.

On this rock the whole proposal for a worldwide cargo shipping survey by the JCS came to grief. To the Army neither the joint agency to determine shipping requirements nor the proposition that assault shipping in the Pacific "be considered, in effect, the private property of CINCPAC"[24] were acceptable. Somervell proposed a torrid memo to King, but Marshall chose merely to inquire into MacArthur's views on King's proposals with a strong hint that the War Department found them unacceptable. MacArthur's reply was not disappointing. He rejected the idea of a joint shipping agency out of hand. "Such

[20] Msg CREGOX 17401, CINCAFPAC to WD, 25 May 45, ABC 320.2 (3-13-43), Sec 9.

[21] JCS 1286/6, 5 Jun 45, memo, COMINCH for JCS, title: Joint Agency for Coordination and Control of Shpg Within the Pacific.

[22] Memo, Somervell for Marshall, 16 May 45, ABC 320.2 (3-13-43) Sec 9.

[23] JCS 1286/6, 5 Jun 45.

[24] Memo, Somervell for CofS, 6 Jun 45, sub: Joint Agency for Coordination and Control of Shpg within Pacific, ABC 320.2 (3-13-43) Sec 9.

action," he said, "would deprive me of control of the principal means of transportation and would subject my requirements to review by representatives of a commander who has no responsibility for support of Army forces."[25] Though he questioned some of King's views on assault shipping, there is no evidence he really disagreed with the Navy's contention that the proper way to regulate the distribution of this asset was by negotiation between himself and Nimitz. His final recommendations were that the Army procedure for dividing control of ordinary cargo shipping along service lines be adopted and that assault craft for the roll-up be requested from CINCPAC under existing procedures, their availability to be taken into consideration in computing other shipping requirements. MacArthur could hardly have failed to perceive that if the Army was to control its own resources in the Pacific as well as the WSA shipping that served it, then it must surrender to the Navy control of amphibious resources that could certainly be construed as being within its proper province. His solution was therefore "close and continued coordination and cooperation between CINCAFPAC and CINCPAC in the use of shipping," [26] and to this solution the Army staff in Washington had perforce to agree.

Meanwhile, the combined review of cargo shipping with the British, so long delayed, was at last completed early in June 1945, but under conditions that made it little more than an academic exercise. On V–E Day the British announced they were ready to proceed with the study since food discussions they had previously been awaiting were now concluded, but in the negotiations that followed they steadfastly refused to grant the absolute priority for military over civilian requirements the Americans desired. The American staff consequently decided to proceed with the study without any reference to priorities whatsoever, and to make it merely a tabulation of combined shipping requirements for both military operations and civilian relief as then known. The study subsequently prepared on this basis by the Combined Military Transportation Committee (CMTC) in collaboration with the Combined Shipping Adjustment Board showed small deficits against the U.S. pool averaging 29 sailings per month and against the British pool averaging 85 sailings per month in the last six months of 1945. However, the shipping authorities thought captured enemy vessels and liberated and neutral shipping might well be sufficient to overcome these deficits and they characterized them as "manageable." Provisional estimates of the situation in the first six months of 1946 produced a similar conclusion.[27]

The CCS accepted the paper on 4 July 1945 though their acceptance had no force in terms of allocations. As Brig. Gen. George A. Lincoln, the Army Planner, noted, the estimates of U.S. military

[25] (1) Msg C–18697, CINCAFPAC to WD, CM–IN 11431, 12 Jun 45. (2) Memo, Somervell for CofS, 6 Jun 45. (3) Msg WARX 12523, Marshall to MacArthur, 6 Jun 45.

[26] Msg C–18697, CINCAFPAC to WD, CM–IN 11431, 12 Jun 45.

[27] (1) CCS 746/24, 2 Jun 45, rpt by CMTC and CSAB, title: Over-all Review of Dry Cargo Shpg for Remainder 1945 and First Half 1946. (2) CCS 746/19, 8 May 45, and CCS 746/21, 12 May 45, memos by Reps Br COS, same titles. (3) CCS 746/23, 21 May 45, memo by U.S. CsofS, same title. (4) Memo, Gen Lincoln for Col Wood, 14 May 45, ABC 560 (26 Feb 43) Sec 1C.

requirements in the Pacific as well as those for civil affairs shipments to Europe were "largely theoretical" since neither had been approved by the responsible theater commander.[28] Yet the very fact that the British and Americans had been able to bury the whole controversy over priorities was ample indication that in the over-all view shortages of cargo shipping had ceased to be stringent.

Outlines of a New Pacific Logistical System

The Army-Navy negotiations in Washington had, in sum, left the whole problem of a new logistical system in the Pacific exactly where the JCS command directive of 3 April 1945 had left it—subject to the mutual agreement of General MacArthur and Admiral Nimitz. Efforts to reach such a mutual agreement went on concurrently with the exchanges in Washington and were stalemated by much the same differences. A conference held at Guam in mid-April between Nimitz' staff and a group of SWPA representatives headed by Lt. Gen. Richard K. Sutherland, MacArthur's chief of staff, made little progress. Sutherland came to the conference expecting to make arrangements for MacArthur to take over Army forces and resources in POA, including the Ryukyus, at the earliest possible moment. Nimitz, who had just launched the Okinawa assault, was in no mood to release any resources he thought necessary for the successful conclusion of its several phases or, for that matter, for a possible landing on the China coast. Moreover, he saw no possible way to separate Army and Navy functions at the bases within POA, and felt that he must hold on to Army service units at such places as Saipan, Guam, and the Palaus indefinitely. "The essential garrisons of all positions in POA," he reported to Admiral King, "must remain under my operational control as long as I am responsible for these areas. Abolition of unity of command in the subareas and outlying islands would produce chaos and would retard the prosecution of the war."[29]

Nimitz did agree to release operational control of Army units to MacArthur as soon as they were released from POA operations, but except for this concession, which had little immediate effect, Sutherland's group had to go home empty handed. The conference never even got around to discussing the vital matters of requisitioning and shipping control, nor was much said about logistical arrangements for the final assault on Japan.

Despite this setback, the Army went ahead with its own arrangements. On 20 April General MacArthur was assigned administrative control over the Army in POA, and the War Department decided that henceforth all Army forces and resources moved to the Pacific should be assigned to CINCAFPAC except for Twentieth Air Force units subject to direct control of the JCS and troops specifically earmarked for ICEBERG. This extension of MacArthur's powers, however, did little more than to confuse the

[28] (1) Memo, Gen Lincoln for Asst Secy WDGS, 5 Jun 45, sub: Over-all Review of Cargo Shpg. . . , ABC 560 (26 Feb 43) Sec 1C. (2) CCS 746/25, 4 Jul 45, same title.

[29] Memos, King for Marshall, 14 and 16 Apr 45, inclosing msgs from Nimitz, 14–15 Apr 45. The first memo is in OPD 384 TS, Case 1/42; the second is in OPD Exec 10, Item 68.

situation further, for existing "elements under operational control of CINCPOA" were also specifically excepted from the Army commander's control.[30] Also, since Nimitz retained control over shipping in POA, MacArthur could not exercise any jurisdiction over the movement of Army personnel and supplies into that area regardless of the Army's intent to assign them to his command when they arrived.

Nor did the change in Army organization in the Pacific have much immediate practical effect. Two area commands were established under MacArthur, one embracing the old SWPA area and the other embracing the Army within the boundaries of POA. The first, Army Forces, Western Pacific (AFWESPAC), absorbed both the U.S. theater headquarters in SWPA (USAFFE) and the U.S. Services of Supply (USASOS) in that theater; the second, Army Forces, Middle Pacific (AFMIDPAC), was essentially simply a continuation of Headquarters, USAFPOA, under a different name. General Richardson remained as commander of AFMIDPAC with the only change that he now reported to MacArthur rather than directly to the War Department. Of the two commands, AFWESPAC was obviously destined to be the more important. It represented a new development in MacArthur's command, a consolidation of the administrative and logistical functions of the theater headquarters and the theater SOS, and the purpose of its creation was to provide a communications zone for the assault on Japan. General Styer, ASF chief of staff, became commanding general of AFWESPAC and several other high ranking members of ASF headquarters soon joined his staff. Out of AFWESPAC the ASF hoped to create the ideal theater supply command for the final phase of the war.[31]

Of more immediate interest is the anomalous position of AFMIDPAC in this setup. Under the administrative control of MacArthur, most of the troops in its jurisdiction stayed under the operational control of Nimitz until he chose to release them. Until that time, MacArthur could not move troops between his two area commands, nor make any firm estimates of the forces that would be available to him for the invasion of Japan, nor exercise any control over shipping and the flow of supplies to troops in AFMIDPAC. Just as Nimitz refused to surrender operational control of Army troops in POA, he also declined to take the operational control of the Seventh Fleet, which MacArthur offered him. As a consequence, the old joint area commands continued to exist beside the new functional commands, making the new Army theater setup more a fiction than a fact.

This confused situation continued after V–E Day to prevent the concentration of effort on preparations for the invasion of Japan that the Army desired. On 21 May Somervell complained bitterly to Marshall that "the orderly and timely assembly of supplies, service troops and shipping for the support of Army operations in the Pacific is becoming increasingly difficult as the time for

[30] Msg WARX 75413, Marshall to MacArthur and Richardson, 1 May 45.

[31] (1) Msg CM–IN 11201, MacArthur to Marshall, 12 May 45. (2) Msg WARX 87663, Marshall to MacArthur, 25 May 45. (3) Msg MacArthur to WARCOS, CM–IN 6056, 7 Jun 45. (4) Memo, Lutes for Somervell, 28 Jul 45, sub: Comd and Logistical Responsibilities in Pacific, History Planning Div ASF, Doc Suppl, III, app. 9 EE.

major land operations approaches and as compliance with the spirit of the directive approved by the JCS . . . is delayed."[32] He contended that Nimitz' continued preparations for the invasion of the China coast, or alternately for extended operations in the Ryukyus, served the POA commander as an excuse to withhold both Army resources and assault shipping needed by MacArthur and to place orders for supplies on Army as well as Navy agencies on the west coast for those purposes. Somervell asked for a firm JCS directive for OLYMPIC at the earliest practicable date, that all Army resources outside the Ryukyus be assigned to MacArthur immediately and that those in the Ryukyus be assigned him when the occupation of Okinawa (first phase of ICEBERG) was completed. Under this scheme Somervell thought it should be up to MacArthur to decide whether further expansion in the Ryukyus would be necessary for successful initiation of OLYMPIC.

The firm directive for OLYMPIC was issued a few days later, on 25 May 1945. It assigned to MacArthur primary responsibility for planning and execution of the invasion of Kyushu, except for its naval and amphibious phases. As a result of this directive, Nimitz did cancel the last phase of the Ryukyus Campaign and further specific preparations for invasion of the China coast.[33] These decisions went far to clear the air, but they did not, as Somervell had hoped, make any specific provision as to the time that Nimitz should release Army resources.

With the directive for OLYMPIC an accomplished fact, representatives of CINCPAC-CINCPOA and CINCAFPAC-CINCSWPA met again at Manila on 1–3 June to iron out their problems—this time with a greater measure of success, at least as far as arrangements for OLYMPIC were concerned. Nimitz agreed to furnish as much shipping as possible for the SWPA roll-up and for transport of air forces to Okinawa, and to release to MacArthur three Army divisions at the end of organized resistance on Okinawa, two of them to be shipped to the Philippines in CINCPAC shipping. MacArthur in turn agreed to release divisions to CINCPAC for amphibious training. For OLYMPIC the two commanders would, in general, furnish their own logistic support shipping. Each would control shipping completely "at ports under their exclusive control"; at ports used jointly, CINCAFPAC was to control in co-ordination with CINCPAC; each service was to do its own unloading. MacArthur was to control the flow of shipping to Japan itself, as well as the ports in Japan used by both services. He would establish regulating stations at Ulithi and Okinawa. He was also to be responsible for harbor clearance and port development, to allocate land areas in Japan, to furnish Class I supplies for Navy and Marine Corps elements operating under his control, and to deliver other classes of supply (except POL) to those elements on receipt from CINCPAC at the regulating stations.

The agreement was limited to the arrangements for OLYMPIC. No specific mention at all was made of release of Army garrisons in POA or of shipping control in that area. The omission constituted a tacit agreement that those

[32] Memo, Somervell for CofS, 21 May 45, sub: Logistical Support of Pacific Opns, OPD 400 TS, Case 80.

[33] (1) JCS 1331/3, 25 May 45. (2) History Planning Div ASF, Doc Suppl, III, 179.

matters should remain generally as they were, that Nimitz should continue to control shipping within POA and to forward Army requirements for that shipping through Navy channels to Washington. By the same token, outside of the three divisions to be released as soon as organized resistance on Okinawa ended, there was no provision for a time schedule of release of other Army units in POA to MacArthur's operational control, nor indeed any indication that Nimitz did not intend to hold on to the base and garrison forces there indefinitely. The anomalous status of AFMIDPAC was not really changed.[34]

On 19 June an OPD officer noted:

> CINCPOA's stranglehold on shipping for Army forces in the Central and South Pacific remains unbroken. It is also clear that MacArthur wants us to arrange a procedure whereby he will control shipping for support of *all* Army forces in the Pacific. Further discussions with CINCPOA about shipping are not planned until we have settled the issue here.[35]

The basic question, which had been shuttled out of Washington to the theaters, had been shuttled right back to Washington again, but it seems no serious new attempt was made to settle it there either. As the anomalous situation of area and functional commands existing side by side had been tacitly accepted in the theater, it was also tacitly accepted in Washington, and arrangements for executing the final assault on Japan had to be based on its continued existence. The only further developments came at the end of organized resistance on Okinawa when Nimitz agreed that CINCAFPAC should take over shore positions in the Ryukyus on 31 July 1945; and the transfer took place on the scheduled date.

Until the war against Japan ended, then, MacArthur did not get that measure of centralized control over all Army resources in the Pacific that the Army staffs in Washington had envisioned for him. Yet, for all the vicissitudes, controversies, and confusion, the trend was clearly enough toward a new logistical system in the Pacific that would emphasize separate service supply lines rather than the joint arrangements that had taken shape during the middle period of the Pacific war. Just how successful or viable the complicated and tenuous arrangements for OLYMPIC would have proved, it is impossible to say. Certainly the ASF continued to complain to the very end of the war of the uncertainty of requirements planning in the Pacific —for ships, for men, and for supplies— under the mixed system that actually prevailed. Even so, General Lutes, late in July 1945, while recognizing some of the defects, stated flatly that it was "more satisfactory from an Army point of view than any previous command and logistical arrangement in the Pacific."[36]

The Execution of Redeployment

The War Department designated 12 May 1945, four days after the German surrender, as R Day, and on that day

[34] (1) Memo, Col Johnson, Chief Pacific Sec, Theater Gp, OPD, for Gen Hull, 15 Jun 45, sub: CINCAFPAC-CINCPAC Arrangements for Opn OLYMPIC, OPD 381 TS, Case 135/26. (2) Msg C–18697, CINCAFPAC to WD, CM–IN 11431, 12 Jun 45. (3) OPD MFR, 15 Jun 45, OPD 560 TS, Case 26/5.

[35] Memo, TDR for Gen Lincoln, 19 Jun 45, sub: Pacific Shpg, with attached transcript of teletype conf of 18 Jun 45, ABC 320.2 (3-13-43), Sec 9.

[36] Memo, Lutes for Somervell, 28 Jul 45.

the administrative procedures worked out for redeployment far in advance were formally put into effect. Actually, the shift to the one-front war had begun more gradually a few weeks earlier when it had become apparent that German collapse was imminent. In mid-April, the European and Mediterranean theaters were instructed to keep their supply orders to a minimum, and personnel and supply movements to Europe were both cut back drastically during that month. A trickle of redeployment also actually began before V–E Day, and the prearranged system for disposition of shipping was put into effect gradually rather than in a single dramatic move on the day of surrender. Between 2 and 8 May, 67 cargo ships originally destined for Europe were either discharged at east coast ports before leaving or were returned for discharge; 50 more were diverted to the west coast and to the Pacific theaters. In this manner the Army began its great reorientation of effort from the Atlantic to the Pacific theaters.[37]

The giant wheels of redeployment turned for little more than three months before they were reversed, so that the machinery developed was never fully tested. In evaluating the brief period during which redeployment did proceed, two points require emphasis. First, there was never any final analysis by the Army command in the Pacific of its troop needs or of reception and mounting capacities for OLYMPIC and CORONET. Second, despite the theory that military necessity would govern, there was constant competition between the requirements of the Pacific war and the pressure to bring American soldiers home for discharge. These two factors created the greatest complications in carrying out the master redeployment plan drawn up by the JCS committees at the end of April.

Though MacArthur's headquarters never presented a final troop basis for OLYMPIC and CORONET, its preliminary estimates, hastily drawn up in response to the first OPD Redeployment Forecast, produced the principal revisions in the master redeployment plan after V–E Day. MacArthur increased his requirements for divisions by two and asked for an additional 100,000 service troops, while substituting infantry divisions for three of the armored divisions the JCS had proposed to furnish him. In order to allow more time for developing staging facilities, he asked that all 17 divisions to be redeployed from Europe be sent through the United States.

His request for indirect redeployment of all divisions was granted, but the question of an ultimate Pacific troop basis was never finally settled. MacArthur's various requests shoved total requirements up to 2,624,000 men, almost 200,000 above the ceiling established in the JCS plan. Though OPD at first insisted on holding CINCAFPAC to the ceiling, preliminary drafts of a new JCS plan drawn up in July provided for the increase. And they did not take into account acceptance of a Canadian offer of a division, a French offer of 2 divisions, and a British offer of 3 to

[37](1) CCS 856, 9 May 45, title: Administrative Procedures for Readjustment of Personnel Prior to Redeployment. (2) Final Rpt, Ocean Traffic Br, Water Div, OCT, 31 May 45, sub: Result of Activities in Connection with Redeployment—ETO and MTO, OCT HB file Redeployment. (3) Wardlow, *The Transportation Corps: Movements, Training, and Supply*, p. 183.

5 divisions for the Pacific war. Whether all these allied troops would actually be employed against Japan at all and, if so, whether they would be substituted for American divisions was still up in the air when the war ended. The principal effect of MacArthur's evaluation was to increase the number of divisions to be moved by way of the United States, and hence the load the continental establishment would have to carry. Other adjustments were naturally made in individual units to conform to CINCAFPAC's desires. In other respects, redeployment went ahead generally on the basis of the April joint plan.[38]

As the planners had anticipated, shipping was the key problem. In the face of public pressure to bring high-point men home for discharge, the War Department virtually abrogated the "military necessity" clause, accelerating the Category IV movements home from Europe and applying the point system in the Pacific in the same measure as it applied in theaters now inactive. These steps increased the demand for personnel shipping. The return of high-point men from the Pacific generated a demand for replacements in larger numbers than had been anticipated. Simultaneously, the increase in requirements for indirect redeployment and the net augmentation of both Army and Navy personnel requirements in the Pacific served to increase further the load that Pacific shipping had to carry. Meanwhile, though personnel shipping had become available in approximately the quantities anticipated it was largely concentrated in the Atlantic, except for the Navy's combat loaders. During the summer the lift from Europe to the United States exceeded expectations as ships were overloaded and the airlift was expanded from an estimated 15,000 to 50,000 men monthly. Much of the increased lift was used to bring men home for discharge, and meanwhile a large deficit of personnel shipping appeared to be developing on the west coast. By 29 June it had already mounted to a total of 44,000 spaces and an Army-Navy *ad hoc* committee, studying the situation, predicted that it would reach 673,000 by the end of the year. The schedules for direct redeployment from Europe were also generally behind.[39]

It was really more a question of imbalance than a genuine deficit. The British *Queens* could be used only in the Atlantic, the bulk of the Army's regular troopships were concentrated there, and the converted Victory ships were initially destined for Atlantic service. The Navy's APA's, which had exceeded their schedules in the Pacific during the first quarter of redeployment, would have to be withdrawn from transpacific service at the end of Septem-

[38] (1) JCS 1053/2, 18 May 45, title: Revised Estimate on Personnel Shpg Including Air Transport. (2) Diary Entry, 22 May 45, Strat Log Br, Plng Div ASF. (3) JLC 321, 24 May 45, title: Logistical Analysis of Strategic Deployment of U.S. Forces Between 1 Jul 45 and 30 Jun 46, ABC 320.2 (3-13-43) Sec 9. (4) Msg C–17527, GHQ SWPA to WD, 1 Jun 45, CM–IN 374. (5) Msg WARX 11721 to CINCAFPAC, 4 Jun 45. (6) OPD MFR, 10 Jun 45, OPD 320.2 TS, Case 58/61. (7) Ltr, GHQ, AFPAC, to TAG, 24 Jun 45, OPD 320.2 TS, Case 58/71. (8) JWPC 49/27/M, 2 Jul 45, memo for JPS, title: Strategic Deployment of U.S. Forces, ABC 320.2 (3-13-43) Sec 10. (9) OPD Redeployment Forecast, 24 May 45, OPD 320.2 TS, Case 54/96.

[39] (1) Diary Entry, 29 Jun 45, Strat Log Br, Plng Div, ASF. (2) Unsigned and undated OPD paper entitled Discussion, ABC 320.2 (3-13-43) Sec 10.

ber to meet the 1 November target date for OLYMPIC. The solution to the dilemma was fairly obvious — transfer some of the shipping and airlift from the Atlantic to the Pacific. On 28 July 1945 the JCS asked WSA to modify the conversion program so as to place 74 of the 100 converted Victory ships in the Pacific rather than the Atlantic in order to provide 111,000 additional spaces there. This scheme would, the JMTC noted, delay the conversion, since additional facilities were required for the longer Pacific voyage; and these 74 ships over the course of a year could move 965,000 troops from Europe to the United States, only 400,000 from the United States to the Pacific. The committee felt, however, that the "need for troop lift in the Pacific justifies the cost" and the JCS agreed.[40]

As a second expedient, the Army proposed to divert much of the airlift from the Atlantic to the Pacific, beginning in August 1945. But MacArthur reported that air terminal facilities in the Philippines could accommodate only 10,000 men monthly, and that any effort to expand them could not be justified in terms of shipping cost, construction effort, and service troops. By the time General Marshall had approved this limited increase in the Pacific airlift, the first atomic bomb had been dropped and the surrender of Japan without a mass invasion was in sight. Thus, while tentatively approving the airlift on 6 August, Marshall also decided to hold in abeyance the transfer of 26 of the 74 Victory ships to Pacific service.[41]

Meanwhile, at the TERMINAL Conference in Potsdam in July, the U.S. Joint Chiefs had once again opened negotiations with the British to secure additional assistance in troop lift in the Pacific. They pressed the British on three points. First, they asked agreement that seven specific captured enemy liners—*Europa, Caribia, Vulcania, Patria, Potsdam, Pretoria,* and *Milwaukee*—be allotted for U.S. use "as long as the emergency exists," all save the *Europa* to be placed in the Pacific service.[42] Second, they wanted the British to go ahead with the conversion of 100 cargo ships to troopships as they had tentatively agreed at ARGONAUT. Third, they wanted the *Queens* to continue available for American troop movements in the Atlantic for another six months with a provision that they might be used in part for repatriation of Canadian troops.

The British would go only half way. They agreed to allocate the seven captured ships to the Americans until 31 December 1945, on condition the Americans would allot space in them for repatriation of 16,000 Canadian troops. On the other proposals, they asked for a combined study of resources and requirements as a basis for determination, citing the fact that the personnel lift remaining to them was sufficient to move "only

[40] (1) JCS 1306/2, 21 Jul 45, rpt by JMTC, title: Use of Converted Victory Ships for Increased Pacific Trooplift. (2) Ltr, Gen Handy (for JCS) to Adm Land, 28 Jul 45, folder Conversions 1945, Box 122890, WSA Conway File. (3) Related papers in folder Army 1945, Box 122890, WSA Conway File.

[41] (1) Memo, DCofS, USA, for Brig Gen Henry I. Hodes, 6 Aug 45, sub: Decision Ref AAF Plan for Increased Pacific Lift, with related papers, ABC 320.2 (3-13-43) Sec 10. (2) OPD MFR, 7 Aug 45, sub: ATC Augmentation in the Pacific, OPD 320 TS, Case 173/8.

[42] CCS 679/6, 18 Jul 45, memo by Br COS, title: Disposition of Captured German Passenger Ships.

about two men out of every three" they themselves wished to redeploy.[43]

The question of British cargo ship conversions was quietly settled in separate negotiations. The British agreed to furnish 25 sailings for ammunition cargoes from Europe to the Pacific and to furnish ships to support the three to five divisions that it was decided at TERMINAL they should put into the Pacific. The Americans agreed that these contributions would be more important and consequently dropped their request for the conversions.[44] The other matters remained unsettled as, with the abrupt end of the war, the ground of the debate shifted solely to one of troop lift for repatriation.

In terms of accomplishment, some 886,000 troops were moved from Europe and the Mediterranean to the United States between 12 May 1945 (R Day) and 25 August, and 155,354 were redeployed directly to the Pacific. Of the troops returning to the United States, between one-half and two-thirds were slated for eventual movement to the Pacific, but this phase of redeployment had hardly begun when the news of the Japanese intention to surrender cut it to a trickle. In general, in mid-August movement from the inactive theaters to the United States was ahead of schedule but direct movement to the Pacific from Europe was considerably behind. Up to this point, personnel redeployment was proceeding successfully for the most part, despite the deficit in direct movements to the Pacific. The real tests lay ahead, during the fall of 1945, when the outmovement from the United States was expected to mount rapidly in volume, matching the inflow from Europe. Whether the expedients planned to increase the Pacific troop lift would have enabled the timely arrival of the units necessary for launching OLYMPIC on 1 November 1945 must remain undetermined.[45]

Redeployment of supplies had, meanwhile, fallen considerably further behind. Outshipments from Europe by the end of July totaled only about 900,000 measurement tons as opposed to a 1 May forecast of 1,600,000 tons. This shortfall was mainly a result of difficulties experienced in the European and Mediterranean theaters in assembling equipment, putting it into combat-serviceable condition, getting it to port, and packing and crating it for the long voyage. The shortfall freed more cargo shipping in the Atlantic during the summer for the movement of civilian supplies. Despite all the foreboding, no real cargo shipping shortage developed. This is not to say that a shortage might not have

[43] (1) CCS 679/8, 22 Jul 45, memo by Br COS, title: Employment of Captured Enemy Ocean-Going Passenger Shpg and British Troopship Employment in U.S. Transatlantic Programs in First Half of 1946. (2) CCS 679/6, 18 Jul 45, same title. (3) CCS 679/7, 19 Jul 45, title: British Troopship Employment in U.S. Transatlantic Programs, First Half 1946. (4) CCS 679/9, 23 Jul 45, memo by Br COS, title: Employment of Captured Enemy Ocean-Going Passenger Shpg and British Troopship Employment. . . . (5) Min, 199th mtg CCS, 23 Jul 45.

[44] Msg, VICTORY 233, TERMINAL to WD, Land and Bissell to Conway, CM-IN 23756, 23 Jul 45.

[45] (1) ASF Monthly Progress Report, Aug 45, sec. 3. (2) For a study of redeployment problems in the European theater see European Comd, Redeployment, pp. 39–82. (3) A full treatment of the problem of rail movement in the United States during redeployment is to be found in Wardlow, *The Transportation Corps: Movements, Training, and Supply*, pp. 190–203. (4) Similarly, the problems of staging, organization, and training of ground troops during redeployment are treated in Greenfield, Palmer and Wiley, *Organization of Ground Combat Troops*, pp. 623–47.

appeared during the fall and winter when the real peak of cargo movements both from Europe and the United States to the Pacific would have been reached.

From 12 May to 25 August 1945 the European and Mediterranean theaters shipped out 576,432 long tons of cargo to the Pacific and 705,645 long tons to the United States. Both theaters were able to keep their supply shipments to the Pacific in pace with direct redeployment of troops. In both cases, however, any assessment of accomplishments must take into consideration quality as well as quantity. And in terms of quality, the redeployment process, as far as it went, revealed some very real defects. The application of the point system all too frequently resulted in the redeployment of units whose efficiency had been badly damaged by the withdrawal of high-point men. Training time in the United States was severely restricted by the necessity to grant furloughs and the tight schedule on which Pacific operations were expected to proceed. It seems extremely doubtful that the 17 divisions destined for the Pacific would have been truly efficient units when they arrived. In the same way, haste in shipment of supplies from Europe resulted in something less than efficiency in packing and crating for the long voyage. Haste was complicated by lack of materials for fungus proofing, and much material arrived in the Pacific unfit for use.[46]

[46] (1) *Ibid.* (4). (2) ASF Monthly Progress Report, Jul and Aug 45, sec. 3. (3) Interoffice Memo, J. E. Cushing, Asst Dep Adm, WSA, for Capt Conway, 22 Jun 45, folder Pac Coast 1945, Box 122891, WSA Conway File. (4) European Comd, Historical Div, Supply: Procurement, Storage, and Issue, "Occupation Forces in Europe Series, 1945–1946," MS, OCMH, pp. 85–100.

Arrangements for Logistical Support of Olympic and Coronet

Redeployment was only one aspect of the arrangements for logistical support of the invasion of Japan. Most of the personnel increments for that invasion were to come from Europe, but by far the bulk of supplies would still originate in the United States. Projections of quantities to be shipped over the ensuing year tended to rise monthly with the acceptance of a larger ultimate troop basis for the Pacific, with development of new requirements in the theaters, and with the prospect that the volume of supplies shipped directly from Europe would fall below expectations. By 1 August the projections had reached a total of 39 million measurement tons of Army cargo for the first year of redeployment, as opposed to the figure of 32 million presented at the Army-Navy conference at the beginning of May. Actual shipments during the May–August period exceeded the May projections by some 600,000 measurement tons.[47]

The major problems in connection with this massive movement of supplies were the ones that had been anticipated —outloading capacity on the west coast and reception capacity in the Pacific. With regard to the former, WSA sharply challenged the Army-Navy schedules agreed upon at the May conference, contending that a definite ceiling of between 275 and 280 ship loadings monthly on military account should be imposed — some 25 to 30 sailings less than the military services had contemplated. WSA argued that it would be inadvisable to

[47] ASF Monthly Progress Report, Aug 45, sec. 3.

crowd west coast ports to their capacity in view of the limitations on rail service, the shortage of stevedores, and the prospect that repair facilities would be inadequate to maintain all the ships moving in and out in operating condition. The military services, on the other hand, held that the west coast should be used to absolute maximum capacity, and only the surplus above the absolute maximum should be diverted to the east and Gulf coast ports. In the JMTC the Army offered calculations showing that the railroads could handle the load and suggested military port battalions might be used to make up the stevedore shortage. In the end the military position generally prevailed and the effort went ahead full speed to use west coast facilities to full capacity. Only a small number of sailings were added to those scheduled from the east coast.[48]

In its own major supply establishment on the west coast, the San Francisco Port of Embarkation, the Army carried out a thoroughgoing reorganization. The Control Division surveyed the port in May and found numerous continuing deficiencies, especially in the operation of the Overseas Supply Division. There was a general feeling in the ASF, to which visiting SWPA officials wholeheartedly subscribed, that the San Francisco port should be reorganized along the lines of the New York port. If this was to be done, there were no better people to do it than the commanders at New York, and in June 1945 both Maj. Gen. Homer M. Groninger and General Goodman were transferred to San Francisco, the former to assume command of the port and the latter to head up its Overseas Supply Division. The move was further evidence of ASF intentions to get as strong a "team" as possible for Pacific supply operations in the final phase and to bring to bear all the experience gained in supporting the European campaign on the final effort in the Pacific. Beyond these motives it evidenced an intention to apply in the Pacific the standard system of overseas supply for the Army that had been worked out for the most part in the New York port.[49]

To the end of the war, however, reception capacity in the Pacific continued to be the unknown factor in the whole equation. All the ASF projections of cargo shipments to the Pacific were based on the gross capacity of Pacific areas to receive, not on a careful matching of cargoes and specific destinations. Moreover, they did not take sufficiently into account the extent to which capacity in the Philippines and other Pacific islands would be absorbed in outloading troops for the invasion. A representative of MacArthur's headquarters severely criticized ASF planning for these reasons, but the fact was that the theater itself had simply not furnished the ASF the necessary information to enable it

[48] (1) Memo, Col Stokes for Gen Wylie, 20 May 45, sub: West Coast Shpg Situation. (2) OCT MFR, Gen Wylie, 27 May 45. Both in OCT HB File Port Capac and Util. (3) JMT 102, 11 Jun 45, title: Merchant Ship Employment on West Coast.

[49] (1) Control Div ASF, Survey of Pacific Supply, 15 Jun 45. (2) Ltr, Gen Gross to Maj Gen Clarence H. Kells, CG SFPOE, 11 May 45, OCT HB File, San Francisco. (3) Memo, Col John W. Mott for CG USASOS, APO 707, 7 Jun 45, sub: Rpt on Temporary Duty, U.S., folder Pac Sec Gen File, ASF Plng Div Theater Files. (4) Ltr, Gen Wood to Gen Lutes, 10 Jun 45; ltr, Lutes to Wood, 25 Jun 45. Folder Pac Theaters Apr 45–Apr 46, Lutes File.

to do this sort of detailed planning. "Our whole program here," wrote General Lutes to General Styer on 20 July,

> now hinges on one intangible bit of criteria, i.e., what will the discharge capacity be by phases. As you know, we have always wanted to get up a study correlating and collating the production program, transportation or shipping schedule, storage capacity, shipping capacity and capacity at the destination to receive. Such a study has been attempted and . . . has fallen flat due to the fact that the last factor . . . governs. Now our storage is beginning to pile up and our production rolls merrily along without definite knowledge on our part that we can ever ship all that we are procuring and storing. . . .[50]

Lutes closed with a plea to Styer to provide the material for such a study, but whatever efforts were made in that direction were overtaken by the swift march of events.

In the period May–August 1945, Pacific reception capacity seems to have been reasonably adequate for the shipments sent out, and for that period to have been a potential rather than an actual logistical limitation. The strict instructions issued by the JCS at the end of 1944 prohibiting use of ships as floating warehouses and limiting ship retentions in overseas theaters remained in effect, and both MacArthur and Nimitz were careful in their month-by-month estimates of requirements to avoid the instances of heavy shipping congestion that had occurred earlier. Some degree of congestion did develop nevertheless at Guam, where the Navy was preparing a major base, and at Manila. Furthermore, when the war with Japan ended, there were many ships en route to all the Pacific islands that were not to be unloaded for months afterward. The most that can be said with any assurance is that reception capacity in the Pacific remained an unknown quantity to the very end. There is good reason to believe that it would have continued to act, as it had acted for a year or more previously, as the principal limitation on logistical support of forces in the Pacific.[51]

In any case, the logistical plans for OLYMPIC and CORONET put their main stress on direct shipments to the assault area as the principal means for providing maintenance support once troops were ashore, rather than reliance on the Philippine or other island bases. The ASF kept its plan on the books for expanding the Philippine base and actually got MacArthur to agree to establishing an Ordnance Base Center there; but the continued uncertainty of reception capacity raised many doubts whether it could in fact be set up and left the plans of other technical services for such base centers uncertain. The timetable for OLYMPIC and CORONET did not, in short, permit the ASF to make the Philippine base the "England of the Orient," as the supply planners had apparently contemplated it should be.

Also, the plans for providing direct support for these operations were, in their shipping aspects, more the product of Pacific than Atlantic experience. They provided, much as CINCPOA-CINC-

[50] (1) Ltr, Lutes to Styer, 20 Jul 45, folder Pac Theaters, Apr 45–Apr 46, Lutes File. (2) Memo, Col Mott for CG USASOS, 7 Jun 45.

[51] (1) See above, ch. XXII. (2) Memo of Trip to POA 1–24 Jun 45, by unidentified member of WSA party, folder Pac Trip, Box 122890, WSA Conway File.

PAC plans had previously, for block-loaded ships to move to the theater on a time schedule. There were to be 482 of these specially loaded ships for the invasion of Kyushu, and preliminary planning for the invasion of Honshu provided for 700. Loaded ships would move to the regulating station at Ulithi and await call forward into the assault area, thus providing the main reserve afloat rather than at depots in the Philippines or other Pacific islands. These block-loaded ships somewhat resembled the commodity loaders used in the European invasion. The system for regulating the flow of shipping resembled more closely that used in SWPA than the more carefully regulated echeloning practices typical of POA. The Chief Regulating Officer, CINCAFPAC, was to control movement into the combat area.[52]

OLYMPIC and CORONET also promised to provide a final test for the system of preparing operational projects in the War Department.[53] The ASF started preparation of operational projects for the final phase in the Pacific in December 1944, based on existing tentative plans for the invasion of Kyushu and Honshu and an operation in the North Pacific involving 122,000 men. Separate projects for each of these operations were prepared and procurement planning instituted. The procurement planning, however, had to proceed uncertainly, for none of the operations was specifically approved by the JCS until the end of May 1945, and OPD would not permit the dispatch of ASF plans to the theater for adjustment until just before the decision on OLYMPIC was made on the grounds that no Pacific command had been designated as responsible for carrying out the operations. So, despite the head start the ASF had, there was a flurry of last minute adjustments between the theater and the War Department in the summer of 1945 that were by no means complete when the war came to an end. Because the lead time for CORONET was considerably greater, the ASF was able to furnish its project for that operation to MacArthur's headquarters in time for it to serve as the main basis for the theater's planning. It was thus only for CORONET that the theory behind the War Department prepared project was actually carried out, and the end of the war prevented any testing of the efficacy of this type of operation.[54]

The unexpected end of the war arrested preparations for OLYMPIC and CORONET in the planning stage, and few shipments to the Pacific in May, June, and July 1945 represented much more than the accumulated backlog of Pacific supplies, the necessities for Philippine base development, support for going operations in the Philippines, Netherlands Indies, and Okinawa, and routine maintenance for troops already in the Pacific. Shipments showed a marked increase over the immediately preceding three months, 7.5 million measurement tons of supplies going out as opposed to 5.4 million in the months of February, March, and April. In the corresponding period shipments to Atlantic theaters decreased from 10.5 to 6.4 million tons. These figures indicate that, while the shift from the support of Atlantic the-

[52] (1) History Planning Div ASF, Text, I, 186–87. (2) ASF Final Rpt, *Logistics in World War II*, pp. 53–54.

[53] See above, ch. VI.

[54] History Planning Div ASF, Text, I, 182–86.

aters to support of Pacific theaters was gaining momentum, its full implications still lay in the future.[55]

The Success of the Roll-up

Meanwhile, the roll-up of troops and supplies within the Pacific itself proceeded at what seemed, at least in Washington, a desultory pace. The assault shipping Nimitz promised in the June conference at Manila was slow in forthcoming in the quantities required. The philosophy that it was much easier to reorder tailor-made loads from the United States than to inventory, sort, and ship useful materials forward from rear bases continued dominant. However, it seems that by the time Richardson's command in POA was turned over to MacArthur a rather thorough job had been done of rolling up bases on the small outlying islands of the Hawaiian group and the Army bases in the Gilberts and Marshalls. The chief remaining roll-up problems in the old POA were at Hawaii —where the decision to abandon any immediate plans to expand the base rendered a good deal of material surplus— and in the South Pacific Base Command. In SWPA surpluses remained in Australia, the northern Solomons, New Guinea, Morotai, and Manus. Disturbed by a lack of information as to just what had been done to roll up the surpluses, the War Department on 9 August asked MacArthur for a report on tonnages moved since 1 February 1945 and those still to be moved, stressing the need to make maximum use of stocks already in the Pacific as a means of "reducing to a minimum duplicating shipments from the Zone of the Interior," but denying an intention "to initiate any drastic action to roll up rear areas which would in any way affect the successful prosecution of the war."[56]

MacArthur's reply may be taken as the best available summary of the AFPAC roll-up as of the end of the war. On 19 September he reported that a total of approximately 2,382,000 measurement tons of cargo had been moved forward from old South and Southwest Pacific bases and that approximately 1,398,000 measurement tons remained in those bases. An earlier report showed that 216,000 measurement tons had been moved forward from Hawaii and 700,000 tons remained to be moved.[57] As inexact as these figures undoubtedly were, they revealed that the roll-up was at least between one-half and two-thirds complete when the war ended. However, they hardly indicate the extent to which the evacuation of bases was accompanied by wholesale destruction of supplies and abandonment of facilities to the ravages of the jungles in which they had been created. Nevertheless, given the complicated problems of shipping, service troops, and port capacity that were the constant limiting factors in the Pacific war, it is hard to say that the roll-up was not executed in as effective a manner as circumstances permitted. It did not end, of course, with V–J Day. That event brought an even greater problem of surpluses in the forward areas in the

[55] ASF Monthly Progress Report, Jul 45, sec. 3.

[56] (1) Msg WARX 46979 to CINCAFPAC, 9 Aug 45. (2) Memo, Gen Lutes for OPD, 6 Aug 45, sub: Roll-up of Bases, Pacific Areas, OPD 400 PTO, Case 1077.

[57] (1) Msg CX–10235, CINCAFPAC to WAR, CM–IN 26249, 27 Aug 45. (2) Msg CX–14733, CINCAFPAC to WARCOS, CM–IN 15785, 20 Sep 45.



UNDERGROWTH ENCROACHES ON ABANDONED QUONSET HUTS, TINIAN ISLAND

Philippines, on Okinawa, and in the Marianas, into which supplies from both the rear areas and the United States were pouring. On many Pacific islands supplies were to deteriorate in open storage until 1950 when the United States was to find a new and unexpected use for them in the Korean War.

A naval historian, commenting on the roll-up of naval supplies in the South Pacific, has summed up the effort of the Army just as fittingly:

> The logic of rolling forward rear bases was impeccable. In the case of personnel its urgency could not be denied. But to set up a cross current against the normal flow of supply and support proved to be extremely difficult, if not impracticable. Much of the usable material was in fact moved forward. The rest remained in the South Pacific to be locally disposed of or to stand as a monument to the unsparing waste of war and the greater importance of time over cost.[58]

The "greater importance of time over cost" might indeed be designated as the most important factor in logistics in World War II.

The Last Year in the CBI

While the massive preparations went ahead in the Pacific for the final assaults against Japan, the last act was also being played out in the China and India-Burma theaters. The final American strategy on the Asiatic mainland was shaped largely in terms of a desire to

[58] Ballantine, *U.S. Naval Logistics in the Second World War*, p. 286.

make the utmost practicable use of previous American investments and involved no substantial new commitments. The possibility that a port on the China coast might be secured through the overland advance remained, nevertheless, and gave the continuing operation to open a land route through Burma at least a small place in the final American strategy for the defeat of Japan. Also to be considered was the long-standing American policy of aid to China. Logistical support of the two theaters was, accordingly, shaped in these terms. In the redeployment plans, movement of troops to the CBI after V–E Day was to be confined to a limited number of service units; a somewhat larger force was to be moved in from the Pacific once a port on the China coast had been opened. In the interim, the CBI received only limited augmentations of personnel.

It is ironic that only after the theater had been relegated to a subsidiary role did the great objects once proclaimed for it at last come into sight. British and Chinese forces advanced rapidly into central and southern Burma in the fall of 1944, and on 27 January the junction between Chinese forces advancing from India and Yunnan finally took place, securing the trace of the Ledo Road. To the south, the British completed the conquest of central Burma and entered Rangoon early in May 1945, without the forces from Europe that had been presumed necessary at second Quebec for the execution of DRACULA. The land route to China was thus finally secured on all sides.[59] Mountbatten was at last free to turn his attention to a move southward against Sumatra, Singapore, and Hong Kong. British operations along these lines were finally approved by the CCS at the Potsdam Conference in July, but the Americans by then regarded them as little more than mop-up actions.[60]

Because of the declining strategic importance of the CBI, the opening of the Ledo Road proved a much less significant development than once had been anticipated. The Americans were no longer prepared to devote resources to its exploitation. American service troops in the theater were spread thin. Beginning in the fall of 1944, increasing numbers were moved into China as the center of gravity of U.S. operations shifted forward. The SOS was spread over a wide territory operating a line of communication from Calcutta to east China, and its numbers were never commensurate with the tasks it was charged with performing. Most of the limited augmentations in the last year were in air personnel rather than ground service troops.

As early as August 1944 OPD had tentatively decided, over ASF objections, that the Ledo Road should be developed for two-way traffic only as far as Myitkyina, and from there to Kunming only as a one-way road for delivery of vehicles and artillery to China. The decision was based on the reasoning that the most serious shortage in China was motor transport and the road could be developed for truck deliveries without commitment of more resources, whereas to develop it as a two-way road all the way would require trucks and Quartermaster trucking companies that currently were

[59] (1) On these operations, see Romanus and Sunderland, *Time Runs Out in CBI*, chs. 3–7. (2) John Ehrman, *Grand Strategy VI*, 165–201.

[60] See below, Chapter XXVI, for the problem of allocating lend-lease to the British for this campaign.

in short supply for European operations. Other CBI projects were also adjusted at the time in the light of the new situation in the theater. The Fort Hertz pipeline was finally and definitely abandoned; the other pipelines were kept on the books, the only change being that the terminal for the second 6-inch line from Calcutta was to be a submarine terminal at Chittagong rather than on the docks at Calcutta.[61]

As the day drew near when the Ledo Road would actually be opened, the whole problem of the CBI line of communication came up for a re-appraisal in Washington. The re-appraisal was conducted in the light of a shifting situation in China. In November and December 1944, Maj. Gen. Albert C. Wedemeyer, faced with what he thought would be a last-ditch defense of Kunming, moved two of the American-trained Chinese divisions by air from India into China. At the same time, since more supplies were coming in over the Hump than ever before, he was able to take the first steps toward re-forming and equipping the existing Chinese Army in China. Now confident of his ability to repel the Japanese attack and then take the offensive, he prepared his BETA plan for an advance overland to seize first Fort Bayard, a small port on the Liuchow Peninsula, then Kowloon and Canton, opening a new avenue for shipment of supplies into China. In March 1945 Wedemeyer's staff presented its requirements for tonnages to be moved into China to support his operations—77,000 tons each month in April and May, 80,000 in June and July, and 87,000 in August for the support of 36 Chinese divisions, plus the Tenth and Fourteenth Air Forces. It appeared that prospective airlift tonnages and those on the Ledo Road under one-way operation from Myitkyina would fall 12,000 to 25,000 tons short of meeting these goals. There was the further consideration, as everyone undoubtedly realized, that these tonnage requirements would have to be expanded, particularly if Japanese resistance was stiff. The ASF again proposed that the Ledo Road be developed further but the decision again went against it. The requirements for trucks and operating personnel to bring the road to a capacity of 60,000 tons monthly—5,759 more truck-tractors, and 56,500 troops including 137 Quartermaster truck companies—compared unfavorably with the matériel the Air Transport Command said it needed to enlarge the airlift to 80,000 tons per month—150 more C–54's plus reserves, and about 5,000 troops. The resources committed to the airlift could also be shifted much more easily to other tasks, once a port had been opened on the China coast, than could the fixed investment in an overland route with all the paraphernalia it required. Moreover, the removal of the B–29's from the theater left the east Bengal airfields open for Hump operations and freed additional transports for the Hump.[62]

With the scale of road operations set far lower than expected, the theater also

[61] (1) Memo, Lutes for ACofS, OPD, 29 Jul 44, sub: Projs TIG–1A and TIG–1C, Ledo Road Construction and Opn, file OPD 1942–44, Hq ASF. (2) Diary Entries, 23 Jul, 16 and 18 Aug, 20 Sep 44, Strat Log Br, Plng Div, ASF. (3) Memo, Handy for Marshall, 14 Aug 44, and related papers, ABC 384 Burma (8-25-42). (4) For a more detailed account see Romanus and Sunderland, *Stilwell's Command Problems*, pp. 384–87.

[62] Romanus and Sunderland, *Time Runs Out in CBI*, chs. II, IV, VI–VIII.

finally decided to stop the 4-inch pipeline at Myitkyina and to divert pipeline troops and matériel to a line to be run east of Kunming—a decision that set a precedent for the 6-inch pipeline from Chittagong, which was stopped at the same point. Thus the final version of the supply line into China differed considerably from that envisaged at QUADRANT in August 1943 when the basic logistical plan for the CBI was drawn up. The 119,800 tons of cargo carried into China by airlift, road, and pipeline in the peak month of July 1945 nevertheless did not fall far short of the goal of 129,000 set for January 1946 at QUADRANT. The difference lay in the fact that the airlift carried 74,000 tons as opposed to an original estimate of 20,000, while the road and pipeline fell far below QUADRANT estimates.[63]

The situation in early May 1945, however, seemed to justify General Somervell's fears that the airlift would be insufficient to support the overland advance to the China coast. The Chinese Army showed in its defense of Chihchiang that it could stop limited Japanese attacks, but the resources to enable it to move forward did not seem to be available. The C–54's for the Hump were delayed; the transport system on the ELOC improved slowly; the mounting U.S. overhead in China ate heavily into the supplies that could be brought over the Hump for use of the Chinese Army. The old, dreary prospect once again appeared—a major operation in the CBI would be indefinitely delayed because not enough resources were available for its logistical support. The JCS, however, in approving Wedemeyer's plans (Operation RASHNESS), had really counted on Japanese withdrawals to make the Chinese advance possible, and in this calculation they were not mistaken. The Japanese high command, faced with the necessity of preparing a citadel defense of the home islands, decided to shorten its lines in China. In late May Japanese troops began to withdraw from their recently acquired positions in east China, opening the way for rapid, virtually unopposed, execution of the first phases of RASHNESS.[64]

With these events the issue of further development of the Ledo Road was finally and definitely settled. Logistical planning now centered entirely on early development of Fort Bayard to support an advance to Kowloon and Canton. The target date for the first operation was set for August 1945, and five fast cargo ships were loaded in late July with supplies and equipment for shipment into Fort Bayard. In addition, a schedule was arranged for five more ships to move into the port monthly. The target date for opening Kowloon was set at 1 December 1945, and plans envisaged support of 120,000 U.S. troops (to be made available by redeployment from Europe) and 39 Chinese divisions through that port and Canton by 1 June 1946.[65] The Japa-

[63] For an account of detailed problems of operations on the Ledo Road and a table showing both tonnages carried over the Ledo Road and the Hump air line in 1945 see Larson and Bykofsky, *The Transportation Corps: Operations Overseas*, pp. 584–91.

[64] Romanus and Sunderland, *Time Runs Out in CBI*, ch. VIII.

[65] (1) Memo, Somervell for CofS, 7 Jul 45, sub: Supply Procedures for China Theater, file Supply Procedures for CT, ASF Plng Div. (2) Memo, Brig Gen Henry C. Wolfe, Dir Plng Div, for Dep Director, Pls and Opns, ASF, 6 Aug 45, sub: Status of Supply Support to Projected Opns in China, file 12a Genl File 1945 (CBI), ASF Plng Div.

nese decision to surrender, of course, rendered even this final CBI project abortive.

On 6 August 1945 an American B–29 dropped one atomic bomb on Hiroshima. On 8 August the Soviet Union declared war on Japan and its Far Eastern armies began their march into Manchuria. On 9 August another atomic bomb fell on Nagasaki. On 15 August a Japanese Government that had long before concluded that the war was lost made known its intention to surrender. On 2 September the surrender was consummated in ceremonies aboard the U.S.S. *Missouri*. The war against Japan thus came to its end in a manner radically different from that which the military planning staffs had envisaged. The elaborate plans and preparations for invasion of Japan had no ultimate utility. Events seemingly justified those who, like Admirals Leahy and King, had long been skeptical of the necessity for mass invasion. Yet King, at least, never advocated any diminution in preparations for a concentrated, massive effort in the Pacific, whatever line that effort might take; and to the last he fought for naval expansion beyond anything the circumstances seemed to require.

The argument can certainly be made that the Japanese would hardly have surrendered except in the certain knowledge that the United States had the means, the plans, and the intent to invade, whatever the effects of bombing (atomic and conventional), blockade, and Soviet entry into the war. Legitimate criticism can still be directed at the massive scale on which the final effort against Japan was planned when forces of the Army and Navy and of America's allies are taken into consideration, at the seeming absorption of the military staffs in preparing for the execution of plans that had generated a momentum of their own, and at their failure to take into consideration in their plans the possibility of Japan's collapse, or to even begin a downward adjustment of force requirements until that collapse was a certainty. The framework of plans for the final massive assault against Japan had been started in 1943 and 1944; the military machine for executing them was in existence and needed only to be moved into position. Schooled in the necessity of preparing for every contingency, fearful that public pressures might lead to the premature dismantling of the military machine, and, for the most part, unaware of the new technological revolution brewing in the laboratories and on the testing grounds, American military staffs continued to work at completing the structure around the framework of plans until the very moment that the mushroom cloud over Hiroshima presented startling evidence of the arrival of a new age in warfare.

PART SEVEN

FOREIGN AID

CHAPTER XXV

Lend-Lease and the Common Pool

The high rate of American production during 1943 and 1944 finally made possible the realization of the dream of 1941—a tremendous outpouring of American munitions to aid the Allies. Shipments of ground and air munitions under lend-lease during each of the middle war years were more than double those of 1942. The increase in total volume was achieved without any marked corresponding increase in the proportion of American production allotted to lend-lease (approximately 20 percent), a testimonial to the vastly increased output of American factories. The British Commonwealth of Nations continued to be the largest lend-lease beneficiary, receiving around 61 percent of the total military supplies transferred during 1943 and 1944. The USSR received approximately 22 percent, and the remaining 17 percent went to France, China, the Latin American countries, and others.

Increased production, combined with more careful planning for its use, measurably reduced the severe competition for supplies between the U.S. Army and lend-lease that had been characteristic of the earlier period. True, shortages of vital items continued, and these items had to be carefully rationed in accordance with strategic priorities, but there was a great change from the situation in 1941 and 1942 when shortages were so all-pervasive as to make allocations largely a question of dividing a deficiency. During the last part of the war the United States was able to fulfill its role as the "arsenal of democracy" and at the same time to support its own military forces on a scale more lavish than had ever been known in past wars.

The swelling flow of supplies was accompanied by a tendency toward increasing control over transfers on a unilateral national basis and more careful scrutiny of lend-lease requests and allocations. Lend-lease was conceived, by both the Congress and the military leaders, as an instrument to be used solely for winning the war and not for postwar purposes. American military policy toward lend-lease in the later stages of the war was grounded on this principle, finding expression in the doctrine that lend-lease allocations should be limited to quantities needed by Allied powers, over and above their own production, to fulfill strategic goals laid down by the CCS. Application of this policy, particularly to the British, produced a decrease in the proportion of American production going to lend-lease from approximately 20 percent in 1944 to about 13 percent in the first six months of 1945.[1]

[1] These percentages are based generally on Crawford and Cook, Statistics: Procurement, 9 Apr 52 draft, and Lend-Lease, 15 Dec 52 draft. It should be noted, however, that they are approximations. Only approximate figures are possible for two reasons:

(Continued on next page)

The Common Pool

As the relationship had developed during 1942, Great Britain was not only the principal lend-lease beneficiary, but also a partner in the disposition of the total war supplies of the two nations. In January 1942 the President and the Prime Minister had agreed that the munitions resources of the two countries should be placed in a common pool from which allocations should be made in accordance with strategic need among all the Allied nations fighting the Axis Powers. To give effect to the principle, the Munitions Assignments Boards, Washington (MAB) and London (LMAB), were established, under the aegis of the CCS, to allocate U.S. and British munitions production. The twin principles of lend-lease and reciprocal aid served as the legal mechanisms to make the common pool possible. Around the boards the British and Americans succeeded, during 1942, in building a structure for allocation of munitions on a combined basis unparalleled in the history of coalition warfare. Though it cannot be said that the common pool was ever a literal reality, there was collaboration and consultation in almost every phase of the planning and operation of the Anglo-American supply machinery.[2]

While the combined machinery continued to operate without much change during the later war years, there was a definite weakening of the British position vis-à-vis the American, and the concept of the common pool underwent a gradual modification to the point where, by the end of the war, it had become little more than a figure of speech. The theory of the common pool had been advanced, and the combined machinery set up, during a period in early 1942 when British experience in waging war and British governmental and military staff organization were far more mature than American. In that early period, too, the British war economy was more tightly organized and producing a greater volume of munitions than was that of the United States. As the war progressed the situation gradually changed. American organizations gained experience, confidence, and efficiency; planning for effective utilization of the nation's resources in pursuits of war became more exact and systematic; the American industrial machine began finally to show its vast productive power, attaining a height of four times British production by mid-1943; more and more U.S. troops completed their training and moved to theaters of operations. The theaters within the area assigned as the exclusive responsibility of the British—the Middle East and India—declined in relative importance to the European theater, where the effort was genuinely combined, and to the Pacific theaters, where the effort was almost exclusively American. In short, American military and industrial power began to assert itself, and with that development its military directors tended more and more to resist attempts, real or fancied, by the British to direct its use.

The British position in relation to

(Continued from preceding page)
(1) dollar value statistics on procurement deliveries are not strictly comparable to those on lend-lease shipments and transfers, and (2) the tables do not show annual breakdowns for theater transfers, which form a significant portion of the lend-lease total in the last part of the war.

[2] See Leighton and Coakley, *Global Logistics, 1940–43*, chs. X, XI, and XVIII.

the common pool was even at the start a vulnerable one, since Great Britain was dependent on U.S. production to a far greater degree than the United States was dependent on British. The British in 1940, while still fighting virtually alone, made the fateful decision that in the interests of national survival they should seek from the United States the maximum quantities of supplies they could use without regard to economic consequences. In giving effect to this decision in the years following, the British virtually abandoned their export trade and concentrated upon mobilizing the maximum fighting force from available manpower, relying heavily on U.S. and, to a lesser degree, Canadian production for supplies and equipment. By the time the Americans entered the war the British course was, to all intents, irrevocable. The Japanese attack forced the British to increase the size of the Empire forces even further. Until the end of the war the United Kingdom maintained a far larger proportion of its population in the armed forces than did the United States or any other of the allies.[3]

Under these circumstances the British felt they must have a voice both in the distribution of U.S. munitions and in the planning of U.S. production programs, and sought therefore to give a literal interpretation to the common pool theory. The Americans, on the other hand, had little reason to participate in the formulation of British production plans or the distribution of British-produced munitions since they had few requirements for them. Reciprocal aid, though it grew to substantial proportions, normally took the form of services, subsistence, and construction materials, rather than finished munitions. Consequently, the U.S. military staffs at first exerted little effort to establish the same strong representation on the London Munitions Assignments Board that the British had on the board in Washington, nor did they concern themselves to any great degree with British production plans. To the Americans the common pool all too frequently seemed to mean *American production,* and they inevitably looked askance at a theory that gave the British a dual role as applicant for aid and participant in decisions rendered on their applications.

During 1942 the British lost the first, and perhaps the most vital, round in their battle to secure a literal interpretation of the common pool theory. Their attempt to get a genuine combined production program based on combined requirements as determined by the CCS and administered by the Combined Production and Resources Board (CPRB), was unsuccessful. By fall of the year, when the time came to delineate a definitive munitions program for U.S. industry in 1943, the Americans insisted on formulating the program on a unilateral basis and the British were not permitted to participate. The British in the meantime had secured acceptance of the principle of strategic necessity as the criterion for assignments by the MAB; but in the application of that principle they met many disappointments, and they found themselves without any firm

[3] (1) H. Duncan Hall, "History of the Second World War, United Kingdom Civil Series," *North American Supply* (London: Her Majesty's Stationery Office, 1955), pp. 158–60, 473, 490. (2) W. K. Hancock and M. M. Gowing, "History of the Second World War, United Kingdom Civil Series," *British War Economy* (London: His Majesty's Stationery Office, 1949), pp. 370–71.

basis on which to plan for the division of their last reserves of manpower between industry and their armed forces in 1943. The result was the negotiation at the end of 1942 of what was, fundamentally, a compromise arrangement—the Weeks-Somervell Agreement — for distribution of ground munitions to be produced in the United States during the following year. In this agreement the British reduced their stated requirements in the Army Supply Program by approximately one-third; in return they secured a definite promise that these requirements would be accepted as an equal obligation with U.S. Army requirements against American production, to be sacrificed or reduced only in the same proportion as American requirements.[4]

As a corollary to the Weeks-Somervell Agreement, ASF officials came up with their own interpretation of the common pool, which was called the *residual theory*. Each country, they said, should have exclusive control over its own production facilities and determine what and how much these facilities should produce. Each country should produce to the fullest extent possible the war material it needed and have priority on its own productive capacity to meet its own military needs. The common pool should apply only to residual or marginal requirements that each should have the right to place on the other.[5] This residual theory was seldom, if ever, advanced in discussions with the British. Yet it found expression in the actions of nearly all U.S. Army officials within and without the assignments machinery. It did not in any sense preclude very generous allocations of American production to the British; but it did assert the right of Americans to determine and control these allocations in the national interest, and thus posed a definite threat to the British that these generous allocations would be severely reduced or cut off at any moment that the Americans might deem it no longer in their interest to continue them. It is not surprising therefore that the British continued to fight for a literal interpretation of the common pool. Nearly every time the issue came up, however, the Americans were in a position to insist that their own actions in asserting the superiority of American claims on American production were in consonance with British practices in relation to British production from the very inception of the common pool. They also were able to insist, as American forces came to predominate in overseas theaters and American ideas on strategy gained an increasing dominance in decisions of the CCS, that their claims had a better basis in relation to strategic need, the very cornerstone on which the common pool was founded.

In accepting the Weeks-Somervell Agreement, the Washington Munitions Assignments Board prevented it from assuming the status of a protocol by stipulating that assignments should continue to be made by that body in keeping with strategic directives of the CCS. And the principles of the Weeks-Somervell Agreement were not renewed when British requirements for 1944 and 1945

[4] See Leighton and Coakley, *Global Logistics, 1940–43*, pp. 282–85.

[5] (1) International Division, ASF, Lend-Lease as of September 30, 1945 (2 vols. text and 10 vols. documentary supplement), Text, I, 217–18 (hereafter cited as ID, Lend-Lease), MS, OCMH. (2) See also Study, International Division, ASF, sub: Study on International Aid for Joint Staff Planners, Log file, OCMH.

were presented. The British were soon being required to give strategic justification for assignments even as in 1942, despite the acceptance of their requirements in the Army Supply Program. OPD insisted that these justifications be based on prospective or actual employments of troops in battle in accordance with plans approved by the CCS, not simply on theater deployments as the British had proposed in 1942.[6] Thus the doctrine of strategic necessity, which the British had urged as a guide to assignments in 1942 when they had nearly all their troops deployed in active theaters and the Americans very few, turned out to be a two-edged sword. The Americans could and did wield it against the British in the last part of the war to deny or reduce assignments of critical items.

There were other facets of the general reassertion of American national interest in the administration of lend-lease. Beginning in late 1943 British requirements were subjected to an increasingly critical scrutiny; greater restrictions were placed on the disposition of materials made available under lend-lease; numerous civilian articles were ruled ineligible for lend-lease transfer; other semicivilian articles, long procured on military priority, were shifted to civilian agencies making it more difficult for the British to secure them. In short, the concept of lend-lease as an instrument of U.S. national policy came gradually to supplant the concept of lend-lease as a mechanism for pooling resources. The former concept had more solid grounding in the original Lend-Lease Act of 1941 and in the extensions voted in 1943 and 1945; the common pool was only the result of an executive announcement, with no congressional sanction.

The emphasis placed on this tendency of American leaders to limit the application of the common pool concept must not be allowed to obscure the important role that the practical application of pooling resources played in the victory over Germany and Japan. The British were able to carry out their design of mobilizing an abnormally large proportion of their manpower in the armed forces while relying on American aid for much of their equipment. During 1943 British Empire forces received 24.5 percent of their total munitions supplies from U.S. lend-lease and in 1944 27.2 percent. Even in the first half of 1945, when the American desire to curb lend-lease began to assert itself in earnest, that proportion decreased only to 21 percent.[7]

On the other side of the ledger, the British in turn made substantial contributions to American operations in nearly all theaters of the war. A British statistician has, in fact, made a case that British reciprocal aid to the United States took almost as heavy a proportion of British resources as American lend-lease to Britain took of American resources.[8] In sum, the common pool, as modified in actual practice, proved a successful mechanism for its original purpose—winning the war against the Axis. Its reinterpretation in the last years of the war in terms of American national

[6] See, for example, Memo, Gen Tansey, Log Gp, OPD, for Chmn MAC(G), 14 Apr 43, sub: Special Issue of Equipment to U.K. in Support of a Special Opn, Tab G, 89th mtg MAC(G), 15 Apr 43.

[7] Hall, *North American Supply*, p. 428.

[8] *Ibid.*, pp. 432–33.

interest was an almost inevitable corollary of the vast expansion of American military power vis-à-vis British military power that had taken place since 1942.

Changes in Lend-Lease Administration and Procedures, 1943–45

The combined machinery for administration of military lend-lease and the common pool of munitions that had taken shape in Washington during 1942 centered around the MAB, which was responsible to the CCS, and its three committees, Ground (MAC(G)), Air (MAC(A)), and Navy (MAC(N)), which also were combined in structure but operated within the War and Navy Departments. This machinery exercised complete responsibility for allocation of all finished munitions of American production. For requirements there were also two combined bodies, the International Supply Committee with responsibility for decisions on lend-lease requirements for ground equipment, and the Joint Aircraft Committee with similar responsibility for air equipment. The MAB had also been assigned the responsibility for advising the CCS on the relations of requirements programs to approved strategy. The Combined Production and Resources Board, a civilian board, was theoretically responsible for combining the American and British production programs into an integrated whole adjusted to the strategic requirements of the war as indicated by the CCS and all relevant production factors.

In reality, after the autumn of 1942 neither the MAB nor the CPRB exercised much influence on the American military requirements program, which became almost exclusively the responsibility of the JCS and the respective service departments. And the role of the International Supply Committee had already been limited almost solely to consideration of various lend-lease requirements for noncommon items and for spot demands. The actual determination of the Army Supply Program, including those parts devoted to lend-lease, fell to agencies of the ASF. Within the ASF the International Division exercised the primary responsibility for lend-lease functions, providing the chairman and secretariat for the MAC(G), liaison with all lend-lease governments, and the necessary staff machinery for integrating lend-lease requirements with those of the U.S. Army. While the ASF handled the administrative side of lend-lease, OPD played the most important role in determining assignments policy on the American side.[9]

Such changes as were made in this machinery during the period 1943–45 were directed either toward increasing administrative efficiency or toward reducing the degree of British influence in the disposition of American-made munitions. In early 1943 the International Supply Committee was discontinued and the power of decision on production of noncommon items delegated to the International Division, ASF. The British, while they retained membership on some informal subcommittees in the technical services to which each specific request for production of a noncommon item was referred, no longer were allowed a voice in the final decision. Appeals by any foreign government

[9] See Leighton and Coakley, *Global Logistics, 1940–43*, pp. 247–69.

under the new procedure could no longer be taken to the MAB, but went to the Commanding General, ASF. The British lodged no official protest against this change, evidently because they had derived little benefit from their membership on the International Supply Committee during 1942 and found it just as easy to negotiate directly with the International Division.[10]

A similar change was effected in the assignments machinery in the summer of 1943 when the combined subcommittees of the Munitions Assignments Committee (Ground) were replaced by War Department conference groups without British representation. The combined subcommittees had mushroomed until by early 1943 they were in operation for almost every type of equipment for which MAC (G) was responsible. Reporting to the main committee through an assignments subcommittee, they performed almost all the routine work of preparing assignments schedules. When, in early June 1943, Lt. Gen. George N. Macready, head of the British Army staff in Washington and British Army member of the MAB, complained of the "bickering" that went on at the subcommittee level and the lack of sufficient knowledge of strategic and operational plans among subcommittee members to enable them to make intelligent assignments, General Somervell and Brig. Gen. Boykin C. Wright, chief of the International Division, seized the opportunity to go one step further and eliminate British representation on the subcommittees entirely. The Americans did not have representation on the similar subcommittees in London, where most assignments were handled as a routine matter. On 1 July 1943, by unilateral decision, General Wright as chairman of the MAC (G) placed a new system of determining assignments in effect. The British and other applicants would submit monthly bids in writing to the International Division, which would then prepare assignments schedules based on the recommendations of War Department conference groups. The British were to be allowed to have observers at the meetings of these groups but no official representation. The British, or the Liaison Branch of the International Division, which acted for other countries, were to indicate at an agenda conference held two days before each meeting of MAC (G) the adjustments in decisions made by the conference groups or the International Division that they wanted considered in the full meetings of the ground committee. The combined subcommittees on amphibious vehicles, chemical warfare supplies, diesel engines, quartermaster stores, signal equipment, tanks, trucks, and explosives were accordingly replaced by War Department conference groups. The medical and engineer common stockpile committees and the committee on transportation stores were continued on a combined basis, but in November 1944 the engineer committee was also replaced

[10] (1) Memo, Col John B. Franks for OQMC, 2 Feb 43, sub: Discontinuance of Regular Mtgs of ISC, ID 337, Confs, II. (2) Memo, Col George W. Smythe, ID, for CsTechSvcs, 13 Feb 43, sub: Procedure for Processing Lend-Lease Reqmts, Lend-Lease, Doc Suppl, V. (3) Duncan H. Hall and C. C. Wrigley, "History of the Second World War, United Kingdom Civil Series," *Studies in Overseas Supply* (London: Her Majesty's Stationery Office, 1956) pp. 153–54.

by a War Department conference group on engineer items.[11]

Though "bickering . . . at the subcommittee level" was advanced as the reason for the change, the real motive was somewhat different, as General Wright confidentially noted:

> The lessening of bickering and friction is of course a minor consideration. There is relatively little and that could be eliminated without too much trouble. The real goals are to remove the hypocrisy of having subcommittees handling all sorts of minutiae where on the surface we and the U.K. are supposed to have equal voices (of course, in the final analysis, we don't) and to restore the concept that our production and our facilities are our own until we actually dispose of finished munitions and not a joint U.K. and U.S. undertaking; to have it understood that the reference to a "common pool" is not to be taken literally but instead is merely a metaphor. . . .
>
> The result (it is hoped) would be that the U.S. would give wisely and even very liberally out of its own production and that in the few cases where there would be dissents the resolution of the disagreement would be made on a strategy or high policy level.[12]

British protests that the situation in Washington was not comparable to that in London, where there was little American demand for most articles of British production, consequently fell on deaf ears.

Procedures for repossession of material assigned were also changed in the direction of vesting greater administrative control in ASF agencies. The rule in effect until mid-1943 provided that all ground munitions assigned to foreign governments and not shipped within 45 days should be reported to the MAB through the MAC(G) for possible repossession by the United States or for reassignment. Though leniently applied, pressure under the rule did help keep the lend-lease pipeline clear, and the reports provided a guide for making assignments in the light of proven ability to ship. The MAB decided in June 1943 that operation of the rule could be safely delegated to the ground committee, reserving the right to hear appeals when MAC(G) could not reach unanimous agreement. In early September 1943 the MAC(G), acting on the recommendation of its International Division secretariat, revamped the procedures. For material en route to and at port the repossession date was set at 60 days, but repossession was to be subject as before to specific decisions by MAC(G) and appeal to the MAB. For material remaining under control of the technical services in depots, repossession was to be permissible with the consent of the beneficiary government after 45 days, and was to become automatic and mandatory after 75 days. The new procedures made the formal rules of repossession less stringent, recognizing that the 45-day period originally set was too short, but at the same time made repossession more a matter of routine administration. Of perhaps greater significance, the procedural changes were accompanied by

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[11] (1) Ltr, Gen Macready to Gen Somervell, 3 Jun 43. (2) Ltr, Somervell to Macready, 3 Jun 43; Memo, Gen Wright for Comdr D. C. King, 25 Jun 43, sub: Change in Assignments. (3) Ltr, Gen Macready to Gen Somervell, 8 Jun 43. (4) Ltr, Somervell to Macready, 14 Jun 43. All in ID 334 MAB, I. (5) Min 2184, 102d mtg, MAC(G), 15 Jul 43; min 3945, 165th mtg, MAC(G), 2 Nov 44. (6) Memo, Gen Maxwell, G–4, for Chmn, MAC(G), 30 Mar 44, sub: Engineers Common Stockpile Procedure, Director Materiel File MAB in Washington. (7) ID, Lend-Lease, Text, I, 261.

[12] Memo, Gen Wright for Dir Materiel, ASF, 2 Jun 43, ID 334 MAB, I.

a gradual shift in policy whereby MAC (G) normally refused to make new assignments to replace material repossessed.[13]

At the higher levels, in the realms of JCS, CCS, and MAB action, a similar tendency developed toward substituting joint for combined decisions. After early 1943 the MAB ceased to play a significant role in the determination of requirements, exercising the requirements function set out in its charter only by maintaining statistical balance sheets of U.S. and British requirements and production as a guide to adjustments.[14] Effective control over this most important aspect of the logistical process, as far as it pertained to American production, passed to the agencies serving the JCS. There was a corresponding tendency for JCS agencies to also exercise more and more influence over assignments policy, both because of the increasing predominance of American forces in overseas theaters and because of greater cohesion in the JCS organization itself after the realignments of 1943. One of the results of the realignments was the chartering of an organization embracing the purely American side of the MAB, first known as the U.S. Representatives, MAB, and later renamed the Joint Munitions Allocation Committee (JMAC). The JMAC was given the primary function of allocating munitions between the U.S. Army and Navy, but it also was able to give greater unity and cohesiveness to the actions of American representatives on the MAB and its committees. Three subcommittees of the JMAC were formed for ground, air, and Navy materials, respectively, so that the final organization paralleled that of the combined munitions assignments machinery. Agreements reached within the JMAC before meetings of the combined board enabled the Americans to present a solid front on issues where there was conflict with the British.[15]

The formation of the JMAC was less important than the general extension of the cognizance of the JCS over logistical matters. This cognizance included an increasing number of questions involving lend-lease policy, particularly as it affected nations other than those of the British Commonwealth, such as China, France, and the independent nations of the Middle East. In determining lend-lease policy, the Joint Logistics Committee usually took the lead, while the JMAC served as a mechanism for enforcing the policy after its approval by the JCS. Once a policy had been determined within the JCS committees it was very difficult for the British, in combined meetings of the CCS or MAB, to get it changed.

Purely within the Army itself, in the realignment of general staff functions in

[13] (1) Memo, Gen Wright for CG ASF, 29 Jun 43, sub: Items for Consideration 73d Mtg MAB, in ID file of MBW Min, Book IV. (2) Min 2a, 73d mtg MAB, 30 Jun 43. (3) Memo, Secy for Chmn, MAC(G), 3 Sep 43, sub: 45 Day Rpt, Gen Tab 2, Agenda 110th mtg MAC(G), 9 Sep 43. (4) Min 2340, 110th mtg MAC(G), 9 Sep 43. (5) Hq, ASF, Cir 43, 9 Feb 44. (6) ID, Lend-Lease, Text, I, 649–56.

[14] Statistics on some major item or group were normally presented by Isadore Lubin, MAB statistician, at each meeting of the board.

[15] (1) On the realignments in the JCS, see above, Chapter IV. (2) JCS 202/20/D, 11 May 43, title: Charter U.S. Reps MAB. (3) Memo, Gen Burns for JCS, 20 Aug 43, and related papers in Director Materiel File MAB in Washington. (4) JCS 450/8/D, 10 Nov 43, title: Charter JMAC. (5) ID, Lend-Lease, Text, I, 210–13.

the fall of 1943 to give G–4 a more important place, a G–4 representative was added on both the MAB and the JMAC, and G–4 replaced OPD on the ground committee. G–4 as a rule took a more critical attitude toward lend-lease allocations than either the ASF or OPD had formerly done, insisting that U.S. Army requirements should have a clear first priority. Shortly after gaining its place on MAC (G), G–4 announced its intention of establishing policies for the ground committee to follow. The question might well have been raised whether such policies could be established unilaterally, but the British evidently never knew of the directive. There was always a question, never resolved, as to whether MAC (G) was in fact an agency of the War Department or responsible solely to the Munitions Assignments Board. G–4's claim to the right to dictate policies for the ground committee evidently was based on the former theory; it was another of those straws in the wind that pointed up the growing American desire to exercise complete control over disposition of American equipment without British participation.[16] Toward the end of the war General Tansey of OPD summed it up succinctly: ". . . if we ever have lend-lease again there should be no combined assignment boards. Assignments should be made by a purely American agency whose decision is final."[17]

In the realm of War Department relations with civilian agencies responsible for lend-lease, the pattern established in 1942 continued to prevail. Funds for procurement of military articles, whether for the U.S. Army or for lend-lease, continued to be appropriated in a lump sum, thus permitting the MAB to make allocations in accordance with strategic considerations. Funds for civilian lend-lease were appropriated separately. On the civilian side, an important change took place in September 1943 with consolidation of the offices and functions of the Office of Lend-Lease Administration (OLLA), the Office of Economic Warfare, and the Office of Foreign Relief and Rehabilitation Operations into the Foreign Economic Administration (FEA) with Leo Crowley as director.[18] The change made little difference in the Army's relation with the civilian organization in handling lend-lease. FEA merely inherited, with some broadening of their scope, the powers formerly exercised by OLLA and was responsible for maintaining over-all lend-lease accounts, establishing the terms and conditions under which lend-lease was rendered, and determining policy outside the strategic sphere. Similarly, the War Shipping Administration, through its forwarding corporations, continued to handle lend-lease shipments of military as well as civilian material except for those shipments specifically consigned, as were those for France and China, to the Amer-

[16] (1) Memo, Gen Handy, OPD, for CG ASF, 23 Dec 43, sub: OPD Representation at MAC(G) Mtgs, OCS 334 MAB. (2) Memo, ACofS, G–4, for Chmn, MAC(G), 11 Jan 44, sub: Sup Div, WDGS Participation in Munitions Assignment Activities, Director Materiel File MAB in Washington. (3) At the MAB meeting, 4 July 1945, Admiral Joseph M. Reeves stated the contrary view that personnel of the committees were merely detailed by the War and Navy Departments and that the MAB had sole authority over them as far as assignments were concerned.

[17] Memo, prepared by Gen Tansey, sub: Allocation of Munitions for Logistic Support of Global Strategy, no date, ABC 400 (2-17-42), Sec 6.

[18] Executive Order 9380, Foreign Economic Administration, 25 Sep 43.

ican theater commander for delivery in his theater.

British Requirements and Assignments, 1943–44

The flow of American supplies to Britain during 1943 and the first half of 1944, as a British historian has noted, "ran at its highest levels," but "so smoothly that there were relatively few policy issues or serious difficulties."[19] The main policy issues had been settled during 1942, and by early 1943 the whole system of handling lend-lease for the British had taken relatively final form. British requirements were submitted to the International Division for inclusion in the Army Supply Program at the time of each semiannual revision (in July and December). U.S. Army standard items and some of the larger categories of nonstandard British-type items such as the .303-caliber rifle and ammunition were included in Section I of the Army Supply Program; requirements for most other nonstandard items and for various miscellaneous supplies such as clothing, tank components, and certain signal and engineer stores were included in Section III (formerly Section VI). The British were also allotted a small pool of raw materials for production of spot items, interim demands, and emergency needs. These requirements programs formed the blueprint for military aid to the British; the rate of assignments to fulfill them was determined by the MAC(G) and MAB at their weekly meetings.

It would be well here to give a brief description of the method by which the British arrived at their military requirements on the United States. The procedure entailed, first, the determination of a gross requirement (for Empire and Commonwealth forces) for each article, and second, the net deficit above Empire production that would have to come from the United States. The British, to begin with, drew up an order of battle based on forces required to fulfill British Army commitments under current strategic plans. This table showed the forces expected to be deployed progressively in each theater over the ensuing two years and the estimated activity of these forces by time period. Requirements were then calculated including four main components: (1) initial equipment including all ammunition carried by combat organizations; (2) General Staff Reserve, and emergency operational reserve in each theater of war to cover the possible severance of communication lines or unexpected operational requirements; (3) a transit or pipeline commitment to cover the quantity of stores which must be held over and above the General Staff Reserve to avoid depletion as a result of time taken to replace wastage and loss; (4) maintenance to replace wastage and loss. The last three factors varied from theater to theater and from time to time in accordance with the classification of activity in each area as "intense," "normal," or "quiet." To the theater troop requirements many others had to be added: training needs, Admiralty and RAF requirements for Army stores, demands for home defense or from the Dominions and India for equipping forces other than those in theaters of war, a repair pool for certain types of equipment, a "War Office Reserve" based on unit

[19] Hall, *North American Supply*, p. 394.

equipment for a mixed force of six divisions to meet unpredictable demands. Then, worth special mention, were the requirements for materials that in U.S. Army terminology had come to be known as operational projects and the British called theater stores, which embraced needs that did not depend upon size and type of forces, but on special considerations of geography, climate, or terrain. Infinitely the most difficult of all to compute, they were based on special strategic forecasts, and might include as well as strictly military materials, some that had definite civilian utility. The gross Empire requirements for each article were then calculated in London, and the deficit that could not be met from Empire production was then forwarded to Washington as the basis for the part of the Army Supply Program covering lend-lease to the British.[20]

The British did not have quite the same respect for the "scientific" calculation of requirements that the Americans at least professed to have, and regarded the end result as merely an educated guess. It is at least possible that American insistence that the British determine their requirements far in advance was also conditioned less by their confidence in anybody's ability to do so than by their desire to keep production plans stable and not allow them to be continually disrupted by British demands for bits and pieces. The fact that in the pre-Pearl Harbor period the British had come to rely on American production to meet all sorts of emergency demands led them after Pearl Harbor to expect from American production a flexibility they could not obtain from their own.[21] Much of Somervell's fight during 1942 to reduce British lend-lease to a sort of regular schedule was motivated by his desire to reverse that situation.

For the most part, the Weeks-Somervell Agreement represented a satisfactory compromise on this as well as other issues. Its net effect was more to establish the over-all limits of the British program for 1943 than to spell out in their entirety the exact requirements to be included. Within these over-all limits, the British were permitted as much flexibility as possible in ordering equipment to meet shifting demands. This flexibility was seldom as great, however, as that allowed the U.S. Army. Each item change, in the same way as the initial determination of the requirements to be included in the Army Supply Program, became the subject of special negotiation, the philosophy of the ASF being that the British request should be accommodated only if its fulfillment would not unduly disrupt the regularly scheduled production program. Similarly, in the assignments process, the accepted British requirement was usually treated as the upper limit on allocations, to be waived only in case of unusual operational urgency. Exceptional items, like DUKW's, where supply was far short of the need, were assigned entirely on the basis of operational priorities without much regard for accepted requirements, but the number of exceptions decreased as production of most items rapidly

[20] Memorandum on the Calculation of British Army Requirements on North America, Incl to Memo, Col Joseph W. Boone for Maj Robert C. Woods thru Maj Gen James K. Crain, 3 Nov 43, ID 400.312 Reqmts U.K. II.

[21] For a lucid discussion of the British viewpoint see Hall and Wrigley, *Studies in Overseas Supply*, pp. 166–69.

caught up with demand. There was, thus, in the handling of military lend-lease for the British, flexibility within certain limits, which reflected the necessity for both long-range production plans and short-range adjustments in distribution.

In the Weeks-Somervell Agreement itself only a limited number of major items of equipment were specifically listed (dollar value $1.9 billion). Other British requirements remained to be considered in detail; these the Americans had promised to make "every effort" to accept. General Clay understood this to mean that the additional requirements would still be limited in dollar value to those included in the September 1942 revision of the ASP ($2.1 billion), since to permit any expansion would inflate the program beyond the agreed limits of American productive capacity. The British, quite in contrast, asked for a vastly expanded program of supporting and accessory equipment and of equipment for special needs, such as light antiaircraft cannon. As prospects brightened for early satisfaction of the British Army's basic needs for weapons and ammunition—the items covered in the main agreement—peripheral demands for such things as mechanical transport, signal, and engineer equipment, increased. The British presented requirements for 217,000 trucks for 1943, for instance, most of them of the heavy type they believed more economical of operation. In the end, though the ASF made some concessions, the additional British requirements were generally held within the limits of the dollar value total in the September program. Truck requirements were cut in half, since experience had proven that the British could hardly ship more than that number; signal needs were also severely curtailed because of obvious production limitations; the U.S. Navy's mounting needs for Oerlikon light antiaircraft cannon precluded meeting British requests for this item for ground army use.[22]

In mid-1943 the British renewed their effort to get more of their truck requirements accepted in the ASP, and also asked for increases in the provision of heavy artillery, pistols, binoculars, Universal carriers, engines, and miscellaneous engineer equipment. The ASF refused most of these demands on the ground that they could not be accommodated within the existing limits of the American munitions program. Only in the case of pistols, jeeps, and engines was any sizable augmentation agreed to. On the same occasion, the British presented their 1944 requirements program for the first time, in dollar value about two-thirds of the program for 1943. Again the ASF made reductions in the requests for trucks and signal equipment as well as in miscellaneous categories in the light of prospective production capacities.[23]

[22] (1) Memo, Gen Wood, Dir Reqmts Div SOS, for Dir ID, no date, sub: Revision of Sec VI, ASP, for Jan 43. (2) Ltr, Gen Macready to Gen Clay, 15 Jan 43. (3) Ltr, Clay to Macready, 17 Jan 43. All in ID 400.192 ASP, I. (4) Hall and Wrigley, *Studies in Overseas Supply*, pp. 190–99. (5) ID, Lend-Lease, Text, II, 957–61.

[23] (1) Memo, British Reps, ISC, for Dir ID, 1 Jun 43, sub: ASP, ID 400.312 U.K. I. (2) Memo, Col George Olmstead for Dir ID, 28 Jun 43, sub: U.K. Requested Changes 1943, ASP, ID 400.192 ASP, III. (3) Ltr, Somervell to Venning, 5 Jul 43, with related papers in Hq ASF file British. (4) Ltrs, Venning to Somervell, 16 Jul 43, and Clay to Venning, 26 Jul 43, ID 400.192 ASP, IV. (5) Memo, British Reps, ISC, for Dir ID, 2 Sep 43, sub: Provision for U.K. ASP I 1943–44, ID 400.312 Reqmts U.K., I. (6) ID, Lend-Lease, Text, II, 961–67.

In assignments, according to British calculations, their accepted requirements program was 86 percent fulfilled during 1943, a performance that compares quite favorably with that of the War Department in meeting the Third Soviet Protocol and not far short of that of American industry in meeting the U.S. Army's own requirements as stated at the time of the negotiation of the Weeks-Somervell Agreement. And, at least in theory, part of the matériel for French rearmament came out of the British share in the ASP. In sum, then, the Weeks-Somervell Agreement was substantially fulfilled, as British requirements in 1943 were met in about the same proportion as American.[24]

No similar agreement was negotiated for 1944 and before long the British were to feel the effects of its absence. Until the last part of 1943 negotiations most often simply involved the issue of whether the United States could produce items requested by the British. Little justification of end-use was required in the production planning stage; this was normally reserved for the time when bids were placed before the MAB. Late in 1943, however, under the whiplash of criticism by the McCoy Board, the Richards Committee, and various members of Congress that there was virtually no screening of lend-lease requirements, the ASF moved to require a definite statement from the British as to the use to which they intended to put equipment even before a production requirement was accepted in the 1944 program.[25] Maj. Robert C. Woods of the International Division was dispatched on a special mission to London in November 1943, and the British sent a delegation of War Office supply officials to Washington to assist in developing detailed justification for their 1944 program.

In general, in the course of these negotiations, American officers found little to criticize in the calculation of British Army requirements. Major Woods found those transmitted to Washington "as realistic as the existing means of calculation and the human element of fallibility will permit."[26] Random studies of individual items, made early in 1944, were "notably unproductive of any substantiation that the U.K. replacement requirements are materially higher than our own. . . ."[27] The net result of the tighter screening undertaken in connection with the British presentation of 1944 lend-lease requirements in December 1943 was not so much to reduce them as to establish for the Richards Committee that screening did take place.

Tighter screening, nevertheless, soon brought into focus one of the major issues of requirements policy—the inclusion of British "civilian" requirements in the Army Supply Program for procurement on military priority. In Britain there was no such fine distinction between military and civilian require-

[24] (1) Hall and Wrigley, *Studies in Overseas Supply*, pp. 196–97. (2) On the Soviet Protocols see below, Chapter XXVII. (3) On the extent of the U.S. Army's own requirements were met, see above, Chapter V.

[25] For discussion of the McCoy Board and Richards Committee, see above, Chapter V.

[26] (1) Memo, Maj Woods for Dir ID, 13 Nov 43, sub: Interim Rpt on British Reqmts. (2) Memo, Woods, sub: Confs and Discussions with Regard to Determination of U.K. Reqmts for Current Review of ASP, 4–12 Nov 43. (3) Memo, Gen Lutes for Gen Styer, 12 Nov 43. (2) and (3) in ID 400.192 ASP, V.

[27] Memo, Col Olmstead for Gen Wright, 23 Jan 44, sub: Your Memo 14 Jan . . . Regarding U.S.-U.K. Relationships, ID 008 Lend-Lease, XII.

ments as was made in the United States. The British frequently lumped together military requirements for such items as railroad rolling stock, communications equipment, tractors, and engines with requirements for civilian use closely related to military activity. Without doubt considerable justification existed for this practice, since the British war economy was as tightly organized as it was humanly possible to make it and civilian consumption had been cut to far lower levels than in the United States. The British could argue that tractors for agricultural use in Great Britain were as vital a military requirement as tractors for use of Montgomery's army on the Continent. But the U.S. War Department held that civilian requirements for Britain must have no higher production priority than similar requirements in the United States; early in 1944 the International Division informed the British that all material designed for civilian end-use must be eliminated from the Army Supply Program and that requests for such material must be processed separately through the Foreign Economic Administration. While the British obtained a decision at a higher level restricting the rule to relatively few items, it still had some effect. For instance, of 50,000 engines requested by the British as military lend-lease, only 8,000 were accepted as designed for military end-use; the rest were shifted to FEA for procurement on a much lower priority.[28]

By this sort of screening an initial British program for ground equipment totaling $2.75 billion in dollar value was reduced to $2.5 billion by the time of the semiannual revision of the ASP in mid-1944. The program for 1945, presented at that time, which was based on continuation of a two-front war and totaled $2.1 billion in value, was subjected to an even more intense screening to eliminate civilian requirements and those having postwar implications.[29]

Tighter screening was but one evidence of the generally stricter attitude toward British lend-lease that revealed itself in American military circles as the year 1944 wore on. Increasingly, the residual theory of the common pool came into its own. The principles of the Weeks-Somervell Agreement were soon repudiated. "The fact that a particular Allied requirement has been incorporated into the Army or Navy Supply Program," General Tansey instructed OPD officers concerned with assignments, "does not dictate its assignment to that Ally."[30] Instead, Tansey directed, each Allied bid must be intensely scrutinized to see that it was justified on a strategic basis; data on stock position should be required and no Allied army allowed to pile up reserves in excess of those of the U.S. Army; no assignments must be permitted to establish postwar

[28] (1) Ltr, Col Boone to Mr. C. W. Reid, British Supply Council in North America, 1 Apr 44, ID file Policy—Reqmts and Assignments. (2) ID, Lend-Lease, Text, I, 248–49; 972–74. (3) Hall and Wrigley, *Studies in Overseas Supply*, pp. 143–45.

[29] (1) ID, Lend-Lease, Text, II, 972. (2) The acceptance of this program was highly tentative because of the uncertainty of the duration of the war with Germany. Separate calculations were undertaken at the same time for a special program designed for a one-front war against Japan. See below, ch. XXVI.

[30] Memo, Gen Tansey, 2 Jan 45, ABC 400 (2-17-42) Sec 6. The cover note reads: "These were produced by Gen Tansey . . . as part of his education scheme to insure against the U.S. equipping the postwar armies of Europe."

stockpiles or for "quasi-military or non-military use."

The effects of the stricter attitude began to show in assignments to the British in the last half of 1944. During the first half of the year 45 percent of the total of British requirements accepted in the ASP were assigned, but during the second half only 30 percent, making a total of 75 percent for the year 1944 as opposed to 86 percent in 1943. Assignments during the last quarter made up only 15 percent of the total for the year.[31] To the British it often seemed that denial of assignments was based on the all-sufficient finding that U.S. Army needs would absorb all the available supply. On 21 December 1944 Brigadier J. M. Godfrey, British member of MAC(G), protested vigorously against what seemed to be the policy on the U.S. side to "fill all U.S. Army requirements before giving consideration to outside bidders," in contravention of the principles of the common pool.[32] Godfrey got little satisfaction, the chairman of MAC(G) (then Maj. Gen. Glen E. Edgerton) insisting that final assignments decisions were based on "relative operational priorities."[33] This was perhaps literally true, but the British had a legitimate complaint that "relative operational priorities" were being given a distinctly American twist. In several cases where the British appealed the decisions of the conference groups and of MAC(G) to the MAB they met a far colder reception than they had in the early days of the war.

A brief history of the allocation of medium tanks will serve to illustrate the trends in assignments policy during 1943 and 1944. The British allocation of 10,000 medium tanks in the Weeks-Somervell Agreement, accepted only over their violent protests, was raised to 12,000 in February 1943 as a result of cancellation by the Russians of their major allotments under the Second Protocol. General Somervell at the time proposed to go even further. He would have the British abandon their own plans for developing and producing their new Cromwell tank and place virtually their entire reliance for medium tanks on the United States, arguing that previous British models had been decidedly inferior mechanically to the American Sherman (M–4 series) tank, and that cancellation of tank production in Britain would relieve the Americans of furnishing miscellaneous components for the program and free tank production facilities in the United Kingdom to produce locomotives, heavy trucks, and other heavy machinery for which the British were placing sizable demands on the United States. Although technical problems and difficult production adjustments were involved, it does not appear that they weighed so heavily in the British rejection of Somervell's offer as did the feeling of the Prime Minister that an independent great power could not be completely dependent upon outside sources for so important an item as tanks. The British did cut back the scope of their tank program, but they continued to work on

[31] (1) Hall and Wrigley, *Studies in Overseas Supply*, pp. 196–97. (2) ASF compilations of assignments of major items of ground equipment to the United Kingdom in 1944 show: 1st quarter, $530 million; 2d quarter, $471 million; 3d quarter, $475 million; 4th quarter, $260 million. See ASF Monthly Progress Reports, sec. 2–G, 30 Apr 44, 31 Jul 44, 31 Oct 44, 31 Dec 44.

[32] Min 4108, 172d mtg MAC(G), 21 Dec 44.

[33] *Ibid.*

development of the Cromwell and to require some components from the United States.[34]

American medium tank production during 1943 totaled 21,250. Of this total the British were assigned 10,464, slightly less than their stated requirements but sufficient to meet all their needs and enable them to establish a sizable reserve. In September 1943 they set their requirement for the following year at 8,500, 4,000 of them to mount the new high velocity 76-mm. gun instead of the 75-mm. Meanwhile, the U.S. Army badly underestimated its own need for medium tanks and set its 1944 requirements at hardly a third of the British.[35]

As the European war dragged on, tank losses ran higher than the Americans had anticipated. The Sherman's 75-mm. gun and armor proved no match for the heavier German Tiger with its 88-mm. gun. The U.S. Army found itself forced to cut heavily into the quantities originally earmarked in the ASP for the British. In September and October 1944 medium tank assignments to the British were cut back severely; in November and December they were suspended entirely. During the Battle of the Bulge, Lt. Gen. Omar N. Bradley's forces borrowed tanks from the British in the field. There could be little question of the superiority of the American claim since British tank reserves were far higher, and the British at first were co-operative. The British tank reserves were seriously affected, however, when, of the 4,000 tanks with the 76-mm. gun requested, the Americans delivered only 1,330. In order to provide themselves with tanks capable of meeting the Tiger on something like equal terms, the British pushed production of the Cromwell and began a reconversion program replacing the 75-mm. gun with a 17-pounder on a limited number of Shermans. For this latter purpose they made a determined bid for 324 Shermans from the United States in December 1944, arguing that although they could accept cutbacks they could not afford to have their assignments discontinued entirely. The Americans, pointing to the need for the U.S. Army in Europe—now twice the size of the British Army there but far inferior in tank reserves—and to requirements for an expanded armored training center and their own tank rebuilding program, insisted they could make no assignments to the British during the whole first quarter of 1945. Figures were produced showing that even under this dispensation, the worldwide American tank position in April 1945 would still be worse than that of the British. The issue created the first really heated controversy in the MAB since 1942, and the ailing Harry Hopkins was finally called in in an effort to settle it. In the end the British got a small concession—90 new M–4 tanks from January production for their reconversion program in exchange for 90 used Shermans to be turned over to ETOUSA—but the real result was to make it clear to the

[34] (1) Ltr, Somervell to Venning, 22 Mar 43. (2) Ltrs, Venning to Somervell, 23 Mar, 17 and 22 Apr, and 3 Aug 43. (3) Ltr, Somervell to Venning, 5 Aug 43. (4) Memo, Brig Gen A. R. Glancy, DCOrd, for Maj Gen Thomas J. Hayes, Chief, Production Div, OCOrd, 5 Apr 43. All in ID 470.8 U.K. I. (5) Memo, Averell Harriman for Gen Clay, 18 Jun 43, ID 400.312 Reqmts U.K., I. (6) Churchill, *Hinge of Fate*, pp. 953–54. (7) Hall and Wrigley, *Studies in Overseas Supply*, pp. 18–19

[35] (1) Crawford and Cook, Statistics: Procurement, Table PR–7. (2) ASF Monthly Progress Rpt, 31 Dec 43, sec. 2–B. (3) Ltr, Venning to Styer, 7 Sep 43, ID 470.8 U.K., I.

British that they could no longer count on the United States for more than token quantities of medium tanks.[36]

U.S. production of medium tanks during 1944 totaled only 13,468. Of these the British were assigned 5,031, a shortfall of more than 3,000 under their ASP requirement; the Soviet Union got 2,197 under the Third and Fourth Protocols; 79 were assigned to other nations, and the rest went to the U.S. Army. While these figures in themselves show that the majority of medium tanks were still going to lend-lease, only the U.S. Army received substantially greater quantities than its originally stated requirements. British requirements for 1945 accepted in the ASP for approximately 4,000 Sherman tanks mounting either the 76-mm. gun or the 105-mm. howitzer and for 1,150 of the newly developed heavy tank, the General Pershing, proved to be virtually meaningless. Only token assignments had been made against them before the end of the war in Europe and these were almost all canceled shortly after V–E Day.[37]

Whatever the merits of the American position then, the net effect on the British was to leave them with the feeling that they no longer could expect to receive their former share of American munitions—a feeling accentuated soon afterward by similar disappointments on bids for light tanks, field telephone wire, and radio sets.[38] "During the last year of the war," two British war historians conclude, "international aid in munitions came to be regarded by the Americans less and less as a matter of accepted routine, more and more as an exception, an incubus or an anachronism."[39]

Retransfers, Diversions, and Lend-Lease to Independent Nations

Another facet of the reassertion of American national interest in the distribution of lend-lease was revealed in the increasing restrictions on British disposition of assigned materials. The main issues, all clearly interlocked, were retransfers, diversions, and the right of independent nations in British spheres of influence to ask and receive supplies from the United States directly and not through British channels. Most of these issues arose in the Middle East, which after 1942 became largely an inactive theater serving as a forward base for operations in the Mediterranean, as an avenue for forwarding supplies to the Soviet Union, and as a rear base for support of British forces in India.

Retransfers were covered by an explicit provision of the Lend-Lease Act:

> All contracts or agreements made for the disposition of any defense article or defense information . . . shall contain a clause by which the foreign government undertakes

[36] (1) Memo, Brig Gen Don G. Shingler, Actg Chmn, MAC(G), for ExO MAB, 5 Dec 44, sub: Min 4016, 4018, 169th mtg MAC(G). . . , ID file MBW, Min, MAB, 9 Dec 44. (2) Min 2b, 148th mtg MAB, 3 Jan 45; min 4, 151st mtg, 24 Jan 45. (3) Memo, Shingler for ExO, MAB, 2 Jan 45, sub: Min 4096–b and –c, 172d mtg MAC(G)—U.D. Dissent to . . ., ID file MBW Min, Book VII. (4) Hall, *North American Supply*, p. 416. (5) Hall and Wrigley, *Studies in Overseas Supply*, p. 44.

[37] (1) Crawford and Cook, Statistics: Procurement, Table PR–7. (2) ASF Monthly Progress Rpt, sec. 2–G, 31 Dec 44, 30 Jan, 28 Feb, 31 Mar, 30 Apr, and 31 May 45.

[38] (1) On light tanks see Min 4207, 177th mtg MAC(G), 25 Jan 45; Min 3b, 152d mtg MAB, 31 Jan 45; and Min 2b, 153d mtg, 7 Feb 45. (2) On radios and field wire see Min, 157th mtg MAB, 7 Mar 45; 160th mtg, 28 Mar 45; 161st mtg, 4 Apr 45; 162d mtg, 11 Apr 45.

[39] Hall and Wrigley, *Studies in Overseas Supply*, p. 43.

that it will not, without consent of the President, transfer title or possession of such defense article . . . by gift, sale or otherwise, or permit its use by anyone not an officer, employee, or agent of such foreign government.[40]

The original intent of this clause was to prevent lend-lease recipients from turning material received over to a third country in such a manner as to obscure the fact that the United States was the real donor and also to prevent sale of lend-lease goods through commercial channels, particularly where they might be in competition with American exports. In a White Paper issued on 10 September 1941 the British gave assurances on the latter point, asserting that lend-lease materials had not and would not be used for commercial exports, nor would goods similar to those supplied under lend-lease be exported through commercial channels where it involved any development or extension of British export trade at the expense of that of United States.[41]

The restrictions on retransfer of munitions, on the other hand, were soon relaxed as Americans recognized Britain's need for flexibility in distributing lend-lease supplies among Commonwealth nations and various smaller allies under British sponsorship. In 1942 the Lend-Lease Administrator, Edward R. Stettinius, Jr., to whom the President had delegated his powers under the act, granted the British virtually blanket authority to retransfer munitions to any member of the Commonwealth or to other nations the President had declared eligible to receive lend-lease. This blanket retransfer authority gave the munitions assignments machinery the flexibility it required in the strategic situation of 1942. Though the Americans never formally accepted the British proposal to divide the world into protégé nations, the MAB nevertheless at first followed this system generally in making assignments. The British bid in Washington for munitions in bulk for the United Kingdom, members of the Commonwealth, the several refugee governments of Europe, and for Egypt and Turkey. The LMAB then made final assignments among these claimants. Under this system, the Americans bid before the LMAB for British materials desired by China, Iceland, and the Latin American republics.

There was much criticism, even in 1942, of the latitude thus granted the London Board and before the end of the year breaches were made in the system. Australia and New Zealand, members of the British Commonwealth, lay within the American sphere of strategic responsibility, and American commanders in the South and Southwest Pacific asserted the right to exercise final authority over all lend-lease requests emanating from those areas. Beginning in October 1942, materials assigned in Washington for Australia were earmarked and the LMAB was forbidden to vary the assignment. After the invasion of North Africa, the United States took over from the British major responsibility for rearming the French.[42]

[40] PL 11, 77th Cong. (Lend-Lease Act), sec. 7.

[41] Copy of British White Paper in ID, Lend-Lease, Doc Suppl, I.

[42] (1) Leighton and Coakley, *Global Logistics, 1940–43*, pp. 249, 253, 491–92, 497–502, 512–17. (2) Ltr, Thomas B. McCabe, Dep Lend-Lease Admin, to Hon Morris Wilson, Chmn British Sup Council in N America, 26 Mar 42, ID, Lend-Lease, Doc Suppl, II. (3) ID, Lend-Lease, Text, I, 272.

During 1943, the question of the LMAB's prerogatives came to center largely on the matter of assignments to independent nations in the Middle East. In the prevailing shortage of munitions for all purposes during 1942 requests from these nations received little consideration, for they were not actively engaged in the war against the Axis and needed arms only to preserve internal order. The sole exception was Turkey, a country the Allies were anxious to bring into the war against Germany. For a brief period the Americans received requests directly from Turkey, but at Casablanca Churchill secured an agreement from Roosevelt that Turkey should be a British responsibility, an agreement that continued in force throughout the rest of the war. Beyond this concession, the Americans proved unwilling to go. When, shortly after Casablanca, requests of other nations in the Middle East—Saudi Arabia, Iran, Iraq, Ethiopia, and Egypt—began to get greater attention, the State Department and the JCS agreed on a policy affirming that the United States would welcome direct inquiries from all independent nations outside the Axis orbit concerning American supplies, and that such supplies would be furnished to them directly if it were feasible to do so. The War Department decided it would rely primarily on its own representatives overseas to determine the validity of these requests.[43]

This policy announcement, made in June 1943, demolished the British claim that independent nations in the Middle East were their protégés and must submit their claims to the London Board. In the face of it the British officially withdrew their dissent from a proposed American assignment to Iran, some months old, then pending before the MAB. But they continued to protest further assignments, even those to Iran where the United States had a special interest in the supply line to Russia. When the Americans proposed to make assignments to Saudi Arabia, where the British had long maintained close control over arms shipments, their protests took on a new vehemence. While agreeing, perforce, that any independent nation might indeed submit requests directly to either the United States or the United Kingdom, they insisted that the British commander-in-chief in the Middle East should pass on requests arising from within his area just as did MacArthur in Australia and Eisenhower in North Africa. The Saudi Arabia case produced a formal policy statement by the MAB in Washington (MBW 69/1) on 13 September 1943 in which a few concessions were made to the British viewpoint. MBW 69/1 again reaffirmed the right of all independent nations to apply directly to the United States for aid, but it provided that the MAB when acting on these requests should obtain the views of the military commanders involved and inform United Kingdom representatives. On the specific case in hand, it was agreed that each nation should furnish half of a small quantity of arms for Saudi Arabia.[44]

[43] (1) *Ibid.* (1), pp. 520–21. (2) Ltrs, Cordell Hull to Adm Leahy, CofS to CinC, 25 May 43, and Leahy to Hull, 3 Jun 43, with related papers in ABC 420.3295 (8 Jun 43). (3) Msg, CM-OUT 6075–76, AGWAR to CG's, NATO and ETO, 12 Jun 43. (4) Egypt was declared eligible for lend-lease on 11 November 1941, Iran on 10 March 1942, Iraq on 1 May 1942, Ethiopia on 7 December 1942, and Saudi Arabia on 18 February 1943.

[44] (1) Min 1329, 65th mtg, MAC(G), 10 Dec 42; min 1961, 93d mtg, 13 May 43; mins 2095, 2100, 2105,

Meanwhile, at the MAB meeting on 7 July Admiral Joseph M. Reeves, the U.S. Navy member, had launched an attack on the British right to retransfer, questioning their action in giving four lend-lease LST's and six coastal transports to the Greek Government. Reeves cited the pertinent section of the Lend-Lease Act requiring explicit authority from the President, and argued that if these vessels were to be given to Greece at all they should be given directly by the United States. Harry Hopkins, chairman of the MAB, then appointed a special subcommittee composed of Generals Somervell and Macready to study the question. The subcommittee had reached agreement before the end of the month but it was November 1943 before a final paper (MBW 67/8) codifying the new system of retransfers could be agreed upon by the entire MAB.

The new system worked essentially as follows. The head of the Foreign Economic Administration, Leo Crowley, revoked the blanket consent to retransfer munitions granted to the United Kingdom and delegated the power to consent to retransfers to the secretaries of the U.S. Army and Navy. MBW 67/8 established as a fundamental policy the rule that no lend-lease country should be allowed to retransfer military or naval lend-lease articles without the consent of the secretary concerned. The Secretaries of War and the Navy, themselves, then granted the United Kingdom a new blanket consent permitting emergency retransfers within theaters of operations and allocations of lend-lease matériel among parts or units of the British Commonwealth and Empire and forces of other nations serving directly under the British Chiefs of Staff, but with the proviso that the Washington MAB must give its approval in all cases where any assignment earmarked for a particular dominion, colony, area, or theater should be varied by the London board. Moreover, all retransfers made under this blanket consent were to be reported at agreed intervals to the Washington board. In cases requiring specific consent from one of the secretaries, the initial assignment was to be canceled and the material reassigned by the Washington MAB to the second foreign government.[45]

Taken together, MBW 69/1 and MBW 67/8 just about demolished the British protégé system. The British were left with the right to act as sponsors

98th mtg, 17 Jun 43. (2) Min 2c, 73d mtg MAB, 30 Jun 43; min 4, 81st mtg, 1 Sep 43; min 6, 83d mtg, 15 Sep 43. (3) Memo, Gen Somervell for Gen Burns, MAB, 5 Jul 43, sub: Munitions Assignments Procedure, Hq ASF file MAB. (4) Memo, Wing Comdr T. E. H. Birley for Gen Burns, 19 Jul 43, sub: Munitions Bidding and Assignments Procedure; Memo, Gen Clay for Gen Wright, same sub, 21 Jul 43. Both in ID 008 Lend-Lease, V. (5) Ltr, Hull to Stimson, 24 Jul 43; Msg A756, Winant to Hull, 3 Aug 43; Msg, Gen Crain, LMAB, to Gen Burns for Gen Wright, 25 Oct 43; Memo, Gen Crain for Maj Ogden, 14 Nov 43. All in ID, Lend-Lease, Doc Suppl, V and VI. (6) MBW 69/1, 13 Sep 43, title: Munitions Bidding and Assignments Procedure. (7) Numerous papers in Dir Materiel, ASF, file Middle East.

[45] (1) MBW 67/8, 18 Nov 43, title: Retransfer of Munitions. For the entire MBW 67 series, see ID file MBW 67. (2) Min 1b, 74th mtg, MAB, 7 Jul 43; min 6, 76th mtg, 21 Jul 43; min 4, 77th mtg, 28 Jul 43; min 2b, 78th mtg, 4 Aug 43; min 4, 87th mtg, 13 Oct 43; min 4, 88th mtg, 20 Oct 43; min 4, 89th mtg, 27 Oct 43; min 4, 91st mtg, 10 Nov 43; min 6, 92d mtg, 17 Nov 43. (3) Ltr, Gen Macready to Gen Somervell, 15 Jul 43, Hq ASF file British. (4) Ltr, Leo Crowley, FEA, to Rt Hon Ben Smith, British Resident Minister of Supply, 13 May 44, ID Lend-Lease, Doc Suppl, VII. See also related materials in ID, Lend-Lease, Doc Suppl, V–VII. (5) In MBW 67/10, 14 March 1944, the British established similar conditions on U.S. retransfers of British munitions furnished under reciprocal aid.

before the Washington board only for the military forces of the Commonwealth, the Empire, and associated nations directly under British command, and for Turkey. Even then the clear recognition of the right of the Washington board to earmark assignments and the necessity for detailed reports of retransfers further restricted the powers of the LMAB. After mid-1943 this practice of earmarking became more common and the Joint Military Allocations Committee, acting under the powers delegated to the Secretaries of War and Navy, rigorously scrutinized all proposed retransfers falling outside the blanket consent.

Meanwhile, diversions of military lend-lease to civilian end-use in the Middle East were receiving much critical attention. The problem of diversions, though they in fact frequently involved retransfers, was normally treated as a separate issue. The U.S. Army Forces in the Middle East (USAFIME) reported such things as gifts of jeeps to King Ibn Saud of Saudi Arabia and King Farouk of Egypt, and the use of lend-lease trucks for Syrian harvests, to fight locusts in Arabia, and for commercial purposes by the United Kingdom Commercial Corporation. In September 1943 the theater called particular attention to the fact that the British were setting up a committee with no American representation, for the disposition of scrap, salvage, and surplus military goods, much of it of lend-lease origin. There were also allegations that the British were hoarding military supplies in the Middle East while still requisitioning them under lend-lease for use elsewhere. A report from G–4, USAFIME, on 25 February 1944 contained the astounding charge that the British had millions of tires stocked in the Tura Caves near Cairo, "more than the entire holdings in the hands of U.S. manufacturers, wholesalers, distributors, retailers, department stores, gas stations, etc. at the time of Pearl Harbor."[46]

Most of these reports that the British were playing fast and loose with American materials in order to enhance their own prestige in the Middle East proved somewhat exaggerated. General Macready found the charge about the tires "so palpably absurd" its author "must have received his information from a source . . . deliberately malicious"; the total stock of tires in the whole of the Middle East and North Africa, he said, was approximately one-sixth the quantity alleged to be in the Tura Caves.[47] The International Division, ASF, reviewing the cases of British abuse of lend-lease reported by USAFIME, thought they only showed that the British had interpreted their right to retransfer and divert more liberally than intended and that a "new set of ground rules" was needed.[48]

There was, nonetheless, sufficient substance to charges that the British were

[46] (1) Memo, Lt Col John B. Breckinridge, Actg Chief, Economics Div, USAFIME, for CG USAFIME, 25 Feb 44, sub: Rpt No. 44. . . , G–4 400.3295. (2) Memo, Lt Loftus E. Becker for Dir ID ASF, 25 Jan 44, sub: Booklet for Gen Somervell, ID 008 Lend-Lease, XII. (3) Memo, Col Boone for Dir Materiel, 4 Sep 43, sub: Disposal of Battle Scrap, Salvage and Surplus Lend-Lease Supplies and Facilities in Middle East, Dir Materiel, ASF, file Middle East.

[47] Ltr, Gen Macready to Gen Clay, 14 Mar 44, G–4 400.3295.

[48] (1) Memo, Col Olmstead for Gen Wright, 23 Jan 44, sub: Your Memo of 14 Jan. . . . (2) Memo, Wright for Olmstead, Maj Harmon, Maj Palmer, Capt Overby, 14 Jan 44. Both with related material in ID 008 Lend-Lease, XII. (3) Memos, Gen Somervell for Gen Clay, 16 Mar 44; Clay for Somervell, 19 Mar 44, in Dir Materiel ASF, file Middle East.

using lend-lease "surpluses" in the Middle East for other than military purposes under existing "ground rules" to lead the Americans to hasten to prepare the new set. FEA representatives in the Middle East were just as critical of British practices as were those of the Army. On 21 January 1944 General Somervell informed General Macready that it was War Department policy that military lend-lease items assigned the United Kingdom should not be diverted to civilian end-use without the consent of the United States; on 3 March Macready gave assurances that this principle would be observed and that instructions would be sent to all theater commanders to that effect. Meanwhile, early in 1944, FEA representatives in the Middle East, James M. Landis and Livingston Short, secured formation of a Joint Transfer Committee in Cairo with British and American civilian and military representation to consider all cases of disposal of surplus. It was agreed that transfers of military lend-lease materials to civilian end-use should be made only after approval of USAFIME or FEA representatives in the theater or, in some cases, reference back to the MAB in Washington to determine whether military need for the articles existed elsewhere. Materials so referred to Washington were then considered in MAC(G), which, if it approved the diversion to civilian use, reassigned the material to FEA for distribution through American channels.[49]

James Landis of FEA wanted to go further and urged that the restriction on British disposal of military material should be extended to goods similar to those of lend-lease origin produced in the United Kingdom itself. Landis argued that any release of surplus in the Middle East was possible only because of lend-lease production and its natural origin was therefore only a matter of happenstance. The American representatives on the MAB soon took over this "similar goods" doctrine and attempted to use it to block a British assignment of 5,000 .303-caliber rifles to Saudi Arabia on the grounds that the British were still receiving large quantities of .303 rifles from American production. Moreover, Admiral Reeves made the specific proposal that the MAB accept the principle that the United Kingdom could not dispose of any equipment either of lend-lease origin or of similar goods "except upon terms acceptable to the United States."[50]

The British protested vigorously, describing the similar goods doctrine as a "fantastic" extension of the principle of their White Paper of 1941. A compromise settlement was reached permitting them to proceed with the assignment to Saudi Arabia, but in the aftermath the Secretaries of War and the Navy urged the Secretary of State to affirm the similar goods doctrine at the diplomatic level. The State Department note to the British Ambassador, dispatched on 20 June 1944, did not go quite so far as the service departments

[49] (1) Ltr, Gen Somervell to Gen Macready, 21 Jan 44. (2) Ltr, Macready to Somervell, 3 Mar 44. Both in ID, Lend-Lease, Doc Suppl, VI. (3) Ltr, Somervell to Macready, 2 Feb 44, Dir Materiel ASF, file Lend-Lease 1942–44.

[50] (1) Memo, Col Boone for Gen Clay, 29 Feb 44, sub: Informal Mtg of JMAC, ID file MBW Mins, Book VI. (2) Memo, Landis for Lauchlin Currie, 31 Dec 43, ID, Lend-Lease, Doc Suppl, VI. (3) ID, Lend-Lease, Text, I, 284–89, gives a complete history of the Saudi Arabian case.

asked, but stressed, rather, the necessity for mutual agreement on retransfers and diversions through the Munitions Assignments Boards.[51]

The President himself saw and concurred in the note and as a corollary asked that U.S. representation on the LMAB be strengthened. An AAF member was thereupon added to the board. At the same time, the JCS asked that the LMAB modify its previous practice of assigning many noncritical items by administrative action and take formal action on all items of British production and captured enemy equipment that U.S. forces might have an interest in or that were proposed for transfer to armed forces other than those of the British Empire. Moreover, the JCS asked for cumulative monthly reports showing allocation by theater of all complete items of military equipment received under lend-lease.[52]

The British accepted these changes and with them the necessity for consultation through the Munitions Assignments Boards on assignments to third countries, but held out to the end against acceptance of the similar goods doctrine. The exchange of notes on the matter ended in September 1944 with a mild State Department reminder that

> the decisions as to whether certain defense supplies are transferred to Great Britain is determined, of course, by the British need for such supplies and bearing upon that need is the use Great Britain seeks to make of these or similar supplies of British origin.[53]

The Americans had clearly gained a point in that they were now assured a voice in disposition of all "similar goods" through consideration of them in the LMAB, even though the British would not accept their contention that such transfers would have to be approved in Washington. The British War Office, in issuing instructions to its theater commanders, told them that, although the British Government could not agree to the American contention, nevertheless "circumspection is . . . necessary in handling such transfers so as to avoid embarrassment with the American Administration."[54]

The net effect of the American effort to restrict British freedom in disposing of military lend-lease materials was to curb, but not entirely to prevent, their use for civilian purposes in the Middle East. Procedures established were at best cumbersome and not well understood at any level. The British were not inclined to accept so strict a definition of diversion as the Americans held. They were accustomed to use military supplies in support of local economies in order to secure more indigenous support for their armies and considered that it constituted military end-use in the broader sense. Thus they found

[51] (1) Ltr, Hull to Stimson, 20 Jun 44, with inclosed note, Hull to Lord Halifax, 20 Jun 44, ID, Lend-Lease, Doc Suppl, VII. (2) Ltr, Gen Macready to Gen Somervell, 19 Feb 44; ltr, Secys War and Navy to Secy State, 22 Mar 44. ID, Lend-Lease, Doc Suppl, VI. (3) Min 4, 106th mtg MAB, 1 Mar 44. (4) Min 3209, 136th mtg MAC(G), 30 Mar 44.

[52] (1) Ltr, President to Secy War, 23 Jun 44. (2) Ltr, Robert Patterson to President, 29 Jun 44. Both in ID, Lend-Lease, Doc Suppl, VII. (3) JCS 844/1, 15 May 44, title: Assignment of War Materials from British Production.

[53] (1) Ltr, Secy State to Secy War, inclosing note for dispatch to British Ambassador, 14 Sep 44. (2) Note, Sir Ronald Campbell, British Embassy, to Secy State, 22 Jul 44. Both in ID, Lend-Lease, Doc Suppl, VII.

[54] Msg, 57/Gen (a) 3906 (D. L. M.), War Office to Major Overseas Comds, 16 Jul 44, ID, Lend-Lease, Doc Suppl, VII.

ways of using military materials for what the Americans defined as civilian purposes while keeping them under Army control. As late as July 1944 USAFIME could still complain that despite American restrictions "a provisioning program for Middle East requirements is going forward on a military priority basis, which, of course, places the Middle East civilian needs on a higher priority level than civilian needs in the United States and elsewhere."[55]

The amount of controversy over retransfers, diversions, and lend-lease to independent nations led these questions to assume proportions far beyond their real importance in the scale of global war. The net amount of munitions furnished to nations in the Middle East by either Britain or the United States was small. Their priority was low and assignments were made only when it could be shown that the munitions assigned were not needed for active prosecution of the war. The largest American allocations were made to Iran for an 87,000-man army sponsored by the U.S. Military Mission there, and smaller ones were made to Saudi Arabia and Ethiopia. Egypt and Iraq were in effect left as British responsibilities and American assignments in each case were infinitesimal. The considerable assignments that had been made to Turkey following the TRIDENT Conference (all to go through British channels) were severely cut back after August 1943 and much of the material was repossessed as the prospects of inducing Turkey to enter the war faded. In August 1944 at the request of the Supreme Allied Commander, Mediterranean (SACMED) the flow of American supplies to Turkey was resumed but never again assumed large proportions.[56]

The principal effect of the American policy on retransfers, diversions, and lend-lease to independent nations was to pose restraints on the British in developing their base in the Middle East either for operations in the eastern Mediterranean or in India or for postwar purposes. The restraints thus imposed were reinforced by critical screening of military requirements for British forces in the Middle East by USAFIME and the War Department, and of civilian requirements by FEA. No formal system of screening in the theater was adopted for the Middle East as it was for India and southeast Asia, but a good deal of informal screening was authorized. Likewise, no formal inventory of all British stock in the Middle East was undertaken, as Somervell had once asked, but inventories of specific items such as tires did prove that British stocks were excessive (if not as large as once charged) and assignments were accordingly cut back or canceled.[57]

Beyond a local effect in the Middle East, the net result was to restrict the liberty of the LMAB in allocating materials on a broader front, and to enhance the powers of the JMAC acting for the War and Navy Departments in making assignments of American matériel. None

[55] (1) Rpt No. 52 of Office ACofS G-5, USAFIME, 17 Jul 44, ID, Lend-Lease, Doc Suppl, VII. (2) On the effort to evolve an "Interpretative Memo" on the policies for retransfers, diversions, and related matters extending from September 1944 to May 1945 see ID 008, Lend-Lease, X and XI.

[56] (1) ID, Lend-Lease, Text, II, 1310–15, 1317–27, 1344–48 contains a complete summary of assignments to these countries. (2) Memo, Gen Handy for Gen Somervell, 22 Jun 43, sub: Gen Ridley's Mission to Iran, Dir Materiel ASF, file Middle East.

[57] Min 5, 38th mtg JMAC, 6 Dec 44.

of these restraints could be considered unreasonable ones. The British retained considerable freedom in making allocations to the Empire, Commonwealth, and associated forces actively engaged in the war. The way the LMAB operated had never been fully in keeping with the principles of the common pool, which the British insisted on so vociferously in Washington. And the U.S. insistence on broadening the scope of the LMAB and requiring reports of its actions brought British allocations more definitely under the jurisdiction of the CCS than they formerly had been. In net effect the new restrictive doctrines on British disposal of U.S. munitions served to emphasize the fact that Britain could not count on American lend-lease aid for anything beyond the immediate effort to win the war.

Problems and Procedures in India and Southeast Asia

In contrast to the Middle East, an inactive theater where the major problems arose out of the disposition of surplus and confusion of civilian and military requirements, India and southeast Asia were the main areas of active British operations in the war against Japan. The Americans had, since 1942, harbored a healthy skepticism about British requirements for forces in India—the large quantities of material requested seemed hardly in keeping with the scale of the British effort in 1942 and 1943. In view of the basic conflict of aims in that area,[58] the Americans sought to restrict lend-lease aid to projects specifically designed to support operations approved by the CCS, that is, the campaign in Burma, and to keep to a bare minimum supplies furnished for support of the Indian economy and development of the Indian base for broader purposes. The establishment in August 1943 of the Southeast Asia Command under Lord Louis Mountbatten, separate from the British Indian Command and responsible for the conduct of combined operations under the CCS, made such a policy reasonably feasible. All together the British maintained in India forces totaling upward of 2,000,000 men under arms, but only 200,000 were assigned for operations in SEAC; the rest consisted of static defense forces chiefly concerned with maintaining internal security. Using this division of forces between static and operational as a rough rule of thumb to determine which requirements for India were actually justified in terms of strategic need, the American staff adopted the general principle that only SEAC forces should be eligible for military lend-lease. The British and the Government of India would, for the most part, have to support the static defense forces and develop the Indian base. SEAC's requirements on the United States for operational equipment were considerable, nevertheless, since many of the special types of supplies needed for warfare in the jungle were not produced in Britain at all. In the wake of QUADRANT, preparations for the campaign in Burma reached their high point, and SEAC's operational requirements for this campaign were given a relatively high priority and special efforts made to meet them. Especially significant was the effort devoted by the ASF to meeting Brigadier Orde Wingate's highly specialized requirements for his long-range penetration groups.

[58] See above, ch. XXI.

Even so, assignments were limited to those deemed necessary for the initial assault in Burma, as far as they could be distinguished.[59]

At the same time, aid to India was confined in great part to materials necessary for base development in direct support of operations and minimum support of the civilian economy, much of it coming under FEA control rather than that of the MAB and the War Department. Of materials under War Department control, the major contribution was in locomotives for the Indian railways and in can and drum plants. The Army also shared in the administration of the civilian aid program by FEA, though hardly to the extent General Somervell desired. An FEA mission was sent to India and it worked in close co-operation with the American SOS there and with General Wheeler, Principal Administrative Officer, SEAC, in determining the priorities to be granted Indian requests. The Indian program had to labor under the same disabilities of low priority and lack of shipping space that civilian programs did generally, and these handicaps limited the extent to which the Indian base could in fact be built up.[60]

In the tangled web of conflicting strategic purposes in the Far East that emerged after the SEXTANT Conference, the British effort in SEAC came to occupy a place of declining importance in the American scale of strategic values. In this situation, even British requirements for operations in SEAC came under increasingly critical scrutiny.[61]

In January 1944 the British suggested a procedure for handling India and SEAC requirements by which they would be, for the most part, merged with those of U.S. and Chinese forces in the CBI and processed as combined requirements. General Somervell would have no part of the system, insisting that supply for the British should go through British channels, that supply for Americans and Chinese should go through American channels, and that requirements for India and SEAC must be segregated. The whole matter was referred to the CCS, who in July 1944 approved a procedure basically in keeping with Somervell's ideas. In this procedure, a basic distinction was made between organizational and maintenance equipment for troops and "theater stores," the British term for special projects in support of operations. Requirements for unit equipment and maintenance for U.S. and Chinese forces would be processed through normal SOS CBI channels as before. Similarly, unit requirements for British forces would be processed through British channels, with the authorities in London determining what proportion would have to be met under lend-lease. In the case of theater stores the Principal Administrative Officer, SEAC, meeting with representatives of GHQ, India, and U.S. theater headquarters should decide whether each individual project should be British, American, or combined. If American, the requirement would be passed directly to Washington through normal U.S. channels; if British or combined, it was to be processed in the same manner as

[59] (1) See above, ch. XXI. (2) ASF, Lend-Lease Information, 31 Dec 43, Rpt 10, Part 3, pp. 14–16. (3) Materials in Log file, OCMH, and file CBI Theater, ASF Plng Div. (4) Min 2297, 109th mtg MAC(G), 1 Sep 43; min 2639, 119th mtg, 11 Nov 43.

[60] Lend-Lease Information, 31 Dec 43, ASF Rpt 10, Part 3.

[61] See above, chs. XVI and XXI.

British requirements for organizational equipment. Requirements for SEAC were to be carefully segregated from those for India, and the availability of resources in India carefully investigated before requisitions were placed on outside sources.[62]

In August 1944, General Sultan, India-Burma Theater commander, suggested another step, proposing that his headquarters screen all British and combined requirements for American lend-lease. On 30 August Somervell notified Macready of the American intent to institute this screening. Macready agreed, though reluctantly, to its application to operational projects in India designed to support SEAC operations but protested strenuously that screening of British requirements for unit equipment went far beyond the intent of the CCS and violated the long established custom whereby each country determined what organizational equipment and maintenance were needed by its own forces. Moreover, Macready said, it would be impossible for commanders in India, British or American, to say what part of total requirements must be met under lend-lease. Only the British Government in the light of its knowledge of Empire resources could determine this. Somervell admitted there would be difficulties involved, but he was adamant in his insistence that the War Department must have the privilege of consulting its theater commander on any foreign requirements arising in his theater, and the British War Office perforce finally agreed to the screening.[63]

The screening procedure was first applied to current bids for assignment to SEAC. Comments from India-Burma Theater were requested after the British Army staff in Washington had presented its bids to MAC (G). As time went on, however, the British found it more convenient to work with Americans in the theater to segregate as far as possible in advance the requirements to be presented under lend-lease before forwarding them via London to Washington. An informal group came into being at SEAC headquarters dedicated to this purpose. Before the end of 1944 the system had been extended to include forward programing of requirements by the International Division. Although the screening in the theater theoretically did not involve final decisions, the War Department and the MAC (G) almost invariably followed theater recommendations. Moreover, criteria for screening were those policies on lend-lease that had gradually taken shape during 1943 and 1944. Materials furnished were to be exclusively for execution of plans approved by the CCS, thus ruling out any projects for development of the Indian base or the equipment of forces for distant campaigns such as the proposed British advance to Sumatra and Singapore; the British were not permitted to build up reserves of U.S. equipment in excess of those held by U.S. forces in Burma and India, whatever their own tables might call for. Almost always initial British requirements were reduced,

[62] (1) CCS 583/1, 15 Jul 44, title: Development of a Procedure for Submission of Reqmts and Establishment of Shpg Priorities for CBIT. (2) Memo, Gen Macready for Gen Somervell, 24 Jan 44, sub: Administrative Instructions to SAC, SEAC. (3) Ltrs, Somervell to Macready, 29 Jan and 3 Mar 44. All in ID, Lend-Lease, Doc Suppl, VI.

[63] (1) Ltrs, Gen Somervell to Gen Macready, 31 Aug, 5 and 21 Sep, 4 Nov 44. (2) Ltrs, Macready to Somervell, 2 Sep and 2 Nov 44. Both in ID, Lend-Lease, Doc Suppl, VIII.

although both General Covell, the theater SOS commander, and General Somervell insisted that the primary purpose of screening was not reduction but to insure that the British got the type and quantity of equipment best suited to their needs.[64]

To the Americans this screening system seemed to provide, for the first time, a method of intelligently appraising British requirements for a theater from which their demands had always been regarded with some question. The British, on the other hand, naturally found the system irksome and thought it served to drive the final nail into the coffin of the common pool theory. Macready complained to Somervell again and again of delays occasioned in assignments while waiting for comments from the theater. He continued to insist that the procedure should apply only to operational projects, and not to organizational and maintenance equipment; his most vociferous protests were directed at the use of U.S. reserve and maintenance scales in screening British requirements. Indeed, Macready's contention that determination of these scales should be left to the national authority concerned was in keeping with opinions Somervell himself had expressed in 1943. But American philosophy on lend-lease had changed considerably in the meantime and Macready's protests were to no avail.[65]

The American insistence on screening of India and SEAC requirements certainly arose in part because the American theater command felt that the British were being supplied on too lavish a scale for what they were accomplishing. But there was also a broader purpose behind it, which fitted with the general American feeling that the British should supply their own forces for the war with Japan to the utmost extent possible and that any advances along the line of the Netherlands Indies and Malaya should be made only through the use of British, not American, resources. Quite apart from screening, the MAB in late 1944 began to take a dim view of the equipment requirements of SEAC where they were in competition with the Southwest Pacific for critical items. When the British joined the issue by dissents from MAC (G) decisions on tractors, cranes, shovels, jungle hammocks, and jungle boots, they were able to get only token assignments approved by the MAB. In the case of tractors, the MAB in August 1944 resorted to the novel device of negative earmarking, writing into the bulk assignment to the United Kingdom a prohibition on any reallocation of these tractors to SEAC.[66] Continued failure of the CCS to give any definite approval for the British plan of operations against Sumatra and Malaya led to a further curtailment of SEAC assignments during 1945.

[64] (1) *Ibid.* (2) ID, Lend-Lease, Text, I, 253–56. (3) Ltrs, Gen Covell to Gen Somervell, 17 Jan 45, 16 Feb 45, 17 Apr 45, folder Gen Covell's and Gen Terry's Ltrs, ASF Plng Div. (4) Ltr, Gen Shingler to Exec U.S. Staff, LMAB, 23 Feb 45, sub: Bids for India/SEAC, ID, Lend-Lease, Doc Suppl, IX.

[65] (1) Ltr, Macready to Somervell, 2 May 45. (2) Ltr, Somervell to Macready, 7 May 45. Both in ID, Lend-Lease, Doc Suppl, IX. (3) Memo, Somervell for Wedemeyer, 23 May 43, sub: Memo on Shipments Required for Opns in India, file Agenda, ASF Plng Div.

[66] (1) Min 3682, 155th mtg MAC(G), 17 Aug 42; min 3695, 156th mtg, 24 Aug 44; min 3888, 162d mtg, 5 Oct 44; min 3898, 163d mtg, 12 Oct 44; min 3937, 165th mtg, 2 Nov 44; min 4077, 171st mtg, 14 Dec 44; min 4807, 172d mtg, 21 Dec 44; min 4124, 173d mtg, 29 Dec 44. (2) Min 5, 139th mtg MAB, 25 Oct 44; min 2a, 140th mtg, 1 Nov 44; min 4, 146th mtg, 13 Dec 44; min 2, 148th mtg, 3 Jan 45.

CHAPTER XXVI

The End of the Common Pool

American moves to restrict the scope of military lend-lease to Britain in the latter stages of the war with Germany fall into better perspective when viewed in the light of plans for a more drastic curtailment after V–E Day. In American military planning for the period between the defeat of Germany and the defeat of Japan (in U.S. terminology Period I, in British Stage II), the basic assumption was that the common pool arrangement would no longer apply, even theoretically. It was assumed that other nations would support their own war effort against Japan to the maximum extent possible and that lend-lease would be confined to quantities absolutely necessary to meet marginal requirements of forces actively engaged against Japan, with decisions on allocations to be made unilaterally by the JCS. This proposed policy was in keeping with the feeling, openly expressed in Congress and strong in the military services, that during the last phase of the war the American taxpayer should be relieved as far as possible of the burden imposed by foreign aid.[1] Within the AAF and the Navy there was also the feeling, scarcely concealed, that curtailment of lend-lease would be an effective method of limiting British participation in the main drive against Japan in the Pacific where neither General Arnold nor Admiral King wished to have anything more than token British forces.

The JCS "Corollary Principle"

When, in the fall of 1943, the ASF began compilation of a special Army Supply Program to cover requirements for the first year of a one-front war, the formula adopted for the lend-lease portion was that after V–E Day shipments should be made only to China, India, Australia, New Zealand, the USSR (to fulfill the Third Protocol), and Latin American countries; those to inactive areas in Europe, Africa, and the Middle East would be stopped. This formula, approved by OPD, was recognized as being not entirely realistic, since much

[1] The Truman Committee, reporting on reconversion on 5 November 1943, recommended that: ". . . these programs [for lend-lease following the defeat of Germany] should be determined as soon and as definitely as possible and made known to industry and to the public. Furthermore, every effort should be made to reduce the cost to our taxpayers to a minimum, both by obtaining reverse lend-lease, and by compelling the recipients of lend-lease to utilize the resources they have to a maximum before they request aid from us . . . we should never forget that lend-lease was originally authorized by the Congress solely because the English and others . . . did not have sufficient American exchange to purchase materials needed by them. Lend-Lease was never intended as a device to shift a portion of their war costs to us. . . ." Rpt of Truman Committee, 5 Nov 43, Outlines of Problems of Conversion from War Production, excerpt in ID, Lend-Lease, Doc Suppl, VI.

would depend on both Soviet and British intentions and plans with regard to the war against Japan. And the International Division was specifically forbidden, until May 1944, to undertake negotiations with lend-lease nations in order to get a better idea of their post V–E Day needs.[2]

Meanwhile, the AAF proposed gradual curtailment of aircraft production as the day of the defeat of Germany approached, and got JCS approval for the policy. It would serve, as one air officer bluntly put it, to eliminate surpluses—"the best method of anticipating Russian and British requests, and thus in turn limiting their potential capabilities in the Pacific."[3] As a corollary, General Arnold asked the JCS on 15 March 1944 to adopt a policy stating that:

> Upon the defeat of Germany, Lend-Lease military aircraft and related equipment should be assigned only to those nations who will effectively employ their air forces against Japan and who do not possess or have access to adequate production facilities of their own to maintain that part of the air forces so equipped.[4]

Since there seemed little point in adopting such a policy for aircraft alone, the Joint Logistics Committee was instructed to produce a broader set of principles to cover the entire field of military lend-lease. The committee's report, presented on 2 May 1944, called for a "strict policy on assignments of Lend-Lease material" to be administered by the JCS rather than the MAB:

> a. Assignment of Lend-Lease munitions will be based on the assumption that after the defeat of Germany, each Allied Nation will maintain its forces to the fullest extent from its own stocks and production, and will make full use of such forces against Japan in so far as they can be effectively employed in accordance with our agreed strategy.
>
> b. Upon the defeat of Germany, assignment of Lend-Lease munitions will be limited to those materials which are not available to the Allied Nations concerned, and which are necessary to support that portion of the forces of such nations as, in the opinion of the United States Joint Chiefs of Staff, can and will be profitably employed against Japan in furtherance of our agreed strategy.
>
> c. It is contemplated that on the request of the United States Government, Allied nations will make available for return immediately after the defeat of Germany any munitions furnished by the United States which are not required by such nations for their use against Japan in accordance with our agreed strategy and which are desired by the United States.[5]

The first of these principles did provide that lend-lease should be used to promote a maximum and not a minimum participation by Allied countries in operations against Japan—a viewpoint

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[2] (1) Memo, ACofS, OPD for DCofS, 16 Nov 43, sub: Assumptions to be Used in Establishing Basis for International Aid Reqmts during Period Following Defeat of Axis and Prior to Defeat of Japan, ID, Lend-Lease, Doc Suppl, VI. (2) Material in Readjustment Div, ASF, file Lend-Lease Policy Studies. (3) Memos, Gen Handy for Dir Spec Plng Div, WDGS, 11 Mar 44 and 4 Apr 44, sub as in (1), G–4 400.3295. (4) Materials in ID 008 Lend-Lease, XII. (5) Memo, Hq ASF for all BrCs, ID, and CsTechSvcs, 19 Apr 44, sub: Materiel Demobilization Plan, Period I, ID, Hq ASF, ID, Lend-Lease, Doc Suppl, VII.

[3] Memo, Gen Kuter, AC of Air Staff, Plans, for Chief of Air Staff, 28 Apr 44, sub: Cutback in Airplane Production, USAAF files, 425.01–E, Production, RG 501 A–49–47.

[4] JCS 771, 15 Mar 44, memo by CG AAF, title: Policy Concerning Assignments of Lend-Lease Military Munitions Following the Defeat of Germany.

[5] (1) JCS 771/3, 5 May 44, rpt by JLC, title: Policy Concerning Assignments of Lend-Lease Munitions Following Defeat of Germany. (2) JCS 771/1, 20 Mar 44, memos by CNO and CofS, same title.

championed by General Somervell. Yet even Somervell, although he recognized some of the problems of rehabilitation that Britain, the USSR, and other nations would face, was reluctant to suggest that the American contribution to their military effort against Japan might be increased to ease the burden, and neither this question nor that of the support of occupation armies was even discussed in the JCS.[6]

When the JLC report was considered by the JCS on 9 May, decision was deferred mainly because Admiral Leahy felt the timing was wrong as it was just in advance of OVERLORD and a Soviet drive on the Eastern Front. The JCS did agree at that meeting on a memorandum to the President informing him of the proposed gradual curtailment of aircraft production and asking him to approve the "corollary principle" as a guide to future procurement planning for Period I: "That Lend-Lease munitions will be limited to materials not available to nations concerned and which can be profitably employed against Japan in accordance with agreed strategy."[7] Roosevelt approved on the following day, though later events indicate that he was hardly aware of the full implications. Then on 30 May 1944 the JCS definitely put their seal of approval on the first two JLC recommendations and tentatively accepted the third with some minor changes, instructing the JLC at the same time to explore further this matter of return of lend-lease munitions on the defeat of Germany.[8]

The JCS policy, apparently accepted as national policy, rested on the dubious assumption that military lend-lease could be treated as a separate entity apart from the broader problem of the role American aid should play in the readjustment and rehabilitation of European economies following the defeat of Germany. Neither the State Department nor the Foreign Economic Administration had been consulted during its formulation. Of greater significance, the military leaders had taken no cognizance at all of the plight of their wartime partner, Great Britain, a country nearing exhaustion after five years of all-out war and dependent upon U.S. aid if it was to make any kind of start during Period I on the extremely difficult adjustment of its economy.

By tight mobilization of all resources, human and material, and with the aid

[6] (1) The original JLC report was JCS 771/2, 15 April 1944, title: Policy Concerning Assignments of Lend-Lease Materials . . . Following Defeat of Germany. It was modified as a result of Memo, Somervell for CofS, 18 April 1944, same subject, ABC 400.3295 (15 March 1944), Section IA, which Marshall presented to JCS at the 159th meeting, 18 April 1943, and the JCS referred to the JLC for a revised report. (2) JLC 86/4, 2 May 1944, title: Policy Concerning Assignments of Lend-Lease Materials . . . Following Defeat of Germany, contains memorandum of JSSC on this matter.

[7] (1) JCS 771/3, 5 May 44. (2) JCS 162d mtg, 9 May 44, Item 3.

[8] (1) JCS 771/4, 10 May 1944, title: Policy Concerning Assignments of Lend-Lease Munitions Following the Defeat of Germany, notes the President's approval without indicating whether it was written or verbal. (2) JCS 771/5, 27 May 44, memo by JLC, same title. (3) Min, 165th mtg, JCS, 30 May 44. (4) The subsequent JCS study on returns is JCS 771/6, 2 September 1944, title: Policy Concerning Disposition of Lend-Lease Material Following Defeat of Germany. No action was taken on it as a result of the President's directive just prior to OCTAGON prohibiting further military planning on the future of lend-lease. The matter was revived in 1945 and made the subject of another study, JCS 1448, 23 July 1945, title: Policy Concerning Settlement of Lend-Lease Obligations. But no determination was made before the end of the war as to what U.S. policy on returns should be; afterward it was decided few returns should be required.

of lend-lease and Canadian mutual aid, the United Kingdom had been able to generate military power beyond its ostensible capabilities. It was achieved at the expense of disruption of Britain's normal economy and by imposing on the British people sacrifices that could not be borne indefinitely. Both men and women were impressed into national service; hours of labor averaged more than fifty per week; higher taxes were imposed than anywhere else in the world; capital equipment deteriorated without normal maintenance or replacement; the aerial blitz and the buzz bombs took their toll of houses, industrial plants, and human lives. The British by 1944 were a war-weary people, accepting their sacrifices in the hope of better things to come. Yet the decision to devote all resources to the war without regard to economic consequences threatened to postpone indefinitely the realization of those better things.

Britain's prewar position had been built on overseas trade and overseas investment, and both had to be sacrificed during the war in the interests of survival. Before lend-lease, the British had exhausted almost all their dollar reserves, real and potential, to obtain supplies from the United States and Canada. A large part of British overseas investments and holdings, a major source of prewar income, was liquidated. Lend-lease brought a measure of relief, but it could not, nor was it intended to, restore assets already lost. Moreover, it led to a further drastic reduction in British export trade in order that all British resources could be concentrated on the war effort. It did not end the drain on British financial resources. The United Kingdom continued to pay in sterling for certain imports from some of the Dominions and colonies, for supplies and services for British troops in those areas, and for much of the reciprocal aid furnished American forces in various parts of the Empire, in India, and in countries of the Middle East and Africa. Without the normal offset of exports to balance these payments, British sterling assets in many areas of traditional British influence were turned to liabilities.

The British therefore faced a bleak outlook in the postwar world, even if they could recoup some of their losses during the last phase of the war. This, at least, they hoped to do, and their program for what they designated as Stage II called for some easement of civilian living standards, some rebuilding of capital equipment, and some expansion of exports (to two-thirds the 1938 level). These goals, the British Cabinet knew, could not be attained without continuation of American lend-lease on a generous scale if British forces were to participate in the war against Japan and fulfill their continuing commitments in the occupation of Germany and the maintenance of order in the Middle East. Neither the Prime Minister nor the Opposition had any intention of allowing either of these obligations to go by default.[9]

In their own planning for Stage II, consequently, the British presupposed that civilian lend-lease would continue on at least as generous a basis as during the two-front war, and that American military supplies would continue to be furnished in at least as large a proportion of total British requirements. Yet they, like the Americans, did their plan-

[9] Hancock and Gowing, *British War Economy*, pp. 518–24.

ning in secret and considered the truth about their own plight as information too dangerous to be communicated to anybody. There seems to have been little appreciation of the true nature of the British position at any level in Washington. Even Secretary of the Treasury Henry Morgenthau, a long-standing advocate of British aid, viewed with suspicion the gradual growth of British dollar reserves to the point where, in early 1944, they had reached over a billion dollars—large in American eyes perhaps, but considered by the British to be but meagre insurance against the day when they would have to pay for their imports from the United States. In spring 1944, Treasury and FEA, with support from the Army, undertook to reduce those dollar balances by removing industrial equipment, machine tools, and other items having possible postwar uses from lend-lease, making the British pay for them in cash. The British were also asked to include under reciprocal aid raw materials and petroleum products that they procured from their colonies and from such independent nations as Iran and Saudi Arabia, items that the Americans had themselves formerly paid for in cash. Under the circumstances, the British could hardly refuse.[10]

All these straws in the wind undoubtedly disturbed the British, but they were not aware of the policy adopted by the JCS. After the President had given his approval to that policy, however, the ASF was finally given the go-ahead signal for negotiations on lend-lease requirements to be included in the special ASP for Period I. On 18 May 1944 Somervell asked General Macready for the British figures for the first year of Period I, assuming that it would begin 1 October 1944. "The requirements so stated," he wrote, "should be for the support of British forces which would be used in the war against Japan."[11] The British promised, with evident reluctance, to try to assemble such figures, protesting all the while that there were too many uncertainties, strategic and otherwise, about Stage II to arrive at more than tentative conclusions. As for the basis on which Somervell proposed that the requirements be calculated, British spokesmen asserted they were "instructed by London to say that we are not authorized to accept such a policy," that it might "render it impossible for us to exert against Japan the full military effort of which we might be capable."[12]

Subsequent conferences with the British Army Staff produced no agreement and the requirements finally presented in late July 1944 were, in the words of Sir Walter Venning, "based on assessment of our entire needs during Stage II and not confined to operations in any particular theater of war." This basis, Venning insisted, had to be used if the British were to carry out cutbacks in military production requisite to making "some approach to a level of existence which could be regarded as even tolerable in a civilized country."[13] The final

[10] (1) *Ibid.*, pp. 524–27. (2) Somervell's interest in this problem is reflected in his memorandum for Under Secy War Patterson and Asst Secy War John J. McCloy, 16 March 1944, Dir Materiel file Lend-Lease 1942–44.

[11] Ltr, Somervell to Macready, 18 May 44, ID, Lend-Lease, Doc Suppl, VII.

[12] Ltr, Macready and Venning to Somervell, 16 Jun 44, ID 400.192 ASP, Part I.

[13] (1) Ltr, Venning to Somervell, 18 Jul 44, ID 400.192 ASP, X, Part I. (2) Ltr, Maj Gen D. H. Pratt, Br Army Stf, to Gen Somervell, 25 Jul 44, ID, Lend-Lease, Doc Suppl, VII.

British presentation the ASF found too close to the program presented earlier on the assumption that the war with Germany would continue. "We do not anticipate any serious question as to our ability to produce the quantities requested," General Edgerton of the International Division admitted, "the question is entirely one of the validity of the requirements in the light of U.S. policy set forth in J.C.S. 771."[14]

The Americans refused to accept the British requirements as stated and the matter soon came to an impasse. Finally, on 21 August, General Lutes returned the British statement to Sir Walter Venning and the ASF went ahead to make its own approximate calculations of British needs for the war with Japan. There the matter rested until shortly before the President and his military advisers departed for Quebec to meet with the British in September 1944.[15]

The President Intervenes

On 9 September, the day before his departure for Quebec, Roosevelt abruptly called a halt to the military planning for the future of lend-lease. He wrote General Marshall:

> There has been a good deal of discussion within the several Government Departments relative to our Lend-Lease policy after the collapse of Germany.
>
> It is my wish that no Department of the Government take unilateral action in regard to any matters that concern Lease Lend, because the implications of such action are bound to affect other Departments of the Government, and, indeed, our whole national policy. I am particularly anxious that any instructions which may have been issued, or are about to be issued regarding Lend Lease material or supplies to our allies after the collapse of Germany be *cancelled* and withdrawn. I intend to give instructions to all Departments relative to the Lease Lend policy of this government at an early date. . . .[16]

According to the best information the War Department could obtain, the State Department had learned of tentative orders issued by the Transportation Corps halting lend-lease shipments to Europe on V–E Day and had protested through Hopkins to the President. The President, having been apprised unofficially of the British position, had decided he must take a strong hand.[17] In any case, the JCS had to recognize that this directive rendered Roosevelt's approval of the "corollary principle" in May a dead letter, and all JCS papers on the subject were withdrawn along with all the various tentative instructions issued by the ASF.[18]

The sequel followed at Quebec a few days later. The British had taken their position in negotiations with the ASF during July and August in anticipation of a direct appeal from the Prime Minister to the President. At Quebec Mr. Churchill made that appeal, marshaling

[14] Memo, Gen Edgerton, ID, for CG ASF, 7 Aug 44, with related papers, ID 400.192 ASP, X, Part I.

[15] Ltr, Lutes to Venning, 21 Aug 44, with related papers, ID 400.192 ASP, X, Part I.

[16] Ltr, President to Gen Marshall, 9 Sep 44, ABC 400.3295 (15 Mar 44) Sec IA.

[17] (1) See Memo, Gen Edgerton for Gen Clay, 12 Sep 44, sub: President's Letter of 9 Sep 44 on Lend-Lease, Dir Materiel file Lend-Lease 1944. (2) On the informal feelers the British had sent out to the President, Hopkins, and FEA, see Hall, *North American Supply*, page 441.

[18] (1) JCS Memo for All Holders of JCS 771 Series, 20 Sep 44, ABC 400.3295 (15 Mar 44), Sec IA. (2) Memo, Somervell for Dir Materiel, 19 Sep 44, sub: Lend-Lease Policy after the Collapse of Germany, file Lend-Lease High Policy, Readj Div ASF.

all the powers of his rhetoric and baring every secret of the British financial balance sheets. In the end he prevailed and the President accepted the British Stage II program in all its essentials, initialing an agreement with the Prime Minister to that effect on 14 September 1944. The British would continue to get "food, shipping, etc." during the war with Japan to meet "reasonable needs"; lend-lease munitions would continue on such a basis as to permit "proportionate and equitable conversion" in the United States and United Kingdom; the British would be permitted to take steps to re-establish their export trade and the Americans would not impose restrictions on lend-lease supplies that would jeopardize British progress in this direction. To work out detailed plans for carrying out these agreements, a combined committee of American and British members would be formed to meet in Washington under the chairmanship of Henry Morgenthau.[19]

The Anglo-American committee held its meetings during October and November 1944. The official American members were Henry Morgenthau, Edward R. Stettinius, and Leo Crowley. The British delegation was headed by Lord John Maynard Keynes, Mr. Ben Smith, and Sir Ronald Campbell. A special military subcommittee was set up to consider naval, air, and ground army programs with Generals Somervell and Macready as prominent members. Initially, the War Department proposed that the basis of negotiation should be the military formula that supplies should be furnished only for the war against Japan, but Morgenthau ruled it "too rigid to fall within the general understanding reached by the President and Mr. Churchill at Quebec." Other "reasonable needs," Morgenthau said, must also be included.[20] Under this dispensation, the military subcommittee proceeded to draw up programs for air, naval, and ground army equipment that were in general satisfactory to the British. The ground army program for the year following V–E Day was to total $828,256,066 in dollar value, a figure somewhere between the British presentation in July and the separate calculations made by the ASF. In the broader field, continuance of civilian lend-lease was agreed upon, though it was to be somewhat restricted by the further removal from lend-lease eligibility of many articles that entered into the British export trade—the price Britain had to pay for an American promise to free British exports from the restrictions of the White Paper of 1941.[21]

Despite this concession, the British, by all outward appearances, had won their point. The principle of proportionate and equitable conversion had been accepted. But the agreements tentatively reached were not set down in any binding documents to which both

[19] Record of Conversation Between the President and Prime Minister at Quebec on September 14, 1944, and Official Memo of Quebec Conversations 14 Sep 44 initialed by FDR and WSC, forwarded by Secy State to Secy War, 19 Sep 44, ABC 400.3295 (15 Mar 44), Sec IA.

[20] Ltr, Morgenthau to Patterson, 20 Oct 44, ID, Lend-Lease, Doc Suppl, VIII.

[21] (1) Ltr, Military Sub-Com to Henry Morgenthau, Chmn, British-American Com on Lend-Lease, 23 Oct 44, and related papers in ID, Lend-Lease, Doc Suppl, VIII. (2) For accounts from the British side see Hancock and Gowing, *British War Economy*, pages 528–33, and Hall, *North American Supply*, pages 441–47. (3) See also Memo, C. H. B[undy] for Col Roberts, OPD, 7 Feb 45, sub: Combined Com on Mutual Lend-Lease Between U.S. and U.K. . . . , ABC 400.3295 (15 Mar 44), Sec IA.

countries subscribed. The Americans really accepted them for planning purposes only. Ground army requirements, for instance, were placed in the special Army Supply Program with the usual stipulation that assignment would depend upon strategic justification before the MAB. The British did not get what they really thought most desirable: a supply protocol on the Soviet pattern to cover the period after the defeat of Germany. This failure was to have unfortunate consequences for them.

Planning in the fall of 1944 was originally undertaken on the assumption that the war in Europe would end within a month or two. This assumption proved erroneous, and the Stage II Agreements remained on the shelf while U.S. supply agencies were absorbed in the manifold problems of continuing to support a two-front war. Attention was not specifically turned to the problem of post-V–E Day lend-lease again until February 1945. Meanwhile, in allocation of material by the MAB, the British were forced to accept many cutbacks because of the dominant strategic need of U.S. forces deployed in such large numbers in both Europe and the Pacific. While the war in Europe wore on, the Lend-Lease Act came up for its biennial renewal, and this time Congress wrote into it a proviso that lend-lease should not be used for "post-war relief, post-war rehabilitation, and post-war reconstruction" except under specific restrictions.[22] The then Vice President, Harry S. Truman, played a significant role in shepherding this final version of lend-lease through the Congress.

The ailing President, meanwhile, did not issue any further instructions to follow up his "cease and desist" order of 9 September 1944 except to authorize negotiations with the USSR on a Fifth Protocol, nor did he indicate any positive confirmation of the Stage II Agreements. The ASF, therefore, when it did turn its attention to Period I planning again in February 1945, had to assume that the Presidential injunction of the previous September remained in force. Finally, on 27 March 1945 Assistant Secretary of War Robert Patterson formally asked the President to remove his prohibition on lend-lease planning, but Roosevelt died on 12 April without having answered Patterson's letter. Five days after Roosevelt's death, the new President, Harry S. Truman, told the War Department to go ahead with its planning; but he laid down no policy, merely intimating that the agreements reached with the British and under negotiation with the Russians should serve as guides, and instructing that any problems be taken up with Judge Fred M. Vinson, Byrnes' successor as Director of the Office of War Mobilization and Reconversion.[23]

American policy thus drifted without any positive direction as V–E Day approached. The military staff once again grabbed the reins and were soon urging a return to the principles enunciated by the JCS in May 1944. The crux of the question was whether the tentative agree-

[22] (1) See *Twentieth Report to Congress on Lend-Lease Operations*, pp. 56–59. (2) See above, chs. XXII and XXV.

[23] (1) Memo, Robert Patterson, Actg Secy War, for President, 27 Mar 45. (2) Ltr, Harry S. Truman to Secy War, 17 Apr 45. Both in ABC 400.3295 (15 Mar 44) Sec IA. (3) Memo, Gen Styer for Gen Somervell, 10 Mar 45, Hq ASF file Lend-Lease. (4) Voluminous material in Dir Materiel file Lend-Lease, ID 008 XI and XX, and file Lend-Lease High Policy, Readj Div ASF.

ments of October and November 1944 constituted official commitments. Somervell queried Morgenthau, who ruled that they did not, that they had only been accepted as "a suitable basis for this government's budgetary and production planning."[24] Based on this assurance, when the final surrender of Germany came on 8 May 1945, the military departments were prepared to act on the assumption that further assignments of American material to Britain would be made only for active operations against Japan; the British, on the contrary, still assumed that the Stage II Agreements would go into effect.

The British were soon disillusioned by the actions of the MAB and MAC (G) in May and June 1945. Most of the material previously assigned and awaiting shipment to the United Kingdom was repossessed on 10 May. Subsequent assignments of ground equipment to the British during May and June totaled only $20 million in dollar value and were limited entirely to materials that the British could not make for themselves—such as DUKW's, light tanks, and carbines—and that the U.S. commander in India approved as necessary for the campaign in Burma under the SEAC screening procedure. What the British considered even more serious was that assignments of almost all kinds of air matériel except special types of naval aircraft were denied mainly as a result of cutbacks in American production schedules. As of 27 June 1945, Maj. Gen. F. H. N. Davidson of the British Army staff claimed that since V–E Day only 20 percent of the quantities bid for by the British had been assigned. In several stormy sessions of the MAB, the Americans made it plain that they would not make assignments on the basis of the Stage II Agreements, but solely on that of strategic necessity, and that in applying the latter criterion they conceived that the British should produce for themselves everything of which they were in any way capable. Under this policy no allocations could be made for the later stages of the campaign in SEAC or for British operations in the final phase of the Pacific war until the operations had been specifically approved by the CCS. Thus bids for matériel for the so-called increment forces forming in the British Isles and elsewhere in the Empire for participation in the war against Japan were turned down. In addition, when queried specifically, Maj. Gen. John Y. York, acting chairman of the MAB, said that no assignments for Allied occupation forces in Germany could be made until policy on this point had been clarified.[25]

On 28 May 1945 Churchill cabled President Truman protesting the standstill to which the MAB had come, citing particularly the damaging effect it was having on the British air program. He told Truman of the agreement he had reached with Roosevelt at Quebec and expressed hope that these "principles your predecessor and I agreed on

[24] (1) Ltr, Morgenthau to Somervell, 27 Apr 45, ID, Lend-Lease, Doc Suppl, IX. (2) MFR, OPD S and P Gp, 27 Apr 45, sub: Lend-Lease Policies After Collapse of Germany, ABC 400.3295 (15 Mar 44), Sec IA.

[25] (1) Min 4502, 192d mtg MAC(G), 10 May 45; min 4533, 193d mtg, 31 May 45; min 4550, 195th mtg, 7 Jun 45; min 4557, 196th mtg, 14 Jun 45; min 4625, 198th mtg, 5 Jul 45; min 4600, 197th mtg, 23 Jun 45. (2) Min 3, 168th mtg MAB, 30 May 45; min 4, 172d mtg, 27 Jun 45; min 3, 173d mtg, 4 Jul 45; min 4, 174th mtg, 11 Jul 45. (3) Hall and Wrigley, *Studies in Overseas Supply*, pp. 44–46.

. . . still hold."[26] Churchill's cable arrived while a heated debate was in progress within the administration over lend-lease policy, with the service departments taking the lead in urging restriction of lend-lease to materials for the war against Japan, the civilian officials for the most part holding that the Stage II Agreements must be honored. On 15 May 1945 Secretary of War Stimson presented the War Department's views to Judge Vinson, stipulating that certain of the British requirements already accepted in the Army Supply Program as a result of the Morgenthau committee's work might stand, but asking that, apart from these,

matériel already in the possession or control of the British Empire be employed to the maximum possible extent in satisfaction of its requirements and that remaining requirements that may be referred to the War Department be considered for supply . . . only if such requirements (1) appear necessary in order to carry out our agreed strategy, (2) are beyond the supply capabilities of the British Empire, and (3) can be obtained only from United States sources.[27]

After conferences with War, State, and FEA officials, Vinson replied on 13 June:

It was agreed that the tentative principles enunciated in your letter were not broad enough to cover the understanding reached between the late President and Prime Minister at Quebec. In general, it was agreed that, in accordance with those understandings, lend-lease should be furnished on a basis which would permit proportional and equitable reconversion in the United Kingdom. It was further agreed that the requirements estimated in the meetings held in October and November 1944 should be accepted as the basis for present requirements. Such estimates, however, are always subject to change in the light of strategic demands and supply considerations. I assume, of course, that the War Department's budget requests appropriations adequate to fulfill these commitments.[28]

The State Department drafted a reply for the President to send to Churchill generally along this line.[29] In the event the draft was never used. On 19 June, Stimson informed Vinson and the Secretary of State that the War Department budget estimates for fiscal year 1946 had not, in fact, been framed in terms of the Stage II Agreements, but instead had been based on "policies considered appropriate by the Joint Chiefs of Staff." If Vinson's instructions were to be carried out, Stimson said, the War Department would have to ask for additional funds.[30]

The JCS policies to which Stimson referred had not in reality taken final shape, but their general tenor was already sufficiently clear to justify the secretary's statement. On 11 May General Arnold asked the JCS to reaffirm the policy adopted a year earlier and withdrawn at Roosevelt's direction. In the Joint Logistics Committee this recommendation was modified, at the behest of General Somervell, to permit use of military lend-lease for occupation forces and "exceptional military programs"

[26] Paraphrase of cable from Prime Minister to President, 28 May 45, folder Lend-Lease, Hq ASF files.

[27] Ltr, Secy War to Judge Vinson, Dir of War Mobilization and Reconversion, 15 May 45, ID Lend-Lease, Doc Suppl, IX.

[28] Ltr, Vinson to Secy War, 13 Jun 45, ID, Lend-Lease, Doc Suppl, IX.

[29] Incl D to JCS Info Memo 418, 22 Jun 45, title: War Material for British Empire for Period Following V-E Day.

[30] Ltrs, Secy War to Dir, OWMR and to Secy State, 19 Jun 45, ID, Lend-Lease, Doc Suppl, X.

within the discretion of the JCS.[31] Somervell now foresaw that it would be practically impossible to cut off all support —rations, POL, and maintenance—for French, British, and other units in Germany that had previously been almost completely dependent upon American support. It was only a minimum of support pending placing occupation forces of Allied nations on financial arrangements other than lend-lease that he proposed, but when the matter was discussed in the JCS Admiral Leahy objected strenuously to even that minimum as being clearly illegal under the latest extension of the Lend-Lease Act.

Leahy's views soon proved to be those of the President. On 5 July Truman issued a directive to the JCS that settled the issue:

> Now that the war in Europe has terminated . . . and in order to follow accurately the letter and spirit of the Lend-Lease Act, the following policy is established. . . .
>
> Approval of the issue to Allied Governments of Lend-Lease munitions of war and military and naval equipment will be limited to that which is to be used in the war against Japan, and it will not be issued for any other purpose.[32]

Truman's positive declaration clearly ruled out lend-lease for occupation armies, but it did not specifically accept the premise, on which the JCS was proceeding, that assignments to the British should be limited to material for the war with Japan that they could not provide for themselves. To this extent, it still left the way open for a limited application of the principle of equitable and proportionate conversion, and on this line the State Department again drafted the long-delayed reply to Churchill's cable of 28 May. The new draft was rather vague. It still purported to accept the Stage II Agreements but laid considerable stress on the possibility of scaling down British requirements because of of changed conditions and on the improved ability of the British to pay cash for more of the material furnished them, particularly articles which might evoke criticism in Congress if supplied under lend-lease, in the light of an improvement in their dollar reserves since November 1944. The President presented this reply to Churchill at Potsdam on 17 July 1945. The private British reaction was that their over-all financial position had never been worse but, making the best of a bad situation, they prepared to make a final fight to salvage as much as they could of the Stage II Agreements at the Potsdam Conference.[33]

Sometime earlier, on 2 July 1945, the British presented a paper to the CCS in an effort to get the MAB out of its stall, reiterating their understanding of the Stage II Agreements and asking that their programs, now revised, be accepted within the framework of the agreements as a guide to assignments. A few days

[31] (1) JCS 771/9, 29 May 45, rpt by JLC, title: Policy Concerning Assignments of Lend-Lease Munitions Following Defeat of Germany. (2) The memo by CG AAF is JCS 771/8, 11 May 45, same title.

[32] (1) JCS 771/11, 6 Jul 45, title: Presidential Policy on Military Lend-Lease. (2) JCS 771/10, 21 Jun 45, memo by CofS, USA, title: Amendments to Policy Concerning Assignments of Munitions Following Defeat of Germany. (3) Memo, Gen Shingler for CofS, ASF, 20 Jun 45, sub: Lend-Lease for French and British Forces in Army Occupation, Dir Materiel file Lend-Lease. (4) Materiel in ABC 400.3295 (15 Mar) Sec IA.

[33] (1) Memo, Secy State for President, no date, ID 008 Lend-Lease, XXII. (2) Memo, President for Prime Minister, submitted 17 Jul 45, ABC 400.3295 (15 Mar 45), Sec IA. (3) On the British reaction see Hall, *North American Supply*, p. 459.

later, in order to establish the strategic basis of their need, the British Chiefs also outlined their ideas on the contribution they should make in the final phase of the war. They proposed that three to five British Commonwealth divisions participate in the main attack in the Pacific together with sections of the British Fleet and ten to twenty VLR squadrons of the RAF. They would also undertake operations in the "Outer Zone" to maintain pressure on the Japanese across the Burma-Siam frontier while studying operations against Siam, Java, Sumatra, and Hong Kong. Exact dates and detailed plans for these operations would be presented at a later date.[34]

Though the British ideas on strategy were tentatively accepted with some modification in the size of forces to be employed in the Pacific, the pleas for the Stage II Agreements left both the War Department and the JCS still unmoved.[35] The issue was finally joined at Potsdam. At that conference the British Chiefs, supported wholeheartedly by the Prime Minister, argued forcefully that the wartime partnership should continue in the occupation and rehabilitation of Europe and that supplies and shipping for these purposes should continue to be allocated on a combined basis and on a reasonably high priority in relation to the war against Japan. The U.S. Chiefs insisted on the narrower view that only the pursuit of the war against Japan should be continued as a combined military undertaking, that occupation and rehabilitation were not matters for a combined military commitment. In response to the direct pleas of Churchill, however, on the subject of continuing lend-lease for the occupation and for equitable and proportionate conversion in the United Kingdom, President Truman promised to do the best he could for the British within the limitations imposed by Congress on his action:

> . . . he was handicapped in his approach to this matter by the latest renewal of the Lend-Lease Act. As Vice-President he had worked out its clauses together with Senator George, who had explained to the Congress that the act was intended to be a weapon of war only. The President was now striving to give to the Act the broadest interpretation possible and he had no intention of causing the British any embarrassment in the matter of furnishing supplies to British troops or maintenance thereof. However, he must ask the Prime Minister to be patient as he wished to avoid any embarrassment with Congress over the interpretation of the Act and it might be necessary for him to ask for additional legislation in order to clear up the matter.[36]

Following Potsdam, Truman laid down a specific policy in detail indicating the extent to which this "broadest interpretation possible" would go. He reaffirmed that supplies should be furnished only for the war against Japan, but accepted the principle of proportionate and equitable conversion insofar as it was compatible with this dictum, thus overruling the JCS position that

[34] (1) CCS 888, 2 Jul 45, Memo by BrCOS, title: Lend-Lease to U.K. (2) CCS 889, 6 Jul 45, memo by BrCOS, title: British Contribution in the Final Phase of War Against Japan.

[35] (1) JCS 771/12, 9 Jul 45, rpt by JLC and JSSC, title: Lend-Lease to U.K., British Military Commitments in Stage II. (2) Memo, Somervell for CofS, 14 Jul 45, ABC 400.3295 (15 Mar 44), Sec IA.

[36] (1) Min, Plenary Mtg, TERMINAL, Babelsberg, Germany, 24 Jul 45. (2) CCS 877, 14 Jun 45, memo by U.S. COS, title: Basic Objectives, Strategy, and Policies, and other papers, in CCS 877 series 5, 21 Jul 45. (2) Min, 195th mtg JCS (TERMINAL), 23 Jul 45, Item 11.

supplies should be limited to those the British could not possibly make for themselves. He ruled out supplies for armies of occupation, but he authorized them for any purposes that would further redeployment of U.S. troops, thus providing a measure of flexibility. Such other maintenance as the British or others requested for their armies in Europe and the Middle East was authorized only in return for cash payment and was to be handled through FEA.[37]

The British had finally won a partial confirmation of the Stage II Agreements, although hedged about in many ways. And, since the British strategic plans (with some modifications) were approved at Potsdam, the MAB was at last in a position to proceed with assignments for British forces in the war against Japan. In the meantime, however, on the recommendation of the JCS Truman had proposed to Churchill that the time had come to end the system of assignments by combined bodies, that the MAB should be abolished and its functions turned over to the Joint Munitions Allocation Committee. The British reply, from Clement Attlee, the newly elected Prime Minister, suggested that the subcommittees at least should continue in existence to consider those few remaining cases where scarcities of specific items were still involved.[38]

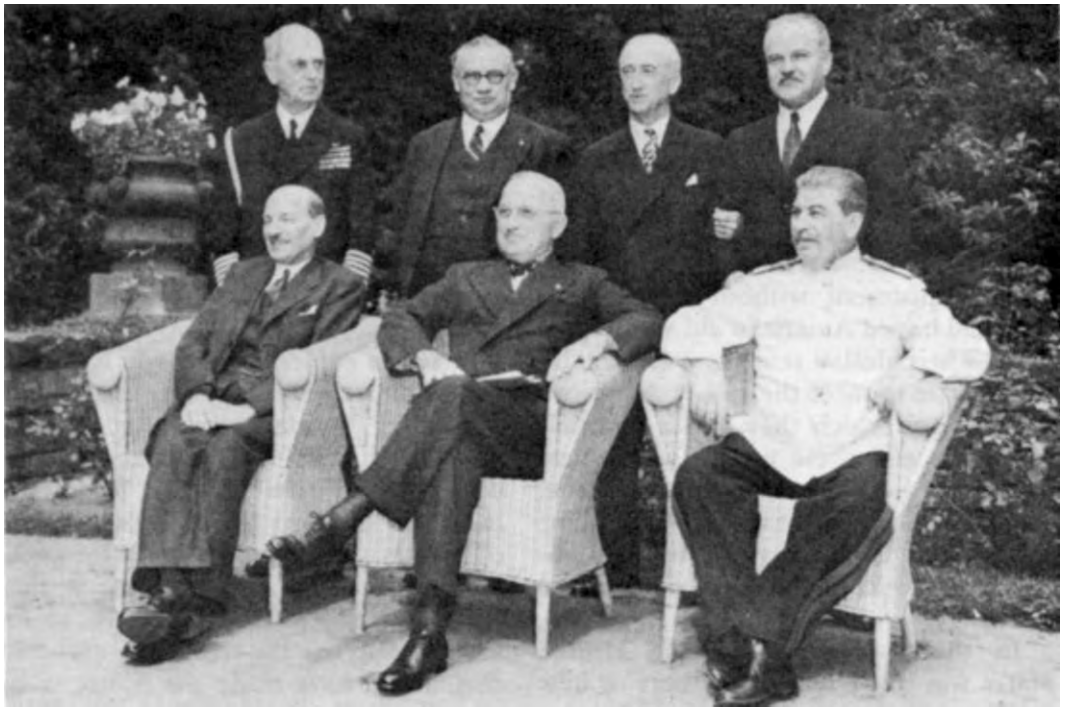
The war against Japan moved so swiftly and unexpectedly to its end that events overtook the new policy before it could be placed into practical effect and made any further discussion of the future of the combined munitions assignments boards unnecessary. In an effort to avoid the confusion on lend-lease policy that had followed the fall of Germany, the Joint Logistics Committee hastily completed a study on post-V–J Day policy, which the JCS approved on 11 August 1945. Its main point was a recommendation to the President that lend-lease of munitions terminate immediately on the surrender of Japan, "except for assistance to Allied forces engaged against Japanese forces which have not surrendered, and in certain unavoidable cases where the abrupt termination of aid already in programs would be unreasonable or would cause undue hardship."[39] The President approved this policy, and on 24 August officially announced that lend-lease would end effective on V–J Day.

Whatever the JCS influence may have been, Truman undoubtedly felt obliged to adopt this line because of promises made to Congress in connection with the last lend-lease appropriations in July. On 5 September 1945 he issued more formal instructions to the JCS indicating the cases where the flow of aid would be allowed to continue even though Allied forces were not engaged in subduing any continuing Japanese resistance. Rations, shelter, medical supplies and services, petroleum products, fuel, and transportation would be allowed when they could not reasonably be furnished by the government concerned and when denial would work immediate hardship; but they were to be eliminated at the earliest practicable date,

[37] JCS 771/14, 31 Jul 45, title: Presidential Policy on Military Lend-Lease.

[38] (1) JCS 1397/5, 23 Jul 45, title: Review of Combined Procedures for Munitions Assignments. (2) Memo, Prime Minister to President, dated about 31 Jul 45, Incl to JLC 336/5, 13 Sep 45, same title as (1).

[39] JCS 771/17, 11 Aug 45, title: Military Lend-Lease after Unconditional Surrender or Defeat of Japan.



THE BIG THREE AND THEIR ADVISERS *in the palace garden during the Potsdam Conference. Seated, Prime Minister Attlee, President Truman, Premier Stalin. Standing, Admiral Leahy and Foreign Ministers Ernest Bevin, James Byrnes, and Vyacheslav M. Molotov.*

and in no case were to be extended beyond six months after the formal Japanese surrender. Maintenance items might also be furnished for U.S. equipment in possession of Allied forces against payment on terms to be decided by the State Department and FEA. Maintenance, repair, training, transportation, and other services already undertaken would be continued to the nearest practicable stopping point as determined by the U.S. theater commander in the area concerned. A special exception was made of the Chinese forces sponsored by the Americans who were to continue to receive aid essential for the reoccupation of all of China then occupied by the Japanese, though not for "fratricidal war."[40]

As a result of these exceptions, a small trickle of lend-lease continued to flow to the United Kingdom and other countries for some months, but to all intents and purposes the surrender of Japan signaled the end of lend-lease. In actual fact, the flow of military materials had been almost entirely cut off earlier in anticipation of the surrender. The Munitions Assignments Board held its last meeting on 8 August, though it was not formally allowed to expire until November. Its residual functions, as expected,

[40] JCS 771/18, memo from President to JCS, 5 Sep 45, title as JCS 771/17.

were turned over to the Joint Munitions Allocation Committee.[41]

To the British, the sudden end of lend-lease was a virtual catastrophe, coming as it did at the end of a four-month period when they had received few items from the United States that they could make for themselves. They were plummeted into the harsh realities of postwar readjustment without the cushion they had hoped American aid would provide. Their dollar reserves were totally inadequate to meet the cost of American supplies for which they had a continuing need; and there was little prospect that they could, for many years to come, build up their export trade to the point where they could pay for needed imports from either the United States or elsewhere.

In the postwar period the United States was to be forced to resort to new devices to maintain a going British economy and to bolster British military strength, starting with a loan in 1946 and progressing through the Marshall Plan and the Mutual Security Program. A forthright approach to the problem in 1945 might have saved much lost time and have been more economical in the end. Certainly the restrictive attitude of the JCS played some part in preventing such a forthright approach to a situation in which Presidential direction was uncertain and a practical policy vacuum existed.

It seems evident that both Roosevelt and Truman, the latter perhaps belatedly after Potsdam, saw the need for helping the British in their postwar economic adjustment, but Roosevelt's hand was faltering in the last six months of his life and he did not take the necessary steps either to lay down a clear policy for the executive branch to follow or to secure the legislative authority that would have made the course of his successor easier. Without legislative authority, Truman felt his hands were tied, and lend-lease was allowed to lapse without any real consideration of how it might be used as an effective instrument of U.S. policy in promoting postwar adjustments—just as it had been used during hostilities as an extremely effective means for fighting a coalition war.

[41] (1) JCS 771/19, 14 Sep 45, title: JCS Responsibilities under Presidential Lend-Lease Policy. (2) JCS 1397/6, 6 Oct 45, title: Revision of Combined Procedure for Munitions Assignment. (3) Memos, Adm Leahy for President, 17 Oct and 2 Nov 45, ABC 400.3295 (15 Mar 44), Sec IB. (4) JCS 1397/9, 28 Oct 45, title: Abolishment of MAB, Washington.

CHAPTER XXVII

Aid to the USSR in the Later War Years

Aid to the USSR continued during the last two years of the war to absorb its share of both American supplies and shipping. By mid-1943 any imminent danger of Soviet collapse had passed and the Red Army had assumed the offensive all along the Eastern Front; nevertheless, the Soviet Union continued to press for aid on the largest possible scale and the United States to grant it in the most generous measure of which it was capable. Responsible American officials were compelled to view the continuing contribution of the Red Army in the war against Germany as an indispensable condition to the success of the Anglo-American assault from the west. Moreover, they expected the USSR to enter the war against Japan at a propitious moment after the defeat of Germany and to play an important role in the defeat of the Asiatic member of the Axis. Having accepted, very early in the war, these premises as to the essential character of the Soviet contribution to victory in both Europe and Asia, there was little tendency to use the USSR's need for American supplies as a bargaining lever. During the first two years after the German attack in 1941 the urgency of Soviet needs had been so great, the threat of Soviet collapse so imminent and foreboding for the Allied cause, that almost any effort or sacrifice seemed justified in order to deliver supplies. This sense of urgency died hard even under the changed conditions of the last half of the war when victory over Germany and Japan seemed assured. The postwar implications of thus helping to strengthen the Soviet position in Europe and Asia were either not foreseen or ignored.

The Soviet Aid Program continued until the end of the war in Europe to be based on annual diplomatic protocols, supply agreements at the governmental level, and was thus far more rigid than were the lend-lease programs for the British, French, and others. The Third Protocol covered the period from 1 July 1943 through 30 June 1944, the Fourth the period from 1 July 1944 through 30 June 1945.[1] No fifth protocol was ever signed, but arrangements were made to supply materials to the Soviet Union for a campaign against Japan in Manchuria.

The formulation and administration of the protocols fell to the President's Soviet Protocol Committee (PSPC), an organization directly responsible to the President, composed of representatives of the War, Navy, State, Treasury, and Agriculture Departments, and of the War Production Board, Foreign Economic Administration, War Shipping

[1] On the First and Second Protocols see Leighton and Coakley, *Global Logistics, 1940–43*, pages 97–102, 561–597.

Administration, and the Petroleum Administrator for War. General Somervell was the War Department representative on the committee. Harry Hopkins was officially its chairman but because of his ill health General York, executive of the committee, functioned in that capacity most of the time. The Protocol Committee worked principally through its two subcommittees, one for supply and the other for shipping. The Army was represented on the first by the International Division, ASF, and on the second by the Transportation Corps. In addition, in formulating policy on Soviet supply, the Protocol Committee normally consulted the Joint Chiefs of Staff. All these arrangements insured that military interests would have proper consideration in the administration of the protocols, but the basic protocol agreements transcended military authority. The guidelines for military policy on supplying the USSR emanated from the President himself.

Supply to the USSR continued to be a collaborative effort with the British, but the British contribution declined in relative importance as U.S. aid increased in volume. Canada also associated itself with the United States and Great Britain in the Third and Fourth Protocols. They were thus four-cornered political agreements, but each country offered its own schedule of supplies separately and the U.S. schedule overshadowed the others. Collaboration centered mainly in framing the conditions under which supplies would be granted, in preventing duplication among the various schedules, and in arranging convoys over the northern route and through the Mediterranean (for both of which the British were responsible).

In terms purely of logistics, the flow of supplies to the USSR was far smoother during the later war years. By mid-1943 the main obstacles to a large-scale Soviet supply program had been overcome. The commitments for Soviet aid had been fitted into American supply programs and the growing output of American factories was making it possible to meet them without significant sacrifice to the U.S. military effort. The shipping situation was vastly improved. Most important of all, there was now adequate capacity on the routes of delivery. Inability to maintain convoys over the northern route in the face of heavy losses, inadequate facilities in the Persian Gulf, and insufficient Soviet flag shipping in the Pacific had all combined to frustrate every effort to meet commitments under the First and Second Protocols. But by mid-1943 a capacity of well over 200,000 short tons monthly was in sight in the Persian Gulf, and the transfer of vessels to the Soviet flag in the Pacific had created a fleet capable of transporting an even greater tonnage to Vladivostok. There was no further need to accept prohibitive losses on the northern route, although there remained a good chance that it, too, could be used whenever the British could spare naval convoys from other operations.[2]

Formulation of the Third Protocol

The outlook was hardly so optimistic when consideration of the Third Protocol first began. In January 1943 deliver-

[2] On shipping experience during the First and Second Protocol periods see Leighton and Coakley, *Global Logistics, 1940–43*, pages 551–97.

ies on the Second Protocol were more than a million short tons in arrears. The President, in ordering an intensive effort to overcome this deficit, also asked for preparation of offerings for a Third Protocol on the assumption that "Russian continuance in the war is of cardinal importance and therefore it must be a basic factor in our strategy to provide her with a maximum amount of supplies that can be delivered to her ports."[3] At Casablanca, the CCS endorsed this concept and approved a shipping schedule that envisaged bringing Soviet aid shipments up to protocol commitments by the end of 1943, assuming that the commitments under the Third Protocol would be the same as those for the Second (4,400,000 short tons).[4]

The Casablanca schedule for the first six months of 1943 proved impossible of fulfillment. In March shipments over the northern route had to be suspended to permit preparations for the Sicily invasion. Capacity in the Persian Gulf increased much more slowly than anticipated. With these difficulties coming on top of previous embarrassments in fulfilling protocol schedules, the Americans sought to confine the commitment under the Third Protocol to realizable proportions. In March and April 1943 WSA formulated a shipping program providing for movement of 150,000 short tons monthly through the Persian Gulf and 225,000 monthly over the Pacific route, or a total of 4,500,000 short tons during the Third Protocol year, approximately the same volume of supplies originally promised under the Second. The WSA program left the northern route entirely out of consideration and even assumed that the bulk of British supplies (approximately 50,000 tons monthly) would move through the Persian Corridor. The Second Protocol deficit, now looming larger than it had at Casablanca, was to be quietly forgotten.[5]

Meanwhile, the departments and agencies reviewing Soviet requests came up with a total offering of 7,080,000 short tons of supplies, exclusive of vessels and fly-away planes, but including materials expected to be delivered but unshipped at the end of the Second Protocol period. When a small commitment of the Canadian government was added, the total came to one-and-one-half times the tonnage of the WSA shipping program. The Protocol Committee decided to offer the USSR the whole amount and ask that they select from the list 4,500,000 short tons to fit the maximum shipping available.[6]

The Soviet Government, unimpressed by the generosity of the American offer, insisted that the Soviet war effort required the import of much more than 4.5 million tons of supplies. The United States could, Soviet representatives said, by exerting itself, deliver at least 6 million tons—1.4 over the northern route during the fall and winter months, 2.6

[3] Memo, President for Secy War, 6 Jan 43, ID 031.1, II.

[4] See Leighton and Coakley, *Global Logistics, 1940–43*, pp. 587–89.

[5] (1) *Ibid.*, pp. 589–92. (2) Memo, Adm Land and Lewis Douglas for Harry Hopkins, 30 Mar 43. (3) Memo, W. S. McPherson for Douglas, 13 Apr 43. (4) Memo, Douglas for Hopkins, 15 Apr 43. Last three in folder Russian Shpg 1/1/43, WSA Douglas File.

[6] (1) Memo, Gen Burns for Secy War, 26 Mar 43, ID 031.1, III, Part I. (2) Memo, Brig Gen Sidney P. Spalding, PSPC, for Secy JCS, 9 Apr 43, sub: Status of Proposed Third Soviet Protocol, ABC 400.3295 (19 Apr 42), Sec 1.

instead of 1.8 by the Persian Corridor, but only 2 million via the Pacific where turnaround time would inevitably be greater than the 75 days WSA had assumed in its calculations. The Soviet maneuver was obviously aimed at securing an additional commitment for reopening the preferred northern route. The Americans agreed to go only part of the way. In view of the vast improvement in the shipping situation since the WSA calculations in March, the President's Soviet Protocol Committee, after consultation with the JCS, agreed to increase the total commitment for the Atlantic routes from 150,000 to 200,000 tons monthly, to be shipped either over the northern route or by way of the Persian Gulf "whichever in the light of changing conditions proves from time to time to be more efficient." The committee, while agreeing that the turnaround time in the Pacific should be 90 rather than 75 days, insisted that the Pacific route was capable of handling 225,000 tons monthly since it was currently operating at that level. A provision that the Soviet flag ships in the Pacific should be transferred to the Atlantic in case of Japanese interference with that route was also included in the final draft of the protocol.

The final American offer was thus set at 5,100,000 short tons for the Third Protocol period, 2,700,000 by the Pacific route and 2,400,000 by the Atlantic, with a provision that, if conditions permitted, the United States, Great Britain, and Canada would "gladly review the schedules from time to time for the purpose of increasing the quantities to be provided and delivered." Soviet representatives were also to be permitted to include a 500,000-ton stockpile in their selections, making a total of 5,600,000 short tons. The USSR accepted this compromise. On 1 September 1943 Soviet representatives notified the State Department that they would take the military and industrial equipment offered at full rates and made specific deductions in their requirements for foodstuffs, metals, petroleum products, and chemicals. The logic behind this move is obvious. Advance planning was necessary for procurement of military and industrial equipment while there was always a possibility of drawing from existing stockpiles of foodstuffs, petroleum, and raw materials if shipping could be found to move them. On 19 October 1943 the Third Protocol was formally signed in London. Long before that date, on 1 July 1943, it had gone into effect as the practical program under which the United States, Great Britain, and Canada were continuing to send supplies to the USSR.[7]

The military requirements of the USSR under the Third Protocol clearly reflected the change in the Soviet position. They emphasized aircraft, specialized types of transportation and communication equipment, clothing, medical supplies, and bulk explosives, rather than the tanks, artillery, and ammunition emphasized earlier. This shift, already foreshadowed by cancellations under the Second Protocol, was to become

[7] (1) Quotes are from text of Third Protocol in Dept of State Pub. No. 2759, *Soviet Supply Protocols.* (2) Memo, Gen Burns for Gen Clay, 10 Jul 43, sub: Proposals of Soviet Government in Regard to 3d Protocol, ID 031.1, V. (3) Ltr, Gen Spalding, Asst ExO, PSPC, to Secy War, 14 Jun 43, ID 031.1, IV. (4) JCS 322/1, 17 Jul 43, title: Third Soviet Protocol. (5) Memo of Embassy of USSR, Washington, in answer to U.S. Remarks on Protocol, 1 Sep 43, ID, Lend-Lease, Doc Suppl, V.

even more pronounced as the Soviet offensive gained momentum. In the sphere of civilian supplies, the shift was even more marked, moving toward industrial equipment and other materials needed for reconstruction and rehabilitation of devastated areas in the wake of the German retreat.

War Department offerings, totaling approximately 1,700,000 short tons, substantially met Soviet requests in almost all categories except aircraft. The Russians asked for 500 fighter planes, 100 light bombers, 50 medium bombers, and 30 transport planes monthly—a total of 8,160 planes. General Arnold refused to agree to any substantial augmentation over Second Protocol schedules — 100 fighters (P–39), 100 light bombers, 12 medium bombers, and 20 transports monthly—with an additional 150 P–39's going on British account each month, or a total of 4,344. As a result of a special pledge of the President to Stalin, 600 older type P–40–N fighters were added and the number of B–25 bombers raised from 144 to 222, but otherwise Arnold's views prevailed.

In contrast, requests for 20,000 jeeps, 3,000 artillery prime movers, and 100,000 field telephones were met in full, and 2,000 medium tanks (M4A2) offered and accepted for which the Soviets had stated no requirement. A commitment was made for 132,000 trucks against a request for 144,000. A requirement for 10,000 railroad flatcars was accepted in its entirety, but only 500 to 700 locomotives could be offered against a request for 2,000 to 3,000. Certain types of signal equipment—radio locators and direction finders—were reserved for future consideration because of the old problem of proper specifications. A Soviet request for teletype apparatus was initially turned down.[8]

By agreement with the British and Canadians, certain conditions were placed on the aid pledged in the Third Protocol, though in order to meet Soviet objections the USSR was assured that they would not be invoked unless absolutely necessary. The shipping promised was to be subject to reduction "if shipping losses, lack of escorts, deficiencies in the anticipated capacity of available routes, the necessities of other operations, or the exigencies of the situation render their fulfillment impracticable," and the lists of supplies were to be subject to readjustment "to meet unforeseen developments in the war situation."[9]

Military efforts to secure some small *quid pro quo* from the USSR were less successful. The War Department desired a pledge from the Soviet Union that it would extend American observers the same facilities for visits and information in the USSR that were accorded Soviet representatives in the United States, and the British Chiefs of Staff wanted a pledge of Russian assistance in defending the northern convoy route. The Protocol Committee ruled against inclusion of either of these conditions, remarking that:

> In the experience of those engaged in the execution of previous Protocols, the Soviets are very difficult to deal with on a bargaining basis, but respond most satisfactorily in performing their share of an

[8] (1) Third Soviet Protocol. (2) Ltr, Patterson to Hopkins, 17 Apr 43. (3) Memo, Gen Arnold for Gen Somervell, 20 Apr 43, sub: 3d Extension, USSR Agreement. (2) and (3) in ID 031.1, III, Parts I and II. (4) Msg, Roosevelt to Stalin, 16 Jun 43, in MS Index to Hopkins Papers, Book VII, Lend-Lease Aid to Russia 1942–43, Item 65.

[9] (1) Third Soviet Protocol. (2) JCS 322/1, 17 Jul 43, title: Third Soviet Protocol.

understanding when a generous offer is made, and which does not force the Soviets into a bargaining position.[10]

In the face of this attitude the JCS and CCS decided not to insist.

The Swelling Flow of Aid to the USSR

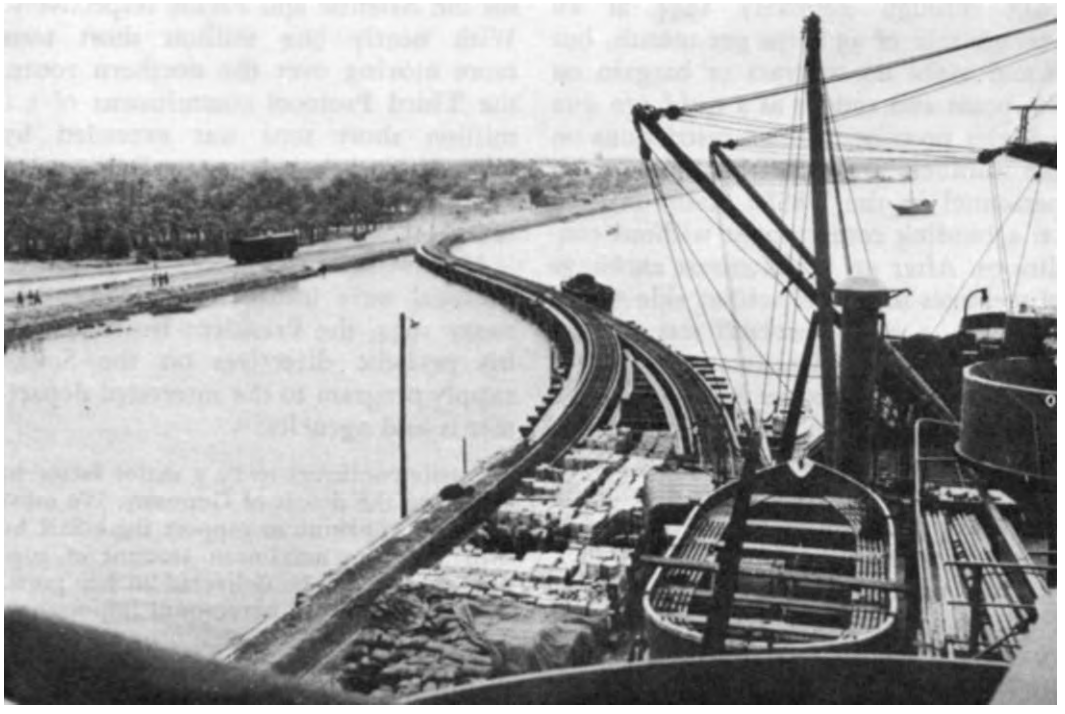
Even before the Third Protocol was formally signed in October, the improved situation on the delivery routes was evident. By the end of September 1943 shipments on the proposed protocol were 15 percent ahead of schedule. In September, shipments over the Pacific route mounted to a new high of 345,000 short tons and those to the Persian Gulf reached 207,000 short tons. Brig. Gen. Donald H. Connolly, head of the Persian Gulf Command, reported that a continuing capacity of 242,000 short tons per month could be anticipated on that route under existing plans for development.

Shipments via the Pacific route, however, soon began to decline because of difficulties of winter navigation, reaching a nadir of 102,000 short tons in January 1944. The possibility of Japanese interference forced most Soviet flag shipping in the Pacific to proceed by way of Kamchatka, Petropavlovsk, and the Strait of Tartary rather than directly through La Perouse Strait close to the northernmost Japanese island of Hokkaido. The route was difficult in winter, and many ships were icebound for long periods when even icebreakers could not get through the packed ice. Several Liberty ships cracked up in the ice and had to be replaced; most returned to the west coast in need of extensive repairs. Despite these difficulties the Russians were completely unresponsive to WSA suggestions that some of the Soviet flag shipping be transferred temporarily to the Alaska and Hawaii run, an attitude that discouraged any further transfers of American shipping to the Soviet Pacific fleet.

In the face of declining Pacific shipments and continuing danger of Japanese interruption of that route, further augmentation of the capacity of the Persian Gulf was seriously considered. In September 1943 General Connolly offered alternate plans for an increase from 216,000 long tons (242,000 short tons) monthly to 244,000 and 260,000 long tons respectively. The first goal, he said, could be achieved with a small personnel increment, simply by putting 450 more railroad cars on the Trans-Iranian Railway and setting up two new mobile truck assembly plants. The second goal would be more difficult, requiring additional major port construction and a considerable augmentation of the motor transport service. The Protocol Committee decided that the additional rail and truck assembly equipment should be sent to provide a standby capacity for 244,000 long tons, but that no additional personnel should go and no commitment should be accepted for the increase.[11]

[10] (1) Quoted from JCS 322, 18 May 43, title: Third Soviet Protocol. (2) CCS 243, 22 May 43, and CCS 243/1, 31 May 43, both titled Third Soviet Protocol.

[11] (1) Memo, Hq PGSC, 14 Sep 43, sub: Rpt on Movement of 260,000 LT Russian Cargo thru Persian Gulf with Alternative Plan for Movement of 240,000 Tons. (2) Min, Protocol Subcom on Shpg, 5 Oct 43. (3) Rpt of Subcom on Shpg, attached to Agenda for 6th mtg, PSPC, 30 Sept 44. All in ID 334 PSPC, I. (4) FEA, *Report on the Status of the Soviet Aid Program as of September 30, 1943*. (5) See below, Appendix G–3. (6) Memos, Adm Land and Lewis Douglas for President, 11 Oct, 10 Nov, 10 Dec 43,



LIBERTY SHIP WITH SUPPLIES FOR THE USSR *at the port of Khorramshar, Iran.*

Negotiations were already under way for reopening the northern route, and this undoubtedly influenced the decision of the committee. In September 1943 the Soviet Union began to press urgently for resumption of the northern convoys, which had been suspended since March. Soviet spokesmen insisted that the northern route was the only one over which supplies destined for use on the northern front could be delivered in time to serve their intended purposes. Moreover, much of the Third Protocol cargo consisted of heavy and bulky equipment such as locomotives, power and construction equipment, and industrial machinery—articles that for the most part, because of their bulk and ultimate destination in the USSR, could not be handled in the Persian Gulf. In the Pacific there were insufficient ships equipped to handle locomotives; transport of other types of heavy equipment across the Trans-Siberian Railway was difficult.[12]

Resumption of the northern convoys depended on the ability of the British to furnish naval escort. Churchill was willing to run convoys from November

11 Jan, and 10 Feb 44, folder Russia—Rpts to President, WSA Douglas File. (7) Msgs NA 5409, Douglas to Harriman, 11 Oct 43; SD 2984, Douglas to Harriman, 17 Oct 43; 1857, Moscow to Secy State, Harriman for Douglas, 6 Nov 43; all in folder Rus Shpg 1/1/43, WSA Douglas File.

12 (1) *Ibid.* (1). (2) JCS 517, 2 Oct 43, and JCS 517/1, 14 Oct 43, titles: Convoys to North Russia.

1943 through February 1944 at an average rate of 35 ships per month, but would make no contract or bargain on the point and sought as a *quid pro quo* a Soviet promise to relax restrictions on the numbers and movement of British personnel in the USSR. Stalin insisted on a binding commitment without conditions. After an acrimonious exchange of messages in which neither side would give way, a *modus vivendi* was reached at the Foreign Ministers meeting in Moscow in late October and the convoys were reinstituted on schedule in November. Churchill made no specific pledge for their continuance, nor did Stalin make any concessions on the matter of British personnel in the USSR.[13]

The scheduled convoys sailed in November, December, January, and February, and a fifth was added in March. In February and March WSA found it necessary to cut shipments to the Persian Gulf in order to provide ships for the northern route, since heavy shipments to England in preparation for OVERLORD were placing a strain on the Atlantic shipping pool. When the northern convoys were suspended in April to allow naval preparations for OVERLORD, shipments to the Persian Gulf were correspondingly increased, reaching a peak of 289,000 long tons in May. With the return of the icebound fleet, shipments once again mounted to large proportions in the Pacific in May and June. By the end of the Third Protocol period on 30 June 1944, the calculations of the capacities of both the Pacific and Persian Corridor routes had been vindicated. Total tonnage by each route was slightly in excess of the protocol commitment for the Atlantic and Pacific respectively. With nearly one million short tons more moving over the northern route, the Third Protocol commitment of 5.1 million short tons was exceeded by approximately 25 percent. Delivery of aircraft was also maintained at protocol rates.[14]

Meanwhile, negotiations for a fourth protocol were under way. On 14 February 1944, the President issued one of his periodic directives on the Soviet supply program to the interested departments and agencies:

> Russia continues to be a major factor in achieving the defeat of Germany. We must therefore continue to support the USSR by providing the maximum amount of supplies which can be delivered to her ports. This is a matter of paramount importance.
>
> . . . . . .
>
> The USSR has been requested to state requirements for a Fourth Protocol, to cover the period from July 1, 1944 to June 30, 1945. It is desired that within the limitations of available resources, every effort be made to meet these requirements. . . .[15]

The initial American supply offering, compiled in the same way as previous protocols, was 7,383,073 short tons of supplies, including a carry-over of stockpiles from the Third Protocol. The Canadian offering amounted to 491,371 short tons. The shipping commitment was initially set at 5,400,000 short tons, equally divided between the Atlantic and Pacific. Again the USSR felt that the offering was too low and pressed for a commitment of 7,000,000 short tons. Maj.

[13] Churchill, *Closing the Ring*, pp. 263–74.

[14] (1) See below, Appendix G–3. (2) Memos, Land and Douglas for President, 11 Oct, 10 Nov, 10 Dec, 11 Jan, 10 Feb, 10 Mar 44, folder Russia—Rpts to President, WSA File. (3) Min, 7th mtg PSPC, 10 May 44, ID 334 PSPC, I.

[15] Memo, President for Secy War, 14 Feb 44, ID 031.1, VII.

Gen. Sidney P. Spalding, head of the Lend-Lease Supply Mission to the USSR, thought the figure not "unduly high" in view of the extensive destruction in the USSR and the valiant war effort the Soviet people were exerting.[16]

The principal issue, once more, was the northern route. At the insistence of the Russians, supported by the U.S. Joint Chiefs, the British agreed to start convoys over the route again in August 1944, but it was still uncertain whether the convoys would continue to run monthly. With demands for OVERLORD forces mounting, WSA was unwilling to make a binding commitment of too much shipping in the Atlantic. In the end the Russians had to settle for a definite increase of only 300,000 short tons in the shipping commitment via the Atlantic (raising the total to 5,700,000 short tons), and a promise that more would be shipped if possible. Again they were permitted to include a stockpile, this time of 600,000 tons, in their selections. Actually, in the light of experience under the Third Protocol, Soviet officials could have had little doubt that the United States would exert itself to exceed protocol quotas.[17]

The conditions on Soviet aid and the escape clauses were generally the same as those in the Third Protocol. War Department offerings made up approximately the same proportion with heavy types of equipment needed to rehabilitate transportation, communication, and other facilities predominating. Railway materials included 1,735 locomotives and 12,244 flatcars; truck offerings showed larger numbers of the very heavy types, including for the first time 40-ton tank transporters. Another important addition was mobile construction equipment for roads and airports. The War Department had also, during the Third Protocol period, accepted responsibility for certain types of industrial equipment (industrial lift trucks and tractors, cranes, power shovels, teletype apparatus, and the like), and considerable quantities of these items were included in the Fourth Protocol as part of a total offering of industrial equipment valued at $1,132,453,000.

The main change in aircraft schedules under the Fourth Protocol was the elimination of light bombers and a corresponding increase in the number of pursuit planes (from 1,200 to 2,450,) and medium bombers (from 222 to 300). Soviet bids for heavy bombers (B–17 and B–24) and for newer, larger types of transports (C–46 and C–54) were refused. Plans called for delivery of nearly all aircraft via the Alaska-Siberian ferry route, rendering the aircraft assembly facilities in Iran of little further use.[18]

[16] (1) Quote from Msg CM-IN 24565, 29 Jul 44, U.S. Military Mission, Moscow, to Protocol Committee. (2) Min, 8th Mtg PSPC, 8 Aug 44, ID 334, Pres Sov Prot Com, I. (3) Msg M 20156, U.S. Military Mission, Moscow, to Protocol Com, 13 Jul 44, ID Cables Moscow IN and OUT Jan–Nov 44. (4) Memo, Strategy and Policy Gp, OPD, for Asst Secy, WDGS, 18 Aug 44, sub: Fourth Soviet Protocol, ABC 400.3295 Russia (19 Apr 42), Sec 2. (5) JCS 874/1, 12 Aug 44, title: Resumption of Northern Convoys to Russia.

[17] (1) *Ibid.* (2) and (4). (2) For copy of final version of Fourth Protocol, see Dept of State Pub. No. 2759, *Soviet Supply Protocols.* (3) War Department offerings as first formulated were forwarded by Memo, Secretary Stimson for General York, 15 June 1944, G–4 400.3295.

[18] (1) *Ibid.* (2) and (3). (2) ID, Lend-Lease, Text, II, 1027–28. (3) On the heavy bombers see below, pp. 688–89. (4) All quantities represent those in the final version of the Fourth Protocol, but do not include Annex III. Some items were the subject of negotiation right up to the signing.

The Fourth Protocol was not formally signed until April 1945 because of difficulties over terms of payment for industrial materials. The State Department adopted the general formula that no Soviet requirements that would be more than 18 months in production could be financed under lend-lease, on the assumption that such materials were for postwar rehabilitation rather than for the war effort. Much of the industrial equipment fell into this category. The Fourth Protocol was signed without any final agreement on this issue. Delivery of industrial equipment was made subject to future settlement of terms of payment and, indeed, most of it was never delivered, owing mainly to Soviet intransigence over the interest rate.[19]

Despite the delay in signing, the Fourth Protocol went into practical effect with the expiration of the Third on 1 July 1944, following a precedent established earlier. Shipping rates were soon exceeding the high ones of the previous year. Availability of supplies and shipping, principally the latter, had now become the limiting factors on aid to the USSR rather than capacity of the routes of delivery. The British proved able to maintain the northern convoys without interruption, and with inconsequential losses, from August 1944 through the end of the war in Europe in May 1945. Shipments via Vladivostok and the Soviet Arctic ports were pushed vigorously during the summer and fall of 1944, and the diminution in the winter of 1944–45 was less than the previous year. In this situation the Persian Corridor assumed the status of an auxiliary route except for the delivery of unassembled trucks. During the last half of 1944 shipments through Iran were well below the capacity of the Trans-Iranian Railroad, and no appreciable tonnage was moved by truck. In midyear the Army and the Protocol Committee proposed disbanding the motor transport service in the area so as to free about 8,000 service troops for duty elsewhere; but the Russians urged delaying the move to preserve a reserve capacity in case the Japanese should interfere with the Pacific route or the northern convoys again be suspended. Not until November 1944 was the move finally accomplished, concomitant with the discontinuance of air assembly in Iran.[20]

By September 1944 the Russians had regained complete control of the north shores of the Black Sea, and it was apparent that great economies in both U.S. military shipping and Soviet rail transportation could be effected by shifting the lines of supply from the Persian Gulf. The Turks agreed to allow passage of the Dardanelles, and the British agreed to provide convoy escort through

[19] (1) Deane, *The Strange Alliance*, pp. 92–93. (2) ID, Lend-Lease, Text, II, 1027. (3) Memo, Gen Wright, Dir ID, for Harry Hopkins, Chmn PSPC, 25 Oct 43, sub: Policy on Industrial Equipment for Russia, ID 008 Lend-Lease. (4) Ltr, Dean Acheson, Dept State, to Gen York, PSPC, 14 Mar 44, ID 031.1, VII.

[20] (1) See below, Appendix G–3. (2) T. H. Vail Motter, *The Persian Corridor and Aid to Russia*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1952), pp. 270–71, 328, and app. A, Tables 6 and 10. (3) Msgs, M 20156, U.S. Military Mission, Moscow, to Protocol Com, 13 Jul 44; WAR 60899, Marshall to Deane, 5 Jul 44; M 20115, Deane to Marshall, 19 Jul 44; WAR 77837, Deane to Spalding, 9 Aug 44. All in ID Cables Moscow IN and OUT Jan–Nov 44. (4) Diary Entry, 12 Jul 44, Strat Log Br, Plng Div, ASF.

the Aegean Sea. By American standards, however, the Russians moved very slowly in performing the essentials in their own territory—arranging convoys in the Black Sea, rehabilitating damaged ports, and setting up truck assembly plants. Though they asked for necessary equipment from the United States, they were at first unwilling to allow U.S. personnel to visit Odessa, the main port of entry contemplated. After the usual tortuous course of negotiations, these matters were ironed out, a start made on rehabilitation, and shipments through the Black Sea inaugurated in January 1945. The first ships leaving the United States carried with them port cranes necessary to put the port of Odessa in condition to handle the heavier cargo that followed in other vessels. Two truck assembly plants were rushed to Odessa from the Persian Gulf. And despite some port congestion in the beginning, the Black Sea route soon supplanted the Persian Corridor. Few supplies were shipped from the United States to Iranian ports after January 1945, and activity in the Persian Gulf Command after that date was confined mostly to cleaning up the backlog of supplies on hand, transporting oil from the Abadan refineries to the Soviet Zone, and liquidation of facilities. Liquidation proceeded slowly, nonetheless, because of reluctance to give up the insurance the Persian Corridor route offered against the failure of the others. American port and railroad facilities in Iran remained virtually intact until after V–E Day. Much of the material made surplus by the declining need for the Iranian route, in addition to the truck assembly plants, was set up for delivery to the USSR. Several port cranes, assorted rails and accessories, and 792 10-ton trucks had been delivered by V–E Day, and 3,663 rail cars were scheduled for transfer.[21]

Even with the Persian Corridor fading rapidly from the picture, American aid under the Fourth Protocol had already surpassed the original 5.7-million short ton shipping commitment by the end of the war in Europe in May 1945. Flight delivery of aircraft was also ahead of schedule.[22]

The War Department and the Protocols

During the period from July 1943 to May 1945, when U.S. aid to the USSR mounted to its highest point, War Department supply agencies were generally successful in discharging their responsibilities under the protocols. Their relations with Soviet representatives, also, were more cordial and smooth than earlier. Yet certain problems persisted. Although total shipments under the Third and Fourth Protocols generally ran ahead of schedule, the War Department was usually slightly behind in meeting the supply commitments for which it was

[21] (1) See numerous messages exchanged between the Protocol Committee and the U.S. Military Mission in Moscow in ID Cables Moscow IN and OUT Jan–Nov 44, and in folder Russia, Box 122869, WSA Conway File. (2) JMT 73, 7 Sep 44, title: Allied Communications to Russia Via the Black Sea. (3) Various materials, mostly cables, on the closing out of the Persian Gulf Command and difficulties in early shipments to the Black Sea are in a notebook kept by F. E. Phelps of Planning Division, ASF, entitled PGO—Hands Off (hereafter cited as Phelps Notebook), ASF Plng Div, Job A46–371. (4) ID, Lend-Lease, Text, II, 1071–74.

[22] (1) FEA, *Report on Status of Soviet Aid Program as of April 30, 1945*. (2) Deliveries were only 95 percent of commitments if Annex III is included, see below, pp. 691 ff.

responsible. Against Third Protocol schedules, the War Department made available 84 percent of its offerings and in May 1945 had furnished 79 percent of its share of the Fourth Protocol, as opposed to a scheduled 82 percent.[23] The cause of this lag was not any lack of will or effort on the part of the ASF in procurement and delivery of material or any considerable retentions to meet requirements of U.S. military forces. It lay rather in the difficulty of programing Soviet requirements for timely production and in the fact that shipping was not always adequate to move certain heavier types of equipment, notably locomotives and trucks.

The Army Supply Program was drawn up by calendar year, with a major revision semiannually. The protocols covered a fiscal year. They were never made final until well after the period they were to cover had begun, and requirements frequently changed in the interim. Under this system, it was difficult to plan Soviet aid in the Army Supply Program, particularly where nonstandard items with special specifications were involved. In December 1943, General Clay proposed that the protocols be put on a calendar year basis to match the Army Supply Program, but the Protocol Committee was reluctant to recommend a change on the ground that it might be disturbing to the Soviet Union at that stage of the war.

The greatest difficulties in production planning arose in the case of signal equipment—such as radio stations, radar (where the issue of military secrecy was also involved), measuring and testing equipment—and in certain types of engineering, transportation, and industrial supplies. All these materials were normally related to special projects and dependent upon the development of the military situation in the USSR. Soviet representatives in Washington, dependent on advice from supply commissars in Moscow who themselves were not in direct touch with the battlefronts, were slow in developing and presenting both requirements and specifications. For both the Third and Fourth Protocols the ASF found it necessary to make its own advance estimates of Soviet needs in order to place contracts for timely procurement, and the estimates had to be based, not on any knowledge of conditions on the Eastern Front, but merely on previous Soviet requests and other fragmentary information. Adjustments and new requests subsequently presented by Soviet representatives proved difficult to handle. The ASF, following the Presidential directives to make all possible supplies available to the USSR, did, time after time, find the means to meet emergency Soviet requests despite the mushrooming of U.S. Army overseas requirements for special project materials in 1944 and 1945. Nevertheless, there were certain delays in procurement of special needs of the USSR, and in April 1945 the War Department was encountering difficulties in meeting commitments for construction machinery, landing mat, specialized types of trucks and tractors, rotary snow plows, ice plants, cloth, tarpaulins, and medical supplies, either be-

[23] (1) Memo, Dir ID, for Dir Materiel, 24 Jul 44, sub: Rpt to President on Action by WD under 3d Protocol Thru 30 Jun 44. (2) Rpt, Secy War to President, 28 Jul 44, ID 031.1, X. (3) Memo, Gen Shingler, Dir ID, for Dir Materiel, 7 May 45, sub: Rpt to President on Action by WD under 4th Protocol. (4) Rpt, Secy War to President, 11 May 45. (3) and (4) in ID 031.1, XII.

cause of delayed placement of contracts or competition with U.S. needs.[24]

The Soviet Union almost invariably accepted War Department offerings at their full rate in order to obtain the advantages of advance procurement planning, and then, under changing conditions, sometimes gave preference to other supplies for shipment. Increases in Third Protocol tonnage as a result of the improved shipping situation were made, at Soviet request, mainly in food, steel, aluminum, nickel, and alcohol.[25] Much of the reason for this lay in the nature of available shipping space. Total tonnage in itself was never an adequate measure of ability to ship specific items. Normally more shipping space for bulk bottom cargo was obtainable than for finished equipment, which in many cases required deck loading or special facilities for packing and handling. Shipment of petroleum products, toluol, alcohol, and other liquid cargo depended upon the availability of tankers, not dry cargo ships. The Russians often desired particular cargo only by a particular route of delivery, and there were other factors influencing the nature of cargo on each route. Finished military equipment was excluded from the Vladivostok route, though items such as petroleum, foodstuffs, trucks, locomotives, and engineering equipment of either military or civilian end-use moved over it. Before the opening of the Black Sea, the Persian Gulf, because of its superior assembly facilities, had to be the principal reliance for shipment of unassembled trucks. Medium tanks had to be shipped almost entirely over the northern route. The Iranian ports could not handle locomotives and there were too few ships on any of the routes equipped to carry them. In these circumstances, shipment of some types of military cargo lagged behind, and this lag, rather than difficulty in procurement, was the principal reason why the War Department failed to meet protocol schedules. For instance, under the Third Protocol 121,620 trucks were shipped instead of the 132,000 promised and 1,802 medium tanks instead of 2,000. Similarly, though at the Tehran Conference the greatest Russian emphasis had been put on locomotives, many still had to be held back under the Third Protocol because of lack of ships capable of delivering them. Movement of locomotives was speeded up, beginning shortly after the Tehran Conference, by adaptation of Soviet flag vessels in the Pacific and performance under the Fourth Protocol was better.[26]

Regulation of assignments to the USSR was normally accomplished at the production end rather than in distribution. The protocol schedules were, at least as long as the war in Europe continued, virtually ironclad commitments

[24] (1) ID, Lend-Lease, Text, II, 1023–28, 1050–58, 1074–83. (2) Memo, Gen Clay for Executive PSPC, 22 Dec 43, sub: Fourth Soviet Protocol, ID 031.1, VI, Part II. (3) Memo, Gen Shingler, for Dir Materiel, 6 Apr 45, sub: Rpt to President on Action by WD under 4th Protocol, ID 031.1, XII. (4) Other Monthly Rpts of Secy War to President and related material in ID 031.1, III–XII. (5) For correspondence relating particularly to the negotiation of the Fourth Protocol see ID 031.1, Volume VIII.

[25] (1) Memo, Col L. C. Strong, Liaison Br, ID, for Gen Wright, 28 Feb 44, sub: Protocol Tonnage, ID 031.1, VII. (2) Deane, *Strange Alliance*, pp. 96–97. (3) Msg 138, American Embassy, Moscow, to Dept State, Harriman for Hopkins, 15 Jan 44, OPD Exec 9, Book 16, Paper 364.

[26] (1) Rpt, Secy War to President, 28 Jul 44. (2) Msgs, 10042, SEXTANT to AGWAR, CM-IN 15521, 25 Nov 43, Somervell for Styer; 10056, CM-IN 16123, Douglas, WSA to MacPherson, WSA, 26 Nov 43. All in OPD Exec 5, Item 13.

for delivery. Military materials were formally assigned by the Munitions Assignments Board, but that body's practical jurisdiction over the protocols was limited mainly to adjustments in the rate of delivery and to decisions on Soviet bids for critical equipment that arose outside the protocol commitments. The responsibility for preventing interference with deliveries for the U.S. Army rested for the most part with the ASF agencies that drew up the protocol schedules and reviewed extraprotocol requests for War Department materials.

Under this system, regulation of USSR stockpiles was a major problem. Because of the difficulties caused by excessive backlogs during the first two protocol periods, the Army placed the greatest emphasis on limiting the stockpiles to reasonable proportions. Under the Third Protocol the Soviet Union was to be allowed a stockpile of 500,000 tons and under the Fourth 600,000 tons. However, the Russians began the Third Protocol period in July 1943 with a stockpile of 1,200,000 tons and, in fact, never brought it down to the stipulated figures. General Wright, head of the International Division, ASF, secured a clause in the Third Protocol, one that was continued in the Fourth, reserving to the United States "the right to limit the size of individual stockpiles, either by control of production or diversion of product, or both, when in its judgment such action is in the best interest of the common cause," but the clause was hedged by another provision which said that making up resulting arrearages was to be given "all possible consideration."[27]

In an effort to give practical effect to this principle, the ASF attempted in fall 1943 to secure application of its own stock control procedures to all supplies for the USSR, but the Protocol Committee was unwilling to go this far. The committee did institute a program for controlling the flow of supplies at the production end, essaying in each case to get Soviet representatives in Washington to cut back programs of their own free will when it was apparent that materials would pile up in storage. Large backlogs of trucks and locomotives were forestalled in this manner. Along the same line, the committee adopted the principle that when the Russians made requests for new materials, they must cancel part of their existing requirements to provide the necessary shipping space. As an example, during the Third Protocol period, the Russians canceled requirements on the War Department for ammunition and scout cars in order to permit extraprotocol shipments of pipeline, 40-mm. antiaircraft guns, artillery pieces, and explosives. Only in extreme instances did the War Department resort to the repossession procedures administered by the MAB, and then Soviet representatives were given many warnings and several extensions before any repossession action was taken. Only in the case of 48 wreckers, repossessed in June 1944 after eight months in storage, did the USSR suffer any serious inconvenience, for U.S. Army requirements prevented resupply of these wreckers when the USSR bid for them again.[28]

[27] (1) See final texts of Third and Fourth Protocols. (2) Memo, Gen Wright for Gen Burns, 14 Sep 43, sub: Revision of 3d Russian Protocol, ID 031.1, V.

[28] (1) Memo, Col Boone, Actg Dir ID for CG ASF, 11 Sep 43, sub: USSR Reqmts with related papers in ID 031.1, V. (2) Memo, John N. Hazard, Secy PSPC, for Gen Burns, 18 Oct 43. (3) Ltr, Burns to

In general, adjustment of the Soviet program to both shipping capabilities and the changing war situation in the USSR itself was a difficult matter. Soviet representatives in the United States could take little action without constant reference to Moscow, and U.S. representatives in or out of the Soviet Union were permitted to get little firsthand information on Soviet needs on which to base their own conclusions.

The Deane-Spalding Mission

The main effort to gain more firsthand information on Soviet needs and on the use of American supplies in the USSR was made by the U.S. Military Mission established in Moscow in October 1943. At that time the United States reorganized its representation in the Soviet Union. Averell Harriman replaced Admiral William H. Standley as Ambassador, and at Harriman's suggestion the military mission was created with General Deane, formerly U.S. Secretary of the CCS, as its head. The military mission was to work with the Embassy in promoting the closest possible co-ordination of the military efforts of the United States and USSR. The old Supply Mission to the USSR under Col. Philip Faymonville, which had handled lend-lease matters independently in the Soviet Union since October 1941, was supplanted by a new lend-lease mission headed by Brig. Gen. Sidney P. Spalding, long assistant to Maj. Gen. James H. Burns on the Munitions Assignments Board and the President's Soviet Protocol Committee. Spalding's mission was subject to the over-all co-ordination of the Ambassador and the chief of the military mission, although he reported directly to the Protocol Committee. In practice his group functioned virtually as a part of Deane's mission. Though both missions were expected to render such technical assistance as the Russians requested, neither was given any power or authority to investigate or make more than informal recommendations on lend-lease requests. The United States Government had evidently decided, after its bitter experience with the Greely mission in early 1942, that the USSR would hardly permit any group charged with the latter functions to enter the country.[29]

Both General Deane and Ambassador Harriman soon became convinced that the United States should establish a closer control over the flow of supplies to the USSR now that the crisis in the Russo-German War had passed. They did not, at least in the beginning, want power to screen all Soviet requests as MacArthur screened Australian requests or Stilwell did those of the Chinese; they merely wished to force Soviet officials to give them fuller information on, and justification for, their requirements for critical items. In January 1944 Deane learned that many lend-lease diesel marine engines were rusting in storage be-

K. I. Lukashev, SGPC, 22 Oct 43. (4) Memo, Gen Wright for Dir Materiel, ASF, 3 Dec 43, sub: Mtg of Subcom on Supplies of PSPC. (2), (3), and (4) in ID 334 Pres Sov Prot Com, I. (5) Min 3359, 141st mtg MAC(G), 11 May 44; min 3483, 147th mtg, 22 Jun 44. (6) Memo, Gen Wright for Executive PSPC, 26 Jan 44, sub: Soviet Items on West Coast, Unshipped for Over 60 Days. (7) Memo, Gen York for Gen Wright, 31 Jan 44, same sub. (6) and (7) in ID 400.318 Russia I. (8) ID, Lend-Lease, Text, II, 1095–98.

[29] (1) For background material on the formation of the Deane mission see OPD Exec 1, Item 21, Moscow Mission September 1943, and Deane, *Strange Alliance*, pages 9–12. (2) On the Greely mission see Motter, *The Persian Corridor and Aid to Russia*, pages 65–81.

cause the Soviet Union had not prepared hulls for their installation, a circumstance that gave rise to the suspicion that much other lend-lease material might be similarly misused. The USSR was, at the time, pressing for an increase in protocol tonnages of aluminum, nickel, alcohol, and copper wire, all materials vital to American war production. A. I. Mikoyan, Soviet Commissar for Foreign Trade, turned aside lightly all queries as to the use the Russians intended to make of the materials, promising information in the near future but intimating clearly that he thought Soviet representatives in Washington could secure the materials without such specific justification as requested. In mid-January 1944, Deane and Harriman both recommended to Washington that before items in critical supply were allocated to the USSR, the military mission should be required to obtain information and submit recommendations that would indicate the relative urgency of the Soviet need.[30]

In Washington, the War Department and the JCS readily agreed to the application of the Deane-Harriman proposals, but it proved impossible to overcome the pronounced fear of wounding Soviet sensibilities that prevailed in circles close to the President. The JCS drafted a memorandum for the President on 17 January 1944, asking approval of Deane's recommendations. When it was discussed with Isadore Lubin, statistician on the MAB and an intimate of Harry Hopkins, Lubin indicated that there would be political objections. He recognized "some merit" in the proposal, but felt that "if it were put into effect it should be done gradually and not with a full broadside at the Soviets."[31] Admiral Leahy decided that the memorandum should not be sent to the President pending word from Hopkins who at that time was in the hospital and not permitted to have visitors. Somervell proposed to talk to Hopkins as soon as he could, but there is no record that the conversation took place.

At any rate, the military representatives were overruled in conferences between Hopkins, Leo Crowley, head of FEA, and Edward Stettinius, Acting Secretary of State. On 25 February 1944 the Protocol Committee informed Harriman that it would be "inadvisable to subject USSR requirements to screening in Moscow or to reject Soviet requests because of failure to provide operational or other justification" to the military mission. They argued that limitations on ocean tonnage still had the effect of forcing the Russians to give "continuous preference to badly needed high priority items," and that final determination of offerings to the USSR must be made in Washington rather than in Moscow since complete information on overall U.N. requirements, resources, and shipping were available only to the authorities there.[32]

[30] (1) Msg 138, American Embassy, Moscow, to Dept State, Harriman for Hopkins, 15 Jan 44, OPD Exec 9, Book 16, Paper 364. (2) Msg CM-IN 11287, Deane to JCS, 17 Jan 44. (3) Deane, *Strange Alliance*, pp. 96–98.

[31] (1) Memo, Secy JCS for Gen Handy, 21 Jan 44, sub: Policy as to Furnishing of Items in Short Supply to the USSR. (2) Memo, Capt M. Freseman, USN, for Adm Leahy, 20 Jan 44. Both in ABC 400.3295 Russia (19 Apr 42), Sec 2.

[32] (1) Msg 407, Stettinius to Harriman, 25 Feb 44. (2) Memo, Gen Somervell for CofS, 19 Jan 44. Both in OPD Exec 9, Book 16, Paper 364. (3) Adm Leahy's note on memo from Capt Freseman, 20 Jan 44. (4) Memo, Gen Styer for Gen Somervell, 31 Jan 44, folder CG ASF 1943–44, CofS ASF file.

Harriman protested that his proposals had been misunderstood, that neither he nor Deane had contemplated any far-reaching decisions on the scope of the Soviet Aid Program in Moscow, only a limited screening as a lever to get information on Soviet requirements. He did not feel that limitations on ocean tonnage would necessarily continue in the future, as they had in the past, to restrict Soviet requests to their more urgent needs. "We lay ourselves wide open to just criticism at home," Harriman wrote, "unless we now begin to get at least some knowledge of the purposes for which they are using our shipments."[33]

Harriman and Deane continued to urge on every suitable occasion that the military mission be permitted to screen Soviet requests for critical materials. In August 1944 Deane indicated he wanted to go much further and have the mission screen all military requirements for the USSR. In December 1944 he expressed to General Marshall his disgust at the lack of any positive action on any of the proposals: "The situation has changed but our policy has not. We still meet their requests to the limit of our ability, and they meet ours to the minimum that will keep us sweet."[34]

Despite the barriers placed in their way, Deane and Spalding did furnish some information on Soviet requirements, using intuition, common sense, and the little knowledge they could glean from their own contacts and those of members of their respective missions. The information had at least some influence on the formulation of the Fourth Protocol schedules. The mission, however, had no lever with which to force Soviet officials to give operational justification for their supply needs as long as the normal channel for transmission of requests stayed in the Soviet Government Purchasing Commission in Washington. The Soviet officials probably lost more than they gained by their attitude. Deane and Harriman were prepared to support Soviet requests if justified by "little more than a sob story." General Spalding, who had particular responsibility for lend-lease, was never overly critical of Soviet requests. On the few occasions that Spalding and Deane were permitted to travel and observe, they obtained or speeded up shipments of items such as DUKW's, trucks, landing mat, and port cranes sorely needed in the areas they visited.[35]

Milepost: Supply for the USSR's War Against Japan

One of the primary tasks of the Deane mission was to arrange for military collaboration with the USSR in the war against Japan. At the Tehran Conference in December 1943, Stalin clearly indicated that the western Allies could count on the USSR entering the war against Japan at the propitious moment after the defeat of Germany. American military planners, if they did not consider Soviet entry an absolute essential to victory over Japan, did believe it highly desirable. The JCS view, as stated

[33] Msg 699, American Embassy, Moscow, to Secy State, 2 Mar 44. ABC 400. 3295 Russia (19 Apr 43), Sec 2.

[34] (1) Deane, *Strange Alliance*, p. 84. (2) Memo, BG F.N.R. [Gen Roberts], OPD, 12 Aug 44, ABC 400.3295 Russia (19 Apr 43), Sec 2.

[35] (1) *Ibid.* (1), pp. 91, 99–100, 210–11. (2) See also msgs in ID Cable file Moscow IN and OUT Jan–Nov 44.

to the President just before the Yalta Conference, was:

> We desire Russian entry at the earliest possible date consistent with her ability to engage in offensive operations and are prepared to offer the maximum support possible without prejudice to our main effort against Japan.[36]

The Americans hoped to use Siberian bases in the strategic bombing of Japan and thought the Soviet Siberian Army could effectively prevent the withdrawal of the Japanese Kwantung Army from Manchuria to the home islands to oppose an American assault. It seems fair to say that, after late 1943, they counted more heavily on the USSR to defeat the Japanese on the continent of Asia than on either the Chinese or the British. All operations on the Asiatic mainland were, after the SEXTANT Conference, considered subsidiary to the main effort in the Pacific; but in the whole scale of subsidiary effort in Asia, the prospective Soviet contribution appears to have ranked highest in American eyes.

The value of Soviet military collaboration would, in the American view, clearly depend on genuinely combined Soviet-American advance planning and preparation. The U.S. staff reasoned that, once the USSR was at war with Japan, the Japanese Navy could certainly cut the supply line to Vladivostok and the Japanese Army could probably initially cut the Trans-Siberian rail line. An advance build-up of supplies in Siberia against these contingencies, to tide the Soviet Siberian Army over until one line or the other could be reopened, therefore seemed imperative. It seemed equally imperative to begin as soon as possible the even more elaborate build-up required for strategic bombing from Siberian air bases and to plan for maintaining at least a minimum flow of supplies across the Pacific to Siberia in the event of a Soviet-Japanese clash. Assuming that the United Nations could maintain control of the Sea of Okhotsk north of Vladivostok, the port of Nikolaevsk and certain smaller ports in the Amur River region could serve as supply bases, as could Petropavlovsk on the Kamchatka Peninsula. But these ports were relatively undeveloped, and were open only from June through October; inland clearance facilities were poor. In order to keep even this line open, the Americans postulated that a campaign to seize one of the Kurile Islands would be required, and to support such a campaign and subsequently run convoys through the Sea of Okhotsk, naval and air bases on Kamchatka must be prepared.[37]

Even after Stalin's promise at Tehran, General Deane found Soviet officials curiously indifferent to any of these things, seemingly fearful of compromising their neutrality too early and of permitting Americans to make surveys in Soviet territory. On the matter of Siberian air bases, they blew hot and cold by turns. When in April 1944 the USSR requested 500 B–17 or B–24 bombers as part

[36] (1) Memo, JCS for President, 23 Jan 45, in Dept State, *The Conferences at Malta and Yalta*, pp. 396–400. (2) Min, 1st Plenary Session, EUREKA Conference, Tehran, 28 Nov 43. (3) For a detailed treatment of the military view on this subject see Dept of Defense Release, 19 October 1955, *The Entry of the Soviet Union into the War Against Japan: Military Plans, 1941–45*.

[37] (1) ASF Strat Log Study 57, no date, sub: Soviet Far East, ASF Rpt 13, Part 3, ASF Plng Div files, Job A 47–147. (2) JLC 260/M, 15 Jan 45, title: Log Support of USAF in Pacific Russia. (3) JCS 1176/6, 18 Jan 45, title: Russian Participation in War Against Japan.

of the Fourth Protocol, Deane and Harriman sought to use the request as a lever to force the Soviet hand, reasoning that commencement of preparation of the bases could be made a condition on furnishing the USSR a small strategic air force for use against Japan. After some persuasion the JCS reluctantly adopted this approach, but the Russians continued to delay any action, in part, Deane thought, because the Americans proposed to have six groups to their four. In the end no heavy bombers were included under the Fourth Protocol. Though negotiations continued afterward, the attitude of the Soviet officials remained an enigma and the day of preparation of the Siberian airfields was postponed time after time on one pretext or another.[38]

During the course of these frustrating negotiations, the military mission continued to press on other fronts for logistical preparations for eventual Soviet participation in the war against Japan. In April 1944 Deane urged that the northern convoys be reinstituted as soon as possible after OVERLORD to permit supply shipments via the Atlantic for that purpose. In May Spalding proposed that a special effort be made to ship large quantities of supplies to Vladivostok during the summer months while navigation conditions were best in order to provide a ready-made stockpile in Siberia. There was even consideration given to risking Japanese interference by shipping military supplies over the Pacific route. On 22 June, after having finally been permitted to visit Vladivostok, Spalding urged that additional ships be transferred to the Soviet flag in the Pacific during the summer months, the ships to be diverted to other services during the winter.

The JCS, on the advice of the Joint Military Transportation Committee, refused to consider further transfers to the Soviet flag in view of the shortage of cargo shipping in the Pacific and doubts that any greater tonnages could be unloaded expeditiously at Vladivostok. The best that could be done, they decided, would be to speed up the repair of vessels of the Soviet lend-lease fleet on the Pacific coast, an effort that was falling behind because of overcrowded facilities. It would be more practicable, the JMTC thought, for the Soviet Union to build its stockpile from supplies sent by the northern route and transshipped over the Trans-Siberian Railway.[39]

Shipments over the Pacific route were accelerated during the summer months but no more ships were transferred to the Soviet flag. Americans were not in a position to know to what extent materials shipped by either this or the northern route were used to augment stocks in Siberia. Indeed, there is no indication that Soviet officials showed any great enthusiasm for the Deane-Spalding proposals in the summer of 1944. Moreover, they gave out little information on what was being done to prepare facilities in the Amur River region or on Kamchatka, and they refused to allow any American survey

[38] (1) Deane, *Strange Alliance*, pp. 226–39. (2) JPS 442/3, 4 May 44, title: USSR Request for Heavy Bombers and Transport Aircraft.

[39] (1) JMT 55/D, 24 Apr 44, title: Resumption of Northern Convoys to Russia. (2) JCS 901, 9 Jun 44, title: Logistical Support of USSR for Possible Opns Against Japan, with appendixes. (3) JCS 901/1, 13 Jun 44, and JCS 901/3, 1 Jul 44, rpts from JMTC, titles as in (2). (4) Msg 722, U.S. Military Mission, Moscow, to AGWAR, Spalding to JCS, 22 Jun 44, Incl B, JMT 62/2/D, 24 Jun 44.

parties into those areas. Nevertheless, the American staff continued contingent planning for a North Pacific operation to open a route through the Kuriles with forces to be made available from Europe once Germany was defeated.

In conferences between Churchill, Stalin, Harriman, Deane, and Sir Alan Brooke during the British Prime Minister's visit to Moscow in October 1944, Stalin temporarily cleared the air. He agreed definitely that the "Soviet Union would take the offensive against Japan three months after Germany's defeat provided the United States would assist in building up necessary reserve supplies and provided the political aspects of Russia's participation had been clarified."[40] Moreover, the Russian leader indicated that airfields in the Maritime Provinces and on Kamchatka would be provided, and he offered the use of Petropavlovsk as a naval base. He said that great improvements were under way at ports in the Amur River area and that a rail line would be built connecting the ports with the Komsomolsk area to the south in which the Americans had expressed interest as the site for their air bases. Staff planning on these matters could begin immediately. Stalin placed his primary emphasis, however, on the supply build-up for Soviet ground forces in the Far East, and Soviet representatives presented an additional list of supplies they wished delivered via the Pacific route before 30 June 1945. This list included 500 transport aircraft; 230,000 tons of POL supplies including liquid products, collapsible gas stations, tanks, and pipelines; 186,000 tons of food and fodder; 14,580 tons of clothing material and hospital supplies; 296,385 tons of automotive vehicles, road machinery, and airdrome equipment, including 1,000 DUKW's and 32,000 trucks; 306,500 tons of railroad equipment, including 500 locomotives and 6,000 rail cars; 20,175 tons of miscellaneous engineer and signal equipment; medical supplies valued at $3 million; and 4,200 tons of small naval vessels and port equipment. All of these were semimilitary types of supplies previously delivered over the Pacific route. The USSR evidently intended to build up its reserves of strictly military equipment by way of the Trans-Siberian Railway. The total requested from the United States came to 860,410 short tons of dry cargo and 206,000 tons of liquid POL, all over and above commitments already made under the Fourth Protocol.[41]

This formidable list of requirements, cabled to Washington by General Deane, arrived at a time when the fall shipping crisis was coming to a head.[42] The Soviet program—designated MILEPOST—was originally treated as a military project and referred to the JCS rather than the Protocol Committee for decision. The Joint Logistics Committee undertook a study on the premise that affirmative action was desirable but that the Soviet requests were not to be met "at the expense of operations in Europe or those scheduled or projected in the Pacific."[43] The JLC concluded that the requirements should be accepted in principle, but only the part that could be furnished in 1945 should be scheduled

[40] Deane, *Strange Alliance*, p. 247.

[41] (1) *Ibid.*, pp. 241–49. (2) Dept State, *Conferences at Malta and Yalta*, pp. 361–74. (3) JLC 206/D, 19 Oct 44, title: Supplies and Equipment Requested by USSR.

[42] See above, ch. XXII.

[43] JCS 1138, 26 Oct 44, rpt by JLC, title: Supplies and Equipment Requested by USSR.

for production. On this basis, a commitment for only 46 percent, or about 400,000 tons, of the dry cargo could be undertaken. Certain items, such as locomotives, rolling stock, naval vessels, transport aircraft, and heavy trucks, were ruled out, but the entire POL requirement was accepted subject to availability of shipping. Shipping in any case would be the big problem, the JLC thought, since it would mean new transfers to the Soviet flag in the Pacific in the face of an over-all shortage of cargo shipping in that area and operations in winter when ice conditions lessened capacity on the Pacific route. The committee therefore thought the commitment could not "be based on a definite guarantee as to the time this tonnage will be moved," and speculated that twenty sailings per month might be available beginning no earlier than March 1945. As an interim measure, the committee suggested that the USSR might be asked to substitute tonnage for MILEPOST for supplies already in the Fourth Protocol.[44]

The JCS accepted the JLC report as the basis for the MILEPOST project and asked that the Protocol Committee administer it. The ASF, to whom responsibility for procurement of most of the supplies was entrusted, soon reported that the proposed availability schedules could be improved considerably if the USSR were willing to accept certain substitutions and diversions from the Fourth Protocol, and if MILEPOST shipments were given an operational priority (A-1-*b*-5). Despite the fact that OPD ruled against the operational priority (it would have been higher than the A-2 priority granted U.S. troops on movement orders) and that the USSR refused many of the substitutions, the ASF still found that by adjustment of production or release schedules, use of Persian Gulf surplus, and diversions from the Fourth Protocol it could provide virtually all the material requested, not, it is true, by 30 June 1945 but by stretching out requirements to the end of the year. By February 1945 schedules calling for delivery of 840,000 short tons of dry cargo out of 914,000 requested (the USSR had meanwhile added a request for 54,000 tons of landing mat) had been set up. And since the original Fourth Protocol commitment for POL had been fulfilled by the end of 1944, further shipments by the Soviet tanker fleet in the Pacific in 1945 promised to surpass the MILEPOST targets for liquid cargo. Moreover, by February, it also appeared that the naval vessels could be made available later in the year. At Yalta General Deane was able to persuade the AAF to promise the USSR 150 C–47 transports to supplement the limited rail facilities in Siberia. On 3 April 1945 the entire revised MILEPOST list was formally added to the Fourth Protocol as Annex III.[45]

[44] (1) *Ibid.* (2) JCS 1138/2, 11 Nov 44, title: Supplies and Equipment Requested by USSR. (3) Memo, S&P Gp, OPD, for Asst Secy, WDGS, 27 Oct 44, same sub, ABC 400.3295 Russia (19 Apr 42), Sec 2.

[45] (1) ID, Lend-Lease, Text, II, 1036–40, 1071–74. (2) Memo, Gen Lutes for Gen Roberts, 15 Nov 44, sub: Supplies and Equipment for MILEPOST. (3) Memo, Gen Tansey for Gen Roberts, 15 Nov 44, same sub. (2) and (3) in ABC 400.3295 USSR (24 Apr 44), Sec 2. (4) JCS 1138/3, 27 Jan 45, title: Supplies and Equipment Requested by USSR. (5) JCS Info Memo 360, 4 Feb 45, title: Summary of Supplies and Equipment for "Milepost." (6) Deane, *Strange Alliance*, pp. 99, 249–50. (7) Msgs, WAR 51933, PSPC to Spalding, 25 Oct 44; M 21510, Spalding to PSPC, 26 Oct 44; WAR 53251 to Spalding, 27 Oct 44; all in ID Cables Moscow IN and OUT Jan–Nov 44. (8) Dept State, *Conferences at Malta and Yalta*, pp. 834–39.

Meanwhile, a shipping program had been arranged in the face of even greater obstacles and competing demands. The general story of the steps taken to alleviate the shipping crisis in fall 1944 has been told elsewhere. In the proposals made by General Somervell in November, provision was made for 85 sailings for MILEPOST, beginning with the transfer of 16 ships to the Soviet flag in the Pacific in December 1944. Shipping for this purpose and for simultaneously reducing deficits for support of Pacific operations was to be made available from the Atlantic, mainly by reductions in the British Import Program and in protocol shipping via the Atlantic. The JCS accepted this solution subject to the proviso that "if the full number of ships proposed cannot be obtained from the Atlantic or other sources, the deficit will be applied to the proposed Russian requirement and not to shipping for Pacific areas."[46]

WSA objected to cutting either British or Soviet quotas until the military services had cleared up stagnant pools of theater shipping, and the President, while agreeing to negotiation with the British on releases, forced the JCS to take positive action to reduce congestion. At the same time, he made no specific mention of cutting protocol shipments in the Atlantic and gave the MILEPOST program a high priority:

> While the additional Russian request complicates the program still further, I am convinced we should move at once to get these supplies moving. Specifically, I wish that the 16 additional ships required for December for Russian account be made available and that prior to the 10th of December a decision be reached whether or not the ships required for Russian account in January can be allocated. I consider this a matter of utmost importance, second only to the operational requirements in the Pacific and Atlantic.[47]

WSA provided the 16 ships in December, taking them as far as possible not solely from the Atlantic but "from vessels . . . not as adaptable to military needs as Liberty ships" in both the Atlantic and Pacific. Those from the Pacific were taken with the understanding that the tonnage was to be replaced. The MILEPOST program was inaugurated three months ahead of the March 1945 date the JLC had first predicted, and the ASF was hard put to it to get the necessary cargo to port to fill the ships. Some sailings were shifted to the east coast. By 10 December, also, the JMTC had agreed, despite the fact that "deficits will still exist," to allocate twenty additional ships to the USSR from Atlantic services in January 1945.[48] By the end of December a total of 50 ships had either been earmarked for, or had already been turned over to, the Soviet flag in the Pacific and 2 more were earmarked shortly afterward, against an ultimate target of 85.[49]

In the event, only 37 ships were actually transferred. As the Joint Logistics Committee had warned, the Pacific route

[46] (1) JCS 1173/1, 18 Nov 44, title: Remedies for Existing and Prospective Shortages in Cargo Shipping. (2) See above, ch. XXII.

[47] JCS 1173/2, 21 Nov 44, title: Remedies for Shortages in Shipping, app. A.

[48] (1) JCS 1173/9, 9 Dec 44, rpt by JMTC, title: Remedies for Shortages in Shipping. (2) Memo, Adm Land for President, 9 Dec 44, sub: Merchant Shipping, WSA Conway Reading File, Nov–Dec 44, Box 122894. (3) Msg WAR 69405 to U.S. Military Mission, Moscow, 25 Nov 44, with related material in OPD 400 TS, and ABC 400.3295 USSR (24 Apr 42), Sec 2.

[49] Ltr, Conway to Harriman, 29 Dec 44, WSA Conway Reading File Nov–Dec 44, Box 122893.

proved incapable of carrying the load imposed upon it during the winter months. Ice in Tartary and La Perouse Straits and congestion at Vladivostok convinced WSA by late February that the pace of the MILEPOST shipping program in the Pacific would have to be slowed down. Fifteen of the ships intended for MILEPOST were instead allocated to meet urgent Navy requirements for mounting the invasion of Okinawa. In compensation, fifteen additional sailings were allotted to Soviet Protocol account in the Atlantic. The goal of 85 ships was quietly abandoned, and a decision was reached that the 37 ships allocated could, by making repeated trips, fulfill any MILEPOST requirements that could not be met in Pacific shipping already turned over to the Soviet flag.[50]

MILEPOST shipments were not far behind schedule on V–E Day, and any deficits were more than remedied in May and June 1945. Meanwhile, regular Fourth Protocol shipments hardly suffered at all. The only month in which any appreciable cutback occurred was January 1945, and heavier shipments in the three months following more than made up for it. In November 1944 it was contemplated that, with MILEPOST shipments and the proposed reductions in the Atlantic, a total of 7,063,000 short tons of Soviet aid would be shipped by 30 June 1945. The actual total was 7,200,000 short tons, and this despite a rapid cutback in Atlantic shipments after 12 May.[51]

While the Americans were working so diligently to fulfill their supply obligations, Soviet officialdom continued as dilatory and obstructionist as before in getting any combined planning under way. With the effort at genuine collaboration stymied, General Deane turned his planning teams to studies of the very premises on which the Americans were operating—the actual value or necessity of both the Siberian air project and the proposed operation for opening a supply route through the North Pacific. The planners concluded that, this late in the war, the limited results to be obtained by establishing a U.S. Strategic Air Force in Siberia would not justify the high cost, and that the supply route would not be vital to Soviet success in a war against Japan though it would be insurance against initial reverses and prolongation of the war. Deane consequently recommended to the JCS that the United States withdraw from all these projects and await Soviet initiative to resume them. In mid-April 1945 the JCS approved. The only contingent planning that continued was for a naval operation to force passage of convoys through the North Pacific.

The whole broad plan for Soviet-American collaboration in the war against Japan died without any real regrets, it appears, on the Soviet side. In retrospect, it seems likely that all the Soviets had originally expected out of the negotiations was an extension of

[50] (1) Msg WAR 42974, WSA and PSPC to U.S. Military Mission, Moscow, 23 Feb 45, Phelps Notebook, ASF Plng Div files. (2) Msg DTG 110917 Z, NCR 3562, ALUSNA, Moscow to COMINCH, 11 Mar 45, CM–IN 12463, 12 Mar 45. (3) Memo, CG ASF for U Secy War, 24 Feb 45, sub: Weekly Situation Report, ASF Ind Pers Div File Rpts to Under Secy War and Secy War.

[51] (1) FEA, *Rpt on Status of Soviet Aid Program as of June 30, 1945*. Actual shipments from 1 July 1944 through 30 June 1945 were 110 percent of Fourth Protocol commitments, including Annex III (MILEPOST). (2) See below, Appendix G–3. (3) Msg, WAR 67471 to U.S. Military Mission, Moscow, 23 Nov. 44.

their lend-lease supply program, and in this they were outstandingly successful.[52]

The Soviet Aid Program After V–E Day

On 30 September 1944, President Roosevelt informed the Secretary of State that the instructions issued on 9 September suspending all planning for lend-lease after V–E Day should not apply to "lend-lease negotiations current with the Government of the USSR."[53] Then on 5 January 1945 he issued the last of his directives on aid to the Soviet Union, ordering the formulation of a Fifth Protocol covering the period 1 July 1945 to 30 June 1946, and emphasizing the importance of aid to the USSR in almost precisely the same terms as a year earlier.[54] Though the reason given continued to be the "defeat of Germany," even the most pessimistic of prophets at the time hardly expected the war in Europe to continue until mid-1946. Roosevelt thus clearly implied that aid to the Soviet Union would continue uninterrupted after V–E Day, despite the fact that the USSR would not then be at war with Japan. Yet doubts and misgivings plagued the heads of all the agencies involved, and the opposition in Congress to supplying the USSR under lend-lease for any purpose other than the pursuit of the war was unmistakable. Roosevelt died on 12 April 1945 without having clarified his policy further.

The 5 January directive, meanwhile, had led to the usual negotiations with the Russians on their requirements for a Fifth Protocol. Planning was well along by mid-April, when it became obvious that final victory over Germany would not be long delayed. Averell Harriman and General Deane, both then in Washington, felt that a change in lend-lease policy was now imperative as a corollary to the change in policy on combined planning for Soviet entrance into the war against Japan. In conferences with the State Department and FEA, Harriman urged that no Fifth Protocol be signed, that the escape clauses in the Fourth be invoked on V-E Day, and that further aid to the USSR be limited to needs that could positively be justified for the war against Japan. Deane asked General Marshall to seek JCS support for these views. Meanwhile, General York, acting chairman of the Protocol Committee, urged on everyone the necessity for an early decision, for without it, he said, it would be impossible to stop the massive shipments for May and June —roughly 700,000 tons each month.

Nevertheless, V–E Day passed without a final decision. The Joint Logistics Committee on 2 May 1945 presented the JCS with a draft letter for the President embodying Deane's views, but it was apparently held pending final decision in the State Department. That decision was made in a meeting of all interested agencies, including the Army and Navy, held at the State Department on 10 May 1945, when a more drastic policy than the one

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[52] (1) Deane, *Strange Alliance,* pp. 249–66. (2) Dept State, *Conferences at Malta and Yalta,* pp. 757–62, 834–39, 841. (3) JCS 1313, 16 Apr 45, title: Revision of Policy with Relation to Russia. (4) JCS 1313/1, 16 Apr 45, title: Specific Actions to be Taken Under Revised Policy with Russia. (5) JCS 1313/2, 23 Apr 45, title: Revision of Policy with Relation to Russia.

[53] (1) Ltr, President to Cordell Hull, 30 Sep 44, OPD 400.3295 (Russia), Case 21. (2) See above, ch. XXVI.

[54] Memo, President for Secy War, 5 Jan 45, ID 031.1, XI.

proposed by the military authorities was drawn up and approved in principle.[55]

This policy, expressed in a memorandum sent on 11 May to the new President, Harry S. Truman, by Acting Secretary of State Joseph Grew and Leo Crowley of FEA, proposed that the supply program for the USSR be immediately and drastically curtailed. So long as it was anticipated that the USSR would enter the war against Japan, deliveries under Annex III of the Fourth Protocol should continue, as should supplies to complete industrial plants for which shipments had already begun; but other supplies on hand or on order for the Fourth Protocol should be delivered only when they were required to support military operations against Japan. "Other lend-lease supplies now programmed for the USSR should be cut off immediately as far as physically practicable, and such goods and the related shipping tonnage should be diverted to approved supply programs for western Europe." There should be no Fifth Protocol. Future supply programs for the USSR should be designed to meet new military situations as they arose, "on the basis of reasonably adequate information regarding the essentiality of Soviet military supply requirements and in the light of all competing demands for supplies in the changing military situation." The residuary Soviet aid program would continue to get existing priority ratings for production, and the Protocol Committee would continue to administer it as before. The Soviet Union would also be allowed to purchase other material for cash if it so desired.[56]

President Truman approved the policy on 11 May, informing Grew and Crowley that they should "proceed on the assumption that the USSR will enter the war against Japan."[57] The new policy, in its first expression, was even tougher than the policy Deane had long been urging. As General York succinctly put it, the new approach should be "when in doubt hold" instead of the former approach of "when in doubt give."[58]

In interpretation and application, however, the new policy at first turned out to be somewhat less tough than it sounded. As General York had warned, it took time to reverse the momentum behind the protocol program. A literal interpretation of the State-FEA memorandum meant that even ships at sea should be turned around, supplies unloaded, and distinction made between those intended for the war against Japan and those for European Russia. The Protocol Committee at first proposed to so interpret the memorandum, though

[55] (1) Memo, Gen Shingler for CG ASF, 18 Apr 45, sub: Lend-Lease Policy Toward USSR Following Collapse of Germany, Dir Materiel file Lend-Lease. (2) JCS 1325, 26 Apr 45, title: Allocation of U.S. Supplies to USSR. (3) JCS 1325/1, 2 May 45, rpt by JLC, same title. (4) Memo, Gen Lincoln for CofS, 11 May 45. (5) Record of tel conv, Gen York with Gen Hull, 27 Apr 45. (6) Memo, Gen Lincoln for Asst Secy, WDGS, 11 May 45, sub: Allocation of U.S. Supplies to USSR. (4), (5), and (6) in ABC 400.3295 Russia (19 Apr 42), Sec 3.

[56] (1) Memo, Joseph C. Grew, Actg Secy State, and Leo Crowley, FEA, for President, 11 May 45, ABC 400.3295 Russia (19 Apr 42), Sec 3. (2) This policy was officially promulgated in Memo, Gen York for Members, PSPC, 15 May 45, ID 334 Pres Sov Prot Com, II.

[57] Memo, Harry S. Truman for Actg Secy of State and FEA Administrator, 11 May 45, ABC 400.3295 Russia (19 Apr 42), Sec 3.

[58] Min, 29th mtg, Soviet Protocol Subcom on Shipping, 12 May 45, Dir Materiel file, folder Gen Edgerton's Lend-Lease.

military spokesmen protested vehemently that it would only lead to confusion and chaos. When Harriman, the principal architect of the new policy, also protested that he had not meant the phrase "cut off immediately" to be applied so literally, the Protocol Committee reversed itself and agreed that both ships at sea and those already loaded in port on 12 May should proceed. Material at port, en route, or in storage, however, was to be held for review to see that it was in fact intended for Soviet Far East programs. In successive Protocol Committee meetings, policy was defined as permitting shipments for Annex III (MILEPOST), for a Trans-Siberian Airways project approved by the JCS in the fall of 1944, for the annual summer program to the Soviet Arctic, and for maintenance of material already shipped. However, because it was virtually impossible to conduct a real item by item review, the committee decided simply to permit all Pacific shipments to proceed as planned since about 90 percent of them involved the approved programs, and to cancel all further berthings in the Atlantic for the Black Sea, northern USSR, or the Persian Gulf. It is ironical that under these policies, owing to the large Pacific shipping program in May 1945, shipments for that month totaled 768,400 long tons, the most that had ever been shipped to the Soviet Union in any one month. It was not until June that the new policy was reflected by a fall to 329,200 long tons.[59]

These heavy shipments in May and June left only the remainder of the MILEPOST program (about 20 percent of the total) and miscellaneous small amounts of supplies scheduled for shipment during the rest of the year. Meanwhile, the USSR had been asked for its additional requests on the United States for the war against Japan, under a procedure whereby requests would be screened by the military mission in Moscow before presentation to the Protocol Committee by the Soviet Purchasing Commission in Washington. No allocations against them would be made until the military mission's recommendations were known. Allocations of military material would be by the Munitions Assignments Board in the same manner as to the British and others.

It proved virtually impossible to carry out this procedure as intended. On 28 May Soviet officials presented in Moscow and in Washington a list of requirements approximating 1.8 million tons for the period 1 July through 31 December 1945. For the most part the list consisted of material ordered and not delivered under the Fourth Protocol and material on which the Russians had been negotiating for the Fifth Protocol. They contended that most of the material had really been destined for use in the Far East and that Annex III had not repre-

[59] (1) *Ibid.* (2) Memo, Gen Lincoln for Gen Hull, 13 May 45. (3) MFR, Gen Lincoln, 14 May 45, ABC 400.3295 Russia (19 Apr 42), Sec 3. (4) Min of Mtg on Soviet Lend-Lease Program in Mr. Clayton's Office (State Dept), 14 May 45, ID 334 PSPC, II. (5) Min, 10th mtg PSPC, 15 May 45, ID 031.1, XII. (6) Min, 23d mtg, Protocol Subcom on Supplies, 16 May 45, ID 334 PSPC, II. (7) Msg WAR 83643, Protocol Com to CG U.S. Military Mission, Moscow, 16 May 45, Phelps Notebook, ASF Plng Div files. (8) Memo, Gen Edgerton, Dep Dir Materiel, for CG ASF, 17 May 45, sub: New Policy for Lend-Lease. (9) Memo, Edgerton for ACofS G–4, 21 May 45, sub: Revised Lend-Lease Aid Policy to USSR. (8) and (9) in Dir Materiel file, folder Lend-Lease. (10) FEA, *Rpt on Status of Soviet Aid Program as of 30 June 1945.*

sented their total requirements but was only a supplement to other requirements not positively identified under the Fourth Protocol.[60] When Deane was asked to secure justification he ran into much the same blank wall as he had before. Soviet officials satisfied themselves with the statement that the 28 May list constituted "minimum requirements of the Far East in deliveries of equipment and material necessary in order to meet the urgent needs and strengthen the defense capabilities of the region and likewise for undertaking measures connected with the Far East."[61]

Despite the extremely vague justification, Deane and Spalding believed there was good reason to support the purpose of the Soviet program—the rapid build-up of Soviet reserves in Siberia for the war against Japan—and that Soviet officials were at least truthful in their insistence that part of the regular Fourth Protocol offering had been intended for the Far East. They thought enough material should be scheduled each month to use the full capacity of the Soviet merchant fleet in the Pacific.

> We definitely believe that it is in the United States' interest to make certain that our support is timely and effective even at the risk of supplying the Soviet Union some items over and above the needs which could be fully justified. For this reason we have selected a list of these items . . . which we know will be required to support the purposes of Annex III, at least in some amount. In most cases, we cannot give full justification for the amounts requested and an effort to force the Soviet authorities to do so would be so time consuming as to destroy the effectiveness of our aid.[62]

The selected items approved included 30,000 trucks, 2.5 million yards of cotton cloth, 1.8 million yards of woolen goods, 6,000 tons of leather, 600,000 pairs of shoes, and 500 construction machines, all for procurement by the ASF, and naval supplies, industrial equipment, raw materials, and foodstuffs for procurement by other agencies.[63]

There was considerable opposition in Washington, among both civilian and military authorities, to acceptance of even the limited program proposed by Deane without specific justification in each case. Leo Crowley took the position that the USSR should pay for the nonmilitary supplies, and Admiral Leahy's attitude was critical. General York, again in a quandary as the deadline for loading ships for July and August approached, pressed the JCS for a policy decision as to the military importance of the program. The JCS obliged on 23 June 1945, but limited its approval of assignment of military materials to those that could be shipped during July and August; the rest of Deane's list was approved for production planning purposes only. The Joint Chiefs also expressed the opinion that a similar policy for nonmilitary materials was justifiable on the basis of military necessity. This policy, in its broader application, was accepted, and

[60] (1) Msg M 24482, U.S. Military Mission, Moscow to AGWAR, 28 May 45, Spalding for Protocol Com. (2) Msg WAR 10182, Deane for Spalding from Protocol Com, 1 Jun 45. (3) Msg M 24531, Spalding to Protocol Com, 3 Jun 45. All in Phelps Notebook, ASF Plng Div files. (4) Ltr, Gen York, Exec PSPC, to Lt Gen L. G. Rudenko. Chmn Soviet Govt Protocol Com, 7 Jun 45, ID, Lend-Lease, Doc Suppl, IX.

[61] Msg M 24603, Deane to PSPC, 8 Jun 45, CM-IN 8091, 9 Jun 45, Phelps Notebook.

[62] (1) *Ibid.* (2) See also Msg, M 24531, 3 Jun 45.

[63] Memo, Gen Edgerton for Gen Somervell, 11 Jun 45, sub: USSR Developments, Dir Materiel file Lend-Lease.

the State Department so informed the Soviet Embassy on 27 June. Soviet ships ready for sailing in July and early August were filled. July shipments totaled 309,000 long tons.[64]

Neither Deane nor the authorities in Washington were able to secure any further justification for the Soviet requests for the rest of the year. Deane concluded that the Soviet authorities were incapable of providing "detailed adequate, military justification," and that the mission "could not verify such justification if it were made available." The best the mission could do was to obtain "impressions of urgency and sincerity."[65] With Harriman's concurrence, Deane asked for continued shipping of such supplies as the mission recommended as long as the Pacific route stayed open. The time to revise the policy, Deane thought, would be when and if the Japanese closed the Pacific route, at which time a military decision would be required on the institution of convoys. The JCS, not completely satisfied, simply extended the existing policy for one month in order to fill ships loading in the month of September.[66]

At the Potsdam Conference, in July 1945, the problem of keeping a supply route open to the USSR after it entered the war with Japan was discussed, and Admiral King indicated that the U.S. Navy could push convoys through to the Amur River ports, but that Tsushima Strait could not be cleared until the Americans were established on Kyushu.[67] By this time, however, it was not altogether clear whether even these limited operations in the North Pacific could be justified in terms of any approved supply program for the USSR. By the end of July the major portion of both the MILEPOST program and approved parts of the 28 May program had been met. General Deane on 8 August cabled that he did not believe the USSR could or would give adequate operational justification for many further shipments and that in proposing convoys the United States seemed to be "taking the initiative in setting up the means to deliver a supply program which under present policy we intend largely to curtail."[68]

The dilemma never had to be resolved. Even before Deane's message arrived in Washington the first atomic bomb had fallen on Hiroshima, and the Soviet Union's entry into the war on 8 August came largely as an anticlimax.

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[64] (1) Record of tel conv, Gen York with Gen Lincoln, 11 Jun 45. (2) Memo, Gen Lincoln for Chief Log Gp, OPD, 14 Jun 45, sub: Strategic Guidance for Lend-Lease Supplies for Russia. Both in ABC 400.3295 Russia (19 Apr 42), Sec 3. (3) JCS 1325/4, 16 Jun 45, memo from PSPC, title: Lend-Lease Reqmts of USSR for Balance of 1945. (4) JCS 1325/5, 24 Jun 45, same title. (5) Memos, Actg Secy State for Soviet Embassy, 26, 27 Jun 45, ID 334 PSPC, II. (6) Memo, Gen Edgerton for CG ASF, 18 Jun 45, sub: New Policy for Lend-Lease to USSR, Dir Materiel file Lend-Lease. (7) Min, 111th mtg PSPC, 29 Jun 45, ID 334 PSPC, II. (8) See below, Appendix G–3.

[65] JCS 1325/6, 2 Jul 45, title: Lend-Lease Reqmts of USSR After 31 Aug 45.

[66] (1) Msg M 24897, U.S. Military Mission, Moscow, to WD, 4 Jul 45, CM-IN 3446. (2) JCS 1325/7, 11 Jul 45, title: Lend-Lease Reqmts of USSR after 31 Aug 45. (3) Memo, Gen Lincoln for Asst Secy WDGS, 7 Jul 45, sub: Lend-Lease Reqmts of USSR, ABC 400.3295 Russia (19 Apr 42), Sec 3.

[67] (1) Min, Tripartite Mtg held in Cecilienhof Palace, 24 Jul 45. (2) Min, mtg of CsofS, U.S. and USSR, 26 Jul 45. Both in TERMINAL Book.

[68] (1) JLC 304/2/D, 11 Aug 45, title: Policy on Military Lend-Lease to USSR, Incl msg, Deane to JCS, 8 Aug 45. (2) Rpt, Secy War to President, 11 Aug 45, on Status of Soviet Aid Program, ID 031.1, XIII. (3) JWPC 393, 2 Aug 45, title: Delivery of Supplies to Russia.

On 14 August, the Japanese Government made known its desire to surrender, and three days later the President promulgated a new policy providing that, effective upon the official announcement of V–J Day, further lend-lease shipments to the USSR would be cut off. Only ships at sea and those already loaded would be allowed to proceed. Further supply to the Soviet Union after that date would be under other than lend-lease arrangements.[69] In the interim, such cargo as was readily available at west coast ports continued to be loaded, but the loadings stopped on V–J Day. The President's Soviet Protocol Committee was dissolved on 7 September 1945.[70]

The end of the Soviet aid program, announced five days before the general proclamation of the end of lend-lease, came as a climax to the shift in American policy toward supplying the USSR that had started belatedly with the end of the war in Europe. This policy change was one of the many harbingers of a new period in Soviet-American relations, a period when many Americans, in retrospect, would look back with a certain amazement at the whole heroic U.S. effort to supply the USSR during World War II.

[69] JCS 1325/9, 24 Aug 45, title: Policy on Military Lend-Lease to USSR.

[70] (1) Memo, Actg Dep Dir, USSR Br, FEA, 25 Aug 45, ID, Lend-Lease, Doc Suppl, X. (2) Memo, Harry Hopkins for President, 7 Sep 45, ID 334 PSPC.

CHAPTER XXVIII

Military Supply to Liberated and Latin American Nations

By the very nature of the situation, lend-lease supplies for the war against Germany had to be concentrated very largely on the British Commonwealth and the USSR. The other European powers originally in the lists—France, the Netherlands, Belgium, and Norway in the west; Poland, Czechoslovakia, Greece, and Yugoslavia in the east—lay under the yoke of the Axis until well past the middle of 1944. As early as 1940, the British began to arm escapees and Colonials of occupied countries, incorporating them usually as units in Commonwealth forces. These refugee units were small, the most important elements being the Free French Forces under General Charles de Gaulle and the Polish Army Corps evacuated from the USSR through Iran in 1942. In addition, small quantities of arms were provided by air-drop to resistance groups under combined British-American auspices.

The liberation of Axis-held territory, beginning with the invasion of North Africa in fall 1942, opened up new sources of manpower for the Allied armies. Yet only in the case of French North Africa did liberation come in time to permit the organization and preparation of a force that could play any significant role in the war. A start was made toward organizing and equipping units in Metropolitan France, Belgium, and the Netherlands, but V–E Day overtook the program before it was more than barely started. Eastern Europe, with the exception of Greece, fell to Soviet armies, not to the western Allies. The British effort to re-equip patriot forces in Greece received little American support.

The problem of equipping liberated manpower, resistance, and patriot groups was treated from the first as a combined Anglo-American problem, except for the forces that formed parts of the British Army. Although the Americans furnished 90 to 95 percent of the material for French rearmament, decisions on the scope of the program were rendered by the CCS and not by the U.S. Joint Chiefs alone. The Munitions Assignments Boards, Washington and London, made their assignments to conform to CCS directives, which normally spelled out exact numbers and types of units to be organized and sources from which supplies were to be drawn.

The North African Rearmament Program

The basis for the North African Rearmament Program was the agreement reached at Casablanca between President Roosevelt and General Henri Giraud,

commander of French Forces in North Africa, to provide modern equipment for 11 French divisions (8 infantry and 3 armored), and planes for a rejuvenated French Air Force.[1] Though the CCS did not definitely ratify the 11-division commitment until QUADRANT (owing to both a difficult shipping situation and British opposition) the United States went ahead during the intervening period to complete one phase of the program[2] and definitely schedule another, making up between the two phases about half of the rearmament materials for ground forces promised by Roosevelt at Casablanca. These steps were taken directly as a result of pressures brought by Giraud, but the pressures would not have been so successful had they not appealed to American self-interest. Arming French divisions would save the personnel shipping required to move an equivalent number of American ones; moreover, the final reduction in the U.S. Army's mobilization goal to 90 divisions was definitely made with the 11 French divisions in mind.[3]

Nevertheless, shortages of matériel, shipping, convoy escort, and port capacity in North Africa forced the Americans to move slowly. Control over the detailed formulation of the program and the rate of shipment was entrusted to the Supreme Allied Commander in North Africa, General Eisenhower. Eisenhower was forced initially to limit rearmament materials to 25,000 tons per monthly convoy, out of which 4,000 tons had to be used for maintenance of French units, armed with old weapons, who were already in the Allied battle line. The Joint Rearmament Committee, a Franco-American agency set up in AFHQ to run the program, drew up its plans on this basis, but under pressure from General Giraud a way was found to provide a special convoy in March 1943 that carried more than 100,000 tons of rearmament materials. By the end of April 1943 the French had on hand in North Africa the major portion of the equipment necessary for three infantry divisions, part of an armored division, and the numerous supporting units necessary to place one expeditionary corps in the field.

The American commitment was made entirely to Giraud, but it was clear from the start that Giraud's bitter rival, General de Gaulle, leader of the Free French Forces, would also have to be reckoned with. A *modus vivendi* between the two was reached on 3 June 1943 with the formation of the French Committee of National Liberation (FCNL) with Giraud and de Gaulle as co-chairmen, an agreement which provided a semblance of unified control for Frenchmen everywhere fighting the Axis. It was, nevertheless, only an uneasy truce, and no steps were taken at the time toward fusing the British-equipped Free French Forces with the new French army being re-equipped with American arms.

[1] Except where otherwise noted, this section is based on Marcel Vigneras, *Rearming the French*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1957), pp. 74–296. A concise account of the first phase of French rearmament, December 1942–May 1943, is in Leighton and Coakley, *Global Logistics, 1940–43*, pages 511–20.

[2] The designation of phases of French rearmament as here used conforms to the usage in ASF at the time. The phases apply only to the North African Program and not to the French Metropolitan Program which was given separate phase designations. The phases in the North African Program were roughly as follows: Phase I—January–April, 1943; Phase II—July–August 1943; Phase III—September 1943–January 1944; Phase IV—February–October 1944.

[3] See above, ch. V.

Following completion of the first phase in April 1943, French rearmament languished for a period of nearly three months. The British and American members of the CCS, after failing to reach agreement in March on the scope of the program or the priority to be accorded it, at the TRIDENT Conference simply accepted a commitment to proceed "as rapidly as the availability of shipping and equipment will allow, but as a secondary commitment to requirements of British and United States forces in the various theaters."[4] No specific mention was made of the 11-division program nor was any strategic plan adopted for employment of French troops. This low priority in a period when feverish preparations were under way in North Africa for launching the invasion of Sicily (HUSKY) left little available shipping in convoys for French rearmament materials and even less port or internal transport capacity to handle them. AFHQ was reluctant to accept French requisitions for a second phase of the program. And, since the theater delayed in sending requisitions, the MAB did not make any new assignments after March. In May and June 1943 only the backlog of equipment for the first phase was sent, and monthly shipments fell well below the 25,000-ton allocation. "There appears," noted the ASF Planning Division diary in mid-June, "to be a definite lethargy insofar as the program is concerned"; and Colonel Magruder, director of that division, with some pique characterized French rearmament as "a hand-to-mouth procedure in which the basic directive is vague and its execution unmanaged."[5]

The impetus for a second phase of French rearmament came again from General Giraud, who visited the United States in July 1943. While Giraud was on the high seas, at the War Department's request, Eisenhower's headquarters on 4 July cabled new requisitions calling for equipment for the rest of the first armored division and the nucleus of a second, for elements of another infantry division, various corps and service units, and for units of the French Air Force and Navy. Eisenhower stipulated that these requirements must be met within the 25,000-ton allocation. Then on 6 July, anticipating that Giraud would press for substantially more, the Allied commander warned the War Department that port capacity in North Africa was severely limited, and that no substantial increase in French supplies could be handled until the load on Casablanca was relieved and the French allowed to take over operation of that port—an event he estimated could not take place before 1 November 1943.

Despite Eisenhower's pessimism, Giraud's requests, presented in a 10-day round of conferences beginning on 7 July 1943, got a very sympathetic reception. The French commander, as expected, went beyond Eisenhower's recommendations and requested materials sufficient to equip a second French corps to operate beside the first—that is, to complete two full armored divisions, two additional infantry divisions, and corps and service troops. An ASF study revealed that shipping would be available to transport the necessary supplies if spaced over the July, August, and Sep-

[4] CCS 87th mtg, 18 May 43, Item 6.

[5] (1) Plng Div ASF, Diary of a Certain Plan, Entry, 23 Jun 43. (2) Memo, Col Magruder for Dir Opns, ASF, 26 Jun 43, sub: Equipment of French Divisions, folder Current Opns, ASF Plng Div.

tember convoys and that the only bottleneck would be port capacity in North Africa. Marshall and Somervell consequently promised Giraud approximately what he asked for, with the time schedule to be dependent upon Eisenhower's evaluation of reception capacity. Once the invasion of Sicily had been successfully launched, the theater was able to revise its earlier predictions, informing the War Department on 16 July that plans for the use of Casablanca had been adjusted to permit accommodation of 200,000 tons of French rearmament materials in August and September. Giraud was informed, before he returned to North Africa, that Somervell's schedule could be substantially fulfilled.

Phase II shipments were, in fact, considerably accelerated, and almost all materials, some 230,000 tons, had cleared American ports by the end of August.[6] Their arrival in North Africa provided the French with most of the equipment necessary for four infantry and two armored divisions as well as some of the supporting units necessary to make up two army corps, though shortages of numerous specific items remained.

As a corollary to Giraud's visit and the Phase II shipments, and under pressure from Eisenhower and the CCS, de Gaulle's British-equipped Free French Forces were finally brought into the rearmament program. Though they were allowed to keep the British equipment they already had, they were to be issued no new British equipment, and were to become part of the consolidated forces under the French Committee of National Liberation to be rearmed mainly from American sources. Under the new arrangement, General Giraud became commander in chief of all French armed forces fighting the Axis and continued as co-president with de Gaulle, of the FCNL. Giraud's pleas that the French program be increased as a result of this accretion of manpower from the Free French Forces was turned down by Eisenhower; AFHQ did agree, however, that the program should be revised to include 7 infantry and 4 armored divisions, rather than 8 infantry and 3 armored as agreed at Casablanca.[7] Giraud continued to press for an addition of one division to the program, and for a considerable time maintained one Free French division, with its British equipment, outside the rearmament program.

The heavy Phase II shipments heralded the end of the major logistical barriers to the fulfillment of the entire French rearmament program. The old bottlenecks—scarcity of matériel and limitations on convoys, shipping, and port capacity—were rapidly disappearing. At the QUADRANT Conference in August 1943 the JCS presented a definite, detailed program for completing the equipment of the 11-division force by the end of the year, and the British Chiefs approved it subject to the proviso that its fulfillment should not "interfere with operations scheduled previous to the . . . Conference."[8] The CCS also approved AFHQ's design to use the reequipped French forces in an assault

[6] Memo, Col Robert A. Case, Dir Stock Control Div, ASF, for Dep Director Opns, ASF, 5 Sep 43, sub: Weekly Rpt of Status Phase III, French Rearm Program, ID 475, Equipment of Troops France, III.

[7] These were light armored divisions requiring slightly less equipment than their U.S. counterparts. The four French armored divisions were normally equated to three and two-thirds American ones.

[8] CCS 317/3, 23 Aug 43, title: Equipping Allies, Liberated Forces and Friendly Neutrals.

on Corsica in September, in larger operations in Italy, and to explore the possibility of using them in an invasion of southern France.

The 15 August plan set up a schedule for shipping equipment for one infantry and one armored division in September, for another infantry division in October, for a third in November, and for the last armored division in December. Each monthly slice was to include matériel for the necessary supporting combat and service units. All shipments would be made to Casablanca, which port would be turned over to the exclusive control of the French in September. Initial shipping requirements, totaling 630,000 tons, were considerably reduced by transfer to the French of American equipment left by four U.S. divisions scheduled to move from North Africa to England to participate in OVERLORD.

Phase III of French rearmament got off to an auspicious start. Approximately 140,000 tons of matériel were shipped in the September slice, and the October slice (something over 50,000 tons) was assigned and moved to port by the end of that month.[9] At this point Phase III was interrupted. The first move toward curtailment came as a result of Presidential objections to the growing political ascendency of General de Gaulle, who early in September 1943 moved to displace Giraud from his position on the Committee of National Liberation, but there is no reason to believe that the ultimate decision was made on anything other than military grounds. When President Roosevelt suggested a possible curtailment to check de Gaulle, General Marshall's staff was already moving in that direction for the different reason that the French were proving unable to provide the necessary supporting combat and service units to make an 11-division army self-sufficient.[10]

By early September 1943 the Joint Rearmament Committee had worked out a plan providing in detail for those supporting combat and service units—258 in all. AFHQ soon learned that the French would not be able to organize the units from available manpower. There was a marked shortage of technically proficient personnel in North Africa. Skilled Europeans were already spread thin to provide officers, noncommissioned officers, and technicians in combat forces. Giraud from the start placed his entire emphasis on the fighting divisions and placed the support troops, particularly those designated to perform service functions, in low priority for activation, almost completely ignoring Eisenhower's repeated warnings that the French Army must be self-supporting. Giraud took the position, not altogether untenable, that it would be bad policy to break up units capable of efficient combat operations to form semiefficient service units. He argued that the French did not need as large-scale service support as U.S. troops and that, in the last analysis, it would be wiser and easier for the Americans to provide service support to the French than to train and ship new combat units. But neither Eisenhower nor Marshall had any intention of furnishing U.S. service units to support the French, however much they may have respected the

[9] Memo, Col Olmstead for U.S. Members, MAC(G), 30 Oct 43, sub: Status of French Rearmament Plan, ID 475 Equipment of Troops France, III.

[10] Memo, Gen Handy for CofS, 19 Oct 43, sub: Equipment of French Divs, with supporting documents in OPD 400 France, Case 51.

"old gentleman." General Smith, Eisenhower's chief of staff, recommended that the rearmament program be limited to six infantry and two armored divisions, a plan that would provide better balance between armor and infantry and at the same time free personnel from the combat forces to form necessary supporting units. Since the French continued to delay any definite response on what they intended to do about the supporting units, and since in the meantime their embryo supply organization seemed to be incapable of ingesting the quantities of American equipment already shipped, at Eisenhower's recommendation the JCS in early November suspended further shipments pending re-examination of the whole program.[11]

While the issue thus hung fire, the main body of French troops already armed were committed with the U.S. Fifth Army in Italy where they acquitted themselves well. At SEXTANT in December 1943 the CCS decided that most of the French Army, after receiving battle experience in Italy, should be used as the main follow-up force in the invasion of southern France. This plan called for an immediate decision on size and composition. The National Defense Committee of the FCNL finally, but reluctantly, agreed on 11 January that two infantry divisions should be disbanded to provide supporting units for the rest, and though Giraud, as commander-in-chief, made a final desperate appeal to General Marshall to preserve the entire 11-division program and furnish American service support, in the end he was forced to acquiesce. And it was not long afterward that de Gaulle forced him into retirement. The new program, officially agreed to in North Africa on 23 January and approved by the CCS on 3 March,[12] still included on paper 6 infantry and 4 armored divisions; however, one of the infantry divisions remained in cadre only, and one armored division was deferred indefinitely. It also included 245 supporting organizations, of which 210 were units included in the former plan and 35 were new additions. What really remained was a self-supporting 8-division force, of which 5 infantry and 2 armored divisions were expected to provide a balanced force for ANVIL. The third armored division would be employed in the immediate follow-up of OVERLORD and participate in the liberation of Paris.

The 23 January plan was the final word on North African rearmament, except for minor adjustments, and the 8-division program was established as the practical limit on French ability to mobilize manpower in North Africa. A fourth phase of French rearmament got under way in February 1944 in fulfillment of the plan and continued through October, largely a matter of rounding out the 8-division force by filling shortages, equipping supporting units, and adjusting the whole program to the necessities of Operation ANVIL. The basic equipment for eight divisions, with certain exceptions, was already in the theater in February either in the hands of the French or as surplus in theater stocks. On paper the sole remaining problems were those of equipping 81 support units and filling shortages. In

[11] JCS 547/2, 8 Nov 43, title: Distribution of French Ground and Air Forces in the Various Theaters of Opns and the Rearmament of French Naval and Air Forces.

[12] CCS 414/4, 3 Mar 44, title: French Army Rearmament Plan.

reality, more serious problems had emerged during Phase III as parts of the rearmed French army were committed in combat. The Americans learned during this period the manifold difficulties of raising, equipping, and supporting an army in liberated territory where the *de facto* government had few real resources at its command. The actual arming and training of combat forces proved the easiest task, the provision of an adequate system of support the most difficult.

The initial American approach to French rearmament involved elements not completely compatible. A compact French striking force was to be formed to operate under the strategic direction of the Anglo-American CCS in conjunction with British and American forces. At the same time, this French striking force was not to be supported directly as a part of an American or British command, but was to be made as self-reliant as possible. Supplies would be furnished the French in bulk under lend-lease arrangements in accordance with CCS plans, and the French would be expected to develop their own supply organization, paralleling the American one operating in the same theater. There would be American advice and guidance in the operation of the French supply system as there would be in the equipping and training of the striking force, but not direct American management. French military lend-lease was to be treated as nearly as possible like British and Russian with the minimum of allowance for the fact that the French political and military organization in North Africa was not a really going concern but at least a semidependency of the Allied military command.

The War Department accepted from the start the obligation to furnish maintenance and replacement supplies for the American equipment issued to the French units in the approved program, and in fall 1943 set up a system for discharging this obligation. All assignments of initial equipment included a provision for thirty days' maintenance and six months' supply of spare parts. Beyond this the French were expected to submit timely requisitions for additional maintenance and replacement requirements to the Joint Rearmament Committee in North Africa for submission to the MAC (G) in Washington for assignment and shipment through normal lend-lease channels, though in emergencies the theater commander was authorized to make issue directly from theater stock. Approved units ready for, or actively engaged in, combat with an American command were authorized replacement and maintenance on the same scale as U.S. troops operating in the same theater, and those remaining in North Africa on a U.S. zone of interior basis.[13] The French were expected to provide subsistence for all their forces either from indigenous North African production or from food supplies shipped under the civilian supply program. In either case, they would themselves be responsible for storage and distribution of the supplies available to them from both America and indigenous sources. Lend-lease supplies were shipped to North

[13] (1) Memo on Mtg to Establish Principles Governing Supply of Maintenance Equip to French Forces in N Africa, 26 Oct 43, ID 475 Equipment of Troops France, III. (2) The theater commanders' emergency powers were covered in WD Circular 220, 20 September 1943, paragraph 14b. This provided that, except in emergencies, advance authority for such transfers would be obtained from the MAB.

Africa consigned to the American theater commander rather than to the French, but the turnover in the theater was usually automatic and, indeed, after the French took over the port of Casablanca, they received most of these supplies directly.

Such a system presupposed the existence of a central French SOS organization in North Africa capable of performing the tasks of sorting, storage, distribution, and stock control as efficiently as the American theater SOS, and French willingness to in fact confine their distribution to the narrow limits set down in CCS directives. Neither supposition was valid. As a first step toward self-reliance, the French in September 1943 established a central SOS organization for handling American matériel—the Service Central des Approvisionnements et Matériels Américains (SCAMA). But even under expert American tutelage, SCAMA's progress was slow and always handicapped by language difficulties, shortage of trained personnel, materials, inadequate depot establishments, and unfamiliarity of French personnel with American equipment and American methods. And while SCAMA was suffering growing pains, the supply problems it was supposed to handle were getting out of hand. Moreover, while rearmament supplies were supposed to be issued only to approved rearmament units, AFHQ had no effective control over diversions. In addition to approved units, the French maintained around 200,000 troops in their Territorial and Sovereignty Forces charged respectively with operation of the supporting military establishment in North Africa and with defense and internal security. There were other units also, which, though not approved under the rearmament program, were participating in active combat operations in Corsica and Italy. Because equipment for rearmament units normally arrived far in advance of the actual activation of the units, some of it was inevitably diverted to nonprogram troops.

The chaotic condition of the French supply system became evident once the French troops were committed in Italy. The initial plan provided that French requisitions should be processed by Fifth Army to SOS NATOUSA, which would then call on the French military authorities for the desired material (to be furnished out of lend-lease or indigenous stocks). Should an emergency arise, the theater commander was empowered to make direct transfers out of theater stocks to be replaced later by lend-lease assignment. The French were expected, in the meantime, to be preparing their timely requisitions for maintenance and replacement for submission by the Joint Rearmament Committee to Washington for assignment by MAC (G).

It is doubtful if such a highly complicated and cumbersome procedure could have worked even had the French possessed an efficient supply organization. Since they did not, it broke down almost immediately. The first French troops sent to Italy were not even issued their full initial allowances before leaving North Africa, and U.S. Fifth Army soon found itself forced to resort to emergency measures to fill these shortages, disregarding the finer points of lend-lease procedure. Similarly, SOS NATOUSA frequently found it necessary to invoke the theater commander's emergency powers in order to provide timely maintenance and replacement to

meet Fifth Army's requisitions for the French, either because the French had already diverted material to other units or could not locate it in depot stocks. Even in the case of rations, the theater SOS found it necessary to supplement French stocks heavily. When they did meet SOS requests the French frequently took the materials out of the only ready reserve available—the equipment shipped for rearmament units not yet activated—thus laying the basis for future shortages and confusion. Moreover, they seemed unable to anticipate future replacement and maintenance requirements properly, partially because they had no adequate inventory of the stocks they already possessed, and so delayed the submission of requisitions for new shipments from the United States.

Even apart from the inadequacy of the French supply system, it was clearly wasteful to ship supplies from the United States to North Africa, place them in French stocks, then withdraw them later for transshipment. The red tape involved was frightening, and there was obvious duplication in the maintenance of two separate reserve stocks in the theater for the support of troops fighting in the same command and receiving their supplies ultimately from the same source.[14]

Finally recognizing the need for American management to follow lend-lease supplies, on 26 December 1943 Eisenhower recommended direct American support be substituted for complicated lend-lease arrangements. With little dissent, this idea was accepted by the War Department and MAC(G); it was placed into effect in supplying French forces in Italy in January 1944. After the usual refinements, the new system was formally promulgated by the War Department on 8 March 1944. Approved French units were authorized maintenance and replacement supplies on the same basis as before, but these supplies for units ready to move to, or already in, actual combat zones under American command were to flow entirely through American channels. Only French garrison forces and forces operating independently or as part of a British command were to receive them through military lend-lease channels. American commanders were to include French forces serving under them in their Monthly Materiel Status Reports (MMSR) to the port of embarkation, and forward requests for supplies for the French outside the MMSR as a part of their consolidated requisition on the United States. These consolidated requisitions were to include the balance of the French ration, which the theater SOS could not secure from the French themselves.[15] To provide data on which after-the-fact assignments could be made by the MAB and lend-lease accounts drawn up, commanders were to estimate the proportion of their requisition for each article that was for French forces. This system of accounting proved entirely too burdensome for the theaters concerned, NATOUSA and ETOUSA, and in 1945 it was abandoned in favor of a straight per diem charge for each French soldier maintained.

Under this arrangement, the French supply organization in North Africa was relieved entirely of the burden of supporting French troops in Italy and

[14] In addition to Vigneras, *Rearming the French*, see ID, Lend-Lease, Text, II, 1205–08.

[15] TAG Ltr, 14 Mar 44, sub: Replacement and Maintenance of Equipment and Supplies for French Forces in Approved French Rearmament Program, AG 400 (8 Mar 44) OB-S-SPLLD-M.

France. All that was left to it were the tasks of storing and distributing rearmament supplies in North Africa, providing the housekeeping services for the entire French military establishment there, and furnishing support for the all-French operations on Corsica and Elba. This simple solution, nonetheless, was not without its complications. It left the French without enough resources to support adequately the part of their military establishment outside the rearmament program. One problem, that of nonprogram troops serving in the combat zone, was generally solved by July 1944 by blanketing them under the rearmament program, but still left were the Territorial and Sovereignty Forces in North Africa (all together about 200,000 men) with a minimum of American support. This was a continual source of trouble, since the development of a French communications zone in North Africa was largely dependent on these American supplies. The CCS did agree, in January 1944, to furnish certain supplies and materials for the Territorial Forces but the provision was, in French eyes, inadequate. The Sovereignty Forces received an even smaller allotment. Both forces were, in fact, always poorly supplied, and the result was almost inevitably that diversions of material from units in the rearmament program continued, despite American efforts to prevent them. These diversions contributed to the appearance of unforeseen shortages in French units in both Italy and southern France that had to be met from theater stocks or by emergency order on the United States.

The French were never able to activate all the supporting units provided in the CCS plan of 3 March 1944, despite the reduction in the scope of the program and the disbandment of two infantry divisions in February 1944. The need for combat replacements and the continued shortage of skilled personnel militated against it. The 7-division force that participated in the invasion of southern France was reasonably well rounded, but it never was able to meet the goal of self-containment the Americans set for it. Thus, both in Italy and in southern France, the Americans had to provide a measure of service support to the French forces operating with them. To the obligation of providing maintenance and replacement supplies through their own channels, the U.S. Army had to add the provision of port and base services. A French base section (Base 901) was organized and sent first to Italy, then to southern France, but in neither place was it able to stand entirely on its own feet.

Despite these difficulties, the French North African Rearmament Program generally achieved the purposes for which it was designed. It provided a rejuvenated 8-division French Army which played an important role in the campaigns in Italy and in the liberation of France, and it obviated the necessity for activation and deployment of eight additional American divisions.

The Metropolitan and Liberated Manpower Programs

By October 1944 the North African phase of French rearmament had come to an end, and the scene of action had shifted to Metropolitan France. The shift of control of the 6th U.S. Army Group, of which the French 1st Army formed a part, from SACMED to

SHAEF in September 1944 brought a shift of control over French rearmament soon afterward. Most of the personnel of the Joint Rearmament Committee moved from North Africa to France in October to form the Rearmament Division of the SHAEF Mission (France). Meanwhile, the CCS had begun to wrestle with the problem of arming French manpower available in Metropolitan France.

In October 1943 the French Committee of National Liberation presented to the War Department a grand scheme to enlarge the rearmament program to 36 divisions and 2,800 first-line aircraft by the end of 1945, recruiting of manpower to begin as soon as the Allies entered Metropolitan France.[16] The FCNL urged that this large-scale rearmament of French manpower would be necessary to enable the French to discharge their obligations "to fight the Axis in Europe to the finish, to contribute to the occupation of Axis territories and the maintenance of security in Europe, to assist in the war against Japan, and to restore French sovereignty to all territories of the French Union."[17]

This proposal went far beyond anything the Americans were willing to contemplate. The JCS took the position that rearmament of French forces should be limited to those that could be profitably used in the war against Germany; the creation of a French army for postwar purposes or even to aid in the war against Japan, they thought, involved political considerations beyond their jurisdiction. At QUADRANT, they had already taken the position that the equipping of French forces after the invasion of the Continent should be limited to those required for garrison and guard duties.

> During the first four or five months following an initial assault . . . , all available port and beach capacity will be required for the build-up and maintenance of United Nations forces . . . a minimum of six to eight months will be required between the start of reorganization and re-equipment of French Army units . . . and their initial employment. Thus it would appear that no continental French Army units could be employed for ten to thirteen months after the initial assault.[18]

The FCNL proposal was therefore quietly slipped into the discard.

The British were eventually to take the view that liberated manpower should be used to create national armies in Europe to insure postwar stability and relieve the occupation burden on American and British troops, but this view did not emerge full-blown in the councils of the CCS until August 1944. In the interim they agreed to limit the question, as the JCS desired, to what contribution European liberated manpower—French, Dutch, Belgian, Danish, and Norwegian—could make toward winning the war in Europe. Even when so limited, there were important issues to be resolved, but the CCS had made little progress in resolving them before the Normandy invasion. The only conclusion reached, and it was tentative, was that 172,000 men should be organized into internal security battalions, 175 (140,000 men) to be raised by the

[16] Except where otherwise indicated, this section is based on Vigneras, *Rearming the French*, pp. 299–390.

[17] Memo, National Defense Committee, FCNL, 16 Oct 43, ABC 091.711 France (6 Oct 43), Sec 1A.

[18] CCS 317, 18 Aug 43, memo by U.S. CsofS, title: Equipping Allies, Liberated Forces and Friendly Neutrals.

French, 50 (32,000 men) by the Dutch and Belgians, all to be supplied with either captured equipment or equipment in the hands of the British.

Meanwhile, a considerable effort was devoted to furnishing supplies to resistance groups, particularly in France. This program had begun in 1941 under the auspices of the British Special Operations Executive (SOE), and it was joined in later by its American prototype, the Office of Strategic Services (OSS). The operation continued to be predominantly British until shortly before the Normandy invasion in 1944 when the OSS sponsored several large-scale airdrops in an attempt to dispel a common French illusion that their aid was coming entirely from the British. Even previously the SOE had procured many of its supplies under lend-lease, through a special procedure whereby its requirements were screened by OSS before submission to the War Department for procurement.[19] All in all, the airdrops provided only small quantities of light equipment—rifles, machine guns, ammunition, explosives, radios, and articles of clothing—and, while they contributed greatly to the effectiveness of the French Forces of the Interior (FFI), they could not provide the heavier equipment needed for an organized army.

After the Normandy invasion, as long as the beachhead in France continued small, the bulk of supply for the French continued to take the form of SOE-OSS assistance. Meanwhile, a welter of conflicting voices sought to point a way to some definite program for a new phase of French rearmament. The French continued to press for the program of October 1943, but to little avail. After the combat successes of July and August, the American commanders concerned, Generals Eisenhower and Devers, indicated it would be better to limit re-equipment of French combat troops to small units that could be quickly trained and put to use. On 2 August 1944 the CCS definitely authorized the organization of the 172,000 men into liberated manpower units for rear area work as planned earlier, but took no action on the question of combat forces. When the matter came up again for consideration on 22 August, the British presented their view that an 8-division French army should be created to promote postwar stability in Europe and suggested the United States should assume responsibility for equipping such a force, while they themselves would provide equipment for the smaller forces of other western Allies. The JCS, however, held to their view that postwar armies were a political question "which should be subject of agreement between the governments concerned."[20] The JCS recommended, in keeping with the Eisenhower-Devers view, that 39 separate battalions of French combat troops be formed at the discretion of SCAEF (General Eisenhower) and SACMED (General Wilson). They thought fullest possible use should be made of captured equipment, of U.S. equipment previously transferred

[19] On the development of this procedure see Memo, Gen Wood for Gen Wedemeyer, 10 Nov 42, sub: Procurement of Special Operations Equipment, AG 400.3295 (11-7-42) (1), and related papers in AG 400.3295 (11-3-42) (1). For further discussion of its development and new problems raised in 1944–45, see ID, Lend-Lease, Text, I, 249–53.

[20] CCS 661, 29 Aug 44, memo by U.S. CsofS, title: Revised French Rearmament Plan and Use of French Manpower.



FRENCH PATRIOTS WITH GUNS PARACHUTED IN BY THE ALLIES

to the United Kingdom and no longer required in the prosecution of the war, and of surplus equipment in U.S. theater stocks, and that the rest should be supplied from the United States, the United Kingdom, and Canada by agreement between the British Army Staff in Washington and the War Department. The British did not finally agree to this American proposal until December 1944, though the Americans went ahead and shipped equipment for eleven infantry battalions at Eisenhower's request.[21]

The French, in the meantime, showed no inclination to confine their military organization to a congeries of small units for internal security and piecemeal use in combat. The internal security units took shape but slowly, and the FCNL almost immediately began to organize the FFI into divisional organizations to the extent it was able to do so. General Alphonse Juin, French Chief of Staff for National Defense, personally appealed to General Marshall for equipment for five French divisions, and on 31 October told SHAEF that the French would not furnish units to be used as part of British or American commands

[21] CCS 661/3, 16 Dec 44, memo by Reps of Br COS, title: Revised French Rearmament Plan and Use of French Manpower.

but would insist that any new units formed be included "within the framework of a newly rebuilt French Army."[22]

It was less the attitude of the French than the turn of military events that finally forced Eisenhower's hand. With the Allied armies stalled on the German border, on 1 November Eisenhower recommended to the CCS that the mobile military labor, security, and other liberated manpower units be increased to 460,000 men, 243,081 to be recruited from France and the rest from the Netherlands, Belgium, Norway, and Denmark, and that two additional French infantry divisions be raised, since he now believed they could be readied in time for participation in the war. The program, tentatively approved in Washington, was soon absorbed within a broader one that the French worked out with SHAEF and Brig. Gen. Auguste Brossin de Saint-Didier, head of the French Military Mission in Washington, presented to the CCS on 18 December 1944. Under this proposal the French would organize eight new divisions, six infantry, one mountain, and one armored, with 213 supporting units, one army and two corps headquarters, in addition to the security and labor units already authorized. Saint-Didier emphasized that the plan was "one of active participation in the war . . . not a postwar plan, the present establishment of which seems premature."[23] The activation of troop units was to be phased in accordance with the availability of French manpower, and as much equipment as possible was to be furnished by French industry, now on its way toward rehabilitation. Phase I would consist of three divisions, Phase II of two, and Phase III of three more. It was hoped that the five divisions in Phases I and II would be ready by 1 May 1945, those in Phase III by August 1945. The French hoped to provide their own equipment for the divisions in Phases I and III, except for clothing and individual equipment, tentage, heavy engineering equipment, and most of the vehicles and artillery. The United States would have to supply these deficiencies, also furnish complete equipment for the two divisions in Phase II, and for all the supporting corps, army, and service units of all three phases. Equipment the British had immediately available might be used in training the divisions first activated and, in some cases, to provide part of the French share for Phases I and III.

General Eisenhower, now faced with the serious crisis in the Ardennes and fearful lest he should be short of manpower for the fighting in 1945, approved the program in all its essentials, but insisted SHAEF should carefully supervise its execution. The CCS accepted it in principle on 28 December along with the enlarged Liberated Manpower Program and instructed the CAdC to make a further study of the sources from which equipment should be drawn.

The wheels were thus set in motion for an 8-division Metropolitan Rearmament Program. Requirements were hastily computed by the ASF, items supposedly available from French or British sources deducted, and a phased shipping program arranged providing for the rapid fulfillment of the American share of the 8-division commitment, save only

[22] Ltr, Juin to Marshall, 7 Sep 44, Incl, CCS 661/1, 29 Sep 44, title: Revised French Rearmament Plan and Use of French Manpower.

[23] Memo, Saint-Didier for Chmn, CCS, 19 Dec 44, Incl, CCS 752, 23 Dec 44, title: Plan to Increase the War Effort of France.

for a few scarce items in too great demand for U.S. forces.

Hardly had the shipments begun, in January 1945, before the program was revised. General Somervell, on a tour of the European theater, quickly perceived that not enough service units had been planned for to make the 8-division force self-sufficient, and ETOUSA soon raised the proposed number of those units from 213 to 1,128, bringing the proposed division slice up from 25,000 to 37,500 men, a figure roughly equivalent to what experience in the North African Program had proven necessary.

Having revised the program, the theater then proposed that shipments be rephased to place the service units in first priority, but the French objected that this would disrupt their plans for activation of units and the ASF that it would disrupt the procurement program and delay shipment of matériel. The upshot was that the January, February, and March phases were shipped much as planned, providing the major portion of materials for three divisions and 167 supporting units; shipments for the later months were rescheduled so as to defer the other five divisions until after the matériel for the supporting units had been shipped. In the theater Eisenhower placed the service units in highest priority, particularly those still needed to complete the supporting organization for the French 1st Army, though again he ran into opposition from the French, who showed the same propensity they had in North Africa to favor combat divisions.[24]

The difficulty over service troops was not the only one that plagued the Metropolitan Program. The British promptly furnished the equipment they had promised (most of it obsolescent), but it turned out that the French had been entirely too optimistic in their predictions of both availability of manpower and the rapidity with which their own industry could begin to produce war materials. In mid-February they reported that because of unexpected power shortages they would not be able to furnish in time most of the materials they had proposed to supply for the three divisions in Phase I.[25] The activation and training of units—at least those Eisenhower asked for—also lagged, and the Supreme Commander retained much of the equipment shipped for them in U.S. stocks. Similar problems afflicted the Liberated Manpower Program. At first no service troops were provided to support the internal security units. The initial scale of individual equipment furnished by the British proved inadequate, and Eisenhower had to ask for an increase. The British War Office, without a definitive CCS decision on responsibility for supply of either the original equipment or the requested increase, delayed action. The problem of control of the units caused difficulty. Recognizing all these problems, Eisenhower recommended, and the CCS approved, a reduction in the total liberated manpower to be mobilized from 460,000 to 400,000 men.

[24] In addition to Vigneras, *Rearming the French*, see ID, Lend-Lease, Text, II, 1215–17, and CCS 768/7, 27 Mar 45, title: Equipment for Allied Forces in Europe.

[25] Memo, Col Jean Regnault, Chief, French Gp, Rearm Div, SHAEF Mission (France), for Brig Gen Harold F. Loomis, Chief, Rearm Div, 15 Feb 45, sub: French Manufacturers, ID 475 Equipment of Troops France, X.

It was this revised program— 8 French divisions with 1,128 supporting units and 400,000 men in Liberated Manpower units—that the CCS definitely accepted on 7 April 1945 (on the recommendation of the CAdC) with the significant qualification that "any units . . . which have not been equipped by the time active hostilities with Germany cease will not be equipped."[26] The United States was to underwrite the entire Metropolitan Program, the British, the Liberated Manpower Program. The British would, in addition, equip 6 Belgian infantry brigades and a new Polish division, all without increasing their lend-lease requirements on the United States. Rations and POL for Liberated Manpower units were to be furnished by the national force, British or American, with which they served.

The definitive CCS decision came as an anticlimax. With the end of the war in Europe clearly in sight, the pressures that had been behind French rearmament in December 1944 were dissipating. However much the British and French might feel that forces should be created to promote postwar stability in Europe, U.S. opposition to any such course had become inflexible. The very solicitude of the French to protect their interests in the postwar settlement provoked incidents that forced Eisenhower to suspend issue of equipment for either the Metropolitan or the Liberated Manpower Program even before hostilities ended. The Liberated Manpower Program was suspended early in April, when the French Provisional Government refused to permit use of units organized under it to support U.S. or British troops outside France until a French zone of occupation was settled. The Metropolitan Rearmament Program ground to a halt at the end of the same month, when French troops refused to withdraw from Stuttgart at the order of General Devers. These incidents were finally resolved to the satisfaction of all, to be sure, but by that time Germany had surrendered, and the qualification in the CCS decision had been invoked. As of V–E Day the only American support still going to the French took the form of maintenance supplies to units partially or wholly equipped under either the North African or the Metropolitan Program.

The net results achieved in the Metropolitan Rearmament Program were therefore small. Three infantry divisions and about forty supporting units were partially equipped by V–E Day, but almost none entirely, and only very limited combat use had been made of any of them. The units had received most of the equipment promised by the British, but virtually none of the equipment the French had hoped to be able to supply for themselves. Of the American equipment shipped for the Metropolitan Program, only about one-third had been issued by SHAEF to the units for which it was designated.

Epilogue to French Rearmament

French rearmament came to a virtual end on V–E Day.[27] On 20 April 1945, in anticipation of the imminent German collapse, the JCS agreed that "equipment which cannot be used against German forces will not be shipped from the

[26] CCS 768/11, 7 Apr 45, title: Equipment for Allied Forces in Europe.

[27] Except where otherwise indicated this section is based on Vigneras, *Rearming the French,* pp. 361–99.

United States to complete the French Metropolitan Rearmament Program,"[28] and so informed General Eisenhower.

The question of issue of material already shipped but still in SHAEF stocks remained. The French protested vigorously against SHAEF withholding any of this material, but to no avail. The JCS finally agreed to the issue of equipment for twenty-two service units certified by Eisenhower as necessary to support French occupation forces, and to two railway operating battalions and one railway grand division needed to aid in redeployment of American troops, but ruled against even completing the equipping of the three partially outfitted divisions. Replacement and maintenance supplies for French forces already equipped was continued until 30 September 1945 in accordance with the President's interpretative memorandum on lend-lease on 30 July,[29] but ETOUSA divested itself of the responsibility for direct support through American channels and these supplies were furnished the French in bulk.

Some consideration was given in the meantime to equipping a French force for use in the war in the Far East. The French had suggested this as far back as October 1943 with Indochina evidently in mind, but the Americans gave their requests little consideration until after V–E Day. The War Department then finally agreed in principle to the use of French troops in the Pacific, planning, in accordance with Eisenhower's recommendations, that they should be organized strictly according to U.S. TOE's, placed under U.S. operational control, and supplied entirely through U.S. channels. At first the JCS proposed to use the French troops in the Pacific. At Potsdam, however, the British suggested that they might best be used in Indochina, an area within SEAC, and the CCS finally approved a 2-division project with the provision that it should serve either under British or American command and in any area the CCS should determine. The two divisions were to be equipped as far as possible from matériel already provided under the North African and Metropolitan Programs; they could hardly be committed before the spring of 1946, the CCS said, because of shortage of shipping to move them to the Pacific.[30] The French protested that all equipment already in their hands was needed for occupation forces, but before they received an answer to this protest the end of the war with Japan was in sight and the Americans dropped the plan. They had, in fact, shown little enthusiasm for it at any time. The French return to Indochina therefore had to be carried out with resources available to the Provisional Government of France.

Italian Military Forces

In September 1943, following Italy's surrender, that nation took its place among those at war with Germany, but not as a member of the United Nations, only as a "cobelligerent." Italy declared war on Germany on 12 October 1943. The use of Italian manpower by Allied commands in the Mediterranean had begun even earlier. Within the limits

[28] Min, 160th mtg JCS, 20 Apr 45.

[29] See above, ch. XXVII.

[30] CCS 895/2, 19 Jul 45, title: Participation of Two French Colonial Divisions in Far Eastern Operations.

permitted by the Geneva Convention, co-operative Italian prisoners captured in North Africa and Sicily were used for rear area work, at first simply individually or in groups as day laborers. Then in November 1943, after the surrender, Italian POW service units were organized under special tables of organization. These units, when serving with U.S. forces, were supplied through American channels and served as substitutes for U.S. service units. The British made similar arrangements for Italian prisoners of war serving as part of their commands.[31]

The Italian Army, which the new government under Marshal Badoglio brought over to the Allied side and which numbered some 551,000 men, was in a different category from the prisoners of war, since there were no restrictions on its use under the Geneva Convention. The situation in fall 1943 resembled that in North Africa in late 1942 when Admiral François Darlan had placed the French Army at Eisenhower's disposal. The American reaction in this case, however, was quite different. The United States would approve no extensive program for Italian participation in the war, except insofar as the Italians could so participate using their own indigenous resources. The United States position was that as an ex-enemy country Italy should not be declared eligible for lend-lease, nor given more than a minimum of support through other channels. The British, who favored a more liberal policy in rearming Italian forces, did not have the resources to do it themselves and could not overcome American opposition to it as a combined project.[32]

The Allied command in Italy learned soon after the surrender that it needed the co-operation of the Italian Army to preserve internal security, provide essential services, and bolster Allied fighting forces. In view of this need, Eisenhower informed the CCS in fall 1943 that he would require monthly shipments of 12,600 tons of subsistence and clothing to carry Italian forces through the winter, and that indigenous and captured stocks would be insufficient. Some emergency shipments were made from the United States in answer to Eisenhower's request, but the whole question of policy was placed before the CCS with a recommendation from the U.S. Joint Chiefs that the British assume responsibility for Italian armed forces (other than prisoners of war) in the same way the Americans had for the French. The British, however, could do so only if they could be assured of receiving many of the necessary supplies under lend-lease, and by this time the general prohibition against lend-lease retransfers had been put into effect.[33]

The rations required were the same the United States was already furnishing the British, and U.S. stocks of used

[31] Col. Criswell G. Blankeney, ed., *Logistical History of NATOUSA-MTOUSA* (Naples: G. Montanino, 1945), pp. 283–85.

[32] For a statement of the War Department position on extending lend-lease to Italy, see Memo, Somervell for Chief, Legislative and Liaison Br, OCS, 22 Feb 45, sub: HJ Res 99 . . . , Dir Materiel, file Lend-Lease.

[33] (1) See above, ch. XXVI. (2) Msgs, CM-IN 187, Algiers to WAR, 30 Sep 43; CM-OUT 8709, AGWAR to CG FREEDOM, Algiers, 19 Oct 43; CM-IN 13759, Algiers to WAR, 23 Oct 43; CM-OUT 13033, AGWAR to CG FREEDOM, Algiers, 29 Oct 43. (3) Memo, Lt Col Orrin C. Krueger, Actg Chief Theater Br, Plng Div, ASF, for Col Magruder, 5 Nov 43, sub: Equip for Italians, file Preps for U.S.-Bri Stf Conf, ASF Plng Div.

clothing were available for the Italians. Considering these facts, the Combined Administrative Committee recommended to the CCS in December 1943 that responsibility for supply should be split—the United States furnishing subsistence; the British, medical supplies and fuels; and each country contributing clothing according to its agreed capacity as determined by established assignments procedures. Supplies should be limited to these categories, and furnished only to those Italian troops who were effectively contributing to the Allied effort. Combat equipment should come only from Italian sources. The CAdC also suggested formation of a theater agency similar to the Joint Rearmament Committee to be responsible for supply to the Italians, its authority to be exercised through the theater commander but with "the duly authorized representative of the country of ownership concurring in the establishment of requirements and disposition of supplies and equipment, under the principle that the country of ownership should control the distribution of its assets," an obvious attempt by the Americans to guarantee that the British would not control distribution of U.S. equipment.[34]

Provisions for shipment of subsistence, clothing, and so forth, were immediately agreed upon and placed into effect. Clothing was pulled together from a miscellany of sources, the United States furnishing old Civilian Conservation Corps stocks of green mackinaws and caps, Army class X shirts, cotton socks, and comforters, the United Kingdom supplying battle dress, boots, and pullovers from surplus Middle East stocks.[35] There was some delay in agreement on the whole CAdC paper since the British objected to the conditions placed on the theater commander's control of the program (British General Wilson succeeded Eisenhower as Mediterranean theater commander in January 1944), and the over-all policy was not formally accepted and the theater notified until late February 1944.[36]

By that time both General Wilson and General Devers, the new U.S. theater commander in the Mediterranean, had gone ahead with plans of their own that envisaged fuller use and support of the Italians than the CCS policy explicitly sanctioned. Devers' interest was in the use of Italian service troops. He was preparing, he informed the War Department on 3 March, a project for equipping additional Italian military service units on the same basis as the POW units, and it would require more equipment from the United States. Wilson had broader plans for forming an Italian combat force of three divisions, one of them to be committed to action as early as possible. He thought these divisions essential because many U.S. and French troops were soon to be withdrawn from Italy. He proposed to equip them to the maximum extent possible from Italian sources, but some necessary items of armament, transport, and ammunition

[34] CCS 386/1, 27 Nov 43, rpt by CAdC, title: Subsistence and Clothing for Italian Troops Other than POW.

[35] (1) CCS 386/2, 29 Nov 43, title as above. (2) Diary Entry, Theater Br, 21 Dec 43, Plng Div ASF. (3) Memo, Secy for Chmn, MAC(G), 28 Dec 43, sub: Clothing for Italian Troops not POW's, Tab J, Min, 125th mtg MAC(G), 30 Dec 43. (4) Msg, CM-OUT 11255, AGWAR to FREEDOM, Algiers, 29 Dec 43.

[36] CCS 386/3, 5 Feb 44, memo by Reps Br COS, title as above. CCS 386/4, 22 Feb 44, memo by U.S. CsofS; CCS 386/5, 26 Feb 44. The British succeeded in knocking out the last clause in the proviso—"under the principle . . . ."

could not be secured in Italy and he asked CCS approval for procurement from the United Kingdom or the United States.[37]

The CCS immediately replied that there could be "no deviation from the decision . . . that combat equipment is to be provided only from Italian sources."[38] They withheld decision on the matter of service troops pending further information from the theater, but informed Wilson that provision of such heavy equipment as trucks and bulldozers would be practically impossible, and suggested that Italian units be organized to use the simplest available tools. This CCS reply, dictated by the CAdC, undoubtedly reflected almost entirely American views. In further CCS deliberations on the subject the British pressed for some effort to supply the Italian combat forces under Wilson, arguing that all forces "which are capable of making a contribution to the defeat of Germany should be considered in principle as eligible to receive such share of combined Allied resources as will ensure that the maximum impact on the enemy is achieved."[39] The U.S. representatives were at first willing to make concessions only as regards service troops, and even those were rather limited. In the theater the British and American armies had both adopted as one solution to the problem the "dilution" of their own service units with Italian personnel, thus making them eligible for supply through national channels. The CAdC in July 1944 recommended approval of the practice, and proposed further that all-Italian service units operating under U.S. command be loaned equipment that would be returned at the end of the war, a system similar to that under which issues had been made to the POW units.

The British still pressed for a more elaborate program and finally won some additional concessions. In August 1944 the CCS formally approved the equipping of the three combat divisions, stipulating that equipment might come, not only from Italian sources, but also from other captured equipment or from stocks available without prejudice to other requirements of higher priority. Any U.S. equipment furnished under this authorization was also to be on a loan basis to be returned at the end of the war. A new division of supply responsibility with the British was made whereby they were to assume support of Italian ground combat forces to a limit of 63,000, Italian air forces to a limit of 22,000, naval forces to a limit of 75,000, and service forces operating under their command to a limit of 100,000. The United States would assume complete responsibility for service troops operating with its own command to the limit of 90,000 men. The two countries would continue as before to share the furnishing of subsistence, clothing, fuel, and medical supplies to independent Italian forces, some 124,000 men, charged with internal security and administrative functions.[40]

The concessions to the British proved of minor importance. The Italian com-

[37] CCS 386/6, 4 Apr 44, title: Subsistence and Clothing for Italian Troops Other than POW.

[38] (1) *Ibid.* (2) CCS 386/7, 10 Apr 44.

[39] CCS 386/11, 28 Jul 44, memo by BrCOS, title as above.

[40] (1) Memo, Somervell for Lutes, 18 Jul 44, CofS ASF, file CG ASF 1943–44. (2) CCS 386/10, 22 Jul 44. (3) CCS 386/14, 10 Aug 44, title: Combat Equipment for the Italian Army. (4) ID Rpt 10, Lend-Lease Information, 31 Dec 44, Part 1, pp. 6–7.

bat forces were never welded into an effective fighting unit. The main Italian contributions continued to be in service units and in maintaining internal security, and the American commitment was consistently limited to that of supplying troops essential to the operations of U.S. commands plus miscellaneous subsistence and clothing for internal security units remaining under Italian command. The British, within the resources available to them, were unable to make much progress in Italian rearmament, however much they may have wished to do so. The real key to the failure to make more extensive use of Italian manpower lay in the American refusal to make Italy eligible for lend-lease.

Military Aid in Eastern Europe

Though Greece, Yugoslavia, Poland, and Czechoslovakia were all declared eligible for lend-lease very early in the war, circumstances prevented the delivery of anything more than the most minute quantities of supplies to any of those countries. Until the very last stages of the war, delivery to resistance groups could only be accomplished by airlift or, as in the case of Greece and Yugoslavia, by submarine or small surface craft, and was handled under SOE-OSS auspices. Refugee forces, such as Lt. Gen. Wladyslaw A. Anders' Polish Corps, the Czechoslovakian Armored Brigade, and miscellaneous Greek units, were all under British sponsorship, and any aid furnished them was a part of the bulk allocation to the British. By a practical working agreement, during the first part of the war these countries were assigned entirely as responsibilities of the British. In accordance with American policy developed in 1943 affirming the right of all independent anti-Axis nations to submit direct requests for lend-lease, requests were received from Eastern European refugee governments as well as from resistance groups, and some efforts were made to arrange delivery to them through OSS and American theater channels. However, insofar as both Poland and Czechoslovakia were concerned, apart from the sheer difficulty of delivery, the United States and Britain were both reluctant to furnish supplies to forces that seemed to fall more properly into the Soviet sphere of influence.[41] The largest OSS-SOE deliveries were made to Yugoslavia, the next largest to Greece. Delivery of supplies to Yugoslavia was made a direct responsibility of the British theater commander in the Mediterranean, but, as far as possible, assignments of U.S. materials to Yugoslavia were made direct. They were shipped to the U.S. theater commander in the Mediterranean, who then arranged delivery, normally through channels provided by the British.

At first most of the supplies to Yugoslavia went to Col. Draza Mihailovic, but the British soon learned that Marshal Josif Tito's forces were making the most effective fight against the Germans. They eventually concentrated their support on Tito and persuaded the Americans to do likewise. At the Cairo Conference in December 1943 the CCS directed an intensification of the effort to supply the Yugoslav partisans. Since the operation proposed by the British to open a port

[41] In the most important case in point, the Polish uprising in Warsaw in 1944, the British wanted to dispatch planes with supplies despite failure to secure Stalin's agreement, but President Roosevelt was very lukewarm. See Churchill, *Triumph and Tragedy*, pp. 128–45.

on the Istrian coast never came off, the supplies continued to be OSS-SOE sponsored. In the end, the Red Army occupied Yugoslavia, as it did Poland and most of Czechoslovakia. American and British aid, which had played such an important part in sustaining Tito, as a consequence, was almost entirely cut off early in 1945. The British entered Greece in 1945, and proposed to organize and equip a Greek army to restore order in that disturbed country, but the JCS ruled that American resources could not be made available for the purpose because liberated manpower units in western Europe must have first priority. They approved the British action only on the same condition as stipulated for the Belgian brigades—that it would result in no increase in British requests on the United States.[42]

The extent to which the USSR used American supplies to arm liberated forces in eastern Europe can only be conjectured. Upon several occasions the United States informed the Soviet Union that lend-lease retransfers must have prior American approval, but the Russians ignored the notes. They did, in April 1945, approach General Deane on the subject of retransfer of vehicles of lend-lease origin to four Czechoslovakian divisions Stalin had agreed to equip, but they never made any formal request on the U.S. Government. Presumably, with the end of the war in Europe the Soviet Union was able to furnish vehicles of its own manufacture. It may well be assumed, nevertheless, that the USSR made whatever disposition it desired of lend-lease supplies within its own sphere of influence since the United States had little means of controlling that disposition or of even knowing what it was.[43]

Military Aid to Latin America

Lend-lease to Latin American republics did not figure greatly in American plans after Pearl Harbor. All of these republics, except Argentina and Chile, followed the lead of the United States and broke off diplomatic relations with the Axis Powers; but, save for Brazil and, to a lesser extent, Mexico, their role in the war was purely defensive. As the United Nations passed from the defensive to the offensive at the end of 1942, assignments of military equipment to Latin American republics of necessity got a very low priority. Though these assignments were made by the combined machinery in the same manner as others, British participation in decisions thereon was largely perfunctory and they were treated as almost exclusively within the American province. The U.S. State Department maintained a close surveillance over all Latin American programs and assignments on the grounds that their *raison d'être* was more diplomatic than military.

[42] (1) On the specific U.S. policy and actual quantities of supplies delivered to each country, see ID, Lend-Lease, Text, II, 1305–10, 1315–17, 1340–44, 1354–57. (2) On the British SOE supply to Yugoslavia and Greece see Ehrman, *Grand Strategy V*, 141–64, 462–75. (3) CCS 768/1, 1 Feb 45, title: Equipment for Allied and Liberated Forces; CCS 768/2, 8 Feb 45, same title. (4) CCS 425, 4 Dec 43, title: Directive for Intensification of Support of Partisan Forces in Yugoslavia.

[43] (1) Aide-Memoire, U.S. Dept State to Soviet Chargé d'Affaires, Washington, 6 Jul 44, ID, Lend-Lease, Doc Suppl, VI. (2) Ltr, U.S. Secy State to Soviet Ambassador, 19 Dec 44, ID, Lend-Lease, Doc Suppl, VIII. (3) ID, Lend-Lease, Text, 1307–09.

The basic program for military lend-lease to Latin America was drawn up in mid-1941 by the Joint Army-Navy Advisory Board on American Republics and provided for a total of $400 million in aid, about 75 percent of it to consist of Army equipment. An arbitrary division of this sum was made among the Latin American nations, generally in accord with their population and strategic importance. In line with this program, the State Department, between 1941 and 1943, negotiated lend-lease agreements with each of the Latin American countries save Panama and Argentina, the former being excluded because it was already under the protective jurisdiction of the United States, and the latter because of its pro-Axis leanings. In each agreement the credit to be granted was stated, the final total reaching $425,890,000, all but $100,000,000 for Army equipment. Brazil received an allocation of only slightly less than 50 percent of the total, a recognition of that country's strategic position and also its willingness to take an active part in the war. Military lend-lease to Latin America was not to be totally gratuitous. Each nation was to be expected to pay a percentage of the cost of the material it received in proportion to its ability, the percentages varying from 2.73 in the case of Paraguay to 69.23 in that of Nicaragua.[44]

The lend-lease agreements were, in effect, small protocols, but they carried no time schedule for deliveries and each one contained a clause providing that they might be terminated when the defense needs of the Western Hemisphere would no longer be served by their continuance.[45] Under these dispensations the U.S. military authorities controlled the flow of munitions to Latin America, much as they did to other countries, in the light of strategic need, making political concessions only when they posed little or no threat to the fulfillment of programs considered more vital to the prosecution of the war. Until mid-1943, the general scarcity of munitions for all purposes held back the allocation of any sizable quantities to Latin America; after mid-1943 when munitions became available in greater quantities, the danger of attack to the Western Hemisphere had largely passed, and the United States formally adopted a policy of limiting military supply to Latin America for purely defensive purposes.

By June 1943 munitions of a dollar value of 165 millions ($125 million Army; $40 million Navy) had been allocated to Latin American republics, some 70 percent to Brazil and Mexico. At this point the State Department recommended formulation of a new policy in the light of the improved strategic situation of the United Nations, and in mid-August this policy was formally agreed by the War, State, and Navy Departments. It provided that allocations of military equipment to the Latin American republics would be limited in the future to that necessary for (1) forces required for joint employment with forces of the United Nations in antisubmarine and other military operations in defense of common interests;

[44] (1) Stetson Conn and Byron Fairchild, *The Framework of Hemisphere Defense*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1960), pp. 232–35. (2) ID, Lend-Lease, Text, II, 1231–34. (3) JCS 629, 23 Dec 43, title: Rpt of Joint Army and Navy Advisory Board on American Republics as Revised at Request of Dept of State.

[45] JCS 629, 23 Dec 43.

(2) training and equipping of Latin American forces to be employed in overseas offensive operations; (3) repair and maintenance of existing equipment and that to be furnished in the future; (4) continued development of an interest in American munitions and training doctrine to the exclusion of foreign materials and influences; (5) maintenance of internal security in those countries whose governments continued to support the United States.[46]

In September 1943 the Joint Advisory Board on American Republics was reinstated and assigned the task of refining the policy and working out new programs in consonance with it. The board's recommendations, in substance, asked for abrogation of the old agreements and cessation of arms deliveries to all save Brazil and Mexico while new programs were developed for the postwar period—programs whose goal was to be complete conversion of Latin American armies to U.S.-type arms and organization in the interests of hemisphere solidarity. What remained in the wartime program were the provisions for supply of Brazil and Mexico, the nations that formed the most important links in the Atlantic antisubmarine defenses and that proposed to send small expeditionary forces overseas. Further allocations to other republics after mid-1943 were inconsequential.[47]

The Brazilian project was the larger and more important. In April 1943 President Getulio Vargas of Brazil proposed the formation of a Brazilian Expeditionary Force made up of a maximum of three infantry and one armored or motorized division with suitable supporting troops and a small air force, all to be equipped by the United States. The Brazilians suggested that, for training purposes, only sufficient equipment for one division need to be sent to Brazil, this to be used to train the divisions in rotation. OPD decided to cut this requirement in half and in July 1943 MAC (G) assigned to Brazil 50 percent of the equipment for one division. In January 1944 further assignments were made of tanks and armored cars for training armored units, though the JCS still withheld decision on the size of the Brazilian force to be used overseas. Finally, in April 1944, they decided to limit it to one infantry division and one fighter squadron to be used in the Mediterranean theater. Agreement was obtained from the British Chiefs early in May and the wheels set in motion for detailed arrangements for movement and support. The Brazilian troops took only individual equipment with them, the rest was supplied directly from the United States and issued to them on arrival in Italy. The training equipment initially furnished was left in Brazil. The first Brazilian regimental combat team arrived in Naples in July 1944 and by fall the whole division had taken its place in the line with the U.S. Fifth Army. Maintenance and replacement were furnished through U.S. channels in the same way as for French forces. Naturally problems arose—of language, of unsuitability

[46] (1) *Ibid.* (2) Statement of Policy Regarding Future Supply of Lend-Lease Materials to Latin America as Agreed upon by State, War, and Navy Depts, 6 August 1943, G-4 400.3295, I.

[47] (1) JCS 629/1, 31 Dec 43, title as JCS 629. (2) JCS 629/2, 20 May 44, title: Staff Convs with Reference to Lend-Lease Agreements with Other American Republics. (3) JCS 629/3, 25 May 44; JCS 629/4, 1 Jun 44; both same title as (2). (4) For later development of the postwar policy see further papers in the JCS 629 series.

of U.S. rations, of provision of personnel replacements, and of divers other matters involved in supply and administration of a separate national force in a theater already possessed of the most polyglot forces ever assembled. Most of them were settled satisfactorily, but their existence undoubtedly contributed to the decision to make no further effort to exploit the manpower available in Brazil.[48]

The Mexican Government furnished one fighter squadron that was sent to the Pacific in early 1945 and supported through American channels.

War Department lend-lease supplies for Latin America totaled $323,710,000 in dollar value by the end of the war, close to the amount promised in the separate lend-lease agreements. Brazil received 71 percent and Mexico 10 percent, the former considerably exceeding its allotment. The other Latin American nations received proportionately less, and it must be remembered that, owing to the general rise in prices during the period, the dollar values do not truly reflect the extent to which these smaller nations were disappointed in their anticipations. Taken all in all, lend-lease to Latin America constituted only about 1.5 percent of the total military aid furnished Allied powers during World War II.[49]

[48] (1) JCS 284, 4 May 43, memo from CofS, USA, title: Arming of Brazilian Expeditionary Force, with related papers, ABC 400.3295 (5–4–43) Brazil. (2) Memo, Lt Col L. C. Strong, Liaison Br, ID, for Reqmts and Assignments Br, 14 Jun 43, sub: Assignment of Training Equipment for Brazilian Expeditionary Force, Tab 9, Agenda, 101st mtg MAC(G), 8 Jul 43. (3) Min 2167, 102d mtg MAC(G), 15 Jul 43; 2916, 127th mtg MAC(G), 13 Jan 44. (4) Memo, Gen Wood, Dep Dir P&O, ASF, for Gen Roberts, OPD, 13 Apr 44, sub: Brazilian Expeditionary Force, ABC 400.3295 (5–4–43). (5) CCS 553, 18 Apr 44, title: Brazilian Expeditionary Force. (6) Min 3368, 142d mtg MAC(G), 18 May 44, with Tab 4, Agenda. (7) Cables and other papers in OPD Exec 1, Item 28b. (8) Study, Command and General Staff School, by Maj. L. R. de Freitas Tacito of the Brazilian Army, Logistical Support of a Brazilian Expeditionary Force by American Supply Installations.

[49] (1) Statistics: Lend-Lease, 15 December 1952 draft, prepared by Theodore E. Whiting, Carrel I. Tod, and Anne P. Craft (hereafter cited as Whiting, Tod, and Craft, Statistics: Lend-Lease), MS, OCMH, table Lend-Lease–7. (2) ID, Lend-Lease, Text, 1289–90.

CHAPTER XXIX

Lend-Lease to China, 1943–45

China received 7 percent of the total value of lend-lease supplies furnished by the War Department during World War II. Had the limited capacity of the supply line from India to China not prevented the United States from carrying out its expressed intention of equipping a sizable Chinese army for the war against Japan, the percentage would have been much higher. Under a basic policy whereby lend-lease was assigned only to forces that could use it effectively in prosecution of approved strategic plans of the CCS, assignments to China had necessarily to be limited to materials that either could be used by the Chinese Army in India or transported into China within a reasonable period of time.[1]

Assignments to China were made in the normal manner, by the Combined Munitions Assignments Board and its committees; but British participation in decisions on lend-lease to China was largely perfunctory, confined mainly to those instances in which assignments to China affected British interests in some way. British supplies, most of them from Empire sources, were also furnished to China, but under close American control. The Chinese Army in India was dependent upon Indian sources for most of its subsistence, quarters, uniforms, and miscellaneous supplies; these supplies and services were furnished administratively by arrangement between the American SOS and the Government of India, or in response to bids placed by the United States before the Indian Munitions Assignments Committee. Supplies procured in India for movement into China were normally bid for, after mid-1943, through the London Munitions Assignments Board. Other supplies for Chinese troops, whether in India or in China, were procured from Australia and bid for before the Australian Munitions Assignments Committee. Supplies from Canada, on the other hand, were assigned directly under Canada's own Mutual Aid Program but the assignments were co-ordinated with those made in Washington through a Joint War Aid Committee. Thus, the sources of supply were varied, but the control almost solely American, exercised through the U.S. commander in the CBI and by the War Department and MAB in Washington.[2]

[1] (1) See above, ch. XXI. (2) Whiting, Tod, and Craft, Statistics: Lend-Lease, p. 7.

[2] (1) See Leighton and Coakley, *Global Logistics, 1940–43*, pp. 547–49, and ID, Lend-Lease, Text, II, 1151–52. (2) On the Canadian program and procedures see CCS 542, 11 Apr 44, and CCS 542/1, 6 May 44, titles: Canadian Mutual Aid to China.

The Stilwell Program

General Stilwell's was the guiding hand in shaping the Chinese lend-lease program in the year and a half following the fall of Burma in May 1942. His plan for lend-lease was an integral part of his general concept of reopening the supply line through Burma and eventually creating an effective Chinese army capable of coping with the Japanese invader.

To recapitulate briefly, Stilwell hoped to persuade Chiang to reform and consolidate his scattered understrength armies and to create a compact, efficient force of 60 divisions, the first 30 (X-RAY and YOKE, or X and Y, Forces) to be engaged in the effort to retake north Burma, the second 30 (ZEBRA, or Z, Force) to provide an effective defense of east China. These divisions were to be organized on special tables of organization and equipment providing for considerably less artillery, fewer motor vehicles, and generally less heavy equipment than comparable U.S., British, or French divisions. At first only the Chinese divisions formed at Ramgarh in India (X-RAY Force) could be completely equipped with American or British matériel; the YOKE and ZEBRA Forces in China were to be initially supplied primarily from Chinese sources supplemented by selected critical items that could be flown over the Hump, most of them for the YOKE divisions. Once the road from India to China was open, however, Stilwell would give all 60 divisions enough American equipment to enable them to move on to take a port on the China coast. Once a port was opened, Stilwell hoped a large enough force could be supplied to drive the Japanese out of China. Just before the Cairo Conference in December 1943, he proposed to Chiang Kai-shek that he ask the United States for equipment to provide, ultimately, an efficient army of 90 Chinese divisions in the field.[3]

Realization of Stilwell's plan depended upon Chiang's willingness or ability to reform and consolidate his forces, on adequate airlift capacity over the Hump, and adequate priority on that capacity for YOKE Force supplies, and finally on execution of the strategic plan calling for the opening of a land route through Burma. None of these conditions, it will be recalled, was fulfilled during 1942 and 1943. Chiang was slow to consolidate units in Yunnan for YOKE Force and never brought these units to full strength; none of the ZEBRA divisions were even designated until September 1943. At TRIDENT the air effort in China got an almost absolute priority over YOKE Force supplies. The land campaign in Burma was postponed time and again. The only part of the plan on which Stilwell was able to make early and substantial progress was in the training and equipping of X-RAY Force at Ramgarh, and it was with this Chinese Army in India that he was finally forced to move, alone, in November 1943 to open the north Burma campaign.[4]

In retrospect it seems clear that Stilwell's plan offered Chiang his best hope for an Army that would be effective enough to enable him to play an important part in the war against Japan and to strengthen his position internally vis-à-vis his rivals, warlord or Commu-

[3] (1) See Memo, Gen Stilwell for Generalissimo Chiang Kai-shek, no date, printed in Romanus and Sunderland, *Stilwell's Command Problems*, pages 57–58. (2) For the background, see above, Chapter XXI.

[4] See above, ch. XXI.

nist, in the postwar period. Yet it involved risks that Chiang was unwilling to take and a measure of American control that he was loath to accept. Chiang wanted supplies on the same basis the British and Russians received them, with no strings attached. Perhaps, also, the reform and consolidation on which Stilwell insisted were beyond Chiang's power to effect. Whatever the reason, lack of will or lack of ability or a combination of both, Chiang resisted Stilwell's pleas for Army reform and consolidation and time and again showed his preference for air action in China as a substitute, with all the implications this had for priorities on Hump tonnage.

Stilwell continually espoused a policy of using lend-lease as a lever to force Chiang to reform and consolidate his armies and launch YOKE Force on the drive across the Salween into Burma. Although President Roosevelt refused, until after the Cairo Conference, to exercise this sort of pressure, this was hardly so important a factor in the failure of Stilwell's plan as was the limited capacity of the Hump air line and the priority on air supply granted Chennault. Only the most minute quantities of ground force supplies moved over the Hump until well past the middle of 1943, leaving Stilwell very little to bargain with. Meanwhile, the continued growth of a stockpile of Chinese lend-lease in India served as the rationale for further curtailment of the Chinese lend-lease program by the War Department and MAB.

If he was not granted the right to use lend-lease as a lever in bargaining with Chiang, Stilwell was granted powers that to all intents and purposes made him lend-lease administrator for China subject to policies established in Washington.[5] By decision of the MAB in June 1942, all military lend-lease for China was consigned to Stilwell for delivery, and he was empowered to divert materials for use by U.S. troops though cautioned not to do so without permission from the Chinese Government. By early 1943 requirements for China in the Army Supply Program as well as assignments made by MAC(G) were being shaped entirely in terms of Stilwell's 60-division program and his specific requests for matériel for Chinese forces. By an agreement negotiated at Chungking in January 1943, the American commander was made responsible for presenting all Chinese military requirements in Washington and granted the right to comment on all requirements for civilian-type supplies. Moreover, since the Chinese did not have the necessary personnel or facilities in India to handle storage and movement of lend-lease supplies, these functions were entrusted to the American theater SOS. On the all-important airlift, the theater controlled priorities (subject, of course, to high-level policy determinations in Washington) on all movements by the U.S. Air Transport Command and part of those by Chinese National Airways Corporation (CNAC) planes. Only on the remaining CNAC lift, always small, could the Chinese move such other essentials as they deemed necessary—arsenal materials, bank notes, supplies for the civilian economy, and military supplies for forces outside the Stilwell program.[6]

[5] The International Division refers to Stilwell by this title in Rpt 10, *Lend-Lease Information*, 31 Oct 43, section on China.

[6] See Leighton and Coakley, *Global Logistics, 1940–43*, pp. 532–34.

The ASF initially included requirements for the full 60 Chinese divisions in the Army Supply Program for 1943 and 1944. Assignments, meanwhile, were limited during 1942 to certain specific tonnage figures (first 3,500, then 5,000) monthly, but this policy was abandoned in early 1943 in favor of one of simply meeting Stilwell's requests. Under the new policy, shipments rose to around 10,000 tons monthly by mid-1943.

Despite the seeming simplicity of the basic program—material for 60 divisions—there were many complications in administration. The theater SOS in India inherited from the Chinese a stockpile of miscellaneous materials, mostly lend-lease but some of it consisting of purchases made by China Defense Supplies, Inc. (CDS), in 1939–40. The materials were scattered in various places, many of them deteriorating in open storage, and there was no adequate inventory. With an excessively long supply line to operate and an acute shortage of trained personnel, the theater SOS was in no position either to provide proper storage or to make an adequate inventory. Some of the supplies in India could be used at Ramgarh, others, with Chinese permission, were diverted to U.S. forces, but the great bulk remained in storage in India awaiting the day they could be moved into China. Each month's shipments added to the burden of storage and inventory, and the ASF soon observed a tendency to requisition new material for Chinese troops when the need arose rather than to try to locate specific items already in India.

Besides duplicate requisitions, there were others that fell outside the estimates originally made in preparing the Chinese lend-lease section of the Army Supply Program. Theater calculations of the exact requirements for 60 Chinese divisions were continually fluctuating. Unprogramed requirements were exceedingly hard to meet because of the low priority accorded Chinese forces. Moreover, Chinese requirements had to be processed through the military assignment machinery, which, the International Division estimated, took some nine months between the filing of a requisition and the ultimate arrival of material in India. Thus, however small they might seem in relation to those of other lend-lease recipients or other American theaters, they had to be anticipated at least nine months in advance.[7]

Concerned by the growing stockpile in India and by the seeming lack of system in handling Chinese lend-lease, OPD and ASF, applying the philosophy that war material should never be allowed to accumulate in idle stockpiles, moved in July 1943 to curtail the Chinese program further. While reaffirming the 60-division commitment, they decided that the full second 30 divisions were too far in the future to permit inclusion of more than training materials for them in the Army Supply Program. They therefore cut back the Chinese requirements program for 1943 and 1944 from the full 60 divisions to the first 30, plus 10 percent for training the second 30.[8]

The theater commander was forced to concur, albeit reluctantly, since at this point so very little ground force material was moving into China. It was not until

[7] (1) ID Rpt 10, *Lend-Lease Information*, 31 Oct 43, section on China. (2) Msg 2296, AGWAR to AMMISCA, 11 Mar 43, ID Cables AMMISCA OUT, vol. III.

[8] Msg 2976, AGWAR to AMMISCA, 6 Jul 43, and related papers in OPD 400 CTO, Case 61.

after QUADRANT, with an increase in the capacity of the airlift and the cancellation of the absolute priority for Chennault's air force, that the first sizable quantities of Y Force supplies moved over the Hump. At that time Chiang also began to show a more co-operative attitude, designating some of the Z Force divisions and enabling Stilwell to open a Z Force training center at Kweilin. With these developments the theater reopened the question of supplies for the second 30 divisions. A complete plan for equipping 60 divisions in accordance with the tables of organization and equipment then in use at Ramgarh was presented in Washington in October 1943. Total requirements for initially equipping each division were estimated at 4,612 tons, of which 600 tons were placed in "A" priority for movement over the Hump; the rest, so-called "B" supplies, would be shipped to India to await opening of the Ledo Road. Assuming that the road would be opened by October 1944, the theater estimated that the first 30 divisions could be almost completely equipped by the end of 1944 and that equipping the second 30 could begin early in 1945. Therefore, the argument ran, the material for the second 30 would have to be placed in the 1944 Army Supply Program if it was to be on hand and ready to move in time.

OPD ruled against Stilwell on the grounds that after the defeat of Germany material originally produced for other Allied forces could be used to supply China; it would therefore be unwise to "overburden American production" during 1944 with full requirements for 60 Chinese divisions.[9] Undoubtedly "overburdening American production" was less the real consideration than was a belief that the 60-division program was impossible of achievement, and a concern lest supplies accumulate in idle storage in India awaiting the uncertain contingency of the opening of the Ledo Road. Shortly thereafter, in any case, OPD asked G–4 to work out a definite policy that would effectively prevent any further growth of the stockpile. As finally agreed and dispatched to the theater on 8 December 1943, this policy established the rule that no assignments or shipments should be made to India for Chinese forces unless the theater could give definite assurances that material to meet the requirement was not already in the theater or en route and that it could be delivered to using forces in India or China within six months after arrival in India.[10]

The message placing this restriction on stockpiling in India arrived in the theater just when hopes were highest for a much larger lend-lease program for China. Stilwell's plan for a Chinese Army of 90 divisions had been presented to the President at SEXTANT in late November, and the President had indicated at least a conditional assent. Marshall reported to the JCS on 25 November that the President had told him that the Generalissimo should have something for his trip and that he (the Presi-

[9] (1) DF, OPD for G–4 and CG ASF, 23 Oct 43, sub: Logistical Plan for Equipping Chinese Divs. (2) Ltr, Col Frank Milani, AG USAFCBIT, to Chief, Asiatic Sec, OPD, 11 Oct 43, same sub. Both in OPD 400.3295 China, Sec 1A, Case 50. (2) Romanus and Sunderland, *Stilwell's Command Problems*, ch I. (4) Msg AG 2524, AMMDEL to AGWAR, 29 Oct 43, file CBI CM–IN Sep–Nov 43, ASF Plng Div.

[10] (1) Memo, G–4 for OPD, 6 Dec 43, sub: Proposed Supply Policy Pertaining to Equipping Chinese Divs. (2) Msg 4795, AGWAR to AMMDEL, 8 Dec 43. Both with related papers, in OPD 400.3295 China, Sec 1A, Case 50.

dent) had spoken to Chiang about arming the third 30 divisions but had postponed any definite commitment. Taking his cue from these conversations, Stilwell instructed his subordinates in the theater to prepare requisitions for the equipment for the second 30 divisions and forward them to Washington. Brig. Gen. Benjamin G. Ferris' message containing the requisitions crossed that of OPD informing the theater of the more restrictive policy. On receipt of OPD's message, Ferris, evidently nonplussed, cabled Washington asking whether this policy had not been prepared prior to SEXTANT decisions. But OPD was not ready to make any change, informing the ASF on 16 December that it had received no notification of any Presidential commitment and stating that if one had been given "an attempt will be made to have the decision reversed as impractical."[11]

In reality, at Cairo and Tehran the whole strategic concept behind the 90-division plan had been swept away. The swift pace of the Pacific advance, the new emphasis on the air effort in China, and the prospect of Soviet entrance into the war against Japan left no compelling necessity behind the Chinese ground force program. The sequel was inevitable. On 28 December 1943 Col. Thomas S. Timberman, head of OPD's Asiatic Theater Group, told General Handy that "thirty divisions are the maximum we will be able to reasonably equip . . . in the course of this war. . . . Some training of the second thirty divisions with the very limited equipment can be undertaken; any equipping of the third thirty divisions is considered impossible."[12]

Handy took the matter to General Marshall on 31 December, noting that the President had made no commitment on the timing of the flow of equipment, and obtained the Chief of Staff's approval for a message to the theater affirming the G–4 policy that set the upper limit of the Chinese program at 33 divisions and established the 6-months' rule on delivery.[13]

The President himself, whatever the reason, seemed much less concerned about Chiang's position after meeting the Chinese leader at Cairo. He exerted no such pressure on the War Department to speed up Chinese lend-lease as he had after Casablanca to see that his promises to General Giraud were fulfilled. On the contrary, he finally adopted a policy not unlike the one Stilwell had long been urging, threatening to halt the flow of lend-lease to YOKE Force entirely if Chiang did not use it to attack across the Salween.[14]

The 33-Division Program

The 90-division program thus became a vague, nebulous concept based on an

[11] (1) DF, Col John J. Binns for Dir Plng Div ASF, 16 Dec 43. (2) Msg CM–IN 9772, AMMDEL to AGWAR, 15 Dec 43. Both in folder CBI Theater, ASF Plng Div. (3) Romanus and Sunderland, *Stilwell's Command Problems*, ch. II. (4) JCS 130th mtg, 25 Nov 43, Item 6.

[12] Memo, Col Timberman for Gen Handy, 28 Dec 43, sub: Equipping Chinese Divs, OPD 400.3295 China, Sec 1A, Case 50.

[13] (1) Memo, Handy for CofS, 31 Dec 43, sub: Equipping Chinese Divs. (2) Msg 4171, AGWAR to USAFCBI Forward Echelon, 31 Dec 43, with for record note. Both in OPD 400.3295 China, Sec 1A, Case 50.

[14] See Msg, AGWAR to AMMISCA, President to Stilwell for delivery to Chiang Kai-shek, 27 Dec 44, Stilwell Personal File, Book V, Item 1578.

equally vague Presidential promise, and soon disappeared entirely. Even the 60-division program soon vanished from the planning boards. The mushrooming requirements of Chennault's force and of the XX Bomber Command kept the movement of ground force supplies into China at a low level throughout the first half of 1944. Chiang's decision, under continuing American pressure, to finally launch YOKE Force on a drive into Burma in April 1944 came too late. The lend-lease policy for China had already been cast in a mold that had hardened. Under the impact of the Japanese advance in east China in summer 1944, the theater itself despaired of the possibility of actually concentrating the second 30 divisions and training them, recognizing that under existing conditions it would be better to use available equipment for a smaller number of units. Thus the 30 division plus 10 percent plan underwent a metamorphosis whereby it became, in effect, simply a plan for equipping a 33-division Chinese force.[15]

The effort in Washington concentrated on systematizing the handling of lend-lease for the 33 divisions and on reducing stockpiles to a minimum. The first step toward more systematic accounting for both military lend-lease and China Defense Supplies, Inc., supplies in India and China was taken when, in November 1943, Col. William S. Gaud, Jr., was dispatched to China by the War Department as "direct representative to the Government of China in all matters pertaining to the assignment of military supplies and equipment to the Chinese Government."[16] Gaud's first reports revealed deplorable conditions in the storage of and accounting for Chinese lend-lease supplies, particularly those shipped under civilian programs; and he was instrumental in the establishment of a joint War Department-FEA Screening Committee in Chungking to pass on all Chinese lend-lease requisitions for civilian supplies. The theater continued to exercise primary responsibility for the Stilwell program but, again, Gaud's reports led to a more concerted effort by the War Department to secure a complete physical inventory of all Chinese lend-lease supplies on hand in India. Though some progress was made with this inventory, it was not to be completed to the satisfaction of the War Department until April 1945. In the meantime its imperfection constituted a stumbling block to intelligent stockpiling.[17]

The theater was never happy with the restrictions placed on stockpiling by the G–4 6-months' policy, realizing that, adequate inventory or not, the existing stockpile in India was unbalanced and could not provide critical items needed in emergencies for forces at Ramgarh or, more important, could not satisfy the requirements that must be met on that unpredictable date when the Ledo Road would open. In April 1944 General Sultan, citing the long time lag between assignments and arrival of materials in the theater, asked for a stockpile of equipment for 8 Chinese divi-

[15] (1) See above, ch. XXI. (2) Romanus and Sunderland, *Stilwell's Command Problems*, ch. VIII.

[16] TAG Ltr to Col Gaud, 11 Nov 43, sub: Instructions Relative to Duties of WD Military Aid Representative to the Republic of China, ID, Lend-Lease, Doc Suppl, VI.

[17] (1) Gaud's reports are in ID file 319.1, Reports Col Gaud. (2) See also ID Rpt 10, *Lend-Lease Information*, 31 Mar 44, section on China.

sions and supporting troops of 2 Chinese armies to be shipped without regard to the 6-months rule. The theater based its request on an estimated shipping time of 6 months; OPD, reasoning that the shipping time was actually only 70 days, reduced the stockpile requirement proportionately to 5 divisions and supporting troops for one army before approving it. Shortly afterward OPD also approved, at Stilwell's request, the assignment and shipment of equipment for 3 Chinese long-range penetration battalions to be organized at Ramgarh.[18]

Despite OPD approval, the 5-division stockpile for a long time was more promise than reality. MAC (G) delayed assignments awaiting proof from a physical inventory that materials were not already in India, and the CBI theater could not complete the inventory satisfactorily. A common feeling in OPD that proper control of the Chinese program was "lacking within the theater" played its part in dictating delays in assignments calculated to insure that the new stockpile in India would be built at a leisurely pace.[19]

Continued complaints from General Sultan finally brought some action. Based on new tables of organization and equipment forwarded from the theater and on a specific list of requirements for completing the stockpile, the ASF secured assignments by MAC (G) in August and September 1944 of most of the critical items but they were made on OPD's stipulation that they would have to be furnished within theater priority. "It is believed highly desirable to get this equipment out there," wrote General Tansey, "but not at the expense of American troops in other theaters."[20] Meanwhile, OPD turned a deaf ear to Sultan's plea, forwarded on 16 August, that the stockpile be increased to ten divisions. Also, MAC (G) postponed action on some of the requests for the 5-division stockpile, awaiting clarification of the priority question. Shipments continued sporadic, and the stockpile on hand in India when the Ledo Road finally opened in early 1945 was an unbalanced one.[21]

While holding back materials for a stockpile, the War Department and MAB moved to establish more effective procedures for supplying Chinese forces who were actually fighting and for integrating the supply line in India that

[18] (1) Ltr, AG Hq, CBIT, to Chief, Asiatic Sec, OPD, 7 Apr 44, sub: WD Policy on Supply of Chinese Army. (2) Msg CRA–2487, CG USAFCBI Rear Echelon, to AGWAR, 1 May 44. (3) Memo, OPD for G–4, 2 May 44, sub: WD Policy on Supply of Chinese Army with for record note. All in OPD 400.3295 China Sec 1A Case 50. (4) Min 3382, 143d mtg MAC(G), 22 May 44.

[19] (1) See Memo, Col William H. Wood, Asiatic Sec, Theater Gp, OPD, for Gen Handy, 20 Jul 44, and cables exchanged between War Department and CBI, 19 May–16 Jun 44, in OPD 400.3295 China, Sec 1A, Case 50. (2) Memo, Col Kreuger, Chief, Theater Br, Plng Div, ASF, for Col Magruder, 15 May 44, sub: WD Policy on Supply of Chinese Army, folder 1a Policy File (CBI) 1944, ASF Plng Div.

[20] (1) Memo, Gen Tansey for Gen Handy, 19 Aug 44, sub: Equipment for Chinese Divisions, OPD 400.3295 China Sec II, Case 59. (2) Memo, Handy for G–4, 5 Aug 44, sub: Amendment to the Establishment of Procedure for Supply and Maintenance to China for 30 Divs Plus 10% . . . , ID 008 Lend-Lease, XIII. (3) Memo, Gen Lutes for Dir Plans and Opns ASF, 17 Aug 44, sub: CDS Equipment—CBI, folder CBI 1944, Hq ASF. (4) Memo, Gen Edgerton, ID, for OPD, 28 Aug 44, sub: Equipment for Chinese Forces, OPD 400.3295 China, Sec II, Case 59.

[21] (1) Min 3855, 161st mtg MAC(G), 25 Sep 44, and Gen Tab 3, Agenda 161st mtg. (2) Msgs CM–OUT 86075, Marshall to Sultan, 24 Aug 44 and CRA 10983, Sultan to Marshall for OPD, 16 Aug 44, OPD 400.3295 China, Sec 1A, Case 50. (3) Ltr, Gen Sultan to Gen Maxwell, ACofS G–4, 24 Sep 44, ID 008 Lend-Lease, XIV.

served both U.S. and Chinese troops. In April the MAB authorized Stilwell to divert Chinese lend-lease material in India to the use of U.S. troops without first consulting the Chinese and without incurring any obligation, either on the part of the theater or the MAB, to make replacement. Only material originally purchased outright by the Chinese was excepted from the arrangement.[22]

The next move came in August when the theater was authorized to furnish replacement and maintenance supplies to the Chinese Army in India through regular U.S. supply channels. Just as with the French forces in Italy, the complicated lend-lease channels had proved too slow and cumbersome to properly serve the Chinese forces advancing in north Burma, and the solution adopted was the same as that for the French—direct requisitions on the responsible port of embarkation (Los Angeles) for maintenance and replacement supplies for the Chinese Army in India as part of the U.S. theater's orders. This system proved so much simpler and more efficient that in December the MAB extended it to include those units in the Chinese Army in China that formed part of the American 33-division program with which U.S. advisory personnel were serving. The final link in the chain of American control over the flow of supplies to the approved Chinese divisions was thus forged. Although initial equipment for the Chinese Army in China had still to be assigned by the MAB, it, too, was shipped through U.S. supply channels and its distribution to Chinese units closely controlled by General Wedemeyer, successor to General Stilwell, and his staff.[23]

The Final Phase

By early 1945 when the system was put into effect, the one-way road from Myitkyina to Kunming was finally open, and, combined with the enlarged airlift, promised to inaugurate a new era in the theater. The supply line was still limited, it is true, and the major portion of the airlift would still be absorbed in carrying material for the American air force, and for theater overhead, instruction, advisory, and supply personnel; but, in contrast to the earlier period, it promised to be one of relative abundance for China.

General Wedemeyer, taking up where Stilwell left off and working in considerably closer harmony with Chiang, refined and developed the 33-division plan. His first step was to organize a force within China for defense against the Japanese attacks in the east (Plan ALPHA); his second step was to begin preparations for the drive to the coast to open a seaport (Plan BETA). Wedemeyer urged on Chiang the same line of

[22] (1) Msg 6889, AGWAR to AMMISCA and AMMDEL, 9 Mar 44, Stilwell Personal File, Book VI, Item 2091. (2) Min 3268, 138th mtg MAC(G), 13 Apr 44, and Tab 9. (3) Msg WARX 25273 to CG USAFCBI, 19 Apr 44, ID, Lend-Lease, Doc Suppl, IX.

[23] (1) Min 201, 86th mtg MAC(A), 31 Jan 44. (2) Memo, Col Olmstead, Secy, for Chmn MAC(G), 7 Aug 44, sub: Policy on Supply of U.S. Military Equip to Chinese Army, ID 008 Lend-Lease, XIV. (3) Memo, Lt Col James R. Stewart, Secy, for Chmn, MAC(G), 21 Jan 45, sub: Transfer of Lend-Lease Equip to Chinese. (4) TAG Ltr to CG's, CT and IBT, 15 Feb 45, same sub. (3) and (4) in ID, Lend-Lease, Doc Suppl, IX. (5) The final shift was made following a visit by Colonel Olmstead of the International Division and Brig. Gen. William J. Morrissey of G–4 to the China Theater on a lend-lease inspection mission in November 1944. For the Olmstead-Morrissey Report see OPD 400.3295 China, Sec II, Case 63.

action as had Stilwell—consolidation of his scattered 300–400 division force into a limited number of divisions that could be better fed, better equipped, and better trained. From General Ho Ying-chin, Chinese Chief of Staff to the Generalissimo, he received and approved a plan for 36 divisions in China to be American-equipped (including the 2 that had been moved by airlift from India) with new and slightly reduced tables of equipment and organization. To these would eventually be added 3 more divisions from India to be moved over the Ledo Road, to make up a total of 39 U.S.-sponsored, U.S.-equipped divisions in the Chinese Army. American equipment to be furnished the 39 divisions under the tables would be no more than had been promised the 33 under the old plan. To insure proper distribution and use of available equipment, Chinese as well as American, Wedemeyer permitted his own SOS commander, Maj. Gen. Gilbert X. Cheves, to assume the duties of commander of the Chinese SOS as well. Finding the Chinese soldiers suffered even more from lack of food than from lack of equipment, Wedemeyer requested supplementary foodstuffs from American sources.[24]

Satisfied now of the theater's ability to move and use equipment for the Chinese in China, the War Department and MAB moved rapidly in early 1945 to assign and ship the equipment for the 39-division force. On 12 January General Sultan relayed China Theater's requests that this equipment be phased through the first nine months of 1945. "Stocks in India," Sultan reported, "are neither sufficiently balanced nor sufficiently large to cope with this phasing of China's program. They are so small that with the increased rate of deliveries now possible they can be entirely dissipated as to many important items within a very short time."[25] The ASF moved quickly to comply and secured assignments by MAC (G) to meet the first phases of the program in February. The assignments committee also approved Wedemeyer's request for foodstuffs, agreeing to furnish 4,000 to 6,000 tons of canned meat and canned or dehydrated vegetables monthly through U.S. supply channels for a 6-months' trial period. The phasing of shipments was generally in keeping with the theater's desires.[26]

The question of whether the Chinese program should be enlarged was considered once again in the light of the new developments, but the Joint Staff Planners decided any move in that direction must await the demonstration by the Chinese that they could now, with American aid, put effective fighting forces in the field. There was no longer any overwhelming military importance attached to even the 39 divisions, and it seemed most unlikely that any larger force could be formed, equipped, and trained in time to play an appreciable role in the war against Japan.[27]

[24] Romanus and Sunderland, *Time Runs Out in CBI*, chs. IV and VI.

[25] Msg CRAX 943, CG USAFIBT to AGWAR, 12 Jan 45, OPD 400.3295, Sec II, Case 58.

[26] (1) Memo, Gen Styer for Gen Wood, 8 Jan 45, folder 12a Genl File (CBI) 1945, ASF Plng Div. (2) Mins 4174, 175th mtg, MAC(G), 11 Jan 45; 4266, 180th mtg, 15 Feb 45; 4286, 181st mtg, 23 Feb 45. (3) Memo, Secy for Chmn, MAC(G), 12 Feb 45, sub: Assignment of Available Equipment for Chinese 39 Div Program, Gen Tab 3, Agenda, 180th mtg MAC(G). (4) Memo, Styer for Lutes and Shingler, 22 Jan 45, ID 008 Lend-Lease, XIV.

[27] Diary Entries, 26 Jan 45, 21 Apr 45, Strat Log Br, Plng Div ASF.

To summarize briefly the final plans for Chinese lend-lease: They envisaged the arming with standard American equipment of 39 divisions and supporting army troops, all organized on special Chinese tables of organization and equipment. The units within each division were organized basically in the same way as corresponding American organizations; the differences were in that the Chinese division was smaller and had less artillery and motor transport; and their Army organization had fewer supporting troops of various sorts. There was some difference between the five Ramgarh-trained divisions (Chinese Army in India) and the 34 projected divisions of the Chinese Army in China. Both had the standard three infantry regiments, but each of the former included one battalion of truck-drawn 105-mm. howitzers and one battalion of 75-mm. pack howitzers drawn by mules, whereas the latter contained only the 75-mm. mule-pack battalion. The Ramgarh divisions also had more motor transport, more signal troops, and a gas platoon that the divisions organized in China did not have. The total standard divisional strength of each Ramgarh division was set in mid-1944 at 11,968, that of the divisions in China was later set at 10,990. Total strength of the 5 India-trained divisions with supporting army troops amounted to 89,071, that of the 34 additional divisions in China to 474,505—a total of 564,206 Chinese soldiers entitled to American lend-lease support.[28]

Certainly a weakness in the whole plan was the lack of any Chinese SOS units in the approved troop basis for American support. The main effort to improve the Chinese logistical organization centered on the supply of trucks over the Ledo Road and the establishment of Cheves' supervision over the supply and transport system supporting the approved Chinese divisions in China. Most of the SOS supplies, apart from those forwarded to American troops, were requisitioned under the Chinese civilian ministry program and accorded a low priority. The only exception was the FEA truck program that was integrated by theater headquarters into the over-all program for rebuilding the internal transportation system in China.[29]

As of V–J Day approximately one-third of the equipment for the 39 Chinese divisions had been delivered to them, one-third was in the India-Burma or the China Theater, and one-fifth was en route from the United States to Asian ports. Almost all of the remainder had been assigned to China by the MAB but had not yet been shipped.[30]

In the Presidential order bringing an end to lend-lease on V–J Day, China was granted a special exemption and continued aid was authorized in order to permit Chinese armies to occupy the parts of the country evacuated by the Japanese. However, Truman specifically excluded any aid to Chiang for prosecu-

[28] See tables in ID, Lend-Lease, Text, II, 1122–24.

[29] (1) Romanus and Sunderland, *Time Runs Out in CBI*, chs. IV and VII. (2) ID, Lend-Lease, Text, 1121–44, 1159–63. (3) On the FEA truck program see Larson and Bykofsky, *The Transportation Corps: Operations Overseas*, Chapter XII.

[30] (1) Memo, Gen Hull, Actg DCofS, for President, 3 Sep 45, sub: U.S. Commitment for Equip of Chinese Army, WDCSA 091 China. (2) Memo, Hull for Marshall, no date, sub: Lend-Lease to China, ID 014 Civ Sup, XXXV.

tion of a "fratricidal war."[31] The systematic effort to arm the 39 divisions stopped, though much of the material shipped earlier was turned over to the Chinese, as was a sizable proportion of U.S. Army supplies in China. But the aid furnished China in the period immediately following V–J Day consisted mainly of transportation services and supplies necessary to enable the Chinese to reoccupy their land. This chapter in the story of American aid to China belongs to the postwar period.

The end of the war with Japan was hardly an unmixed blessing for Chiang. The reform and consolidation of his armies, on which both Stilwell and Wedemeyer had insisted, was left incomplete, and the process of equipping a select force with American supplies was interrupted. Chiang did, of course, have the Ramgarh divisions, which had been both well-equipped and well-trained to a high level of efficiency, and other divisions at least partially equipped and trained in American methods. But the process of creating a modern Chinese Army that would be under the close control of Chiang's government had only begun, and the momentum gained was soon to be lost in the tragic postwar era.

It should be noted that, despite proposals presented from time to time to arm the Chinese Communists, these rivals for the control of China did not, before the end of World War II, receive any American supplies except small quantities furnished under the auspices of the Office of Strategic Services.[32]

[31] JCS 771/18, Memorandum from President to JCS, 5 Sep 45, title: Military Lend-Lease Policy after Unconditional Surrender of Japan. See above, ch. XXVI.

[32] See Romanus and Sunderland, *Time Runs Out in CBI* for discussion of the Communist issue.

CHAPTER XXX

The Army and Civilian Supply — I

At the outset of the North African campaign, on 13 November 1942, President Roosevelt declared: "No one will go hungry, or without the means of livelihood in any territory occupied by the United Nations, if it is humanly possible within our power to make supplies available to them."[1] This announcement heralded the beginning of a civilian supply problem that was to complicate the work of military logisticians immensely. It was not just a matter of humanitarian concern as the President's announcement might suggest, but one of military necessity. Disease and disorder in rear areas or lack of co-operation from local governments could easily disrupt lines of communications and endanger the success of military operations.

Civilian supply was, of course, only a part of the over-all problem of administration of civil affairs in liberated and occupied territories. The establishment of order in rear areas and the prevention of disease and unrest depended on more than imported supplies. The reestablishment of local authority, the restoration of public utilities, basic transport, and communication facilities, and the establishment of an equitable system of distribution of available supplies were all of transcendent importance. Liberated peoples would eventually have to depend on their own production for the major portion of their needs. Yet imports that could be brought in only through Allied channels often represented the vital margin necessary to prevent famine and epidemic or, under better conditions, to permit a small start toward restoration of normal agricultural and industrial production.

Civil affairs and civilian supply were problems having both political and military aspects. In the last analysis, they were closely related to high policy, to the question of achieving the avowed United Nations goal of a peaceful and stable postwar world. They of course raised questions of civilian versus military jurisdiction. And, since they were handled as a combined responsibility in theaters of combined operations, they also raised delicate problems of reconciling British and American approaches. There resulted a kaleidoscopic succession of complex organizational patterns, the description of which must perforce take up an inordinate amount of space in this account of civilian supply. These organizational complexities must not be allowed to obscure the fact that military authorities, national and combined, came to exercise practical control over civil affairs and civilian supply from mid-1943 onward.

Some have viewed the extension of military authority into a field at first

[1] New York *Times*, 14 November 1943, p. 3.



LEND-LEASE "TRADE GOODS" IN A DEPARTMENT STORE WINDOW, CASABLANCA

conceived to be a civilian realm as a prime example of military lust for power and authority. The record does not bear this out. The extension was more a matter of moving into a vacuum than of conscious grasping for power. Military leaders accepted the civil affairs task in the first instance as an unwelcome burden under the pressure of military necessity; they sought continually to limit the responsibility they had undertaken; they were ready—even zealous, it sometimes appeared — to divest themselves of it as soon as the military necessity passed. But military necessity did prove in some degree to be self-perpetuating. Once the military authorities had taken over the tasks involved and perfected organizations and procedures for carrying them out, the transition to civilian control became increasingly difficult, however much all concerned may have wished to make it. The civilian agencies were slow to develop a coherent organization or to make the necessary plans for taking over. The Army had in being the organization, facilities, and resources that civilian agencies were not in a position to duplicate. Theater commanders were reluctant to relinquish control over civil affairs as long as the dangers of disorder and unrest were still present, or over civilian supplies as long as they feared loss of control over the shipping necessary to bring them in.[2]

[2] For a lucid discussion of the evolution of military control and the reasons for it, see Harry L. Coles and

The North African Prelude

The invasion of North Africa was undertaken without any significant preparation for import of civilian supplies. An ASF study concluded that no shipping space could possibly be made available for them until military operations were well advanced. The CCS instructed General Eisenhower that economic problems would be handled by American and British civil authorities except as they affected military operations. The general assumption was that French North Africa, primarily an agricultural region, would be able to feed itself. The only provision for civilian supplies in early shipments was some 1,500 tons of "trade goods"—talcum powder, lipstick, stockings, buttons, thread, piece goods, and the like—intended to lure hoarded agricultural supplies into the market.[3]

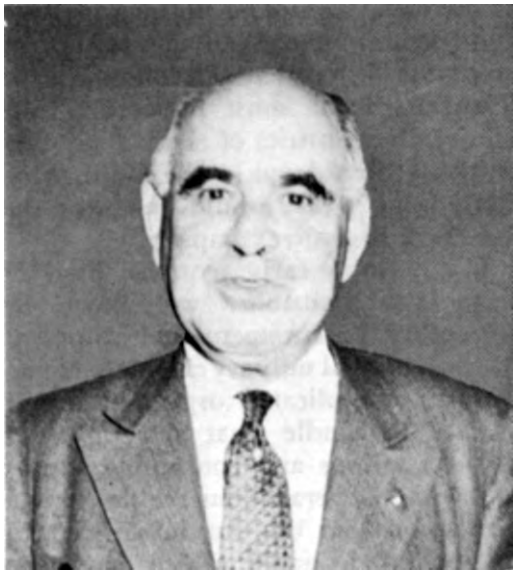
The planners did not reckon with the dislocations created in the North African economy by German occupation. Vital imports had been curtailed since mid-1940, and the Germans had already drawn off the fruits of an early 1942 harvest for use in occupied Europe. With market places bare of consumer goods farmers frequently preferred to hoard their produce, thereby intensifying the food shortage in cities. Shortage of civilian transport and the disruptive effect of marching armies on both agriculture and industry completed the pattern of economic dislocation. Eisenhower soon learned that he must import at least minimum quantities of civilian supplies or risk a breakdown in the North African economy that would endanger the success of his entire campaign.[4]

Eisenhower's early requests, most of them for foodstuffs, were met by emergency procurement and shipment through normal military channels. Meanwhile, a complicated organization was evolved to handle what now promised to be a serious and continuing supply problem. General Somervell's recommendation that the Australian pattern be instituted, under which lend-lease representatives in the theater served as part of the theater commander's staff and determined civilian requirements subject to his approval and assignment of shipping priorities, was lightly turned aside. On 18 November the President placed full responsibility for civilian relief on the Department of State. Within the State Department a special Office of Foreign Relief and Rehabilitation Operations (OFRRO) was established with Herbert Lehman, former governor of New York, as its head. The Office of Lend-Lease Administration (OLLA) was made responsible for furnishing funds and arranging procurement through appropriate government agencies and departments (normally Agriculture, Treasury, and War). The Board of Economic Warfare (BEW) was also given a place in the picture because of its interest in securing strategic materials from North Africa. Then, as it was a matter of combined concern (though it was agreed at the outset that the United

Albert K. Weinberg, *Civil Affairs: Soldiers Become Governors,* UNITED STATES ARMY IN WORLD WAR II (Washington, 1964), pp. 91–95, 139–42.

[3] (1) International Div, ASF, Civilian Supply: A History of the Civilian Supply Branch (2 vols. text, 3 vols. documentary supplement) (hereafter cited as ID, Civilian Supply), MS, OCMH, Text, I, 13–26. (2) Strat Log Div, SOS, Study, 10 Nov 42, sub: Joint Pool of Military Supplies, ASF Plng Div files. (3) Ltr, Secy CCS to Secy State, 12 Nov 43, in Coles and Weinberg, *Civil Affairs: Soldiers Become Governors,* p. 34.

[4] ID, Civilian Supply, Text, I, 14, 30–31.



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States would be the chief source of civilian supplies for North Africa), a committee of the combined civilian boards (Combined Production and Resources Board, Combined Shipping Adjustment Board, Combined Raw Materials Board, and Combined Food Board) was formed to serve as the principal policy-making body for civil affairs. A subcommittee, called the Combined Committee for North Africa (CCNA) but mainly American in its composition, became the operating arm of the Committee of Combined Boards (COB) for handling day-to-day operations. The organization created in North Africa, which necessarily followed the intricate Washington pattern, was the North African Economic Board (NAEB) on which all interested American and British agencies were represented.[5]

In the whole complex structure, the military position was ill-defined. In North Africa, both formulation of requirements programs and distribution to French agencies were in the hands of NAEB, which was associated with AFHQ but not clearly subordinate to the theater commander. In the United States both planning and procurement to meet NAEB requests rested with civilian agencies, U.S. and combined. The Committee of Combined Boards was a co-ordinate body with the CCS, though the CCS did furnish part of its secretariat and act as a channel of communication with the theater on civil affairs. The War Department, though it had as an emergency measure to procure and ship civilian supplies to meet Eisenhower's early requests, at first had virtually no voice at all in the new setup.

Experience soon revealed that the Army must play a more important part. General Eisenhower found civil affairs and civilian supply to be integral parts of military logistics in North Africa. Only he was in a position to evaluate the relative importance of civilian relief and determine the shipping space to be allotted it, given existing limitations on convoys, ocean shipping, and port capacities. Within the theater he also had to control the ports and internal transportation system. Even before the invasion it had been agreed that coal and POL should be treated as common-use items to be requisitioned and imported entirely through military channels and allocated within the theater between civilian

[5] (1) Memo, Somervell for CofS, 11 Nov 42, sub: Civilian Supply in N Africa, folder CofS, Hq ASF. (2) Msg R-3008, AGWAR to USFOR, London, 10 Nov 42, AG 400.3295 (9-1-42) (3), Sec 5. (3) Msg 4990, London to AGWAR, 17 Nov 42, ID Cables Economic Sup Program N Africa. (4) ID, Civilian Supply, Text, I, 13–26.

and military users. In order to maintain unified military control over the ports, Eisenhower also ruled that other civilian supplies must be consigned to him for delivery to NAEB, despite objections from its civilian members. Limitations on ocean shipping also made it imperative that civilian supplies be loaded on the same ships as military cargo, not separately by WSA. Thus while OLLA procured the supplies, the Army Transportation Corps shipped them, giving the War Department a continuing responsibility for meeting Eisenhower's requests. By mid-December John J. McCloy, Assistant Secretary of War, had secured a place on the Committee of Combined Boards, and both OPD and ASF were granted representation on the Combined Committee for French North Africa. Within the ASF, the International Division was soon assuming *ex officio* the major War Department operating responsibility for civilian supply. On a higher level the CCS secretariat, sitting astride the channel of communications between the Committee of Combined Boards and NAEB, acted as a sort of monitoring agency to see that civilian decisions did not adversely affect military operations. Thus the consideration, if not the primacy, of military interest in civilian supply was assured.[6]

Early shipments of civilian supplies to North Africa were sporadic, and by 10 December Eisenhower was disturbed, warning that

> civil needs are so closely tied up with success of the military campaign, that unless there is a general readjustment of shipping to increase the tonnages received here I shall be compelled to decide between reducing the size of total forces or causing disaffection with the French by failing to supply essentials which they are expecting to receive.[7]

The Washington authorities could do little to resolve Eisenhower's dilemma since the amount of shipping was controlled by limitations on the size of convoys, and asked him for a command decision. On 28 December Eisenhower ruled that 30,000 tons of civilian supplies should be included in each convoy, but he did so on the mistaken assumption, advanced by shipping experts in the theater, that the tonnage could be accommodated by a combination of reduction in ballast and use of broken stowage. Army shipping experts in the United States disagreed, and it was only after the addition of three ships per convoy in early January 1943 for combined French rearmament and civilian supply tonnages that the goal was met. The 30,000-ton schedule was maintained during the following months. At Casablanca General Giraud thought he had secured a promise for an increase to 65,000 tons monthly but the Combined Boards ruled such an increase was not justified. Actual shipments from December 1942 through June 1943 amounted to 179,450 tons, of which over 140,000 were foodstuffs, 17,000 tons cotton textiles, 10,000 tons chemicals, and the remainder distributed among paper, iron and steel, agricultural machinery, tires, autos, spare parts,

[6] (1) Msgs 3996, AGWAR to USFOR, London, 5 Dec 42; 4054, 7 Dec 42, both in AG 400.3295 (9-1-42) (3). (2) Msgs 1613, Algiers to AGWAR, 10 Dec 42; 1761, London to AGWAR, 12 Dec 42; 761, AGWAR to FREEDOM, Algiers, 4 Jan 43; all in ID Cable File Economic Prog N Africa. (3) ID, Civilian Supply, Text, I, 16–39.

[7] Msg 1654, FREEDOM, Algiers, to AGWAR, 10 Dec 42, ID Cable File Economic Prog N Africa.

tools, and other miscellaneous industrial items. In addition, approximately 65,000 tons of coal were furnished monthly from England to ports inside the Mediterranean to meet combined civilian and military needs, 20,000 tons monthly from the United States to ports on the Atlantic coast.[8]

In every phase the civilian supply program for North Africa showed the effects of hasty planning and divided responsibility. Without an over-all plan, procurement was based entirely on monthly requisitions by the North African Economic Board. The Office of Lend-Lease Administration, charged with co-ordinating procurement by other agencies in response to these requisitions, was ill-equipped for the task and found it difficult or impossible to secure necessary priorities on scarce items when NAEB requests were in competition with military orders. In general, requests for such relief items as grain, flour, soap, and clothing were met, but procurement and shipment of items for industrial rehabilitation and for transportation and communication needs lagged far behind NAEB requisitions.

The system of handling shipments was satisfactory neither to the Transportation Corps nor to WSA. Army port authorities complained that OLLA did not provide supplies at port at the time or in the manner necessary to make proper use of broken stowage on ships carrying military cargo or to follow normal military practices in packaging and addressing supplies. WSA countered with criticisms of Army loading practices and complained that when civilian supplies were shipped along with military cargo they had to go to whatever port the latter was destined for, regardless of the subsequent problem of overland transportation. WSA officials in North Africa charged civilian supplies were neglected or mishandled in the scramble to unload military cargo—"loose flour as a result of broken bags, has been piled as high as five feet, . . . valuable agricultural machinery broken, . . . cotton piece goods piled loose in a jumbled mass on dock and warehouse floors . . . barrels of powdered milk . . . discharged in broken and smashed condition."[9]

WSA used these arguments to press for a separate civilian supply program for North Africa in ships under its own control. The Army successfully resisted this pressure until the end of active operations in North Africa, but in June 1943 WSA finally won its point.[10]

Relinquishing military control over shipments to North Africa had little relationship to the trend of thinking with

[8] (1) ID, Civilian Supply, Text, I, 15–16, 32–35. (2) Msgs, 3189, FREEDOM, Algiers to AGWAR, 28 Dec 42; 726, AGWAR to FREEDOM, 2 Jan 43; 4860, Algiers to AGWAR, 5 Jan 43; 5021, 11 Jan 43; all in ID Cable File Economic Prog N Africa. (3) For complete files of cable exchanges between Committee of Combined Boards and NAEB see BOC-COB Cable Files, ID.

[9] (1) Ltr, Edward G. Meyers to Lt Comdr Donald Watson, WSA, 16 Jun 43, folder Lend-Lease, Box 122874, WSA Conway File. (2) Memo, Lt Col Marvin H. Dixon, Chief International Br, Movements Div, TC for ACofT for Opns, 1 Apr 43, sub: Stockpile of Civilian Sups for N Africa, TC 400 Africa Jan–Jun 43. (3) Memo, J. E. Slater, Regional Dir, WSA, N Africa, for Lewis Douglas, 6 Apr 43, sub: Shpg Aspects Lend-Lease Problems, N Africa, N Africa Apr 43, WSA Douglas File. (4) ID, Civilian Supply, Text, I, 33–38.

[10] (1) *Ibid.* (3). (2) Ltr, Gen Wright to OLLA, 15 May 43. (3) Memo, Maj Arthur E. Palmer, CSB ID, for Gen Wright, 6 Jul 43. (4) Ltrs, Stettinius to Gen Wright, 13 Jul 43, and to Douglas, WSA, 14 Jul 43. Last three in ID 014 Civ Sup N Africa, III.

regard to areas still to be liberated. "We have had an opportunity to learn a real lesson from North Africa," wrote General Somervell on 3 April 1943, "which lesson is to me that you cannot separate the handling of civil affairs from military operations in areas in which military operations are under way, and that an attempt to do so in an hostile country would be disastrous."[11] In preparations for entry into Tunisia, the last stage of the North African campaign, some recognition was given this military viewpoint. Governor Lehman agreed that all civilian supply operations in the initial stages of the occupation of Tunisia should be under Eisenhower's control with OFRRO personnel participating under military direction. This produced a sort of State-War partnership in the execution of Tunisian relief, but one that was confined to the theater of operations itself. There was no recognition in the Tunisian pattern of military responsibility for procurement and shipment of civilian supplies even during the early period. Lehman seems to have assumed that these supplies would be handled as civilian lend-lease, with the theater commander to control distribution until such time as the military situation would permit turning it over to OFRRO. The President seemingly confirmed Lehman's views in a broad directive on 19 March 1943 centering authority in OFRRO to plan, co-ordinate, and arrange for administration of relief activities in all areas expected to be liberated from Axis control, with the proviso that relief operations in any specific area would be subject to approval of the U.S. theater commander there.[12]

Military Assumption of Responsibility

The President's directive did little to halt the trend already under way toward military assumption of responsibility for civil relief in the initial stages of military operations. The proviso requiring the theater commander's approval of relief programs for his area proved more important than the broad authority delegated to Lehman. On 1 March 1943 the Civil Affairs Division was created on the General Staff, reporting directly to the Secretary of War. Maj. Gen. John H. Hilldring, head of the new division, took a stand on the issue of military responsibility as strong and positive as had General Somervell. When on 22 March 1943 the CCS Secretariat suggested that the Committee of Combined Boards be given responsibility for preparing plans for civil affairs, both Hilldring and Somervell disagreed. Somervell reminded the Chief of Staff that in addition to the need for complete military control over transportation to and within theaters, security requirements would preclude allowing civilians on the boards the knowledge of future operations required for intelligent civil affairs planning. In the end the JCS decided that such planning should be carried out by the War and Navy Departments "as an integral part of planning for any specific operation," the departments to co-ordinate their activities to the extent necessary "directly with the civilian

[11] Memo, Somervell for McCloy, 3 Apr 43, OPD Exec 8, Book 8, Item 50.

[12] (1) ID, Civilian Supply, Text, I, 39–52. (2) Ltr, President to Hon Herbert H. Lehman, 19 Mar 43, ID CSB Basic Pol File Gen 1942–43.

agencies concerned." The Army's Civil Affairs Division was selected as the "logical agency" to handle the major portion of this military responsibility.[13]

Concomitant with this JCS decision, Lehman agreed that there should be an initial period of military responsibility in each newly liberated area during which the War Department would undertake "complete procurement, operating and administrative responsibility" for all phases of civilian relief "as functions of the theater commander." This period was to be sufficiently long to make the transfer to OFRRO orderly, and was estimated for planning purposes at ninety days. With the upcoming invasion of Sicily in mind, the War Department informed all theater commanders on 12 April that they must prepare timely requisitions for civilian supplies in advance of each operation.[14]

The establishment of a period of military responsibility was a development of major importance. It launched the War Department on active and systematic preparations for civilian relief while the civilian agencies still foundered in uncertainty and confusion. The initial assumption that Army procurement would be merely a supplement to that undertaken under OFRRO auspices soon gave way in the face of the revelation that OFRRO was in no position to carry out a procurement program without military support in obtaining funds and priorities. Likewise, the assumption that the War Department program would be totally guided by theater requisitions gave way as experience in preparations for the invasion of Sicily showed that to wait for theater requisitions would unduly delay procurement. A special operational plan was hastily drawn up and agreed to between Washington and the theater to provide for the first 90 days of that operation. By July 1943 the ASF, under the direction of the Civil Affairs Division, was engaged in formulating a broader advance program to cover the period of military responsibility in other areas.

In April 1943 a Civilian Supply Branch was established in the International Division, ASF, charged with responsibility for co-ordinating civilian supply responsibilities within the ASF and handling relations with civilian agencies. Shortly afterward, supply planning was initiated in the technical services. Finally in July 1943 a special Section VI was added to the Army Supply Program solely devoted to civilian supply requirements. It was based on estimated relief needs of 45 million people in the Mediterranean area, and 25 million in northwest Europe, for the 90 days assumed as the duration of the military period. The calculation of requirements was made on the so-called "disease and unrest" formula, calling for only minimum quantities of food, fuel, soap, and medical supplies needed to prevent starvation and epidemics that might endanger military operations. Procurement would be carried out under Army appropriations, not as civilian lend-lease, and it would be phased in accordance with the expected pace of

[13] (1) JCS 250/2, 10 Apr 43, title: Planning for Handling of Civil Affairs in Occupied Areas Which May Become Theaters of Operations. (2) TAG Ltr to Col John F. Haskell, 1 Mar 43, AG 014.1 (2-27-43). (3) Memo, Somervell for CofS, 25 Mar 43, ID CSB Basic Pol File Gen 1942–43.

[14] (1) Quotes from Msg CM-OUT 2457, AGWAR to CG NATOUSA, 5 Apr 43. (2) WD Cable of General Application, 12 Apr 43, ID CSB Basic Pol File Gen 1942–43.

operations. No large stockpiles would be created in advance. Delivery during the military period would be entirely through military channels.[15]

The limited yet concrete nature of this earliest military planning contrasted sharply with the broad idealistic approach of OFRRO. In May 1943 that agency completed an over-all estimate based on relief and rehabilitation needs of 150 million people to be liberated in the Mediterranean area and northwest Europe by the end of 1944. The approximate cost was set at $2.4 billion. OFRRO went considerably beyond the disease and unrest formula, providing also for clothing, shoes, and industrial and agricultural rehabilitation supplies. Lehman proposed that the War Department support procurement of these supplies before Congress and the allocating agencies and, in turn, requisition its relief supplies for the military period out of stockpiles to be created. The War Department did not wish to put itself in the position of supporting estimates that far exceeded its own conception of military needs, nor did it want to lend any support to an effort to create large stockpiles of relief supplies. In replying to Lehman on 7 July 1943, General Hilldring agreed only to support such OFRRO requests as were deemed a "necessary part of any specific military occupation," and as the specific need arose:

> I would like to establish as a general premise the thought that the War Department will provide the absolutely essential supplies to meet the urgent needs of an occupied area for the period which is necessary to permit the full exploitation of military operations and until you have had sufficient time after the start of an operation to procure the supplies which will enable you to discharge your responsibilities.
>
> Our reason for the adoption of this premise is that we regard supplies for the support of the civilian population as an integral part of our troop equipment. . . . We feel it would be unwise at this stage of military plans to adopt the machinery you suggest for the separate handling of this most important phase of our military supply problem. . . .[16]

General Hilldring's statement delimiting the positive area of military responsibility left Governor Lehman in the difficult position of being without practical means to get the broad OFRRO program off the ground, for the Lend-Lease Administration concurrently was insisting on developing its own plans for procurement of civil relief supplies and was also disinclined to support OFRRO estimates.

The President, meanwhile, had come up with still another scheme for insuring over-all civilian control, this one originating in the Bureau of the Budget. "The civilian agencies," he wrote, "have considerable experience and talent that it would be difficult and undesirable for the Army to duplicate. The military operations of our Army should not be unnecessarily diluted or diverted by the questions affecting relief, rehabilitation, . . . and other essentially civilian problems."[17] Yet, basically, the Bureau

[15] (1) ID, Civilian Supply, Text, I, 53–81. (2) See below, pp. 755–56, on planning for Sicily.

[16] (1) Quoted from Ltr, Gen Hilldring to Gov Lehman, 7 Jul 43. (2) Ltr, Lehman to Hilldring, 22 Jun 43. Both in CAD 400.38 (2-20-43), Sec 1. (3) ID, Civilian Supply, Text, I, 68–72.

[17] (1) Ltr, President to Secy State, 3 Jun 43, ID 014 Civ Sup, I. (2) J. A. Stilwell, "Supplies for Liberated Areas," Dept State *Bulletin*, X, 265, 20 May 44, 469–78.

of the Budget plan was little more than a revamping of the discredited mode of operations in North Africa. In Washington there would be an interdepartmental policy committee under the chairmanship of State with an operating arm, the Office of Foreign Economic Coordination (OFEC), under the direction of Assistant Secretary of State Dean Acheson. In each theater an area director would be appointed by the Secretary of State to co-ordinate the activities of U.S. civilian agencies there. The area director was to be under two chains of command, one to the military theater commander and the other to the Assistant Secretary of State.

Again there was too much co-ordination and too little effective action. The area director system never went into practical effect and military commanders continued in control in Sicily and took over in the early stages in Italy. In Washington the OFEC mechanism failed to resolve the conflicts among the civilian agencies themselves; perhaps its principal achievement lay in the agreement reached within it in late July that the period of military responsibility should be extended from ninety days to six months.[18]

On 25 September 1943, in a final effort to centralize civilian responsibility for all foreign economic matters within the administration, the President brought the Office of Lend-Lease Administration, Board of Economic Warfare, and Office of Foreign Relief and Rehabilitation Operations together in the Foreign Economic Administration headed by Leo Crowley.[19] Though a step forward, there were still divided responsibilities. The State Department was still the policy-making agency, the War Production Board, the War Food Administration, and the Treasury still the procuring agencies, and WSA in charge of shipping. The procession of co-ordinating bodies continued as before, and FEA was unable to develop any more practicable over-all plan than had its separate components. The problem was by now complicated by the necessity of developing a common program with the British for the war period and a program within an even broader international framework for postwar rehabilitation. In October 1943, the United Nations Relief and Rehabilitation Administration (UNRRA) was founded at Atlantic City, with Governor Lehman as its head and many of the old OFRRO personnel as its American component. But the founding of UNRRA, for the nonce, meant little. It had as yet no funds and no workable international machinery; it was, in any case, designed mainly to take care of the postwar period.

By early November 1943 it was apparent that no civilian agency, national or international, was prepared to assume the relief burden in time to meet the situation expected to develop as Allied forces moved onto the Continent of Europe. The combined military authorities had, meanwhile, made considerable progress in planning civilian relief for the period of military responsibility. Recognizing that only the military authorities seemed prepared to act and to act quickly, on 10 November 1943 the

[18] Memo, Palmer for Dir ID, 28 Jul 43, sub: Responsibilities of Civilian Supply Subcom. ID 014 Civ Sup, I.

[19] Executive Order 9380, 25 Sep 43.

President reversed his position and placed primary responsibility for civilian supply on the Army for an indefinite period of time. He informed the Secretary of War:

> Although other agencies of the Government are preparing themselves for the work that must be done in connection with the relief and rehabilitation of liberated areas, it is quite apparent if prompt results are to be obtained the Army will have to assume the initial burden of shipping and distributing relief supplies. This will not only be the case in the event that active military operations are under way, but also in the event of a German collapse. I envisage that in the event of a German collapse, the need for the Army to undertake this work will be all the more apparent.
>
> Therefore, I direct you that you have the Army undertake the planning necessary to enable it to carry out this task to the end that it shall be prepared to perform this function, pending such time as civilian agencies must be prepared to carry out the longer range program of relief.
>
> You may take this letter as my authority to you to call upon all other agencies of the Government for such plans and assistance as you may need. For all matters of policy that have to be determined in connection with this work, you will consult with the State Department for any political advice; and upon the Treasury for such economic and fiscal direction as you may need.[20]

The President's letter definitely and finally confirmed military responsibility for civilian relief during the initial stages of operations and extended it by adding the function of planning for the eventuality of a German collapse. It gave the War Department the leading role in handling civilian supply that formerly, at least in theory, had been in the hands of civilian agencies. By this time it had been determined that the War Department would not exercise this responsibility independently, but in co-operation with responsible British agencies.

Combined Arrangements

The combined military arrangements for handling civilian supply had taken relatively final shape by the time the President's directive was issued. The combined arrangement for North Africa was, of course, the Committee of Combined Boards, but the JCS, in deciding that U.S. military planning for civil affairs should be centered in the Army's Civil Affairs Division, also ruled against continuation of this arrangement and recommended that a combined civil affairs committee be organized directly under the CCS.[21]

This proposal for the marriage of British and American organizations for civil affairs posed difficult problems of adjustment of divergent national policies, procedures, and interests. In July 1942 the British had established an Administration of Territories (Europe) Committee (AT(E)) in the War Office, responsible for all civil affairs planning for the liberation of northwest Europe. The committee sponsored the preparation of a phased statement of over-all relief and rehabilitation requirements as a basis of forward production and import planning—the so-called Young-Sinclair estimates, named for Sir Robert Sinclair of the Ministry of Production and Sir Hubert Young of the Board of Trade who were jointly responsible for their preparation. The Young-Sinclair estimates provided for three six-month

[20] Ltr, President to Secy War, 10 Nov 43, ID, Civilian Supply, Doc Suppl, 133.

[21] JCS 250/2, 10 Apr 43.

periods beginning in mid-1943 and running through the end of 1944, calculated on both a "scorched" and an "unscorched" basis. This AT(E) program, finished in the spring of 1943, was of broad scope, recognizing no differentiation between military and civilian periods of responsibility. It went beyond the approved U.S. War Department categories of food, soap, fuel, and medical supplies, to include rehabilitation items such as clothing, transportation stores, fertilizer, seed, industrial first-aid kits, and materials for repair of public utilities. AT(E) estimates differed from the ASF program, too, in that they were divorced from consideration of supply possibilities and initially from strategic plans. It was contemplated that phasing of procurement would be worked out by application of "Strategic Keys," that is, the CCS timetable for liberation of each area. Such procurement would depend, in part, on imports from the United States or other outside sources.

British civil affairs organization and procedure also differed from American. The British Directorate of Civil Affairs in the War Office, like the U.S. War Department Civil Affairs Division, reported directly to a civilian head of a military department, but, unlike the Civil Affairs Division, it was not part of the General Staff. The Administration of Territories (Europe) Committee also, though in the War Office, was of a quasi-civilian type, regarded by Americans as comparable to OFRRO rather than to any U.S. military agency. All procurement in Great Britain was carried on by civilian ministries to whom the military services submitted their requirements. Even in determining requirements, the War Office used different channels for civilian supply than for troop needs. Similarly, though movement to theaters was through regular military channels, distribution within those theaters was handled by a separate civil affairs staff reporting to the theater commander through separate channels. Thus, though the British also proposed a period of military responsibility in each area and a later transition to civilian control, one period was expected to shade very easily into the other because of the quasi-civilian nature of the initial organization.[22]

The British proposed to reconcile the differing approaches of the two governments by a simple territorial division of responsibility. They agreed to the formation of a combined civil affairs committee in Washington, but also proposed, by adding U.S. membership to the existing AT (E) Committee, to set up a similar committee in London, this committee to exercise primary responsibility for northwest Europe and the Balkans, the Washington committee to be left with primary responsibility for the western Mediterranean area. To this scheme the Americans refused to agree and the British finally gave in. On 3 July 1943 the CCS chartered the Combined Civil Affairs Committee (CCAC) with responsibility for making recommendations to the CCS on civil affairs in all combined theaters. The committee was to sit in Washington, its membership to consist of representatives of the U.S. Army, Navy, and State Departments, with British opposites from their Joint Staff Mission and Foreign Office, and in addition one other U.S. and one other British civilian member. The addi-

[22] (1) J. A. Stilwell, "Supplies for Liberated Areas," Dept State *Bulletin*, X, 265, 20 May 44, 469–78. (2) ID, Civilian Supply, Text, I, 95–102.

tional U.S. civilian member was John J. McCloy, Assistant Secretary of War, who acted as chairman of the CCAC throughout the life of the organization. To placate the British the existing AT (E) Committee in London was also granted status as a combined committee, and the Commanding General, ETOUSA, was instructed to designate a staff officer to serve on it, but its exact functions were left purposely vague.[23]

One of the first decisions of the CCAC was to establish a supply subcommittee, CCAC (S), organized in a somewhat similar manner to the Munitions Assignments Committee (Ground). Its initial membership was made up solely of military personnel on the American side—one representative each from the Army and Navy—while the British, in recognition of the role of their civilian ministries in military procurement, had only one member from their Army staff in Washington, while the other member came from the Embassy staff. Another U.S. military member, from the Civil Affairs Division, was added later. In view of the paramount responsibility of the ASF in civilian supply, the International Division furnished the chairman and secretariat for the CCAC (S) as it did for MAC (G). The Civilian Supply Branch became the effective operating arm of the CCS subcommittee, much as other parts of the International Division made up the effective operating arm of MAC (G). The CCAC (S) was in turn to be both the planning and operating arm for the CCAC and CCS in the administration of civilian supply in liberated areas.[24]

Before CCAC (S) could assume this role, the basic differences in the British and American approaches had to be further reconciled. Though forced to accept the American scheme of organization, the British did not abandon their fight for a territorial division of responsibility. Moreover, they insisted that the Young-Sinclair estimates, combining requirements for the military and civilian periods, should form the basis for civilian supply planning by CCAC (S) and that the civilian Combined Boards should have a continuing and important place in the determination of relief programs for both periods. The Americans considered the question of territorial responsibility already settled. They made it quite clear that the British could not count on receiving lend-lease supplies for redistribution as relief to other nations, and continued to insist on a combined military plan designating sources of supply by commodity for each area liberated. This plan the Americans would confine to the military period, and during this period provide only the basic necessities—food, fuel, and sanitary supplies. These matters, they insisted, were of purely military concern and outside the province of the combined civilian boards. In insisting on a separation of the military and civilian periods, the War Department rejected the Young-Sinclair estimates as a basis for planning,

[23] (1) CCS 190/1, memo by Reps BrCOS, 11 Apr 43, title: Planning for Handling Civil Affairs in Enemy Occupied Areas Which May Become Theaters of Operations. (2) JCS 250/4, 19 Apr 43, same title. (3) Min, 97th mtg CCS, 4 Jun 43. (4) CCS 190/6/D, 3 Jul 43, title: Charter of CCAC. (5) For more complete discussion and a long series of documents covering the basic issues, see Coles and Weinberg, *Civil Affairs: Soldiers Become Governors*, pages 114–54.

[24] (1) CCAC 9/1/D, 9 Aug 43, title: Supply Subcommittee. (2) ID, Civilian Supply, Text, I, 108–12.

just as it had earlier rejected the broad estimates of OFRRO.[25]

These differences made it impossible for CCAC (S) to even hold a formal meeting until after the CCS, at QUADRANT in August 1943, had reached decisions on at least some of the questions at issue.

The CCS decisions were embodied in a fundamental charter (CCS 324/1) that afterward became the guide for all combined military planning for civilian supply. The CCS recognized that "minimum economic relief for the population of occupied areas must be furnished by the military during the period of military operations and for some time thereafter," and directed the preparation of an over-all combined program by the CCAC, that would indicate the division of supply responsibility in each category between the United States and the United Kingdom. Shipping was to be the responsibility of the nation furnishing the supplies, and maximum use was to be made of local resources to lessen both the supply and the shipping burden. The military program was to be confined to "the basic ration, soap, medical, sanitary supplies, fuel . . . and other agreed articles considered essential to military operations." The basic ration should be nearly as possible the same whether furnished by the United States or Britain. Stockpiling should be limited to the smallest amount possible, with food items limited to the basic ration.[26]

The CCS charter generally conformed to American rather than British views; indeed, it consisted almost entirely of a draft by the U.S. Joint Staff Planners. The main concession to the British was in the clause pertaining to "other agreed articles," one that was open to varying interpretations; nor were the Americans able to secure a clause they advocated making the British responsible for all purchasing outside the United States.[27] Beyond this, the charter left many other matters open to future settlement, and they became the subject of the earliest deliberations of the Supply Subcommittee of the CCAC, beginning with its first formal meeting on 8 September. By that time the development of operating procedures was urgent, for in late August the first requirements for civilian supplies in Italy had arrived from AFHQ.

In considering the requirements for Italy, the British made one last attempt to establish primary American responsibility for the Mediterranean area (except for coal and POL) and of course, by inference, primary British responsibility for northwest Europe and the Balkans. It was foredoomed to failure, and they abandoned their position at the third meeting of CCAC (S) on 21 September when the Americans agreed to

[25] (1) ID, Civilian Supply, text, I, 102–04, 110–12. (2) Memo, Arthur B. Van Buskirk, OLLA, for Edward R. Stettinius, OLLA, 26 May 43. (3) Min, mtg ID and OLLA officials, 28 May 43. (2) and (3) in ID CSB Basic Policy File Genl 1942–43. (4) Ltr, Gen Wright to Bernhard Knollenberg, 1 Oct 43, ID 014 Civ Sup, II. (5) Memo, Gen Wright for Gen Clay, 13 Jul 43, sub: U.K. Questions re Civilian Sups in Military Opns, ID, Civilian Supply, doc suppl, 92.

[26] (1) CCS 324/1, 22 Aug 43, Ad Hoc Com Rpt to CCS, title: Rehabilitation of Occupied and Liberated Territories. (2) The recommendations were approved in 115th meeting CCS, 23 August 1943.

[27] (1) For a brief sketch of the negotiations at Quebec see Memo, Palmer for Dir Materiel, ASF, 25 Aug 43, sub: Rpt on Trip to Quebec, ID CSB Basic Policy File Genl Aug–Dec 1943. (2) See also ID, Civilian Supply, Text, I, 113–18, for a fuller discussion of relative British and American positions on each point.

ship against the first three months' requirements for Italy without prejudice to the final determination of supply source and supply responsibility.[28]

With that issue settled, and immediate shipments arranged, the major question became the general method of determining source of supply for items in the over-all program CCAC (S) was expected to draw up. The British members took the position that the military subcommittee should develop requirements for each area expected to be liberated, and then submit them to the Combined Boards which would, in the light of worldwide shipping and supply availabilities, determine the extent to which the requirements could be met and the sources from which supplies should be drawn. War Department spokesmen contended that CCS 324/1 clearly designated the CCAC as the organization responsible for determining sources of supply for the military period. Again the American view prevailed, but with the concession that either side of the subcommittee could, at its own discretion, present specific questions to the Combined Boards for advice through its own national channels. In actual practice, because of the need for drawing on worldwide sources of supply, civilian supply programs would usually be submitted to the Combined Boards for advice, though the British members of CCAC (S) were to regard this advice as more binding than did U.S. War Department representatives.[29]

Disagreement over the basic ration also delayed the processes of CCAC (S) for a time. The Americans and British agreed on 2,000 calories as the minimum necessary for the health of civilian populations, but the British wanted to furnish specific supplements for each local area, while the Americans proposed a standard basic ration for all areas. In particular, the British held out for larger quantities of sugar and fats for Belgium, Holland, and France, and for the inclusion of coffee. A compromise was reached on this issue in mid-November, the U.S. members agreeing to the inclusion of limited amounts of sugar, fats, and coffee. With this agreement the way was clear for the preparation of the over-all plan that the CCS had directed at Quebec.[30]

Contemporary with these developments in the combined machinery, the ASF began in September 1943 to revise Section VI of the Army Supply Program in accordance with the decisions reached at Quebec. Although there had been no combined agreement on the matter, for planning purposes the ASF assumed a 50-50 division of supply responsibility between the United States and United Kingdom for a six months' military period. Broadening the base on which calculations had been made in June, the revision of Section VI was drawn up on the premise that supplies must be furnished from the United States to meet

[28] (1) Mins, 1st mtg CCAC(S), 8 Sep 43; 3d mtg, 21 Sep 43, Item 1. (2) The British retained responsibility for coal and POL see below, p. 758.

[29] (1) Ltr, Col G. A. Rickards, Civ Affairs Br, BAS, to Gen Wright, 11 Oct 43, ID CSB Basic Pol File Aug–Dec 43. (2) Ltr, McCloy to Wilson, CPRB, 26 Oct 43, with related materials in ID 014 Civ Sup, III. (3) Min, 11th mtg CCAC(S), 16 Nov 43, Item 4. (4) Min, 16th mtg CCAC, 14 Dec 43, Item 5.

[30] (1) Ltr, Col Rickards to Gen Wright, 24 Sep 43. (2) Memo, Palmer for U.S. Members, CCAC(S), 16 Oct 43. Both in ID CSB Basic Pol File Aug–Dec 43. (3) Mins, 4th mtg CCAC(S), 28 Sep 43, Items 2 and 3; 8th mtg, 26 Oct 43, Item 1; 11th mtg, 16 Nov 43, Item 2. (4) CCAC(S) 2/1, 17 Nov 43, title: Agreed Subsistence Reqmts for Northwest Europe.

50 percent of the minimum needs of 112 million people in combined areas of responsibility in northwest Europe and the Mediterranean.[31]

The basic premises on which a combined plan for relief and rehabilitation could be formulated had therefore been agreed by the time the President issued his directive of 10 November. However, in its relations with the British the War Department had insisted on restricting military responsibility to somewhat narrower limits than the President now proposed. It seemed necessary to redefine the respective responsibilities of civilian and military agencies.

The Problem of Rehabilitation Supplies

The War Department, while insisting adamantly on military control over civilian supply during the initial phases of operations in overseas theaters, also sought vigorously to limit that responsibility to the narrow field of relief. This attitude in the end produced serious delays in the provision of rehabilitation supplies necessary for the resuscitation of transportation and communication facilities, and industrial and agricultural production in liberated areas. Slow progress in rehabilitation almost inevitably resulted in larger and larger demands for relief. The experience in every liberated territory pointed to the need for a balanced economic program with internal transport as perhaps the real heart of the problem. The military formula of food, fuel, and sanitary and medical supplies was therefore hardly a satisfactory one.

There was no lack of awareness of the rehabilitation problem. Reporting on the North African situation as early as April 1943, Colonel Wright of the International Division was moved to remark:

> The requirements of this area . . . would have been much more satisfactorily met had the exports consisted of industrial items in large quantities and cotton cloth and spare parts for automotive equipment to reestablish the internal transportation which is the most vital problem now facing the population . . . a rich food producing area is importing food for its cities, and to some extent food is piling up at the ports rather than being distributed.[32]

ETOUSA officials also, in fall 1943, candidly criticized the existing restrictive nature of the military civil affairs program, predicting the omission of industrial and agricultural maintenance materials would be "nothing short of catastrophic based on the North African experience in which failure of early planning for procurement of these items led to long delays which frequently, by unduly delaying production and distribution in North Africa, led to increased demands for imports of consumers' goods."[33]

War Department insistence on limiting its responsibility to relief was based on the assumption that rehabilitation was a responsibility of the civilian agencies and on the desire, for budgetary reasons as well as reasons of convenience, to limit Army procurement to the smallest number of articles possible. The Department stipulated that it would sup-

[31] ID, Civilian Supply, Text, I, 131–36.

[32] Memo, Col Boykin C. Wright, 24 Apr 43, sub: Civilian Supply, ID CSB Basic Pol file 1942–43.

[33] Memo, Col Cornelius E. Ryan, Chief CA Sec ETOUSA, for Chief ID ASF, 8 Oct 43, sub: Memo on Civilian Supplies for Liberated Areas, ID 014 Civ Sup, III.

port procurement by civilian agencies of any rehabilitation supplies specifically justified on the basis of military necessity. This position was adopted while it was still assumed that the period of military responsibility would be only 90 days. The War Department stuck to its position with a certain dogged inflexibility after the military period had been lengthened and the field of military responsibility broadened.

The concession made to the British at QUADRANT that the military program should include "other agreed articles considered essential to military operations" caused some concern in military circles, but led to no immediate broadening of the field of military procurement. Requirements for rehabilitation supplies, if necessary to military operations, it was ruled, could be met in part by using standard military equipment. Beyond this CCAC (S) would process requisitions from theater commanders, make recommendations as to their military necessity, and include them in military shipments where justified. Civilian agencies would remain responsible for procurement and for development of future programs.[34] This system gave rise to a new but ephemeral set of co-ordinating committees and a procedure whereby requirements outside the military program were processed through CCAC (S) to one of them, the Combined Supply Committee. But CCAC (S) determined first whether procurement should be supported as a military necessity or undertaken as a military task, and this proved to be an effective means of controlling the whole affair. CCAC (S) seldom gave its sanction or support to requisitioned items, but merely passed requests on to the Combined Supply Committee for consideration in the light of competing U.S. or Allied civilian demands to be produced on a civilian priority. Without military priority, civilian agencies were seldom able to make timely procurement.[35]

The President's November directive clearly called for some broadening of the military province, and new arrangements took shape in meetings between State, War, and FEA representatives in December 1943. It was agreed that the War Department would initiate and develop plans for relief for all areas to be liberated, working out its estimates in close collaboration with State and FEA. Besides food, fuel, soap, and medical supplies, the military programs would include transport equipment, utility repair items, clothing and shoes, and seeds, fertilizer, and other agricultural supplies. Industrial rehabilitation items would still be excluded. Military procurement, as opposed to planning, would be limited to relief items already included in the ASP, and to transport equipment and public utility repair items to be furnished from military stocks. FEA would continue to procure other items in the programs, with the War Department to support procurement on military priority of all items included on approved military programs. Military planning would also be limited to the military period, still estimated at six months. Both planning and procurement for the postmilitary period would have

[34] (1) Memo, Maj Edward M. Conklin, Jr., QMC, for Gen Wood, 6 Sep 43, sub: Relative Reqmts for Occupied and Liberated Territories. (2) Memo, Gen Clay for Gen Lee, 31 Aug 43. Both in ID CSB Basic Pol File Aug–Dec 43. (3) Ltr, Maj Palmer, ID, to Mr. Abbot Low Moffat, State Dept, 11 Oct 43, ID 014 Civ Sup, II.

[35] ID, Civilian Supply, Text, I, 137–45.

to proceed on civilian priority ratings. The military authorities would also, regardless of the extent of advance procurement, have to determine what items could be brought into overseas areas in the light of transportation limitations.[36]

To provide a working organization to carry out these decisions, the United States Procurement Committee (USPC) was set up in early February 1944. According to its own official definition of function—arrived at months later—it was "a forum for reaching agreements . . . with respect to civilian supply, requirements and procurement problems during the military period."[37] Its purpose was thus to provide a meeting place for the principal operating personnel in War, State, and FEA, and a point of contact for other interested agencies such as the War Food Administration, Treasury, WSA, and WPB. In the USPC the American viewpoint was normally agreed upon before presentation to the British in CCAC (S). The USPC was also the American vehicle for communication with the Combined Boards in accordance with agreed procedures for determining sources of supply. It supplanted the Combined Supply Committee as the agency responsible for processing theater requests for unprogramed items during the military period (subject, of course, to British agreement within the CCAC (S)).

The USPC was, nonetheless, only a forum, and it had no power to bind constituent agencies by its decisions. Moreover, because the committee's consideration was limited to the military period, the civilian agencies could do little more than make suggestions on which the Army had to take final action in the light of its own evaluation of the shipping and supply situation. The committee's sphere of activity was limited, and it did not provide for any effective planning for the transition from the military to the civilian period of control.[38]

All these arrangements were still based on the uncertain assumption that civilian agencies could prepare and implement an over-all rehabilitation plan that would take up where military planning and operations left off. The civilian agencies, whose planning apparently had been set back by the President's directive, were by no means in a position to do so. There remained for some time afterward a void in the area of planning for the long pull into which the War Department showed no inclination to move. In January 1944, in reply to the representations of the Secretary of State that the military should take steps very soon to restore transport, agriculture, fishing, and industrial production in liberated areas, Stimson reminded Hull that the War Department had been appropriated no funds and "accorded no congressional or executive authority to procure civilian supplies other than those which are deemed necessary or desirable in support of military operations."[39]

[36] (1) Ltr, CPRB, CFB, CRMB, CSAB to J. J. McCloy, Chmn, CCAC, 13 Dec 43, ID CSB Basic Pol File Aug–Dec 43. (2) Memo, Gen Wright, sub: Memo Re Conf . . . in Gen Clay's Office, 14 Dec 43, Dir Materiel File Lend-Lease 1942–44. (3) ID, Civilian Supply, Text, I, 154–59.

[37] USPC 25 (revised), 12 Sep 44, in ID, Civilian Supply, Doc Suppl, 166; see also Text, I, 184.

[38] ID, Civilian Supply, Text, I, 176–87.

[39] Ltr, Secy War to Secy State, 29 Jan 44; Ltr, Secy State to Secy War, 1 Jan 44. Tabs B and C to ASF Plng Div Strat Log Study 53.

This was intended as a reminder that long-term plans for rehabilitation must be formulated by State and FEA working with British civilian agencies, but it was not until mid-May 1944 that a civilian agency was to be formed by the State Department for this purpose (the Liberated Areas Committee). In the meantime, all plans developed were based on the military conception of the task, shaped largely in terms of the disease and unrest formula. Be the fault where it may, the effects of this failure to provide for an early start of rehabilitation were to be serious in both Italy and northwest Europe.

The First Phase in Sicily and Italy

Sicily and Italy provided the first testing ground for the policies and procedures taking shape in Washington. The invasion of Sicily was the first Allied operation for which there was a definite civilian supply plan prepared in advance. The plan, to cover a 90-day military period, was based on the assumption that once the dust of battle settled, Sicily would be self-sufficient except for coal and oil. For such immediate relief needs as arose, AFHQ hoped to rely mainly on stockpiles in North Africa. Only 12,100 tons of food were requested from the United States, and some thought even that quantity excessive.

The Allied Military Government of Occupied Territory (AMGOT) instituted in Sicily soon found this optimism entirely unwarranted. Whether there was enough grain to provide bread for all the people was a debatable proposition, but for the moment quantity was irrelevant, since the lack of transport, the colossal black market, farm hoarding, and the ravages of battle kept grain out of the cities. Two months after the invasion, cities such as Palermo were still living "hand to mouth" with "not even 24 hours reserves of breadstuffs in the town."[40]

The situation the Allies found on the Italian mainland was even worse. The appearance of economic order, prosperity, and self-sufficiency that Mussolini's fascist government had been able to create was in reality only a façade that cloaked Italy's long-standing economic ills. The country was almost entirely dependent upon the outside world for coal and oil, and much more so for essential raw materials and even foodstuffs than the Fascists admitted. The minor wars in Ethiopia, Spain, and Albania had placed a severe strain on the Italian economy; three years of World War II as a German ally pushed it to the brink of collapse. Italy entered the war in 1940 unprepared and was never able to mobilize her economy in efficient fashion. Though nominally an ally, Italy was forced into an economic as well as political and military dependence on Germany that left her at the mercy of the Nazi overlords of Europe. The country did not prosper under the German hegemony. Shortages of raw materials and agricultural supplies, military demands on the labor force, and demor-

[40] (1) Rpt of CCAO, AMGOT for Aug 43, CAD 319.1 AMG (8-17-43), Sec 1. (2) Memo, Palmer for Clay, 14 May 43, sub: Problem of Civilian Supply Raised by JCS 302. (3) Memo, Palmer for Clay, 25 May 43, sub: Civilian Supply for HUSKY. (4) Draft msg, Marshall for Eisenhower, 26 May 43. (2), (3), and (4) in ID CSB Basic Pol File Gen 1942–43. (5) CCS 247/5/D, 28 Jun 43, title: Directive on Civil Affairs for HUSKY.



ITALIANS AT AN ALLIED SOUP KITCHEN

alization of the population led to a decline in agricultural and industrial production. Reserves of foodstuffs, clothing, and other consumer commodities sank to perilously low levels with prospects of replacement remote. In early 1942 the daily bread ration, already the lowest in western Europe, had to be cut from 200 to 150 grams per person. The transportation and communication system, subjected to excessive wear and tear, began to show signs of deterioration. Price, marketing, production, and rationing controls broke down, giving rise to a flourishing black market.

The Allied invasion gave the final impetus to economic collapse in the areas taken over. These areas in the south, the poorest section of Italy, were cut off from their normal exchange with the north where the main Italian industrial plant was centered. Bombing, demolition by the retreating Germans, and the ravages of land battles left thousands homeless, further curtailed agricultural production, disrupted an already weak transport system, and created new scarcities for black market operators to exploit. The demands of Allied and Italian military forces absorbed much of the

output of what was left of the productive plant. The Allies thus faced a formidable economic problem in southern Italy and soon came to realize that a considerable volume of relief supplies would be required if chaos was to be averted.[41]

That supporting the Italian economy would impose a burden on Allied supply lines had not been entirely unforeseen. At the TRIDENT Conference in May 1943 one of the main American arguments against British plans for invasion of Italy was that it would involve furnishing immense quantities of supplies to support a "crippled economy."[42] Yet even the Americans thought coal and oil would be the principal Italian deficiencies, and that the country would be able to feed itself. They estimated that about 200,000 tons of coal and 45,000 tons of oil per month would be the minimum required to sustain the industries necessary for production and distribution of the essentials of life. When the invasion of Italy was finally agreed at QUADRANT, the plans for civilian supply were shaped largely in terms of coal; oil was to be supplied over the short route from the eastern Mediterranean and entirely through military channels. The British accepted the responsibility for furnishing 100,000 tons of coal per month for the first three months following invasion (the lowered estimate was based on the limited area in Italy it was anticipated would be occupied during that period). The Americans in turn agreed to provide two ships monthly to carry such other dry cargo as the theater commander should consider necessary and that could not be carried in Italian ships. This arrangement was to be a temporary expedient; there was little expectation that the British could continue to furnish and haul coal to Italy after the first three-month period. The long-range civilian supply plan the CCS directed at QUADRANT was to cover Italy as well as northwest Europe. But since this plan was not finally placed in effect until June 1944, civilian supply needs for Italy were handled in the interim on an emergency basis, "going forward from crisis to crisis in a prevailing atmosphere of urgency."[43]

On the assumption that the only food problem in Italy would be supplying deficits in cities, initial estimates envisaged import of foodstuffs for only 10 percent of the population. On this basis, CCAC (S) on 9 November 1943 approved a program calling for shipment of 271,000 metric tons of grain or flour and 72,790 metric tons of other subsistence to cover the first six months south of Rome and the first three months north of Rome.[44] There was, understandably, consternation when, early in December, AFHQ informed the CCS that imported grain would be required for 50 percent of the people south of Rome and 70 percent of those in the north, and requested shipment of 882,000 met-

[41] Economic Sec, Allied Control Comm, Rpt, 1 Sep 44, ch. I, ACC files, 10000/154/328.

[42] (1) Memo, Col James K. Woolnough for Gen Wedemeyer, n.d., sub: Relative Supplies for Occupied and Liberated Territories, ABC 337 TRIDENT. (2) See also above, ch. III, and Memo, Somervell for Marshall, 14 May 43, sub: Study of Opns for Italy and Turkey, folder Agenda, Hq ASF file.

[43] (1) ID, Civilian Supply, Text, I, 229. (2) Memo, Clay for CG ASF, 18 May 43, sub: Coal Reqmts Ref CCS 227, folder CSofS Jt and Comb 1942–44, Hq ASF File. (3) Memo, Somervell for Marshall, 14 May 43. (4) See also above, ch. III. (5) CCS 324/1, 22 Aug 43.

[44] (1) CCAC(S) 1, 16 Sep 43, CCAC(S) 1/3, 17 Sep 43, and CCAC(S) 1/5, 14 Oct 43, titles: Agreed Italian Civilian Reqmts. (2) Min, CCAC(S) 10th mtg, 9 Nov 43, Item 4. (3) ID, Civilian Supply, Text, I, 229–30.

ric tons of grain and 240,000 tons of other subsistence during the first six months of 1944. AFHQ urged that shipments be speeded since theater stocks in both Italy and North Africa were at a very low level.

The reasoning behind the AFHQ request was compelling. Civilian supply had previously been neglected, Eisenhower explained, while port and inland transport facilities were absorbed in handling military cargo. By the end of November 1943, the new Allied Control Commission working with the Italian Government[45] was at the end of its rope. The 1943 harvest had fallen 25 to 30 percent below normal; amassing grain under the old unpopular Fascist system completely broke down and the major portion of the short harvest found its way into the black market. Even the low 150-gram bread ration could not be maintained, and the only way to prevent mass starvation in urban centers such as Naples seemed to be a crash program of imports. Eisenhower stressed the military urgency behind the requests:

> It should be understood that our requisitions for food . . . are not based on considerations of humanitarianism or any other factor except that of military necessity. The conditions in Southern Italy are such that unless reasonable quantities of food are supplied very promptly we will experience sabotage, unrest, and a complete cessation in all those activities necessary to our advance.[46]

CCAC(S) approved the stated theater requirements through March 1944 and shipments from the United States were started immediately to meet the emergency. The requirements for the second three months were subjected to a closer scrutiny since the advance had been much slower than anticipated. A theater request for a 134,000-ton stockpile for operations north of Rome was turned down and other reductions were made with the net result that the AFHQ total was cut from 882,000 to 609,000 metric tons of grain and flour, and from 240,000 to 150,000 tons of other subsistence.[47]

Even with the reductions the new Italian food program, when added to a continuing demand for nearly 100,000 tons of coal monthly, posed a heavy demand on Allied supplies and shipping. The Italian ships the QUADRANT planners had so hopefully postulated turned out to be few in number and best suited to short voyages within the Mediterranean; the burden of transoceanic transport of Italian relief supplies therefore fell on British and American shipping. In arranging the enlarged Italian program the Allied authorities got their first exercise in developing the global availability of relief supplies and adjusting it to the availability of shipping and convoys. If the development of these ar-

[45] In Sicily and in the early stages in Italy, Allied Military Government of Occupied Territory handled civil affairs. In an effort to sustain the Badoglio government in its role as cobelligerent, an Allied Control Commission was set up on 10 November 1943 to work with it in governing the country. The Control Commission was assigned responsibility for rear areas, absorbing in most cases AMGOT personnel there; AMGOT continued to be responsible for forward areas. The Allied Control Commission was military in character and under the Allied theater commander who was nominally its president.

[46] (1) Msg CM-IN 9014, 14 Dec 43, AFHQ to CCS. (2) Ltr, MGS AFHQ to CCS, 26 Nov 43, in Coles and Weinberg, *Civil Affairs: Soldiers Become Governors*, pp. 314–15. (3) Msgs, LAC 32, CM-IN 3851, 6 Dec 43; and LAC 71, CM-IN 18299, 30 Dec 53, AFHQ to CCS.

[47] ID, Civilian Supply, Text, I, 231–34.

rangements generated a good deal of friction on both the national and international level, it also served to clarify the problems involved and to point the way to smoother operations in the future.

Until December 1943 all wheat and flour shipped to Italy came from North Africa, part of it on loans from the French that had to be repaid as the 1943 North African harvest was also short and famine conditions threatened there in the winter of 1943–44. The U.S. members of CCAC(S) agreed that December and January shipments to Italy might be met from the United States but after that, they found, American wheat would not be available in sufficient quantity. CCAC(S) therefore decided that wheat should be obtained from Argentina beginning with 65,000 tons in February 1944. Lewis Douglas of WSA protested this arrangement, stating flatly that U.S. bottoms would not be available for the purpose. Douglas argued that American shipping should not be used over the long haul from Argentina to the Mediterranean as long as British bottoms hauled wheat over the much shorter route from the United States to the British Isles. "This is another example," Douglas wrote, ". . . of the confusion that can be created when the C.C.A.C. of the C.C.S. designates sources."[48]

Douglas' caustic comments were inspired by circumstances over which the War Department had no control and of which it was apparently unaware. The British were diligently seeking to shift responsibility for furnishing coal to Italy to the United States, and Douglas thought he detected in that effort a part of a general trend to increase the load on American shipping while British bottoms were diverted to commercial trades. WSA-BMWT relations, normally smooth, reached a nadir at the time of the SEXTANT Conference in December 1943.[49]

At SEXTANT and in the following weeks the specific issues of coal and wheat for Italy were ironed out, and a general framework of procedure agreed that re-established smooth relations between WSA and the War Department on the national level and between WSA and BMWT on the international level. The plan for any sizable shipments of wheat from Argentina was abandoned, not only because of shipping considerations, but also because of political objections from the State Department. Wheat and flour shipments to the Mediterranean continued through March almost entirely from the United States with a small supplement from Canada. For the period beginning in April 1944 arrangements were made for Australia to serve as the main source for wheat and flour, with the United States, Canada, and Argentina (as a last resort) to make up any deficits. Also, arrangements for coal provided that Italian needs should be met from India and South Africa as far as possible, with

[48] (1) Ltr, Douglas to McCloy, 7 Dec 43, ID CSB Policy file Genl 1944. (2) Min, 10th mtg CCAC(S), 9 Nov 43. (3) TAG Ltr to QMG and CofT, 10 Dec 43, sub: Supplies for AMG, NATO, in ID 014 Civ Sup, IV.

[49] (1) Ltr, Douglas to Lord Leathers, 18 Oct 43. (2) Memo, James A. McCulloch for Philip Reed, Mission Economic Affairs, London, 17 Nov 43. (3) Ltr, Douglas to Leathers, 7 Jan 44. All in Folder BMSM Misc, WSA Douglas File. (4) See also above, ch. XII.

deficits to be made up from Great Britain or the United States. For other subsistence, and for sanitary and miscellaneous supplies, the United States was designated as the sole source. WSA and BMWT agreed to divide shipping responsibility on as nearly a 50-50 basis as circumstances would permit, and on other combined procedures for pooling cargo space in moving civilian supplies. These arrangements promised to make better use of U.S. and British shipping, returning from the Far East in ballast, and to reduce the inroads on the grain supplies of the United States and on the coal stockpile of England. The War Department's main objection was that these agreements left its supply agencies subject to unexpected demands to make up deficits that could not be met from preferred sources. This was a cause of some continuing friction, but for the most part the arrangements adopted worked satisfactorily during the ensuing months.

Tentative agreements were also reached on co-ordination between military and shipping authorities for handling civilian supply programs. WSA and BMWT agreed between themselves that they would screen military civil supply programs but would reserve their position when "long term requirements of a speculative nature" were presented and "await firm shipping programs before undertaking commitments."[50] Approval of monthly shipping requirements for each theater would be subject to evaluation of port and inland clearance capacity by shipping and transportation representatives on the spot. Civilian supplies during the military period would be handled through theater channels and consigned to the theater commander for distribution. British vessels in the program would be chartered by BMWT to the War Office, American vessels by WSA to the Army. Shipments from the United States were to be handled in the usual Army fashion as military cargo; vessels carrying cargo loaded outside the United States would be loaded by WSA agents but still chartered to the Army.

The War Department agreed in general to this system, but made certain stipulations to protect the military interest and to preserve the integrity of procedures agreed in the CCAC. Military programs formulated in CCAC(S) would be presented immediately by the Army Transportation Corps to WSA, not directly through combined channels to the CSAB; the shipping agencies would have no authority over determination of requirements and the CCAC would treat recommendations on sources of supply as advisory only; a combined military-WSA-BMWT shipping committee in the Mediterranean would make the necessary decisions on port and inland clearance capacities in that theater; agreement would be reached among all U.S. agencies concerned before any matters were presented to the British.[51]

To return to the Italian problem that occasioned these decisions, the relief

[50] Quoted from Memorandum Covering Combined Shipping Employment Policy of WSA and BMWT, 28 Jan 44, ID 014 Basic Policy file Genl 1944.

[51] (1) Ltr, McCloy to Douglas, 6 Jan 44. (2) Notes of Army-WSA Discussions, 25 Jan 44. (3) Memorandum Covering Combined Shipping Employment Policy of WSA and BMWT, 28 Jan 44. (4) Memo, Palmer for Dir, ID, 3 Feb 44. (5) Ltr, Douglas to McCloy, 7 Mar 44. (6) Memo, Gen Wright for ASW, 12 Mar 44, sub: Comments re Proposed Agreement

program carried out during the first part of 1944 successfully met the immediate crisis. Because the advance up the Italian peninsula moved much more slowly than had been planned, General Wilson was able to accumulate a substantial reserve while raising the daily bread ration from 150 to 200 grams. Yet the portents remained ominous, as the Italian economy continued in a state of chaos and a prospective speed-up in the pace of Allied advance promised to bring new and heavier relief demands.

The real problem was rehabilitation. On 29 June General Hilldring remonstrated vigorously with G–5, AFHQ: "Our authority to carry through our relief obligations in the next year in Europe is in jeopardy at the moment because of the disinclination or the inability of the Allied Control Commission to get into the business of making Italy self-sustaining, and to get into the business with vigor and efficiency. . . ."[52] General Hilldring was more successful in diagnosing the disease than in identifying its cause. The Control Commission had been allotted too few means to accomplish an almost insuperable task, and its initial planning had been for relief only, on the assumption that the task of rehabilitation would fall to civilian agencies. Except for bare relief, first priority on supplies and on transport and productive facilities in Italy had always gone to the Allied military machine; without necessary rehabilitation supplies, and in the existing state of economic disruption and demoralization of the people, it was difficult to even make a start on restoration of production facilities.[53]

By mid-March military control of civil affairs in Italy had lasted for the six months that, in theory, was to be the period of military responsibility. The War Department began negotiations for transfer of rear areas to civilian authority at that time but made little progress. Even aside from the fact that the civilian agencies did not have the plans or personnel, Italian relief presented formidable legal and financial problems. UNRRA as yet had no funds, and in any case, by the terms of its charter could not operate in an ex-enemy country. Italy had never been declared eligible for lend-lease, and therefore FEA had no authority to spend its funds for Italian relief. Negotiations dragged out interminably with no satisfactory solution in sight. In reality, although the theater was willing to accept civilian infiltration into the Allied Control Commission, it was not ready to relinquish control over areas that still served as military bases. This attitude in the theater made most of the sound and fury in Washington meaningless. The prospect in the summer of 1944, therefore, was that relief for Italy would continue for some time to pose a heavy drain on Allied military resources in competition

between WSA and BMWT. (7) Memo, unsigned. sub: Opinion on Memo Covering Combined Shpg Employment. . . . All in ID 014 Basic Policy file Genl 1944. (8) Ltr, CPRB to CSAB, 11 Feb 44, ID 014 Civ Sup, V. (9) For materials on the whole broad shipping question at issue between WSA and BMWT during this period see the Douglas files, Med Relief, U.K. and BMSM.

[52] Ltr, Gen Hilldring to Brig Gen Charles M. Spofford, ACofS, G–5, AFHQ, 29 Jun 44, CAD 380 Reconstruction (4-30-44).

[53] See documents in Coles and Weinberg, *Civil Affairs: Soldiers Become Governors*, pp. 319–22, 364–69.

with the requirements for support of the main campaign that was getting under way in northwest Europe.[54]

[54] (1) Ltr, Lauchlin Currie, Dep Admin FEA to Gen Clay, 3 Mar 44, Dir Materiel file Lend-Lease 1942–44. (2) Notes of discussion held in Gen Clay's office 9 Mar 44, and other materials in ID CSB Basic Policy file Genl 1944. (3) Memo, Palmer for Dir ID, 20 Jun 44, sub: Proposed Transfer to FEA of Responsibilities for Provision of Civilian Supply for Italy as of 1 Jul 44, and other materials in ID 014 Civilian Supply series, vol. XIV ff. (4) For a judicious selection of documents see Coles and Weinberg, *Civil Affairs: Soldiers Become Governors*, pp. 487–91.

CHAPTER XXXI

The Army and Civilian Supply — II

The Combined Plan

Planning for civilian supply for the campaigns in North Africa, Sicily, and Italy was, in the main, impromptu, shaped by immediate emergencies. The CCS action at QUADRANT in directing the CCAC to prepare an over-all civilian supply plan for the period of military responsibility in all combined theaters aimed at avoiding the haste and waste of emergency action once the main campaign in Europe got under way in 1944. The President's directive of 10 November 1943, asking for a plan specifically shaped in terms of German collapse, gave this planning a new direction. The War Department decided to draw up a plan conforming to the President's desires in co-operation with interested U.S. civilian agencies, and then to submit it to the British in the CCAC(S) as the over-all plan in fulfillment of the CCS directive.

Two sets of plans, it was agreed, should be prepared, the first set based on the assumption of German collapse without scorching early (1 February 1944) and late in the year (1 September 1944), the second set on collapse with limited scorching on the same dates. Both sets were to cover all countries of Europe for a six-month period with the exception of the neutrals and the USSR.[1] The no-scorching plans were to be predicated on optimum conditions, with no destruction by the retreating Germans, battle damage, or disruption of trade.

Intensive work was devoted to reconciling War Department and FEA approaches and to welding all previous calculations into one unified whole, and by the end of December agreement had been reached on a set of requirements covering the assumption of collapse without scorching early in the year. These estimates were designated Plan A. Other plans were developed later—a variant of Plan A based on collapse without scorching late in the year; Plan B (in two parts) based on collapse with limited scorching early and late in the year; and Plan C, an estimate of civilian needs for areas in the wake of assault operations leading to collapse by 1 October 1944.[2]

The first variant of Plan A, based on early collapse under optimum condi-

[1] Estimates for Germany and Austria, with the exception of medical and sanitary supplies, soap, and agricultural rehabilitation items, were based solely on caring for displaced persons from other nations found within their borders.

[2] ID, Civilian Supply, Text, I, 152–54, 160–64.

tions, became the primary basis for civilian supply planning in the CCAC(S). The assumption behind the plan was clearly outdated long before it had been agreed; only the most sanguine in early 1944 hoped for a German collapse at any date without a campaign on the Continent. Plan A became the basis of calculations simply because it was prepared first and because it provided a more convenient means than any of the others for calculating minimum requirements of an area for a six-month period. With total area requirements determined and sources of supply tentatively designated, actual procurement and shipment could be phased in keeping with the development of requirements by theater commanders.

Plan A was presented to the British in CCAC(S) on 4 January 1944, and, after adjustments, estimates of requirements were agreed to by both sides of that committee early the next month. Estimates for countries in eastern Europe—Bulgaria, Czechoslovakia, Finland, Hungary, Poland, and Rumania—were included only for informational purposes and, it was agreed, they would not serve as a basis for supply procurement. The total requirement for the other areas—northwest Europe, Italy, and the Balkans—came to approximately 9,135,000 metric tons: 4,869,000 tons of coal, 2,866,000 tons of food, 668,000 tons of petroleum, 569,000 tons of agricultural supplies, 79,000 tons of soap, 71,000 tons of clothing, shoes, and textiles, and 16,000 tons of sanitary supplies. In approving the massive program CCAC (S) emphasized that it was for planning purposes only and did not involve any commitment by either the War Department or the War Office to furnish any of the supplies listed. The CCAC approved on the same terms on 17 February 1944.[3]

Having agreed on the needs of the various areas, the CCAC then submitted the Plan A estimates to the civilian supply and shipping authorities for review through national channels in accordance with the procedures established in late 1943. Based on advice from the civilian agencies, between mid-February and the end of April 1944, CCAC(S) drew up a tentative division of responsibility between the United States and United Kingdom for meeting Plan A estimates and a tentative designation of the source of supply for each item.[4]

The proposed arrangements, extremely complicated in nature, were predicated on the European transport system remaining intact, making possible the shipment of surpluses from one area to meet shortages in another. Europe, it was assumed, would be able to meet most of its own coal needs from fields in the Ruhr, the Saar, and Silesia; any balance would come from British sources in the United Kingdom, India, and South Africa. Europe would also be able to furnish small quantities of other items, the planners estimated, leaving an import requirement of only about 4,000,000 metric tons out of the 8,791,000 tons to which Plan A in its final combined version was reduced. Food, the

[3] (1) CCAC(S) 12 (Rev), 18 Feb 44, title: Estimated Needs of Europe in the Event of Unconditional Surrender Without Scorching. (2) Min, 22d mtg CCAC, 17 Feb 44. (3) ID, Civilian Supply, Text, I, 187–97. (4) The area breakdown was as follows: northwest Europe—5,101,000 tons; Italy—2,636,000 tons; Balkans—1,397,200 tons. Estimates for eastern Europe, not considered for procurement purposes, totaled 1,299,400 tons.

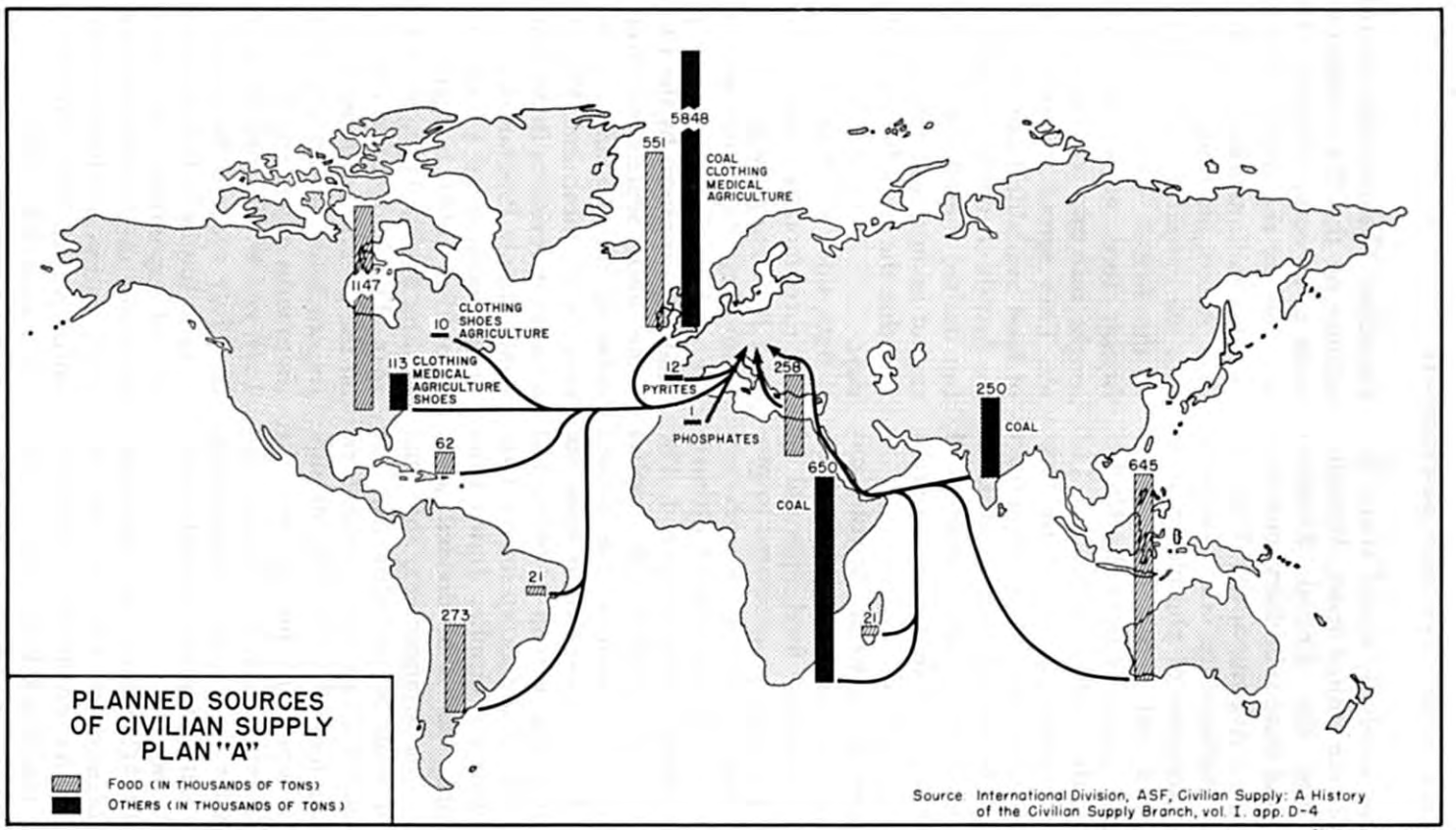
[4] See ID, Civilian Supply, Text, I, 198–203 for details.

major item involved, would come primarily from the United States, Australia, Canada, and the United Kingdom stockpile, and from subsidiary sources in North Africa, Argentina, the West Indies, and Madagascar; other supplies, with the exception of phosphates from North Africa and pyrites from Spain, would come primarily from the United States and the United Kingdom. The supply of petroleum was left to the combined military petroleum authorities since it was to be imported in bulk for military and civilian needs. Sources of supply for seeds and veterinary materials were not determined.

Disagreement between British and Americans over terms of financial responsibility delayed final approval of the plan. To allow procurement to proceed, in June a *modus vivendi* was reached while the question of ultimate financial settlement was postponed. The United States would pay for all supplies drawn from this country, the United Kingdom for all those drawn from the British Isles and British colonies and dominions with the exception of Canada. Payment for supplies drawn from other sources was to be divided 50-50. Based on this arrangement, the final version of Plan A provided that the British should accept procurement responsibility for 1,892,000 tons of supplies, the Americans for 946,600, the Canadians tentatively for 13,100, and the source for the rest (petroleum, seeds, and veterinary supplies) was left undetermined. *(Map 7)*

In the CCAC(S), the Americans sought a firm commitment only for the first ninety days, for which the division was 1,179,600 tons from U.K. sources, 300,600 from U.S. sources, and 8,500 from Canadian. The division reflected a heavy reliance on the U.K. stockpile of foodstuffs to conserve shipping. This stockpile had, by the end of 1943, grown to over 6.5 million tons, a greater reserve than Americans thought necessary now that the danger of submarine blockade of the British Isles had receded. The British food authorities, nonetheless, sought zealously to safeguard their levels. They agreed to make 700,000 tons of food available from the stockpile in the first three months in case of collapse, but limited the offer to 200,000 tons in case of assault, and that only on condition that the stock be replaced in ninety days.

Both sides of CCAC(S) approved the first three-months' plans on these terms on 9 June 1944, the CCAC on 22 June. In mid-July the British agreed finally to the division for the entire plan. The final step, approval by the CCS, did not come until September 1944 but the delay in no way affected implementation. In the meantime, Plan A served as a basis for revisions in Section VI of the Army Supply Program for 1944 and for the presentation of a joint War Department-FEA relief budget to Congress, totaling $536,556,990, for the fiscal year 1945. This budget was necessarily based on the general assumption that military responsibility would continue for only six months in western Europe and north Italy, and on the unrealistic target dates of 1 July 1944 in Sicily and 1 October 1944 in southern Italy for FEA assumption of responsibility in those areas. FEA presented the budget estimates for U.S. participation in Balkan relief for the initial period. This agreement on financial responsibility in no way affected the earlier FEA-War Department agreement


5848
551
COAL
CLOTHING
MEDICAL
AGRICULTURE
1147
10
CLOTHING
SHOES
AGRICULTURE
113
CLOTHING
MEDICAL
AGRICULTURE
SHOES
12
PYRITES
1
PHOSPHATES
258
250
COAL
62
650
COAL
645
21
273
21
PLANNED SOURCES
OF CIVILIAN SUPPLY
PLAN "A"
FOOD (IN THOUSANDS OF TONS)
OTHERS (IN THOUSANDS OF TONS)
Source: International Division, ASF, Civilian Supply: A History of the Civilian Supply Branch, vol. I, app. D-4
H. C. Brewer, Jr.

MAP 7

on the commodity basis for procurement.[5]

Meanwhile work continued on Plans B and C and on the variant of Plan A that assumed collapse late rather than early in the year. The total tonnage requirements (in metric tons) estimated under these alternate plans were: Plan A (collapse late in year without scorching), 15,142,500; Plan B (collapse early in year with scorching), 18,675,600; Plan B (collapse late in year with scorching), 26,623,000; Plan C (assault operations leading to late year collapse), 31,324,000. Coal requirements in all these variants were vastly increased over the original Plan A, both because of higher fuel consumption in winter (under late in year collapse estimates) and the probability of scorching of the mines. Requirements for food and other supplies were also increased in the scorched plans though in lesser proportion. Import requirements in the scorched plans were necessarily much greater.

Of the alternate plans, only the first variant of Plan B received consideration in the CCAC (S). Plan B estimates were approved by the committee in mid-July and submitted to the supply authorities for advice. But the approval of supply sources for the quantities in Plan B progressed very slowly. The crux of the matter was the U.K. food stockpile. The JCS coupled their approval of Plan A with an admonition to WSA and the War Food Administration that "maximum use be made of stockpiles in areas adjacent to those requiring relief before any allocation of tankers or cargo ships be made for supplies from more distant sources," and recommended "special scrutiny" of stockpiles of U.S. lend-lease, "the military necessity for which disappeared with the improvement of the strategic situation."[6] The Joint Chiefs thought that the British should be willing to accept a 2- or 3-million-ton reduction in their 6.5-million-ton food stockpile, in return for a guarantee of the stockpile at a reduced level, thus making food available for northwest Europe at a minimum cost in shipping. Marvin Jones of the War Food Administration was at first sympathetic and agreed to negotiate with the British for such a release against Plan B estimates. To the surprise and consternation of the military officials, however, the combined supply authorities seemingly ignored the logic of the argument, and in their recommendations on Plan B provided for only 585,000 tons of food—the remaining portion of the British offer of 700,000 tons in case of collapse—to be withdrawn from the U.K. stockpile. The rest of the food was to come from more distant sources such as the United States, Canada, Australia, and Argentina.

Thus, while in theory an over-all supply plan came into being with the quan-

[5] (1) ID, Civilian Supply, Text, I, 166–69, 196–219, and app. D–4. (2) CCAC(S) 12/4 (Rev), 14 Jul 44, title: Plan "A"—Initial U.S.-U.K. Procurement Responsibility. (3) ID Rpts, Essential Civilian Supplies for Occupied and Liberated Areas During Period of Military Responsibility, 28 Apr and 8 Sep 44. (4) Min, 34th mtg CCAC(S), 9 Jun 44, Item 2. (5) Hammond, *Food: The Growth of Policy*, pp. 278–81, 397. (6) The final terms of financial settlement agreed to between the British and Americans in February 1945 provided that payment for military relief was to be requested from all governments of liberated or conquered areas. Any amounts not recoverable were to be shared 67 percent by the United States, 25 percent by the United Kingdom, and 8 percent by Canada up to a limit of $400,000,000. Canada agreed to these terms conditionally.

[6] Ltr, JCS to Marvin Jones, WFA, app. C, JCS 957, 15 Jul 44, title: Civilian Supply Reqmts for Europe.

tities in Plan A the lower limit and those in Plan B the upper, actually by September the Plan A figures had been expanded by less than a million tons. It was the Plan A estimates then that, in the main, were to serve as the guide to procurement and as limits to the pool of civilian supplies on which theater commanders could draw during most of the year 1944.[7]

Neither Plan A nor Plan B estimates, divorced as they were from any valid prediction of the course of the war in Europe, were of much value in planning the allocation of shipping. The combined shipping authorities stuck to their decision not to make positive commitments on "long term requirements of a speculative nature," in which category they placed both plans. WSA kept in very close touch with the planning and indicated Plan A requirements could be met should collapse actually occur as postulated, but pointed out that should the Allies have to invade northwest Europe the situation would be entirely different.[8]

Plan C was developed by the ASF largely in an effort to provide some phased guide to shipping requirements; Plan C estimates were phased over a period of one year on the assumption of assault operations leading to collapse. ASF Plans Division made extensive studies of shipping requirements based on the plan but in the end it proved only an academic exercise. The British refused even to consider Plan C in the CCAC (S), and WSA as before insisted that firm agreed requirements were necessary before it could make commitments.[9]

The development and phasing of concrete requirements for liberation of occupied Europe after the Allied invasion therefore rested largely on theater commanders and their staffs. Theater planning for civilian supply went on simultaneously with the broad planning in Washington, and was normally co-ordinated with it. The role of the CCAC (S) was to evaluate theater plans in relation to one another and to fit them into the over-all limits on availability of supplies established in Plan A and the supplementary quantities approved in Plan B. Shipping then had to be arranged within the total military allocation to any theater. Three areas of combined operations need to be distinguished: (1) the Mediterranean under SACMED, including Sicily, Italy, and, for a limited period, southern France; (2) the Balkans—Greece, Yugoslavia, and Albania—also under SACMED; (3) northwest Europe—northern France, Belgium, the Netherlands, Luxembourg, Denmark, and Norway—under SHAEF.

In the case of Italy, Plan A estimates were, in the first instance, based on theater forecasts of need developed out of the experience of the previous year. Beginning in July 1944 Italian requirements were no longer processed on an

[7] (1) JCS 957, 15 Jul 44. (2) ID Rpts. (3) ID, Civilian Supply, Text, I, 227. (4) Min 37th mtg CCAC(S), 23 Jun 44, Item 2. (5) Memo, Palmer for Dir ID, 11 Jul 44, ID 014 Civ Sup, XVI. (6) Memo, Palmer for OCofT and OQMG, 10 Oct 44, sub: Civilian Supplies for Europe, ID 014 Civ Sup, XXIV. (7) Diary Entry, 15 Nov 44, Strat Log Br, Plng Div, ASF.

[8] (1) Ltr, Capt Conway, WSA, to Col N. M. Coe, OCofT, 27 Mar 44, WSA Conway File, Reading File Jan–Mar 44, Box 122891. (2) See also ltr of 6 Apr 44 in Reading File Apr–May 44, Box 122893, and Ltr, R. M. Bissell, Div of Ship Reqmts, WSA, to Col Dixon, OCofT, 6 Jun 44, ID 014 Civ Sup, XIII.

[9] See Incls in ASF Plng Div, Strat Log Study 53.

emergency basis but charged against over-all requirements established in Plan A. SACMED also prepared both operational and collapse plans for southern France, though these had to be fitted into the over-all planning done by SHAEF since southern France was expected to revert eventually to SHAEF control. Definite commitments were made only against requirements for the assault phase—48,900 tons of foodstuffs, 1,200 tons of soap, and 23,000 tons of coal for the first 45 days. Many of these supplies were loaded on the flatted ships and forwarded directly by the New York POE as part of the military supplies for ANVIL.[10]

Establishing any firm requirements for the Balkans was more difficult because no approved combined operations were scheduled there, and the Americans were loath to contemplate military relief activity in the area in case of German collapse. The British Middle East Command, however, had long been engaged in planning for Balkan relief, and the British had established at Cairo in 1943 an Administration of Territories (Balkans) Committee (AT(B)) as a counterpart of the AT(E) in London. They had also begun to accumulate a stockpile of relief supplies for the Balkans. The President, acting on State Department advice, in January 1944 approved U.S. participation in Balkan relief on the understanding that only a small American military staff should be employed in a supervisory role and that UNRRA should, as far as possible, undertake the actual distribution of relief supplies. Estimates for the Balkans were, as noted, included in Plan A. These estimates were revised upward in July to conform more closely with the estimates developed by the British AT(B) in Cairo, the excess over Plan A being regarded as tentative and dependent upon action to be taken on Plan B. To meet emergency needs should the Allies occupy any part of the Balkans, the existing Balkan stockpile in the Middle East was augmented by small shipments from the United States; at the same time, however, it lost its completely separate identity and was placed under SACMED to form part of the total resources in his theater to meet civilian supply needs in all areas under his command.[11]

In the SHAEF area in northwest Europe, the area of the main Allied effort, civilian supply planning by combined military staffs in London had begun in mid-1943. On 6 January 1944 the newly constituted SHAEF staff was able to present two six-month plans based, respectively, on collapse (RANKIN C) and assault (OVERLORD) conditions, the former calling for 1,270,000 tons of supplies, the latter for 532,000 tons. There was originally a considerable discrepancy between the basis of SHAEF planning and that of CCAC(S). Until May 1944, when the CCS finally ruled other-

[10] (1) ID, Civilian Supply, Text, I, 237–38. (2) ID Rpt, Essential Civilian Supplies . . . , 28 Apr 44. (3) On planning for southern France, see Robert W. Komer, Civil Affairs and Military Government in the Mediterranean Theater, MS, OCMH, ch. XXI, pp. 21–34.

[11] (1) ID, Civilian Supply, Text, I, 238–43. (2) Memo, McCloy, approved by Roosevelt, 31 Jan 44, *Ibid.*, Doc Suppl 180. (3) CCAC(S) 7/20 (Revised), 5 Jul 44, title: Estimated Import Needs for Civilian Relief in Albania, Greece, and Yugoslavia. The revised tonnage for the Balkans was 1,504,661 as opposed to 1,397,200 in the original Plan A. Variations in quantities of individual items were considerably greater. (4) Komer, Civil Affairs in the Mediterranean, ch. XXII.

wise, SHAEF planning followed an original British conception that did not provide for military responsibility for so-called hiatus areas such as Denmark, Norway, and the Bordeaux region of France, which military forces would enter, if at all, only as a result of a general German withdrawal or collapse. SHAEF plans also included industrial rehabilitation items specifically excluded from Plan A. By D-day, however, SHAEF collapse planning had been brought in line with Plan A premises, though the operational relief plans still had not been. In any case, firm commitments were made against only the first 90 days of assault. The requirements—34,000 tons of food, 23,000 tons of coal, 2,700 tons of soap and miscellaneous other supplies—were to be met, in the main, from United Kingdom stockpiles. The U.K. stockpile, moreover, was conceived as the main reserve from which SHAEF emergency demands could be met, though, as has been noted, the British insisted on limiting withdrawals and on early replacement from outside sources in the case of assault.[12]

The structure of civilian relief plans in existence when the Normandy invasion got under way on 6 June 1944 was thus a complicated and imposing edifice but one that would require extensive adaptation to the war situation. Other than the firm commitments for the assault phases in both northern and southern France, the Balkan stockpile, and the arrangements agreed as a result of the emergency in Italy, plans were tentative and shaped in terms of an early German collapse. The pools of supplies provided in Plans A and B from sources around the globe could not be translated into reality unless ships were available to transport them at the time they were needed. Apart from shipping, there were other questions left unanswered. Plan A did not provide for the heavy imports of coal that would undoubtedly be necessary once the assault was under way; there was a supposition that the British would furnish coal, but no definite agreement. Similarly, the assumption that the U.K. stockpile would be a principal source for food was valid only for collapse conditions, not for assault. In general, also, theater operational planning based on assault, when carefully analyzed, showed estimates of requirements by area considerably in excess of quantities included in the overall supply plan; only by drawing on the bank provided for a much wider area, and thereby exhausting the reserve for collapse, could they be met. The provision of rehabilitation supplies for the military period was hardly adequate, and procedures for requisitioning unprogramed demands were extremely complicated. No plan at all had been made for the postmilitary period, or for the transition from military to civilian control.

By its very nature, however, civilian supply planning could not be as exact as planning the supply of military forces. Conditions to be encountered, numbers of persons to be fed or clothed, and the

[12] (1) ID, Civilian Supply, Text, I, 166–69, 196–97, 244–47. (2) Ltr, Hq COSSAC, CAD, to Secretariat CCS, 6 Jan 44, sub: Civilian Supply Reqmts, Opns RANKIN C and OVERLORD, ID CSB Basic Pol File Genl 1944. (3) Min, 17th Mtg CCAC(S), 11 Feb 44. (4) ID Rpt, Essential Civilian Supplies . . . , 28 Apr 44. (5) CCAC(S) 11, 31 Jan 44, title: Civilian Supply —Opnl Reqmts for Europe. (6) CCAC(S) 9/1, 15 Feb 44, title: U.K. Stockpiles for Initial Relief Reqmts. (7) Min, 18th mtg CCAC(S), 25 Feb 44, Item 6.

relative need for rehabilitation as opposed to relief supplies were all unpredictable and far more dependent than supply of troops on the rate of military advance. The need for combined agreement on financial responsibility and on sources of supply spread round the globe made planning an extremely complicated process. Uncertainty as to the duration of the period of military responsibility posed further difficulties. The agreements reached on an over-all combined plan represented as solid an achievement as was possible under the circumstances.

Operational Procedures

Beginning about June 1944 the emphasis in civilian relief activities shifted from planning to operations. During the summer of 1944 theater needs did not assume large proportions and posed few logistical problems. In northern France, the Allied beachhead remained small for some time and lay in an area relatively rich in agricultural produce. Even in Italy the advance north of Rome was slow, and stockpiles built up during the first half of 1944 permitted a slowdown in shipments. The arrangements already made for civilian supply in the assault phases of operations therefore sufficed. Not until fall, by which time much larger areas had been liberated, was the need for such quantities of supplies as set up in Plans A and B to be felt.

That need, nevertheless, was always in the background. During the summer of 1944 the agencies concerned did what they could to adapt the over-all combined plan to the situation as it was developing, to render the procurement and shipment of supplies as responsive as possible to theater needs, and to make the requisitioning of supplies for civilian relief as simple and direct as that of supplies for troops.

The quantities for each area and the sources of supply approved in Plans A and B were accepted as the ceiling on procurement subject to shipping and supply limitations. Theater operational plans were automatically approved as long as they fell within these ceilings. The theater commanders were also required to set up the necessary shipping within their over-all military allocations and to indicate the phasing of their requirements. On the basis of this phasing, CCAC (S) designated specific sources and the theater then requisitioned directly against them.

Originally each individual theater requisition on the United States had to be forwarded to the International Division for submission to the CCAC (S) before shipping instructions were issued to the port. But once approved and phased theater programs had been established, the ASF moved to simplify the system. The formal procedure finally established on 3 November 1944 provided that upon allocation of supply responsibility to the United States by the CCAC (S) for a stated quantity of supplies, the International Division would forward a supply program through the Office of the Chief of Transportation to the responsible port of embarkation for the theater concerned. When requisitions against this program were submitted to the port by the theater, the port would, after screening, ship the supplies requested. Theater requirements not falling within the over-all combined program, however, still had to be submitted for an item-by-item review by the CCAC(S),

with the exception of certain requests from SHAEF.[13]

A fundamental problem arose out of the variation between the area estimates in Plan A and those made by SHAEF. Very soon after D-day, SHAEF took the position that it could not confine its operational requirements within the limits of a plan prepared on totally different assumptions from the conditions under which it was operating, and, in particular, that it could not insure its requirements for any given area would fall within the amounts allotted for that area in Plan A. As a matter of fact, once SHAEF planning had been extended to cover hiatus areas, requirements began to burgeon beyond these approved limits. An International Division officer in mid-August found them three times those in Plan A and double those in Plan B for the areas then under SHAEF control. There was little the CCAC could do to reconcile the discrepancies except to warn SHAEF that the ceilings in the current supply plan (Plan A and approved supplementary quantities in Plan B) were based on actual supply and shipping limitations and to exceed them might be simply to postpone a day of reckoning. The initiative was left in the hands of the theater commander, and the net effect was to transform the Plan A pool into a bank of operational supplies with the initial area estimates on which it had been based practically obliterated.[14]

In developing special procedures for handling technical stores — equipment needed to restore public utilities, transport, and communications systems—differences between British and Americans had to be ironed out. It had been agreed that standard military items would be used for these purposes, but the British wanted to place technical supplies for civil affairs purposes in a special pool and to requisition them through civil affairs channels. The Americans wanted simply to draw on stocks pooled under theater control for civilian and military use. In the end, the Americans prevailed. The procedure finally agreed to in September 1944 provided, in brief, that theater commanders should use military stocks for civilian supply purposes and requisition for replacement through service channels, these replacement requisitions to be subject to approval of CCAC (S).[15]

A final problem was the old one of filling the void in organizational arrangements for eventual transition to civilian control and for handling supplementary rehabilitation programs in the interim. In May 1944 the State Department and FEA established for this purpose the Liberated Areas Committee (LAC) under the chairmanship of Dean Acheson of State. A combined counterpart, the Combined Liberated Areas Committee (CLAC) was established in Washington at the end of July with a subsidiary in London, the London Coordinating Committee. Both the LAC and the CLAC set up operating subcommittees for sup-

[13] (1) ID, Civilian Supply, Text, I, 247–52, 271–75; and Doc Suppl, 120. (2) ASF Cir 154, 24 May 44. (3) ASF Cir 363, 3 Nov 44.

[14] (1) Msgs, MEL 89, SHAEF to CCS, CM-IN 9116, 12 Jul 44, and LEM 103, CCS to SHAEF, CM-OUT 66385, 17 Jul 44. (2) Memo, Gen Wood, Dir P&O, ASF, for Dir Materiel, 23 Jul 44, sub: Consumption of Civilian Relief Supplies in Europe, ID 014 Civ Sup XVIII. (3) Memo, Capt Ed Jenison, CSB, ID, for Maj Palmer, 16 Aug 44, ID, Civilian Supply, Doc Suppl, 280.

[15] (1) ID, Civilian Supply, Text, I, 265–71. (2) CCAC(S) 8/6, 29 Sep 44, title: Supply of Technical Stores for Civil Affairs.

ply. The War Department was represented on the LAC by the Civil Affairs Division and on its supply subcommittee by the Civilian Supply Branch, International Division, but was permitted only observers on the combined committees.[16]

The formation of these civilian committees completed the structure of civil affairs organization. Though their principal function was planning for the transition from military to civilian control, they also served a useful purpose during the military period as points for processing requirements from theaters for supplementary supplies disapproved in the CCAC (S) on grounds of lack of military necessity. For the most part, however, the role of the combined civilian committees was a limited one as long as the military authorities retained control.

The Food Crisis in Italy

In the rapid advances of August and September 1944, the Allies liberated most of France, Luxembourg, and Belgium, and part of the Netherlands, thus vastly increasing the areas for which they were responsible and bringing under their control large urban populations. In Italy they advanced rapidly north of Rome, and in the Balkans the British prepared to enter Greece in force and to send an Allied relief mission to Yugoslavia. The full impact of the demand for civilian relief supplies was finally being felt, and at precisely the same time an acute shipping and port discharge crisis threatened to preclude meeting it. By the end of October the outlines of crises both in Italy and in northwest Europe were taking shape.

It was in Italy that the matter came to a head first. By September 1944 the Allies had been in Italy for a year; still the country continued in a state of semi-starvation and chaos, with no real amelioration in sight. Press reports painted such black conditions as a mortality rate of 50 percent among infants, 200,000 deaths annually from tuberculosis, and an average food consumption of 664 calories daily. Although these figures were erroneous, the real ones were sufficiently alarming. On 8 September the President sent a special directive to the Secretary of War citing the "critical supply situation in Italy" and instructing the War Department to "take immediate action to make available the additional essential civilian supplies and shipping to remedy this condition."[17] This directive was only one indication of a general reorientation of policy toward Italy that found further expression in a joint statement of the President and the Prime Minister at Quebec on 26 September. On the political side, Roosevelt and Churchill declared that the Italians should have more responsibility for their own government, and decreed that responsibility should be gradually shifted from the Allied Control Commission, to be renamed the Allied Commission, to the Italian Government. On the economic side, "first steps should be taken toward the reconstruction of an Italian economy—an economy laid low under the years of misrule of Mussolini and ravished by the German policy of venge-

[16] ID, Civilian Supply, Text, I, 299–315.

[17] (1) Memo, President for Secy War, 8 Sep 44, OPD 014.1, Case 128. (2) Msg, WARX 27877, CCAC to AFHQ, U.K. Base, Hq COMZ ETOUSA, and SHAEF, 9 Sep 44. (3) Msg, AFHQ to WD, FX 27517, LAC 700, 19 Sep 44. Last two in Folder Lend-Lease, Hq ASF.

ful destruction."[18] Following an Anglo-American suggestion, the UNRRA General Council agreed that it would provide relief for displaced persons and refugees in Italy. On 10 October the President relaxed restrictions on Italian exports and announced that funds available from this source, from dollar remittances of individuals in the United States to friends in Italy, and from the dollar equivalent of lire paid out to American troops would be available to enable the Italians to obtain essential civilian supplies in the United States to supplement the military relief program.[19]

The new approach called for both an accelerated measure of relief and a beginning on the long-term problem of rehabilitation. General Wilson, Supreme Allied Commander in the Mediterranean, was already convinced of the urgency of both lines of action. On 13 September he told the CCS that the old disease and unrest formula had outlived its usefulness in Italy and asked for a new directive on economic rehabilitation. "If the two governments at this stage," he predicted, "consider only what is required in the interest of the war effort, they may lose the opportunity of ensuring one of their own long term interests, i.e., the establishment of a reasonably prosperous and contented Italy after the war." On 24 September he forwarded a request for a considerable increase in grain shipments to Italy, a request that had disturbing implications.[20]

The genesis of Wilson's request for increased grain supplies goes back to July 1944, when at the behest of the Allied Control Commission he agreed to raise the daily bread ration in Italy from 200 to 300 grams. The Control Commission had argued at the time that this would not make necessary any increased imports. The existing consumption of bread, it estimated, was probably around 300 grams daily but much of the bread was in black market channels. Announcement of a 300-gram bread ration was conceived as a psychological measure to dispel fears that led to hoarding and black marketing and to bring into government warehouses grain that was being diverted into illegal channels. Accepting these premises, and reasoning that the action could be rescinded if necessary, Wilson went ahead with the announcement of the increased ration despite a warning from the CCAC that it might require up to 700,000 tons of increased imports and that they could positively not be furnished.

The action did indeed have salutary effects. It brought a larger proportion of the crop into government warehouses, thus helping to curb inflation and weaken the black market; but the Allied Control Commission soon found that these improvements were not enough. A study of the requirements for the next harvest year, extended to include areas at the time still under German control, indicated clearly that the import program would have to be heavily augmented if the 300-gram ration was to be established throughout all Italy and not mere-

[18] Joint Statement of President Roosevelt and Prime Minister Churchill on Post-War Europe, 26 Sep 44, OPD 014.1, Case 128.

[19] Statement by President, 10 Oct 44, Dept State *Bulletin*, 15 Oct 44, p. 403.

[20] (1) Quote from Msg, NAF 778, AFHQ to AGWAR for CCS, 13 Sep 44, ID 014 Civ Sup, XXIV. (2) Ltr, SACMED to Secys, CCS, 24 Sep 44, sub: Bread Ration for Italy, Incl, CMT 64/M, 11 Oct 44, title: Provision of Additional Civilian Supply Shpg for Italy.

ly confined to the south. Even with efficient amassment, it was calculated the 1944 harvest would provide only 160 grams daily for all Italy. To provide supplementary quantities necessary to raise it to 300 grams would require imports of 1,536,000 tons, about 50 percent more than had been scheduled. Yet the Control Commission now felt that the 300-gram ration was a must if the new approach in Italy was to mean anything at all. Wilson urged the CCS to approve the increased imports, pointing out that only in this way could Italian food consumption be brought to the approved minimum 2,000-calorie-a-day level:

> There is among sections of the urban population, I am advised, a condition of under-nourishment which is the cumulative result of the war years, the mis-management of the Fascist government and oppression by the Germans. While we are in no way responsible for this condition, and have, in fact, in some measure, arrested its growth during the year in which we have had responsibility, we cannot on that account overlook the consequences of prolonging the condition. . . . Under the proposed program there will be involved a lower per capita import of wheat than was the case during the first year of the occupation. . . . It should not be lost sight of that Italy normally imported substantial quantities of wheat in peace years when conditions in respect to cultivation, fertilizer, agricultural equipment, labor and transport, were not subject to present difficulties. . . .[21]

Wilson's requests were clearly in line with the new approach publicly announced by the President and the Prime Minister, but War Department officials could only look upon the situation with considerable apprehension. The time had long passed when they had expected to be rid of the responsibility of Italian relief; now they were being asked to assume an additional burden in that area in the face of a shipping shortage to meet military needs in all theaters of war. They were less inclined to accept the Allied Control Commission's view of the situation than that of their own commanders, who emphasized that the problem was more one of equitable distribution than one of shortage of supplies. "Black market operations continue," reported Brig. Gen. Carter B. Magruder, MTOUSA SOS commander, on 30 September, "and the increased ration is largely for the purpose of cutting out the black market and thus releasing reserves held by the Italians hoping for an increase in prices. Little is done in the way of enforcing rationing by police power, and the Allied Control Commission feel little responsibility along this line."[22]

In his reply to the President's directive of 8 September, made before the receipt of General Wilson's enlarged requirements, Secretary Stimson emphasized that the War Department was only an agent of the CCS in the civilian supply field, and that it was completely fulfilling its obligations under CCS plans. He went on to say that the Department would, however, take appropriate action to provide its share of any additional requirements received from the theater commander, and in this way incurred at

[21] (1) *Ibid.* (2). (2) Komer, Civil Affairs and Military Government in Mediterranean Theater, ch. XI, pp. 2–14.

[22] (1) Memo, Gen Lutes for Dir Materiel, 30 Sep 44, sub: Rpt by Gen . . . Magruder on General Conditions in AFHQ, ID 014 Civ Sup, XXIII. (2) Memo, Somervell for DCofS, 25 Sep 44, sub: Essential Civilian Supplies for Italy . . . , ID 014 Civ Sup, XXII.

least some obligation to meet Wilson's requests. The President's interpretation of that obligation was indicated by his public announcement on 4 October that steps were being taken to "increase the bread ration in those areas of Italy where food supplies are below the standard necessary to maintain full health and efficiency," a statement that was given wide circulation in the Italian press and generally interpreted as a public commitment to the 300-gram ration for all occupied Italy.[23]

The President's announcement was clearly premature in the view of the military authorities. As the dimensions of the problem were outlined in the CCS committees, there seemed no means of providing the necessary shipping. It appeared that no further stocks of wheat would be available from Australia, the previous source for the Mediterranean, since all surplus Australian wheat was being diverted to India to meet famine conditions, and that therefore all grain or flour would have to be shipped from North America. The existing civilian supply program for Italy, which covered the year period from July 1944 through June 1945 and was based on a 240-gram ration for all Italy, called for shipments of 1,010,000 tons of grain. Of this, 170,000 tons had been shipped by October and 200,000 tons were scheduled for shipment during the remainder of 1944. The balance of 640,000 tons, to be shipped during the first six months of 1945, would have to be increased to 1,166,000 tons if the 300-gram ration scale were approved, requiring an additional ten sailings per month from the United States. The American military transportation authorities could see no way of making U.S. bottoms available for the purpose, and WSA would sanction no further requests on the British since their Import Program had already been cut to provide ships to support U.S. military operations. The Combined Military Transportation Committee wrestled with the problem to no avail, and finally the American members merely forwarded their own recommendations to the U.S. member of the CCAC urging that no commitment be made to establish the 300-gram ration. "Since the requirements for military cargoes now exceed available shipping," they noted, "it is probable that the present program will have to accept deficits and there is no reason to expect an increase in shipping allocations."[24]

Nothing deterred, the President once again entered the lists. Accepting the shipping difficulties but noting that SACMED had been able to accumulate a grain reserve for northern Italy, he pointed out that that area might not fall to the Allies until Germany collapsed, an event probably to be long delayed. So he assumed to himself the responsibility "for asking General Wilson to increase the ration to 300 grams throughout all Italy that our forces oc-

[23] (1) OWI Press Release 1827, 4 Oct 44. (2) Memo, Secy War for President, 15 Sep 44, ID 014 Civ Sup, XXII. (3) Komer, Civil Affairs in the Mediterranean, ch. XI, p. 15.

[24] (1) Memo, J. E. Killough, Secy JMTC, for Directors, ID ASF and CAD WDGS, 26 Oct 44, sub: Shpg Provisions for Italian Wheat, folder JCS 144, Box 122894, WSA Conway File. (2) Min, 86th mtg JMTC, 19 Oct 44. (3) Memo, Lt Col A. E. Palmer for CofT, 16 Oct 44, sub: Shpg Provisions for Italian Wheat, ID 014 Civ Sup, XXV. (4) Ltr, Harry L. Hopkins to Adm Land, 10 Oct 44, folder Reading File Aug–Nov 44, Box 122893, WSA Conway File. (5) Ltr, Land to Hopkins, 13 Oct 44, folder Harry L. Hopkins, Box 122891, WSA Conway File.

cupy."[25] In pursuance of the President's instructions, the U.S. War Department recommended to the British War Office that instructions be issued in the name of the CCS to General Wilson approving an increase in the bread ration to 300 grams throughout Italy. In a very real sense, however, the President had gotten the cart before the horse. The British would agree to the 300-gram ration only if the United States furnished the shipping. "In your instructions . . . to your Secretary of War," Churchill informed the President on 12 November, "you have jumped a good many fences. . . . Commitments of this kind are bound to tie up shipping, and for this reason you will understand that I am rather concerned. Great Britain cannot provide the additional tonnage required and I trust your War Department will adopt measures to take care of the increase in supplies."[26]

The War Department was in no position to do what the Prime Minister asked. The fall shipping crisis had reached its height, and the JCS were about to recommend cutbacks in sailings to the Mediterranean in the months following for military purposes as well as for civilian relief.[27] In November and December 1944 Wilson was forced to take cuts in civilian supply shipments. The result, in the light of the public promises of the President, was to place the theater commander in an impossible position. To add to the complications, UNRRA now proposed to commence its supplementary program for feeding displaced persons in Italy and asked for an allocation of ships in December. On 17 November Wilson bitterly complained to the CCS, presenting for the first time an unequivocal demand for more shipping. Once again, however, the CCS could only come up with a negative reply, informing Wilson that no commitment should be made to the 300-gram ration or to the UNRRA supplementary program unless he could provide shipping for these purposes by shifting priorities on allocations already made to his theater.[28]

The Allied Commission refused to retreat from its position, arguing that the 300-gram ration had now become a military as well as a political necessity. "We must expect disease arising from malnutrition," wrote the chief commissioner, "and acceleration in inflation and the activities in the black market, a decrease in morale leading to an increase in crime and prostitution, disorders and food riots . . ."—conditions that might well interfere with military operations.[29] On 21 December Field Marshal Alexander, Wilson's successor as SACMED, renewed the appeal to the CCS in stronger terms:

> I am aware in general terms of the shipping situation and alive to the effect of conflicting claims of many operations in many Theaters of war. It is my duty, however, to point out to you in terms which allow of no misunderstanding that I cannot

[25] Ltr, President to Secy War, 31 Oct 44, Hq ASF folder Lend-Lease. This letter was also made public and published in the Italian press.

[26] (1) Paraphrase of Msg, Churchill to Roosevelt, 12 Nov 44, CAD 400.38 (2-20-43) Sec 11. (2) Ltr, Secy War to President, 7 Nov 44, OPD 014.1, Case 128.

[27] See above, ch. XXII.

[28] (1) Msg NAF 814, CG AFHQ to CCS, 17 Nov 44, app. B to CMT 64/1, 20 Nov 44, title: Provision of Additional Civilian Supply Shpg for Italy. (2) CMT 64/2, 29 Nov 44, same title. (3) Msg FAN 465, CCS to AFHQ, 8 Dec 44, in Coles and Weinberg, *Civil Affairs: Soldiers Become Governors*, p. 504.

[29] Memo, Chief Commissioner, AC, for AFHQ, 12 Dec 44, in Coles and Weinberg, *Civil Affairs: Soldiers Become Governors*, p. 504.

administer those parts of Italy under my control in accordance with the policies quoted above and which are known to the Italians unless I am regularly provided with the means to do so. The alternative is an Italy embittered by unfulfilled promises, by hunger and distress. This I believe would be a grave handicap to our immediate war effort and a lamentable example to other nations of the injustice of Allied dealings.[30]

Alexander indicated that he was willing to import wheat if necessary "at the expense of military requirements if operationally possible to do so."[31]

The impasse could not be resolved until the shipping crisis itself ended. It will be recalled that in early December 1944, under pressure from WSA, the JCS took action to break up shipping congestion in the various theaters and thus free more ships for outward sailings from the United States.[32] They then entered with the British Chiefs, at the latter's request, into an over-all survey of the shipping situation. While awaiting the results of this study, the CCS delayed a reply to Alexander. Finally, however, on 18 January they cabled him authorization to establish within the liberated sections of Italy "the maximum basic ration you decide is practicable in the light of the currently approved shipping programme up to a maximum of 300 grams of bread . . . per person per day."[33] This, as an OPD officer noted, "may or may not comply with the President's desire to increase the ration to 300 grams but it is the best compromise possible in view of the shipping situation."[34]

Alexander at first felt that his stocks and prospective deliveries would not permit any action, but in February he was notified of an increase in his shipping allocations for the following months and with the high priority he now placed on civilian supply he was able to foresee for the first time the minimum stocks necessary for the 300-gram ration. On 16 February 1945 he made the long-delayed announcement of the establishment of this ration for all Italy under Allied control.[35]

There were similar delays in instituting an economic rehabilitation program in Italy along the lines promised by the President and Prime Minister at Quebec. Wilson's cable of 13 September 1944 requesting a new directive remained unanswered for three months. General Somervell argued that the War Department should not depart from its basic premise that civilian supplies should be furnished only on the basis of military necessity. The trouble now was that, even accepting this premise, there was undoubtedly an element of military necessity in the Italian rehabilitation program, and the President evidently looked to the War Department and not to the civilian agencies to take the initial steps to fulfill his general plan for aid to the Italian economy. Moreover, in view of the over-all shortage, the military showed little inclination to relinquish control of even the smallest quantities of shipping to other agencies. Small wonder, then, that

[30] Msg, Alexander to CCS, 1 Dec 44, *Ibid.*, p. 504.
[31] *Ibid.*
[32] See above, ch. XXII.
[33] Msg, FAN 478, CCS to AFHQ, 18 Jan 45, in Coles and Weinberg, *Civil Affairs: Soldiers Become Governors*, pp. 518–19.
[34] Memo, Gen Lincoln, Chief S&P Gp, OPD, for Asst Secy, WDGS, 16 Jan 45, ABC 430, Sec 1.
[35] (1) Msgs, Alexander to CCS, 26 Jan and 16 Feb 45, in Coles and Weinberg, *Civil Affairs: Soldiers Become Governors*, p. 519. (2) Komer, Civil Affairs in the Mediterranean, ch. XI, pp. 24–27.

the economic program was delayed. Meanwhile, however, the Allied Commission in Italy went ahead with its studies of Italian agriculture and industry and drew up a program of import requirements for rehabilitation, dividing them into two groups, the first to be provided by the military under a more liberal interpretation of the disease and unrest formula, the second to be a supplementary program of industrial first-aid to be financed by the Italians using the resources indicated in the President's 10 October announcement.

The CCS early in January finally authorized the launching of the program, directing Alexander to accomplish the maximum rehabilitation possible, consistent with the discharge of his military mission, using Italian resources and such supplies as he should be authorized to import. The imports to be carried in the military program were designated Category A, those to be paid for by the Italian Government Category B. The distinction between the two categories was, of course, hardly a real one, as the two parts were interdependent and equally necessary in the task of economic rehabilitation. However, under the terms of the CCS directive, the Allied Commission worked out with AFHQ an arbitrary division into the two categories for purposes of requisitioning. Category A items were to be requisitioned through military channels by AFHQ to the CCAC with the supply subcommittee to render a final decision as to whether they could be included in the category of military necessity or relegated to Category B. Category B items were to be passed directly from the Allied Commission to CCAC, which would forward them to the civilian authorities for action. In actual fact, the CCAC did not receive the first Category A program until May 1945, after the hostilities in Europe were ended. Italian rehabilitation therefore became, in the main, a postwar problem.[36]

Northwest Europe and the National Import Programs

The civilian supply problem in northwest Europe never reached quite the crisis point it did in Italy. Except in areas in the northern part of the Netherlands, held by the Germans until V–E Day, there was never the same amount of civilian distress or economic dislocation and chaos. The German withdrawal from France was so rapid that any considerable destruction of crops was impossible; sufficient indigenous stocks remained to prevent immediate widespread disease and unrest. SHAEF was able, until well toward the end of 1944, to get along with considerably less civilian relief supplies than it had anticipated.

Yet the slow rate of civilian supply imports during 1944 was less a matter of lack of need than lack of means. There was widespread malnutrition and even starvation in areas occupied by the Allies in northwest Europe, even if it did not assume dangerous proportions. Because of inadequate port capacity, SHAEF simply found it impossible to

[36] (1) Msgs, NAF 810, SACMED to CCS, 1 Nov 44, and FAN 450, CCS to SACMED, 13 Nov 44, in Coles and Weinberg, *Civil Affairs: Soldiers Become Governors*, p. 505. (2) Memo, Somervell for Dir CAD, 17 Nov 44, sub: Non-concurrence in Proposed Economic Policy for Italy, ID 014 Civ Sup, XXVIII. (3) Komer, Civil Affairs in the Mediterranean, covers these matters in some detail. (4) ID, Civilian Supply, Text, I, 447–50.



FRENCHMEN RECEIVING THEIR BREAD RATION

call forward appreciable civilian supply tonnages.

Only 21 percent of SHAEF estimates were imported into northern France during 1944; in the south, more of a grain deficit area, the rate was higher—75 percent of advance estimates—but the sum of civilian supply imports was still small. These shortfalls had the effect of postponing the day of reckoning. Indigenous stocks were rapidly exhausted and food shortages began to appear. Even more serious, the completely disorganized state of the French transportation system, the scarcity of coal, raw materials, seeds, fertilizer, and industrial rehabilitation items, combined with the excessive demands of the Allied military machine on the French economy, threatened to increase the relief burden immensely unless steps were taken soon to provide rehabilitation supplies. Belgium had always been heavily dependent upon imported foodstuffs, and the areas of the Netherlands as yet not taken were known to be reduced to a state of semi-starvation.[37]

By the end of 1944 a large backlog of demand for civilian supplies in northwest Europe had built up. Stated SHAEF requirements for relief supplies for the first six months of 1945 threatened by themselves to place an exceptionally

[37] (1) USFET Gen Bd Study 33, Procedures Followed by CA and MG in the Restoration, Reorganization and Supervision of Indigenous Civil Administration, pp. 110–17. (2) ID, Civilian Supply, Text, I, 331–33, 406–07.

heavy strain on supplies and shipping from North America. In addition, the French Government, which was anxious to make an early start on rehabilitation and to assume a larger role in the war against Germany, developed its own national import program and vigorously pressed for an independent allocation of shipping to carry it out. Within this national import program the French wished eventually to absorb the shipping and supplies previously allocated as military relief.

As in Italy, shipping was the key factor. But for the shipping shortage, the War Department would have been quite willing to agree to turn over the civilian supply programs in northwest Europe to the respective national authorities. In fact, military officials took the lead in August and September 1944, when an early end of the war in Europe seemed probable, in developing plans for a turnover with 1 January 1945 as the target date.

SHAEF took even more positive steps in co-operation with the French Provisional Government. The French, on the basis of a 1 January 1945 target date, drew up an import program for the first six months of 1945 totaling almost 7 million tons, mostly coal, raw materials, and industrial rehabilitation items. To co-ordinate this national import program with the military relief program, SHAEF established in Paris the Four-Party Committee consisting of French officials, U.S. and British economic advisers, and the SHAEF mission to France. The Belgians also drew up a similar program, and a similar Four-Party Committee was formed in Brussels. Anticipating an improvement in the port situation after the capture of Antwerp, SHAEF agreed that in all probability it could release 5,000 tons daily capacity in Mediterranean ports, 5,000 in Seine ports, 4,000 in Pas de Calais ports, and the entire capacity of Bordeaux when that port was taken, to the French. In informing the CCS of these developments, SHAEF proposed that no definite transfer date be set but that "the military program of direct relief items . . . continue concurrently with [the national import] program . . . but gradually diminish in scope until there is complete termination of military responsibility."[38] For the time being, the military program would be confined generally to minimum relief supplies for forward areas while the French Government would import all else. SHAEF candidly admitted that in the situation existing in France, many of the items in the French national program would serve a more useful purpose than the Plan A items scheduled for import as military relief.[39]

SHAEF's proposals were framed without reference to the developing shipping crisis, and their receipt in Washington early in November found the atmosphere in the War Department considerably changed from that of September. There was no longer any illusion that the war in Europe would soon be over, and the acute shipping shortage had given rise to some sober second thoughts on the question of relinquishing control of civilian supply. The initial War Department proposals had been made on the assumption that as long

[38] (1) Msg, SCAEF 122, SHAEF MAIN to AGWAR, 3 Nov 44 (Paraphrase) CCAC 400 France (3-14-44) Sec 1. (2) ID, Civilian Supply, Text, I, 393–98.

[39] Memo, Palmer for Dir ID, 22 Nov 44, sub: Summary of Temporary Duty with SHAEF Hq . . . , ID 014 Civ Sup, XXVIII.

as military operations continued theater commanders would continue to control all shipping priorities, including within their purview the allocation of shipping for the national import programs. The civilian agencies, and particularly WSA, it now appeared, wanted to make the independent assignment of shipping for the national import programs their own prerogative, subject only to theater certification of port and inland clearance capacities. Faced with possible loss of control over an important segment of available shipping, and belatedly realizing the complications that national import programs would introduce, the military authorities retreated to their original position and insisted that civilian supply shipments be limited to items of military necessity and be kept entirely under military control until the shipping situation eased. On 27 November the CCAC informed SHAEF that no additional shipping space could be allotted for national import programs and that SHAEF would have to decide whether materials in the French program should be substituted in military shipments for those included in Plan A.[40]

The War Department soon found itself at odds with WSA and with the British on this issue. Captain Conway presented the WSA position to Harry Hopkins on 4 December 1944, arguing that European national governments should be treated as claimants for shipping "in their own right," subject only to prior clearance with theater commanders to insure that port and inland clearance capacity would be adequate. To present these claims as part of the military shipping program, he argued, "would place the military authorities, who are themselves the principal claimants for shipping, in a position to make the final allocation of shipping as between themselves and another important group of claimants." These governments had, after all, contributed substantial numbers of ships to the United Nations pool and placed them under the control of BMWT and WSA—French, Belgian, Dutch, Polish, Norwegian, Greek, and Yugoslav ships, to a total of 4,627,000 dead-weight tons. "It is not unnatural for them to feel," Conway wrote, "that they should have the right to at least ask the WSA and the MWT to allocate shipping for their minimum essential imports." And he proposed that neither WSA nor BMWT nor the CCS were really in a position to make allocations, that it must be done by some designated "civilian body or individual in a position of high authority."[41]

The purpose of Conway's move was to place the matter before the President, but there is no record that this was done. The next move came from the British Chiefs of Staff who, when they proposed in December 1944 an over-all study of the shipping situation by the CCS, insisted that it include the prospective civilian supply requirements not only for military relief but also for the na-

[40] (1) *Ibid.* (2) Ltr, Col Palmer to Maj Gen Frank Scowden, Chief Sup and Economics Br, G–5, SHAEF, 24 Nov 44, ID 014 Civ Sup, XXVIII. (3) Msg, LEM 327, CCAC to SHAEF MAIN, 27 Nov 44, CCAC 400 France (3-14-44) Sec 1. (4) Notes of Discussion in Mr. McCloy's Office 27 Nov 44, ID 014 Civ Sup, XXVIII. (5) Memo, Somervell for Director, CAD, 7 Nov 44, sub: Termination of Civilian Supply Responsibility for France . . . , ID 014 Civ Sup XXVII. (6) Draft note, 17 Nov 44, sub: Note on Shpg for Liberated Areas, folder Msc 1944, Box 122870, WSA Conway File.

[41] Ltr, Granville Conway to Harry L. Hopkins, 4 Dec 44, Harry L. Hopkins, Box 122891, WSA Conway File.

tional import programs. The JCS agreed, but in drafting the directive for the study successfully blocked a British attempt to label the national import programs as "agreed and inescapable commitments."[42]

Nevertheless, while the negotiations on the over-all shipping review were still going on the British again stole a march by dispatching Sir Richard Law to the United States to negotiate directly with Harry Hopkins on the issue. The British position, as Law defined it, was that unless liberated countries were "sustained in taking up their share of the burden, the progress of the war and the peaceful development of Europe in the future are both likely to be gravely prejudiced." He insisted that national import requirements must not be regarded as "merely the marginal element" in any study of supply and shipping.[43]

Both the State Department and WSA supported the British position against the American military contention that the best formula for helping the liberated areas of Europe was to win the war as quickly as possible.[44] The real issue was, of course, the relative emphasis to be given to pursuit of the war against Japan as opposed to rehabilitation in Europe once Germany was defeated.

On 14 January 1945 Hopkins and Law reached an agreement providing for commencement of the national import programs on a limited scale:

> The French import program and other import programs when received are endorsed for planning purposes and the US and UK agencies concerned should as necessary facilitate, through the established procedures, procurement against these programs so that supplies will be readily available for shipment.[45]

"Subject to military necessity," preliminary shipping allocations were set up as follows: 6 ships for France from the United States in January, 10 in February, and 10 in March; one for Belgium in January, 2 in February, and 2 in March; one UNRRA ship for Italy in February and one in March. Pending final decision, these allocations were not to be reduced "except in the face of military necessity and not without prior discussion with Mr. Harry Hopkins." A final, controversial clause provided that the agreement was not "to alter any present procedures whereby the availability of shipping tonnages shall be determined by the appropriate shipping authorities after clearance with the appropriate Chiefs of Staff."[46]

This controversial provision caused trouble. The War Department claimed for the CCS the right to veto any allocations for civilian purposes; WSA insisted that "present procedures" did not provide any such veto power for the

[42] (1) CCS 746, 10 Dec 44; CCS 746/1, 13 Dec 44; CCS 746/2, 15 Dec 44; CCS 746/3, 22 Dec 44; CCS 746/4, 22 Dec 44; CCS 746/5, 28 Dec 44; CPS 150/1/D, 30 Dec 44; all titled: Overall Review of Cargo Shpg. (2) Min, 180th mtg CCS, 26 Dec 44, Item 6; Min, 181st mtg, 30 Dec 44, Item 1.

[43] (1) Memo by Sir Richard Law, MP, with covering Ltr, Hopkins to Gen Handy, 4 Jan 45, ABC 560 (26 Feb 43) Sec 1B. (2) The War Department learned of Law's visit from the New York *Times*; see draft Ltr, Secy War to Secy State, no date, ABC 560 (26 Feb 43) Sec 1A.

[44] (1) Memo by Dept State, 26 Dec 44. (2) Min of Mtg in White House, 5 Jan 45, concerning shipment of supplies for liberated areas of northwest Europe. (3) Draft memo, JCS for President, no date. All in ABC 560 (26 Feb 43) Sec 1B.

[45] Memo of Agreement, Dept State Washington, signed by Harry Hopkins, Dean Acheson, Richard Law, 14 Jan 45, Incl A, CCS 746/8, 31 Jan 45, title: Shipping Agreement.

[46] *Ibid.*

CCS over allocations outside the military sphere.[47] In the last analysis, the basic issue was the priority to be assigned the national import programs vis-a-vis military requirements, regardless of who should make the allocations. The shipping studies revealed that there would be a continuing shortage of cargo shipping for military purposes during the first six months of 1945, assuming the war with Germany continued, and the JCS resisted any effort to expand the civilian programs. The whole argument was carried over into the ARGONAUT Conference at Malta and Yalta in early February, where the British made a determined fight to give civilian rehabilitation in Europe an equal place with the war against Japan on the priority scale. On 30 January the JCS had presented their position in a strong memorandum to the President, expressing serious concern "over the present determined effort to divert resources to non-military uses, with resulting effect on our military operations, and over the implied willingness of the British to consider qualifying our objective of ending the war at the earliest possible date." They reminded him that the price would be "paid directly in the unnecessary loss of lives of many more American fighting men."[48] They then recommended an absolute and exclusive first priority on military requirements vital to the conduct of the war including therein only such civilian relief requirements as were essential to that purpose and to maintaining the war-making capacity of the United Nations. They would allocate shipping for postwar rehabilitation purposes only when these military needs had been fulfilled. As long as military requirements could not be met in full, shipping for civilian programs should not be allocated without prior consultation with the CCS.

The military arguments were evidently persuasive, for the conference went on to agree that first priority should be given to "basic undertakings" and within that category included supplies for liberated areas only to the extent that they would "effectively contribute to the war-making capacity of the United Nations against Germany and Japan."[49] The British effort to secure a larger place for civilian rehabilitation in Europe as opposed to the pursuit of the war in the Pacific thus failed. Nevertheless, the Hopkins-Law Agreement was tacitly confirmed by inclusion of these allocations in the shipping budget, and the national import programs were begun generally in accordance with its terms. There was no real decision as to whether the military or civilian shipping authorities were to have the final say on allocations, and the question continued to be argued for some time afterward. In effect then, the ARGONAUT decisions provided that both the military relief and the national import programs should proceed with the major emphasis, at least theoretically, to continue on military relief.

In the actual implementation of the military program, shipments of relief supplies to Europe reached their peak during the first six months of 1945 and continued at a high level for some three months longer. Shipments to northwest

[47] (1) Ltr, R. M. Bissell, WSA, to J. J. McCloy, 13 Jan 45. (2) Ltr, McCloy to Bissell, 22 Jan 45. Both in ABC 560 (26 Feb 43) Sec 1B.

[48] Memo, JCS for President, 20 Jan 45, Incl, JCS 1205/3, title: Overall Review of Cargo Shpg.

[49] CCS 776/3, 9 Feb 45, title: Rpt to President and Prime Minister.

Europe from all sources during the last three months of 1944 totaled 589,000 tons; those to the Mediterranean 563,000 tons; in the first three months of 1945 they rose to 1,359,000 and 1,418,000 tons, respectively; in the second quarter they reached 2,336,000 and 1,559,000 tons.[50] The elaborate arrangements of sources in Plans A and B in general broke down, as had already been foreshadowed in the fall of 1944, and a much heavier burden of shipment fell on the United States than had originally been contemplated. This held true particularly for foodstuffs, though the United States also shipped substantial quantities of coal.

In January 1945, in view of the military shipping deficit and future relief demands, the American members of CCAC (S) renewed their bid for two million or more tons of food from the U.K. stockpile to meet relief needs in northwest Europe and the Balkans. There was justice in the American demands, for the U.K. stockpile was without doubt inflated. But the British food authorities were tenacious in their insistence on maintaining high levels, and the matter was taken out of the hands of the CCAC to intergovernmental levels and became one of the issues in the combined shipping studies at the end of 1944. The Combined Shipping Adjustment Board took the position that, instead of reducing the U.K. stockpile directly by withdrawals, it should be reduced by cutting the U.K. Import Program thus avoiding the necessity of transshipment. This solution was adopted in general as part of a series of complex arrangements growing out of the shipping negotiations at the turn of the year. The U.K. stockpile was eventually cut by about one million tons.

The general easing of the shipping situation that followed these negotiations made possible the tremendous upsurge in civilian supply shipments in 1945. The release of ships from the British Import Program, the break-up of the stagnant pools of shipping under military control in overseas theaters, and other measures, combined to overcome the much-heralded military deficit even before V–E Day. The victory over Germany freed many ships scheduled to carry military cargo to Europe and permitted a considerable surge in civilian supply shipments immediately following V–E Day. The expected competition between redeployment and civilian relief in Europe never fully developed because of the rapidity with which the surrender of Japan followed the surrender of Germany.[51]

The result was, nevertheless, a very heavy drain on available supplies of foodstuffs in the United States. Fortunately, some Canadian supplies were available to fill part of the breach. Procedural difficulties also arose, since the Combined Food Board refused to give priorities to military relief requirements over those in the national import programs, and something of a crisis developed in transportation to ports because of heavy

[50] See Table below, Appendix H–2.

[51] (1) CCAC(S) 93, 3 Jan 45, title: Source of Subsistence Supply. (2) Memo, Shingler for Dir, CAD, 26 Jan 45, sub: U.K. Stockpiles as Source of Supply for Civilians in Liberated Areas . . . , ID 014 Civ Sup, XXXII. (3) ID, Civilian Supply, Text, I, 334–37. (4) Hammond, *Food: The Growth of Policy*, pp. 271–82, deals with the rationale behind the British stock levels. (5) Draft CSAB paper in folder U.K. Msc 1945, Box 122891, WSA Conway File.

movements in the period April through July. But all these difficulties were ironed out, and shipments to the SHAEF area in the first six months of 1945 proved sufficient not only to meet stated needs in liberated areas but to establish a stockpile against the future needs of occupied areas in Germany and Austria when military responsibility in France and the other liberated countries should be terminated. Shipments to the Mediterranean were sufficient to maintain the 300-gram bread ration. In the Balkans military relief operations were hampered by civil war in Greece and the political complications of dealing with Communists in Yugoslavia and Albania more than by scarcity of supplies or shipping.[52]

Termination of Military Responsibility

The easing of the shipping situation during the early months of 1945, followed by the final victory over Germany in May, paved the way for the long-delayed transition from military to civilian control of relief and rehabilitation in liberated areas. The Liberated Areas Committees had, since their establishment, been working out their plans for this eventuality. As recounted in the previous section, plans and procedures were developed during August, September, and October 1944 for termination of military responsibility in northwest Europe and the Balkans; plans for termination in Italy had been under discussion for some time longer. On 26 October the CLAC formally endorsed the principle that "military responsibility for civilian supplies in liberated areas of northwest Europe should be terminated at the earliest possible date," and outlined a procedure whereby the CCS should, on the advice of SHAEF, determine a target date for the transition, provide guidance on the problems to be inherited from the military period, and indicate the extent to which supplies and allocations under military control could be made available.[53] The action taken by SHAEF in early November to prepare for the inception of national import programs in France and Belgium was in keeping with the CLAC design, but that design soon became obscured by the prolongation of the war with Germany and the acute shipping crisis.

The position outlined by the U.S. military staffs on 30 January was taken not only as the result of the shipping shortage but also because of a realization that the theater commanders could hardly relinquish control of any part of their supply lines as long as large-scale military operations continued. The experience in France, where Eisenhower turned over control of certain areas of the country to the French, was not a happy one. French operation of the railways was quite unsatisfactory and some had to be returned to U.S. military control. Somervell, who became the most outspoken advocate of continued military control, put his finger on the basic issue: "Since the transportation system of France involves complex relationships between railways, port facilities, and highway

[52] (1) For fuller discussion see ID, Civilian Supply, Text, I, 337–46. (2) On the Balkans see Komer, Civil Affairs in the Mediterranean, Chapter XXIII.

[53] (1) CLAC 8/1, 26 Oct 44, title: Termination of Military Responsibility for Civilian Supply in Northwest Europe, ID, Civilian Supply, Doc Suppl, 332. (2) ID, Civilian Supply, Text, I, 393–98.

transport, the further complications introduced by the independent handling and movement of supplies inland by the French might well produce disastrous consequences to logistical arrangements of our Army and delay the termination of the war."[54] This objection applied with even greater force to Italy where the Italian Government had less effective control over the country than the French Provisional Government had over France.

Under the circumstances Somervell's arguments were sound. There were, without question, dangers in dividing control of the supply line between the military and new national governments that had little experience in handling the general transportation and supply problems of modern war. Yet it was equally clear by early 1945 that a military relief formula based on preventing disease and unrest was outdated, both in northwest Europe and in Italy, and that the long-term national interest of the United States would be best served by early steps toward rehabilitation of agricultural and industrial production. The situation had reached a point where the War Department was no longer in a position to carry out an adequate civilian supply program, but still could not relinquish control for fear of adverse effects on the progress of the war. The basic fault perhaps lay in the unrealistic distinction established in 1943, in the very early stages of planning, between the military and civilian periods. What was needed by early 1945 was clearly a single program embracing both relief and rehabilitation regardless of who should administer it.

Many of the ends of a unified program were finally achieved, though more awkwardly and with greater friction. Under the Hopkins-Law Agreement the national import programs for France and Belgium got under way in January 1945 and gradually gained momentum. The UNRRA program, begun in February, and the incipient Category B program provided the germ of a national import program for Italy. Jean Monnet, the celebrated French economic planner, exerted an unremitting pressure on the U.S. State Department for consolidation of the French national import program and the military relief program into one entity under French control. WSA supported his position wholeheartedly. The civilian supply authorities and the combined boards tended to treat the French national program as one having equal priority with military relief since it was forwarded after consideration by the SHAEF Four-Party Committee. In sum, the civilian agencies began to anticipate the termination of military responsibility without the announcement of a target date by the CCS as had been provided in the CLAC procedure of the preceding October. Finally, on 6 March, SHAEF itself recommended that military responsibility for import of relief supplies to France, with the exception of coal and POL, be terminated at the end of that month. With the shipping situation considerably eased, the War Department approved, but moved the date forward to the end of April in order to assure a smooth transition. The date for termination of military responsibility for coal and POL was postponed until 1 September because the military imported those supplies in bulk for military and civilian consum-

[54] Msg, Somervell, ARGONAUT, to Under Secy War Patterson, CM-IN 30109, 31 Jan 45.

ers and rearrangement of that system would take more time.[55]

Termination arrangements for the other countries of Europe followed rapidly. On 21 May 1945 President Truman pointed out that the time had come to release the War Department from its obligations under his predecessor's 1943 directive. "No responsibility for civilian supply in any liberated country in Europe should continue to rest upon the Army," he wrote, "except as may be dictated by the actual necessities of the military situation. On the other hand, no liberated country should be prejudiced by termination of this responsibility. The date and conditions of termination in each case should be subject, of course, to the recommendation of the military commander in the field."[56]

Under the terms of this directive, termination was arranged for Belgium, the Netherlands, Denmark, Norway, and Luxembourg for food on 1 September and for coal and POL on 1 October, the burden to be assumed by the national governments concerned. The same termination dates were finally arranged for Italy except for the Venezia Giulia section in the north, the area of Yugoslav-Italian dispute. The old problem of a successor agency in Italy was finally solved by UNRRA, on 22 August 1945, including Italy in its program for the coming months. In the Balkans UNRRA assumed responsibility on 1 June 1945 for food for Greece and Yugoslavia, on 1 July for all supplies for Albania, on 1 August for coal for Greece and Yugoslavia, and on 1 September and 1 October, respectively, for POL to the last two countries.[57]

By the time combined military responsibility in all these areas had been finally terminated, the United States, United Kingdom, and Canada had shipped a total of 13,507,940 long tons of civil relief supplies to Europe—6,788,765 from American sources, 6,098,902 from British, and 620,273 from Canadian—as a part of the military relief program. Of this, all except 470,243 tons was made up of coal and food, almost equally divided between the two items. The volume of these imports was more than threefold that initially provided for in Plan A and even more than that included in Plan B. The increase is, of course, partially explained by the fact that the military period endured far longer than the six months provided for in the planning phase. But it was also true that needs proved to be greater, and indigenous supplies, notably coal, far less adequate than had been assumed in planning based on collapse rather than an 11-month military campaign.[58]

The major impact of these shipments had come later than expected, in the first half of 1945 rather than the last half of 1944, though this was, in itself, partially a result of postponement of

[55] (1) Materials in folders French Misc (1945) and ARGONAUT, Box 122890, WSA Conway File. (2) Memo, Somervell for McCloy, 18 Feb 45, ID, 014 Civ Sup, XXX. (3) Msgs, SCAEF 221, SHAEF Fwd to AGWAR, 6 Mar 45; FACS 169, CCS to SHAEF Fwd, 31 Mar 45; in CCAC 400 France (3-14-44) Sec 2. (4) Memo, Capt T. L. Marsh for Director, ID, no date, sub: Rpt . . . of Visit to SHAEF. (5) ID, Civilian Supply, Text, I, 413–20.

[56] Ltr, President to Secy War, 21 May 45, ID, Civilian Supply, Doc Suppl, 360.

[57] ID, Civilian Supply, Text, I, 420–61.

[58] (1) See table appendix H–2. (2) The table in General Appendix D–7 to ID, Civilian Supply, Text, I, shows actual quantities shipped as falling somewhere between Plans A and B, but is in error in that it compares the actual shipments to the *total* quantities in those plans, not to estimated *import* requirements.

shipments because of the acute shipping shortage. By the time the military shipments had been terminated, the flow of supplies under the national import programs was well established; by June 1945 it already exceeded the volume of military relief.

As President Truman noted in directing termination of military responsibility, the Army had, despite all the difficulties encountered, discharged its obligations with regard to civilian supply in Europe well. "Vast military operations" had been carried to a successful conclusion "without disease and unrest in liberated areas."[59] The flood of supplies shipped during the first nine months of 1945 compensated for earlier deficiencies. The major weakness in the military program, of course, lay in its entire concentration on mere relief and its lack of any balanced economic program that would permit an early start on rehabilitation. This omission had serious consequences in Italy, a country forced to endure some 20 months of Allied campaigning. Consequences were less serious in northwest Europe where the early commencement of national import programs and the end of the war with Germany after 11 months of campaigning served to mitigate the effects of economic dislocation.

Civilian Supply in the Pacific

Civilian supply problems in the Pacific never assumed the proportions they did in Europe. Military operations were, for the most part, carried on in island areas inhabited by numerically small primitive populations whose economies could hardly be completely disrupted even by the impact of modern war. Nevertheless, a considerable problem was foreseen once U.S. forces reached the densely populated areas off the Asiatic coast and those on the mainland of Asia itself, and Army supply agencies devoted a considerable effort to planning for civilian supply in these areas. Procedures for the Pacific were far simpler than those in Europe. There was unilateral, not combined responsibility, with the United States assuming the burden in its theaters in the Pacific, the British that in southeast Asia. Within the Pacific theaters, too, the Navy assumed responsibility for the scattered islands within Nimitz' command. This made it possible for planning for the areas of Army responsibility in the Pacific and Far East to be centered entirely in the Civil Affairs Division and the ASF.

The basic assumptions behind Army planning for the Pacific were generally the same as those for Europe—a six-month period of military responsibility after which civilian authority would take over. There was, however, this difference in the division of functions with the civilian agencies—military responsibility was to be limited to areas of actual military operations and in those areas include clothing, shoes, and textiles as well as food, fuel, soap, and sanitary supplies. It was anticipated that since Asiatic and island peoples had always been dependent on outside sources for their clothing, it would necessarily be a primary item in preventing disease and unrest.[60]

[59] Ltr, President to Secy War, 21 May 45.

[60] (1) ID Rpt, Essential Civilian Supplies for Occupied and Liberated Areas during Period of Military Responsibility, 8 Sep 44, Incl J. (2) ID, Civilian Supply, Text, I, 346–47. (3) Ltr, Sidney A. Mitchess, Chief, Liberated Areas Div, Dept State, to Gen Hilldring, 8 Jun 44. (4) Hilldring to Mitchell, 1 Jul 44. Last two in ID 014 Civ Sup, XIII.

Despite this delimitation of Army responsibility, it was decided that the International Division should develop general plans for a much wider area on the basis of which specific plans for the areas of military operations could later be developed. It was recognized that the division of area responsibility between the Army and Navy might well be changed, and the need for civilian supplies to support U.S. Army operations in parts of the British Southeast Asia Command or in China was always a possibility.

The exact division of responsibility in SEAC and SWPA caused occasional trouble since some of the territories in SWPA were former British colonies and American forces in the Far East were operating on supply lines within SEAC. The JCS insisted that any policies the British might wish to put into effect in territories in SWPA over which they had exercised authority before enemy occupation should be communicated to the U.S. Chiefs of Staff for consideration by MacArthur and be subject to his approval. The JCS also said that in SEAC the United States would not assume authority over civil affairs except when U.S. forces were employed in areas "other than those over which His Majesty's Government exercised authority prior to enemy occupation," as China, Indochina, and Thailand, and that in those countries the extent of U.S. civil affairs administration would be a matter of recommendation to the CCS by the U.S. Joint Chiefs. The British would have to requisition civilian supplies for SEAC through normal lend-lease channels, not military ones. Despite British fears that this system would make no provision for SWPA areas such as Borneo and Hong Kong, the Americans insisted on it.[61]

Accordingly, the general plan developed covered China, Burma, Thailand, French Indochina, Malaya, the Netherlands Indies, the Philippines, Manchuria, Japan, Korea, Formosa, and scattered Pacific islands, an area with a total estimated population of 731,500,000 people. Import requirements for maintaining a 1,800-calorie standard of consumption for the six-month military period were conservatively estimated at 3,455,000 metric tons, with other necessities making up an additional 345,500 tons.[62]

This plan was, however, a totally theoretical one. For operational purposes, for Section VI of the Army Supply Program, and for budgeting, more detailed plans were drawn up covering the areas to become the probable scene of actual operations—the Philippines, Netherlands Indies, Formosa, the China coast from Swatow to Ningpo, and Kyushu in the Japanese home islands. These plans were meshed as closely as possible with strategic and operational planning through the Joint Logistics Committee. Prospective needs for technical equipment were handled as operational projects through normal military channels. Estimates solely for relief for these areas, with a total dollar value of $132,000,000, were placed in Section VI in the Army Supply Program and in the War Department relief budget for fiscal year 1945.[63]

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[61] See exchange of correspondence between Gen Macready and Mr. McCloy, 13 Jul–9 Nov 44, ID 014 Civ Sup, XVI.

[62] (1) ID, Civilian Supply, Text, I, 358–59. (2) ID Rpt, Essential Civilian Supplies . . . , 8 Sep 44, Incl J.

[63] (1) Memo, Gen Edgerton, Dir ID, for CAD WDGS, 19 Oct 44, sub: Additions to Section VI of ASP, ID CSB Basic Policy File Genl 1944. (2) ID, Civilian Supply, Text, I, 350–58, 360–64.

The only Pacific areas in which the Army actually undertook relief operations before the surrender of Japan, however, were the Philippines and those parts of the Netherlands Indies originally included in the Southwest Pacific Area. Under pressure from Dutch officials in Washington and at MacArthur's headquarters, planning for civilian supply in the Netherlands Indies began as early as December 1943. The Netherlands Government presented its own estimate of requirements in detail in February 1944, a program that went far beyond the War Department's conception of military necessity. Accordingly, it was sent to MacArthur for review and he reduced it extensively, applying the military necessity formula. It still, however, included articles outside the realm of military procurement and therefore was unacceptable in Washington. Finally, in September, a formula was worked out with theater officials and representatives of the Dutch whereby the Netherlands Government would itself procure and finance all supplies for the area west of the Macassar Strait (Java, Bali, Lombok, Borneo, Soemba, and Soembawa; Sumatra was excluded from the agreement as falling within SEAC), and all those supplies not falling within the military formula for the area east of Macassar (the Moluccas, New Guinea, Timor Island, Flores, and the Celebes); the War Department would furnish supplies considered necessary from the military viewpoint for the area east of Macassar. The War Department would also support the Netherlands Purchasing Commission in its procurement by certifying the military necessity of supplies after receiving recommendations from MacArthur and screening requisitions. This system was generally put into effect, though not, it is true, without some disagreement between Washington and the theater over the size of the requisitions and some disappointment to the Dutch over the limited quantities the War Department was willing to certify for procurement on military priority. Little of the program was actually completed, since in July 1945 all of the Netherlands Indies were transferred to SEAC, and though previous certifications were confirmed no new ones were made. Shipments to the Netherlands Indies through U.S. military channels continued until September 1945 but only reached a total of 16,000 tons.[64]

The Philippines were consequently the only area in the Pacific in which the Army became involved in extensive civilian supply activities, but even there the transition to civilian control was rapid. Advance planning for the Philippines began in June 1944, based on the supposition of invasion toward the end of the year or early in 1945. It was carried out in close co-ordination with officials of the Philippine Commonwealth Government in Washington. Available in the United States for financing procurement of relief supplies for the Philippines were the Sugar Tax Funds, which were the proceeds of duties collected on sugar imported from the Philippines since the passage of the Philippine Independence Act in 1937. However, it was agreed that the Army would undertake the initial burden of relief from its own relief funds insofar as supplies were necessary for military purposes, leaving the tax funds

[64] (1) JCS Memo for Info 315, 27 Sep 44, title: Civilian Relief Supplies for Netherlands East Indies. (2) ID, Civilian Supply, Text, I, 375–84.

for use in the postmilitary period. A program was worked out in August 1944 and approved by MacArthur for the assumed six-month period. It included some 325,000 metric tons of supplies—224,000 of food, 47,000 of POL, and 20,000 of coal, with the rest made up of soap, veterinary, medical and sanitary supplies, clothing, textiles, and miscellaneous items.

As the Leyte operation was undertaken earlier than expected, there was no time to build up a stock of civil relief supplies in advance, and MacArthur at first had to rely on materials originally intended for the Netherlands Indies. When requisitions from MacArthur began to come in, they raised a now familiar problem in civilian supply. Many were for rehabilitation items outside the approved program—motor and marine transportation equipment, construction materials, farm tools, and fishing equipment. The War Department tried to meet these requests, but a new issue soon arose when MacArthur requested trade goods such as combs, brushes, cosmetics, pocket knives, and flashlights, comfort articles designed to lure laborers back to the abaca plantations. Abaca was one of the principal sources of fiber for manufacture of manila hemp rope, an article in very short supply in the United States. Nevertheless, the War Department could not agree to step so far outside what it considered to be its field of operations, and in the end it was agreed that FEA should handle the trade goods through its subsidiary, the U.S. Commercial Company. This expedient in turn very quickly raised the question of termination of military responsibility and the inauguration of a Philippine import program with the Sugar Tax Funds.

Termination and transition to civilian control were arranged much more easily in the Philippines than they had been in any country in Europe. It was simply a matter of gradually transferring the entire burden from the Army to the U.S. Commercial Company and the reinstituted Philippine Government. The termination date was finally set at 1 September 1945. By that time some 191,000 metric tons of relief supplies had been shipped by the Army to the Philippines.[65]

[65] ID, Civilian Supply, Text, I, 364–75.

PART EIGHT

CONCLUSION

CHAPTER XXXII

Logistics and Strategy in World War II

World War II was the first war fought by the United States on a truly global scale. The American war effort involved establishment and support of many fighting fronts stretched around the globe and of allies, great and small, engaged in a common struggle against the Axis Powers. Both the fighting fronts and the Allies had to be supported over long sea lines of communications. Sea transport, in all its varied forms, became the most important single element in logistics. In the existing state of transportation technology, it was the only means of mass movement of either troops or supplies overseas and, in more specialized forms, the only means of landing large numbers of troops on hostile coasts. Demands of Allied civilian economies competed with strictly military requirements for both supplies and shipping.

Such a war imposed upon the central directing staffs the task of carefully balancing the allocation of forces and supplies, and the shipping necessary to transport them, among many fronts and many nations, a task that contrasted markedly with the simpler one in World War I of directing a maximum effort in support of one front. If logistics were not, perhaps, of greater importance than in previous wars, logistical problems were more complex and necessitated a greater degree of central control and direction. Only these central planning staffs, taking an over-all view of the worldwide availability of all resources, could effectively plan their division in a multifront war. Since they could make these allocations intelligently only in the light of a strategic design, the result was an unprecedented emphasis on the relationship of logistics and strategy.

The complexity of this relationship, as well as of the logistical processes themselves, was accentuated by the need for international agreement on almost every phase of the conduct of the war, for it was fought in a partnership with the British that ran the gamut of military activity from strategic direction to the framing and execution of operational plans. Despite the success achieved in conducting the war as a genuinely combined effort, national interests had to be continually reconciled. Involved combined arrangements for conducting and supporting a coalition war could not give to the whole Anglo-American supporting structure the same cohesiveness that normally exists within a national organization under a single direction.

Even within the American national organization, there was considerable diffusion of authority and responsibility, and the extent of conflicts of points of view and interests cannot be ignored. In the military sphere, the War and Navy Departments retained a high degree of autonomy in controlling require-

ments planning, production, and distribution of matériel for their respective forces, the unifying mechanisms within the Joint Chiefs of Staff organization notwithstanding. Within the JCS organization many issues were settled by a process not too different from that used in negotiating with the British. The War Shipping Administration spoke with a potent voice in determining the allocation of critical merchant shipping, and other civilian agencies, especially the War Production Board, were influential in shaping and impelling the war economy, whose capacity ultimately controlled the range and magnitude of military plans.

The Lead Time Factor

The availability of means establishes the limits within which strategists may realistically plot the course of military action. Land campaigns cannot be conducted without trained and equipped armies; bombing campaigns without planes and trained crews; naval warfare cannot be conducted without ships and men, amphibious landings without assault shipping and trained amphibious troops; nor can any type of overseas campaign take place without extensive means of overseas transport. Within the limits of the national economy, choices must be made far in advance of the actual initiation of combat operations as to the amounts of these and other ingredients needed in the military machine, and training and production programs begun to provide them. Planning for the balance within and among all the elements in the machine is an intricate affair. Experience indicates that the lead time required for the production of matériel is ordinarily longer than that for organization and training of combat formations. Thus logistical choices affecting the nature of the production program, if made in the absence of a strategic plan, may turn out to be strategic decisions in disguise; at the very least they will, at a later date, narrow the range of strategic choice. Inadequate provision of any single ingredient may become of decisive importance at the critical moment, when final strategic decisions must be made and operational plans drawn up. Winston Churchill, for instance, was to wonder in mid-1944 how history would ever understand why the "plans of two great empires like Britain and the United States should be so hamstrung and limited" by an "absurd shortage of . . . L.S.T.s."[1]

These earliest decisions on the general balance within the military machine and the production programs required to achieve it must be followed by decisions on deployment of troops to specific areas and arrangements and preparations for the support of specific military operations. These processes, in World War II, also required a considerable lead time. The earlier decisions could be made on the scope of deployment and the nature of operations in each specific area, the more economical and efficient preparations were likely to be. And, under conditions where sea transport could never be so plentiful as to permit its prodigal use, movements begun in any one direction were impossible to reverse without a prohibitive amount of waste motion; once sizable ground resources were committed in an area, the

[1] Churchill, *Closing the Ring*, p. 514.

strategy makers had only limited flexibility in planning their use elsewhere.

In this light, strategic and logistical planning in World War II were two sides of the same coin. Logistical decisions made on production programs well in advance had a vital effect in determining the range of choice open to the strategists. Choices the strategists made, sometimes dictated by emergencies rather than long-range plans, in turn determined the direction ponderous logistical machinery would take; once oriented in that direction the range of choice further narrowed. The shorter the lead time for logistical preparations, the narrower that range of choice was likely to be. All in all, planning was an extremely complex process of first adapting strategy to logistical possibilities, then, in turn, of executing the detailed logistical preparations to fulfill the strategic design. The first task had to be performed at the highest Allied levels, the second largely by national military and civilian organizations working independently in pursuit of presumably common goals. Lines of authority and channels of responsibility, however, were never quite so clearly defined.

In an age of atomic weapons, intercontinental ballistic missiles, and rapid air movement, choices as to the nature of ingredients in the military machine may well have to be made before war breaks out. Indeed, the range of strategic choice and the actual outcome of any war may be determined by the forces and matériel in being at its beginning. This has, in fact, been the norm rather than the exception throughout history. It was only in the nineteenth century, with mass armies and relatively gradual mobilization of a nation's manpower and economy, that the character of the military machine began to take shape after the eruption of hostilities. Yet, even in World War I, European nations found their range of choice narrowly bound by the nature of their mass armies and by plans for mobilization and subsequent military movements over existing lines of communication, plans mostly determined in advance as part of the military arrangements surrounding elaborate alliance systems.

The United States was fortunate in not being so narrowly bound when it entered World War II. The military machine was still in process of formation. There seemed to be ample time to adjust production programs to strategy after the outbreak of war. The only strategic commitment already made was a tentative agreement with the British that Germany should be defeated first; actual deployments planned in support of that principle covered only the immediate future. The period of maximum military effort lay one or two years ahead, and the lack of any immediate threat to the American base itself permitted this time to be used for careful planning and preparation. Strategic planning, for some time after Pearl Harbor, was to involve allocation of resources in prospect as well as those in being.

Grand Design or Pool

Given this set of circumstances, an approach having immense appeal was to begin with a long-range strategic design —a master plan to govern the whole paraphernalia of logistical preparations. This plan would form the basis, subject of course to inevitable adjustments in the infinitely complex processes of exe-

cution, for a detailed requirements program for training of men and production of matériel, for long-range deployment plans, and ultimately for allocation of resources and their deployment to the various theaters of war.

A logical sequence of this kind was the ideal to which both the Army staff and American civilian administrators aspired in the early stages of World War II. To logisticians in particular it had a great attraction, for it would permit an orderly plan of action and eliminate much waste motion. This concept of a grand design, at least ostensibly, lay behind the Army's calculations in the Victory Program of 1941, and it dominated the Army's planning in the months immediately following Pearl Harbor, the ultimate product being the BOLERO-ROUNDUP plan for striking a concentrated blow across the English Channel against Germany in spring 1943.

There were inherent difficulties and dangers in the "grand design" approach, even apart from those of securing agreement with the British. American organization for directing the war effort was still in a state of flux, the art of requirements determination quite imperfect, and the calculations of both manpower availability and productive capacity imprecise. The supply of merchant shipping, on which the whole scale of overseas deployment depended, could not be predicted very far into the future. In any case, the grand design of 1942 proved ephemeral; perhaps it was too simple a concept to meet the situation in World War II. Emergencies dictated deployments in 1942 far more effectively than did long-range plans. Before the end of that year the decisions to invade North Africa and to undertake limited offensives in the Pacific produced a multifront pattern of strategy for waging the war in 1943 rather than a strategy of concentration.

While these decisions were being made the patterns of manpower mobilization and of industrial production were taking shape without the guidance of a long-range strategic blueprint. Even in the initial stages of these processes in 1941 and 1942, despite much talk of strategic requirements, the practical goals almost had to be the creation of the largest possible military forces and the production of the maximum amount of military matériel. By the fall of 1942, when the time came to readjust production plans for the next year, the major considerations were feasibility and balance rather than detailed strategic requirements. The goals in almost every area—ground divisions, planes, combat ships, lend-lease to allies—had been set beyond the realistic bounds of economic feasibility. In the adjustment of these programs, a process extending well into 1943, no more than the most general of strategic considerations entered. Decisions emerged that established roughly the proportionate claims that air, sea, and ground forces, construction and manning of the merchant marine, and support of allies would have against U.S. manpower and production. These proportions, once established, were to be subject to only minor adjustments as the specific courses of action for waging the war unfolded. In effect, a pool of multipurpose resources was created that could be drawn on flexibly for whatever courses of action the strategists should decide upon.

The Army's own troop basis and supply program reflected this "pooling"

approach. The over-all troop basis—the foundation on which supply programs were computed—was shaped largely by the limits of manpower available for the Army after the demands of war industry and of the Navy had been met. Internal composition of that troop basis was determined less by projections of requirements of the various theaters than by those of a balanced air, ground, and service establishment. Demands of an air force adequate to assure overwhelming supremacy over the Axis cut heavily into the Army's manpower pool. Experience revealed a need for a far greater number of service troops than prewar planners had dreamed of. In the end the practical limit of expansion of ground combat forces was set at 90 divisions instead of the 215 divisions contemplated in the 1941 Victory Program. Changed conditions, with the USSR engaging the main bulk of the Wehrmacht and prospects of overwhelming Allied air power and of creating a substantial number of French divisions in North Africa, made the reduction a reasonable gamble. Of necessity, however, strategic concepts had to be adapted to the scale set for American ground force effort.

The supply program took shape generally in terms of the troop basis, though it provided for a sizable reserve that was not to be reduced to realistic proportions until early 1944. Until well into 1944, specific theater requirements hardly entered into the calculations of either initial troop equipment or of replacement and maintenance supplies. Weighted averages were used for all overseas theaters rather than specific factors for each one, for there was no reliable forecast of specific theater deployments and little valid experience data on which to base a scale of variations. Strategic forecasts of some sort had perforce to be used in calculating needs for special types of operational equipment, but for the most part they were educated guesses. The main virtue of the Army Supply Program was its generous provision for as many contingencies as possible.

The distribution system, too, was shaped as a general system, with no substantial differentiation of method among the several overseas areas. Emphasis was on wholesale supply pushed forward on an automatic or semiautomatic basis, with all the implications this carried for over supply or under supply of specific items in specific areas.

The pool of U.S. military resources in prospect in early 1943, then, was one based largely on a concept of mass production of various items for mass distribution without the selectivity that only calculations of specific requirements for specific operations could provide. Herein lay the principal disadvantage of the pool approach.

Conflicting Pulls

Despite the essentially multipurpose nature of the military machine being created, certain built-in features predisposed its use in certain areas. If the main rationale for the basic Allied strategic principle that Germany should be defeated first was simply that Germany was the stronger enemy against whom the main forces of our strongest allies were already engaged in deadly struggle, it also had a logistical *raison d'être*. The latent human and industrial power of the United States, the principal reserve

available to the Allied camp, could be brought to bear more quickly and effectively against Germany than against Japan. The centers of American industrial production were closer to the east coast, ports along that coast and the transportation network far more ample than those in the west; the Atlantic shipping lanes (to the Mediterranean areas as well as to the United Kingdom) were shorter than those in the Pacific, and reception capacity, real and potential, far greater at the receiving end. Areas in Europe, once a foothold was secured, were far more suitable to the employment of substantial ground and air forces than primitive islands of the Pacific or the populous but undeveloped countries of southeast Asia. Indeed, if the United States were to create and utilize a mass ground army within any reasonable period of time, it would have to be in Europe against Germany. Army planners went further to postulate that a mass ground army could be economically deployed and supported only in a direct blow across the English Channel against northwest Europe. And the 90-division force taking shape, with all its supporting establishment, was still a mass army; its creation inevitably predisposed Army strategists toward a concentration of effort against Germany in northwest Europe. The emerging limitations on the size of the ground army merely reinforced the belief that it must be used quickly and decisively in a concentrated effort.

At the same time, the design for a two-ocean Navy, set in train in 1940 and 1941 and confirmed in detail by early 1943, made sense only in terms of a strong American effort in the Pacific against Japan, for by 1944 the major part of the strong battle fleet in prospect could find little profitable employment in Atlantic or Mediterranean waters. A powerful fleet in the Pacific would inevitably act as a magnet to draw other resources – merchant and amphibious shipping, Army combat and service troops, and air power—into the Pacific battle. There were thus two conflicting pulls inherent in the nature of the American military machine. They augured a reasonably equal balance in the allocation of total Army and Navy resources between Europe and the Pacific.

The pulls were exerted in 1943–44 within the framework of deployment patterns already established in 1942 and that necessarily had powerful influence on those to follow. Theaters or bases, once established, as General Marshall so frequently insisted, generated their own rationale for offensive strategies in given areas. Forces deployed to one area could not be transferred to another except at prohibitive logistical cost. The pressures to reinforce and to launch offensives along several lines rather than to revise the pattern and concentrate on one line were, therefore, well-nigh irresistible. This logic applied as much to the war with Japan, in which the South and Southwest Pacific Areas developed quite independently of any preconceived strategy for their use, as it did to the war in Europe, in which the decision to invade North Africa in 1942 created an opportunity for a later invasion of German-held Europe from the south as an adjunct to, or a possible substitute for, a direct attack across the English Channel.

The war assumed its multifront character as a product of circumstances, then, rather than of long-range strategic design. Five main areas—the United King-

dom, the Mediterranean, the South and Southwest Pacific, the Central Pacific, and China, Burma, and India, as well as a number of minor ones, emerged to compete for their share of American military resources. Adjustment of resources allocations among these competing areas became, in 1943 and 1944, the central problem of strategic logistics.

The Adjustment of Means and Ends

Allocations had to take place within the framework of still another process—a general adjustment of strategic plans to the means prospectively available. Strategic designs in 1942, like counterpart production plans, were generally too ambitious, at least in the timing of operations. In retrospect, SLEDGEHAMMER, the plan for an invasion of Europe in 1942, could not have succeeded except against incredibly weak German defenses. Feasibility of ROUNDUP in spring 1943, the center of the Army planners' original grand design, will perhaps forever remain a subject of debate. But there is strong evidence that, with the shortage of merchant shipping in 1942, the forces and supplies simply could not have been deployed to England in time even without the diversions to the Middle East, North Africa and the Pacific. Moreover, the administrative machinery in both the United States and the United Kingdom was still immature and U.S. combat commanders and troops alike still were inexperienced and unblooded in battle. In July 1943 as many divisions landed in Sicily as might have been required for the initial stages of a 1943 ROUNDUP, but this is not to say that the same types of amphibious shipping that sufficed for the Sicily landings would have been best suited to a cross-Channel assault.[2] Then HUSKY was, in the last analysis, an attack on a peripheral island that the Germans could supply and reinforce only by water or air; whereas ROUNDUP would have been an attack directly into the center of German strength, not as yet diminished by the effects of an intense strategic bombing campaign or the bleeding and battering of another year's war in Russia and the Mediterranean.

On the other side of the world, the American plan for a full-scale attack on Burma (ANAKIM) in 1943, before the line of communications through India had been developed, was also clearly premature; the three-step advance on Rabaul projected as the main preliminary line of attack in the Pacific in mid-1942 had to be retailored early in 1943 to the availability of resources in the Pacific. In fact, the rapidity with which the strategic program agreed to at Casablanca generally receded into the realm of the improbable in the months following that conference was ample evidence of the extent to which, in early 1943, strategic planning had not yet been aligned with a realistic appraisal of the means of execution.

The first year after Pearl Harbor was a year of shortages in all areas—in equipment, supplies, trained troops, and ship-

[2] Some 148 LST's, 235 LCI(L)'s, 239 LCT's, and 64 attack personnel and cargo transports were used in HUSKY; OVERLORD a year later involved the use of 229 LST's, 209 LCI(L)'s, 923 LCT's, 3 LSD's, and 34 attack personnel and cargo transports. The much greater use of combat loaders in HUSKY is to be noted, for they were far more suitable for employment in the Mediterranean than in the English Channel. The larger numbers of LST's and LCT's in OVERLORD shows the much greater need for a large vehicle lift in that operation.

ping. The most stringent limiting factor, hampering the Allied war effort at every turn, was the shortage of merchant shipping to carry troops and supplies overseas. For this reason, decisions on American production programs made late in 1942 provided perhaps more generously for construction of merchant shipping than for any other commodity, and the highest strategic priority at Casablanca went to the war against the submarine. These actions bore fruit. Victory over the submarine and the high volume of new construction of merchant shipping by the summer of 1943 had effectively reduced the restrictive influence of the merchant shipping factor. Over-all supply from mid-1943 on, if not sufficient to meet every military and civilian demand, was adequate for most legitimate needs.

At about the same time, the supply situation also began to ease as American industry reached peak rates of mass production. The logistical bottlenecks after mid-1943 were apt to be more specialized than general as the requirements of various specific operations came to be more precisely defined. The most serious bottleneck was to appear in the shortage of amphibious shipping. In general, after mid-1943, the problems were no longer in mass production but in selective production of items for which the planning of mass production programs had inadequately provided. They were the almost inevitable consequences of planning in terms of a pool rather than of a strategic design.

By the time of the TRIDENT Conference in May 1943, the prospective availability of resources was far more predictable than it had been a year earlier, and requirements of proposed operations could be anticipated in far more concrete terms. At TRIDENT, and at the two succeeding conferences—QUADRANT and SEXTANT—the American and British staffs sought to make a more realistic appraisal of means prospectively available and to adjust strategic designs to logistical possibilities. At each conference the assembled logisticians drew up a careful balance sheet of requirements and resources reflecting an effort to provide, for a shorter range, a substitute for the abortive attempts in 1942 to arrive at a grand design and calculate logistical requirements in its terms. But this kind of planning was a different sort of process. At short range, production plans could be adjusted only in detail, and then only through the respective national machineries. Resources planning at the conferences was largely concerned with weighing the feasibility of strategic courses of action, of adjusting them in terms of the availability of means already in prospect, of tentatively allocating resources for the execution of operations agreed upon, and of providing guide lines along which the respective national logistical organizations should move in deploying and supporting forces in various theaters.

These processes proved to be something less than the pure exercise in the strategy-requirements-feasibility formula they purported to be. Evaluation of alternative courses of action was not always completely objective. Preconceived notions strongly influenced calculations of the relation of means and ends; American and British planners tended to inflate advantages and to deflate prospective costs of the respective courses of action they proposed to pursue. National and service proprietary interests frequently carried inordinate influence in

determining the allocation of the most scarce and most critical resources. Once agreements had been reached by the CCS and ratified by the heads of state, the lengthy and detailed resources papers almost invariably simply proved that the operations agreed upon were logistically feasible, subject to certain contingencies.

What was perhaps the central problem of allocation of resources—their division between the war against Japan and the war against Germany—was never debated in anything more than general terms. Under the general formula agreed to at TRIDENT, of giving first priority to the war against Germany while maintaining and extending unremitting pressure against Japan, American military leaders effectively asserted their right to decide unilaterally on the division of American resources between the two main spheres of the war. Allocations to the American sphere in the Pacific were, in a sense, ratified by the conferences since they were included in outline in the resources papers, but they were the product of American decision and not of bilateral debate. The Anglo-American debates centered on the division of resources among the theaters where the effort was combined—the Mediterranean, northwest Europe, and southeast Asia. This situation gave free play to the "pull toward the Pacific" inherent in American psychology and in its geographic position and made manifest in the shaping of the U.S. naval establishment. It had its effect in constricting the availability of resources, particularly assault shipping, for the pursuit of the war in Europe on several fronts simultaneously.

The conferences did not, at any rate, produce the sort of stability in strategic designs that the logisticians desired, however much the situation improved over that of 1942. There was a marked tendency to delay firm and irrevocable agreements on specific operations until shortening logistical lead time forced decision. During 1943 the build-up of American forces and matériel in the British Isles for a 1944 cross-Channel invasion proceeded hesitantly, subject to a first priority for the demands of going theaters in the Mediterranean and the Pacific; delays and changes in plan plagued operations in southeast Asia from beginning to end; the invasion of southern France was not finally and irrevocably agreed on until a few days before it was to be launched.

Somehow, nonetheless, in the conferences and other Anglo-American negotiations, ends were tailored to means. For all their imperfections, the conference discussions and evaluations made signal contributions to that outcome. At TRIDENT the concept of a large-scale cross-Channel assault in 1944 was abandoned for one on a medium scale because the Americans and British both came to realize that this was all that was within the realm of possibility. At QUADRANT the ambitious plans for an offensive in the CBI were adjusted and based upon a far more realistic appraisal of logistical requirements. At SEXTANT and after, amphibious operations in southeast Asia and the eastern Mediterranean were eliminated to make way for higher priority operations in northwest Europe, Italy and southern France. Later, the southern France operation was postponed to permit an adequate scale of assault lift for OVERLORD and the more effective prosecution of the drive up the Italian peninsula. In turn, the drive in Italy was weakened, once the Pisa-

Rimini line was reached, to permit execution of the southern France invasion. The result was a return to concentration in Europe; but a concentration balanced by a far greater commitment in the Pacific than had been envisaged in any of the plans of 1942.

The processes by which these adjustments were achieved were not uncomplicated processes of adjusting means to ends. They had to proceed within the political and psychological framework of the stresses and strains within the Anglo-American coalition, within the British and American Governments themselves, and the necessities of working with a Soviet ally waging what was in effect a separate war on its own front. Seen in terms of concrete questions of resources allocation raised before the CCS, the fundamental issue involved in the long Anglo-American strategic debate was the degree of flexibility to be allowed in disposing of combined resources between the Mediterranean, northwest Europe and southeast Asia. The British insisted on a high degree of flexibility, regarding the campaigns in the two European theaters as interdependent, and the campaign in southeast Asia as an affair that could await the defeat of Germany. They did not believe, in 1943, that preparations for either the cross-Channel assault on a fixed date or for the American-sponsored offensive in Burma should be allowed to interfere with full exploitation of opportunities in the Mediterranean area. The Americans, on the contrary, started from the premise that a decisive victory over Germany could be won only by a maximum concentration of resources on one front —the direct blow against northwest Europe—and continuously fought against both additional allocations of resources to the Mediterranean after HUSKY and any modification of agreements made at TRIDENT on transfers from that area to the United Kingdom and India.

What the British proposed ostensibly as diversionary operations to the east of Italy, the Americans regarded as an effort to carry out a significant shift of strategic emphasis. They came to regard British designs in the eastern Mediterranean as the very apotheosis of a British peripheral strategy, to be resisted at all costs. By mid-1943 the American staffs, adjusting to the reality of a sizable permanent commitment of resources in the Mediterranean, developed a Mediterranean strategy of their own, with a westward orientation, involving an advance in Italy at least as far north as Rome, followed by either an overland or amphibious invasion of southern France. At the same time, they clung to their earlier position on allocation of resources and denied the necessity for new adjustments among European theaters to carry out the two-pronged advance. The American espousal of the southern France scheme set the stage for the final phase of the debate in the first six months of 1944, which found the British espousing the priorities for OVERLORD and the advance in Italy against the requirements of ANVIL.

Whether the desire for flexibility actually cloaked a devotion of Winston Churchill or other British leaders to a Mediterranean-oriented strategy or whether, as General Marshall frequently insisted, pursuit of this sort of opportunism would have sucked so many resources into the Mediterranean as to inadvertently produce such a strategy, must remain unanswered questions. The

Americans did, at the time, so interpret British intentions and this interpretation vitally influenced their whole approach to the allocation of resources in a multi-front war. It acted to reinforce existing pressures for a greater commitment to the Pacific, and it led to a certain rigidity in allocations for the presumed first-priority war in Europe, even to a reluctance to face up to the true requirements of the very cross-Channel operation they championed.

Landing Craft and Strategy

These American doubts and fears played perhaps the most important part in producing the hesitancy with which the BOLERO build-up progressed in 1943. They played at least some part in generating the landing craft shortage for European operations. The landing craft shortage stands as the most conspicuous example of the influence of logistical factors in narrowing the range of strategic choice in 1943 and 1944.

The emergence of assault shipping as a critical factor resulted from a failure in prewar planning to anticipate requirements for amphibious landings and, later, a seeming lack of flexibility in adapting production plans to developing need. Curiously enough, the first large-scale landing craft program did take shape in 1942 in terms of a specific strategy—the ROUNDUP plan for the invasion of Europe in 1943. The program was almost unique in this respect. To meet the presumed needs of ROUNDUP a large pool of landing ships and craft was produced in a crash program in the fall of 1942 and spring of 1943. With the demise of the ROUNDUP strategy the pool was dissipated. Some craft were diverted to the Pacific, though most of them were employed in the invasion of Sicily. The U.S. Navy, meanwhile, disturbed by the dislocations the crash program had produced, cut back landing craft production drastically. The JCS simply did not face up to the problem of determining strategic requirements for the year ahead. The Americans, for whatever reasons, came to assume that the pool created, along with limited new production scheduled, would suffice to meet requirements of a 1944 ROUNDUP as well as of all other operations that might be scheduled in the interim in the Mediterranean, the Pacific, and southeast Asia.

At TRIDENT, the British and Americans agreed that there would be a demonstrable deficit for a large-scale ROUNDUP in 1944—a primary reason for the decision on a medium-scale ROUNDHAMMER. Setting requirements for ROUNDHAMMER, however, was a curious exercise in which the usual processes were reversed. Craft in the existing pool expected to survive amphibious operations in the Mediterranean and in southeast Asia in 1943 were to be returned to the United Kingdom for ROUNDHAMMER. To these would be added something like half of a now limited American production of LST's, LCI(L)'s, and LCT's planned in 1943, plus some British production of LCT's and gun support craft. These estimates of availability were simply transformed into requirements, and this scale of requirements became the fixed pivot on which American thinking concerning a cross-Channel invasion turned until well toward the end of 1943. OVERLORD, on the scale it was eventually mounted, was to require almost double this amount of assault lift.

During the last half of 1943 the size

of the pool available for combined use in the Mediterranean and southeast Asia, with the need to preserve even these inadequate allocations for OVERLORD always in the background, narrowed the range of strategic choice at every turn. Losses in HUSKY proved less than TRIDENT predictions but, in the absence of ports, landing craft had to be used long after the assault landings to bring in supplies over the beaches. Lack of readily available craft was a critical factor in preventing immediate follow-up of the Sicilian victory by an assault on the Italian mainland. The Americans, having added the invasion of southern France to their strategic agenda, found themselves arguing at QUADRANT, in contradiction of their own "overriding priority" formula, that the "surplus" landing craft made available by the unexpected small losses in Sicily should remain in the Mediterranean for ANVIL—despite clear evidence in the OVERLORD plan that additional assault lift would be required to insure the success of a cross-Channel attack.

After QUADRANT, Eisenhower found that he needed to retain craft in Italy well beyond their scheduled departure dates for OVERLORD to speed his supply build-up and to launch an amphibious turning movement along the Italian coast. The British, desirous of invading Rhodes and bringing Turkey into the war, found themselves balked by a lack of assault shipping for the operation. In the midst of this general shortage in Europe, at American insistence a sizable fleet of amphibious shipping departed for India to take part in an amphibious operation in the Bay of Bengal scheduled at QUADRANT for February 1944, too late to permit the return of the craft for either an OVERLORD or an ANVIL in May.

Adjustment of American landing craft production to meet the developing crisis was almost unbelievably slow. And when the adjustment did start in fall 1943 it was seemingly unrelated to the area in which the compelling shortage existed. By mid-1943 the Americans had determined to accelerate the pace of the war against Japan, and at QUADRANT proposed as a goal the defeat of Japan within a year of the defeat of Germany. Though no specific plan was advanced, and the British refused to accept the goal, it became the practical guide for the U.S. Navy in planning the production of assault shipping. That the Navy was spurred on by the developing shortage in European waters there can be little doubt, but the new plans it developed for expanding both the construction of combat loaders and landing craft in the fall of 1943 were conceived almost exclusively in terms of the needs of the later stages of the Pacific war. Promised increases in the over-all program were substantial but, because of production lead time, they would become effective too late to provide more than a small increment for an OVERLORD scheduled for 1 May 1944 or any accompanying amphibious operations along the southern fringes of Europe. Even this small increment was not immediately allotted to European operations. Admiral King did agree in November 1943, however, to the diversion of a limited number of craft from prospective Pacific allocations.

Despite this small additional increment, limitations on the supply of landing craft for European operations hedged in military planners and states-

men on every side at the SEXTANT Conference. At Cairo, British and American staffs wrestled valiantly with the problem of how to stretch the available supply to fit in a flanking operation in Italy in December 1943, an assault on the Andaman Islands in the Bay of Bengal (BUCCANEER) in February 1944, an assault on Rhodes also in February, and still carry out OVERLORD on 1 May 1944. The invasion of southern France was, at this stage, simply left off the conference agenda. The British proposed to accommodate Rhodes either at the cost of one or two months' postponement of OVERLORD or by canceling BUCCANEER and returning the necessary assault shipping from India. The Americans, though opposed in principle to the Rhodes invasion, had been committed by the President to support of Chiang Kai-shek, and they seemed more amenable to the postponement of OVERLORD than to the cancellation of the Andamans assault. Roosevelt, apparently belatedly aware of the landing craft shortage, inquired of Washington whether the supply for OVERLORD could be substantially increased by a crash production program in the first five months of 1944.

Then at Tehran Stalin insisted on OVERLORD and suggested a southern France invasion in advance. The Americans, welcoming this Russian support of their own strategic concepts, were soon faced with the problem of also fitting in ANVIL, if not in advance of OVERLORD, at least near the same date. Production authorities in Washington had meanwhile reported that while a crash effort might substantially increase the supply of landing craft for European operations by July, few additional craft could be supplied for a May OVERLORD. The President consequently decided against it. In a somewhat frantic effort to provide for ANVIL, Admiral King made a second offer of diversions from future Pacific allocations, and the Americans then agreed that BUCCANEER should be canceled and assault shipping returned from India to the Mediterranean. The shipping thus returned, the British figured, could be used *seriatim* for Rhodes and ANVIL. Only the amphibious operation in southeast Asia had to be immediately canceled. The target date for OVERLORD (and a simultaneous ANVIL) was adjusted to a fuzzy "in May," which in the event was to mean a postponement to early June. Admiral King's promise of additional landing craft for ANVIL was at least partially conditioned on this delay.

In the SEXTANT deliberations, the fundamental fact in the whole equation —that the supply of landing craft in being and in prospect for Europe, even with the additions promised, was still inadequate for a simultaneous OVERLORD and ANVIL—was almost ignored. No sooner had the OVERLORD high command arrived in England than they demanded an increase in the scale of the assault. While the production authorities had decided, despite Roosevelt's second thoughts, to go ahead with the new crash landing craft program, its products would come off the line too late and therefore mainly benefit the Pacific war. Additional craft to strengthen the OVERLORD assault, it appeared, could only be had from the Mediterranean increment earmarked for ANVIL.

Meanwhile, new complications arose when it developed that the turning movement in Italy could not be exe-

cuted in December 1943. Then, at Churchill's behest, new delays were arranged in LST movement schedules so that a 2-division landing at Anzio could take place in January. Perhaps fortunately, the Turks refused to move toward intervention in the war and the Rhodes operation disappeared from the agenda; in view of the demands for Anzio, amphibious shipping could not have been made available for it.

Whatever the delays and complications introduced by the Anzio landings, the basic competition now narrowed to OVERLORD and ANVIL. The OVERLORD planners in London, like those at TRIDENT, once again engaged in a curious reversal of the usual procedures, and built the "requirements" for OVERLORD around a scale of assault lift that included their SEXTANT allotments plus what they thought could be brought from the Mediterranean should ANVIL be canceled. A long technical debate ensued over what would or would not be sufficient to provide the requisite OVERLORD lift. Despite a belief in Washington that enough lift was on hand to execute both OVERLORD and ANVIL, the upshot was the postponement of the southern France invasion and the transfer of the major portion of its allotted assault lift to OVERLORD. Granted that the postponement of ANVIL grew more immediately out of the continuing stalemate in Italy, without it OVERLORD almost certainly would not have received the assault lift it evidently required. ANVIL was actually to be executed two months after OVERLORD, using the residual lift in the Mediterranean supplemented by a third diversion from Pacific allocations by Admiral King and craft released by General Eisenhower.

Strategic designs, then, were aligned with the supply of landing craft as much as the supply of landing craft was brought into consonance with strategy. The whole controversy over landing craft was hardly an object lesson either in anticipating strategic requirements or in planning the division of a critical resource among several theaters. Nevertheless, the effect of the landing craft shortage on the course of the war was probably less than all the sound and fury surrounding it would indicate. The major casualties were operations that might well have fallen by the wayside for other reasons—the invasion of the Andamans (and with it the offensive in Burma early in 1944), Rhodes, and a southern France operation simultaneous with OVERLORD. Its greatest effect was in curbing British opportunism in the Mediterranean and the American design for an early offensive in Burma. OVERLORD was not affected, nor were operations in the Pacific—by mid-1944 the two centerpieces of American strategy. It would be difficult, however, to prove that the outcome was the result of any conscious design.

After the launching of OVERLORD, assault shipping ceased to be the great arbiter of strategic decision. The new construction program assured a sufficient quantity for Pacific operations in the fall of 1944, despite the continued tie-up of craft in logistical operations in Europe. In what might be designated the third logistical phase of the war, limitations in more conventional areas, —port and inland clearance capacity, supply of military manpower, specific types of supplies, and, once again, merchant shipping—succeeded assault shipping as the principal bottlenecks.

Factors in the War Against Japan

In the peculiarly American sphere of the Pacific theaters it would be hard to pinpoint any single factor that exerted the same influence the landing craft shortage did in shaping the course of operations in the combined theaters in Europe and southeast Asia. The Pacific Fleet, rather than the ground army, was the decisive force. The fast naval air carrier task force may be said to have been the most important single element, though in the Southwest Pacific land-based aircraft fulfilled much the same role. No significant strategic controversies developed around the allocation of carrier task forces among the main Pacific areas.

Although fleet strength and air power were the decisive factors, they required many adjuncts. After tailoring objectives to resources in early 1943, the general tendency was to accelerate the Pacific advance, pacing it to the growth of the power of the Pacific Fleet. This acceleration generated numerous shortages of resources for a balanced effort, the impact of which fell most heavily on the Army, certainly in part because it sought to give first priority to the war in Europe.

In theaters in which all routes of advance and most internal supply lines were over water, means of water transport were necessarily the primary elements of logistics. The most compelling shortages in the Pacific were of all types of floating equipment—not only the ocean-going ships required to bring in men and supplies and the amphibious shipping required to land them on Japanese-held islands, but the small boats, barges, and other types useful for short voyages and in the operation of ports with primitive facilities. The shortage of all kinds of shipping was compounded by a shortage of facilities for unloading, which promoted the wasteful use of shipping.

Given the geography of the Pacific war fronts, a shortage of facilities and supplies was endemic, the problems of equitable distribution to widely scattered island bases almost insoluble. Demands inevitably arose for a higher ratio of service to combat troops than could be satisfied within the existing troop basis, and for all kinds of special operational supplies on relatively short notice.

Amphibious operations until well toward the middle of 1944 required a generous measure of improvisation, particularly in the Southwest Pacific. If the rationale of an accelerated Pacific advance is accepted, the solicitude with which Admiral King guarded Pacific allocations of assault shipping had considerable justification. Some British writers in the postwar period have asserted that as high as eleven-twelfths of American amphibious shipping was sent to the Pacific during the critical period in European operations.[3] The proportion, in fact, was never nearly so high, though any exact calculation is difficult to make. The division between the two areas of larger types of landing craft was relatively even; the Pacific did have, after mid-1943, a heavy preponderance of combat loaders. In contrast to early Navy plans for a relatively even division of these vessels between Atlantic and Pacific, by June 1944 approximately three-fourths of all American combat loaders

[3] See particularly Chester Wilmot, *The Struggle for Europe* (London: Collins, 1952), pp. 176–78, and Bryant, *Turn of the Tide*, p. 587.

were in the Pacific. The shift began with the movements from the Mediterranean after HUSKY to flesh out the lift for the Gilberts-Marshalls campaign. Afterwards, almost all new APA's and AKA's were assigned to the Pacific. Without doubt there was much logic in this distribution. Combat loaders were better suited to the ship-to-shore operations in the Pacific than to operations in the English Channel where the primary need was for large shore-to-shore landing craft and ships. Yet, British combat loaders (LSI (L)'s) did play an important part in OVERLORD, and combat loaders were used extensively in Mediterranean operations.

A more serious flaw in the Navy's handling of the amphibious shipping problem than this distribution lay in its insistence, from TRIDENT onward, in planning boosts in production almost exclusively in terms of Pacific needs on the assumption that TRIDENT allocations would suffice for the European war. The general boosts in production begun in the fall of 1943 did, in the end, benefit OVERLORD and ANVIL, but only as a result of Admiral King's unilateral decisions to accept some sacrifice in allocations made earlier to the Pacific. And King's three separate offers were all timed to influence strategic decision along lines favored by the American JCS. The most curious facet of the entire landing craft situation is the extent to which these decisions on redistribution of a critical resource were not determined by the CCS in the light of over-all strategy, or even by the JCS as a body, but by the U.S. Chief of Naval Operations. There is little evidence that the diversions King sanctioned actually deprived Pacific commanders of their essential needs or affected the course of operations against Japan.

The supply of ordinary merchant shipping in the Pacific, indeed, appears to have been a more critical factor than the supply of amphibious types. At least the various shipping crises in the area centered on it. In terms of plans for an accelerated advance in a predominantly ocean theater, the Pacific areas were stinted in the allocation of merchant shipping at the conferences held in 1943, much as the Atlantic theaters were stinted in allocations of shipping capable of landing troops on hostile shores. Once operational plans were firmly drawn and their shipping implications became apparent, emergencies developed that required transfers from the Atlantic to the Pacific pool. In the most ironic instance, in April 1943 the temporary demise of ANVIL, the operation on which the Americans had been most insistent and for which they promised landing craft at a presumed sacrifice to the Pacific, produced a windfall in ordinary cargo shipping that enabled the Pacific theaters to weather a major shipping crisis. The several transfers of merchant shipping from Atlantic to Pacific had no more effect on the course of European operations than the transfers of assault shipping from Pacific allocations to the Atlantic had on operations against Japan. The speed-up in ship turnarounds in the Atlantic and Mediterranean in the spring and summer of 1944, and the relaxation of convoy restrictions, played no small part in producing this result. But the conclusion is inevitable that the initial allocations in each instance were unrealistic.

In all the juggling of resources in 1943 and 1944, OVERLORD, the western

Mediterranean, and the two main Pacific theaters received favored treatment, while the Anglo-American effort in the eastern Mediterranean and in southeast Asia languished for lack of resources. The reasons were rather different in the two cases. In contrast to American aversion to all Mediterranean operations east of Italy, the approach to Japan by way of the difficult terrain and undeveloped facilities of India, Burma, and China at first had great appeal to the American staffs. As late as the fall of 1943 they were insistent on sending amphibious resources needed in the western Mediterranean to India, and to the very end of the war vital transport planes useful in either Europe or the Pacific were sent to India to operate on the air supply line to China or to support forces in India and Burma that could be supplied in no other way. Beyond this the Americans insisted on keeping their commitment on the Asiatic mainland small, and hoped to obtain the great objectives they desired by persuading the British and Chinese to act. The logistical cost of an American ground effort in the CBI in terms of shipping and other resources promised to be higher than in any other theater, and the American staffs shied away from it. The British military and naval commitment in the area was sizable, but was restricted by the British desire to concentrate on the war in Europe until Germany was defeated, and apparently was not enough. The British, indeed, felt that the more desirable strategic goals were not in Burma and China, but to the south and east of India in Malaya and the Netherlands Indies. Chiang Kai-shek's China was simply not capable of any considerable effort without the extensive American supply support that, because of the lack of a land supply line, could not be given him. The resources that meanwhile poured into the Pacific resulted in an accelerated advance, and by the end of 1943 it was apparent to the American and British staffs alike that the China coast could be invaded from the Pacific much earlier than it could be reached either by overland advance through Burma and China or along the sea route via Malaya and the Indies.

The importance of the CBI was consequently further downgraded on the American strategic scale. American staffs sought first to nourish the air forces in China to support the Pacific advance; that failing, they finally hoped simply to realize as much from the previous investment of resources in the area as possible with no further substantial commitments. Since this was also the principal area of British participation in the war against Japan, the new strategic outlook had its effect in diminishing American lend-lease support to British forces in southeast Asia. At the same time, the prospective Soviet effort on the Asian mainland took on added importance as means of preventing withdrawal of sizable Japanese ground forces to their home islands to oppose an American assault.

Logistical Adjustments

As the specific direction of the Allied effort unfolded, the logistical processes were adapted, as far as they could be, to the developing situation. Production planning for 1944 and 1945 evidenced a transition from emphasis on mass production of standardized articles toward concentration on more specialized areas. In the field of shipping the turn was

toward specialized military types at the expense of mass production of Liberty ships—a shift of which the new landing craft and combat loader programs were the most important evidence. In Army production, the shift was toward heavier equipment of all types and toward greater quantities of artillery and artillery ammunition at the expense of lighter items such as 37-mm. guns, small arms, and ammunition.[4]

These adjustments were not easily or readily made, and the necessity for them was seldom appreciated far in advance. The McCoy Board and the Richards Committee, studying the entire Army supply system late in 1943, identified its major weaknesses—its too generous provision of reserves and its lack of differentiation in requirements of various theaters—but neither of these groups really foresaw the need for adjustments rather than simply economy. Their efforts resulted in what was very probably a premature reduction in military production early in 1944 in an atmosphere of optimism about an early end to the war with Germany. Over-all Army production requirements for 1944 and 1945 were cut back to finally conform to the prospective limits of manpower mobilization for the Army and to eliminate what seemed to be excessive reserve, maintenance, and pipeline allowances.

Within the framework of these reductions, the ASF meanwhile proceeded with its effort to make the whole logistical system more responsive to developing operational requirements, as well as more economical. The adaptation took several forms. The system evolved toward supply by requisition rather than automatic or semiautomatic supply, and toward adjustment of production requirements either on the basis of theater projections of specific need or on the basis of supply and demand studies of actual rates of consumption. The keyed projects system was initiated as a means of anticipating needs in each theater for special operational supplies. By the fall of 1944 special replacement factors had been calculated for each of the main areas of the war, and these were to be later refined by the development of special factors for each major theater.

All these developments, however, came late in the war, and none could be considered to have been outstandingly successful in application. The keyed projects system never worked as it was supposed to because of the difficulty, particularly in the Pacific, of predicting the future course of operations far enough in advance. And the problem, as it developed in 1944, of meeting an increased need for new types of equipment, for heavier equipment, and for larger amounts of artillery ammunition, required longer lead time than was usually available. All too frequently, belated production adjustments could only partially meet a demand. In any case, the trend in the Army Supply Program, after the cutbacks of early 1944, was constantly upward, thus reversing the verdict of the McCoy Board and Richards Committee.

Adjustments in distribution techniques were more successful in coping with special situations, but more as a result of a superior adaptability within the system than any general revamping of it. The move toward requisition supply was not to be fully consummated until very near

[4] For evidence of these trends, see below, appendixes C–1 and C–2.

the end of the war. The instability of strategic plans prevented the full realization of economies possible through bulk preshipment of supplies to the United Kingdom for OVERLORD. At the height of the war in 1944, however, such special techniques as the use of commodity loaders and of the Red List procedure in Europe, and of block-loaded ships and other specially tailored loads in the Pacific were successful expedients. Meanwhile, in many thousands of details, the whole massive mechanism of wholesale distribution was made more efficient and responsive.

The Climactic Phase

By the fall of 1944 the American war effort had reached its climax in both main spheres. In Europe, as a result of the convergence of the OVERLORD and ANVIL-DRAGOON forces, it involved one main, excessively broad, front, and a subsidiary one in Italy. In the war against Japan, there were two main fronts in the Pacific, and a subsidiary front in southeast Asia. The direction of the main efforts was irrevocably fixed, and the competition for resources among theaters to some degree narrowed, but the worldwide extent of the entire American commitment imposed a strain on what was now a mature war economy and war machine. The newly liberated nations of western Europe emerged as competitors for both supplies and shipping to resuscitate their war-torn economies.

There was no longer any real doubt of eventual victory on both main fronts; the only questions were time and cost. The dashing of optimistic hopes for victory over Germany before the end of 1944 forced the Army to practically exhaust its manpower resources in support of the European war and to cut back, after June 1944, the relative pace of deployment to the Pacific. The net result was a shortage of Army manpower resources, particularly service troops, in the Pacific for the campaigns in early 1945. This shortage exerted some influence on the decision to invade Luzon rather than Formosa, and, combined with geographic factors, it delayed Philippine base development and other preparations for the final phase of the war against Japan.

In Europe, meanwhile, the shortage of both port facilities and inland clearance capacity, the result of a change of pace and direction in the military advance contrary to the best-laid logistical plans, played its part in producing the fall and winter stalemate along the Siegfried Line. In the bitter winter war, supply shortages did develop—most acutely in the areas of artillery ammunition and winter clothing—due in part to failure to anticipate requirements and in part to difficulties of distribution. The armies in Europe, too, suffered shortages of both combat and service troops. Rear establishments had to be combed for infantry replacements; a new program for organizing and arming liberated manpower took shape. On the supply side, production programs that had been cut back in the belief that the war in Europe would soon be over had to be hastily reaccelerated. Lend-lease to the Russians continued at its previous high levels, but the British began to suffer serious disappointments.

If the supply of manpower seemed likely to be the ultimate limitation on the American war effort, the more immediate crisis in fall 1944 came to center

primarily on the distribution process. Cargo shipping once more became the most critical logistical factor, affecting the whole range of Allied plans.

The cargo shipping crisis of late 1944 was not, however, like the crises of 1942. The number of ships by now was gigantic, despite some slackening in the rate of construction, and the loss rate to enemy action was no longer a serious factor. The shortage of cargo shipping for outward movement from the United States resulted largely from the retention of great numbers of ships in overseas pools to serve as floating warehouses or to be used for intratheater movements. Shipping congestion of this sort reached its greatest heights in Europe and the Southwest Pacific simultaneously. In Europe it resulted from failure to seize and develop ports rapidly enough to support the advance to the German border; in the Southwest Pacific from the decision to invade Leyte two months ahead of schedule. In both areas congestion was in large part a product of decisions of theater commanders to push ahead to seize the tactical advantage without regard to the logistical dislocations that would follow. It led, however, to uneconomic use of shipping and to partial loss of control by the central shipping authorities over allocations.

The mounting shortage for overseas movement of military supplies coincided with the emergence of large civilian relief demands in Europe and of a requirement for merchant shipping in the Pacific to carry supplies for a Soviet stockpile in Siberia against the day the USSR would enter the war against Japan. To meet the crisis the JCS demanded drastic curtailment of American assistance to British shipping programs, of Soviet Protocol shipments via the Atlantic, postponement of any large-scale civilian relief shipments from North America, and a reacceleration of the lagging ship construction program. These measures seemed less essential to civilian shipping authorities than the break-up of the idle pools of shipping in military service, and in the end their view prevailed. Neither the British shipping program nor the Soviet Protocol shipments suffered appreciably, though the institution of a large civilian relief and rehabilitation program in Europe was delayed by some months. Efforts to boost ship construction mainly came too late. Institution of closer control over overseas shipping pools was the basic solution to the shipping crisis of late 1944.

The juggling of ship allocations in the crisis once again resulted in augmenting the Pacific pool at the expense of the Atlantic. The augmentation served to provide amply for Nimitz' Okinawa operation, which by March 1945 was absorbing shipping from SWPA as well as from the Atlantic. Outward sailings to, and retentions within, MacArthur's theater were severely curtailed in the early months of 1945. Although the effects of these restrictions are difficult to judge because of limited reception capacity in the Philippines, in all probability they slowed the roll-up of rear areas in SWPA and base development in the Philippines; they definitely curbed MacArthur's ambitions to extend his campaign rapidly into the Netherlands Indies. In the end, however, the shortage of Army resources in Nimitz' theater served to curb just as effectively the POA commander's designs for subsidiary operations on the China coast. The net effect of the logistical situation in the Pacific in early 1945 was

to channel the effort toward concentrated preparations for the final assault on Japan.

The One-Front War

In the last phase of the war, after Germany's defeat, the over-all problem of limitation on resources virtually disappeared in all categories save only ocean-going shipping. Air, sea, and ground forces were abundant, needing only to be moved into their new positions. The amphibious equipment was at hand, ready to land the largest force yet engaged in any such operation. The production machine, only recently reaccelerated to near peak capacity, was pouring out an overabundance of supplies. All this being so, the only real logistical problem was the time required to move selected portions of the military machine into position for a final massive assault on Japan.

The supply of troop and cargo shipping and of reception capacity in the Pacific were the logistical factors controlling the timing of the final assault. In their eagerness to bring the war to an end in the shortest possible time, the American staffs insisted that the military requirements of the war with Japan should have first priority on Allied merchant shipping despite the increased demands for European civilian relief, and they finally overrode British objections on this point at the Malta-Yalta Conference.

To a very great extent, American planning for this last stage of the war was dominated by an overestimation of Japanese ability and will to resist. The Army insisted on mass invasion, and its scheduled ground force deployments were reasonable in terms of such a strategy, but the scale of the reserve it planned to maintain in the United States was more questionable. The scale of both Army and Navy air deployments and of naval fleets seems to have been calculated more in terms of a strategy of blockade and bombardment. To almost the very end, as well, the American staffs considered Soviet entrance into the war desirable if not absolutely essential. Also, the effort to give some substance to the Chinese war effort continued, though it no longer held a place of much importance.

There did remain little place for the British. Without much enthusiasm or sense of any great need on the part of the Americans, plans were finally approved at the Potsdam Conference for a further drive in southeast Asia toward Singapore and the Netherlands Indies and for a British ground force to participate in the invasion of Japan. The scale of military lend-lease to the British continued its downward trend.

What the Americans did need from the British was assistance in lifting personnel in their large ocean liners. This was finally promised, though not in quite so large a measure as desired. And the military priority on cargo shipping proved less overriding in the application than in the Malta-Yalta statement. The civilian relief programs gathered momentum in the spring of 1944 and mounted to new heights after the defeat of Germany, profiting from a temporary easing of the military demand for cargo shipping in the Atlantic. Before the full force of the competition of the redeployment movement could be felt, the war had come to an end.

The end came in an unexpected manner, nullifying all the elaborate plans

and calculations for the movement of the military machine into position for the final blow. The invasion of Japan did not have to be executed. And the way in which the final blow was struck promised to alter the whole complex pattern of relationships between logistics and strategy in the future.

International Supply

The supply of military matériel under lend-lease in World War II also involved a close relationship to the development of coalition strategy. When the concept of lend-lease was first advanced by the President late in 1940, it was proclaimed as a method whereby America could become the "arsenal of democracy" without itself becoming actively engaged in the war. This seems, in retrospect, to have been wishful thinking. The idea that the United States could add to the overall striking power of the anti-Axis coalition by extending part of the fruits of its production to Allied nations nonetheless survived. Lend-lease became an extremely effective instrument of coalition warfare. It did what Roosevelt proposed it should do in the first instance: remove the dollar sign from inter-Allied supply transfers. When combined with its counterpart, reciprocal aid, it gave the directing Anglo-American military staffs unprecedented flexibility in allocating supplies and equipment among national forces without regard to their origin and without cumbersome financial accounting.

The whole concept of lend-lease and reciprocal aid found its most perfect expression in the announcement of Roosevelt and Churchill in early 1942 that military supplies and equipment of the two countries should be regarded as a common pool out of which allocations should be made in accordance with strategic necessity by combined munitions assignments boards in Washington and London, operating under the jurisdiction of the CCS.

Allocations among nations on the basis of strategy proved to be even more difficult than allocations among theaters. During 1942 the effort to plan the division of the common pool between British and Americans on the basis of a long-range strategy came to nought. Actual assignments were made at short range and were dictated to no small degree by the emergencies of that year. The whole problem was one of "dividing a deficiency." National interest intruded on the perfect theory of the common pool with irritating frequency.

In effect, the Weeks-Somervell Agreement, negotiated by the British and American military authorities at the end of 1942, recognized that strict adherence to the doctrine of strategic necessity, in a situation in which strategy could not be fixed, was impossible. It substituted the principle that requirements calculated separately by national organizations based on the projected size of forces to be equipped and supplied should be the guide to long-range planning. The Americans agreed to meet the marginal requirements for British ground forces, that is, those that British industry could not supply, in the same proportion that they met the requirements of their own ground forces. Within the munitions assignments machinery, adjustments continued to be made as specific strategic and operational plans unfolded, but agreements reached in the production planning stage, largely in the absence of

detailed strategic concepts, became the principal guide to assignments.

Under this arrangement the munitions assignments machinery worked much more smoothly than it had in 1942. During 1943 and the first half of 1944, British marginal needs were satisfied roughly in the same proportion as American. This enabled the British Commonwealth of Nations to maintain far larger forces in the field than it could otherwise have done, to the mutual benefit of both Great Britain and the United States.

It represented, nevertheless, a serious modification of the original idealistic common pool concept. In terms of finished military equipment, the common pool was largely a one-way street, however much the British may have contributed to the American war effort in the form of services, installations, and maintenance supplies. This situation inevitably led Americans to modify the common pool concept in practice, and to insist on determining the allocations of American equipment in terms of American national interest. In the later war years, British participation in the allocation of American production through the munitions assignments machinery became more nominal than real.

In the last year of the war, the Americans returned to the principle of strategic necessity in making assignments, and applied it to the detriment of the British. The principles of the Weeks-Somervell Agreement were not renewed for either 1944 or 1945. By the fall of 1944, American forces had become predominant in the main theater in Europe; the Mediterranean theater, where British forces predominated, was no longer considered of great importance; and the British effort in the war against Japan had been relegated to a subsidiary position. The British began to find strategic justification difficult, and their share in American production fell sharply. Once the war in Europe was over, the American staffs, reluctant to consider any of the postwar implications of continuing a generous scale of military aid to Britain, determined to limit that aid to proven needs for the war with Japan based on strategy agreed within the CCS. Since the CCS did not agree until Potsdam on any program for participation of British ground forces in the final stages, assignments came virtually to a standstill.

In sum then, lend-lease to Britain served as an admirable and effective instrument for furthering the aims of coalition strategy in the middle war years; its diminution was almost directly proportionate to the waning of British influence in strategic councils and to the increasing preponderance of American forces in the overseas theaters that the JCS considered decisive.

The lend-lease program for the USSR constituted a separate case, for it was not controlled by the CCS, JCS, or MAB, but by the President's Soviet Protocol Committee. The strategic justification for the Soviet aid program was a general one; it was not tied to specific Soviet strategic or operational plans, for the American staffs had no knowledge of them. The general justification was compelling enough. The Soviet Union was exerting a maximum effort against the common German enemy, and it therefore seemed but natural to aid the USSR in any way possible to speed the ultimate military victory.

In 1943 and 1944 the increase in the availability of American supplies and

shipping, and the conquest of the obstacles to forwarding these supplies over the routes of delivery, made it possible to increase the volume of aid substantially over the level of 1942 without any real sacrifice to the effort of the western Allies on other fronts. Strategic conditions were changed; the Red Army was no longer reeling backwards but was on the offensive on all fronts. Some voices were raised in the wilderness demanding a closer scrutiny of Soviet needs for supplies, but these voices were largely ignored by the Protocol Committee. Until the war in Europe was over, the flow of aid to the USSR continued as a maximum effort simply to meet all possible Soviet requests, on the premise that the Soviet contribution to military victory was sufficiently important to warrant it.

Meanwhile, late in 1944 the MILEPOST program was added to provide a stockpile of supplies in Siberia against the day the USSR should enter the lists against Japan. This program, which involved a transfer of American shipping to the Soviet flag in the Pacific, was carried out despite a threatened shortage of cargo shipping for the support of the American military effort in that area, and without any diminution of the flow of supplies under the existing protocol.

With victory in Europe, the situation changed. Further protocol shipments via the Atlantic routes were abruptly canceled, and an attempt made to limit the Soviet aid program to the USSR's proven needs for the war with Japan, on the assumption that it would make good its promises to enter that war. Yet, there were, in fact, no real means of determining whether Soviet requests really reflected those needs, and a fairly generous program of shipments to Vladivostok continued until August 1945, based largely on Soviet requests taken in good faith. The trend toward curtailment in the light of a declining need for further Soviet participation in the war was evident, nonetheless, and the period of disillusionment with the USSR was, belatedly, about to set in.

A common denominator in the trends in the British and Russian programs lay in adherence to the principle that lend-lease allocations should be governed entirely by the requirements for complete military victory over the Axis Powers to the exclusion of any postwar political considerations. Other and less extensive lend-lease programs were similarly shaped almost exclusively in terms of the contribution the recipients could be expected to make toward winning the war. The French North African Rearmament Program provided a force of eight divisions, relieving the Americans of the necessity of forming, shipping, and supporting that many more U.S. divisions for the European campaigns of 1944 and 1945. A program for rearming eight more French divisions in Metropolitan France took shape only after the strain on American manpower began to show in the fall of 1944, and it was canceled when the war in Europe had been won. Lend-lease to China, initially projected on a large scale, was eventually closely restricted to materials that could be moved into China and effectively used there to support 39 American-sponsored divisions. Only in the case of the very small Latin American programs was the political motive dominant; and even here the bulk of wartime aid was concentrated on Brazil and Mexico, governments that contributed some forces to overseas theaters.

The military supply programs for civilian relief had much the same *leitmotif*—military necessity. American military staffs sought constantly to confine their responsibilities in this area to the minimum necessary to prevent disease and unrest or disorders and dislocations that would interfere with military operations. At first they also tried to confine their responsibility to a limited time period and to transfer it to civilian agencies once the military necessity for control of civilian supply in any given area had past. Military necessity did prove in some degree to be self-perpetuating, and theater commanders found themselves forced to shoulder greater burdens than they had initially contemplated. The President, too, in November 1943, recognizing the unreadiness of civilian agencies to handle the task, imposed on the Army the major responsibility for an indefinite period. Yet, even after the President's directive the main rationale for the elaborate Army programs for the liberated countries of Europe continued to be military necessity, and the whole problem of rehabilitation of war-torn economies was still presumed to be beyond the purview of military planning.

In terms strictly of military necessity, as President Truman recognized in 1945, the War Department exercised its responsibilities well. But the emphasis on restricting civilian supply almost entirely to relief items did have a considerable impact in delaying economic rehabilitation, particularly in Italy where military responsibility continued for twenty months instead of the six months originally planned. The inauguration both of large-scale military relief shipments and of national import programs was delayed by the priorities the Americans insisted on giving to strictly military needs. This policy in turn was a product of the over-all philosophy that all available resources, American and Allied, must be used first to bring a quick end to the war; postwar problems—political, economic, and military—would have to wait.

The alignment of means and ends, of logistics and strategy, in World War II was, then, a complex and never-ending process. To say that logistical factors were the sole determinants of strategic decision would be as erroneous as to say that the makers of strategy were not constantly limited and bound by the realities of the logistical processes. In the first stage of the war scarcities of both matériel and shipping hamstrung Allied planners at every turn. In the last phase almost every article in the catalogue was in plentiful supply for a one-front war, but the timing of the final blow was still controlled by the logistical processes involved in moving selected portions of the military machine into place. Sometimes singly, sometimes in combination, critical elements succeeded one another as limiting factors. First it was merchant shipping, then assault shipping; and in the final stage it was military manpower and reception and clearance capacity within overseas theaters.

On the surface it appears that, for all the controversies and byways into which planners and statesmen were led or wandered, what emerged was a balanced strategy fundamentally in line with the resources available for its pursuit, and that the logistical effort was

consequently channeled in the right direction and was reasonably economic and efficient despite the waste that must inevitably attend war. All that can really be said with any certainty, however, is that complete military victory was achieved, and that it is difficult to see how it could have been achieved in much less time and at much less cost. The processes by which victory was gained were not the product of any grand design determined in advance but of a series of decisions made under conditions of stress and uncertainty. Flexibility in adjusting to circumstances and in making allocations among many theaters and nations in a multifront coalition was was one of the principal keys to victory. From another vantage point, the American absorption in the pursuit of the goal of complete military victory to the exclusion of postwar political aims is attested in the whole story of resources allocation. Not in the strictly national sphere, or in the partnership with the British, or in the broader international field of lend-lease to other members of the embryo United Nations, did other than military considerations often govern.

Appendix A

Shipping Terminology and Planning Data: 1943–45

Appendix A–1—Weight, Space, and Distance Measurements

Weight Measurements

Type	Pounds	Short Tons	Long Tons	Metric Tons
1 short ton	2,000	1.0000	0.8929	0.9072
1 long ton	2,240	1.1200	1.0000	1.0160
1 metric ton	2,204.6	1.1023	0.9842	1.0000

1 nautical mile	1.1516 statute or land miles.
1 knot	A speed of 1 nautical mile per hour.
1 ship ton or measurement ton (M/T)	40 cubic feet of cargo or ship's cargo space.
1 register ton	100 cubic feet of ship's space.
Gross tonnage	Entire enclosed space on a ship expressed in register tons.
Net tonnage	Entire *useful* cargo capacity of a ship expressed in register tons.
Dead-weight tonnage	Ship's total carrying capacity, including ship's gear, supplies, and personnel, expressed in long tons.
Dead-weight effective lift	Effective cargo lift of a ship expressed in long tons; approximately 80 percent of the dead-weight tonnage.
1,000 gross tons	Approximately 1,500 dead-weight tons, or approximately 1,200 dead-weight effective lift or 1,775 measurement tons.
1 long ton	Equaled approximately 2.1 measurement tons of all Army cargo during World War II.

APPENDIX A-2—CONVERSION FACTORS—SHORT TONS TO MEASUREMENT TONS

Supply Service	Class of Supply	One Short Ton Measurement Tons
Chemical	Class II (all)	2.0
	Class II (weapons)	3.0
	Class IV	2.1
	Class V	1.2
Engineer	Class II (all)	3.5
	Class IV (all)	3.5
	Class II and IV (tractors)	1.7
	Class V	1.1
Medical	Class II	2.0
Ordnance	Class II	
	Vehicles, Noncombat	2.5
	Heavy	4.0
	Medium	4.0
	Light	2.8
	Tanks	1.5
	Self-propelled weapons	1.5
	Heavy artillery	2.4
	Miscellaneous artillery	1.5
	Small arms	1.8
	Misc other Class II	2.5
	Class V	1.0
Quartermaster	Class I	1.8
	Class II	2.9
	Class III	1.4
	Class IV	1.6
Signal	Class II and IV	
	Radar (ground)	3.2
	Radio (ground)	2.2
	Radio (vehicular)	4.0
	Telegraph and telephone	3.0
	Wire and cable	3.0
	Miscellaneous	3.0
Transportation	Class II and IV	
	Railway rolling equipment	2.1
	Marine ship equipment	12.0
	Marine	5.0

Source: ASF Manual M-409, 1 Mar 46, Logistic Data for Staff Planners, p. 13.

APPENDIX A–3—INITIAL CARGO SHIPPING REQUIREMENTS FOR SELECTED UNITS
1945

Type Unit	Strength	Number Vehicles and Wheeled Guns	Organizational Equipment[a] [b]			30-Days Maintenance[d]	30 Days POL[e]	POL Drums	Measurement Tons Per Man[f]
			General Purpose Vehicles and Guns, Boxed[c]	All Other Vehicles on Wheels	All Vehicles on Wheels				
			Measurement Tons	Measurement Tons	Measurement Tons	Measurement Tons	Gallons	Measurement Tons	
Infantry division	14,253	2,230	19,088	2,167	32,169	15,678	501,750	3,041	3.15
Armored division	10,998	2,684	15,890	32,741	60,176	27,142	1,756,946	10,648	8.11
Medium tank battalion	720	212	1,195	3,824	5,919	792	47,700	289	8.72
Light tank battalion	532	156	697	2,156	3,378	585	35,100	213	7.11
Field artillery battalion (155-mm. howitzer)	507	130	1,313	767	2,640	558	29,250	177	5.80
Field artillery battalion (105-mm. howitzer)	509	146	1,563	—	2,450	560	32,850	199	4.62
Antiaircraft battalion (air raid warning) (medium)	801	224	2,801	717	5,066	881	50,400	305	6.12
Engineer combat battalion	637	137	1,500	844	3,326	701	30,825	187	5.32
Engineer aviation battalion	807	234	1,445	3,684	6,073	888	52,650	319	8.07
Ordnance automotive maintenance battalion (base)	804	14	141	124	328	884	3,150	19	1.70
Ordnance ammunition battalion	1,149	60	772	—	1,135	1,264	13,500	82	2.09
Medical battalion	444	90	1,114	—	1,548	488	20,250	123	4.14
Quartermaster truck battalion	467	423	5,266	—	9,622	514	95,175	577	13.86
Military police battalion (Army)	566	77	453	—	679	623	17,325	105	2.34

[a] Other than vehicles and wheeled guns, add 0.25 M/T per man for organizational equipment.

[b] All computations without stowage; the usual stowage factor was 15 percent.

[c] General purpose trucks (¼ ton through 2½ ton) boxed tonnage computed on basis of single unit pack.

[d] Maintenance computed on basis of 1.1 M/T per man per month excluding ammunition and gasoline and oil. Armored elements have an added allowance of 25-percent replacement of vehicles monthly.

[e] Gasoline requirements for ground troops computed on basis of an average of 7.5 gallons per day per vehicle. Armored forces requirements based on Armored Force data.

[f] On assumption all general purpose vehicles boxed. Includes additional 0.25 M/T per man for organizational equipment not shown in table but does not include bulk POL shipped in tankers or ammunition.

Source: FM 101–10, 1 Aug 45 ed., par. 243.

APPENDIX A-4—INITIAL SUPPLY REQUIREMENTS BY THEATER[a]

(IN MEASUREMENT AND SHORT TONS PER MAN)

Service	European and Mediterranean Theaters of Operation		Pacific		China-Burma-India	
	Measurement Ton	Strength	Measurement Ton	Strength	Measurement Ton	Strength
Total	4.2000	2.5156	3.4000	1.9766	3.2000	2.0181
Chemical	0.0230	0.0163	0.0350	0.0249	0.0192	0.0136
Engineer	1.3758	0.3990	1.2223	0.3545	0.8397	0.2435
Medical	0.0760	0.0380	0.0847	0.0424	0.0682	0.0341
Ordnance	1.9857	1.7276	1.4800	1.2875	1.6755	1.4577
Quartermaster	0.3091	0.1793	0.2798	0.1623	0.2534	0.1470
Signal	0.2402	0.0793	0.2043	0.0674	0.2189	0.0722
Transportation	0.1902	0.0761	0.0939	0.0376	0.1251	0.0500

[a]These figures were compiled by ASF officers shortly after the war, based on a study of actual monthly shipments from U.S. ports to each theater over a representative period of operations as reflected in MPR-3, Transportation, to be used as a general guide. The data do not include bulk petroleum products shipped by tanker or initial equipment that might have been acquired in the theater from Army stockpiles or local procurement. The figures for measurement tonnage, moreover, do not include an allowance for a stowage factor.

Source: Draft, Logistical Data for Staff Planners, prepared by Command and Staff College, Fort Leavenworth, Kans., Sep 46, p. 33.

APPENDIX A–5—MAINTENANCE REQUIREMENTS,[a] EUROPEAN AND PACIFIC AREAS, WORLD WAR II

Item	Pounds Per Man Per Day		M/T Per Man Per Month With 15-Percent Stowage[b]	
	Europe	Pacific	Europe	Pacific
Total[c]	66.800	67.400	2.020	2.030
Class I: Rations	7.170	6.710	.261	.244
Class II				
Qm clothing and equipage	0.426	1.000	.014	.035
Qm general supplies	0.305	0.730	.016	.036
Ordnance vehicle replacement	0.620	0.620	.023	.023
Engineer	0.630	0.370	.035	.023
Ordnance	2.710	0.300	.085	.010
Chemical	0.025	0.567 (incl Class IV)	.002	.024
Signal (including Class IV)	0.725	0.750	.048	.048
Medical (including Class I and IV)	0.300	0.330	.015	.015
Total[c]	5.740	4.670	.238	.214
Class III				
Gas, oil, grease (less AF)[d]	11.400	10.800	.296	.279
AF fuel and lubricants[d]	13.400	11.080	.347	.286
Fuel for temperate zone	8.500	8.500	.294	.294
Total[c]	33.300	30.400	.937	.859
Class IV				
Medical (included in Class II)	—	—	—	—
Ordnance motor maintenance	0.510	0.180	.009	.003
Qm sales items	2.000	1.970	.059	.059
AF supply and replacement	2.840	2.840	.198	.198
Engineer construction material	7.280	11.900	.189	.308
Signal (included in Class II)	—	—	—	—
Chemical	Negligible	(Incl Class II)	Negligible	(Incl Class II)
Transportation	Negligible	0.130	Negligible	.006
Total[c]	12.600	17.000	.455	.574
Class V				
Ammunition (less AF)	3.640	5.140	.058	.081
AF ammunition	4.410	3.470	.068	.054
Total	8.050	8.610	.126	.135

[a] The term *maintenance requirements* as used here may be construed to mean all shipments to the theater for use by the Army except for initial equipment.

[b] This figure is computed by converting short tons into measurement tons through use of the appropriate conversion factor for each item and the addition of 15 percent for stowage loss. Figures on short tonnage and conversion factors in source omitted.

[c] Minor discrepancies in totals due to rounding.

[d] Assumes 90 percent of quantities shown shipped by tanker and 10 percent in packaged containers.

Source: FM 101–10, Aug 49 ed., pp. 303–04.

Appendix B

Landing Craft

Appendix B–1—Principal Types of Allied Landing Craft, Ships, and Vehicles Used in Operations 1943-45[a]

Nomenclature		Builder	Length	Beam	Displacement	Capacity
LCA	Landing craft, assault	U.K.	41′	10′	8.5 tons (light)	35 troops and 800 lbs. equipment
LCP(L)	Landing craft, personnel (large)	U.S.	36′	10′9″	13,500 lbs. (light)	36 troops or 8,100 lbs. cargo
LCP(L)	Landing craft, personnel (large)	U.K.	36′10″	10′10″	13,000 lbs. (light)	25 equipped troops or 6,700–8,100 lbs. cargo
LCP(R)	Landing craft, personnel (ramp)	U.S.	35′10″	10′9″	13,500 lbs. (light)	36 troops or 8,100 lbs. cargo
LCI(L) (1-350)	Landing craft, infantry (large)	U.S.	160′	23′3″	194 tons (light)	6 officers and 182 men or 75 tons cargo
LCM(3) (Mark 3)	Landing craft, mechanized	U.S.	50′	14′1″	26 tons (light)	One 30-ton tank or 60,000 lbs. cargo or 100 troops
LCM(6) (Mark 6)	Landing craft, mechanized	U.S.	56′	14′1″	26 tons (light)	One 34-ton tank or 68,000 lbs. cargo or 120 troops
LCT(1) (Mark 1)	Landing craft, tank	U.K.	152′	29′	226 tons (light)	Three 40-ton tanks, or six 25-ton tanks, or six 16-ton tanks, or 250 tons cargo
LCT(2) (Mark 2)	Landing craft, tank	U.K.	159′11″	31′	296 tons (light)	Approximately same as LCT(1)
LCT(3) (Mark 3)	Landing craft, tank	U.K.	192′	31′	350 tons (light)	Five 40-ton tanks or ten 3-ton trucks or 300 tons cargo; 24 Army personnel
LCT(4) (Mark 4)	Landing craft, tank	U.K.	192′	31′	350 tons (light)	Maximum load 240 tons
LCT(5) (Mark 5)	Landing craft, tank	U.S.	114′2″	32′	133 tons (light)	Five 30-ton or four 40-ton or three 50-ton tanks, or 9 trucks or 150 tons cargo

LCT(6)	Landing craft, tank	U.S.	119′½″	32′	143 tons	Four medium or three 50-ton tanks, or 150 tons cargo; accommodations for 8 troops
LCV	Landing craft, vehicle	U.S.	36′4″	10′11½″	7 tons (light)	One 1-ton truck or 36 troops or 10,000 lbs. cargo
LCVP	Landing craft, vehicle, personnel	U.S.	35′9″	10′11½″	18,700 lbs.	36 troops or 8,100 lbs. cargo or 3 tons vehicles
LCC(1) (Mark 1)	Landing craft, control	U.S.	56′	13′7″	23 tons	Crew only
LCC(2) (Mark 2)	Landing craft, control	U.S.	56′	14′6″	25 tons	Crew only
LCS(S)(1) (Mark 1)	Landing craft, support (small)	U.S.	36′8½″	10′11½″	20,000 lbs.	3–4 plus crew and gunners
LCS(S)(2) (Mark 2)	Landing craft, support (small)	U.S.	36′8½″	10′11½″	22,000 lbs.	3–4 plus crew and gunners
LCS(L)(3) (Mark 3)	Landing craft, support (large)	U.S.	158′0½″	23′3″	250 tons (light)	Crew only
LCE	Landing craft, emergency repair	U.K.	36′3″	10′10″	23,500 lbs.	Crew and repair gear
LSD	Landing ship, dock	U.S.	457′9″	72′	4,032 tons (light)	3 LCT (5 and 6)'s each with 5 medium tanks, or 2 LCT (3 and 4)'s each with 12 medium tanks, or 14 LCM (3)'s each with 1 medium tank, or 1,500 long ton cargos or 41 LVT's, or 47 DUKW's; troops: 22 officers, 310 men
LSM	Landing ship, medium	U.S.	203′6″	34′6″	743 tons (landing)	5 medium or 3 heavy tanks (165 tons maximum payload landing) or 6 LVT's or 9 DUKW's; troops: 48
LST (Merchant conversion)	Landing ship, tank	U.K.	382′6″	64′	3,952–4,890 tons (gross)	18 heavy or 22 25-ton tanks or 33 trucks; 2 LCM's or smaller on deck
LST(1) (Class 1)	Landing ship, tank	U.K.	400′	49′	2,840 tons (light)	1 LCM or 1 LCS; 13 40-ton tanks or 27 loaded 3-ton trucks (150 tons total); troops: 193
LST (U.K. designation: LST(2))	Landing ship, tank	U.S.	328′	50′	1,625 tons (light)	1,600–1,900 tons (ocean-going maximum) (400 tons main deck load); troops: 16 officers, 147 men

Appendix B–1—Principal Types of Allied Landing Craft, Ships, and Vehicles Used in Operations 1943–45[a]—Continued

Nomenclature		Builder	Length	Beam	Displacement	Capacity
LST(3)	Landing ship, tank	U.K.	345′10″	54′	3,065 tons (beaching)	5 LCA's, 1 LCT(6), or 14 trucks on upper deck; 27 25-ton tanks or 15 40-ton tanks on tank deck; troops: 168
LSV	Landing ship, vehicle	U.S.	45–54′	60′	5,615 (light)	19–21 LVT's, 29–44 DUKW's, 800 troops
LVT(2) (Mark 2)	Landing vehicle, tracked	U.S.	26′1″	10′8″	25,200 lbs. (unloaded)	6,500 lbs. cargo or 24 equipped troops
LVT(3) (Mark 3)	Landing vehicle, tracked	U.S.	24′1½″	11′	28,000 lbs. (unloaded)	8,000 lbs. cargo or 24 equipped troops
LVT(4) (Mark 4)	Landing vehicle, tracked	U.S.	26′1″	10′8″	23,350 lbs. (unloaded)	8,000 lbs. cargo, maximum
LVT(A)(4) (Mark 4)	Landing vehicle, tracked (armored)	U.S.	26′1″	10′8″	35,100 lbs.	5,000 lbs. ammunition and gear
DUKW	2½-ton, 6x6 amphibian truck	U.S.	31′	8′	13,000 lbs. (light)	25 equipped troops, or 12 loaded litters, or 5,000 lbs. cargo
Jeep	¼-ton, 4x4, amphibian truck	U.S.	15′7″	5′4″	3,700 lbs. (light)	800 lbs. cargo

[a] Types selected are those identified in ONI 226 as "major operational types." Larger types of landing ships such as the British LSI's of various types, and American AGC's, APD's, APA's, and AKA's are not listed as their characteristics were not standard but varied between individual vessels and classes.

Source: ONI 226, 7 Apr 44, Allied Landing Craft and Ships, and Supplement No. 1 to ONI 226.

Appendix B–2—U.S. Production of Major Types of Landing Ships and Craft 1940–45

Date	LST	LSD	LSM and LSM(R)	LCI(L)	LCT (5 and 6)	LCP (L and R)	LCV	LCVP	LCM (2, 3, and 6)	LVT	LVT(A)
Total....	1,041	22	528	921	1,435	4,824	2,366	23,358	11,496	15,501	3,119
1940–41.....	0	0	0	0	0	564	110	0	125	72	0
1942											
January–June....	0	0	0	0	1	553	446	0	84	268	2
July.....	0	0	0	0	1	307	173	0	118	74	0
August.....	0	0	0	0	45	218	382	0	307	94	0
September.....	0	0	0	1	156	222	255	0	131	105	0
October.....	1	0	0	25	152	228	166	0	203	52	1
November.....	18	0	0	59	101	212	254	75	244	133	0
December.....	43	0	0	68	9	130	215	140	168	125	0
1943											
January.....	46	0	0	70	5	37	180	205	114	103	0
February.....	61	0	0	47	0	44	73	319	156	86	0
March.....	28	0	0	22	0	18	6	655	406	75	0
April.....	17	0	0	10	0	57	1	405	143	35	7
May.....	27	0	0	3	0	0	14	416	236	61	47
June.....	27	1	0	9	1	0	29	567	146	117	55
July.....	24	0	0	16	0	0	35	1,073	244	174	58
August.....	22	1	0	22	10	0	24	812	401	219	45
September.....	23	2	0	23	32	0	2	943	502	236	68
October.....	16	2	0	25	44	50	1	836	585	243	65
November.....	20	1	0	28	46	50	0	921	563	259	70
December.....	25	1	0	30	38	50	0	875	523	246	73
1944											
January.....	28	2	0	35	65	50	0	833	578	341	101
February.....	18	1	0	34	84	50	0	932	641	397	114
March.....	28	1	0	54	81	50	0	811	594	604	181
April.....	50	0	3	69	100	50	0	744	470	680	194
May.....	82	0	39	78	83	50	0	792	487	762	217
June.....	37	1	34	60	76	50	0	792	446	696	198
July.....	46	2	39	44	79	100	0	760	441	615	196
August.....	47	0	47	36	71	150	0	712	421	583	176
September.....	46	0	42	27	67	150	0	709	411	510	127
October.....	43	0	46	26	48	217	0	696	293	696	173
November.....	45	0	43	0	28	172	0	753	222	652	151
December.....	43	0	43	0	12	163	0	756	206	599	130
1945											
January.....	40	0	45	0	0	150	0	808	135	683	125
February.....	28	0	31	0	0	125	0	837	133	727	125
March.....	25	1	36	0	0	125	0	913	120	817	115
April.....	19	2	27	0	0	105	0	816	102	790	70
May.....	13	1	22	0	0	125	0	910	93	792	65
June.....	5	1	9	0	0	90	0	676	99	785	60
July.....	0	2	11	0	0	80	0	559	104	589	58
August.....	0	0	11	0	0	32	0	307	101	406	52

Source: CPA, Official Munitions Production of the United States, May 1, 1947, pp. 99–104.

Appendix C

Army Procurement

Appendix C–1—Estimated Value of War Department Procurement Deliveries January 1942–December 1945[a]

(In Thousands of Dollars)

Category	Total	1 January 1942–30 June 1943[b]	July–December 1943	1944		1945	
				January–June	July–December	January–June	July–December
Total	[c]$110,891,874	$33,251,574	$17,710,160	$18,453,502	$18,396,641	$18,217,630	$4,862,367
Army Service Forces	69,248,874	22,364,574	10,654,160	10,246,502	11,122,641	11,424,630	3,436,367
Ordnance Department	34,163,060	12,144,932	5,783,406	4,657,338	5,067,075	5,467,342	1,042,967
Heavy field artillery	358,660	56,833	47,456	61,472	87,772	95,703	9,424
Light and medium artillery	2,984,063	1,410,589	582,941	384,131	298,782	253,349	54,271
Small arms	2,177,503	745,381	473,717	373,994	298,396	254,310	31,705
Ammunition							
Heavy artillery	1,267,114	332,137	72,355	124,877	260,044	423,977	53,724
Light and medium artillery	5,693,805	1,593,457	861,236	978,160	974,484	1,109,077	177,391
Small arms	2,397,945	1,028,173	578,009	283,691	188,944	267,185	51,943
Bombs	2,788,933	577,645	393,892	378,460	597,483	705,791	135,662
Tanks	5,692,155	2,481,104	794,309	573,364	790,022	887,465	165,891
Self-propelled weapons	1,643,752	627,657	431,953	204,943	190,612	118,623	69,964
Trucks							
Under 2½ tons	2,459,199	1,090,664	398,680	308,768	306,114	299,234	55,739
2½ tons	2,750,717	993,050	358,611	373,830	436,806	468,899	119,521
Over 2½ tons	1,550,418	461,308	230,724	210,490	294,846	290,134	62,916
Other Ordnance items	2,398,796	746,934	559,523	401,158	342,770	293,595	54,816
Corps of Engineers	4,853,759	1,262,547	775,671	789,257	989,517	807,402	229,365
Boats and bridging	306,299	66,269	31,878	45,582	62,386	72,336	27,848
Tractors, transfer type	771,393	216,279	106,123	117,181	170,402	132,635	28,773
Construction equipment	1,463,949	282,023	243,568	317,930	333,893	220,547	65,988
Other Engineer equipment	2,312,118	697,976	394,102	308,564	422,836	381,884	106,756
Quartermaster Corps	21,711,572	6,929,572	2,653,787	3,034,764	3,519,278	3,784,367	1,789,804
Clothing	5,452,286	2,303,987	721,899	572,982	624,274	829,309	399,835
Equipage	2,809,936	1,415,454	296,656	194,911	319,755	419,743	163,417

Subsistence	$ 11,392,689	$ 2,563,389	$ 1,307,842	$ 1,921,151	$ 2,185,773	$ 2,286,416	$ 1,128,118
Other Quartermaster items	2,056,661	646,742	327,390	345,720	389,476	248,899	98,434
Medical Department	786,121	299,794	133,212	93,792	75,525	123,636	60,162
Chemical Warfare Service	1,699,352	397,008	281,162	338,564	299,760	294,561	88,297
Signal Corps	3,962,487	921,809	726,457	826,762	684,618	665,374	137,467
Radio equipment	1,121,995	277,687	228,268	238,622	183,977	170,910	22,531
Radar equipment	612,612	169,267	148,347	165,161	40,042	65,137	24,658
Telegraph and telephone equipment	429,952	62,184	74,088	101,453	103,097	75,856	13,274
Wire and cable	536,338	114,298	61,177	88,724	108,144	138,297	25,698
Other Signal items	1,261,590	298,373	214,577	232,802	249,358	215,174	51,306
Transportation Corps	2,072,523	408,912	300,465	506,025	486,868	281,948	88,305
Railway equipment	807,494	193,433	98,429	175,141	140,423	123,269	76,799
Marine equipment	1,238,527	213,312	198,533	321,356	337,696	156,124	11,506
Other Transportation items	26,502	2,167	3,503	9,528	8,749	2,555	0
Army Air Forces	[c]41,643,000	10,887,000	7,056,000	8,207,000	7,274,000	6,793,000	[c]1,426,000
Aircraft	[c]34,3 ?,000	8,876,000	5,829,000	7,097,000	6,056,000	5,426,000	[c]1,068,000
Signal equipment	[c]3,03 ?00	852,000	557,000	427,000	484,000	601,000	[c]110,000
Other	[c]260,000	1,159,000	670,000	683,000	734,000	766,000	[c]248,000

a Dollar amounts were computed from physical quantities delivered and units costs as of 1945; they do not take into consideration price changes or contract renegotiations and do not measure exact cost to the government.

b Quarterly breakdown in Leighton and Coakley, *Global Logistics and Strategy, 1940–1943*, App. B–2.

c AAF data for September–December 1945 not available and therefore excluded from totals.

Source: Crawford and Cook, Statistics: Procurement, 9 Apr 52. AAF data from Table PR–2 and rounded to nearest million; ASF data from Table PR–3 rounded to nearest thousand.

APPENDIX C–2—DELIVERIES OF SELECTED ITEMS OF MUNITIONS TO THE ARMY 1942–45

Item	Total 1942–45	1942	1943	1944	1945
Aircraft					
Fighter, bomber, reconnaissance	129,255	19,230	37,985	49,406	22,634
Transport, trainer, communications	80,930	21,862	30,615	20,550	7,903
Artillery (field, self-propelled, tank and antitank)					
240-mm. howitzer	315	6	57	158	[a]94
8-inch gun and howitzer	1,193	142	191	611	[a]249
155-mm. gun and howitzer	6,389	458	2,067	2,475	[a]1,389
105-mm. howitzer	18,269	5,553	3,831	4,808	[a]4,077
4.5-inch gun	426	41	345	40	[a]0
90-mm. gun	4,853	0	50	1,641	[a]3,162
76-mm. gun	14,952	0	2,500	8,709	[a]3,743
75-mm. gun, rifle, howitzer	58,342	22,806	24,789	5,959	[a]4,788
3-inch gun	9,324	1,307	7,017	1,000	[a]0
57-mm. gun	16,999	4,177	6,918	3,902	[a]2,002
37-mm. gun	62,397	38,168	19,779	4,255	[a]195
Artillery, antiaircraft					
120-mm. and 90-mm.	8,210	3,286	4,474	450	[a]0
40-mm. and 37-mm.	40,890	11,223	19,685	9,186	[a]796
Rocket launchers, 2.36 inch	476,628	67,428	98,284	215,177	[a]95,739
Mortars, Ordnance type, 155-mm., 81-mm., and 60-mm.	95,536	10,160	24,289	21,732	[a]39,355
Mortars, chemical, 4.2 inch and 3 inch	8,768	823	2,002	5,096	847
Machine guns, .50 and .30 caliber					
Aircraft	1,575,114	352,900	501,493	540,200	[a]180,521
Ground	945,989	270,256	298,324	255,132	[a]122,277
Antiaircraft	72,777	39,175	30,152	3,450	[a]0
Rifles, .30 and .303 caliber	6,174,363	1,425,926	1,723,696	1,400,608	[a]624,133
Carbines, .30 caliber	6,117,822	115,793	2,959,336	2,088,697	[a]953,996
Submachine gun, .45 caliber	1,790,847	602,493	648,230	347,463	[a]192,661
Ammunition (thousands of rounds)					
240-mm. and 8-inch	3,126	134	264	813	[a]1,915
155-mm.	27,340	4,920	4,914	8,567	[a]8,939
105-mm.	93,081	10,487	14,884	37,790	[a]29,920
90-mm.	16,386	3,207	3,843	4,667	[a]4,669
75-mm.	75,244	18,792	27,931	20,815	[a]7,706
37-mm.	100,500	49,044	44,425	4,334	[a]2,697
Mortar (all ordnance types)	95,174	11,513	23,424	31,645	[a]28,592
Mortar, 4.2-inch, chemical	11,344	316	1,669	5,148	[a]4,211
Bombs (thousands)	37,701	3,447	8,140	13,790	[a]10,324
Tanks, all types	84,027	24,997	29,497	17,565	11,968
Heavy	2,464	1	35	54	2,374
Medium	55,560	14,049	21,250	13,468	6,793
Light	26,003	10,947	8,212	4,043	2,801
Trucks, all types	2,166,093	619,735	621,502	596,963	327,893
¼ ton (jeep)	631,873	177,759	180,417	182,068	91,628
Others, 1 ton and under	273,723	96,238	76,071	63,133	38,281
Medium—to 2½ tons	376,904	140,375	133,523	80,888	22,118
2½ ton	740,550	182,049	193,177	220,012	145,312
Heavy—over 2½ tons	143,044	23,314	38,314	50,862	30,554

APPENDIX C–2—DELIVERIES OF SELECTED ITEMS OF MUNITIONS TO THE ARMY 1942–45—Continued

Item	Total 1942–45	1942	1943	1944	1945
Tractors, high-speed military types, Ordnance-procured	31,627	7,433	12,674	8,106	3,144
Tractors, crawler type (diesel)	78,030	11,934	20,167	28,785	17,144
Tractors, gasoline engines (Engineer-procured)	4,069	10	1,236	2,250	573
Portable ground radios, short range	367,194	29,997	65,382	140,963	130,852
Field wire (W–110–B, W–130, W–143, and WS–1–TS) (miles)	5,777,063	1,251,335	1,172,121	1,713,331	1,640,276
Tents, shelter half (thousands)	24,929	11,299	3,621	3,803	6,206
Footwear, various types (thousands of pairs)	126,978	36,755	31,670	28,150	30,403
Railway cars, all gauges	95,290	9,118	42,633	37,116	6,423
Railway locomotives, all gauges	7,570	903	2,123	2,655	1,889

[a] Includes data for period 1 January through 30 August 1945 only.
Source: Crawford and Cook, Statistics: Procurement, 9 Apr 52.

Appendix D

Overseas Deployment and Support

Appendix D–1—Army Personnel Movement Overseas by Theater of Destination December 1941–August 1945

Period	Total	European	Mediterranean[a]	American (Atlantic)[b]	Alaska and Northwest Service Command	Central Pacific[c]	South Pacific	Southwest Pacific	China and Burma-India
Total[d]	7,293,300	3,344,063	1,071,642	206,847	245,745	822,933	274,905	1,073,673	253,492
December 1941–June 1943[e]	1,673,221	386,309	476,140	129,572	131,741	164,313	133,214	221,904	30,028
Third quarter 1943	501,462	184,129	114,245	9,293	44,482	34,595	21,657	53,766	39,295
Fourth quarter 1943	681,524	399,694	78,129	8,064	8,234	40,970	40,153	68,110	38,170
First quarter 1944	823,983	453,028	107,236	8,701	13,017	54,676	48,251	106,664	32,410
Second quarter 1944	687,810	377,576	66,803	8,438	10,915	79,777	31,630	89,177	23,494
Third quarter 1944	796,832	522,808	63,261	5,256	12,150	[d]106,944	[d]	66,318	20,095
Fourth quarter 1944	763,502	446,813	105,315	14,084	10,749	77,097	[d]	79,407	30,037
First quarter 1945	736,897	479,425	47,392	11,254	5,093	81,009	[d]	89,068	23,656
Second quarter 1945	364,317	79,529	11,469	7,075	4,184	118,907	[d]	129,941	13,212
July–August 1945	263,752	14,752	1,652	5,110	5,180	64,645	[d]	169,318	3,095

[a] Includes Central Africa and Middle East as well as main Mediterranean theater.
[b] Includes North and South Atlantic bases, eastern Canada, and Latin America.
[c] After June 1944, South Pacific figures included in Central Pacific.
[d] Includes 6,902,609 troops, 252,170 Navy personnel, and 138,521 civilians, Allied military personnel, and enemy prisoners of war.
[e] For monthly breakdown of totals during this period, see Leighton and Coakley, *Global Logistics, 1940–1943*, app. E–1.
Source: ASF Statistical Review, World War II, app. G, pp. 121–22.

Appendix D-2—Army Cargo Shipped Overseas by Theater of Destination December 1941–August 1945

(Measurement Tons)

Period	Total	European	Mediterranean[a]	American[b] (Atlantic)	Alaska and Northwest Service Command	Central Pacific[c]	South Pacific[c]	Southwest Pacific	China and Burma-India
Total	[d]126,787,875	45,300,680	27,703,582	4,559,842	6,888,398	14,070,539	3,540,815	18,356,214	6,367,805
1943									
December 1941–June[e]	23,828,335	3,716,326	7,302,189	2,833,797	3,375,948	2,280,018	1,446,665	2,272,415	600,977
Third quarter	8,255,566	2,432,804	2,545,419	390,402	1,006,949	196,424	434,594	809,173	439,801
Fourth quarter	8,535,343	2,794,368	2,021,892	199,305	523,829	662,290	542,253	1,147,942	643,464
1944									
First quarter	9,974,369	3,542,943	2,589,710	140,446	517,700	710,798	540,952	1,213,711	718,109
Second quarter	12,396,675	5,465,269	2,710,972	145,211	522,539	822,615	576,351	1,552,595	601,123
Third quarter	13,366,289	6,063,084	2,892,580	208,905	421,041	1,636,832	[c]	1,634,768	509,079
Fourth quarter	12,775,612	5,544,829	2,440,827	171,468	202,640	1,420,916	[c]	2,200,859	794,073
1945									
First quarter	15,643,480	8,387,069	1,916,813	144,600	118,844	2,284,447	[c]	1,784,624	1,007,083
Second quarter	14,679,405	5,637,109	2,012,436	201,394	123,727	2,902,722	[c]	3,084,761	717,256
July–August	7,332,801	1,716,879	1,270,744	124,314	75,181	1,153,477	[c]	2,655,366	336,840

[a] Includes Central Africa and Middle East as well as main Mediterranean theater.
[b] Includes North and South Atlantic bases, eastern Canada, and Latin America.
[c] After June 1944, South Pacific figures included in Central Pacific.
[d] Includes commanding general lend-lease shipments and Navy cargo shipped on Army vessels.
[e] For monthly breakdown of totals during this period, see Leighton and Coakley, *Global Logistics, 1940–1943*, app. E–2.
Source: ASF Statistical Review, World War II, app. G, pp. 131–32.

APPENDIX D-3—ARMY DEPLOYMENT—CONTINENTAL AND OVERSEAS: JULY 1943–SEPTEMBER 1945

Date	Total Personnel	Continental United States	Total Overseas and En Route	En Route Overseas	Overseas But Assigned to ZI Commands[a]	European Command	Mediterranean	Atlantic Stationary Area and Canada	Middle East and Africa[b]	Pacific Including Alaska	China, Burma and India
1943											
30 June	6,993,102	5,355,683	1,637,419	40,652	501	185,532	520,087	198,663	66,077	591,772	34,135
30 September	7,273,784	5,239,683	2,034,101	52,299	672	361,947	610,965	177,688	59,384	709,948	61,198
31 December	7,482,434	4,864,359	2,618,075	132,638	1,051	768,274	597,658	154,959	50,553	818,382	94,560
1944											
31 March	7,757,629	4,414,038	3,343,591	176,946	1,265	1,208,985	670,234	142,028	45,548	964,092	134,493
30 June	7,992,868	4,110,644	3,882,224	64,207	[c]74,261	1,641,143	717,693	113,275	39,154	1,094,084	138,407
30 September	8,108,129	3,679,230	4,428,899	109,525	103,183	2,053,417	712,915	97,835	37,093	1,165,917	149,014
31 December	8,052,693	3,119,011	4,933,682	69,532	153,145	2,699,467	498,675	92,008	35,968	1,204,482	180,405
1945											
31 March	8,157,386	2,753,455	5,403,931	76,347	[d]226,523	3,029,579	496,721	86,356	31,614	1,259,382	197,409
30 June	8,266,373	3,026,651	5,239,722	81,588	277,208	2,811,820	404,242	79,370	24,899	1,366,037	194,558
30 September	7,564,514	3,405,704	4,158,810	44,456	276,704	1,790,817	189,994	69,197	17,656	1,588,648	181,338

[a] Personnel assigned AAF, ASF, and AGF and other War Department agencies stationed outside the United States. Area not specified.
[b] Includes Persian Gulf Command.
[c] From 30 June 1944 would include personnel of Twentieth Air Force in CBI and Pacific.
[d] From 30 March 1945 would also include personnel of ASF base in Philippines.
Source: Strength of the Army, STM-30, 1 Jan 48, CSCSO-31.

APPENDIX D–4—DEPLOYMENT OF U.S. ARMY DIVISIONS OVERSEAS BY THEATER JULY 1943–AUGUST 1945

Date	Total Overseas	Atlantic					Pacific				
		Total European Area	United Kingdom	Mediterranean	Northwest Europe (Continent)	Southern France	Total Pacific Area	Central Pacific Area	South Pacific Area	Southwest Pacific Area	North Pacific
1943											
31 January	21	11	2	9	—	—	10	3	4	2	1
30 September	26	13	4	9	—	—	13	5	4	4	0
31 December	30	17	11	6	—	—	13	5	4	4	0
1944											
31 March	40	25	17	[a]8	—	—	15	4	5	6	0
30 June	50	29	8	8	13	—	21	6	5	10	0
30 September	60	39	1	5	30	3	21	6	0	15	0
31 December	77	57	3	6	41	7	21	6	0	15	0
1945											
31 March	89	68	0	7	52	9	21	6	0	15	0
30 June	86	65	0	7	49	9	21	5	0	16	0
31 August	73	51	0	5	38	8	22	5	0	17	0

[a] Includes 2d Cavalry Division, which was disbanded in June 1944 in the theater.

APPENDIX D–5—TROOP AND CARGO FLOW TO THE UNITED KINGDOM FOR OVERLORD JANUARY 1943–JULY 1944

Month	Total Cargo Shipped (M/T)	Cargo Preshipped (M/T)	Percentage of Total	Total Cargo Arrived (M/T)	Troops Shipped	Troops Arrived
Total	17,354,203	4,916,608	28.3	15,572,634	1,633,089	[a]1,703,410
1943						
January	129,694	—	—	117,913	14,443	13,351
February	92,948	—	—	75,566	2,921	1,406
March	115,856	—	—	65,767	680	1,277
April	134,950	[b]	[b]	111,245	3,362	2,078
May	251,832	[c]557,618	[c]35.4	87,056	40,055	19,220
June	542,001	—	—	348,900	32,848	49,972
July	779,906	—	—	670,024	54,843	53,274
August	730,300	355,658	48.7	753,429	46,085	41,681
September	906,981	366,586	40.4	778,102	76,616	81,116
October	1,018,343	371,602	36.5	956,888	156,377	105,557
November	848,054	457,868	54.0	790,754	67,555	[a]173,860
December	910,482	318,314	35.0	1,008,150	165,301	133,716
1944						
January	982,738	263,185	26.8	886,359	119,015	166,405
February	1,170,235	407,928	34.9	815,948	187,755	136,684
March	1,370,183	335,463	24.5	1,443,248	136,051	124,412
April	1,637,690	465,330	28.4	1,478,651	125,791	216,699
May	2,003,987	391,723	19.5	1,482,294	130,152	108,463
June	1,815,145	340,154	18.7	1,609,569	112,016	121,511
July	1,912,878	[d]285,179	[d]14.9	2,092,771	161,223	152,728

[a] Includes arrivals from Mediterranean and Iceland, mainly in November 1943.
[b] Data not available before May 1943.
[c] For months of May, June, and July 1943 inclusive.
[d] Preshipment continued through August and September 1944, totaling in those months 561,963 measurement tons, or 13.6 percent of total shipments.

Source: Richard M. Leighton, The Problem of Troop and Cargo Flow in Preparing the European Invasion, MS, OCMH, Appendix.

Appendix E

The Division and Air Group Slice

Appendix E-1—Divisional Force Analysis of Actual Army Strength on 30 June 1945

Categories	Total Strength	Per Division
Total worldwide strength in ground forces and supporting service forces including Army support of Air Forces	6,042,277	67,900
Combat divisions (89)	1,229,321	13,800
Combat sustaining force		
Ground forces-type units, outside of ZI	1,333,349	
Ground forces-type units, training in ZI	93,611	
Total combat sustaining force	1,426,960	16,000
Communications Zone sustaining force		
Service force-type units, outside of ZI	1,031,759	
Service force-type units, training in ZI	56,323	
Theater overhead (180,316)		
excluding Air Forces overhead	144,250 (est)	
Students and replacements outside ZI	209,226	
Hospital patients in theaters (92,468)		
excluding Air Forces patients	[a]89,700 (est)	
Air support units (ASWAF) in Army	167,257 (est)	
Total Communications Zone sustaining force	1,698,515	19,100
Zone of Interior sustaining force		
AGF ZI overhead, bulk	134,599	
ASF ZI overhead (bulk personnel and T/O Units)	521,505	
Students and replacements (AGF and ASF)	717,945	
In reception centers and induction stations	44,763	
Casuals awaiting reassignment	44,469	
Hospital patients in ZI (231,138)		
excluding Air Forces patients	[a]224,200 (est)	
Total ZI sustaining force	1,687,481	19,000

[a] Estimate based on proportion among hospitalized battle casualties. Inclusion of nonbattle casualties would increase the proportion of hospitalized members of the Air Forces and reduce the above divisional force portion.

Source: Figures furnished by Office, Comptroller of the Army, February 1951.

APPENDIX E–2—DIVISION SLICES FOR THEATERS

(BASED ON TROOP DEPLOYMENT, 30 JUNE 1945)

Theater	Classification of Troops									
	Combat[a] (AGF)		Combat Support[b] (AGF)		Combat Service Support[c] (AGF)		Service Support[d] (ASF)		Total Division Slice	
	Strength	Pct. of Slice	Strength	Pct. of Slice	Strength	Pct. of Slice	Strength	Pct. of Slice	Strength	Pct. of Slice
European[e]	13,301	37.49	6,692	18.86	7,323	20.64	8,164	23.01	35,480	100
Mediterranean[f]	13,616	41.92	4,395	13.53	7,844	24.15	6,626	20.40	32,481	100
Southwest Pacific Area[g]	13,551	39.46	6,267	18.25	5,467	15.92	9,055	26.37	34,340	100
Central Pacific Base Command[h]	14,045	26.49	17,046	32.15	11,071	20.88	10,858	20.48	53,020	100

[a] Those units or organizations whose primary mission is destruction of enemy forces and/or installations.

[b] Those units or organizations whose primary mission is to furnish operational assistance for the combat elements.

[c] Those units or organizations whose primary mission is that of service in support of the combat and combat support elements.

[d] Those units or organizations whose primary mission is that of service in support of the combat and combat support elements, and which normally operate in the communications zone.

[e] Number of divisions in basis: 61.

[f] Number of divisions in basis: 7.

[g] Number of divisions in basis: 15.

[h] Number of divisions in basis: 6. The relatively high support strengths for the Central Pacific Base Command are explained in part by the Army support rendered to 6 Marine divisions also present in the theater. The Marine divisions are not included in the combat strength shown because the extent of support rendered these divisions by Navy and Marine sources is not known.

Source: ASF Manual M–409, 1 Mar 46, Logistic Data for Staff Planners, pp. 15–16.

Appendix E-3—Air Group Slices for Theaters

(Based on Troop Deployment, 30 June 1945)

Theater	Classification of Troops											
	Combat		Air Corps Service (AAF)		Misc Operating Personnel (AAF)		Arms and Services (AAF)		Service Support (ASF)		Total Group Slice	
	Strength	Pct. of Slice	Strength	Pct. of Slice	Strength	Pct. of Slice	Strength	Pct. of Slice	Strength	Pct. of Slice	Strength	Pct. of Slice
European[a]	2,246	40.94	979	17.85	215	3.92	783	14.27	1,263	23.02	5,486	100
Mediterranean[b]	2,136	41.62	720	14.03	200	3.90	1,029	20.05	1,047	20.40	5,132	100
Southwest Pacific Area[c]	1,581	20.85	1,222	16.11	293	3.86	2,488	32.81	2,000	26.37	7,584	100
Central Pacific Base Command[d]	2,141	32.48	1,150	17.45	493	7.48	1,457	22.10	1,351	20.49	6,592	100

[a] Number of groups in basis: 107.
[b] Number of groups in basis: 39.
[c] Number of groups in basis: 30.
[d] Number of groups in basis: 37.
Source: ASF Manual M-409, 1 Mar 46, Logistic Data for Staff Planners, p. 18.

Appendix F

Merchant Shipping

Appendix F-1—United Nations Merchant Shipping Dry Cargo Gains, Losses, and Construction: 1941–45[a]

(In Thousands of Dead-weight Tons)

Period	Gains Through New Construction[b]	Losses[c]	Net Gain or Loss[d]	Tonnage of Dry Cargo Merchant Ships Available to	
				U.N.	U.S.
Total	48,386	16,362	32,024	—	—
December 1941	194	580	−386	—	—
January–March 1942	883	1,873	−990	—	—
April–June 1942	2,112	2,359	−247	—	—
July–September 1942	2,811	2,343	+468	—	—
October–December 1942	3,323	2,382	+941	—	—
January–March 1943	3,729	1,792	+1,937	[d]36,975	15,460
April–June 1943	5,021	984	+4,037	40,905	19,232
July–September 1943	4,589	898	+3,691	44,563	22,271
October–December 1943	4,553	668	+3,885	48,381	25,194
January–March 1944	3,508	649	+2,859	51,058	27,199
April–June 1944	3,861	436	+3,425	54,669	29,534
July–September 1944	3,119	391	+2,728	56,778	31,502
October–December 1944	3,557	328	+3,229	59,602	34,029
January–March 1945	3,037	447	+2,590	63,943	36,169
April–June 1945	2,613	197	+2,416	66,227	38,066
July–August 1945	1,476	35	+1,441	67,951	39,208

[a] Data include all ships 1,600 gross tons and over excluding vessels in Black and Baltic Seas and on the Great Lakes.
[b] Figures do not include gains through additions to pool of neutral or captured shipping.
[c] Losses on an occurrence basis.
[d] Data not available before this date.
Source: ASF Statistical Review World War II, app. G, p. 144.

Appendix F–2—Growth of the U.S.-Controlled Tanker Fleet December 1941–October 1945

(In Thousands of Dead-weight Tons)[a]

Date	Total	WSA Control	U.S. Civilian Control Other Than WSA	Army Owned or Bareboated	Navy Owned or Bareboated[b]
1941					
December	5,603	—	5,207	4	392
1942					
January	5,593	—	5,182	6	405
April	5,442	—	4,941	6	495
July	5,082	[c]4,388	131	6	557
October	5,299	4,573	63	9	654
1943					
January	5,469	4,695	44	9	721
April	5,838	4,890	41	9	898
July	6,616	5,632	59	9	916
October	7,432	6,394	59	9	970
1944					
January	8,820	7,516	111	9	1,184
April	9,707	8,242	90	9	1,366
July	10,753	9,072	121	8	1,552
October	11,656	9,881	121	9	1,645
1945					
January	12,727	10,913	105	9	1,700
April	13,815	11,785	197	9	1,824
July	14,582	12,463	214	9	1,896
October	14,954	12,709	214	8	2,023

[a] Includes vessels 1,600 gross tons and over; data as of the first day of each month.
[b] Includes naval auxiliaries converted to aircraft carriers.
[c] WSA assumed control of American shipping between April and July 1942.
Source: WSA Shipping Summary, Dec 45, p. 106.

Appendix F–3—Ships in Army Service

Year and Month	Number Ships	M/T Capacity	Troop Capacity	Atlantic			Pacific		
				Total	Trans-oceanic	Within Theater	Total	Trans-oceanic	Within Theater
1943									
July	779	7,048,578	269,282	512	—	—	267	—	—
August	927	8,519,727	349,540	610	—	—	317	—	—
September	946	8,446,703	404,974	578	—	—	368	—	—
October	891	7,747,367	443,596	505	—	—	386	—	—
November	891	7,934,192	414,784	523	[a]444	[a]79	[a]368	[a]273	[a]95
December	986	8,761,845	514,438	549	477	72	437	332	105
1944									
January	1,048	9,565,809	517,649	589	510	79	459	355	104
February	1,121	10,194,397	585,891	652	569	83	469	323	146
March	1,190	11,572,200	555,176	687	632	55	503	333	170
April	1,300	12,163,300	567,949	747	672	75	553	365	188
May	1,508	14,030,300	572,392	896	626	270	612	385	227
June	1,498	14,550,200	503,777	895	570	325	603	378	225
July	1,588	15,351,900	515,022	998	699	299	590	374	216
August	1,673	16,347,000	519,562	1,031	755	276	642	410	232
September	1,703	16,624,600	569,345	1,019	822	197	684	437	247
October	1,720	16,954,900	538,196	979	806	173	741	440	301
November	1,743	17,345,400	538,282	914	764	150	829	511	318
December	1,765	17,727,500	517,340	937	836	101	828	564	264
1945									
January	1,574	15,653,800	441,259	793	749	44	781	493	288
February	1,564	15,274,700	483,263	813	713	100	751	464	287
March	1,464	14,149,600	455,132	750	669	81	714	422	292
April	1,461	14,057,400	464,138	692	638	54	769	477	292
May	1,505	14,416,600	502,959	629	577	52	876	566	310
June	1,537	14,584,000	476,155	492	470	22	1,045	739	306
July	1,706	16,192,700	620,355	440	424	16	1,266	973	293
August	1,594	14,732,700	665,555	433	420	13	1,161	884	277

[a] Data before this date unavailable.

Source: ASF Statistical Review, World War II, app. G, p. 145.

Appendix G

LEND-LEASE

APPENDIX G–1—VALUE OF WAR DEPARTMENT LEND-LEASE TRANSFERS: 1941–49[a]

(IN THOUSANDS OF DOLLARS)

Country	Total	By Method Transfer			By Procuring Agency		
		Direct Shipment	Commanding General Shipment	Theater Transfers	ASF	AAF	Misc Services and Expenses
Total	[b][c]24,510,915	19,837,425	1,075,800	3,597,690	16,281,511	7,428,397	801,007
Brazil	230,957	155,473	8,452	67,032	143,545	81,084	6,328
British Empire (excluding Canada)	14,296,120	13,291,945	3,337	1,000,838	9,150,923	5,007,040	138,157
Canada	169,825	167,158	0	2,667	93,276	76,024	525
China	1,729,333	270,420	385,867	1,073,046	874,216	291,119	563,998
French forces	2,039,474	15,413	660,905	1,363,156	1,621,777	329,519	88,178
Mexico	31,254	19,702	3,102	8,450	15,198	16,056	[d]
Netherlands	95,421	87,652	0	7,769	16,259	77,929	1,233
Turkey	38,807	32,029	6,754	24	37,723	1,060	24
USSR	5,516,412	5,483,106	505	32,801	4,005,240	1,511,074	98
Other American republics	64,777	60,395	0	4,382	31,572	31,296	1,909
Other countries	59,108	16,882	5,531	36,695	52,623	5,928	557
Not distributed[e]	239,427	237,250	1,347	830	239,159	268	0

[a] Dollar values represent basic costs to War Department plus fixed-percentage allowance for handling charges.
[b] Additional transfers in the amount of $560,051,000 for production facilities completed in the United States.
[c] Of total, material valued at $653,363,000 was directed overseas to United States use or returned to the United States either overseas or in the country.
[d] Less than $500.
[e] Consists of material turned over to the Foreign Economic Administration for retransfer to recipient country and miscellaneous expenses connected therewith.
Source: Whiting, Tod, and Craft, Statistics: Lend-Lease, 15 Dec 52, Table LL–6.

APPENDIX G–2—VALUE OF WAR DEPARTMENT LEND-LEASE SHIPMENTS TO THE UNITED KINGDOM, USSR, AND OTHERS BY SIX-MONTH PERIODS: 1941–49[a]

(IN THOUSANDS OF DOLLARS)

Period	Total	United Kingdom	USSR	Others[b]
Total	20,913,225	13,162,794	5,483,611	2,266,820
First half of 1941	31,002	22,960	—	8,042
Second half of 1941	158,214	139,248	83	18,883
First half of 1942	1,089,905	604,752	400,682	84,471
Second half of 1942	2,086,767	1,400,151	589,903	96,713
First half of 1943	2,469,774	1,729,901	470,402	269,471
Second half of 1943	4,166,179	2,584,681	1,101,723	479,775
First half of 1944	4,004,657	2,732,646	983,559	288,452
Second half of 1944	3,257,966	2,010,724	950,384	296,858
First half of 1945	2,495,297	1,358,579	812,860	323,858
Second half of 1945	580,987	250,277	195,252	135,458
1946–49	572,477	328,875	[c]−21,237	264,839

[a] Data represent amounts that were tabulated in time to meet reporting due dates; corrections have not been made for any reporting lags. Includes commanding general shipments but excludes theater transfers.

[b] Theater transfers would increase the figures for others by $3,593,848, while it would not affect totals for the United Kingdom and USSR appreciably.

[c] Negative figure resulting from adjustments.

Source: Whiting, Tod and Craft, Statistics; Lend-Lease, 15 Dec 52, Tables LL–5, LL–10, LL–12.

APPENDIX G–3—NUMBER OF VESSELS AND CARGO TONNAGE SHIPPED FROM THE UNITED STATES TO THE USSR 1 JULY 1943–31 AUGUST 1945

(CARGO IN THOUSANDS OF LONG TONS)

Date	Total Shipped		Destination										Delivered	Lost at Sea
			North Russia		Persian Gulf		Black Sea		Soviet Far East		Soviet Arctic			
	Ships	Cargo	Ships	Cargo	Ships	Cargo	Ships	Cargo	Ships	Cargo	Ships	Cargo		
Grand Total	[a]1,813	12,811	340	2,605	373	2,888	76	672	936	6,287	88	359	12,711	100
							Third Protocol							
Subtotal. . .	[b]833	5,746	122	884	297	2,272	0	0	382	2,473	32	117	5,672	74
1943														
July.	57	336	0	0	17	126	0	0	24	153	16	57	336	0
August.	69	470	0	0	24	177	0	0	38	261	7	32	456	14
September. . . .	77	511	0	0	27	198	0	0	50	313	0	0	511	0
October.	62	440	10	66	25	193	0	0	27	181	0	0	431	9
November. . . .	77	569	[c]20	145	25	195	0	0	32	229	0	0	561	8
December. . . .	89	643	[c]29	214	21	166	0	0	39	263	0	0	629	14
1944														
January.	83	599	30	222	26	201	0	0	27	176	0	0	596	3
February.	52	341	[d]17	127	16	114	0	0	19	100	0	0	333	8
March.	55	352	16	110	21	151	0	0	18	91	0	0	338	14
April.	60	409	0	0	35	275	0	0	25	134	0	0	405	4
May.	76	553	0	0	36	289	0	0	40	264	0	0	553	0
June.	76	523	0	0	24	187	0	0	43	308	9	28	523	0
							Fourth Protocol							
Subtotal. . .	[e]753	5,533	205	1,616	76	616	64	585	383	2,616	25	100	5,516	17
July.	92	625	20	156	17	127	0	0	40	276	15	66	623	2
August.	80	562	25	186	5	36	0	0	41	309	9	31	562	0
September. . . .	73	580	23	191	11	88	0	0	38	298	1	3	580	0
October.	75	545	10	79	20	157	0	0	45	309	0	0	545	0
November. . . .	73	565	[c]20	155	12	96	0	0	41	314	0	0	565	0
December. . . .	79	565	29	228	8	68	0	0	42	269	0	0	565	0

Appendix G–3—Number of Vessels and Cargo Tonnage Shipped from the United States to the USSR 1 July 1943–31 August 1945—Continued

Date	Total Shipped		Destination										Delivered	Lost at Sea
			North Russia		Persian Gulf		Black Sea		Soviet Far East		Soviet Arctic			
	Ships	Cargo	Ships	Cargo	Ships	Cargo	Ships	Cargo	Ships	Cargo	Ships	Cargo		
1945														
January	55	406	15	119	3	31	7	61	30	195	0	0	406	0
February	61	450	20	153	0	5	12	111	29	181	0	0	435	15
March	66	487	19	149	0	4	19	172	28	162	0	0	487	0
April	72	540	20	167	0	1	20	178	32	194	0	0	540	0
May 1–12	27	208	4	33	0	3	6	63	17	109	0	0	208	0
							Post–V–E Day Deliveries[f]							
Subtotal	[a]227	1,532	13	105	0	0	12	87	171	1,198	31	142	1,523	9
May 13–31	70	560	13	105	0	0	6	46	51	409	0	0	551	9
June	53	329	0	0	0	0	2	22	44	274	7	33	329	0
July	66	408	0	0	0	0	0	1	46	314	20	93	408	0
August	38	235	0	0	0	0	4	18	30	201	4	16	235	0

a In addition, 17 vessels sailed for northern Russia, 31 for the Persian Gulf, 2 for the Black Sea, and 3 for the Soviet Far East carrying cargo, a minor portion of which was consigned to the USSR.

b In addition, 15 vessels sailed for the Persian Gulf and 3 for the Soviet Far East carrying cargo, a minor portion of which was consigned to the USSR.

c Includes one tanker from the United Kingdom on U.S. account. Cargo replaced to United Kingdom from the United States.

d Includes 2 tankers from the United Kingdom on U.S. account. Cargo replaced to United Kingdom from the United States.

e In addition, 17 vessels sailed for northern Russia and 16 for the Persian Gulf carrying cargo, a minor portion of which was consigned to the USSR.

f Shortly after V-E Day deliveries to the USSR were limited to materials for use in the war against Japan. Fourth Protocol schedules were therefore revised and no Fifth Protocol was negotiated.

g In addition, 3 vessels sailed for the Black Sea carrying cargo, a minor portion of which was consigned to the USSR.

Source: Report on War Aid Furnished by the U.S. to the USSR, prepared by the Protocol and Area Information Staff, USSR Branch, Division of Research and Reports, Department of State, 28 Nov 45.

Appendix H

Civilian Supply

Appendix H-1—U.S. Shipments of Civilian Supplies 1 July 1943-30 September 1945[a]

(Long Tons)

Commodity	Total All Areas	Areas of Combined Responsibility			Areas of U.S. Responsibility		
		Total	Mediterranean	Northwest Europe	Total	Philippine Islands	Netherlands Indies
Total	6,995,960	6,788,765	3,561,318	3,227,447	207,195	190,946	16,249
Wheat/flour	3,132,257	3,081,160	1,267,386	1,813,774	51,097	49,880	1,217
Other foodstuffs	1,255,182	1,116,123	483,311	632,812	139,059	127,263	11,796
Medical and sanitary supplies	21,124	16,456	11,093	5,363	4,668	3,853	815
Soap	26,572	26,086	8,887	17,199	486	486	0
Coal	2,388,743	2,388,743	1,688,279	700,464	0	0	0
Transportation equipment	22,824	17,313	17,312	1	5,511	4,150	1,361
Communication equipment	78	0	0	0	78	0	78
Other utility repair equipment and supplies	367	367	367	0	0	0	0
Clothing, shoes, and textiles	49,111	44,970	15,443	29,527	4,141	3,615	526
Agricultural supplies and equipment	50,954	50,932	49,470	1,462	22	22	[b]
Industrial repair equipment and supplies	2,798	2,709	2,709	0	89	56	33
Other equipment	11	0	0	0	11	10	1
Miscellaneous manufactured end products	44,273	42,250	15,459	26,791	2,023	1,601	422
Miscellaneous materials and products	1,666	1,656	1,602	54	10	10	0

[a] Does not include petroleum products shipped in bulk for combined military and civilian relief use.
[b] Less than 0.5.
Source: International Div, ASF, Civilian Supply, MS, OCMH, general app. D-15.

Appendix H-2—Civilian Supply Shipments to Areas of Combined Responsibility July 1943–September 1945[a]

(Long Tons)

Quarterly Period	Total	Contributing Country			Recipient Theater		Commodity Category		
		United States	United Kingdom	Canada	Mediterranean	European	Food	Fuel[a]	Other
Total	13,507,940	6,788,765	6,098,902	620,273	6,853,313	6,654,627	6,485,099	6,552,598	470,243
July–September 1943	8,137	8,137	[b]—	—	[b]8,137	—	7,736	—	401
October–December 1943	152,949	152,949	[b]—	—	[b]152,949	—	150,584	—	2,365
January–March 1944	363,845	363,845	[b]—	—	[b]363,845	—	333,414	23,215	7,216
April–June 1944	687,671	249,760	[b]437,911	—	[b]686,944	727	349,652	311,357	26,662
July–September 1944	667,074	327,426	339,648	—	509,435	157,639	232,448	415,956	18,670
October–December 1944	1,152,396	353,595	736,192	62,609	563,428	588,968	484,415	639,999	27,982
January–March 1945	2,778,376	628,102	1,952,582	197,692	1,418,719	1,359,657	1,000,556	1,683,868	93,952
April–June 1945	3,895,534	1,839,221	1,722,964	333,349	1,558,978	2,336,556	2,273,278	1,409,158	213,098
July–September 1945	3,801,958	2,865,730	909,605	26,623	1,590,878	2,211,080	1,653,016	2,069,045	79,897

a Petroleum products not included.

b Known U.K. shipments to the Mediterranean theater, primarily coal, before March 1944, not reported for proper quarterly period, but consolidated in the United Kingdom's shipping reports beginning June 1944.

Source: International Div, ASF, Civilian Supply, MS, OCMH, general app. D–11.

Bibliographical Note and Guide to Footnotes

Global Logistics and Strategy, 1943–1945, like its predecessor volume covering the period 1940–43, is based largely, though far from exclusively, upon the records of the various agencies of the War Department. The nature and composition of these records have been described generally in the bibliographical note to the earlier volume and those to other volumes in the War Department subseries of the UNITED STATES ARMY IN WORLD WAR II. They are described in more detail in *Federal Records of World War II,* 2 vols. prepared by the General Services Administration's National Archives and Records Service, (Washington, 1951).

Physical custody of these Army records has been transferred, since the earlier volume was published in 1955, from the Departmental Records Branch, Adjutant General's Office, Department of the Army, to the National Archives and Records Service. Their arrangement, however, has not been fundamentally changed. Information in the footnote citations to original record material has been designed to identify each document sufficiently so that it can be located through the National Archives and Records Service. In most cases this has involved citation of the specific file in which the document was located at the time it was used by the authors. Major exceptions are papers that can be more readily located by the researcher by master serial numbers. Included in this category are the formal papers of the Joint and Combined Chiefs of Staff (JCS and CCS) and of the committees forming part of those organizations, the Munitions Assignments Board in Washington (MAB) and the Munitions Assignments Committee (Ground) (MAC(G)), certain letters and directives issued by the Adjutant General's office (TAG), general orders and memoranda of the various headquarters (Army, joint, and combined), and certain messages identified by War Department CM–IN and CM–OUT numbers and dates. The alphabetical symbols used in identifying both files and serials are to be found in the accompanying List of Abbreviations.

In sifting the masses of material on logistics and strategy in World War II contained in War Department files, the authors have had to practice a high degree of selectivity. The volume of paper generated in the conduct of logistics business in the last two years of the war is indeed of mountainous proportions. JCS and CCS papers and the files of the Operations Division (OPD), War Department General Staff, have been relied on in this volume to a greater degree than in its predecessor, as even a cursory examination of the footnotes will reveal. This course was imperative both in the interests of economy of effort and in order to place the whole story of the relation of logistics and strategy in its proper perspective. The Joint Chiefs and Combined Chiefs made the basic deci-

sions on wartime strategy, and it was in the joint and combined committees that all of the logistical factors affecting these decisions were apt to emerge in reasonably clear and succinct outline. OPD was the Army staff agency principally responsible for advising the Army Chief of Staff on policy and strategy, the principal link of that staff with the joint and combined organization, and the principal recordkeeper for the War Department of joint and combined papers. The joint and combined papers used so extensively in the preparation of this volume were mainly consulted in the excellent file of these and related Army papers kept by OPD's Strategy and Policy Group (ABC file) rather than in the JCS and CCS files themselves. These latter files, unique among the wartime military records of World War II, remain under control of the Joint Chiefs of Staff.

The groups of OPD records have been succinctly described by Maurice Matloff in the bibliographical note to *Strategic Planning for Coalition Warfare, 1943–1944,* UNITED STATES ARMY IN WORLD WAR II, (Washington, 1959). The most important groups for the purposes of this volume have been the ABC files and the informal policy files of Executive Office, OPD, identified as OPD Exec.

Despite this heavy reliance on CCS, JCS and OPD records, the files of the Army Service Forces agencies are the most important source for reconstructing the record of the Army's own logistical activities and of its relationships with civilian agencies in the detailed execution of production and other programs. Moreover, the ASF materials shed added, and sometimes different, light on the relationship of logistics and strategy, for ASF headquarters had its own links with the logistical agencies serving the Joint Chiefs. ASF headquarters records have therefore also been extensively used. ASF files most frequently consulted have been those of the Directorate of Plans and Operations, the International Division, the Control Division, the Transportation Corps (both the regular Office, Chief of Transportation file, identified as OCT, and the special collections made by its historical branch, identified as OCT HB), and General Somervell's personal file, identified in the footnotes as Hq ASF, with the appropriate folder title.

In addition to the ASF records in National Archives, Lt. Gen. Leroy S. Lutes, wartime director of Plans and Operations, ASF, at various times during the war and afterward, kindly granted access to his personal file, which remains in his custody. Footnote references to folders in this file follow the arrangement at the time they were consulted. The classification "Misc Notes, Lutes File" covers certain notes taken by researchers during the war from these files for which no folder reference could be given.

The whole body of ASF records is far more voluminous and unorganized than are the files of OPD. They confront the historian with many problems in reconstructing a logical and sequential account of events and actions. For this reason, the monographs and organizational histories produced by wartime ASF historians based on preliminary sifting of these records, and the collections of selected documents that frequently accompany them, have been a considerable aid to the authors. A list of the more important of these wartime monographs and agency histories can be found in the

bibliographical note to the authors' *Global Logistics and Strategy, 1940–1943* (Washington, 1955). These studies, together with others produced in the wartime Army historical program and individually cited in the footnotes, are in the custody of the General Reference Section, Office, Chief of Military History (OCMH).

Collections of documents and notes maintained in OCMH have also been of some importance. In these collections, many made by wartime historians, some documents are preserved that are unavailable, or at least extremely difficult to locate, elsewhere. For instance, a collection of notes taken by members of the historical unit of the Control Division, ASF, during or shortly after the war, (identified in the footnotes as Log File, OCMH), have been a convenient source of information.

Some special note is required on the records of the wartime international conferences. The official U.S. military record of these conferences was maintained in a set of bound books for each conference. A set of these bound volumes is in the OCMH collections. The State Department has published documents pertaining to three of the conferences in the series *Foreign Relations of the United States, Diplomatic Papers:—The Conferences at Malta and Yalta,* Department of State Publication No. 6199 (Washington, 1955); *The Conferences of Berlin (The Potsdam Conference),* 2 Vols., Publication No. 7015 (Washington, 1960); and *The Conferences at Cairo and Tehran, 1943,* Publication No. 7187 (Washington, 1961). The published documents include some but not all of the military papers contained in the bound volumes, as well as a large number of background papers relating to the conferences. In some cases they have been useful to supplement the military record, but in general they do not contain the detailed logistical papers that have been the authors' principal concern.

Of somewhat less utility, but still of value in the preparation of this volume, have been the files of the Office of the Secretary of the Army, the Office of the Chief of Staff (OCS), the Supply Division of the General Staff (G–4), and The Adjutant General of the Army. The TAG records, however, are of far less import for the war years than for the prewar period, since after early 1942 the Office of The Adjutant General really ceased to be a War Department central file for anything other than formal directives and backup papers pertaining to them and for the papers generated by TAG business.

Records of overseas theaters have not been extensively consulted, though manuscript monographs and published works relating to operations in these theaters have been the basis for many sections of this book. A single exception has been the selected use of Secretary General Staff files of Supreme Headquarters, Allied Expeditionary Force, identified as SHAEF SGS, for material on the development of European strategy and the requirements for landing craft. The originals of the SHAEF files are with other wartime military records in National Archives. For a full description of these records see the bibliographical note in Forrest C. Pogue, *The Supreme Command,* THE UNITED STATES ARMY IN WORLD WAR II (Washington, 1953).

Of manuscript histories prepared outside the Army's program, those forming part of the history of the wartime activi-

ties of the Joint Chiefs of Staff, prepared by the historical section of that organization, have been most valuable. When used as a primary source of information, these studies have been cited in detail in the footnotes. The most useful of them have been Vernon Davis' account of the development of JCS organization and that of Grace Hayes on strategy in the war against Japan.

Outside the strictly military records of World War II, the files of the War Shipping Administration (WSA) have been of greatest assistance. WSA, as the principal agency responsible for operation of U.S. merchant shipping, was vitally concerned in problems relating to overseas movements of both troops and supplies. WSA officials frequently looked at shipping problems from a different vantage point from military authorities, and consultation of the WSA records has enabled the authors to add balance to their story. Most important for this purpose have been the files of the two successive directors of WSA, Lewis Douglas and Capt. Granville Conway, identified in the footnotes as WSA Douglas and WSA Conway files. The WSA records form part of the collections now under the control of the Federal Records Center, Region 3, Suitland, Maryland.

We have not similarly consulted the files of the War Production Board in the preparation of this volume. Use has been made, however, of the War Production Board study prepared by the Civilian Production Administration, *Industrial Mobilization for War: Program and Administration* (Washington, 1947) and of the unpublished War Production Board historical monographs. Of these monographs, Special Study 11, Landing Craft and the War Production Board, April 1942 to May 1944, prepared by George E. Mowry, has been of particular value.

The volume of published material on various aspects of World War II—memoirs, official and unofficial histories, collections of documents, monographs and syntheses—has proliferated since publication of the earlier volume on global logistics in 1955. These works have been used selectively whenever material contained in them could supplement or clarify the official record available, or when these accounts were sufficiently complete and reliable to obviate the necessity for detailed research in the records. Certainly most important in this category have been the works of our colleagues in the UNITED STATES ARMY IN WORLD WAR II Series. The volumes in the theater subseries and Technical Service volumes on overseas operations have been the principal reliance for information on logistical and tactical developments within the various theaters. Roland G. Ruppenthal, *Logistical Support of the Armies, Volume I: May 1941–September 1944* (Washington, 1953) and *Logistical Support of the Armies, Volume II: September 1944–May 1945* (Washington, 1959), for instance, have been a principal source on the logistical problems of the European theater. Two volumes on the CBI, both by Charles F. Romanus and Riley Sunderland, *Stilwell's Command Problems* (Washington, 1956) and *Time Runs Out in CBI* (Washington, 1959) have been our principal source for material on operations and logistics in the Far East. No companion volume covers logistical and administrative problems in the Pacific; however, the tactical volumes and the Technical Service histories, notably Alvin P. Stauffer's *The Quartermaster Corps: Operations in the War Against*

Japan (Washington, 1956), have been invaluable. Manuscript histories in the OCMH collection contain adequate accounts of theater logistical problems in the South and Central Pacific; *Engineers in the Southwest Pacific,* 8 vols. (Washington, 1947–53), prepared by Corps of Engineers historians, is a source of much detailed information on logistics in General MacArthur's theater.

For material at the Washington level the authors, needless to say, owe a great debt to Maurice Matloff's *Strategic Planning for Coalition Warfare, 1943–1944,* which, from a different vantage point, surveys much of the ground covered here, and to Ray S. Cline, *Washington Command Post: The Operations Division* (Washington, 1951) for its coverage of difficult organizational and procedural problems at the highest Army levels. The Technical Service histories of zone of interior operations and two companion logistical volumes in the War Department subseries, R. Elberton Smith, *The Army and Economic Mobilization* (Washington, 1959) and John D. Millett, *The Organization and Role of the Army Service Forces* (Washington, 1954), are authoritative in the fields they cover. Harry L. Coles and Albert K. Weinberg, *Civil Affairs: Soldiers Become Governors* (Washington, 1964) has provided a principal documentary source for the chapters on the Army and civilian supply. Marcel Vigneras, *Rearming the French* (Washington, 1957) has been the principal source for the story of lend-lease to France; and Stetson Conn, Rose E. Engleman, and Byron Fairchild, *Guarding the United States and Its Outposts* (Washington, 1964) has been the principal reliance for the account of lend-lease to Latin America.

In this work, the authors have sought to present a scrupulously balanced account of the British view in the controversies — strategic and logistical — which characterized the Anglo-American partnership. Information on British points of view and actions has been gleaned from CCS papers, from British papers included in U.S. Army records, from the memoirs of various British participants, and from the published volumes in the British series, History of the Second World War. Of British memoir literature, incomparably the most important items are the last three volumes of Winston Churchill's memoirs, *The Hinge of Fate* (Boston: Houghton Mifflin Company, 1950), *Closing the Ring* (Boston: Houghton Mifflin Company, 1951) and *Triumph and Tragedy* (Boston: Houghton Mifflin Company, 1953), and the two volumes of Arthur Bryant based on Lord Alanbrooke's diary and memory, *Turn of the Tide* (New York: Doubleday & Co., 1957) and *Triumph in the West* (New York: Doubleday & Co., 1958). Of the British official histories the two volumes of John Ehrman, *Grand Strategy,* Volumes V and VI (London: Her Majesty's Stationery Office, 1956) provide a well-balanced story of development of worldwide strategy and the considerations behind it from the British point of view covering the period from August 1943 through August 1945. In the United Kingdom Civil Series H. Duncan Hall, *North American Supply* (London: HMSO, 1955) and Hall and C. C. Wrigley, *Studies in Overseas Supply* (London: HMSO, 1956) present a detailed and interesting account of lend-lease from the British vantage point. C. B. A. Behrens, *Merchant Shipping and the Demands of War* (London:

HMSO, 1955) is equally important in the field of merchant shipping and the operations of the British Ministry of War Transport. The work of W. K. Hancock and M. M. Gowing, *British War Economy* (London: HMSO, 1949) was of considerable value in the preparation of this as well as the previous volume.

Similarly, for information on the U.S. Navy's views and actions, we have relied mainly on the papers and minutes of the JCS and the many committees that served them, on Navy papers to be found in Army records, on memoirs, and on published histories, official and unofficial, based on naval records. Information on naval operations has been drawn largely from the series of volumes written by Samuel Eliot Morison. For naval logistics, Duncan Ballantine's *U.S. Naval Logistics in the Second World War* (Princeton, N.J.: Princeton University Press, 1947) is the best summary. Two works, one by Rear Adm. Worrall Reed Carter, *Beans, Bullets and Black Oil* (Washington, 1953), the other by Admiral Carter and Rear Adm. Elmer Ellsworth Duvall, *Ships, Salvage and Sinews of War* (Washington, 1954), shed light on operational naval logistics in the Pacific and the Atlantic, respectively. A number of agency administrative histories were produced as part of the Navy's wartime historical program. These have been synthesized and related to a larger whole by Rear Adm. Julius Fuhrer in *Administration of the Navy Department in World War II* (Washington, 1960). Still lacking, on the Navy side, is any work comparable to Matloff's *Strategic Planning for Coalition Warfare, 1943–1944,* that reflects the role and thinking of the Navy's war planners in the development of the strategy of the war.

The main source of information on Army Air Forces operations, and incidentally on Army Air Forces logistics, has been the volumes of The Army Air Forces in World War II edited by Wesley Frank Craven and James Lea Cate.

The statistics in this volume are largely of two kinds—data on planning and allocation, and records of accomplishment. The first type predominates in the text and the accompanying tables; the second in the statistical appendixes. The statistics in the text and accompanying tables, for the most part, reflect contemporary calculations, sometimes hastily compiled to meet deadlines, and they were drawn largely from the same sorts of sources as the text of the volume itself. The tables in the appendixes were drawn up from compilations made after the war and represent more refined statistics covering longer periods of time. A primary source for the appendix tables has been the drafts prepared under the direction of Theodore E. Whiting of the Office of the Comptroller of the Army and intended for eventual publication in a statistical volume in the UNITED STATES ARMY IN WORLD WAR II Series. Work on the volume was suspended during the Korean War and has not been resumed; drafts of completed portions are in OCMH files. In areas not covered by the drafts, statistics on Army matters have been drawn from various sources such as Strength of the Army (STM–30) published monthly by The Adjutant General, Department of the Army, The Army Service Forces' *Statistical Review, World War II,* prepared by the Control Division, ASF, in 1946, and drafts and editions of ASF Manual M–409, *Logistical Data for Staff Planners,* and FM 101–10, *Staff Officers Field*

Manual, Organization, Technical and Logistical Data, which contain statistical averages based on World War II experience. Some statistics relating to shipping have been drawn from the late 1945 editions of the War Shipping Administration's monthly *Shipping Summary,* and those on landing craft production from Official Munitions Production of the United States by Months, July 1, 1940–August 31, 1945, prepared by the Civilian Production Administration in 1947. These and other statistical sources less frequently used are cited in footnotes and notes on sources appended to each statistical table.

List of Abbreviations

A & N	Army and Navy
AAF	Army Air Forces
ABC	American-British Conversations (January–March 1941)
ACNO	Assistant Chief of Naval Operations
ACofS	Assistant Chief of Staff
ACofT	Assistant Chief of Transportation
Actg	Acting
Admin	Administration
AFHQ	Allied Force Headquarters
AFPAC	Army Forces, Pacific
AFMIDPAC	Army Forces, Middle Pacific
AFWESPAC	Army Forces, Western Pacific
AG	Adjutant General
AGC	Amphibious headquarters ship
AGF	Army Ground Forces
AGWAR	Adjutant General, War Department
AK	Cargo ship, auxiliary (cargo ship of any type operated by the Navy)
AKA	Cargo ship, attack
AMG	Allied Military Government
AMGOT	Allied Military Government of Occupied Territory
AMMDEL	American Military Mission, Delhi
AMMISCA	American Military Mission to China
ANMB	Army-Navy Munitions Board
ANPB	Army-Navy Petroleum Board
ANZAC	Australia–New Zealand Army Corps
AP	Transport (operated by the Navy)
APA	Transport, attack
APD	Old destroyer used as transport, attack (high-speed)
ARL	Landing craft, repair ship
ASF	Army Service Forces
ASN	Assistant Secretary of the Navy
ASP	Army Supply Program
Asst	Assistant
ASW	Assistant Secretary of War
AT(B)	Administration of Territories Committee (Balkans)
ATC	Air Transport Command
AT(E)	Administration of Territories Committee (Europe)
BAS	British Army Staff
Bd	Board
BEW	Board of Economic Warfare
BMSM	British Military Supply Mission

BMWT	British Ministry of War Transport
Br	British; branch
C-type vessel	Standard cargo vessel
CA	Civil Affairs
CAD	Civil Affairs Division, War Department
CAdC	Combined Administrative Committee
CBI	China, Burma, India
CBIT	China, Burma, India theater
CCAC	Combined Civil Affairs Committee
CCAC(S)	Combined Civil Affairs Subcommittee for Supply
CCAO	Chief Civil Affairs Officer
CCNA	Combined Committee for North Africa
CCS	Combined Chiefs of Staff
CDS	China Defense Supplies, Inc.
CESF	Commander, Eastern Sea Frontier
CFB	Combined Food Board
Cft	Craft
CG	Commanding General
Chmn	Chairman
CinC	Commander in Chief
CINCAFPAC	Commander in Chief, U.S. Army Forces, Pacific
CINCJAPA	Commander in Chief, Japan Area
CINCMED	Commander in Chief, Mediterranean
CINCPAC	Commander in Chief, U.S. Pacific Fleet
CINCPOA	Commander in Chief, Pacific Ocean Area
CINCSWPA	Commander in Chief, SWPA
CLAC	Combined Liberated Areas Committee
Class I	Supplies consumed at an approximately uniform daily rate under all conditions, and that are automatically issued
Class II	Supplies for which allowances are fixed by table of allowances and table of basic allowances
Class III	Fuels and lubricants other than aviation
Class III–A	Aviation fuels and lubricants
Class IV	Supplies and equipment for which allowances are not prescribed or which require special control measures and are not otherwise classified
Class V	Ammunition, explosives, and chemical agents
CM–IN	Classified message, incoming
CM–OUT	Classified message, outgoing
CMP	Controlled Materials Plan
CMTC(CMT)	Combined Military Transportation Committee
CNAC	Chinese National Airways Corporation
CNO	Chief of Naval Operations
CO	Commanding Officer
COB	Committee of Combined Boards
CofS	Chief of Staff
CofT	Chief of Transportation
Com	Committee

Comb	Combined
Comd	Command
Comdr	Commander
COMGENSOPAC	Commanding General, South Pacific
COMINCH	Commander in Chief, U.S. Fleet
Comm	Commission
COMNAVEU	Commander U.S. Naval Forces, Europe
COMNAVNAW	Commander U.S. Naval Forces, Northwest African Waters
Conf	Conference
Conv	Conversation
Corresp	Correspondence
COS	Chiefs of Staff (British)
COSMED	Chiefs of Staff, Mediterranean
COSSAC	Chief of Staff to the Supreme Allied Commander (Designate)
COS(W)	Chiefs of Staff, Washington
CPA	Civilian Production Administration; Central Pacific Area
CPBC	Central Pacific Base Command
CPRB	Combined Production and Resources Board
CPS	Combined Staff Planners
CREGO	Chief Regulating Officer, SWPA
CRMB	Combined Raw Materials Board
CSAB	Combined Shipping Adjustment Board
CSB	Civilian Supply Branch, International Division, ASF
CT	China theater
CTO	China Theater of Operations
D-day	Beginning of operation OVERLORD, 6 June 1944
DCofS	Deputy Chief of Staff
Dep	Deputy
DF	Disposition Form
Div	Division
DUKW	2½-ton amphibious truck
ELOC	Eastern Line of Communication
Equip	Equipment
ETO	European Theater of Operations
ETOUSA	European Theater of Operations, U.S. Army
ExO	Executive officer
FAN	Symbol for messages from Commander in Chief, Allied Expeditionary Force to the CCS
FCNL	French Committee of National Liberation
FDR	Franklin D. Roosevelt
FEA	Foreign Economic Administration
FFI	French Forces of the Interior
FILBAS	Philippine Base
G–1	Personnel section of divisional or higher staff
G–2	Intelligence section of divisional or higher staff
G–3	Operations and training section of divisional or higher staff
G–4	Logistics section of divisional or higher staff
G–5	Civil affairs section of divisional or higher staff

GAL	General George A. Lincoln
GCM	General George C. Marshall
Gp	Group
HMSO	Her Majesty's Stationery Office
Hq	Headquarters
IBT	India-Burma theater
ICAF	Industrial College of the Armed Forces
ID	International Division, ASF
Ind	Indorsement
ISC	International Supply Committee
J–4	Joint Staff logistics section
JAdC	Joint Administrative Committee
JCS	Joint Chiefs of Staff
JDCS	Joint Deputy Chiefs of Staff
JLC	Joint Logistics Committee
JLPC	Joint Logistics Plans Committee
JMAC	Joint Munitions Allocation Committee
JMTC(JMT)	Joint Military Transportation Committee
JOSCO	Joint Overseas Shipping Control Office
JPS	Joint Staff Planners
JPSC	Joint Production Survey Committee
JSM	Joint Staff Mission (British)
JSSC	Joint Strategic Survey Committee
Jt	Joint
JWPC	Joint War Plans Committee
KMF	British troop convoy from the U.K. to Gibraltar
KMS	British cargo convoy from the U.K. to Gibraltar
LAC	Liberated Areas Committee
LCA	Landing craft, assault
LCA(H)	Landing craft, assault (hedgerow)
LCF	Landing craft, flak
LCG(L)	Landing craft, gun (large)
LCG(M)	Landing craft, gun (medium)
LCI	Landing craft, infantry
LCI(L)	Landing craft, infantry (large)
LCM	Landing craft, mechanized
LCP	Landing craft, personnel
LCP(L)	Landing craft, personnel (large)
LCP(R)	Landing craft, personnel (ramp)
LCS	Landing craft, support
LCS(L)	Landing craft, support (large)
LCS(M)	Landing craft, support (medium)
LCS(S)	Landing craft, support (small)
LCT	Landing craft, tank
LCT(5)	Landing craft, tank (Mark V)
LCT(6)	Landing craft, tank (Mark VI)
LCT(7)	Original designation for LSM
LCT(R)	Landing craft, tank (rocket)

LCV	Landing craft, vehicle
LCVP	Landing craft, vehicle and personnel
Ldg	Landing
LMAB	Munitions Assignments Board, London
LOC	Line of Communication
Log	Logistics
LSD	Landing ship, dock
LSE	Landing ship, emergency repair
LSG	Landing ship, gantry
LSH	Landing ship, headquarters
LSI	Landing ship, infantry
LSI(L)	Landing ship, infantry (large)
LSI(M)	Landing ship, infantry (medium)
LSI (S)	Landing ship, infantry (small)
LSM	Landing ship, medium
LST	Landing ship, tank
LST(1)	Landing ship, tank (long-range, British)
LST(2)	Landing ship, tank (U.S.-built; British designation)
LVT	Landing vehicle, tracked
MAB	Munitions Assignments Board, Washington
MAC(A)	Munitions Assignments Committee (Air)
MAC(G)	Munitions Assignments Committee (Ground)
MAC(N)	Munitions Assignments Committee (Navy)
MBW	Munitions Assignments Board, Washington
Med	Mediterranean
MEDCOS	Chiefs of Staff, Mediterranean (British)
MEE	Minimum essential housekeeping equipment
MFR	Memo for Record
MG	Military Government
MIDPAC	Middle Pacific
MMSR	Monthly Materiel Status Report
MPR	Monthly Progress Report
MS	Manuscript
MSR	Monthly Status Report
MT	Motor transport ship
MTO	Mediterranean Theater of Operations
MTOUSA	Mediterranean Theater of Operations, U.S. Army
NAEB	North African Economic Board
NAF	Symbol for messages from the CCS to the Commander in Chief, Allied Expeditionary Force
NASBO	North African Shipping Board
NATOUSA	North African Theater of Operations, U.S. Army
NEI	Netherlands East Indies
NTS	Naval Transportation Service
NYPOE	New York Port of Embarkation
OCMH	Office, Chief of Military History
OCofT	Office, Chief of Transportation
OCOrd	Office, Chief of Ordnance

OCS	Office, Chief of Staff
OCT HB	Historical Branch, Office, Chief of Transportation
OFEC	Office of Foreign Economic Coordination
OFRRO	Office of Foreign Relief and Rehabilitation
OLLA	Office of Lend-Lease Administration
ONI	Office of Naval Intelligence
OPD	Operations Division, War Department
Opn	Operation
OSS	Office of Strategic Services
OWI	Office of War Information
OWM	Office of War Mobilization
OWMR	Office of War Mobilization and Reconversion
P&O	Plans and Operations Division, OPD
PAC-AID	Air mission from China in support of Pacific operations
Pam	Pamphlet
PGSC	Persian Gulf Service Command
Plng	Planning
PM	Prime Minister
POA	Pacific Ocean Areas
POE	Port of Embarkation
POL	Petroleum, Oil, and Lubricants
POM	Preparation for Overseas Movement
POR	Preparation for Overseas Movement of Individual Replacements
POW	Prisoner of war
PSPC	President's Soviet Protocol Committee
PTO	Pacific Theater of Operations
Pub	Publication
QMC	Quartermaster Corps
RAF	Royal Air Force
Recmn	Recommendation
Reqmt	Requirement
Rev	Revised; revision
S&P	Strategy and Policy Group, OPD
SACMED	Supreme Allied Commander, Mediterranean theater
SCAEF	Supreme Commander, Allied Expeditionary Force
SCAMA	Service Central des Approvisionnements et Matériels Américains (Central Office of American Supplies and Equipment)
SEAC	Southeast Asia Command
SFPOE	San Francisco Port of Embarkation
SGPC	Soviet Government Purchasing Commission
SGS	Secretary, General Staff
SHAEF	Supreme Headquarters, Allied Expeditionary Force
Shpg	Shipping
Sit	Situation
SLOE	Special Lists of Equipment
SOE	Special Operations Executive (British)

SOPAC	South Pacific Area
SOS	Services of Supply
SOWESPAC	Southwest Pacific
SPA	South Pacific Area
SPBC	South Pacific Base Command
SS	Strategic Study
Sup	Supply
Suppl	Supplement
Svc	Service
SWPA	Southwest Pacific Area
TAG	The Adjutant General
TBA	Table of Basic Allowances
TC	Transportation Corps
T/E	Table of Equipment
Tech	Technical
Tel	Telephone
TOE	Table of Organization and Equipment
Trans	Transportation
Trng	Training
UGF	U.S. troop convoy from New York to Gibraltar
UGS	U.S. cargo convoy from New York to Gibraltar
U.K.	United Kingdom
U.N.	United Nations
UNRRA	United Nations Relief and Rehabilitation Administration
USAF	U.S. Army Forces
USAFCBI	U.S. Army Forces, China, Burma, India
USAFCBIT	U.S. Army Forces, CBI theater
USAFFE	U.S. Army Forces in the Far East
USAFIME	U.S. Army Forces in the Middle East
USAFISPA	U.S. Army Forces in the South Pacific Area
USASOS	U.S. Army Services of Supply
USFET	U.S. Forces, European theater
USN	Under Secretary of the Navy
USPC	United States Procurement Committee
U.S. Reps MAB	U.S. Representatives, MAB
USSR	Union of Soviet Socialist Republics
USW	Under Secretary of War
VCNO	Vice Chief of Naval Operations
V-E Day	Victory in Europe
VHB	Very heavy bomber
V-J Day	Victory in Japan
VLR	Very long range
WAR	War Department
WD	War Department
WDCSA	War Department, CofS, Army
WDGS	War Department General Staff
WFA	War Food Administration
WMC	War Manpower Commission

WPB	War Production Board
WPD	War Plans Division
WSA	War Shipping Administration
WSC	Winston S. Churchill
XAP	Troop transport, attack, modified
ZI	Zone of Interior

Glossary of Code Names

ALAMO	Code name for U.S. Sixth Army while operating as a special ground task force under GHQ SWPA.
ALPHA	Plan for defense of Kunming and Chungking in eastern China.
ANAKIM	Plan for recapture of Burma.
ANVIL	Early plan for invasion of southern France.
ARCADIA	U.S.-British conference held in Washington, December 1941–January 1942.
ARGONAUT	International conference held at Malta and Yalta, January–February 1945.
AVALANCHE	Invasion of Italy at Salerno.
BAYTOWN	British invasion of Italy on Calabrian coast.
BETA	Plan for opening the port of Fort Bayard on the China coast.
BOLERO	Build-up of U.S. forces and supplies in the United Kingdom for cross-Channel attack.
BOSCO	Communications code name for QUADRANT.
BUCCANEER	Plan for amphibious operation in Andaman Islands.
BUTTRESS	Plan for British operation against northern Calabria in case BAYTOWN plan failed.
CALIPH	Plan for invasion of Bordeaux region of western France as alternate to landing in southern France.
CAPITAL	Offensive to capture north Burma, 1944.
CARTWHEEL	Converging drives on Rabaul by South Pacific and SWPA forces.
CHAMPION	Plan for general offensive in Burma, 1943.
CORONET	Plan for operation against Honshu, Japan.
CULVERIN	Plan for assault on Sumatra.
DRACULA	Plan for attack on Rangoon, 1944.
EUREKA	International conference at Tehran, November 1943.
FORAGER	Operation for the capture of the Mariana Islands, 1944.
FOREARM	Kavieng, New Ireland.
FREEDOM	Cable designation for Algiers messages.
GRANITE	Plan for operations in POA in 1944.
HERCULES	Plan for assault on Rhodes, early 1944.
HUSKY	Allied invasion of Sicily, July 1943.
ICEBERG	Allied invasion of the Ryukyu Islands, 1945.
LONGTOM	Plan for Allied occupation of Chusan Archipelago, 1945.
MANHATTAN	Code name for atomic energy project which developed the atomic bomb, August 1942–August 1946.
MATTERHORN	Plan for bombing Japan from bases in Cheng-tu, China.
MERCANTILE	Manus Island, Bismarck Archipelago.
MILEPOST	U.S. supply program for Soviet forces in Siberia in preparation for Russian entry into war with Japan.

NEPTUNE	Code word for cross-Channel operation, naming specific assault area and target date, for which a special security procedure was developed.
OCTAGON	U.S.-British conference at Quebec, September 1944.
OLYMPIC	Plan for invasion of Kyushu, March 1946.
ORANGE	Pre-war plan for advance through Central Pacific.
OVERLORD	Allied cross-Channel invasion of northwest Europe, June 1944.
PIGSTICK	Plan for limited operation on south Mayu Peninsula, Burma.
POINTBLANK	Combined bomber offensive against Germany.
QUADRANT	U.S.-British conference held at Quebec, August 1943.
RANKIN	Plan for Allied return to Europe in case of deterioration of German position.
RASHNESS	Revised BETA plan.
RECKLESS	Assault force for Hollandia operation, 22 April–25 August 1944.
RENO	SWPA plans for operation in the Bismarck Archipelago along northern coast of New Guinea and on to Mindanao.
ROUNDHAMMER	Cross-Channel invasion plan presented as a compromise between SLEDGEHAMMER and ROUNDUP.
ROUNDUP	Plan for a major U.S.-British cross-Channel operation in 1943.
SEXTANT	International conference at Cairo, November–December 1943.
SHINGLE	Amphibious operation at Anzio, Italy.
SICKLE	Build-up of U.S. Eighth Air Force in the U.K. for bomber offensive against Germany.
SKYSCRAPER	Early cross-Channel attack plan which bore close resemblance to OVERLORD plan.
SLEDGEHAMMER	Plan for limited cross-Channel attack in 1942.
SYMBOL	Code name for international conference at Casablanca, 14–23 January 1943.
TARZAN	India-based portion of general offensive in Burma.
TERMINAL	International conference at Potsdam, Germany, 16 July–2 August 1945.
TIGAR 26–A	Project to move trucks into China by air for use in supporting Fourteenth Air Force over the Eastern Line of Communications.
TIGAR 26–B	Project for overland delivery of vehicles to China by way of Soviet Turkestan.
TORCH	Allied invasion of northwest Africa, November 1943.
TRIDENT	U.S.-British conference held in Washington, May 1943.
X-RAY Force	Chinese Army in India.
Y-Force	YOKE Force.
YOKE Force	American-sponsored Chinese divisions in Yunnan Province.
Z-Force	ZEBRA Force.
ZEBRA Force	American-sponsored Chinese divisions in east China.

UNITED STATES ARMY IN WORLD WAR II

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- *Washington Command Post: The Operations Division*
- *Strategic Planning for Coalition Warfare: 1941–1942*
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- *Global Logistics and Strategy: 1940–1943*
- *Global Logistics and Strategy: 1943–1945*
- *The Army and Economic Mobilization*
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- *The Organization of Ground Combat Troops*
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