

THE PERSIAN CORRIDOR AND AID TO RUSSIA

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~~Dec~~ 1.
~~November 30~~, 1943

~~SUGGESTED DRAFT~~ DECLARATION of the Three Powers regarding Iran

The President of the United States, the Premier of the U.S.S.R., and the Prime Minister of the United Kingdom, having consulted with each other and with the Prime Minister of Iran, desire to declare the mutual agreement of their three Governments regarding their relations with Iran.

The Governments of the United States, the U.S.S.R., and the United Kingdom recognise the assistance which Iran has given in the prosecution of the war against the common enemy, particularly by facilitating the transportation of supplies from overseas to the Soviet Union.

The Three Governments realise that the war has caused special economic difficulties for Iran, and they are agreed that they will continue to make available to the Government of Iran such economic assistance as may be possible, having regard to the heavy demands made upon them by their world-wide military operations and to the world-wide shortage of transport, raw materials, and supplies for civilian consumption.

With respect to the post-war period, the Governments of the United States, the U.S.S.R., and the United Kingdom are in accord with the Government of Iran that any economic problems confronting Iran at the close of hostilities should receive full consideration, along with those of other members of the United Nations, by [redacted] conferences or international agencies held or created to deal with international economic matters.

The Governments of the United States, the U.S.S.R., and the United Kingdom are all one with the Government of Iran in their desire for the maintenance of the independence, sovereignty and territorial integrity of Iran. They count upon the participation of Iran, together with all other peace-loving nations, in the establishment of international peace, security and prosperity after the war, in accordance with the principles of the Atlantic Charter, to which all four Governments have subscribed.

Winston S. Churchill
H. Hopkins.
Joseph V. Stalin

DECLARATION OF THE THREE POWERS REGARDING IRAN

[For text see page 444.]

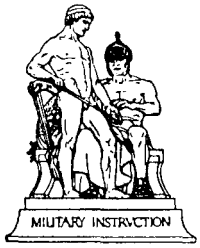
UNITED STATES ARMY IN WORLD WAR II

The Middle East Theater

THE PERSIAN CORRIDOR AND AID TO RUSSIA

by

T. H. Vail Motter



CENTER OF MILITARY HISTORY
UNITED STATES ARMY
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. . . to Those Who Served

Foreword

This volume relates the problems faced by Allies who met in strange lands without the benefit of tested and well co-ordinated policies to govern their diplomatic and military relations. The jealousies and conflicting interests of nations and of government agencies, together with the overlapping of authorities, aggravated an already complex situation. The history here presented seems to make axiomatic the necessity for a single commander in the field who has clear-cut instructions based on long-range plans that have been evolved from past experience and precedent.

Because of its valuable information and acute analysis, this book is essential reading for those faced with the responsibility of future planning in the realms of strategy and its logistical elements. Soldier, diplomat, and financier will find in the following pages a forewarning of the type of problems to be encountered whether in the field of transportation, communications, access to raw materials, the insurance of uninterrupted oil supplies, or in the unpredictable and delicate job of international relations.

Those on the ground struggled with immediate problems not always clearly seen from a distance. Anticipation, planning, and study of history may reduce, if not eliminate, such difficulties in the future.

The author, who holds a Ph.D. from Yale, spent more than two years with the U.S. Army in the Middle East during the war and served for nearly seven years as Chief of the Middle East Section, Office of the Chief of Military History. He has published books and articles in the field of literary and historical scholarship.

Washington, D. C.
15 December 1951

ORLANDO WARD
Maj. Gen., U. S. A.
Chief of Military *History*

Preface

No book which takes years to write and another year to bring to publication can hope to keep up with events in Iran. I have therefore dropped a chapter on the postwar years because I could only record in it confused and ever graver incidents without being able, at such close range, to assess their meaning.

Moreover, my purpose has been to tell the story of United States Army activity in the Persian Corridor during the war years 1941–1945. Since the true historical significance of that activity may well prove to be not the success of the aid-to-Russia supply effort—significant as that was to the victory—but the intimate association of the United States with the state of Iran, I have set the Army's story within the larger framework of economic, social, and political factors, without, I hope, taking my eye from the object, which was to show how the Army got there, what it did, and what its activity meant.

I have drawn for primary sources upon official documents and upon interviews and correspondence, and for secondary sources upon narratives prepared during the war at U.S. Army headquarters, Tehran. The location of documents cited in the footnotes may in some instances be ascertained by reference to the Glossary, where designations of collections are explained. The chief of these include the files of headquarters and subheadquarters of the American commands at Tehran and Cairo; and at Washington the files of the War Department General Staff, War Plans and Operations Divisions, the Historical Records Section, Departmental Records Branch, Adjutant General's Office, the Control and International Divisions, Army Service Forces, the Military Intelligence Division, the files of the North Atlantic Division Engineer and of the New York Ordnance Department (both at New York); and at Washington again, the files of the Office of the Chief of Engineers, the Office of the Chief of Transportation, the Department of State, and the Foreign Economic Administration. Smaller selected files assembled by the historical sections at Tehran and Cairo (cited as the Persian Gulf Files and the Middle East Files respectively) have also been heavily drawn upon. I am obliged to the officials of the Historical Section, Cabinet Office, London, for their courtesy in furnishing copies of British documents not available in American files; and to the following civilian contractors who allowed access to the records of their Persian Corridor operations and, through conference and correspondence, supplied valuable information or commentary: Foley Brothers, Inc.; Spencer, White

and Prentis, Inc.; the General Motors Overseas Corporation; the Douglas Aircraft Company; the J. G. White Engineering Corporation; the Bahrein Petroleum Company; and the Bechtel-McCone Company. Specific obligations in these and all other instances are cited in the footnotes.

Many persons, through interviews, correspondence, and memoranda, have supplied information, criticism, and a variety of points of view useful in the highest degree. I am especially grateful to the following: Col. Philip T. Boone, Brig. Gen. Donald P. Booth, Maj. Gen. Donald H. Connolly, Col. L. D. Curtis, Louis G. Dreyfus, Jr., Arthur W. DuBois, C. Vaughan Ferguson, John W. Frey, Maj. Gen. Patrick J. Hurley, Col. Milford F. Henkel, Philip C. Kidd, James M. Landis, John Lawrence, Col. Albert C. Lieber, Jr., Derwood W. Lockard, Maj. Gen. Russell L. Maxwell, Wallace Murray, Maj. Gen. Clarence S. Ridley, Brig. Gen. H. Norman Schwarzkopf, Charles H. Sells, Brig. Gen. Don G. Shingler, Col. John B. Stetson, Jr., Brig. Gen. Joseph B. Sweet, Frederick Winant, Edwin M. Wright, T. Cuyler Young, and Brig. Gen. Paul F. Yount.

Most useful of secondary sources were the studies prepared in the Historical Section, Office of Technical Information, Headquarters, Persian Gulf Command, by 1st Lt. Francis J. Lewis, Acting Chief of the Section, and the following noncommissioned officers: Laurence P. Corbett, Ralph W. Kerns, Victor H. Pentlarge, Jr., Ogden C. Reed, Wallace P. Rusterholtz, and George B. Zeigler. They are narratives (cited with their authors' names in the footnotes) totaling a quarter of a million words, written at the level of the operating units. The studies provided information, background, and a reservoir of incident and comment of the sort that does not reach papers produced at the highest levels. Three of these narratives, abridged by Sylvia Josif (Mrs. Harold Josif), provided the starting point for my chapters on port, railway, and trucking operations.

Of help received from members of the Office of the Chief of Military History I particularly mention the expert collaboration in statistical matters of George Powell and the skill, tact, and taste with which Miss Ruth Stout, for two years as my editorial assistant and thereafter as Associate Editor, shepherded the manuscript into print. Finally, I wish to note that this project was undertaken in 1944 by invitation of Dr. Walter L. Wright, Jr., first Chief Historian of the Army, whose interest continued after he left the Pentagon in 1946 and persisted to his untimely death at Princeton University in 1949.

T. H. VAIL MOTTER

Washington, D. C.
15 December 1951

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The *Frontispiece*, supplied by the Department of State, is from the White House files.

The two photos are from the U. S. Air Forces, Department of Defense.

THE PERSIAN CORRIDOR AND AID TO RUSSIA

PART ONE

THE COMING OF THE AMERICANS

CHAPTER I

Experiment in Co-operation

The story of United States Army activity in the Persian Corridor during World War II has a central theme, supply. Its major development, lend-lease aid to the Soviet Union, grows out of its minor, lend-lease aid to Great Britain in supplying Russia and in preparing against threatened Axis invasion of the area. The fighting war, the war of guns, is but a muted obbligato to the central theme. The strategic unity of the Middle East and its vital importance to the final victory, the bloody struggle to fend off Axis drives toward Suez and the oil fields of Iraq and Iran, of Saudi Arabia and the Caucasus—these are high themes, but not the subject of this book.

This is not the story of guns and fighting. Here, men do not kill, though they are sometimes killed. The story of supply tells of another kind of fight, not without its own brand of courage, its own price of endurance.

Supply is the theme, the fighting war all but an echo. There will be dissonance; for in this story the United States finds itself upon a stage long trodden in rivalry by Britain and Russia. From the mingled motifs arise overtones, troubled echoes of the past, jarring notes of the present, and unfinished phrases awaiting the future.

Supplying the Soviet War Machine

Military supply is a means, not an end. Mechanized warfare has made it a prime factor in planning and in operations. Skill, spirit, supply—these are essentials to victory; but without the third, the first

two cannot prevail in a struggle of industrialized antagonists. The pooling of supply, the American idea which culminated in the Lend-Lease Act of 1941, produced one of the most potent weapons of World War II. Conceived as a defensive measure, on the principle that defense of Axis enemies was defense of the United States, the Lend-Lease Act was in effect a declaration of economic belligerency in a war that intertwined industrial with military power. It was lend-lease which, long before Pearl Harbor brought military belligerency to the United States, furnished the means by which American economic strength could be shared with Great Britain in 1941 in the Middle East. In that crucial area Britain waged a David and Goliath struggle against Italian and German armies in North and East Africa, in Greece and Crete, and against pro-Nazi elements in Syria, Iraq, and Iran. Defeat would have entailed the loss of an area necessary to the victor in a global war. Defeat would have cut off Britain from her best source of essential petroleum. American aid in the form of war materials and logistic services, brought to Africa in 1941 and 1942, weighed fully in the reckoning which took place at El Alamein in October 1942. There, spirit, skill, and superior supply overcame spirit, skill, and vanishing supply, and the Axis threat from the west against the Middle East was eliminated. (*Map 1—inside back cover*)

It was lend-lease which, in September 1941 after the German attack on the Soviet Union, made the United States an auxiliary of Great Britain in the task of delivering supplies to the USSR through the Persian Corridor. This route, joining Soviet territory to warm water across the mountains and deserts of Iran, was one of five by which 17½ million long tons of lend-lease supplies were carried from Western Hemisphere ports to Soviet destinations. It is difficult to visualize 17½ million long tons in the abstract; but 2,803 ships crossed the seas to carry them, a fleet more than nine times as numerous as that which mounted the Anglo-American invasion of North Africa in November 1942. The total tonnage figure nearly matches the 22 million long tons landed on the Continent of Europe for the American forces between January 1942 and May 1945. Russia's share of the common pool was therefore considerable, befitting her share in the common conflict. In committing munitions and equipment to the titanic defense of Stalingrad, the USSR knew that material losses could be mitigated in ever mounting quantities by future lend-lease receipts.[1] The expul-

[1] The British sent large amounts of goods and raw materials to the USSR during the latter half of 1941. The first American planes were shipped to Russia in September 1941; the first ship to leave the United States for the Persian Gulf sailed in November. "Enough supplies did get to Russia, however, to be of real value in the summer fighting of 1942." Edward

sion of the last Nazis from Stalingrad, completed by 2 February 1943, removed the enemy threat to the Middle East from the north as El Alamein had done from the west. Supply tipped the scales in both battles that saved the Middle East. Afterward, as the German armies withdrew from the passes of the Caucasus and receded westward round the Black Sea, the task of supplying Russia through the Persian Corridor increased in intensity. The change in the American role in late 1942, from auxiliary to full partner of the British in the supply effort, raised the Corridor's tonnage to second place among the five routes to the USSR, and brought to the Persian Gulf ports nearly one fourth of the total lend-lease tonnage shipped to the Soviet Union from the Western Hemisphere.[2]

How important for the Russians Anglo-American reinforcement through the Persian Corridor might prove was accurately anticipated as early as the spring of 1942 by a German study prepared for Hitler. It reads, in part, as follows:

> In their endeavor to support Soviet Russia, Great Britain and the United States will make every effort during the coming weeks and months to increase shipment of equipment, matériel, and troops to Russia as much as possible. In particular the supplies reaching Russia on the Basra-Iran route will go to the Russian Caucasus and southern fronts. All British or American war matériel which reaches Russia by way of the Near East and the Caucasus is extremely disadvantageous to our land offensive. Every ton of supplies which the enemy manages to get through to the Near East means a continuous reinforcement of the enemy war potential, makes our own operations in the Caucasus more difficult, and strengthens the British position in the Near East and Egypt.[3]

Written before El Alamein and Stalingrad extinguished the German drive for the Middle East, the document stands as eloquent tribute to the effectiveness of the logistical partnership of Great Britain and the United States in the Persian Corridor. A few figures will indicate the reality Hitler feared.

A total of 4,159,117 long tons of Russian-aid cargo was shipped from the Western Hemisphere to all Persian Gulf ports between November 1941 and May 1945; but this was only a fraction of the traffic

R. Stettinius, Jr., *Lend-Lease: Weapon for Victory* (New York: The Macmillan Company, 1944), pp. 208, 215. (Quoted by permission of the publishers.)

[2] (1) Report on War Aid Furnished by the United States to the USSR, Foreign Economic Sec, Office of Foreign Liquidation, Dept State, 28 Nov 45, p. 14. (2) Tables 1, 2 and Chart 12. For the five routes see Ch. XIX, pp. 432ff, below. (3) Hist Rpt, The Transportation Corps in the European Theater of Operations, Vol. VII, Apr, May, Jun 45, Pt. 3, Appendixes. ETO Admin 582, HRS DRB AGO (Historical Records Section, Departmental Records Branch, Adjutant General's Office). (4) British Battle Summary 38. BR 1736 (31) Operation "Torch," Nov 42–Feb 43, 1948, pp. 14ff.

[3] *Fuehrer Conferences on Matters Dealing with the German Navy 1942*, Office of Naval Intelligence, Washington, D. C., 1946, pp. 65–66, Annex 5 to Rpt by the CinC, Navy, to the Fuehrer, 13 Apr 42.

handled by British and American agencies in the area during that period. Supplies and equipment destined for the Soviets came also from Great Britain, Africa, and India; aircraft were flown in for delivery to the Russians; and over half a million long tons of petroleum products originating in Iran were carried north to Soviet receiving points. In addition to all this were the supplies to maintain the British and American forces in the area, and to support large numbers of Polish refugees, British and American civilian agencies, and the Iranian and Iraqi civilian economies. All told, about 7,900,000 long tons of imports were discharged at Persian Gulf ports between 1941 and 1945. Of this amount 3,900,815 long tons, 90 percent of it destined for the USSR, were discharged at ports operated by the U.S. Army. British and American agencies together, between 1942 and 1945, delivered to the Soviets 5,149,376 long tons of which the Americans accounted for 4,417,243 long tons. The figures show that, although the British and Americans handled approximately equal tonnages, the bulk of Russian-aid tonnage was delivered by the Americans. It has been estimated that American deliveries through the Persian Corridor to the USSR were sufficient, by U.S. Army standards, to maintain sixty combat divisions in the line.[4]

But while statistics furnish an accurate measure of achievement, they ignore the factor which made it possible and which was itself of equal significance. The Persian Corridor operation was an experiment in international co-operation with no exact parallel or historical precedent. Here was Iran, forcibly occupied by Great Britain and the USSR, two long-standing rivals for its control, serving as a highway over which one of the rivals, calling upon the assistance of a fourth nation, the United States, delivered supplies to the other rival, now, by the fortunes of war, an ally. As an American officer put the case during the first months of confusion, one nation was attempting to deliver supplies to a second nation with the occasional interference of a third through the country of a fourth in which none of the first three, save

[4] (1) The American share includes the weight of motor vehicles assembled in American-operated plants in Iran and the cargoes they hauled north to the USSR and the weight of aircraft assembled at the American-operated plant in Iran, as well as the petroleum products originating in Iran and carried overland to Soviet receiving points. See Tables 1, 2, 3, 4. Because of inadequate data, estimates of British accomplishment are only approximate. They are taken from or based upon figures in History of the Persian Gulf Command, Historical Section, Office of Technical Information, Hq, PGC (cited hereafter as HOTI), Pt. VII, Ch. 6, Transport Routes and USSR Deliveries through the Persian Corridor, by Ogden C. Reed, pp. 28, 34, 36, 39. PGF (Historical Files, Office of Technical Information, Hq, PGC, now at Office of the Chief of Military History). (2) Estimate in last sentence is from Operations in the Iran–Iraq Area, address before the National War College, 18 January 1948, by Maj. Gen. Donald H. Connolly.

for the war, had any business to be. But the strange combination worked.

Even with war needs acting as a spur, the experiment in co-operation was from the start both delicate and difficult. This would have been true had the United States not been a newcomer to an area recognized internationally as within the sphere of British influence. The United States, though long represented in the Middle East by educational and philanthropic undertakings, had entered substantially into Middle Eastern commerce by way of oil only after the first world war. The second war found the United States unprovided with a long-range policy. None had been needed up to 1939 save general friendliness, since the United States had neither political nor military interests in the area. Americans were so unfamiliar with the area that, in the feverish planning of 1941, War Department intelligence had to turn for information on highways and transport routes in Iran to the Consultant in Islamic Archaeology at the Library of Congress. When the accident of history brought the United States to Iran, problems of supply called for immediate solution. Nobody asked what implications the future held. Action first, questions later. There would be time enough to learn whether America had come to the madhouse of Middle Eastern politics as visitor, doctor, or inmate.

The British and the Americans

Building docks and highways, assembling trucks and planes, running trains and unloading ships—these were compassable, concrete jobs. But the exigent, active present was haunted by the long, slothful past, and the past is nowhere so long as in the parched valley where Eden once was green and fruitful. It was to be a new experience for Americans, this dealing with the past as they learned to adjust themselves to three main stresses in the urgent present. First, there were certain British rights and obligations in Iraq and Iran which were applicable to Britain's new American collaborator. Second, there were unforeseen difficulties inherent in lend-lease aid to the Soviet Union. And finally, there were the conditions accepted by Iran under the Anglo-Soviet occupation.

When the first Americans reached the Persian Gulf late in 1941, forerunners of some 30,000 U.S. Army service troops to come, the British position east of Suez reflected three campaigns fought earlier that year. The first was in Iraq, oil-rich geographical core of the Middle East. Iraq had been mandated to the British after World War I at the carving up of the old Ottoman Empire. In 1932 the mandate had

been terminated and Iraq became an independent state and member of the League of Nations. Independence had been buttressed by a treaty of alliance with Great Britain, signed in 1930, whereby Iraq was guaranteed "against external aggression." In return the treaty (revised in 1936) had granted Britain air bases at Habbaniya near Baghdad and Shu'aiba near Basra, to be occupied during the life of the treaty. The treaty further provided, in its fourth article, as follows:

> Should . . . either of the High Contracting Parties become engaged in war, the other High Contracting Party will . . . immediately come to his aid in the capacity of an ally. In the event of an imminent menace of War the High Contracting Parties will immediately concert together the necessary measures of defence. The aid of His Majesty the King of Iraq in the event of war or the imminent menace of war will consist in furnishing to His Britannic Majesty on Iraq territory all facilities and assistance in his power including the use of railways, rivers, ports, aerodromes and means of communication.

The Iraqi part of the railway, connecting the Persian Gulf via Baghdad with the Mediterranean at Tripoli and the Bosporus at Istanbul, was British controlled. So was the pipeline network from the Kirkuk oil fields to Tripoli and Haifa. The treaty thus recognized British interest in the defense of an essential part of British economy. The fifth article of the treaty stated:

> It is understood between the High Contracting Parties that responsibility for the maintenance of internal order in Iraq and . . . for the defense of Iraq from external aggression rests with His Majesty the King of Iraq. Nevertheless His Majesty the King of Iraq recognizes that the permanent maintenance and protection in all circumstances of the essential communications of His Britannic Majesty is in the common interest of the High Contracting Parties. For this purpose and in order to facilitate the discharge of the obligations to His Britannic Majesty under Article 4 above [air bases were granted as previously stated].[5]

In April 1941, as a corollary of the swift German triumphs in Greece and Crete, *a coup d'état* in Iraq deposed the pro-British Regent, Prince Abdul Illah, whose escape to Habbaniya and thence by air to Basra on 2 April was assisted by the American Legation at Baghdad.[6] At Basra the regent was smuggled aboard H.M.S. *Falmouth* to await a more propitious time to show himself. An anti-British government took over. The transformation was aided by the covert and well-organized encouragement of German agents. The hospitality which

[5] Quotations from treaty here and above from Samuel Van Valkenburg, *Whose Promised Lands?* (New York: Foreign Policy Association, Headline Series 57, May–June 1946), pp. 32–34.

[6] The following account draws upon History of PAI Force, revised MS, by Colonel Hutchinson, Hist Sec, Cabinet Office, London (cited hereafter as PAI Force History), Pt. I, pp. 15, 16–28, 36, 41. This manuscript, expanded and altered in some details, was published as *PAIFORCE: The official story of the Persia and Iraq Command 1941–1946* (London: His Majesty's Stationery Office, 1948).

Vichy airfields in Syria offered to German war planes may have seemed to Iraqi Anglophobe elements a more concrete assurance of support than the protection afforded Iraq under the treaty with Great Britain. British prestige fell.

Nevertheless, the British moved as provided by treaty to protect their vital interests. By an operation planned and executed by the British India theater under Gen. Sir Claude J. E. Auchinleck, British forces, predominantly Indian, landed at Basra on 18 April and moved north toward the oil fields and Habbaniya. Reinforcements from India followed on 29 April and Gen. Sir Archibald P. Wavell, as Middle East theater commander, moved troops into Iraq from Palestine. Contact was made on 6 May south of Habbaniya between British forces and two infantry brigades of the Iraqi Army which suffered severe casualties. There was also air contact with German aircraft. What amounted to a siege of the British Embassy at Baghdad was lifted and the Iraqi forces sued on 31 May for an armistice. Members of the British community who had withdrawn to the hospitality of the American Legation came back into circulation, and on 1 June the regent returned to his capital from a short vacation. The crisis was surmounted in Iraq.

Surmounted, but highly dangerous in view of the insistent pressure of the Axis west of Suez which only the month before had driven the British inside the Egyptian border at Halfaya Pass. Firm control of Iraq would save the Mosul–Kirkuk oil fields if the threat from the west were contained. There was as yet no threat from the north. Hitler had not yet invaded Russia.

But there were other dangers nearer than Suez. The lurking menace of German intrigue and German aircraft having been subdued in Iraq, the British moved forthwith to root these elements out of Syria. The ensuing campaign, under command of Gen. Sir Henry Maitland Wilson, involved forces sent from Palestine by General Wavell as well as assistance from the Indian divisions which had occupied strategic points along the Iraqi line of communication between Basra and Baghdad. Begun on 8 June, it was concluded by the capitulation of the Vichy French signed on the anniversary of Bastille Day, 14 July. With Syria and Iraq now free of Axis influence, the way was cleared for the events which were to take place in Iran the following month.

The Fertile Crescent, linking the Nile Delta with the head of the Persian Gulf, would now have been secure and the Suez Isthmus defended from the east had it not been for the wholly new danger to the Middle East posed by Hitler's invasion of the Soviet Union on 22 June 1941. His rapid and apparently inexorable sweep eastward was to bring him by the year's end past Odessa to Rostov at the head of the

Sea of Azov. It was all too apparent, even in midsummer, that he was driving for the Caucasus, nor did the changing fortunes of battle that winter reduce Allied concern lest he succeed. Success in penetrating that barrier and winning the Soviet oil lands lying between the Black and Caspian Seas would expose not only Iraq but Iran also, with its British oil fields in the south and vital corridor linking the USSR with the Persian Gulf.

To cope with any such calamitous sequel to German penetration beyond the Caucasus, the Soviet Union and Great Britain, now allied in the common struggle, determined upon a joint invasion of Iran. With no illusions that they could stop the Germans in Iran if the Russians could not contain them north of the mountains, the British sought merely to delay the invader and to destroy anything useful to him. Moreover, Iran's despotic ruler, Reza Shah Pahlevi, was openly partial to the Axis cause, and the presence of some two thousand German subjects in Iran created a powerful counterweight to Allied interests there. Joint Anglo-Soviet military action began on 25 August, when 40,000 Soviet troops entered Iran from the north and headed for Tehran. On the same day about 19,000 British troops, mostly in Indian brigades, entered from various directions; half of them moved straight for the oil fields in the neighborhood of Ahwaz, and some airborne units went to Abadan to protect British subjects there and the great refinery of the Anglo-Iranian Oil Company, then the largest in the world. There was some slight resistance on the part of Iranian troops and some blood was shed. No force Iran could have brought to bear could have withstood the power of the occupying armies of Britain and Russia, and, thanks to the recent British actions in Syria and Iraq, German help by air was now as far away as Crete. On 30 August identical notes were submitted by the invading powers to the Iranian Government which accepted their terms on 9 September. On 16 September the Shah abdicated in favor of his son, Mohammed Reza Pahlevi, and left the country, to die in exile in South Africa. The next day Tehran was jointly occupied by the British and Russians, but without show of military force, the troops having bypassed the city en route to barracks on the outskirts. Local civilian authority continued uninterruptedly.[7]

The terms imposed in September 1941 by the occupying powers

[7] (1) Maj Gen Sir Francis de Guingand, *Operation Victory* (New York: Charles Scribner's Sons, 1947), pp. 87, 101. (2) India at War, 1939–1943, Hist Sec, India, pp. 77–79, 81–83, 89. Accession 618, OCMH. (3) A Review of the Joint British-Soviet Action Against Iran, by Harold B. Minor, 1 Nov 41. Dept State. (4) State Dept Rpt, British Controls in Iraq, by Richard E. Gnade, 25 Feb 44. MID (Military Intelligence Division) 330 Great Britain, 3 Apr 44 (12 Mar 43). (5) MA Rpts 1, 2, 3 from Baghdad, 5, 6, 10 Sep 41. MID 370.2 Great Britain, 9–10–41 (9–5–41). (6) PAI Force History, I, 57–65.

were designed to secure the control by them of an area vital to their survival in the war against Germany. They disavowed any designs against the territorial integrity or independence of Iran and promised withdrawal when the military situation permitted; and they provided for the co-operation of Iran in what had perforce become the common cause. Iran agreed to remain neutral in the war and to refrain from any act contrary to British or Soviet interests. These and other provisions were incorporated into a Tri-Partite Treaty of alliance which was signed on 29 January 1942 by Great Britain, the Soviet Union, and Iran. The treaty provided for withdrawal from Iranian territory of British and Russian troops six months after the cessation of hostilities against Germany and its associates. It stipulated that Iran's contribution to security was to be restricted to internal security only; and it provided by Article 9 that on the date fixed for withdrawal of the forces of the Allied Powers, the treaty would cease to be binding on any of its signatories.[8]

Two clauses of the treaty proved of especial significance, in the light of subsequent events which were to make the Persian Corridor a principal line of communication linking the American source of vital war materials with the Soviet battlefields. By Article 3 ii(b), Iran granted Britain and Russia "the unrestricted right to use, maintain, guard and, in case of military necessity, control in any way that they may require, all means of communications throughout Iran, including railways, roads, rivers, aerodromes, ports, pipelines, and telephone, telegraph and wireless installations. . . ." By paragraph (d) of the same clause, Iran agreed "to establish and maintain, in collaboration with the Allied Powers, such measures of censorship control as they may require for all the means of communication referred to in paragraph (b)." Thus by September 1941 Britain in the south and Russia in the north found themselves firmly in control of Iranian communications.

There were other consequences of the Anglo-Russian occupation. For a time following it, a considerable pro-German sentiment flourished among a population which resented the invaders and longed for "liberation" by Germany. Until El Alamein and Stalingrad their longings seemed all too near realization. A second consequence, likewise undesirable, was the division of Iran into areas of control allotted to the occupying powers—Russia north of Tehran, Britain south; both at the capital. The numerous authorities resulting did not always work together efficiently. But these disadvantages were far outweighed by the

[8] The treaty is printed in Philip W. Ireland, ed., *The Near East* (Chicago: University of Chicago Press, 1942: 2d impression, 1945); also in *The Middle East, 1948* (London: Europa Publications, Ltd., 1948), pp. 29–30.

value of the Corridor as a line of supply into the Soviet Union. The occupation, although conceived and carried out to deny the area to the Axis, provided a supply route to the USSR just when the north Russia route to Murmansk and Archangel was beginning to prove unduly hazardous to Allied convoys.

So here, in September 1941, were the British and the Russians once again in Iran, whose occupation by their forces was the price it innocently incurred for its strategic location. It was also the price of the sins of Reza Shah. It was not the first time armed forces of Britain and Russia had invaded Iranian soil.[9] For a hundred years Russia had pressed upon the northern borders. Three times in the twentieth century Russian troops had crossed them against the Iranian people's will. Opposed steadily by British counterpressures, these Russian incursions had twice been matched in the twentieth century by the presence of British troops. After Napoleon, the southward sweep of Russia in Asia was met by Britain's strengthening her position in the North West Frontier Province of India, Baluchistan, and the area of the Persian Gulf. With only Iran, Afghanistan, and Tibet as buffers, Russia penetrated culturally and economically into northern Iran and dominated Tehran.

In due course Germany's drive to the east forced Russia and England into each other's arms. The Convention of 1907, while affirming the integrity and independence of Iran, virtually partitioned it into English and Russian spheres with a neutral zone between. So complete was the disregard of Iran's independence that her declared neutrality in the war of 1914 was ignored, while Russia, Britain, and Turkey made her territory their battlefield. In that period Britain used 22,000 troops to quell a German-encouraged revolt of Iranian tribes.

From 1907 to the Russian Revolution, Britain and Russia cooperated in Iran. With the revolution and Russian preoccupation with internal affairs, Britain seized the chance to outwit her Asiatic rival and negotiated with Iran the abortive Anglo-Persian treaty of 1919 whereby Iran was to become a virtual protectorate. Even so, Bolshevist troops occupied the Caspian province of Gilan and did not withdraw until the British, realizing the Iranian Majlis would not ratify the proposed treaty, removed their own troops in 1921. These maneuvers, as Chapter IX will show, were played to off-stage gesticulations by a United States unhappily divided between Wilsonian advocates of inter-

[9] For a panorama, from Peter the Great's occupation of Gilan in 1724 and Catherine the Great's conquests of Iran's Causasian provinces, down to World War II, see George Lenczowski, *Russia and the West in Iran, 1918–1948: A Study in Big-Power Rivalry* (Ithaca, N. Y.: Cornell University Press, 1949), Introduction, pp. 1–5.

national responsibility and those who wished to escape backward into "normalcy." In a world which did not at Versailles wholly abandon the old diplomacy for the new, a United States with no vital material interest in Iran could do little but gesture at a situation it protested. But Lansing and Wilson, if they were not heeded, were observed; and the American voice, though but a stage aside in support of Iranian sovereignty, was heard in Britain, in the USSR, and in Iran.

That year—1921—the Soviets countered the British agreement with a Soviet-Iranian treaty of friendship containing an important concession which allowed the USSR to advance troops into Iranian territory if any third power should threaten Iran or the Soviet Union from Iranian territory. The treaty was signed in February just after a *coup d'état* put Reza Khan into the government for the first time. After serving as Minister of War and Prime Minister he became Shah in 1926. There followed a period of iron rule during which, by borrowing American and German technical skills for the improvement of the country's economy, and by playing off Britain and Russia against one another, Reza Shah made Iran relatively strong and independent. All this came to an end when the situation in 1941 brought about the new Anglo-Soviet occupation and the tripartite alliance of January 1942 with its guarantee of Iranian integrity and of withdrawal of foreign troops after the cessation of hostilities. Uneasy as the alliance was in the area of ancient rivalry, it was no combination, as in 1907, of two strong powers to exploit a weaker. The spirit of 1941 was one of co-operation in common defense. When Britain called upon the United States to aid her, the spirit was significantly fortified. American aid in the Corridor proved important not only in the supply task but also politically as a kind of counterweight in the intricate clockwork of a troubled area.[10]

Events which preceded the American arrival in 1941 had strained British resources in both regional areas of the Middle East. The suppression of the pro-German revolt in Iraq, completed in May 1941, left the British forces in control of the line of communications running between their treaty bases near Basra and near Baghdad; but in that same month the Germans were occupying Crete and were driving British forces back in the North African fighting inside the border of Egypt. The newly passed Lend-Lease Act having provided a procedural framework for American aid, conversations were going forward in London between the British Joint Planning Staff and members

[10] (1) R&A 1206, Conflicts and Agreements of Interest of the United Nations in the Near East, 10 Jan 44, Research and Analysis Br, Office of Strategic Services. (2) Middle East Oil a Vital Military Factor, 21 Dec 45. MIS MID WD (Military Intelligence Service, Military Intellgence Division, War Department).

of an American Special Observer Group under Maj. Gen. James E. Chaney. The object of the conversations was to determine where and how American aid could be effectively applied in that dark spring. Prominently under study was the Middle East; but because it was less in need than the area west of Suez, the Persian Gulf area of the Middle East was scarcely mentioned.[11]

Previous to the German invasion of the USSR, the commander of British forces in Iraq, Lt. Gen. Sir E. P. Quinan, arriving at Basra early in May, had been directed by GHQ, India, to secure the line of communications, and to provide for the maintenance of "such forces as may be required to operate in the Middle East, including Egypt, Turkey, Iraq. . . ." [12] Hitler's sweep across Russia in the summer led to the enlargement of General Quinan's responsibilities. He was not only to maintain the Basra–Baghdad line of communications, with such port development as that entailed, but was to provide for maintenance of ten divisions, increased from the three of his original directive; and he was to prepare against invasion of Iraq via either Anatolia or the Caucasus. The events in Syria in June and July and the occupation of Iran in August measurably expanded the British task. When in September General Wilson took over command of the newly designated Persia and Iraq Force (PAI Force), his Tenth Army included 3 corps headquarters, 7 infantry divisions, 1 armored division, 1 independent armored brigade, 1 independent motor brigade, and some antiaircraft artillery. With more area to defend, more troops had to be maintained. Not until early 1943, after El Alamein and Stalingrad, was it possible to reduce British defensive strength or base installations in Iran.

The new German threat from the north to the British position in Iraq in midsummer 1941 brought that country into Anglo-American discussions of aid to Britain in the Middle East. In July President Franklin D. Roosevelt dispatched W. Averell Harriman, who visited the British bases in Iraq and informed himself on the defense of the oil fields. At that time British responsibilities were confined to security and communications, and American aid was being considered on the basis of those British responsibilities. The Anglo-Soviet occupation of Iran in August and the feasibility of opening there a new supply route

[11] The Special Observer Group Prior to the Activation of the European Theater of Operations, October 1944, pp. 25, 27, 40, 41, 51–52, 77, 80, 81–83, Hist Sec, ETO. Study superseded by The Predecessor Commands: The Special Observers and United States Army Forces in the British Isles, by Warrant Officer (jg) Henry G. Elliott, Part I of The Administrative and Logistical History of the European Theater of Operations.

[12] This and the following paragraph draw upon PAI Force History, I, 28, 46, 72–74, and II, 26.

to Russia further extended British responsibilities and, as a corollary, the scope of American aid. Without waiting for the acceptance by the Iranian Government of the terms submitted to it in the identical notes of 30 August, the British Government promptly charged the United Kingdom Commercial Corporation with procurement of commodities for the USSR and their delivery through the Persian Corridor. The British task now embraced not only security and communications but supply to the Soviet Union. It was immediately recognized that in this new undertaking the Iranian State Railway (ISR) would play a vital role. After informally ascertaining from President Roosevelt American willingness to help in equipping the railway, Prime Minister Winston Churchill, through a cable from Lord Beaverbrook to the Messrs. Harry Hopkins and Harriman, on 6 September expressed the hope that the United States would send certain quantities of locomotives and freight cars inasmuch as the best available route into the Soviet Union during the winter months was that via the ISR.[13]

At the same time the London War Office instructed the British Supply Council in North America in details of similar requests to be made direct to the fountainhead of lend-lease in Washington, emphasizing the needs for the ISR as the most pressing transportation requirement in the entire Middle East. The ensuing memorandum, presented by E. P. Taylor, Chairman of the British Supply Council, to the Division of Defense Aid Reports in Washington,[14] while dealing mainly with requirements for the hard-pressed Red Sea area and Egypt, embodied in its final paragraph the British intention of raising the capacity of the ISR from 200 tons to 2,000 tons per day, and of the Iranian highways to 12,000 tons per month. The expanded highway program was needed to supplement rail haulage in a country whose aridity set limitations on the use of the steam locomotives then planned for and on order. On 10 September Brig. Gen. George R. Spalding

[13] Rad 4105, American Ambassador, London, from Beaverbrook to Hopkins and Harriman, 6 Sep 41. Iran 44/1.2, NADEF (North Atlantic Division Engineer Files, New York). Another copy PGF 242.

[14] The Division of Defense Aid Reports, created 2 May 1941 by Executive Order 8751, was an instrument within the civilian executive agency, the Office for Emergency Management, designed to take over all the administrative details of the lend-lease program, to clear transactions and reports, and to co-ordinate the processing of requests for aid submitted by foreign countries. Its first executive officer was Maj. Gen. James H. Burns, with whom were associated Brig. Gens. Sidney P. Spalding and George R. Spalding, as heads of the Production Section and the Shipping and Storage Section respectively. Eventually the Division of Defense Aid Reports was abolished by the executive order of 28 October 1941 which created the Lend-Lease Administration. (1) A Brief Historical Statement, Records Analysis Div, Office of Budget and Adm Planning, Foreign Economic Administration, 10 May 44, p. 5. (2) Stettinius, *Lend-Lease*, p. 96. (3) WD Cir 59, par. 8, 2 Mar 42. (4) Ann Rpt, SOS, 30 Jun 42, p. 15.

requested that the ISR be made an approved lend-lease project under aid to Britain.[15]

Meanwhile, the conversations held in London the previous May regarding lend-lease aid to the British in the Middle East had been evolving machinery for rendering that aid. On 11 September the War Department notified General Chaney that, "to comply with the desires of the British Government," it contemplated setting up supply and maintenance depots in the Middle East.[16] Two days later, a presidential directive to the Secretary of War to render lend-lease aid to Great Britain in the Middle East embodied the principles of the message to Chaney and set in motion the plans which had been brewing since spring. Though the plans were the product of many minds, the Middle East Directive of 13 September 1941 bears the stamp of the President's peculiar skill in sensing public opinion. Where the draft presented to him had borne the words "expressed wishes" of the British Government, the President's pen had substituted the words "expressed needs." This slight but significant change recognized both the undoubted need of aid and the equally ponderable sensibilities of a part of the American public.[17]

Two salient features of the Middle East Directive need underscoring at this point: first, the method by which it was proposed to furnish the aid; and second, the strictly auxiliary status of American aid. Under the first point, the directive made plain that the aid was to be furnished not by an expeditionary force, but through the Defense Aid Division of the War Department.[18] This consideration, made expedient by the fact of continued American military neutrality, confined the war aid to be furnished Britain to the economic sphere and determined that, though under Army supervision, it was to be furnished by private contract and civilian personnel. Second, the status of American aid was determined by the method, whereby the British were to requisition the War Department for aid through the Defense Aid

[15] (1) AG 400.3295 (8–9–41) Sec 1, under dates 5, 6, 10, and 23 Sep 41. (2) Memo, 10 Sep 41. Iran 44/1.2, NADEF. For estimates see also Memo, Gen George Spalding, 23 Sep 41, sub: Trans Facilities in Iran. PGF 122.

[16] Rad 49, WD to Gen Chaney, 11 Sep 41. AG 400.3295 (8–9–41) Sec 1.

[17] (1) Memo for Secy War, 13 Sep 41. AG 400.3295 (8–9–41) Sec 1. (2) The draft presented to the President was agreed upon by General Burns, Averell Harriman, and Harry Hopkins in Hopkins' office, later approved "in principle" by the War Department, and forwarded 9 September by Burns to Hopkins for Roosevelt. Memo, Burns for Hopkins, 9 Sep 41. WPD 4596 to –15 Iran (Persia), HRS DRB AGO.

[18] Established 8 April 1941 within the Office of the Under Secretary of War "to coordinate the functioning of the War Department," under the Lend-Lease Act, it was placed under the Commanding General, Services of Supply, effective 9 March 1942, and designated the International Division. On 1 October 1941 Col. H. S. Aurand became director. (1) Office Order, Secy War, 8 Apr 41. Folder 2, Drawer 3, Cabinet 65, Lend-Lease File—England, Defense Aid Papers, Intn Div. (2) See n. 14 above.

director in accordance with normal lend-lease procedure. "The British authorities should be consulted," the directive stated, "on all details as to location, size, and character of depots and transport facilities. Their needs should govern." The auxiliary status of the Americans was thus clearly established.

Some indication of the scale of the September planning for the Persian Corridor, even in this early and tentative stage, appears in a memorandum prepared for Harry Hopkins:

> The entrance of Russia into the war has given the Iranian theater urgent priority. The demands of the new theater are tremendous—250,000 ship tons of railroad material in one project, more than the total shipments to the Middle East to date, requiring from 50 to 75 ships, with the distance so great that only three trips a year can be made. A big automotive project is superimposed on the railroad project. Diversions of material hitherto destined for Egypt are being made to the new theater.[19]

If there had been any thought in the War Department that the Persian Corridor aid could be administered under the Middle East Directive through General Chaney's mission in London, or even through a War Department mission for the entire Middle East, a War Plans Division paper disposed of it. It was urged that, in view of the "rapidly changing Russian situation with the threat of a German offensive south through Turkey," the need of extensive supply facilities, not only for the British in the Persian Gulf area now commanded by General Wavell from India, but also for the support of the Soviet Union, called for the establishment of a separate American military mission. It was therefore recommended that an independent Iranian mission be formed under "an officer of broad engineering experience," and on 27 September Col. Raymond A. Wheeler, Acting Assistant Chief of Staff, G–4, who had served as Engineer of Maintenance of the Panama Canal and as Acting Governor of the Canal Zone, and who was a specialist in rail and highway matters, was appointed Chief, United States Military Iranian Mission. At the same time a parallel mission, the United States Military North African Mission, Brig. Gen. Russell L. Maxwell, Chief, with headquarters at Cairo, was set up to aid the British forces under General Auchinleck. These two missions were designed to carry out the responsibilities for implementing lend-lease aid to Britain in the Middle East which President Roosevelt had laid upon the Secretary of War in his directive of 13 September.[20]

[19] Memo, Gen Sidney Spalding for Harry Hopkins [n. d., but after 18 Sep 41]. Iran 43/1, NADEF.

[20] (1) Memo, signed by Col Robert W. Crawford, Actg ACofS, WPD, 24 Sep 41. AG 400.3295 (8–9–41) Sec 4. Another copy Iran 2/8, NADEF. (2) Ltr, 27 Sep 41, sub: Iranian Mission. AG 400.3295 (9–26–41). Another copy AG 400.3295 (8–9–41) Sec 1. Wheeler was promoted to brigadier general on 29 September 1941.

That directive, however, had specifically confined itself to aid to the British, and it was under its provisions that the Iranian Mission was established on 27 September to support the British forces in the Persian Corridor. But in this area, aid to Britain meant participation, on the supply side, in two different British responsibilities, namely, security of the line of communications (a vital part of a third British responsibility, defense against invasion) and supply to the Soviet Union. This indirect responsibility for Russian aid differentiated the two missions, the Iranian and the North African, which were established under the Middle East Directive.

Almost simultaneously, instructions were handed to British and American commanders in the field which recognized the Russian task in so many words. After a conference at Baghdad in September between General Wavell for India and General Auchinleck for Middle East, General Quinan's directive was widened to include taking "steps to develop such road, rail, and river communications as are necessary to ensure . . . the maximum possible delivery of supplies to Russia." [21] And on 21 October the Secretary of War instructed Wheeler, now a brigadier general, "to assure the timely establishment and operation of supply, maintenance and training facilities as required by present and contemplated British, Russian and other friendly operations within or based upon" his area.

In the years that followed, it was to be the destiny of the Iranian Mission and its successors to be primarily concerned with the Russian-supply aspects of British aid, rather than with the strengthening of British communications for area defense. But at the beginning, although lumped with British and other friendly operations, the Russian-aid aspect of this mission was not stressed. Indeed, in describing the two Middle East missions to the Secretary of State in a letter of 30 October, the Secretary of War referred only to "contemplated British operations." Russia was unnamed. Such an omission suggests either a politic underemphasis or imperfect information. Neither explanation suffices. The plain fact is that aid to Russia was necessarily being set up as a part of aid to Britain. Why was this so? [22]

[21] (1) PAI Force History, I, 66, 70. The published version, page 74, says October. (2) Generals Auchinleck and Wavell exchanged commands earlier in the year.

[22] (1) Ltr, Secy War to Gen Wheeler, 21 Oct 41, sub: Ltr of Instructions. AG 400.3295 (9–26–41). Another copy Iran 4/4, NADEF. (2) Ltr, Secy War to Secy State, 30 Oct 41. AG 400.3295 (9 Aug 41) Sec 1.

The main reason was that Britain, enjoying treaty rights in Iraq and Iran, had requested neutral American aid in the field of supply. Furthermore, not only was the United States neutral, but the Soviet Union had not yet been declared eligible for lend-lease aid. Yet in the face of clear and urgent need to utilize the Persian Corridor supply route to the USSR, and in view of the British machinery at hand, the means adopted under the presidential directive for Middle East aid to Britain were the most practicable. Behind the continued ineligibility of Russia for lend-lease aid lay intangibles which added immensely to the material difficulties in establishing the new supply route.

The relations of the Americans to the British in the Corridor were conditioned by the responsibilities of the British in that area. They were also conditioned by the relations of the Americans to the Russians. Aid to the Soviet Union, catapulted into American public concern by the German invasion, created political puzzles more baffling than those inherent in aid to Britain. During the debate over the adoption of lend-lease, objections to British aid had stemmed largely from Anglophobia, but even Anglophobes knew instinctively that the force of logic behind such help was inescapable. Hitler's attack of 22 June 1941 caught the American people completely unprepared in their minds. Always stronger on the side of championing the weak against the strong than on the side of viewing situations with the cold perspective of, say, the professional strategist or European diplomatist, the American people in 1941 were still shocked and grieved over the Russo-Finnish War of 1939–40 which resulted in expulsion of the USSR from the League of Nations. One summer the Soviet building at the New York World's Fair had been "the" spot to visit; the next summer, the building had vanished, and with it nearly every trace of Soviet-American good feeling. It was inevitable that, reflecting this drastic shift in public opinion and buttressed by the Hitler-Stalin pact of August 1939, the policy of the American Government toward the Soviet Union should have been one of austere aloofness tinged with suspicion. The American people, having gradually come to admire the postrevolutionary Russian people and having suffered a violent revulsion following the Soviet attack on Finland, now, in June of 1941, were stunned and puzzled. It was difficult for them to make another about-face overnight and suddenly champion the newly attacked USSR. Soon after Hitler's invasion a former American ambassador to the Soviet Union

publicly proclaimed that country's government "a godless tyranny, the sworn enemy of all free peoples of the earth." [23]

The delicacy of the American Government's position, even as late as the date of the formation of the Iranian Mission, was therefore reflected in the somewhat indirect approach that mission took toward the problem of Soviet aid. Inasmuch as the United States was still militarily a neutral and the Soviet Union not yet officially eligible for lend-lease, the mission, while undertaking to aid Great Britain and Russia, was to proceed to aid the latter by aiding Britain. The reasons were not only that the southern part of the Persian Corridor was under British authority by virtue of the Anglo-Soviet occupation of August 1941 and that American forces were going in as an economic auxiliary furnished under military auspices by a neutral friend. The indirection as to aid to the Soviet Union was also still politically necessary in September, and requires further explanation.

For a considerable period prior to the sudden German attack, the Soviet Union, along with the Axis Powers and Vichy France, had been subject to economic blockade by the Allied Powers. The United States had set up machinery for waging economic warfare and after the conclusion of the Hitler-Stalin pact had taken various measures against the Russians. Only the week before the attack upon the Soviet Union the United States Treasury had frozen forty million dollars of Soviet credits, and as late as 20 June reports of leakage in the economic blockade against the Soviet Union had been discussed by members of General Chaney's Special Observer Group in London as among disturbing elements in the Middle East picture.[24]

When the attack came, Prime Minister Churchill, in an early broadcast to his people referring to Hitler as "this bloodthirsty gutter-snipe," pledged British aid to the Soviet Union. The American official reaction was bound to be slower in the light of the shock to public opinion a similar announcement would have caused.[25] The next day, 23 June—with a background of gloomy predictions in the newspapers that the German armies would smash through to the Black Sea in a few weeks, consolidate their supply lines, and drive on through the Caucasus to Iraq and Iran—*The New York Times,* in a front-page article headed, "Washington Waits," stated, somewhat cryptically,

[23] William C. Bullitt, in accepting a degree from the University of Montreal. *Washington Post,* July 15, 1941.

[24] Rpt cited n. 11, especially p. 41.

[25] (1) On the difficulty of proclaiming immediate support and of expanding aid thereafter until public opinion caught up, see Foster Rhea Dulles, *The Road to Teheran: The Story of Russia and America, 1781–1943* (Princeton, N. J.: Princeton University Press, 1945), Ch. XIV *passim,* especially p. 232. (2) See also n. 36 below.

"If Britain wants the United States to extend lend-lease aid the attempt will be made." As for official utterance, the government contented itself with Acting Secretary of State Sumner Welles' statement of that same day, "Hitler's armies are today the chief dangers of the Americas." One day later the President was quoted indirectly in a press conference as prepared to implement the policy announced by Welles; but the President's remarks, mainly anti-Hitler, stressed American inability, through prior commitments to Britain, to be of much present help to the Soviets. After all, the United States was still a nonbelligerent. But that same day, the 24th, the *Times* quietly reported release of the Soviet credits frozen ten days before.

The Department of State did not share the shock and surprise of the less well informed general public. It had long been formulating a policy of American aid in case Germany attacked the Soviet Union, and when the attack came it was ready with recommendations for reconsideration of restrictive anti-Soviet export control regulations. Then on 9 July the President told Sumner Welles that he was anxious to send Russia substantial aid at once, preferably before October, when winter would interfere with transportation. The Department of State set to work to devise a *modus operandi* for handling requests from the Soviet ambassador outside the established machinery of lend-lease, which, for obvious political reasons, could not yet be extended to the Soviet Union.[26]

By mid-July a committee had been created, consisting of the Soviet ambassador, the chairman of the British Supply Council in North America,[27] and Harry Hopkins, the moving spirit in lend-lease affairs and the President's deputy in their administration. Hopkins' dramatic flight from Great Britain to Moscow via Archangel, bearing to Stalin a reassuring message from Roosevelt, bridged far more than the vast distances of land and sea that separated those two chiefs of state. In his conversations, following his arrival at Moscow on 30 July, Hopkins obtained from the Russians a detailed statement of their supply needs. He also won their confidence to an extent not hitherto achieved by others; and he returned to Washington equipped to speed the ma-

[26] For this and following paragraphs, see The Role of the Department of State in Connection with the Lend-Lease Program, Manuscript prepared in the Division of Research and Publication, Department of State, by George M. Fennemore, May 1943, pp. 205, 208, 210–12.

[27] Arthur B. Purvis, a Canadian whose death in an RAF Ferry Command flight accident while en route to join Churchill at the Atlantic Conference ended a close and fruitful association with Harry Hopkins. See Robert E. Sherwood, *Roosevelt and Hopkins: An Intimate History* (New York: Harper & Brothers, 1948), p. 373.

chinery of Russian aid. An early sequel to Moscow was a joint Churchill-Roosevelt statement of 5 August regarding aid to the Soviets.[28]

Meanwhile, on 12 July, Maj. Gen. James H. Burns of the Division of Defense Aid Reports brought to Washington for consultation Col. Philip R. Faymonville, who had served from 1934 to 1939 as United States Military Attaché in Moscow, winning from Ambassador Joseph E. Davies praise for his "unusual good judgment," a quality called for particularly in the newly developing Soviet-American relationship. "He speaks Russian fluently," Mr. Davies wrote, "and apparently is most highly thought of by the leaders of the Army here," that is, in Moscow.[29]

Shortly after reaching Washington, Faymonville joined Burns' staff and was useful in receiving the Soviet Military Mission which arrived in the capital on 23 July. He was also present at a series of conferences held in the office of Assistant Secretary of War John J. McCloy from 9 to 11 August to determine the extent of American aid and the means of furnishing it.[30] The policy arrived at was that no War Department materials could be made available to the Union of Soviet Socialist Republics without prior release by the British of materials allocated to them. Since the British were committed to aid Russia, the question became one of three-cornered negotiations, with the arrangement of quantities and priorities subject to three valid points of view with the Americans in the middle. A sampling of October cables and letters will indicate how the machinery worked.[31] On 3 October a consignment of tanks went off to the Soviet Union by arrangement with the United Kingdom, whose quotas were affected by the amounts diverted to Russia. On 24 October the Assistant Secretary of War wrote the Secretary of State on the procedure adopted for speeding shipments to Russia of goods originally contracted for by the United Kingdom. On 29 October General Chaney in Washington cabled his Army Special Observer Group in London that the Anglo-American agreement (Balfour-Arnold) on aviation aid, approved by the Secretary of War on 28 October, corresponded exactly with the previous agreements with the Soviet authorities.

In September the President sent Averell Harriman, his special representative in London on material aid to the British Empire, to Moscow

[28] The message to Stalin is given in full in Sherwood, *Roosevelt and Hopkins*, pp. 321–22.
[29] Ltr by Davies, 20 Mar 37. Abstract PGF 262. Faymonville became a brigadier general on 1 February 1942.
[30] AG 400.3295 (8–14–41) Sec 1. Among those present were Maj. Gen. Richard C. Moore, Deputy Chief of Staff, and Colonel Aurand of G–4, War Department General Staff, supply experts.
[31] AG 400.3295 (8–14–41) Sec 1.

for important three-cornered conferences there with a Soviet commission under Foreign Minister Vyacheslav M. Molotov and a British group under Lord Beaverbrook. Travel orders naming the expedition the Special Mission for War Supplies to the Union of Soviet Socialist Republics were made out for Mr. Harriman, General Burns, Colonel Faymonville, acting as secretary, Admiral William H. Standley, shortly thereafter to become American Ambassador to Moscow, William L. Batt of William S. Knudsen's Office of Production Management, and General Chaney.[32] The discussion following, in which Marshal Joseph V. Stalin participated on three occasions, produced the signing at Moscow on 1 October by Beaverbrook, Harriman, and Molotov of the First (Moscow) Protocol, described as "a binding promise by this Government to make specific quantities of supplies available for shipment to Russia by a specific date." [33]

The Moscow Protocol was the first of four similar instruments for aid to Russia. It called for shipment from the United States through 30 June 1942 of roughly a million and a half tons of supplies. The Second (Washington) Protocol, signed 6 October 1942 and covering the period to 1 July 1943, promised 3,300,000 tons to be shipped by the northern Russian ports and 1,100,000 via the Persian Gulf route. The Third (London) Protocol, running through 30 June 1944, promised 2,700,000 tons via the Pacific route and 2,400,000 by either the northern Russian ports or the Persian Gulf. It was signed 19 October 1943. The Fourth (Ottawa) Protocol, signed 17 April 1945, promised 2,700,000 tons via Pacific routes and 3,000,000 via Atlantic routes including the Persian Gulf and the route into the Black Sea, then newly available. It covered the period to 12 May 1945. These protocols were definite commitments on the diplomatic level, different from those given to any other lend-lease recipients. While they contained escape clauses, President Roosevelt was always intensely concerned that they be honored to the letter. Behind every other circumstance that was to affect the supply program which the United States was to undertake in the Persian Corridor stood the protocols and the inflexible necessity of meeting their tonnage promises, come what may.[34]

[32] AG 400.3295 (8–14–41) Sec 3. The travel orders were of 6 Sep 41. Information from Memo, Harriman for CofS, 4 Sep 41; and from the Role of the Department of State cited n. 26.

[33] Stettinius, *Lend-Lease*, p. 205. (Quoted by permission of The Macmillan Company.) The United States made good its word by the stated date, 30 June 1942.

[34] (1) Rpt cited n. 2(1). (2) Lend-lease to the USSR is fully treated by Robert W. Coakley in chapters on international supply before Pearl Harbor, in R. M. Leighton and Coakley, Logistical Support of Overseas Theaters, a volume in this series now in preparation. (3) The protocols are published in *Soviet Supply Protocols, Wartime International Agreements,* Department of State, Publication 2759, European Series 22.

The commitment of October 1941 had been carefully prepared for by the President's statement to Congress on 11 September, "The Soviet Government's purchases here are being made with its own funds through its regular purchasing agency." [35] This statement followed the making available on 24 August of five billion dollars for lend-lease expenditures, from which the Soviet Union was excluded. At the time of the Moscow Protocol, the situation was that the United States had joined Britain in pledging almost unlimited aid, that much could be done through lend-lease aid to Britain, and that it was by then apparent that the President deemed the American public not unfavorable to Russian aid.[36]

So far, Russian supply was on a cash basis. During September–October, for instance, the United States loaned the USSR ninety million dollars with which on 21 October to purchase ammunition then available in the United States.[37] In an exchange of messages between Roosevelt and Stalin of 30 October and 4 November respectively, the United States agreed to advance one billion dollars to Russia to be repaid without interest over a 10-year period, commencing five years after the end of the war. The arrangement was in accordance with the Soviet's expressed preference and was similar to that granted the Netherlands and Iceland, which paid cash for aid procured, for efficiency's sake, through the usual lend-lease channels. On 7 November 1941 the Soviet Union was officially declared eligible for lend-lease as a nation whose defense was vital to the defense of the United States. When a second billion was allocated to the Russians on 20 February 1942, the President took steps to formulate an agreement for repayment in kind, to allay Soviet fears that they would have to repay in dollars. Signed 11 June, this became the Master Agreement, superseding the first billion loan arranged.[38]

The financial aspects have been labored at this point for two reasons. First, their complexity was largely a product of the political difficulties of launching the program in the face of American opinion toward the

[35] *Second Report under the Act of March 11, 1941 (Lend-Lease Act)* (Washington: Government Printing Office, 1941), Letter of Transmittal, p. IV.

[36] Early in September Harry Hopkins wrote Brendan Bracken, Minister of Information in the English cabinet: "We are having some difficulty with our public opinion with regard to Russia. The American people don't take aid to Russia easily. The whole Catholic population is opposed to it, all the Nazis, all the Italians and a lot of people who sincerely believe that Stalin is a great menace to the world. Still I think it will come out all right in the end." Sherwood, *Roosevelt and Hopkins*, pp. 372–73.

[37] The Role of the Department of State cited n. 26, pp. 218–19.

[38] (1) The Role of the Department of State, pp. 220–22. (2) *Report to Congress on Lend-Lease Operations for Year Ended March 11, 1942* (Washington: Government Printing Office, 1942), p. 34. (3) Stettinius, *Lend-Lease*, p. 130. (4) As of June 1951 the USSR had not yet settled its lend-lease account with the United States.

Soviet Union before Hitler's attack. Second, Soviet property rights over the goods shipped had been first determined when the Soviet Union was purchasing on a cash basis. These rights, carried over into the lend-lease period, gave rise to much of the friction that developed later during the stages of shipment and delivery for they permitted the Soviet agents to exact the most scrupulous adherence to the letter of their bond at every stage of the process.[39]

The severity of Soviet inspections can be traced quite as much to these financial arrangements as to their national traits. In this connection it must be borne in mind that the Russians enforced upon their own people equally strict personal responsibility all along the chain of command. Their readiness to punish individuals of their own forces who passed inferior goods became legendary among the Americans who worked with them in the field. It is unrealistic to deplore the Slav's lack of easygoing Anglo-Saxon adaptability.[40]

After the signing of the protocol it was decided, on the recommendation of Harry Hopkins, to leave in Moscow an American representative of lend-lease who had been a member of the Special Mission for War Supplies to the Union of Soviet Socialist Republics which had negotiated the protocol. Colonel Faymonville, secretary of the mission, thus remained for some years as chief of the special mission, first in his capacity as a representative of the Division of Defense Aid Reports, thereafter as a member of the Lend-Lease Administration.[41] To the Iranian Mission, authorized to render aid to Great Britain, the Soviet Union, and other friendly powers in the Persian Corridor, and to the civilian lend-lease mission in Russia, the War Department added a second military mission charged with aiding the Soviets. This was the United States Military Mission to the Union of Soviet Socialist

[39] Rad AMPSC 466, Lt Gen Brehon Somervell to Gen Connolly, 26 Mar 43. 400.3295 Lend-Lease Russia, SL (Material formerly filed in Persian Gulf Service Command boxes at St. Louis, now filed at the Kansas City Records Center, AGO, Kansas City, Mo.) 9021: "Your records should operate with the assumption that British and American authorities are acting as agents, expediters and forwarders for the Russians and that the goods handled are property of the Russians. . . . As soon as the vessels are loaded in American ports the goods become Soviet property."

[40] Maj. Gen. John N. Greely, in "Iran in Wartime," *National Geographic Magazine,* 84 (1943) 141, describes the barbed-wire enclosure where acres of American-built motor vehicles were guarded by Soviet troops with orders to shoot all unauthorized intruders.

[41] In a memorandum of 30 September, prepared for the Chief of Staff by Brig. Gen. Sherman Miles, G–2, opposition was expressed to Faymonville's staying on in Moscow. The Deputy Chief of Staff, General Moore, however, wished Faymonville to stay (memorandum of 4 October). For fuller treatment of War Department differences of opinion concerning Faymonville, see Sherwood, *Roosevelt and Hopkins,* pages 395–96. In Volume I of the Manuscript Index to the Hopkins Papers (under Book IV, Harriman-Beaverbrook Mission, page 6, Item 19) is noted a letter from Hopkins to Secretary of State Cordell Hull, 4 October 1941, transmitting a radio to the U.S. Embassy in Russia designating Faymonville as U.S. lend-lease representative in the USSR.

Republics, established on 5 November, with Maj. Gen. John N. Greely as chief.[42]

The Iranians and the Americans

The United States Military Iranian Mission and the United States Military Mission to the USSR formalized the logistical partnership entered into before Pearl Harbor between neutral America and belligerent Britain and Russia. But there was a fourth partner, Iran, whose role it was to smile appreciatively while the bigger fellows tramped up and down in her house. To be sure, the presence of British and Soviet forces, backed by the tripartite agreement, provided Iran with a protection against the Axis which she did not herself possess, whether or not she might have wished to use it. The large matter of external security was thus taken care of, and neither the Americans nor the Iranians were concerned with it.

Internal security, though also an assumed responsibility of the occupying powers—the United States was not at any time during the war an occupying power in Iran—was another matter. Protection of trains and truck convoys against marauding tribesmen, patrol of tracks, roads, docks against sabotage, vigilance against pilferage—these primarily local functions should theoretically be performed by the Iranian authorities, lest a populace made hostile by foreign surveillance become itself a rearward threat to communications.

In the fall of 1941 the forces at Iran's disposal were inadequate to assume so staggering a task of policing as the ambitious supply plans of the Allies involved. Although the Allies permitted Iran in September 1941 to break off diplomatic relations with certain of the Axis Powers, it was two years before they allowed that country to declare war against Germany. Meanwhile, the Allies discouraged development of military power by Iran. These were policies and decisions in which the United States as an auxiliary remained silent. But there was a feeling in some quarters that the Iranian partner in the logistical task might relish a less passive role than that of the appreciative smile originally called for by the script of 1941. It was less a problem in logistics and security than in diplomacy.

After American entrance into the war Iran's eligibility for lend-lease, declared on 10 March 1942, offered a fresh approach. The

[42] This mission is not to be confused with that of the same name (1 November 1943–31 October 1945) under Maj. Gen. John R. Deane for the purpose of establishing American airfields for shuttle bombing at Poltava, Mirgorod, and Piryatin in the Ukraine. John R. Deane, *The Strange Alliance: The Story of Our Efforts at Wartime Co-operation with Russia* (New York: The Viking Press, 1947).

establishment in that year of two additional American military missions, one to advise Iran on certain matters affecting its Army, the other to reorganize and command its Gendarmerie, brought Iran, though on a modest scale, into direct partnership with the United States. These missions also brought the United States for the first time directly into the four-sided Corridor partnership.

The advisory missions, under Maj. Gen. Clarence S. Ridley and Col. H. Norman Schwarzkopf respectively, performed two important functions. By aiding Iran's ability to preserve law and order along the supply line, they helped the lend-lease operations. But even more importantly, by demonstrating American concern for Iranian sovereignty, they contributed something new to the historic situation, easing, if only briefly, dangerous tensions.

One thing remains to note before commencing an account of the American effort in the Persian Corridor. It was not like the historical facts of enemy threat, Allied need, American planning, tonnages delivered. It could not be felt, as a swirling sandstorm is felt; it was not visible as were swarms of stevedores unloading ships, or convoys of trucks creeping through snow-choked mountains. It was a thing as intangible as discouragement, as impalpable as heat.

It was a spirit shaped by diplomatists and expressed by the sheer obstinacy of men's guts, a spirit animated by Roosevelt, who "considered Iran as something of a testing ground for the Atlantic Charter and for the good faith of the United Nations." [43]

[43] Rad 462, Stettinius to American Embassy, Tehran, 31 Jul 44. State Dept Cable Book, Near East, Iran.

CHAPTER II

Year of Confusion

The American Army served in the Persian Corridor just over four years. In November 1941 officers of the U.S. Military Iranian Mission reached Basra. On the last day of 1945, not regretfully, the remnant of what was then called the Persian Gulf Service Command sailed away from Khorramshahr. Behind them the forces of Britain and the USSR remained in uneasy watchfulness while in the chancelleries of Moscow and London diplomats debated what date the Tri-Partite Treaty had appointed for Anglo-Soviet evacuation. Soviet reluctance to leave, discussed at Moscow in December by the American Secretary of State, combined with the revolt in Azerbaijan against Iran's authority the next spring to rock the United Nations with its first major crisis. But the departing American service troops, whose country was not a signatory to the treaty, were content to be the first to go. Argument was not their business. Their mission was to supply Russia, and their mission was completed.[1]

The period of American service in the Corridor falls into two phases. The first was characterized by the purely auxiliary status of the Americans, who performed construction and industrial tasks nominated by the British. These were connected with maintenance of the British line of communications and with fulfillment of the British commitment to deliver supplies to the USSR. In September 1942, only a few days more than a year after the President's Middle East Directive was signed, the Combined Chiefs of Staff ushered in the second phase by assigning to the United States direct responsibility for moving an ever increasing flow of supplies through the Persian Corridor to the Soviet Union.[2] In October 1942, almost exactly a year from the date of the Letter of Instructions given to General Wheeler, Maj. Gen. Donald H. Connolly arrived in Iraq to assume command of the ex-

[1] (1) See James F. Byrnes, *Speaking Frankly* (New York: Harper & Brothers, 1947), pp.118–21. (2) The American military missions to the Iranian Army and Gendarmerie remained as required by their contracts with the Iranian Government. See Ch. XXI below.

[2] CCS 109/1, Rpt, CSP for CCS, approved 22 Sep 42, sub: Development of Persian Trans Facilities. 323.361 General Connolly's Letter of Instructions, SL 9008.

panded supply forces required to carry out the Combined Chiefs' directive. There followed some months of transition during which, while the Americans developed their Motor Transport Service and gradually militarized their construction and assembly activities, the British handed over operation of the railway from Tehran to the Gulf and of certain ports, and delegated numerous other responsibilities which had remained in their hands the first year. By 1 May 1943, with American assumption of effective control of movements which concerned American operations within the British zone, the transition to co-ordinate status in transport was completed. The narratives of the two phases unavoidably overlap, inasmuch as activities originating in the first survived into the second, while some activities functionally identified with the second phase actually began in the earlier period.

Wheels Within Wheels

There is something almost too neat, too precise, in the fact that the first phase of the American effort ended one year after it began. The calendar suggests a well planned and executed timetable, but nothing could be farther from actuality. The first year was marked by uncertainties, contradictions, false starts and reversals, improvisation, and experimentation. Planning and foresight often proved discouragingly futile. It was a year of confusion.

When General Wheeler reached Baghdad on 30 November 1941 to establish his headquarters there near the headquarters of the British General Officer Commanding, Iraq, all of the elements which were to complicate the American task were already in being. First were those already detailed: the involved relationships of the British, Soviets, Iranians, and Americans, and the procedural difficulties in delivering supplies to the USSR. But there were also questions as to the American task itself: what it was; when, where, how, and by whom it was to be performed. So many and varied were the factors governing the answers to these questions that an entire year passed before a clear-cut program evolved.

Numerous policy papers were produced in Washington to guide early planning, but these, widely separated from the practical realities in the field, seem oddly irrelevant when inspected among the archives. There is the War Department message of 11 September referred to in the previous chapter. It listed objectives for American aid to Great Britain in the Middle East as follows: provision for the assembly, storage, overhaul, and repair of American aviation, ordnance, quartermaster, and signals equipment furnished to British forces in the Middle

East; provision in depots for instruction centers to train British personnel in the operation and repair of American equipment, with necessary housing; and expansion or construction of necessary port, rail, and highway transportation facilities.

In addition the message stipulated that the establishment and operation of all depots and transportation facilities be by American private contractors and American civilian personnel. All of these provisions were incorporated in the Middle East Directive two days later, and reappeared in the War Plans Division's specifications for the Iranian Mission dated 24 September. This paper listed mission functions as follows: the study of British and Russian operational methods and tactics in desert country; the exchange of information and experimental equipment regarding new design, as influenced by terrain and climate; the testing and observation of American equipment in actual campaigns; the training of British and Russian personnel in the operation and maintenance of American equipment; the representing of the War Department in matters pertaining to lend-lease, especially in the supervision of supply and maintenance of equipment which would include adequate dockage, transportation, and depot facilities.

The Secretary of War's Letter of Instructions to General Wheeler, dated 21 October, was even broader. It authorized Wheeler to represent the War Department in the area and to administer and co-ordinate all War Department matters pertaining to the area; to command all military personnel, and to direct, control, and supervise all civilian personnel assigned or attached to the mission; to control and supervise American or other companies or agencies engaged under contract to further execution of the mission's functions; to establish and operate essential port, transportation, storage, assembly, maintenance, and training facilities "subject to the approval of requests for lend-lease assistance submitted by foreign governments"; to advise and assist the British, Russian, and other friendly governments in obtaining appropriate military defense aid as contemplated in the Lend-Lease Act, and to assure the most effective and economic use of such aid; to study operational methods to facilitate the use of American equipment in any future American operations; and to advise and assist the British, Russian, and other friendly governments in all phases of procurement, transport, and maintenance of United States materials, equipment, and munitions requisite to the prosecution of their military effort, and to advise and assist them in the training of their personnel in the use and maintenance of American equipment.

The several statements of objectives and duties should be taken as indicating not so much a considered program as an attempt to an-

ticipate any situation which might arise. Some of the duties, like the training of Russian personnel, were never put into effect. Others, like operation of port and transportation facilities, did not come into effect for more than a year, until certain British treaty rights over movement and transportation were delegated to the United States after the Combined Chiefs' directive. Still others, like the establishment of port, storage, assembly, and maintenance facilities, were put into effect immediately. The advantage of broad and general definitions lay in their flexibility; the disadvantage lay in their vagueness. Here was another element in the confusion which attended the reduction of generalities to specific tasks.

In that process there were wheels within wheels. There were many planners, many plans to be fitted together, many uncontrollable factors, like the progress of the war, to affect planning. Under the Middle East Directive the Iranian Mission existed to comply with "the expressed needs" of the British. Over-all plans had therefore first to be decided upon by the British, whose primary concern was with their line of communications and with their readiness to meet not only the German attack, which until late in 1942 appeared imminent from the west and north, but also the looming threat of a German-Japanese junction in the Persian Gulf.[8] Supply to the Soviet Union through the Corridor necessarily came second in their planning. The Americans, who were committed to aid both the Russians and the British in the area, strove to reconcile the two obligations. The inability of some Americans in the field to understand the direction of the British effort in the area contributed not only to the general confusion but to the evidences of misunderstanding on this point with which the early files abound. This was a price the Americans had to pay for coming into the madhouse with relatively clean hands and pure hearts. They did not know enough and the few who never learned continued to feel that the British were not so serious about aid to Russia as were the Amercians. American planning, then, was conditioned by British planning, which in turn was conditioned by British local responsibilities for security; and both sets of planning were affected by the relative weight to be given from

[8] (1) Gen. Sir Alan Brooke, Chief of the Imperial General Staff, in April 1942, feared such a junction, as well as Axis capture of the Iranian oil fields on which "the whole of our effort in both theaters [Middle East and India] depended." See Gordon A. Harrison, *Cross-Channel Attack,* in UNITED STATES ARMY IN WORLD WAR II (Washington: Government Printing Office, 1951), p. 17. (2) German sources reveal that although Japanese Ambassador Hiroshi Oshima at Berlin in the summer of 1942 suggested such a possibility, no German staff studies to that end were made. Generalleutnant Adolf Heusinger, Chief, Operations Division, German Army General Staff, called the idea "too fantastic and outside the field of military science." Historical Interrogation Commission, WDGS, MID, Interv with Brig Gen R. C. Brock and Lt Col O. J. Hale, 10–11 Sep 45. OCMH. (3) For the Oshima proposal, see Interrog Rpt 5782, 24 Sep 45, p. 3. OCMH.

time to time to the aid-to-Russia program. Since there was no final authority for priorities save that at the very top in London and Washington, priorities assigned or agreed at intermediate and lower levels were subject to change, with resultant confusion.

Aside from such large obstacles to smooth operations, there was the task of intermeshing British and American machinery for planning and action. General planning had taken certain British needs in Iraq into consideration previous to the issuance of the Middle East Directive, while planning for Iranian projects started from scratch in September with the British instructions to General Quinan to prepare such road, rail, and river communications as were required to move maximum possible supplies to the USSR. By the time the first Americans reached Iraq in November 1941 the British were spread over Iraq and Iran, their hands very full indeed with the new Russian-aid task superimposed upon those necessary to secure the area against Axis attack.

Although American help was for a time extended to strictly British-aid projects in Iraq, it was the British commitment to supply the USSR through the Persian Corridor that soon claimed the full efforts of the American mission and its successors. In construction (highways, docks, buildings) and in the assembly of aircraft and motor vehicles, the American projects paralleled and multiplied similar activities by the British. In transport, the core of the program of Russian aid, the British attempted to carry the entire burden themselves along with all their other commitments. But time and the pressure of mounting tonnages proved this to be unworkable. Late in 1942 the decision of the Combined Chiefs of Staff to assign the operation of certain ports, the railroad, and a supplementary trucking service to an augmented American military force overcame the long-standing arguments of those who had hitherto opposed sharing with the Americans British treaty rights over Iranian communications.

One transport operation the British neither shared nor delegated. Inland Water Transport, established as a branch of the British Army in October 1941, operated interport and river barges and certain other port functions in Iraq and Iran. In time this military office employed 200 Army officers, 600 British other ranks, and 12,000 soldiers and civilians of Indian and other nationalities. In its first year of operation (through September 1942) it moved 680,000 tons of cargo for all purposes.[4]

Those British activities which were shared or delegated, while not the subject of this book, are tied to the subject. The work of Brigadier

[4] Unless otherwise noted the account of certain British activities is based upon *PAI Force* (published version) p. 88 and *passim.*

Sir Godfrey Rhodes and a staff of approximately four thousand officers and men in supervising, regulating, and assisting Iranian operation of the ISR solidly constructed a firm foundation for the American stint on the railway. In dock and road building, as well as in the organization and operation of trucking services, the British were equally busy when the first Americans arrived.

General Quinan's directive stressed the improvement of transport facilities. Under it the British brought to completion in 1942 the branch line of the railway from Ahwaz to Khorramshahr which enabled that port soon to outstrip Basra in the Russian-aid program. Basra, too, came in for improvement. The town of Basra lies about two miles inland from the south bank of the Shatt al Arab River, its dock areas being concentrated at Margil [5] and on the opposite or north bank of the river at Tanuma-Cheybassi. When the British landed at Basra in 1941 they found a workmanlike port with six deepwater berths and enough labor and machinery to work them. To accommodate the heavy demands upon Basra as the seaport of their Basra-Baghdad line of communications, the British set about adding six more berths on the river. To provide an alternative port, in case the Shatt should be blocked by enemy action, they were committed to an ambitious dock-building program at a desolate, almost uninhabited sand and clay waste called Umm Qasr, south of Basra on the waters of the Khor Abdullah at the border between Iraq and Kuwait. The occupation of Iran in August–September offered the Iranian ports for use in the aid-to-Russia program, thus permitting the Basra port area to concentrate chiefly on traffic necessary for British military needs. The British therefore undertook to increase dock facilities at Bandar Shahpur, sea terminus of the ISR; at Khorramshahr; and at Bushire, an ancient Persian port served by lighterage from ships anchored miles offshore, whose landward communication relies upon a rudimentary road to Isfahan. British dock construction was performed for the most part by British civilian contractors under Army supervision; while local civilian stevedoring firms and the United Kingdom Commercial Corporation (UKCC) were relied upon to unload ships and provide the sorting and warehousing at dockside that is an important link in the chain of inland clearance. The vagaries of these British contractors added only another set of complications for the joint Anglo-American effort as American responsibilities for cargoes increased.

Of all the civilian contractors, the semiofficial UKCC, with its early assignment to procure and deliver Russian-aid supplies, was the most

[5] Margil, spelled in British documents Maqil or Ma'qil, is said to be an Iraqi corruption of the name of a Scots trader, McGill, who long ago left his mark upon the map.

formidable. The inconsequential capacity of the railway in 1941 emphasized the vital part trucking would have to play in inland clearance, and this required not only the organization of trucking services—accomplished by UKCC and later supplemented by convoys of British Army drivers who took over haulage of strictly military stores and ammunition—but also the improvement of primitive roadways to carry vastly increased traffic. In September 1941 the British Chief Engineer, Iraq, sent Lt. Col. A. J. R. Hill, Royal Engineers, into Iran to reconnoiter the roads. A pattern for road construction and maintenance was evolved whereby the Iranian Government, with large British grants-in-aid, undertook improvement and maintenance of roads in the British zone. A contract was agreed to and the work put into the hands of Consortium Kampsax, the Danish firm which had shared in building the ISR for Reza Shah. Under the supervision of the Corps of Royal Engineers, Kampsax, as supervising and consulting engineers, administered and subcontracted locally. It did not directly construct or maintain highways. From Tehran a British Army engineer staff of fewer than twenty officers and other ranks supervised Kampsax, which in turn administered far-flung operations. By March 1942 a force of 67,000 native workmen and 14,000 donkeys were working on roads. Using shovels and rakes and little straw baskets, hand-filled with earth, men toiled much as in the days of Cyrus and Darius. Floods washed away some roads in the east and these were rebuilt; but this happened too when the Americans built roads with their laborsaving machines.[6]

At one time or another British trucking organizations, either military or UKCC, used four routes to haul goods to Soviet receiving points. (*Map 2—inside back cover*) The easternmost of these picked up at Zahidan loads brought by rail from Karachi. Trucks carried on from Zahidan to Meshed. This route, used intermittently in 1941, 1942, and 1943 for supplies arriving from overseas at Karachi and for raw materials en route from India to the USSR, was abandoned in 1943 through a combination of bad highway conditions and Soviet objections to its use.

A second route provided inland clearance north from the port of Bushire, where lend-lease trucks were being assembled for the Soviets. This route ran via Shiraz, Isfahan, Qum, and Tehran to Tabriz and was used not only for delivery of assembled trucks under their own power but for UKCC convoys carrying cargoes unloaded at Bushire.

[6] U.S. MA Rpt 122 from Tehran, 9 Jul 43. MID 611 Iran, 7–9–43 (11–28–41).

The route was abandoned because in the early days it was too costly in manpower to protect against tribal raiders.

At Andimeshk British military trucking units and the UKCC convoys took over certain cargoes which had come up by rail from Bandar Shahpur and forwarded them by truck via Hamadan and Kazvin to Tabriz. The British used this route until mid-July 1943 when it became a part of the road system prepared by the Americans for their trucking service. Between this route and the Bushire–Isfahan–Qum route, the British also repaired a connecting road from Malayer to Qum via Sultanabad (sometimes called Arak) which was used in due course by Russian-driven convoys of American trucks assembled at Andimeshk and Khorramshahr.

The fourth British-used route, the Khanaqin Lift, came ultimately to bear the chief burden of British trucking for the Soviets, although in the beginning its Basra-Baghdad leg was heavily pre-empted for British military needs. This route started at Basra from which three types of clearance served it: the railway from Basra to Baghdad, barges on the Tigris between the two cities, and a highway. From Baghdad all cargo proceeded by rail to Khanaqin on the Iranian border, whence trucks took over by road via Kermanshah, Hamadan, and Takistan to Tabriz.[7]

In addition to their transport and construction activities the British forces established in the Basra area two large assembly plants. At Shu'aiba, site of the airfield maintained under the Anglo-Iraqi treaty and of a large base ordnance depot, American lend-lease aircraft were being assembled for the Royal Air Force. Near by, at Rafadiyah, where the British had large engineer base workshops, American lend-lease motor vehicles were being assembled for both British and Russian account.

Planning and Action

It was a formidable list of tasks which the Americans offered to share, and no small item in the inventory of early confusion was the fact that the urgency of war needs forced the work to proceed even while tasks were planned and allocations discussed. As happened elsewhere in the war, the machine had to be made to run even while it was being built. Two objectives vied for priority: the readiness of the British forces to meet invasion, and aid to the USSR which held top priority

[7] Upon completion in early 1943 of a rail spur from Kut al Imara to Ba'quba, the Khanaqin Lift consisted of barge from Basra to Kut al Imara, rail from there to Khanaqin, and road to Tabriz.

in all Anglo-American global planning through the first half of 1942. A minor example will illustrate how those interrelated yet conflicting purposes increased the confusion. In his planning late in 1941 for road construction tasks in Iran and Iraq, the American engineer in charge relied upon advice from the field that adequate stocks of explosives for blasting stone would be available from local British stores. Therefore, to save scarce shipping space explosives were not sent abroad; but, when it was time to begin the blasting, it was discovered that local British stocks had been earmarked for demolition purposes in case of invasion and were unavailable for blasting. Thus British need temporarily frustrated the road building essential to Russian aid.[8]

As a result of the Pearl Harbor attack, existing shipping had to be spread over the whole world, while the mounting loss of ships by enemy action which followed Pearl Harbor aggravated an already bad situation. The allocation of dwindling tonnages was a factor to frustrate the most careful and foresighted planning. In the case of shipping priorities for the Persian Corridor, the very zeal of the President to render maximum aid to Russia paradoxically contributed to the long list of situations making for confusion. Deeply concerned lest the solemn promise of the First (Moscow) Protocol be violated because of unlooked-for demands on shipping, Roosevelt wrote the Secretary of War:

> I desire that the Soviet aid program as provided in the Protocol Agreement be re-established beginning January 1. Existing deficits are to be made up and shipped from this country not later than April 1. . . . The whole Russian program is so vital to our interests I know that only the gravest consideration will lead you to recommend our withholding longer the munitions our Government has promised the USSR.[9]

After shipments to the Soviet Union had again fallen behind the protocol schedule in the following spring, the President directed Donald Nelson of the War Production Board to get materials "released . . . regardless of the effect of these shipments on any other part of our war program," and told Rear Adm. Emory S. Land of the War Shipping Administration to give Russian aid "a first priority in shipping."[10] Increased tonnage of lend-lease supplies flowed out to all of the Russian supply routes, including the Persian Gulf route; there the paradox was that the high priorities which stimulated the increased flow did not apply in the same degree to the additional shipments of men and mate-

[8] Interv with Col Albert C. Lieber, Jr., Pentagon, 7 Feb 49. (This form of citation is used for interviews conducted by the author.)
[9] Ltr, President Roosevelt to Secy War, 28 Dec 41. AG 400.3295 (8-14-41) Sec 1.
[10] Stettinius, *Lend-Lease*, p. 205. (Quoted by permission of The Macmillan Company.)

rials needed to build and operate the facilities for handling the flow of supplies. The consequent accelerating imbalance between the arrival of supplies and the ability to move them on to the Russians was perhaps the most troublesome phenomenon of the year of confusion.

From the foregoing account of complexities it is apparent that the business of determining which of the many British tasks were to be assumed by the Americans would have been difficult enough even had the machinery involved in that determination been simple. But here again nothing was simple. There was no neat funnel through which screened and co-ordinated plans could be transmitted from X to Y; and although both the British and the Americans maintained clearance and liaison agencies, translating general directives into field tasks was cumbersome.

On the British side, for example, the War Office in September 1941 instructed the Commander-in-Chief, India, to prepare lists of tasks for the United States to perform in Iraq, Iran, and India.[11] One of the first of these, supply of rolling stock for the ISR, reached the British Supply Council in Washington via Lord Beaverbrook, Minister of Supply, and was transmitted to Harry Hopkins through Generals Burns and George Spalding of the Division of Defense Aid Reports.[12] At the same time Lord Beaverbrook communicated requests for aid through the American Ambassador at London directly to Hopkins and Harriman. Data gathered by Sir Oliver Lyttleton, Minister of State, in the Middle East were transmitted to the British Supply Committee at London, who sent recommendations for dispatch via the Foreign Office to the British Supply Council at Washington. The process in general was to funnel recommendations up from the field agencies to co-ordinating agencies at the top and from them across to similar American agencies which transmitted them on down to the field. As it had not been decided by early October whether General Wheeler's mission was to be attached to the General Officer Commanding, Iraq, whose command embraced Iran, or to the Commander-in-Chief, India, who commanded Iraq, tasks nominated for the Iranian Mission originated at both of these British headquarters. Anthony Eden, Foreign Secretary, notified Sir Miles Lampson, British Ambassador, Cairo, on 7 October that discussion of needed tasks should go forward promptly

[11] By Msgs, 25 Sep, 3 Oct 41, cited Summary and Index, p. 2, American Aid in the ME, 1941 and 1942 (a collection of documents from British sources supplied the author through the courtesy of the Historical Section, Cabinet Office, London). MEF (Middle East Files, OCMH).

[12] (1) AG 400.3295 (8–9–41) Sec 1, under dates of 5, 6, 10, 23 Sep 41. (2) Notes on Conf at Office for Emergency Management, 9 Sep 41, atchd to AG Ltr to CofEngrs, 31 Oct 41, sub: North African Mission. 381 (Middle East) (11–1–41) 3, OCofEngrs.

to enable the Americans to decide "which of these projects they will be able to undertake and when they will be able to start." To provide machinery for screening proposals from various British field agencies, Gen. Sir Robert H. Haining, Intendant-General, Middle East, a special emissary acting at Cairo for the Prime Minister, on 15 October organized within the Middle East War Council at Cairo an American Aid Subcommittee. Under his chairmanship this body undertook to remedy a condition of serious confusion which, in his opinion, arose from the independence of the several British services and agencies that found themselves competing for American-aid projects.[13]

On the American side the general process of planning was similar to the British. Before the arrival of the missions in the field, British requests reached mission planning staffs via lend-lease and the War Department. At this stage the Amercians were handicapped by their unfamiliarity with the regions and conditions involved; but personal consultation with British opposite numbers after the Americans arrived overseas reduced the handicap, while some early planning had to be modified to fit the realities. The Iranian Mission thus received nominations of tasks both from Washington and through its direct contact with British Army representatives in Iraq, Iran, and India. Selection of tasks, assignment of local priorities, and the devising of means of performing the work devolved, in the last analysis, upon the chief of the mission, General Wheeler, subject to the direction and approval of the Secretary of War and to the inevitable and frequent shifts of plan arising from the several causes already discussed.

General Wheeler's plans were subject to still other limitations, for he was by no means the only American charged with interest in, or responsibility for, decisions and actions in his area. There was Colonel Faymonville, already at Moscow as head of the civilian Lend-Lease Administration office there. His interest in seeing that the Russians got what had been promised them required that he keep a very close check on what was going on in the Persian Corridor. He could make inquiries, suggest investigations, consult, transmit Soviet wishes and requirements, and report to Washington his observations and suggestions. Every decision of General Wheeler affecting aid to Russia was of concern to Colonel Faymonville.

General Maxwell, who established the headquarters of the U.S. Military North African Mission at Cairo on 22 November, attended shortly thereafter the third meeting of the American Aid Subcommittee of the Middle East War Council. Although discussion at that

[13] (1) Msg, 7 Oct 41, App. 2, American Aid in the ME, 1941 and 1942. MEF. (2) Summary and Index, pp. 9–10, American Aid in the ME, 1941 and 1942. MEF.

meeting turned chiefly upon projects in the area within General Maxwell's responsibility, the British aircraft assembly operations in the Basra area and proposals for establishment there of American-operated assembly plants were also discussed by General Maxwell as the American representative. In this informal way began an arrangement of convenience by which General Maxwell came increasingly to speak for General Wheeler's interests at British headquarters in Cairo. As time went on, and GHQ, British Middle East Forces, at Cairo, extended its responsibilities to Iraq and Iran, the interest of American headquarters at Cairo in operations in the Persian Corridor likewise increased until its command responsibility for those operations was formalized the following June 1942 by the activation of the U.S. Army Forces in the Middle East under General Maxwell.[14]

Another American agency whose presence in the Persian Corridor affected the decisions and acts of the Iranian Mission was the USSR Mission under General Greely. Organized as a lend-lease instrumentality on the pattern of the North African and Iranian Missions, the Greely mission had been instructed to proceed into the Soviet Union and to carry out its tasks from there. To this end its chief was provided on 5 November 1941 with a Letter of Instructions identical with those given Generals Wheeler and Maxwell, except that Greely was to render advice and assistance to Russian and other friendly governments, in contrast to Wheeler's aid to British, Russian, and other friendly governments, and Maxwell's aid to British and other friendly governments. Greely's functions and authorized powers relative to lend-lease aid to Russia were described in the same words as Wheeler's. Furthermore the War Department had left to their mutual agreement the delimitation of the geographical areas to be commanded by each. Greely arrived at Basra on 31 January 1942 and proceeded to Tehran where he established his headquarters; but the Soviet Union refused

[14] (1) Min, 3d Mtg of American Aid Subcommittee, 24 Nov 41, App. 11, American Aid in the ME, 1941 and 1942. MEF. (2) See Chart 1. (3) The administrative and command relationships of British forces in Iraq and Iran to GHQ, India, and GHQ, Middle East Forces, Cairo, during 1941 and 1942 are somewhat obscure. From May 1941 Iraq appears to have been within the Middle East "sphere of interest," though the General Officer Commanding, Iraq, with headquarters at Baghdad commanded British forces in Iran and was in turn under the command of Commander-in-Chief, India. "For administration only," Iran was placed under the command of GHQ, Middle East Forces, "during the period mid-February 1942 to mid-September 1942." Ltr and atchd Memo, Brig H. B. Latham, Chief, Hist Sec, Cabinet Office, London, to author, 5 Mar 48. (4) In January 1942 the War Department received notification from London that Iraq and Iran had been transferred from India to Middle East. This information, not wholly exact, as the above shows, was simultaneously cabled 15 January 1942 to Generals Maxwell and Wheeler. Memo, Brig Gen Leonard T. Gerow for TAG, 15 Jan 42, sub: Transfer of Iraq and Persia to Middle East Comd. AG 400.3295 (8–9–41) Sec 6. (5) For relevance of British command and jurisdictional matters to the creation of USAFIME, see Ch. V below.

entry of the USSR Mission as a whole, and so the War Department, early in May, abolished it. During the intervening three months, the USSR and Iranian Missions jostled one another uncomfortably in a Corridor which was already crowded.[15]

The number of American missions in the field directly or indirectly involved in operations in the Corridor was matched by the several agencies of the War Department concerned in the planning and execution of Iranian Mission tasks. The Air Corps was charged with the assembly of lend-lease aircraft at a site to be designated by the chief of the mission, and three of the technical services, Ordnance, Quartermaster, and Engineers, divided among them the planning and execution of tasks suitable to their special functions. A considerable tug of war ensued over the determination of the activities to be undertaken by each; data available to one set of planners were not always known to the others, overlapping and confusion continued for many months. The ordnance plan, largest of all from a monetary aspect, was abandoned after months of busy planning because of a re-estimate of the requirements in the light of changing conditions overseas. The Quartermaster Corps as late as February 1942 expected to operate two or three of the chief Persian Gulf ports although, as has been stated, American responsibility for port operation did not become effective for more than a year after that.[16] It also planned for the operation of motor vehicle assembly plants, a function transferred in the War Department reorganization of 1942 to Ordnance.

Upon the Corps of Engineers fell the duty of planning and executing necessary engineering and construction tasks for the mission. On 22 September 1941 the Lend-Lease Administrator, Edward R. Stettinius, Jr., wrote the Secretary of War of the British requirements for the railway, thus setting in motion the machinery of engineer planning. Transmitted to the Chief of Staff, the problem was referred to General George Spalding and by him to the Chief of Engineers, who appointed a committee to explore and recommend. On 29 September the Chief of Engineers reported progress to the Assistant Chief of Staff, G–4, and on 24 October, at General Wheeler's request, instructions were dispatched to the Chief of Engineers by The Adjutant General "to permit essential collaboration between" him and the chief of the Iranian Mission.[17] The Chief of Engineers was directed in addition to

[15] Ltr of Instructions, 5 Nov 41. AG 400.3295 (8–14–41). See also Ch. IV below for an account of the USSR Mission.

[16] Memo, 1 Mar 42, sub: Mtg of Arms and Servs, U. S. Mil Mission to Iran, 27 Feb 42. 323.61 Establishment of Military Districts, Binder 1, SL 9008.

[17] The first two documents cited are in Iran 2/8, NADEF; the third, in AG 400.3295 (8–9–41) Sec 4.

furnish technical engineering advice and assistance relative to port, transport, storage, assembly, maintenance, and training facilities; to purchase and ship equipment and supplies needed by the mission; to negotiate and execute contracts for construction necessary to his tasks; and to provide the necessary engineer commissioned, enlisted, and civilian personnel. On 28 October the Office of the Chief of Engineers assigned to the Division Engineer, North Atlantic Division, New York, "the duty of carrying out the War Department instructions through a new engineer district to be established and known as the Iranian District. Lieut. Colonel Albert C. Lieber, Jr. will be ordered to report to you for duty as District Engineer for the Iranian District." Establishment of the new district with headquarters in New York, and the appointment of Colonel Lieber, followed on 31 October.[18]

The collaborative relationship established by War Department directive between the chief of the Iranian Mission and the Iranian District engineer requires further notice. Colonel Lieber moved his headquarters to Iraq in February 1942, and therefore, as an Army officer located in the territory of the Iranian Mission, came under the command of the chief of the mission. His responsibility for the execution of engineer tasks, however, derived via the North Atlantic Division from the Chief of Engineers. The Iranian District engineer maintained a staff of his own and his headquarters were separate and distinct from Iranian Mission headquarters. His function, subject to the control of the chief of the mission, was to execute certain mission projects; but as the Iranian District engineer was the contracting officer for the U.S. Government, the purse strings for engineer tasks were in his hands, and he exercised full control over matters of finance, procurement, and personnel related to his projects. With regard to engineer work, the functions of the chief of the mission were to make plans through his own engineer planning staff, to adopt projects and assign them priorities, and to allocate the tonnages requested to bring materials from the United States. The co-ordination necessary to the successful carrying out of mission tasks by a district engineer whose authority stemmed from the Chief of Engineers rather than from the chief of the mission was achieved by a voluntary working agreement in the field that recognized the efficacy of reposing final on-the-spot authority in the chief of the mission. The district engineer was not under General Wheeler in matters covered by the War Department's directive to the Chief of Engineers; but the work proceeded as though

[18] (1) Ltr, Brig Gen Thomas M. Robins to Div Engr, NAD, NY, 28 Oct 41, sub: Iranian Mission. 381 (Middle East) O&T Sec Files, Folio 1, Serials 1–175, OCofEngrs. (2) GO 7, OCofEngrs, 31 Oct 41.

he were. Difficulties inherent in a parallel or collaborative procedure were in this way reduced to a minimum.[19]

The Civilian Contractors

One further factor in the catalogue of confusion remains to be noted. The British forces in the Corridor had found it expedient to employ a variety of civilian contractors to carry out or to supervise, under military direction, certain tasks. Rail, highway, and dock construction, housing, stevedoring at the ports, and inland motor transport, were handled in varying degree in this fashion. Partly because of the British example, partly because preliminary American planning was carried on while the United States was still neutral, but chiefly because American resources of trained military personnel were wholly inadequate to meet anticipated requirements, the President's Middle East Directive had stipulated use of civilian contractors acting under military direction. Accordingly, the Air Corps, the Ordnance Department, the Quartermaster Corps, and the Corps of Engineers engaged civilian contractors, three of whom shipped men and machinery to the field during the first part of 1942. Serious difficulties were inherent in the contractor system: overlapping, such as that which produced in Iran in 1942 a situation where four American agencies and one British felt themselves responsible for construction of essentially the same sort of buildings in the same general location; the delicate balance of management controls between military and civilian authorities; and the still more delicate problem of the status of American civilians, legal and military, in war areas. But no other means were available to the planners to accomplish tasks largely technical in nature on the scale called for by the emergency. Furthermore, since a nation still neutral could not send an expeditionary force even if it possessed enough trained officers and men, all early planning, procurement, and shipment had to proceed on the assumption of continuance of the civilian contractor system.

Pearl Harbor removed one set of obstacles to militarization. On the day after the attack the Iranian District engineer conferred on the subject of troops with the Deputy Chief of Engineers, Brig. Gen. Thomas M. Robins. They agreed that during the period required to train engineer forces it would be necessary to carry on with the civilian contractors.[20]

[19] This working arrangement was continued between the district engineer and General Wheeler's successor, Col. Don G. Shingler. (1) Interv cited n. 8. (2) Interv, Gen Shingler with Victor H. Pentlarge, Jr., Pentagon, 22 Apr 46.

[20] Interv cited n. 8.

Systematic militarization of overseas contract activities throughout the world was decreed by a War Department directive on 18 February 1942. In accordance with this directive, such activities, with listed exceptions, were to be "terminated as soon as possible, and in each case within six months from the date of this directive." [21] Activities were to be "carried out by military organizations and units to be organized in the United States and sent overseas" to replace the contractor forces. In the case of the Iranian Mission local circumstances delayed militarization well past the year of confusion and into the period of reorganization initiated by the Combined Chiefs' directive of September 1942. The first of the civilian contractors for this area to go was the one retained by the Ordnance Department. It was released on 14 March 1942. This company, alone of all the contractors, put no men into the field. The termination of contracts by the Engineers and by the Air Corps followed on 1 January and 31 March 1943 respectively; while the Quartermaster contractor (whose contract was transferred to Ordnance) remained in the field until 30 June 1943. Uncertainty as to the continuation of the several contracts hampered all stages of the work, from planning and procurement, through shipment of men and equipment, to actual operations; while the difficulties of transition from civilian to military operation, protracted during a six months' period in 1943, slowed the attainment of targets set by early planning.

As one reviews the months from September 1941 to October 1942, and those following months of long-drawn-out transition, it is apparent that the one thing needful to prevent confusion, besides the rare qualities of divination and absolute wisdom, was unified command. Unified command in the Persian Corridor was, however, impossible. Instead there evolved, through improvisation, through trial and error, and in spite of a host of difficulties, a working co-operation among the representatives of the four nations involved, which brought order out of what was, for a time, very nearly chaos.

[21] AG Ltr, 18 Feb 42, sub: Closing Out of Overseas Contracts and Militarization of Contract Activities. AG 160 (2–15–42) MSC–D–M.

CHAPTER III

Six Months in Iraq

The story of early planning explains how it came about that the first American effort was in Iraq and why that effort was short-lived. For six months from November 1941 the Iraqi chapter was longer on planning than on performance. The ordnance plan is an extreme instance: almost all planning, almost no performance in the field. The case of the Iranian Mission's first job in Iraq was less extreme, though more than a million dollars and the best working months of the year had been expended on projects when change of plan transferred them to the British before they were fairly started.[1] In the early stages of new ventures, trial and error take their toll of the best-laid plans.

The Engineer Tasks

The first plans were very large indeed. Broached by the British before Pearl Harbor put a global strain upon American resources, these plans indicated both a belief that the Americans could do anything and the hope that they would. British needs were great, and the President had directed that their needs should govern.

Following the Washington decision in September 1941 to establish the Iranian Mission, the War Office, London, instructed the Commander-in-Chief, India, to make suggestions for American projects in road construction and maintenance, port development with rail connections, maintenance of American vehicles being operated by the United Kingdom Commercial Corporation, and development of inland water transport. This last field of activity, as has been pointed out, was never entrusted in whole or in part to the Americans; but tasks in the other fields named by the War Office were duly considered for assignment to the Iranian Mission.[2] The command relationship between India

[1] The figure of $1,188,000 for the work in Iraq is included in Report of Foreign Manager on Fee Earned, WD Contract DA–W–1098–Eng–109, 20 Mar 43. Head Office, Spencer, White and Prentis, New York (referred to hereafter as SWP Office).

[2] War Office Rad, 6 Oct 41, quoted Summary and Index, p. 9, American Aid in the ME, 1941 and 1942. MEF.

and the British forces in Iraq and Iran made New Delhi the appropriate clearinghouse for plans for that area. When General Wheeler left the United States in late October arrangements had been concluded for him to stop at New Delhi for consultation with General Wavell. At Honolulu Wheeler joined his chief of staff, Lt. Col. Don G. Shingler, and General Maxwell, who was on his way to Cairo in command of the North African Mission. From Karachi, while Maxwell continued by air to Cairo, Wheeler and Shingler proceeded by train to New Delhi. There from 20 to 26 November they met with the Commander-in-Chief, India.

On 25 November General Wavell's headquarters reported "works suitable for American aid agreed with General Wheeler. . . ." On the day before, Wheeler cabled from New Delhi his list of "nine items . . . essential for American aid to Russia and to British Army in Iraq and Iran." On the same day, in Washington—after conferences participated in by Generals Burns and George Spalding and Brig. Gen. Sidney P. Spalding representing War Department responsibility for lend-lease, General Robins and others of the Office of the Chief of Engineers, the Iranian District engineer and his contractors, and representatives of the Iranian Mission—a third list of tasks was drawn up.[3]

These lists are interesting both for their agreements and for their points of difference. General Wavell noted 10 projects: 5 for India, 3 for Iran, 1 each for Iraq and for an undesignated site at the head of the Persian Gulf. General Wheeler included 6 projects for India, and 1 each for Iran, Iraq, and the head of the Gulf. The Washington list, being primarily concerned with engineer tasks, will be separately considered. Perhaps the most striking difference between the Wavell and the Wheeler lists is the omission from the American list of two British proposals: development of docks at Umm Qasr in Iraq (the task which soon received top priority) and development of ports on the Caspian Sea, inside the Soviet-occupied zone of Iran, with communications thereto. The Caspian task, to which General Wavell's list attached the first importance and which, it noted, would require Soviet co-operation to be obtained by General Wheeler, was quietly and promptly abandoned for lack of Soviet approval.

The Wavell and Wheeler lists agreed, with a difference in phrasing, on establishment of motor vehicle assembly plants at Karachi. The Wheeler list noted that the vehicles assembled at Karachi were for

[3] (1) Msg ARMINDIA 18886/Q. (Q. 1), New Delhi to Troopers Mideast, Cairo, 25 Nov 41, App. 12, American Aid in the ME, 1941 and 1942. MEF. (2) Msg 18786/Q, GHQ, India, 24 Nov 41. Iran 5/13, NADEF. (3) Memo, signed by Capt Paul F. Yount, 24 Nov 41, sub: Rpt on Cons Needs. Iran 2/8, NADEF.

delivery to Russia via eastern Iran; Wavell's list made no mention of a delivery route but noted that some of the vehicles were to be for British use "for leave supplies." The lists also agreed on: establishment of a motor vehicle assembly plant at the head of the Persian Gulf; a small motor repair shop near Bombay; a repair shop at Agra, India, for signals equipment of American make; an ordnance repair shop at Karachi for tank engines and bodies; a base ordnance workshop at Tehran to assemble, service, and check equipment being handed over to the Russians, the British list noting that they attached great importance to putting the delivery of supplies to the Russians into American hands; and provision of American instructional personnel for advice to Indian Army engineers on the use of certain machinery of American make. The British list alone carried an item for American development and maintenance of one thousand miles of road on the Ahwaz–Hamadan–Khanaqin route, a part of which the Americans were later to undertake. The American list named the provision of river craft for work on the Tigris and Karun Rivers, a project later undertaken by the Iranian Mission. This was included in the Wavell list, but with a low priority. The absence from both lists of an American aircraft assembly plant for the Basra area is explained by the fact that this project was planned through British headquarters in Cairo. The British list noted that General Wheeler had indicated in the New Delhi conversations that he did not feel his directive authorized him to discuss British proposals for pipeline construction; the American list did not mention pipeline work. The two lists represent not specifically agreed tasks but general agreement on the kind of task. No agreement on priorities was put to paper; but it is clear, from later project lists, that specific tasks as well as priorities were carefully considered by the conferees and, because of the changing situation, were left unrecorded and flexible.

The Washington list of construction items was drawn up to enable the Iranian District engineer to plan for procurement of men, equipment, and shipping. It indicated that details of the general construction schemes would be dependent on information that would be gathered at sites yet to be selected, but it did not specifically locate any projects beyond noting that they would be in the Basra area, at Bandar Shahpur (not mentioned in the Wavell or Wheeler lists), at Bombay, and at inland points in Iraq and Iran. Dock, housing, plant, shop, and depot construction, road repair and improvement, and a limited amount of railroad construction were listed; but the paper shows, as do all the early planning papers, the differing bases of information upon which the various planners proceeded. For instance, the Washington list, not

having been derived exclusively from nominations by the Commander-in-Chief, India, mentioned airport construction; and its provision for construction of six hundred miles of pipeline in Iran reveals how far the British idea of a great pipeline network to be built with materials imported from the United States had advanced in Washington, though at the same time, in New Delhi, General Wheeler had indicated that pipelines lay outside the scope of his directive. Again, the Washington list, providing only for very limited rail construction, came much closer to eventual American commitments than did later plans which ranged from creating an extensive rail network in Syria and Palestine to double-tracking the ISR.

With planning in late November still in the broad preparatory stage, it had meanwhile been necessary to appoint a civilian contractor for the Iranian District engineer and to develop a specific program of work. The certainty that there would be dock construction, highway work, and a variety of building assignments suggested the firm of Spencer, White and Prentis, Inc., who, in the years 1932 to 1938, had been the contractor when Major Wheeler was building cofferdams, locks, and dams on the upper Mississippi for the Corps of Engineers. To handle an undetermined amount of railway construction, Foley Brothers, Inc., for two generations experienced in railroad work, were called in and the two companies together (called for convenience Folspen) signed on 10 November a contract for service abroad.[4] Lt. Col. John A. Gillies, formerly General Manager of the Santa Fe Railway, appointed to the Iranian Mission by General Wheeler to undertake advance railway surveys in Iran and Iraq, arrived in the field on 20 November and established field headquarters at Marine House, Ashar, in the business district of modern Basra. With General Wheeler's headquarters established ten days later at Baghdad and the district engineer, Colonel Lieber, still at New York, Colonel Gillies, as mission representative in the south, found rail surveys swamped by pressing problems connected with making lend-lease work locally.

The first orientation of the mission was toward the British line of communications, Basra to Baghdad. Both considerations of security and the indeterminate state of planning prevented the writing into the engineer constructor's contract of exact specifications for the work

[4] The contract, DA–W–1098–Eng–109, was approved 18 November 1941 by Under Secretary of War Robert P. Patterson. See Edmund A. Prentis, Progress Review of Construction Work, American Military Mission to Persia, 10 Mar 43; and A. J. Ruge, Project Manager, Report on Iranian Operations, 9 Mar 43. Both filed SWP Office. Information on the overseas operations of the engineer constructor was obtained in interviews with Ruge and Charles H. Sells, Foreign Manager, on 28 October 1944 at the Head Office of Foley Brothers, Inc., Pleasantville, N. Y.; and with Prentis, Lazarus White, C. L. Swenson, and Eugene W. Kortjohn on 19 October 1944 at the SWP Office.

to be done. But examination of the contract and of the first detailed instructions issued under it shows that the Americans had decided to concentrate their initial efforts around the head of the Persian Gulf. The contract, without mentioning sites, called for wharf construction, rail approaches to docks, highway building and improvement in Iran, and temporary housing and warehousing which would be appropriate for either the Basra–Umm Qasr area or Iran. In the first directive under the contract, issued just after the Wavell-Wheeler lists, a motor vehicle assembly plant for the Ahwaz–Andimeshk region was among projects listed. Camps for the constructor's men were also specified for the same area. Otherwise, this directive followed the general statement of tasks written into the contract.

The process of determining construction tasks was carried still further in early January when the Iranian District engineer assigned sites now decided upon by the mission. The construction of an auxiliary port at Umm Qasr with wharves, access roads, and railway yards, a construction camp and storage yard, and highway and rail connections with Basra came first on the list. It also called for construction and administrative offices, camp, mess, hospital, storage facilities, repair shops, and an equipment yard for the Basra area. Because no field reconnaissance had yet been made, absence of information as to sources of rock and gravel left one thousand miles of highway construction and improvement unlocated. In addition the constructor was notified to prepare to build shops at Basra and Karachi as called for by the ordnance program.[5]

The Ordnance Program

The implementing of the lend-lease process at the receiving end in the Persian Corridor laid upon the Iranian Mission many more responsibilities than those involved in the construction of docks, highways, railways, and buildings. By the turn of the year these engineer tasks had received top priority; but both their determination and execution were affected by decisions in other fields such as Ordnance, Quar-

[5] (1) The so-called New York Letter was issued by the North Atlantic Division engineer under date of 27 November 1941. See Rpt cited n. 1. (2) Ltr, Col Lieber to Folspen, 5 Jan 42. Iran 4/4, NADEF. (3) After this date the constructor's work was notified to it through five foreign directives dating from 4 to 27 April 1942, and twenty-one change orders with amendments dating from 10 April to 10 December 1942. They may be compared with the summary of work done contained in Information To Be Furnished to the North Atlantic Division for the Purpose of Preparing a Completion Report for Contract DA–W–1098–Eng–109, as requested by letter dated 10 May 1943 from the North Atlantic Division and signed by Capt. H. G. Groves. NA 7205 (AMSIR) 13/2, and NA 319.2 (AMSIR) 38/2, NADEF. Another copy PGF 239.

termaster, and Air. Kinds of projects, location of sites, division of responsibilities, local arrangements for labor and procurement—all these posed questions for which the mission had to find prompt answers. Most important, in its effect on early planning, was the ordnance program.

Unlike the Corps of Engineers which set up separate district engineers for North Africa and Iran to be attached to the Maxwell and Wheeler missions respectively, the Ordnance Department elected to handle its Middle East projects under a single plan for both missions. Direction of work in the field was to be under Col. Francis H. Miles, Jr., ordnance officer on the staff of General Maxwell and acting ordnance officer for the Wheeler mission. The civilian contractor, The J. G. White Engineering Corporation, of New York, after protracted negotiations starting in November and conducted by the New York Ordnance District office, was appointed on 26 January 1942. The basic program was outlined in an advance plan, dated 12 November 1941.[6]

The advance plan provided for "supervision of and co-ordination with any Ordnance activities which may develop in the area of the Iran Mission," and made Ordnance responsible for the design, location, operation, and maintenance of projected installations, leaving construction to the Engineers. Notwithstanding this definition of responsibilities, the ordnance contractor, by his letter contract, was given "incidental construction" responsibilities, as the following indicates. He was

> . . . to organize, establish, equip and operate one or more depots in the Middle East, India, and Africa for the supply, maintenance and repair of tanks and miscellaneous ordnance, signal, engineer, chemical warfare, or other military equipment . . .; to assist in, or carry on, the instruction of British or other personnel assigned for that purpose, in the supply, maintenance and repair of such equipment . . .; to do such incidental construction as may be directed by the Contracting Officer.[7]

[6] (1) List of Officers, North African Mission, 3 Nov 41. Afr.M. 6/6, NADEF. (2) Ltr Contract DA–W–ord–58, dated 24 Jan 42, approved by Secy War 26 Jan 42. J. G. White Engrg Corp DA–W–0098, Contract and General Folder, NYODF (New York Ordnance District Files, New York). See also Chronology of Development of Contract DA–W–ord–58. Head Office, J. G. White Engineering Corporation, New York (referred to hereafter as White Office). Background and information supplied in interviews with Lt. Col. Edward Gluck, Contracting Officer's Representative, New York Ordnance District on 16 October 1944; and with E. N. Chilson, Vice President of White, D. M. Crawford, Secretary, and R. W. Gausmann, Engineer, at White Office on 17 October 1944. (3) Memo, Col Miles for CofOrd, 12 Nov 41, sub: Plans by North African Mil Mission for Aid to British Activities in Near East. AG 400.3295 (8–9–41) Sec 6.

[7] Ltr, Maj Gen Charles M. Wesson to CofEngrs, 11 Feb 42. J. G. White, Confidential Correspondence 160/DA–0058, NYODF.

Since simultaneous supervision and co-ordination implies some overlapping of function and responsibility, and since the planning functions of the engineer and ordnance officers and their contractors, particularly in structural and engineering design, inevitably overlapped, there was some duplication of effort, and some confusion as to final authority which was at last resolved by the Chief of Ordnance. In forwarding plans and drawings for Middle East ordnance depots to the Engineers, Ordnance explained that they were to be considered by the Engineers as suggestive only, final decision to be reached in the field by the appropriate chiefs of missions acting through representatives of the Corps of Engineers.

In the case of the ordnance program the familiar pattern of the early period was repeated. Planning and procurement had somehow to go ahead at full speed while policy, determined by all sorts of war-inspired factors, remain fluid. The ordnance planners had therefore to determine what installations were to be established, by whom and how they were to be constructed, and how they were to be operated and maintained. Under the first heading the program was precise. It provided that of seven depots for the Middle East, called OMET 1 to 7, three were to be established within the area of the Iranian Mission. The largest of these, OMET 1, at Karachi, was to be capable of serving the entire Middle East area from the standpoint of supply and distribution. Some thirty-six installations there, ranging from small shops to new docks, were called for. Twenty-eight more buildings had been planned for at Umm Qasr and Baghdad (OMET 4 and 7). The program covered installations for the Signal and Quartermaster Corps and Chemical Warfare Service work, as well as for Ordnance. It envisaged putting optical shops and some other buildings underground. Most difficult of all, it involved importation of large quantities of structural steel from overseas.[8]

Construction decisions were complicated by the Corps of Engineers' over-all responsibility in that field assigned by the War Department in October. Yet as late as 2 February 1942 the ordnance contractor, having been put on notice by the Ordnance Department to prepare to do necessary construction, believed that design, construction, and installation of machines and equipment for overseas bases was a func-

[8] (1) Revised Plan, J. G. White, 12 Feb 42, initialed by R. W. Gausmann, Actg Gen Mgr, Overseas Div. Col Gluck's file, Routine Correspondence III, NYODF. That plan based upon: (2) Memo, Col Miles for Brig Gen James K. Crain, Chief of Field Scry, Ord Dept, 26 Nov 41, sub: Status of Ord Participation in North African and Iran Mil Missions, White Office; and (3) Memo, Col Miles, 28 Nov 41, sub: Recommendations for Contractors for Middle East Activities, quoted Rpt by Paul D. Olejar, 15 Jun 44, sub: Ord Activities in Middle East Missions, pp. 11, 11–a, and n. 16. Hist Sec, Ord Dept, Pentagon.

tion under its contract. And as late as 27 January the Quartermaster Corps, seeking funds for operation of proposed motor vehicle assembly plants at Tehran, Karachi, and Bombay, made provision also for possible construction of buildings by its contractor, the General Motors Overseas Corporation. Engineer construction of installations under the ordnance program, however, was definitely confirmed by the date of the contractor's revised plan of 12 February.[9]

Just as overlapping had developed in the fields of structural and engineering design and in provisions for construction of installations, so the determination of policy as to operation of projected overseas bases ran into even heavier problems of division of labor and assignment of responsibilities. At a late stage in planning, in mid-January 1942, the Ordnance Department expected its contractor at the several bases to operate facilities for repair of tanks, guns, aircraft armaments, optical instruments, locomotives, and motor vehicles. In the last-named category, however, a distinction was drawn between operation of projected quartermaster repair shops to be done by the ordnance contractor and operation of shops for the repair of motor transport vehicles to be done by the quartermaster contractor.[10] This problem was not wholly solved by the subsequent transfer of the General Motors contract from the Quartermaster Corps to the Ordnance Department; and fresh problems arose when, as will shortly appear, the ordnance contractor was dispensed with and, soon after, the ordnance program itself canceled.

These decisions were forced in no small degree by the peculiar difficulties inherent in assigning to a civilian contractor tasks concerned with munitions, which were essentially military. No comparable difficulties existed in the purely constructional duties of the engineer's civilian contractor. From the start of its negotiations with the Ordnance Department the White Corporation had urged that the overseas part of its contract "be conducted as a military organization to protect workmen in event of capture." [11] The contractor had estimated that

[9] (1) Memo, Overseas Div, J. G. White [n. d.], sub: Confs of 13–15 Jan 42 with Mil Missions Sec, Ex Div, Field Serv, OCofOrd, p. 12. White Office. (2) Interoffice Memo, J. G. White, 2 Feb 42. White Office. (3) Interoffice Memo, 27 Jan 42; and Ltr, Col Lieber to CofEngrs, 27 Dec 41, and Inds, 19 Jan 42 and 20 Feb 42, which noted that a radio from General Wheeler of 13 January 1942 indicated that construction of most installations would be performed by the British, the American engineers to handle the rest. Iran 24/2–A, NADEF. (4) Revised Plan cited n. 8(1).

[10] Notes of Conference held at the offices of Johnson, Drake and Piper, Inc., 15 January 1942, presided over by Colonel Miles and attended by representatives of Quartermaster, Ordnance, the North African Military Mission, its engineer contractor, the ordnance contractor, but by no representative of the Iranian Mission, save its acting ordnance officer, Colonel Miles. J. G. White Folder, MEF.

[11] See chronology cited note 6(2), and Overseas File, White Office, for this and following dated references unless otherwise noted.

over thirteen hundred American civilians and over sixty-five hundred locally employed laborers would be required for the depots at Karachi, Umm Qasr, and Baghdad.[12] For some time the military authorities were of divided opinion and on 9 December 1941 insisted that, because of the need of speed and the dearth of qualified military technical personnel, civilians would have to be used. On 2 January 1942 Gano Dunn, President of the White Corporation, wrote to Brig. Gen. James K. Crain that, while continuing to urge that civilian employees overseas "have some form of government or related agency status," the contractor would carry on. On the date of the signing of the letter contract, 24 January, the contracting officer instructed the contractor to make no commitments on engaging personnel for overseas pending solution of the problem of military or civilian operation. That the military then were in some doubt of the feasibility of civilian operation was reflected in provisions of the letter contract calling for its automatic termination if a formal contract was not executed on or before 15 April. On 31 January a message was dispatched to the North African Mission stating that Ordnance favored militarization of the overseas projects. On 10 February the contractor was informed, by telephone, that the project was to be completely militarized, and on 18 February, by letter, of the termination of the contract, effective 14 March. The Chief of Ordnance, Maj. Gen. Charles M. Wesson, in a letter congratulating the contractor on "the highly efficient manner in which your organization attacked this difficult problem," stated that "the sole reason for terminating this contract was a War Department decision as to policy." [13]

Termination of the ordnance contract reflected a policy decision not to operate overseas ordnance depots through a civilian agency. The White Corporation was thus the first of the civilian contractors to be replaced by the gradual process of militarization. In time the Army would possess adequate manpower to militarize the ordnance projects; but meanwhile there was the matter of building the required depots. The first step in transferring this task to the engineer constructor was taken when on 12 March the North Atlantic Division engineer directed Folspen to place orders for quotations and deliveries for the proposed construction. Henceforward, the engineer constructor moved toward

[12] Total estimate for all seven Middle East bases was 15,280 employees, of whom 80 percent would be locally hired laborers. Rpt by Overseas Div, J. G. White to WD, OCofOrd, Mar 42. White Office.

[13] (1) Rad 496 AMSEG 170, 31 Jan 42. AG 400.3295 (8–9–41) Sec 6. (2) Ltr, Lt Col S. F. Clabaugh, Ord Contracting Off, 18 Feb 42. J. G. White, Confidential Correspondence, 160/DA–0058, RC 24209, NYODF. (3) Ltr, Gen Wesson to J. G. White, 27 Feb 42. White Office.

full responsibility for all phases of construction without the complications inherent in collaboration with an ordnance contractor. On 27 March the Chief of Ordnance inquired of Karachi whether Folspen was to erect the more than sixty buildings planned for Karachi, Umm Qasr, and Baghdad, and stated that the necessary steel had been procured in the United States but that Folspen would have to obtain and ship abroad the necessary skilled labor.[14]

At this point the critical shortage of shipping provided the immediate reason for cancellation of the ordnance program. On 6 April the War Department decided that "due to shipping conditions . . . no fixed installations will be established in the territory of the Iranian Mission." [15] Although the episode with its alarums and excursions suggests the King of France marching up the hill and then marching down again, it is a significant part of the story of early planning. With invasion threatening from Suez, Anatolia, and the Caucasus, the ordnance program provided for urgent strategic needs. The cancellation of planned fixed installations within the area of the Iranian Mission, one of those sudden shifts in direction forced by war conditions, recognized that the odds against the program, including complexities in the planning process, had proved for the time being insuperable.

The Mission's Tasks

General Wheeler's broad instructions—to advise and assist the British, Russian, and other friendly governments within the area of his mission in all phases of the transport of American materials for their war requirements—embraced the engineer program to establish port and transportation facilities as well as the ordnance program to establish and operate facilities for the maintenance and repair of American-made lend-lease defense articles. His instructions gave General Wheeler a direct interest in all phases of the delivery process; but, as has been noticed, this interest was in practice circumscribed by the Iranian Mission's auxiliary status. General Wheeler could not, there-

[14] (1) See under date of 12 March 1942. NA 5440 (Iran DO), NADEF. (2) Rad, OCofOrd to Karachi, 27 Mar 42. AG 400.3295 (8–9–41) Sec 4. (3) Early in March, Colonel Miles visited General Wheeler, made recommendations for ordnance personnel in Wheeler's area, and received Wheeler's approval of the general ordnance plan providing for a great base at Karachi. This was reported by Colonel Miles to a meeting of General Maxwell's staff on 5 March 1942. Min, Stf Mtg at Cairo, 5 Mar 42. Maxwell Papers (Personal files lent by General Maxwell to the Middle East Section of the Office of the Chief of Military History and returned to him upon his retirement from the Army).

[15] Memo, Gen Aurand, Dir, Intn Div, for CofOrd, 6 Apr 42. NA 7205 (Iran DO–2/1), NADEF. Messages concerning erection of shop buildings at Umm Qasr continued to pass between General Somervell's office and the Iranian Mission as late as 21 April. Folder, Umm Qasr Assembly Plant, SL X–11,737.

fore, concern himself directly with the berthing of ships, their unloading, and the transportation of their cargoes to Soviet destinations. Direct as was the mission's concern with these steps, such matters, in the first phase of the American effort, rested wholly in British hands. The port of Basra was operated by a port directorate maintained by the government of Iraq under the firm wartime guidance (granted by treaty rights) of the British dock directorate. All military traffic was handled by the British Army and Navy representatives. General Wheeler learned that cargoes destined for the Iranian District engineer's construction projects would be unloaded by commercial agents long established at Basra, and that clearing such cargoes from the docks to the site of the American jobs would be done through the British dock directorate.

General Wheeler also found that there was little he could do, beyond offering advice and assistance, to facilitate the flow of lend-lease goods destined for the Soviet Union. As has already been noted, the desire of President Roosevelt to speed help to Russia was providing the port of Basra with a steady flow of matériel. William C. Bullitt, the President's roving ambassador, visited Basra on 7 January and asked questions. General Wheeler told him that the facilities of the port were not being used to capacity and that goods were piling up at dockside faster than they could be removed. General Wheeler estimated that only about one quarter of Basra port's tonnage capacity was actually clearing the docks. Important as was the flow of goods to Anglo-American projects and to Soviet receiving points, and direct as was General Wheeler's interest in this flow, the responsibility for management and control of port and transportation facilities was not his.[16]

Movement of traffic, being closely bound up with British treaty obligations for security, was not easily shared with an auxiliary which possessed no combat troops in the region and, until late 1942, only a handful of service forces. But industrial operations could be shared. In addition to those planned for Engineers and Ordnance, there were operations for the assembly of motor vehicles and aircraft. To supplement aircraft assembly being carried on by the British at their base at Shu'aiba, one or more new plants had been included in planning talks at Cairo. Prompt selection of a site was essential. After conference with British headquarters, Tenth Army, Baghdad, and with the concurrence of the Royal Air Force, of Maj. Gen. George H. Brett, Chief of the Air Corps, and of Brig. Gen. Elmer E. Adler, Chief of the Air

[16] (1) Memo, Gen Wheeler for Bullitt, 7 Jan 42. 323.91 Ports, SL 9008. (2) DE File P–9, Ports and Harbor Facilities, NADEF.

Section, U.S. Military North African Mission, General Wheeler chose the island of Abadan in the Shatt al Arab below Khorramshahr. Selection of a site for the motor vehicle assembly plant, which had been included in early planning for somewhere at the head of the Persian Gulf, followed the Abadan decision. The choice, concurred in by the Russians, fell upon Andimeshk, an Iranian town on the main line of the Iranian State Railway, and was approved by the Commander-in-Chief, India, when on 8 January General Wheeler conferred with him at New Delhi. A second assembly plant for motor vehicles, also included in the early planning, was determined upon for Karachi on the assumption, not yet invalidated by developments, that delivery to the Soviets would be effected via the east Iranian overland route which ended at Meshed. While the American plants at Abadan and Andimeshk were being made ready for operations, the Iranian Mission, initially through Colonel Gillies, furnished technical assistance to the British assembly operations.[17]

On 19 January General Wheeler sent to Washington a list of projects for the Iranian Mission.[18] These projects comprised dock, railway, and highway construction in Iraq and Iran; motor vehicle assembly in Iran and India; motor vehicle reconditioning, rebuilding, repairing, and servicing in Iran and India; the ordnance projects for Iraq and India, later canceled; projects for the assembly, repair, and transfer of lend-lease aircraft at points in Iraq, Iran, and India; repair of radio direction-finding equipment at Agra, India; establishment of schools in Iraq, Iran, and India to teach operation and maintenance of American-made motor vehicles, tanks, and aircraft; and American participation in a proposed joint commission of representatives of Iran, Great Britain, and the USSR to supervise operation of the railway. In all, there were 31 projects, spread over a large area. Of these 15 were eliminated by subsequent planning, 4 were undertaken by the British, 2 were started by the Americans but transferred to the British, and 10

[17] (1) For an account of the considerations affecting the decision and of requests to the British to facilitate arrangements, see 092.2 Agreement Concerning Use of Abadan Air Field, SL 8978, especially documents dated 29 December 1941 and 13 January 1942 and inclosures. (2) History: United States Military Iranian Mission, 20 Mar 43, prepared for Col Don G. Shingler, Chief of Mission, by 1st Lt Victor E. Dietze, Hist Off. PGF 242. (3) The Karachi motor vehicle assembly plans were abandoned because of Soviet objection to the east Iran delivery route as landing cargoes too far from the battle lines. See radio, Faymonville to Wheeler, 22 January, and reply, Shingler (for Wheeler) to Faymonville, 24 January 1942, stating the Zahidan–Meshed route would not be used for lend-lease deliveries by the Americans. 323.91 Ports, SL 9008.

[18] Inclosed in Ltr, Gen Wheeler to Gen Moore, 19 Jan 42. WDCSA 381 Egypt (1–19–42). A similar list, but differing in some details, included in Memo, Chief, Home Office, Iranian Mission, for Defense Aid Dir, 23 Jan 42. 320 Mis Br, Intn Div, ASF NCF (Army Service Forces Noncurrent Classified Files).

were undertaken and carried out by the Americans. Of these 10, 2 represented American technical assistance to British projects at Shu'aiba and Bushire. The remaining 8 were all located in Iran.

The breakdown of projects, not all of which, of course, were to be undertaken at once, is sufficient reminder of the hazards of planning and the obstacles to performance. Under such conditions, procurement and shipment of personnel and the allocation of limited field resources to specific projects were as systematic and dependable as the game of roulette.

Arrival in Iraq

The first to learn this hard fact were the civilians of the Iranian District engineer's constructor, Folspen, who, together with military members of the Iranian, USSR, and North African Missions, and the North African District engineer's civilian contractor's men, sailed from Brooklyn in the U.S. Army Transport *Siboney* on a coldly raining Christmas Eve, 1941. On the following 14 February they disembarked in the bright sunshine of Basra.[19]

The Umm Qasr job had received highest priority in early January while the men were at sea; so, without stopping to savor the attractions of Basra, home port of Sinbad the Sailor, for the Folspen men it was Umm Qasr the day after landing. A long line of borrowed British lorries took the group of 117 civilians, and some of the 9 officers and 10 enlisted men who had landed with them, forty or fifty miles across the desert to Umm Qasr by the waters of the Khor Abdullah. Exactly how far they drove it is impossible to say, for they traversed a waste space marked only by camel caravans. For the last miles there was no road. They had come to build one. And they drove that day only to a name on a map. "There is absolutely nothing there," reported a British survey of late 1941. What had once stood when there was a sort of port at Umm Qasr in World War I had long since sunk into the low shores of the Khor, or been consumed by the desert. As it was not known whether the site was accessible by sea, the Americans' ship had gone on to Basra while the British surveyed the Khor to determine the navigability of the channel to the site of the proposed docks at Umm Qasr.[20]

[19] The North African Mission people had landed at Massawa, Eritrea, on 2 February. The Basra landing date, because of contradictions in Army radios and reports, is fixed by the personal diary of Arthur W. DuBois, Chief of Party of the Folspen men on the voyage. Margil, the dock area of Basra, was the landing point.

[20] (1) Ltr cited n. 5(2). (2) Strength figures in available reports for this period are inconsistent. See Chart 2. Those given for Iranian Mission personnel on the *Siboney* are from a memorandum from the Chief of Staff prepared for the President, 17 January 1942. AG 400.3295 (8–9–41) Sec 1. Previous to the arrival at Margil there were about 15 officers

There was something on the map besides the name when the Americans arrived. They found a rough camp prepared for them by the British. Nissen huts for two hundred men had been promised, and seventeen, all incomplete, were standing, six of which were needed at once for warehousing. Water, brought from Basra in a British-built pipeline, was subject to occasional interruption by Bedouin attracted by its accessibility for their parched flocks. Reservoirs being built by the British were not finished. There was no light save what could be provided by lanterns and candles until a small generator arrived in March on the first supply ship, the *City of Dalhart,* when there was power enough for the mess and recreation huts. The camp, with only the desert track behind it and the Khor Abdullah before it, was well guarded by British Gurkhas against the curiosity of Arabs and camels. There was no refrigeration—and consequent food spoilage. This was war in the Middle East and the men settled down to fight it out.[21]

The Iranian District engineer's first jobs were to build two berths at Umm Qasr with necessary rail and road approaches, shops, warehouses, and housing; to build a rail line 27 miles north across the desert to Rafadiyah Station on the meter-gauge line from Basra to Baghdad, and 8.4 miles of highway between Shu'aiba and Margil; and to build an equipment yard and machine shops at Rafadiyah.[22] There were other jobs to come, at Baghdad and in Iran; but these had top priority.

The engineer's most pressing problems were housing and moving equipment off the ship and down to the site of work at Umm Qasr. Division of construction responsibility between the British and the Americans, assigned at higher levels, entailed overlapping which had to be ironed out on the spot through the co-operation of the British forces and the Iranian Mission. The earliest discussions in Washington had led to a general undertaking by the British to provide necessary

and 10 enlisted men in the field. Colonel Lieber had arrived at Baghdad on 2 February with Prentis and Sells of Folspen. By late February there were about 26 officers, 2 warrant officers, and 18 enlisted men divided between the mission headquarters at Baghdad, the mission field office at Marine House, Ashar, Basra, and the Iranian District engineer's headquarters at Umm Qasr. By 10 April, with the military numbers essentially the same and about equally divided between the mission and the district engineer, the number of civilians at the site of work was 192 with Folspen and 21 on the district engineer's staff. Ltr, Col Shingler to CG, SOS, 10 Apr 42, sub: Status of U. S. Mil Iranian Mission. PGF 26–A. (3) British Rpt, Persian Gulf Ports and Inland Transport Facilities and Organizations: Report on a Visit to Iraq and Persia, October 5th–November 2d, by R. S. Mactier, Basra, 1 Nov 41. PGF 26–A. (4) Memo, Col Gillies for Gen Wheeler, 17 Feb 42. Folder, Khor Abdullah Survey, SL X–11,737.

[21] Charles H. Sells, Report of the Foreign Manager, 10 Mar 43. SWP Office.

[22] A memorandum from Colonel Lieber to the Iranian Mission field office, Basra, 16 February 1942, notes that the rail line from Umm Qasr to Rafadiyah Station was to be built by British troop labor; but Foreign Directive 1 of 4 April to Folspen assigned the work to the American constructors. Unmarked folder, SL X–11,737. For engineer directives to the constructor, see note 5(3).

construction for the proposed American installations, an arrangement consistent with the provision of the President's Middle East Directive concerning division of financial responsibility. Under the directive, it was

> . . . contemplated that a major part of the cost of the proposed projects will be incurred in Sterling or local currencies and will be discharged by the British. Defense Aid funds should be used only to the extent of unavoidable dollar expenditures, such as for pay and allowances for American overhead and skilled mechanics, and materials to be procured in the United States.

The record shows that in January it was understood in Washington that the British would accomplish construction, but that if any should have to be done by the Americans it would be handled by the Iranian District engineer. Under date of 21 January Washington asked General Wheeler to confirm that "construction for both personnel and equipment everywhere in your area will be handled by the British," to which he replied, on 17 February, "All houses, equipment and personnel for project, including truck [assembly], ordnance depots, and airplane assembly plants are to be built by British." He went on to report that, the War Office in London having recently raised the question of division of work and financial responsibility between American and British forces, it had been arranged that all local expense was to be borne by the British, who were also to prepare sites and construct shops and housing before the arrival of the Americans. The ambiguities in the arrangement were reflected in a further passage stating, "Americans will necessarily provide some housing of their own, shops and warehouses, and will furnish practically all materials and equipment for their projects." This understanding, he explained, was to assuage British fears "that all work should have to be done by them and that all we provided were technicians who would supervise complete running installations." General Wheeler's message paid warm tribute to the British: "Cooperation and assistance by British Headquarters, in all preparatory work, have been very cordial, both at Delhi and Iraq." [23]

Nevertheless, there stood the seventeen Nissen huts and the uninviting desert to greet the new arrivals. They soon learned that the

[23] (1) Ltr and Inds cited n. 9(3). Rad AMSIR 10, 21 Jan 42. MID 400.3295, 1–21–42 (1–6–42). (3) Rad AMSIR BAG 19, 17 Feb 42. AG 400.3295 (2–17–42) MSC. Another copy NA 2051 (Iran DO) 4/1–S, NADEF. (4) A note of caution had been struck by an American air officer doing preliminary reconnaissance for Air Corps proposed installations in the Basra area. He is quoted in a quartermaster memorandum of 15 November 1941 as saying, "There are no adequate living quarters at Basra worth mentioning and the Air Corps figures on going into this area 100 per cent independent." The memorandum suggests "that we depend on the British for nothing, despite any assurances to the contrary." Iran 43/3, NADEF.

British had troubles of their own and that, with them as with the Americans in those early days, plan was not always translated instantly into performance. The Americans therefore set to work to build, a process which led to some further on-the-spot adjustment of the general high-level arrangements for division of financial responsibility. It was held by some of the British that they were to attend to local procurement of labor and materials—in accordance with the general practice of the first year or so of the American effort—and that the Americans would act in this respect through established local channels. There was no clear understanding on the details of this point, which affected considerations of local currency and economic conditions. When, therefore, the British presented bills to the Iranian District engineer for certification and reimbursement in dollar exchange, convenience dictated occasional direct procurement by the Americans.[24]

The serious delays experienced in unloading American materials and equipment from the first two ships were only partly attributable to absence of direct American controls over the operations at shipside. Cargo from the *Siboney* was got down to Umm Qasr by the end of February. When the *City of Dalhart* arrived, the district engineer learned with consternation that the crane which he had designated before he left New York to be carried as a deckload in order to speed discharge at Basra had been stowed by transportation experts at the port of embarkation in the very bowels of the ship and heaped over with loose wheat. Weeks were lost in unloading the *City of Dalhart,* delaying work on dock construction at Umm Qasr until 1 April.[25]

Meanwhile work continued on housing at Umm Qasr; but British construction at Shu'aiba and Rafadiyah languished. Colonel Lieber reported on 28 March:

> The British authorities are far behind expectations in providing housing for our administrative group at Shu'aiba and have just started the footers for the warehouse and shop at the Rafadiyah Yard where we are assembling vehicles in the open with occasional dust or sandstorms. I have been pressing this and finally got action by stating that I should have to trim off the Umm Qasr [housing and ordnance shop] projects to do the Rafadiyah and Shu'aiba construction.[26]

All Change—New Priority

On the shore by the Khor Abdullah, April started auspiciously. The sun and the desert wind, stirring up dust and sand, spurred the Americans at Umm Qasr to get on with their job before summer, the

[24] Interv with Col Lieber, Pentagon, 10 Feb 49.
[25] *Ibid.*
[26] Ltr, Col Lieber to Engr, NAD, 28 Mar 42. NA 2144 (Iran DO) I–A, NADEF.

enemy, arrived. Plant and enough equipment to begin had been brought down from the ships at Basra. There were 3 pile rigs and 5 tractors, a grader, 3 shovels, 2 truck cranes, 2 concrete mixers, 8 air compressors, 11 dump trucks, and 20 miscellaneous vehicles. In the first five days of work the wharf approach fill had been graded, the rigs set in place, and pile driving begun. There were materials enough at the site for housing the constructor's men and for about thirty-five hundred feet of wharf. Two more ships, the *Texmar* and the *Granville,* lay off Umm Qasr and the discharge of their cargoes of timber and piling was under way, made no easier by the fact that there was as yet no wharf.[27]

Then, on the fifth day, suddenly and without previous intimation of what was impending, a message arrived from Washington: "Consideration is now being given to a revision of your projects. Suspend all operations on Umm Qasr project until further instructions." [28]

The order was received by the American command with surprise, by British headquarters at Baghdad with dismay. Uncertain as to its implications for the future, Colonel Shingler immediately stopped the unloading of the two ships, since reloading across the beach would be impossible should the timber and piling be required at other sites. On 7 April Shingler told the Folspen officials that both the wharf and railway projects were to be abandoned. Messages flew to Washington and back. In a few days projects were resumed on the condition that only local materials be used. At this time Folspen was given the first hint that construction was to be militarized. On 10 April Washington confirmed that the Iraqi construction projects would be indefinitely suspended. Top priority had been shifted to the Iranian projects. On 17 April dock construction with local materials was stopped by oral order, confirmed in writing on the 25th. The highway construction from Shu'aiba to Margil was canceled on 9 May, and work on the railway from Umm Qasr to Rafadiyah Station stopped on 11 May. Meanwhile, the ordnance program for buildings at Umm Qasr and Baghdad had been canceled on 6 April. Only the technical assistance to the British assembly operations at the shops at Rafadiyah and Shu'aiba was to go on. Leav-

[27] Ltr cited n. 20(2).

[28] (1) Received at the site 5 April, the radio, No. 57, Somervell to Shingler, was dated 4 April 1942. PGF 259. Another copy 323.61 Establishment of Military Districts, Binder 1, SL 9008. (2) Other documents basic to the account of the suspension at Umm Qasr: RAD 28, Gen George C. Marshall to Lt Gen Joseph W. Stilwell and Gen Wheeler, 3 Apr 42. PGF 259. Rad, Lt Col Maxwell W. Tracy, Chief, Home Office, Iranian Mission, to Col Shingler, 10 Apr 42. AG 323.61, Hq PGC (AG decimal files seen at Headquarters, Persian Gulf Command, Tehran, now filed at the Kansas City Records Center, AGO, Kansas City, Mo.). Ltr, Hq, Tenth Army to GHQ, MEF, 17 Apr 42. PGF 26–A. (3) Other dates in text are from Progress Review cited in n. 4. (4) Incidental information on the suspension supplied by interviews already cited.

ing a handful of men behind in Iraq, the Americans moved across the boundary to begin again in Iran. On 27 May the Iranian District engineer established his headquarters at Ahwaz, followed on 1 June by Folspen. Regretfully they refused British pleas that they leave their equipment behind for Tenth Army, which was to take over the Iraqi commitments in support of the British line of communications.

Behind this sudden termination of the American construction projects in Iraq and the transfer of the engineer forces to Iran lay a fundamental change in high policy. Whereas, following General Wheeler's conferences with General Wavell in India, the first weight of the American effort had been thrown into support of the British line of communications in Iraq, the emphasis was now shifted to the building up of the Persian Corridor supply line to the Soviet Union. During the early planning period before Pearl Harbor it had been expected that the Iranian Mission would be able to carry out both of these lend-lease functions. As the President put it in his report to Congress on the first year of lend-lease, the Iranian Mission was organized "to improve transport and communications in the area from Baghdad to Agra, India, and from Umm Qasr, Iraq, to Tehran, Iran, a region strategically important as a supply line to Russia and as a barrier on the road from the west to India." [29] But as this narrative has shown, the increased demands upon American resources after Pearl Harbor made it necessary for the Iranian Mission to do one thing at a time. The January decision to begin in Iraq followed.

Nevertheless, even as the Iraqi projects got under way, the impelling need to strengthen aid to Russia was slowly but surely shaping the decisions which led to the shift to Iran. To recapitulate: first came the President's order of 28 December 1941 to the Secretary of War to meet the protocol commitments to Russia. Next was the President's inquiry of 16 January 1942 to the Chief of Staff as to the possible reinforcement of the two Middle East missions. Then came the War Department directive of 18 February on the militarization of overseas contract activities, looking forward to the time when service troops could undertake an increased program to move supplies to the Soviet Union. Next was the President's directive to Donald Nelson ordering top priority for the release of Russian-aid lend-lease materials, followed by the order to Admiral Land to give top priority to Russian-aid shipping. By early April preliminary plans to militarize the Iranian Mission called for the dispatch to the Corridor of large numbers of service troops in the latter part of the year, and these plans made urgent the

[29] *Report to Congress on Lend-Lease Operations for Year Ended March 11, 1942*, p. 30.

preparation of housing and installations for their use upon arrival. At the time of the suspension of American construction work in Iraq, General Somervell informed Colonel Shingler, "movement of matériel to Russia must be accorded top priority"; to achieve maximum movement Washington believed, as did London, that it would be essential to build up the capacity of the Iranian ports of Khorramshahr and Bandar Shahpur in order to make the best use of the ISR.[30]

The overriding urgency of stepping up aid to Russia was the basic reason for the sudden alteration in the priority of the Iranian Mission's tasks; but there was another factor, India. In accordance with early planning, General Wheeler's responsibilities had included projects for Karachi, Bombay, and Agra. In consequence he was frequently at New Delhi, leaving his chief of staff, Colonel Shingler, in charge at Baghdad headquarters.[31] As it related to the Iranian Mission, the first problem of India for the American planners was the extent to which American bases of activity should be planted there and used for Middle East and Russian-aid supply; and the second, the problem of command, grew out of the first.

In October 1941, in Washington, Maj. Gen. Richard C. Moore, Deputy Chief of Staff, discussed with Lt. Gen. H. C. B. Wemyss, of the British Joint Staff Mission, the extent to which the United States should route supplies for the Persian Corridor via India. Minutes of a conference held on 6 October at the War Plans Division, War Department, reveal some difference of opinion. The British view was that, pending the improvement of Persian Gulf ports, Indian ports should be used. The Americans were disinclined to commit themselves and, in a memorandum of 18 October for the Chief of Staff, observed that the use of India as a supply base might result in the damming up of the flow of American supplies to Iran because of "physical or military restrictions or both," and that if there should be such a stoppage, it should occur in "territory where United States authority predominates," whence material could be diverted elsewhere. The problem was the degree of control Americans could exercise over their lend-lease shipments through foreign lands. General Wheeler had at this time already been appointed chief of the Iranian Mission, his Letter of Instructions was

[30] (1) Rad AMSIR WASH 96, Somervell to Shingler, 10 Apr 42. 323.91 Ports, SL 9008. (2) Some weeks before the stop order was received at Umm Qasr, Colonel Shingler, anticipating that general planning for militarization later in the year would require greatly increased housing, requested and received from General Wheeler authority to proceed to housing construction on the assumption that this sort of project lay beyond the scope of British construction commitments. Memo, Shingler for Wheeler, 21 Mar 42. 323.61 Establishment of Military Districts, Binder 1, SL 9008.

[31] Moved to Basra, 15 Mar 42. Memo, Col Shingler for Q–1, Hq, Tenth Army, Baghdad. File, Iranian Mission, SL X–11,737.

issued three days later, and he was soon to leave for Hawaii en route via New Delhi to Baghdad. The conferences at New Delhi seem to have clarified the problem. When General Wheeler reported to Washington during the talks with General Wavell in November, he accepted the British desire to use western Indian ports for Iranian shipments with no fears such as had been expressed previously in Washington. He strongly urged the use of Bombay and Karachi to take the strain from Basra, Bandar Shahpur, and Bushire. When the ordnance and quartermaster plans were added to other American plans to assist the British in the Middle East, India figured prominently as a site for installations.[32]

In fact, India increasingly figured in American planning as a base not only for Persian Corridor and other Middle East needs, but also for lend-lease aid to India and, even more important, American Army requirements in the area. Because of uncertainty as to Japanese intentions in the Indian Ocean, Bombay and Karachi were more likely candidates than more exposed Indian ports. On 28 February 1942 the War Department, taking into consideration the supply needs of American and Chinese forces in China, India, and Burma, assigned General Wheeler to the command of a Services of Supply (SOS) organization for the American Army forces in the region. Wheeler was to continue as chief of the Iranian Mission.[33]

By this time it was already apparent, from developments in January, that the overland delivery route, Zahidan–Meshed, would not be acceptable to the Russians for lend-lease deliveries. Karachi, Bombay, and India itself were thus all but eliminated as points in the American supply line to Russia. The new Commanding General, Services of Supply, China–Burma–India, was therefore concerned not with Russian aid, but with supply for the CBI theater. After his arrival in India to take over his command, Wheeler informed Washington that in his opinion all proposed American installations in India should be under the "American commander in India, General Stilwell, including Iranian Mission projects. . . ." [34] The separation of the Iranian Mission's Persian Corridor activities from its Indian projects followed, accompanied by command rearrangements.

On 3 April General Marshall by radio relieved Wheeler as chief of the Iranian Mission, detached India from the area included in that mission's responsibilities, continued Karachi nevertheless as a base for the two American Middle East missions, and instructed Wheeler to

[32] (1) Memo for CofS, 18 Oct 41, points 4, 5. Filed, with other documents alluded to, AG 400.3295 (8–9–41) Sec 8. (2) Msg cited n. 3(2).
[33] Rad AMSIR BAG 120, Gen Marshall to Gen Wheeler, 28 Feb 42. AG 381 (2–24–42) (2).
[34] Rad AMSIR 61, 7 Mar 42. AG 400.3295 (8–9–41) Sec 4.

make further plans for Karachi and elsewhere solely on the basis of the requirements of SOS, CBI. The message added that Colonel Shingler would replace Wheeler as chief of mission. Next day, 4 April, General Somervell appointed Shingler chief and notified him that the Iranian Mission and its personnel were no longer under the Secretary of War but under his own SOS command.[35]

The brief Iraqi episode, beset with the confusion that attends new and untried enterprises, ended upon a note of clear-cut decision. Henceforth, as the Americans established themselves in Iran, their strength was to be applied to an ever increasing assumption of that part of the British program in the Corridor which was concerned with aid to Russia.

[35] (1) Rads, 4, 3 Apr cited n. 28(1), (2). (2) Control of the War Department's Overseas lend-lease missions passed, in the reorganization of March 1942, to Operations Division; but OPD agreed on 29 March to its being taken over by SOS. Memo, Maj Gen Dwight D. Eisenhower to Somervell, 29 Mar 42, sub: Contl of Missions. OPD 210.684, 3. Effective 1 April, the Secretary of War transferred all such missions from OPD to SOS. On 9 April they were officially assigned to International Division (General Aurand, Director), formerly the Defense Aid Division, with the intention of combining all the separate home offices of missions into a single Missions Branch. Rpt by Home Office, U.S. Mil Mission to USSR, for period 5–25 Apr 42, SL X–11,737.

CHAPTER IV

Interlude of the Mission to the USSR

While the Iranian Mission was tackling its first assignment in Iraq, a second War Department mission was at large in the Persian Corridor. Conceived in logic, born in ambiguity, the U.S. Military Mission to the USSR[1] was doomed to the functionlessness of a fifth wheel on a cart. After six months, only three of them spent in the field, it expired in frustration. Its brief career is as much a part of the Russian-aid program as are the more successful efforts which followed it.

Why and Where?

Lend-lease to Great Britain involved not only the procurement and shipment of defense materials, but a permissive follow-through in certain instances on the part of the United States until the recipient was able to use the materials himself. In the case of complicated machines like tanks and aircraft, American technicians sometimes went along with shipments to British recipients and were as indispensable as the doctor's directions on a bottle of medicine. In Egypt American officers observed the performance of American materials, and American technicians organized the means for instructing the British in the operation and maintenance of unfamiliar American products.

After the First (Moscow) Protocol of 1 October 1941 pledged specific quantities of American materials for Russian aid and a mission under Colonel Faymonville—representing the civilian-controlled Lend-Lease Administration—was established in Moscow, steps were taken to provide the same sort of accommodation for the Soviets in anticipation of the impending declaration (to come on 7 November)

[1] Called at first by various names; this designation became official by 3d Ind by TAG of 2 Dec 41 to Memo, USSR Mission Home Office for TAG, 18 Nov 41. Folder, U.S. Military Mission to USSR, SL X–11,737.

of USSR eligibility for lend-lease. The Air Force developed a plan to make available a detachment of officers, enlisted men, and civilians "to render technical advice and to supervise the maintenance of American aircraft" to be furnished the Soviets under lend-lease. The Ordnance Department proposed organizing "a group of civilian experts" under contract to Amtorg, Soviet-American trading company, to instruct the Russians in the care and maintenance of ordnance, especially tanks. Technicians were engaged and held in readiness late in October to depart, when word reached Washington that the Moscow government would issue no visas for them. Although Ambassador Laurence Steinhardt was assured by Andrei Y. Vyshinsky, Vice-Chairman, Council of Peoples' Commissars, that visas would be immediately telegraphed to Washington, they were not promptly forthcoming. The plan languished as the United States made clear that it did not insist on sending this sort of aid, its wish being to make technical assistance available only if desired.[2]

This reluctance to receive civilian technicians within Soviet borders, prophetic of the rock in the stream of co-operation upon which the USSR Mission was later to founder, was making itself manifest just as that mission was being established by the designation on 28 October of Maj. Gen. John N. Greely as its chief.[3] The Maxwell and Wheeler missions, established under the provisions of the Middle East Directive, had been in existence for one month. The time lag in the organization of the Greely mission is explained on two grounds. First, the status of the Soviet Union relative to lend-lease was not yet fixed as was the status of Great Britain; and secondly, there was the Faymonville mission at Moscow. At the time that Colonel Faymonville was designated to remain in Moscow in charge of lend-lease matters, there was some War Department opinion in favor of replacing him by "the assignment of a Brigadier General to head that mission with a status similar to that of Generals Magruder, Maxwell, and Wheeler." [4] After a month's time, and with no alteration in the status of the Faymonville mission, the U.S. Military Mission to the USSR was established. It was logical to set up a War Department lend-lease mission for the USSR on the analogy of those created for Great Britain. It was ambiguous to do so

[2] (1) Memo, Lt Gen Henry H. Arnold for CofS, 27 Oct 41; Memo, Gen Crain for Defense Aid Dir, 27 Oct 41; and Memo, Gen Moore for CofS, 28 Oct 41. AG 400.3295 (8–14–41) Sec 3. (2) Rad, Hopkins to Col Faymonville, 28 Oct 41, and other papers, cited MS Index to the Hopkins Papers, Vol. I, Bk. IV, Harriman-Beaverbrook Mission, p. 9, Items 37, 38.

[3] By oral instructions of CofS. See Ltr of Instructions, Secy War to Gen Greely, 5 Nov 41. AG 400.3295 (8–14–41) Sec 1. Another copy Folder, U.S. Military Mission to USSR, SL X–11,737.

[4] Memo, Gen Miles, G–2, for CofS, 30 Sep 41. AG 400.3295 (8–14–41) Sec 3.

without settling the relationship between the new military mission and the existent civilian one. The new USSR Mission was ordered to proceed by an undesignated route to Kuybyshev, the auxiliary Russian capital some five hundred miles east of Moscow. On 19 November *The New York Times* reported that an American military mission was about to leave for Archangel. On that same day, having heard the news via a London broadcast, Colonel Faymonville addressed an inquiry to Washington: "With regard to mission of John Greely to North Russia, announced in London broadcast, information is requested as to duration, object and composition of said mission." To job seekers who wanted to go along, General Greely wrote that the publicity was "unauthorized and inexact." To Faymonville went a vague but reassuring reply and the promise that he would be kept informed.[5]

General Greely's Letter of Instructions defined his "principal function" as assurance of "the timely establishment and operation of supply, maintenance, and training facilities as required by present and contemplated Russian or other friendly operations within or based upon your area." The area was to be that controlled by the USSR with boundaries, for administrative purposes, to be settled in agreement with the chiefs of the China and Iranian Missions with notice to the Secretary of War. In all other respects the authority and duties granted and enjoined were identical with those contained in General Wheeler's Letter of Instructions.

Two points require stress. First, at the time of the formation of the USSR Mission its training and observation functions bulked large in the minds of the planners. Although published months after the situation had altered drastically, the President's report to the Congress on the first year of lend-lease described the early conception of the Greely mission. It read:

> Russian Mission: The major assignments of this mission will be to instruct Russia's soldiers in the characteristics of American-made weapons, and to decide by observation on the spot, supplemented by knowledge of our domestic problems, what types of aid we can best supply. Aside from what they can contribute to Russia's effort, the experience these officers will gain from their participation in the Russian campaign will be of priceless value to the general staff of our own Army.[6]

Second, General Greely has recorded that it was first intended that his mission would enter Russia through Archangel, to which port, along with Murmansk, supplies for the Soviet Union were still flowing in 1941. By the end of November, however, plans had crystallized suffi-

[5] (1) Rad, Col Faymonville to Gen Sidney Spalding, 19 Nov 41, with reply, 25 Nov 41. 334.8 USSR, Intn Div, ASF NCF. (2) Private Ltrs. Folder, U.S. Military Mission to USSR, SL X–11,737.

[6] *Report to Congress on Lend-Lease Operations for Year Ended March 11, 1942*, p. 27.

ciently for him to write that he expected to depart for Iran, going thence into the Soviet Union.[7] These two points, the purpose of the mission as an operating entity and its admission into Russia, were to loom large during the ensuing five months. Purpose and destination were separate but interacting problems. Both were affected, during the period when effort was made to solve them, by the fact of the mission's creation by analogy with other War Department lend-lease missions in spite of the existence of the civilian mission in Russia. The interaction of all forces made for ambiguity. The cloudy vagueness grew yet more cloudy after the decision to go to the USSR via Iran. Would there be room in the Corridor for two military missions with overlapping powers and duties? Under the circumstances, what were Greely's duties?

Fifth Wheel

In requesting the Secretary of War for twelve officers and twelve enlisted men for foreign service and five officers to staff the home office in Washington, Greely described the primary duty of the mission as supervisory. His staff as approved for overseas duty included, besides Col. John N. Hauser, chief of staff, an executive officer, an adjutant, an interpreter; and quartermaster, finance, air, medical, ordnance, and signals officers. At the first staff meeting, held in Washington on 3 December, it was brought out that General Greely planned to fly to Basra in January. Discussion of the change in destination of cargoes, formerly intended for Archangel and now awaiting ships for Basra, indicated that the USSR Mission's home office, which gathered information on Soviet needs and how to meet them, was occupied with the procurement and shipping aspects of the Letter of Instructions. The supervisory duties, regarded at the beginning by Greely as primary, would fall within the shipping and delivery aspects of the lend-lease process. But inasmuch as late November planning by the USSR Mission definitely envisaged a stay of uncertain duration in Iran en route to the USSR, supervision of the delivery of tanks, planes, and other materials of war within the Persian Corridor immediately raised the question of division of labor between the Greely and Wheeler missions. To be sure, General Wheeler's primary function at the start was construction; but by his Letter of Instructions he was as deeply involved in all other stages of the delivery process as was Greely. The engineer report drawn

[7] (1) John N. Greely, Rpt of the U.S. Military Mission to the USSR, 1941–42, with attachments, 11 May 42. 334.8 USSR, Intn Div, ASF NCF. (Cited hereafter as Final Rpt.) (2) Ltr, Gen Greely to Col Walter M. Robertson, 27 Nov 41. Folder, U.S. Military Mission to USSR, SL X–11,737.

up in Washington in late November attempted to distinguish between Wheeler's sole control of all War Department operations in the theater based on the Persian Gulf including supervision of direct deliveries of war materials in Iraq and Iran, and Greely's responsibility for delivery to Russia. But it was a distinction without a difference. The two functions were virtually identical.[8]

More serious even was the inadequate realization in Washington at this time of what the word *delivery* meant in actual practice in the field. If it meant assembly of aircraft and motor vehicles and their dispatch from the assembly plants to near-by or remote Soviet receiving points by a variety of means of transport, then General Wheeler's mission was clearly responsible for this aspect of the lend-lease delivery process. If, on the other hand, planners in Washington thought of delivery as the movement and transportation of cargoes within the Persian Corridor, then the British Army was clearly responsible, and all any American could do was to advise and assist, which was just what General Wheeler was already doing.

General Greely was aware of the potential overlap of two missions in one area. It is not clear what Washington thought delivery meant. At all events, Greely saw no reason to unfold American uncertainties to the Russians. He therefore suggested that the War Department inform Maxim M. Litvinov, Soviet Ambassador at Washington, as follows:

> In order to comply with delivery of supplies to the USSR under the Protocol, a U.S. Military Mission is operating in Iran to develop lines of supply from the head of the Persian Gulf.
>
> In addition a small military Mission of about 25 including 10 officers and headed by Major General John N. Greely is leaving shortly for Iran with the principal responsibility of furthering delivery of military matériel to the USSR along this route. General Greely's Mission will naturally operate through the Iranian Mission and British authorities in that area. The United States Government would like to be informed by the Government of the USSR as to which of its representatives in Iran it would be most advantageous for General Greely to contact, in order to best meet this responsibility.
>
> It would certainly be advantageous for some or all of General Greely's Mission to be furnished with visas for the USSR prior to departure from this country, in order to facilitate communication with the Embassy of the United States in the USSR. In case any objection exists to this procedure, it is desired that the

[8] (1) Ltr, Gen Greely to Secy War, 6 Nov 41. 200 Personnel General, USSR, Intn Div, ASF NCF. (2) Data on personnel allotments and strength are in other papers in this file. See also 334.8 USSR, Intn Div, ASF NCF; Folder, U.S. Military Mission to USSR, SL X–11,737; and Rpt, Chief, Home Office, to Defense Aid Dir, 22 Jan 42, 320 Mis Br, Intn Div, ASF NCF. The strength of the mission fluctuated within narrow limits close to the original request. At termination there were 12 officers and 14 warrant officers, noncommissioned officers, and enlisted men overseas. (3) 300.6 USSR, Intn Div, ASF NCF. (4) 319.1 Rpts Home Office to Mission USSR, Intn Div, ASF NCF. (5) Memo, signed by Capt Paul F. Yount, 24 Nov 41, sub: Rpt on Cons Needs. Iran 2/8, NADEF.

representative of the USSR in Iran be directed to furnish visas to the personnel of General Greely's Mission if and when it appears desirable.[9]

Here, along with a clear statement of the paramount responsibilities of the British and their auxiliary, the Iranian Mission, was a declaration of the USSR Mission's "principal responsibility of furthering delivery" through the Persian Corridor. Here also was an intimation, delicately cushioned, that the USSR Mission, which had, after all, been established by the War Department for the express purpose of operating from Soviet soil, would like visas for "some or all" of its members "if and when it appears desirable," preferably before the mission left the United States, if not, upon arrival in Tehran.

There is no discoverable record that the War Department sent General Greely's information and request to the Soviet Ambassador at Washington; but Greely himself did shortly afterward call upon Mr. Litvinov and came away, as he wrote General Moore, with that official's "agreement . . . to make contact with the Ambassador of the USSR at Tehran." [10] Four months later Greely recalled that Litvinov "agreed to notify the Ambassador of the USSR in Iran" that the Americans, recognizing the reluctance of the Russians to admit technicians capable of assembling and operating lend-lease goods at the northern Russian ports, had decided to send a mission to Iran to carry on further negotiations from there.[11] The upshot of the conversation between the general and the ambassador was an assurance to the Department of State by the War Department that the Greely mission would proceed to Russia, and a message sent at Greely's request to the United States military attaché at Tehran stating that Greely would establish headquarters "probably" at Tehran "to facilitate delivery of matériel to USSR authorities at that point." [12] Here was optimism tempered by realism. The optimism would have been less had it been realized at the time, as it was later, that Ambassador Litvinov did not regard General Greely's call upon him as formal notification by the government of the United States to the government of the USSR of

[9] Memo, Gen Greely for Gen Burns, Div of Defense Aid Rpts, 4 Dec 41. Folder, U.S. Military Mission to USSR, SL X–11,737. Other copies AG 400.3295 (8–14–41) Sec 1; and 336 USSR, Intn Div, ASF NCF.

[10] Memo, Gen Greely for Gen Moore, DCofS, 12 Jan 42. 334.8 USSR, Intn Div, ASF NCF.

[11] Final Rpt.

[12] (1) See Memo reviewing history of mission, prepared for CofS by Gen Eisenhower, ACofS, OPD, 25 Mar 42. 334.8 USSR, Intn Div, ASF NCF. (2) Rad 29 to U.S. MA, Tehran, 7 Jan 42. MID 400.3295 1–7–42 (1–6–42). (3) Optimism as to ability of the mission to obtain entry into the USSR reached its height in a report prepared by Assistant Secretary of War McCloy for the Lend-Lease Administration, 20 February 1942, stating that the USSR Mission's "foreign component has only recently landed in Russia." Rpts, Defense Aid Papers, Drawer 1, Cabinet 67, Intn Div, ASF CCF (Current Classified Files).

American intention to dispatch a military mission to the Soviet Union. Until such notice was formally served upon it, the Soviet Government would take no steps to provide entrance visas. Indeed it is doubtful if the Department of State would have regarded the call as anything but a personal courtesy.[13]

With the question of admittance of the mission into Soviet territory still open, General Greely now completed his preparations for departure. One officer and eleven enlisted men had already sailed on the *Siboney* for Basra, and Greely with six officers departed by air from Miami for Cairo on 19 January. Just before his departure, Greely presented the Deputy Chief of Staff with his immediate plan of operation. Because General Wheeler's mission was located at Baghdad, Greely would establish his headquarters at Tehran, would spread his personnel out over the line of delivery from the Gulf ports northward, and would proceed to get deliveries to the USSR under control first in the south, then in the north, and finally inside the USSR.[14]

After stopping in Cairo for conferences with Generals Maxwell and Adler and British officials from 27 to 31 January, Greely proceeded on the 31st to Basra. En route, at Habbaniya, he found the commander of the Royal Air Force in Iraq, Air Vice-Marshal Sir John H. d'Albiac, desirous that delivery of American planes assembled in the Basra area be effected by the United States, inasmuch as it was undesirable, from the British point of view, to billet a sufficient number of Soviet pilots in Basra to make their own deliveries, and there were not enough British pilots available.[15] His conferences at Cairo and Habbaniya had convinced Greely that "since the Iranian Mission had in hand supply to the USSR in that area, General Greely's mission would not interfere with this local activity, but would enter the USSR as promptly as possible and concern itself with supply and kindred activities to that nation as a whole." [16]

Promptly after his arrival in Tehran on 4 February, Greely called upon Andrei A. Smirnov, the Soviet Ambassador. On the 6th he dispatched a letter to him, stating that Greely's first duty had been "to assist in sending military matériel from the United States to the Union of the Soviet Socialist Republics. I came to Iran to observe passage of

[13] Memo of conversation between Andrei A. Gromyko, Counselor of the Soviet Embassy, Washington, and Loy W. Henderson, Asst Chief, Div of European Affairs, Dept State, 26 Feb 42, atchd to Memo cited n. 12(1).

[14] (1) Itinerary Rpt, USSR Mission. 319.1 Progress Rpts USSR, Intn Div, ASF NCF. (2) Memo cited n. 10.

[15] (1) Min, Stf Mtg at Cairo, 27 Jan 42. Maxwell Papers. (2) Rad Wheeler to Moore, 4 Feb 42. AG 371 (12–17–41) Sec 2. (3) Rpt cited n. 14(1).

[16] Final Rpt.

such matériel through Iran, but responsibility for passage through this area remains with General Wheeler. I was advised by your Ambassador in the United States, Mr. Litvinov, to contact you to determine future action." [17] The letter explained that in the view of the United States it would be advantageous to both countries if Greely's mission could observe, and assist in, the use of lend-lease materials, and requested Smirnov to issue visas "for my Mission of eleven officers and thirteen non-commissioned officers." A copy of this letter was transmitted to General Moore with the request that he ask Litvinov to approve the letter in order "to make sure of quick action." [18]

Ten days later, in a dispatch to Washington, Greely raised the question as to whether his mission should go to Russia after all. His message follows:

> On receiving your decision, urgently requested, as to whether threatening situation in Middle East alters desirability my Mission's proceeding to Russia, I can and will to my best judgment issue all orders required, advising you if emergency demands. Ambassador of USSR in Tehran should be instructed make all arrangements for entry, including visas, if Mission is to proceed to Russia. Otherwise, since it would be foolish to intrude on Wheeler who has in hand transfer of supplies to Russia in this region, my Mission should be used somewhere else—in my opinion, at nearest point where American troops are to be sent: if in Middle East, which I believe needs rear installations far less than divisions, my headquarters should be Cairo to make plans for employing troops there and for coordinating Maxwell and Wheeler missions; if no American troops are to be employed in Middle East, I recommend we move to Far East, to Australia first, presumably, to join troops there. Threat to entire position in Middle East within 60 days seem likely to me.[19]

Command and Conflict

There were now three problems to be untangled: the question of entrance into the USSR; the definition of the purposes of the USSR Mission; and, the inevitable corollary of the second, the question of command relationships among the Americans. All three were thrown squarely into Washington's lap. Yet, until the Russians resolved the first, Washington could do nothing about the second; while the third, involving General Wheeler's late February appointment to General Stilwell's staff in India, depended upon changes in the status of the Iranian Mission, recounted in the previous chapter, which culminated

[17] (1) Memo cited n. 12(1). (2) Ltr, Gen Greely to Andrei Smirnov, 6 Feb 42, atched to Final Rpt. A transcript in PGF 261.

[18] Rad 9 AMRUS 2, Greely to MILID Washington, 6 Feb 42. PGF 261.

[19] (1) Rad AMRUS 4 to MILID Washington (Gen Greely to Gen Moore), 16 Feb 42. Folder, U.S. Military Mission to USSR, SL X–11,737. (2) See also Memo, Maj Willet J. Baird, Chief, Home Office, USSR Mission, for Gen Moore, 27 Feb 42. 334.8 USSR, Intn Div, ASF NCF.

in Colonel Shingler's succession to the command of that mission on 4 April.

Sensing that the continuing Soviet inaction in the matter of the visas indicated an indefinite stay for the USSR Mission in Iran, General Greely on 9 March suggested to Washington that he absorb Wheeler's functions for Iran, leaving Iraq to Wheeler, and that Greely take over shipments to Russia from the south while Faymonville handled them from the north.[20] Numerous similar suggestions followed throughout March, accompanied by a steady stream of reports to Washington on the functioning of the Wheeler mission.

The Iranian Mission, in addition to its responsibilities for engineering construction works, furnished the British technical advice and assistance in the assembly of motor vehicles and aircraft at plants in the Basra area and at Bushire. There were also the unloading of ships and the movement of their cargoes by inland transport. General Wheeler found himself forced to serve the needs of both the British and the Russians. Into this complicated three-cornered situation General Greely threw himself with enthusiasm. His officers explored the supply routes, south, north, and east, all the way to the port of Pahlevi on the Caspian Sea.[21] When the Soviet Ambassador at Tehran complained to Greely that "more than 1,000 trucks, enough to move two divisions," were lying in crates scattered in the fields around Andimeshk, Greely dispatched a party which reported on 29 March that it was true.[22] Delays in British construction at Andimeshk had held up the commencement of assembly operations there by General Motors until 26 March. General Greely also reported to Washington on port operations, the matter about which Ambassador Bullitt had questioned General Wheeler in January. He felt that the small deliveries via the Gulf ports, of which the Russians were complaining, were attributable to British commercial agents. The "necessity of dealing with the British in general" was cited in a later message as impeding aid to Russia. Greely reported that he agreed with the Soviets that "logically" they should take delivery direct at the ports without Anglo-American intervention. He concluded, "International politics seem to forbid this." [23] The dissatisfaction of the Soviet Commissar of Foreign Trade over the "unsatisfactory condition of trucks which arrive through Bushire under

[20] Rad, Gen Greely to G–2, Washington, 9 Mar 42. AG 400.3295 (8–14–41) Sec 1.

[21] File, Reconnaissance Trips, *passim*, SL X–11,737.

[22] (1) Rad AMRUS 13, Greely to Washington, 21 Mar 42. AG 400.3295 (8–9–41) Sec 4. (2) Rpt by Maj Addison V. Dishman, 29 Mar 42, atchd to Weekly Rpt 6 of Col Hauser, CofS, USSR Mission. 319.1 USSR, Intn Div, ASF NCF.

[23] (1) Rad AMRUS 9, Tehran to Washington, 12 Mar 42. AG 400.3295 (8–9–41) Sec 4. (2) Rad cited n. 22(1).

British supervision and [are] delivered to the Russians at Tehran" was relayed to Greely from Faymonville via the USSR Mission's home office in Washington.[24] A report to Washington from the USSR Mission noted friction between Russians and Americans at Basra over trucks, of which the Soviets had rejected forty out of two hundred delivered.[25]

The severity of Soviet inspections of American materials caused a good deal of friction which in one instance was referred to higher levels. On 16 February there arrived at Basra a Russian mission—headed by Ivan S. Karmilitsin, Chief of Engineering, Division of Peoples' Commissariat of Foreign Trade—with the purpose of testing for acceptance seventy-seven twin-motored light Boston bombers and arranging for their delivery to the USSR. On 28 February General Faymonville informed Mr. Stettinius, at lend-lease headquarters, Washington, that "one Mr. Gillis, allegedly an American who is understood here to be an assistant to General Wheeler," had considered as insufficient the credentials of Mr. Karmilitsin.[26] As the "Mr. Gillis" was Lt. Col. John A. Gillies, commanding Wheeler's field headquarters at Basra, The Adjutant General ordered General Greely to investigate and report. On 10 March Greely ordered his chief of staff, Colonel Hauser, to proceed to Basra, adding, "Advise General Wheeler en route if you contact him." [27]

The planes, designed for the British, to be rearmed by them, and diverted by high-level agreement to the Russians, were to be delivered by the Americans. The affair, complicated by misinformation and misunderstanding, produced in Hauser's report recommendations which met as far as possible every demand of the Russians and which contributed to better co-ordination of the activities of the USSR and Iranian Missions. By an unhappy irony, on the very date of General Faymonville's cable, Colonel Gillies and Mr. Karmilitsin perished together in a Soviet plane accident.[28]

The report and attached papers show the Russians to have been captious and overexacting about living quarters and the supply of quinine assigned to them. On the other hand, they also show that the military and civilian members of the Soviet mission proved to be highly qualified and hard working, technically well informed, and

[24] Rad AMRUS 22, Col Baird to Gen Greely, 1 Apr 42. AG 400.3295 (8–9–41) Sec 4.
[25] Progress Rpt, 16 Mar 42. 319.1 USSR, Intn Div, ASF NCF.
[26] Rad, Faymonville to Stettinius, 28 Feb 42. 336 USSR, Intn Div, ASF NCF.
[27] (1) Rad AMRUS 11 Washington, TAG to Amlegation Tehran, 8 Mar 42, ordering a report and requiring extension of "all courtesies necessary to assure friendly relations in the future. . . ." 333 USSR, Intn Div, ASF NCF. (2) Greely's order of 10 Mar 42 filed with Col Hauser's Rpt to Chief, USSR Mission, 16 Mar 42. Folder, Hauser Investigation, SL X–11,737.
[28] Rad AMSIR 64, 7 Mar 42. AG 400.3295 (8–9–41) Sec 1.

fair in their demands concerning the condition and equipment of delivered aircraft. Assembly at Shu'aiba they had found not too efficient, nor the condition of the aircraft uniformly satisfactory. The Americans had combined a large degree of obligingness with some show of condescension, and there had been a clash of personalities. Colonel Hauser recommended no formal finding, owing to the death of the principals. His suggestions were happily accepted on the Soviet side and promptly applied on the Anglo-American.

The Hauser report was perhaps the most constructive act of the USSR Mission; but as a report by one American mission on the work of another American mission in the same area with similar responsibilities, it was evidence of confusion in the command relationship. Accordingly, Greely pursued the question of command. On the date, 16 March, of the submission to him of the Hauser report, Greely cabled Washington:

> Now convinced I must keep officers at assembly plants erected or controlled by Wheeler. This should include Abadan plant [for aircraft assembly]. To have it controlled from Cairo would mean impossible complications. Senior officer in each area [North Africa, Iran] must co-ordinate all activities therein. Have asked Wheeler to come here [Tehran] on return from India with recommendations for future action. No criticism of him personally intended. In case he not return I recommend that Hauser be promoted and placed in command of all activities in Iran on basis that supply to USSR is most immediately important.[29]

On 21 March Greely asked the War Department whether Wheeler, who had gone to India on the 7th, was to return to Basra. If so, Greely would arrange with Wheeler for improving the situation; if not, Greely announced that he would assume command of the Iranian Mission, subject to War Department confirmation, leaving Colonel Hauser "in charge" of unspecified duties, presumably those of the USSR Mission. On 27 March Greely cabled Maj. Gen. Dwight D. Eisenhower at Operations Division, Washington, that he was expecting General Wheeler's views to be submitted immediately. On 2 April General Greely again proposed himself to command the Iranian Mission.[30]

This proposal was supported in the War Department by Brig. Gen. Henry S. Aurand, Director, International Division, SOS, with the concurrence of General Somervell and Brig. Gen. Robert W. Crawford, General Eisenhower's deputy in OPD.[31] On 2 April General Wheeler

[29] Rad AMRUS 11, Greely to Washington, 16 Mar 42. AG 400.3295 (8–9–41) Sec 4.

[30] (1) Rad cited n. 22(1). (2) Referred to by Rad, Gen Wheeler to Gen Somervell, 2 Apr 42. 323.61 Establishment of Military Districts, Binder 1, SL 9008. (3) Rad AMRUS 19, 2 Apr 42. AG 400.3295 (8–9–41) Sec 4. Another copy Mis Br, Intn Div, ASF NCF.

[31] (1) Memo, Gen Aurand for Maj David Wainhouse, 31 Mar 42. OPD 210.684 Iran, 36. (2) Memo, Lt Col Thomas S. Timberman for Chief, Theater Group, 4 Apr 42, sub: Status of Missions. OPD 210.684, 2. (3) At a meeting in Washington on 31 March 1942

sent General Somervell at Washington his view that Colonel Shingler should carry on for the Iranian Mission and that the program outlined to General Moore was being followed, with various concessions to the Russians, "even though extra expense or delay were involved. Relations between British and Russians did not favor expeditious handling of supplies and frequently required American co-ordination." [32] Wheeler continued:

> Colonel Shingler has high executive ability, energy, tact and professional qualifications. We have planned all details together since organization of the Mission and I have confidence in his judgment and actions during my absence and assume full responsibility therefor. I shall visit the area from time to time as soon as certain projects are under way in India. All Mission projects can be handled more expeditiously from India than from Russia because of port, ordnance, vehicle assembly and command co-ordination.

Meanwhile the USSR Mission's home office had been reporting that Greely was considered the number one man in the area and that highly secret information in Washington was going about to the effect that General Greely might "assume command of the entire area which would include the Iranian Mission. . . . Everyone here believes that you are doing the best job that has been done to date in the Far East [*sic*] in co-ordinating activities in the Persian Gulf up to Tehran and from there further north and feels that our Mission is indispensable." [33]

The interest of the North African Mission in some of the responsibilities of the Iranian Mission added a stimulus for Greely's proposal of 2 April. On 1 April he received from his home office a report that Colonel Miles, North African Mission ordnance officer, who was also acting ordnance officer for the Iranian Mission, had arrived at Washington with a "strong plea to authorities for Maxwell to control both Iran and Iraq areas. As British control area, nothing can be done without their authority. Miles stated his belief that Maxwell can better control situation at Cairo." [34]

in which representatives of SOS and the Middle East missions conferred, Colonel Miles stated that OPD had prepared a directive relieving Wheeler of his Iranian Mission command to free him to take over Indian assignments, especially the Karachi base. Colonel Miles added that General Somervell wished Wheeler to continue both of his assignments. This testimony conflicts with the concurrence, just cited, of Somervell with Aurand's approval of Greely to succeed Wheeler in the Iranian command. Memo, Melvin Sims for Lt Col Laurence K. Ladue, 31 Mar 42. Contl Div ASF, HRS DRB AGO.

[32] Rad cited n. 30(2).

[33] Rpt, Home Office to USSR Mission, 22 Mar–4 Apr 42. Folder, Weekly Home Office Reports from U.S. Military Mission to USSR, SL X–11,737. Another copy 319.1 Rpts Home Office to Mission, Intn Div, ASF NCF.

[34] Rad cited n. 24. Colonel Baird reported that General Maxwell had lately sent to Washington a "lengthy cable with respect to requirement for remedial action on delivery of airplanes to Russians and conditions at Basra." Rad AMRUS 27, 19 Apr 42. AG 400.3295 (8–9–41) Sec 4. Maxwell stated to his staff on 9 March that since Wheeler commanded Stilwell's SOS in India, Maxwell should take over all Iraq and Iran, handling all lend-lease

The Chief of Staff's solution of the command problem—the appointment of Colonel Shingler to succeed General Wheeler as chief of the Iranian Mission—was communicated to General Greely on 7 April.[35] But there were still two American military missions in the Persian Corridor, and the USSR Mission had not yet received its visas for the Soviet Union. If the problem of command was temporarily set at rest, there yet remained the questions of what the USSR Mission was to do and where it was to do it.

Russia Unvisited

General Greely's Letter of Instructions ordered his mission to proceed to Kuybyshev. His call upon Ambassador Smirnov in February, his letter to that dignitary, and his appeals to Washington for help, had failed to advance the USSR Mission on the road to Russia. On 11 March Greely tried another tack. He ordered his signals officer, Capt. Carl J. Dougovito, to proceed to Kuybyshev, having obtained for him a diplomatic visa as a courier for the Department of State. Captain Dougovito was instructed to urge the American diplomatic representatives in the USSR to apply to the Soviet Government to issue the visas necessary if the mission was to carry out its War Department instructions. Captain Dougovito was supplied with a copy of General Greely's Letter of Instructions and was told to be guided by it in discussing the purposes of the mission and to proceed on the assumption that the USSR would admit the mission.[36] Dougovito remained in Russia from 13 March to 2 June. His report was submitted more than a month after the USSR Mission had been terminated. It indicated that it had not been possible to enlist the aid of the American diplomatic representatives. The U.S. Minister at Kuybyshev, Walter Thurston, felt, Dougovito reported, "that the objectives listed in the memorandum from General Greely could not be accomplished, and that our efforts would be ineffectual if we did enter the Soviet Union." In Dougovito's opinion General Faymonville was "apparently accomplishing his objective." [37]

In Dougovito's absence, General Greely continued his efforts from Tehran. He told Washington that Soviet Ambassador Smirnov had

needed for the British Eighth, Ninth, and Tenth Armies under General Auchinleck's command. Min, Stf Mtg at Cairo, 9 Mar 42. Maxwell Papers.

[35] Rad 84 to Greely, 7 Apr 42. AG 400.3295 (8–9–41) Sec 4.

[36] Memo, Gen Greely for Capt Dougovito, 11 Mar 42, sub: Instructions on Entering the USSR. Folder, Unnumbered Memorandums U.S. Military Mission to the USSR, SL X–11,737.

[37] Rpt to Home Office, USSR Mission, 12 Jun 42. 334.8 USSR, Intn Div, ASF NCF.

been authorized to issue visas for Greely and two others and that Greely hoped to fly to Russia in two weeks.[38] It should be observed that in this entire affair Moscow never refused to grant temporary visas for individuals or groups of individuals, members of the mission, to make short visits. It was permanent entry for the mission as a whole that was found objectionable.[39] On 21 March Greely again wrote Ambassador Smirnov to tell him that the Chief of Staff, Gen. George C. Marshall, believed that the Soviet Commissar of Foreign Affairs intended to issue visas to Greely "and party." The visas now issued for Greely and two others were sufficient, the letter continued, for the present; but "my government" is under the impression that twenty-one more will be authorized. "It will possibly be desirable for me," General Greely wrote, "to have some of this personnel join me in Moscow later"; and, "It would seem best to clear up what seems to be a misunderstanding in order to prevent delay in the future." [40]

While awaiting a reply to this announcement of intention to proceed to Russia in expectation of later arrival of the rest of his mission, General Greely tried to hop a ride to Moscow which was refused, and refused a lift which was offered. In the first instance the plane was one carrying the new American Ambassador to the USSR, Admiral Standley; but the admiral, while disclaiming any authority over the USSR Mission, declined to permit Greely to board his plane, insisting that to do so might, in the absence of a clearly expressed desire for the mission on the part of the Soviet Government, make the admiral appear to sponsor the mission. At this point, the Soviets offered General Greely flight in one of their planes. Greely declined, and decided not to budge until the War Department, which had ordered him to proceed to Russia, could resolve the matter with the Department of State.[41]

Greely's mild and unhurried letter to Smirnov was counterbalanced by an urgent appeal to the War Department to enlist the good offices of the Department of State in requesting Ambassador Smirnov to issue twenty-one additional visas. The Secretary of War promptly complied with a letter to the Secretary of State summarizing Greely's Letter of Instructions and suggesting that the Soviet Government be formally requested to admit within its borders eleven officers and fourteen enlisted men of the USSR Mission.[42]

[38] (1) Rad cited n. 29. (2) Rad, Greely to Washington, 17 Mar 42. 334.8 USSR, Intn Div, ASF NCF.
[39] Memo cited n. 19(2).
[40] Ltr, Gen Greely to Smirnov, 21 Mar 42. Folder, Greely, John N., Orders and Instructions, SL X–11,737.
[41] Final Rpt.
[42] (1) Rad cited n. 22(1). (2) Ltr, Secy War to Secy State, 30 Mar 42. AG 400.3295 (8–14–41) Sec 1.

General Faymonville now informed the Lend-Lease Administration in Washington that General Greely had requested that Captain Dougovito, who was admitted into the Soviet Union as a State Department courier, be transmogrified into a military attaché and added to Faymonville's staff. As it was necessary to request Soviet approval of this alteration in Dougovito's status, the American Embassy was requested by Faymonville to make suitable representations.[43] If in some quarters the change in Dougovito's status was looked upon as a minor infiltration and in others as illustrating that there are more ways than one to skin a cat, it provided off-stage noises while Ambassador Standley, at the request of Sumner Welles, considered the question of visas for the USSR Mission.

Admiral Standley sent in his opinion on 18 April and it was adverse.[44] He advised the Department of State that there was a British military mission in Russia, but that the Americans executed similar functions through their military attaché and their lend-lease mission under General Faymonville. He noted that "the Soviet has not, with minor exceptions, taken any advantage of the repeated offers made by General Faymonville of the services of technicians and of any other help which might be needed," thus calling attention to Soviet reluctance to agree to that part of General Greely's Letter of Instructions which authorized American assistance to the Soviet Union in training Soviet personnel in maintenance and use of American-made matériel, equipment, and munitions. Other provisions of that letter seemed to Ambassador Standley to raise obstacles to smooth operations because of potentially overlapping responsibilities. The authority given to the chief of the USSR Mission to control all military personnel in his area would, the ambassador noted, enable Greely to "embody in his office the Military Attaché or the functions of the Military Attaché," functions associated with the office of the ambassador. Furthermore, the Letter of Instructions issued by the War Department stipulated that the chief of the USSR Mission would inform American diplomatic representatives in his area of such matters as seemed to him appropriate; and this provision, the ambassador wrote, would render Greely wholly independent as to informing the ambassador of mission activities within the Soviet Union. Admiral Standley did not therefore discuss the matter of visas for the Greely mission with the Soviet Commissariat of Foreign Affairs.

[43] See Rad, Gen Faymonville to Thomas B. McCabe, Actg Lend-Lease Administrator, 6 Apr 42. Folder, Weekly Home Office Reports from U.S. Military Mission to USSR, SL X–11,737.

[44] Rad, Admiral Standley to Dept State, 18 Apr 42, atchd to Ltr, Under Secy Welles to Secy War, 22 Apr 42. AG 400.3295 (8–14–41) Sec 1.

General Greely's home office relayed him an account of Standley's views, noted that General Aurand was urging the Department of State to clarify the situation, and concluded that it was generally felt that Greely should establish himself in Tehran and operate from there.[45] But events failed to confirm the home office's information, just as they had similarly contradicted its intimations as to command a few weeks earlier. Although the War Department was willing to give up the effort to put the mission into Russia and to leave it in the Corridor along with the Iranian Mission, the Department of State saw the mission as a closed book. On 1 May Cordell Hull telephoned Henry L. Stimson and asked him to get the Greely mission out of Tehran forthwith. Mr. Stimson said he would. There was nothing further to do except to send a letter from the Secretary of War to General Greely revoking the Letter of Instructions of six months previous. The letter of revocation, dated 2 May, stated that dissolution of the USSR Mission cast no reflection upon General Greely, but was caused by failure to obtain the necessary diplomatic clearance from the Soviet Government.[46]

Promptly following upon dissolution of the mission came assignment to the Iranian Mission of what was called additional responsibility for handling and forwarding through Iran all military matériel destined for the USSR. The assignment indicates that even at that late date there were those in Washington who did not realize that such duties were already implicit in the tasks of the Iranian Mission, subject only to its auxiliary status vis-à-vis the British. But, thanks to the decision of Secretary Hull, all three problems which had dogged the USSR Mission's short life were solved at one stroke of the pen. Nine of Greely's officers and fourteen of his men were immediately transferred to the Iranian Mission. One officer was returned to the United States. Greely and Hauser stood by for further orders.[47]

It is an oversimplification to attribute the end of the mission solely to the reluctance of the USSR to admit its membership as a whole. Determination of causes requires an examination of opinion within the American Embassy in Russia impossible within the limits of this

[45] Rpt, Home Office to USSR Mission, 5–25 Apr 42. Folder, Weekly Home Office Reports from U.S. Military Mission to USSR, SL X–11,737. Another copy 319.1 Rpts Home Office to Mission, USSR, Intn Div, ASF NCF.

[46] (1) Ltr, Stimson to Welles, 1 May 42, drafted in accordance with Memo, Gen Somervell for Gen Marshall, to the effect that the WD would make no further effort to send the mission into the USSR. AG 400.3295 (8–14–41) Sec 1. (2) Rad AMRUS 30 to Gen Greely, 2 May 42, quotes Ltr of Secy War. AG 400.3295 (8–9–41) Sec 4.

[47] (1) Rad AMSIR 157 Washington, Gen Somervell to Col Shingler, 2 May 42. 334.8 USSR, Intn Div, ASF NCF. Other copies OPD, Iran–Iraq, Vol. I, 20E 42 (IM–Q); AG 400.3295 (8–9–41) Sec 4. (2) 334.8 USSR, Intn Div, ASF NCF.

history.[48] For whatever reasons, Greely's personal calls and letters were the only American requests for visas made directly to the Soviets. Incomplete co-ordination of policy by the State and War Departments weighed in the final outcome. The record further shows that the fate, unforeseen, but nevertheless perhaps not unforeseeable, of being a fifth wheel on the Russian-aid cart contributed to the mission's demise; and the record is clear that up to the last, the War Department maintained its support for two parallel missions in the Persian Corridor.

On the credit side of the ledger, the USSR Mission performed useful field surveys and satisfactorily smoothed out the difficulties which arose over the Shu'aiba assembly operations. Something of the frustration which shrouded its short existence may be mitigated if the lessons its story teaches are studied and learned.

[48] (1) Sherwood, *Roosevelt and Hopkins,* pp. 395–96, and unpublished material in the Hopkins papers. (2) General Greely has recorded that his appointment was suggested by General Burns of the Division of Defense Aid Reports, who had brought Colonel Faymonville to Washington for Russian-aid talks in July 1941 and who took Faymonville to the USSR where he became head of the lend-lease mission. At the time the USSR Mission was established it was expected that Burns would become U.S. Ambassador to the USSR. Burns believed that there were distinct functions to be served by the Faymonville and Greely missions. Faymonville, with direct access to Harry Hopkins, would channel USSR requests into procurement and shipment; Greely, with War Department machinery behind him, would instruct the Russians in the use and maintenance of American lend-lease goods. It was believed that as ambassador, Burns could direct these complementary functions toward the single aim of aiding the USSR. (Ltr, Greely to Maj Gen Orlando Ward, 30 Apr 49. PGF.) But Burns did not become ambassador and the Russians did not want to be instructed. In consequence the mission became something of an orphan.

CHAPTER V

The Iranian Mission and Its Successors

Jobs, Geography, and Manpower

Although the remaining months of 1942 were to produce problems enough, the decisions of April and May eliminated some of the early confusion. The assignment of highest priority to the movement of goods to the USSR dictated handing over American construction activities in Iraq to the British, whose line of communication from Basra to Baghdad the projects were designed to strengthen. The removal of India from the territory of the Iranian Mission, the appointment of Colonel Shingler to succeed General Wheeler, and the dissolution of the USSR Mission all clarified the Iranian Mission's tasks and tended to simplify its machinery. Responsibility for handling and forwarding through Iran all military matériel destined for the USSR, assigned the Iranian Mission at the termination of the USSR Mission, remained nominal because of paramount British responsibilities for movements and transportation. It was exercised through the rendering of advice and assistance, until American assumption, by direction of the Combined Chiefs of Staff in September, of enlarged operational powers and duties. This development was not envisaged during the first half of the year, and consequently, until late summer, all planning for increased Russian aid proceeded on the basis of reinforcing the Iranian Mission and its successor organizations rather than on the basis, determined late in the year, of creating a radically new machine to do the job. Throughout the remainder of 1942 and on into the early months of the new regime established by the Combined Chiefs, the Americans' main concern was with construction of wharves, highways, and housing, and with assembly of motor vehicles, aircraft, and barges.

In the early planning period, when it might be said the planners bit off more than they could chew, it had been supposed that the American field force could handle a large proportion of the thirty-one

tasks to be spread over Iraq, Iran, and India, as listed by General Wheeler in January. Although first priority had been given early that month to the Iraqi projects, Wheeler had assured Colonel Faymonville that on the arrival of the engineer constructor "systematic improvement of 1,000 miles of Persian road net to provide permanent two-lane highways" would be begun. On the day before the Folspen men reached Basra, the British Tenth Army set up priorities for American construction of highways, the first to run from Ahwaz north to Andimeshk, the second from Ahwaz south to Khorramshahr and across to Tanuma in the Basra port area, and the third to connect Umm Qasr with Shu'aiba. The small number of Americans made it expedient to concentrate upon the Iraqi projects; but even while the majority worked in Iraq, surveys for the Iranian highway were carried out and plans made which awaited only the coming of additional plant, equipment, and personnel to be put into effect. Similar reconnaissance looking toward construction of docks at Khorramshahr took place during the Iraqi period, and a construction crew and some equipment were furnished at the same time by Folspen to speed work being done by the British on a motor vehicle assembly plant for American operation at Andimeshk.[1]

The shift of priorities to Iran freed the American working forces for tasks already planned but postponed by the earlier priority rating given to Iraq. The transfer of men and equipment from Iraq to Iran was completed by 1 June, by which date both the Folspen and Iranian District engineer headquarters had been established at Ahwaz. The Iranian Mission headquarters remained at Basra until January 1943 when, as the headquarters of a successor organization under General Connolly, it was removed to Tehran. (*See Chart 1, Appendix B.*)

Ahwaz, which was to be the nerve center of American construction activity, is situated at the head of navigation about 100 miles up the Karun River, or 75 miles by desert track, above Khorramshahr. It is at the junction between the main line of the railway and a branch south to Khorramshahr being built in 1942 by the British. Khorramshahr, whose capacity in late 1941 was variously estimated at from 200 to 700 long tons per day, stands at the confluence of the Shatt al Arab and Karun Rivers, well inland from the Persian Gulf and about 21 miles downstream from Basra. Eight miles down the Shatt al Arab from Khorramshahr, connected by a paved road, is the island of Abadan,

[1] (1) Rad, Col Shingler (for Gen Wheeler) to Col Faymonville, 24 Jan 42. 323.91 Ports, SL 9008. (2) Memo 258/15/29/1, Hq, Tenth Army, QMG Br, for Hq, U.S. Mil Iranian Mission, 13 Feb 42. Folder, Roads: Umm Qasr–Basra, SL X–11,737. (3) Ltr, Col Shingler to CG, SOS, 10 Apr 42, sub: Status of U.S. Mil Iranian Mission. PGF 26–A. (4) Notes and comments by Colonel Lieber for the author, 10 February 1949.

provided with docks used by the Anglo-Iranian Oil Company refinery on the island. From Abadan a road runs north to Ahwaz. The main line of the ISR, which reaches Ahwaz from Tehran via Andimeshk 87 miles to the north, continues about 70 miles to the southeast to the Persian Gulf port of Bandar Shahpur. This port relies wholly on the railway for its communication overland with Ahwaz, there being no highway. In 1942 it had a pier extending far into the shallow water, and a British civilian contractor was adding additional wharfage. Farther to the south along the Gulf coast stands Bushire, more than 190 air-line miles from Khorramshahr, joined to interior points by inadequate roads. Cargoes at Bushire were lightered mainly in native craft from an exposed anchorage 7 miles offshore. The port's relative isolation and the shallowness of its waters made it the least useful for Russian-aid tonnage.[2]

Improvement of some of these facilities to bring them up to the capacities called for by increased tonnages for Russia was being effected by the British when the Americans came over to Iran to share the burden. By 1 July 1942 the broad list of proposed American tasks had been narrowed. Of the tasks named in General Wheeler's January list there remained the following: construction of additional docks at Khorramshahr; first-priority highway construction from Ahwaz north to Andimeshk; second-priority highway from Ahwaz south to Khorramshahr, with a road across to Tanuma; following completion of these roads, a 750-mile two-lane highway north from Andimeshk; operation of a motor vehicle assembly plant at Andimeshk; operation of vehicle repair stations at Andimeshk and Kazvin; and operation of an aircraft assembly plant at Abadan and of a point for aircraft delivery at Tehran. Technical advice and assistance were also to be rendered at the British-operated motor vehicle assembly plant at Bushire and the British aircraft assembly operations at Shu'aiba. Additional tasks undertaken by 1 July included the laying (begun in the spring) of concrete flooring for the motor vehicle assembly plant being built by the British for American operation at Andimeshk; operation by subcontract through the district engineer of a barge assembly plant at Kuwait on the Gulf coast south of Umm Qasr; and construction of housing for 100 men at Khorramshahr, wharf approaches there, and housing for 750 men along the highway route between Ahwaz and Andimeshk, with hospital and warehouse facilities at Ahwaz.[3]

[2] Rpt, Office of Naval Intelligence, 17 Dec 41. WPD 4596 to -15 Iran (Persia), HRS DRB AGO.

[3] Iranian Engr Dist Project Map, 1 Jul 42. Na 2146 (Iran) 25/3, NADEF. Photostatic copy Map File, PGF.

The working force entrusted with these operations had expanded from the handful of men in Iraq in April to 190 military and 817 American civilians by 1 July. Of the latter, 427 were employees of Folspen and 390 of the Douglas Aircraft Company. The military force comprised 69 members of the Air Corps and 121 from other services, chiefly technical. There were 58 officers and 132 enlisted men all told. By the end of August the number of Folspen civilians had risen to 745, the Douglas roster to 397, while the military aggregate was 357. Native laborers employed on five engineer projects totaled 1,280. By the end of October, when the auxiliary civilian-contractor phase of American operations began the transition to the wholly militarized phase under General Connolly, the military aggregate was 413, the Folspen employees totaled 740, and there were 6,320 natives directly hired or employed by subcontract on engineer projects. Contradictory data on motor vehicle and aircraft assembly provide an unreliable census of civilian employees at that date.[4]

Lack of manpower was one problem among many which beset civilian-contractor operations. While construction and assembly tasks were being carried on, the military organization passed through a series of changes, resulting in the merging of the Iranian Mission and the North African Mission into an American Middle East theater of operations with headquarters at Cairo. Simultaneously the militarization of civilian contract activities was in contemplation. These two developments of the organizational structure marked a turning point midway in the first phase of the American job in the Persian Corridor.

Unification of the Middle East Missions

The stream of events leading to the unification of the Iranian and North African Missions into an American Middle East organization, U.S. Army Forces in the Middle East (USAFIME), flowed from a source which has yet to be precisely located on the historical map. The first suggestion, according to General Maxwell, came from British headquarters in Cairo.[5] Maxwell himself advanced the idea to his staff in early March. It was proposed in February in Washington by General Wemyss of the British Joint Staff Mission; and it will be recalled that

[4] (1) Rpt of Opns, CO, Iranian Mission, to CG, USAFIME, for 1 May–30 Jun 42, 2 Jul 42. 334.8 American Aid Subcommittee, SL 9011. (2) Chart 2. (3) Monthly Rpt of Activities of PGSC, Aug 42, to CG, USAFIME, 3 Sep 42. PGF 259. Another copy titled First Monthly Progress Report, same date, differs slightly. 323.61 Establishment of Military Districts, Binder 2, SL 9008. (4) Monthly Rpt of Activities of PGSC, Oct 42, to CG, PGSC, 5 Nov 42. PGF 259.

[5] Min, Stf Mtg at Cairo, 9 Apr 42. Maxwell Papers.

General Maxwell had represented the interests of the Iranian Mission at a meeting of the American Aid Subcommittee of the Middle East War Council in Cairo in November 1941 when installations at Basra were under discussion. It is reasonably certain that the proposal to unify the American missions was originally British.

On 5 February 1942 General Wemyss wrote to General Marshall suggesting that the two missions be combined.[6] The matter, he stated, had been considered by the British Chiefs of Staff, the Minister of State at Cairo, the commanders-in-chief for Middle East, and had, he believed, been unofficially discussed with Ambassador Bullitt when he was in the Middle East. General Wemyss pointed out that, "when, however, as is intended, the Middle East Command is extended to include Persia and Iraq, Wheeler will be partly in the sphere of Commander-in-Chief, Middle East, and partly in that of Commander-in-Chief, India." The new mission, he added, would "far exceed in scope the present Missions." It would canalize, through its chief, information both of intelligence and operational natures between the Middle East sphere and the United States and would provide a framework for any increase in participation of the U.S. Army Forces in the Middle East. General Wemyss suggested that the War Department add to the new mission an officer, to sit with the British Joint Planning Staff for the Middle East, and civilians for co-operation with the Minister of State at Cairo.

Circulated for comment within the War Department, the British proposal was approved by General Aurand whose office was the one in closest administrative touch with the two Middle East missions. G–2 urged that intelligence activities in the Middle East should continue to be channeled directly to Washington and not diverted through the missions.

The War Plans Division (WPD) recommended leaving everything unchanged, pointing out that General Maxwell's relations with British Army headquarters in Cairo would be unchanged by any consolidation, and that General Wheeler's effectiveness would be unimpaired by British command changes putting part of his area in the British India area and part of it in the British Middle East area. "The missions

[6] The following five paragraphs refer to: (1) Ltr, Gen Wemyss to Gen Marshall, 5 Feb 42. OPD 4511–35 to –72, Africa, General (includes N. African Mission Sec 3), HRS DRB AGO. Another copy MID 311.9 Co-ordination, ME (2–7–42). (2) Memo, Gen Aurand for WPD, 8 Feb 42, sub: Consolidation of North African and Iranian Missions, North African Mission File .008, Intn Div, ASF NCF. (3) Memo, Brig Gen Raymond E. Lee, ACofS, G–2, for ACofS, WPD. OPD File as in (1). Another copy MID File as in (1). (4) Memo, Gen Gerow, ACofS, WPD, for CofS, 12 Feb 42, sub: Proposed Consolidation of All American Activities in the Middle East, approved by CofS, 19 Feb 42. OPD File as in (1). (5) Ltr, Gen Marshall to Gen Wemyss, 19 Feb 42. OPD File as in (1).

assigned Generals Maxwell and Wheeler in their respective letters of instruction," the WPD memorandum noted, "do not place them in any British command channels." On the question of the Iranian Mission's obligations toward the USSR, the WPD memorandum stated:

> Of primary importance among the specific duties assigned General Wheeler is the routing of lend-lease materials to the Soviet Union and the training of their personnel in the use and maintenance of American equipment. A complete reorganization of the Wheeler and Maxwell Missions might well disrupt the relations General Wheeler has established with the Russians. This would be undesirable.

The passage indicates a correct realization of the importance of the Russian-aid program and of General Wheeler's responsibility for it. It is well to remember, however, that at the same time (February) top-priority Iranian Mission tasks were those in Iraq for aid to Great Britain; that General Greely's USSR Mission was currently at large in General Wheeler's territory with responsibilities paralleling and overlapping Wheeler's; that the "routing" of lend-lease materials to the Soviet Union was a British responsibility; and, finally, that training of Soviet personnel existed only on paper because of consistent Soviet refusal to accept it.

The War Plans Division further objected to the British suggestion that an American officer sit with the British Joint Planning Staff for the Middle East, pointing out that "suitable provision for co-operation and long-term planning" already existed through the Combined Chiefs of Staff; that nowhere else, not even in England where there were numerous American troops, was such an arrangement in existence; and that presence of an American officer on the British Joint Planning Staff for the Middle East "might serve to complicate matters."

General Marshall, on WPD's recommendation, wrote General Wemyss on 19 February that he appreciated "the informal presentation of your ideas on consolidation," but did not feel that any change was "justified." He added, "Personally, I anticipate no disruption in the present smooth operations of the two Missions." And there, for the time being, the matter rested. The events of the following four months produced in themselves further points in the debatable question of command.

There were straws in the wind. Early in May, following the dissolution of the USSR Mission, the War Department informed Colonel Shingler, chief of the Iranian Mission, that General Maxwell had become a member of the Middle East Supply Council, an official agency for economic controls, and would, along with the American Minister at Tehran, consult Shingler on economic matters affecting Shingler's area. The War Department instructed Shingler to keep Maxwell in-

formed of all agreements made with the British or transmitted to Shingler by the War Department, and to advise Maxwell of decisions involving policy with the British. The message added pointedly that Shingler was not under Maxwell's jurisdiction. In conformity with these instructions Shingler wrote Maxwell a letter in an effort to bridge the differences in time, space, and circumstance between Basra and Cairo. He stated that since the new British command arrangements had oriented Iraq and Iran toward Cairo rather than toward New Delhi, "There has been a radical change in attitude towards all American-sponsored projects," and he cautioned Maxwell not to commit the Iranian Mission "too rigidly on policies until I have had an opportunity to discuss the local situation with you." British policy for Iraq and Iran was now being directed from Cairo where there was a close identification with Afro-Mediterranean areas and problems; whereas American policy in Iraq and Iran had only lately been shifted decisively toward support of the Soviet Union's line of supply.[7]

Colonel Shingler's point was communicated by General Maxwell to the British a few days later in Cairo at a meeting attended by Richard G. Casey, British Minister of State, and by a representative of Colonel Shingler. Lt. Gen. Sir Thomas S. Riddell-Webster, top Army administrative official at GHQ, Middle East Forces, asked General Maxwell if he had any information as to taking over the Iranian Mission. Maxwell replied that "he felt the War Department didn't desire" to act at this time "because it might appear to decrease the importance of supplies to Russia." General Maxwell could, however, arrange to represent Colonel Shingler "in the event quick decisions were necessary." Not long after, General Maxwell sent a note to General Aurand reiterating his own belief that the Iranian Mission ought to become a service command of the North African Mission. There was one more straw to blow in the wind before the War Department decision was reached. On 10 June the Iranian Mission was placed under the North African Mission for general courts-martial purposes.[8]

On 13 June, by order of General Marshall, USAFIME was created and Iraq and Iran placed within its geographical area. Four days later a message summarized the new Letter of Instructions to be issued

[7] (1) Rad AMSIR 162, Washington to Shingler, 4 May 42. AG 400.3295 (8-9-41) Sec 4. (2) Rad AMSIR 165, Washington to Shingler, 5 May 42. Same file. (3) Ltr, Col Shingler to Gen Maxwell, 8 May 42. 334.8 American Aid Subcommittee, SL 9011.

[8] (1) Notes of mtg of 12 May 42 taken by Capt Garrett Fonda, Adj, Iranian Mission. 334.8 American Aid Subcommittee, SL 9011. (2) Msg, Maxwell to Aurand, 25 May 42, carried by Col Louis J. Claterbos, North African Dist Engr, who was returning to the United States. DE File (A) Drawer 1, Cabinet 8, NADEF. (3) Ltr, JA, U.S. Mil North African Mission, to Chief, U.S. Mil Iranian Mission, 10 Jun 42, following authorization from Washington dated 27 May 42. 323.61 Establishment of Military Districts, Binder 1, SL 9008.

to General Maxwell as commanding general. His command was to include all U.S. Army personnel in his area except the Army Air Forces Ferrying Command and General Greely's special mission in Iran, a new assignment following collapse of the mission to Russia. On the same day, 17 June, Maxwell accepted the appointment. On 19 June he issued his first general order activating the new theater. On 23 June the Iranian Mission was discontinued, being redesignated the Iran-Iraq Service Command under Headquarters, USAFIME, effective 24 June, with Colonel Shingler as commanding officer.[9]

The new Letter of Instructions given by the Chief of Staff to General Maxwell, in so far as it affected Iranian Mission matters, gave to the Commanding General, USAFIME, control not only of military personnel, but of all Services of Supply activities, including construction, transport, and maintenance. General Maxwell received control of all War Department intelligence activities in his area, subject to certain local arrangements which did not concern the activities in the Persian Corridor. He was also to represent the War Department in all dealings with the British and other friendly forces in his area.[10]

Colonel Shingler's headquarters at Basra were a thousand miles, as the crow flies, from General Maxwell's headquarters at Cairo. The new command relationship seemed to alter the autonomy formerly enjoyed by the Iranian Mission in its dealings with Washington and with the British. General Maxwell's control over construction and all military personnel, moreover, appeared to affect the working arrangement by which the co-ordinate powers granted the Iranian District engineer and the chief of the mission had been made to function. Colonel Shingler accordingly asked Washington on 24 June for clarification of his responsibilities in supplying the USSR, and in his construction and assembly activities. "It is desirable," he stated, "that I make clear my status to Russian and British officials concerned with activities of the Mission. I am eager to have my direct responsibilities clarified; also the channel of command regarding supplies to construc-

[9] (1) Rad, Gen Marshall to Gen Maxwell, 13 Jun 42. AG 320.2 (13 Jun 42) 15, Hq AMET (AG decimal files seen at Headquarters, Africa–Middle East Theater, Cairo, now filed at the Kansas City Records Center, Kansas City, Mo.). (2) Rad, Gen Marshall to Gen Maxwell, 17 Jun 42. AG 381 (2–24–42) 2, Hq AMET. (3) Rad AMSEG 1494, Gen Maxwell to Gen Marshall, 17 Jun 42. AG 320.2 (13 Jun 42) 15, Hq AMET. In this message Maxwell recommended appointment of Colonel Hauser, former chief of staff of the USSR Mission, as commanding officer of the new Iran–Iraq Service Command, and attachment of Colonel Shingler to Cairo headquarters for staff duty. (4) GO 1, Hq, USAFIME, 19 Jun 42. (5) GO 3, Hq, USAFIME, 23 Jun 42. (6) SO 4, Hq, USAFIME, appointing Shingler CO, Iran–Iraq Serv Comd. By GO 1, Hq, Iran–Iraq Serv Comd, USAFIME, 1 Jul 42, the comd was activated effective 24 Jun 42. (7) Chart 1.

[10] Ltr of Instructions, Gen Marshall to Gen Maxwell, 20 Jun 42. AG 320.2 (13 Jun 42) 15, Hq AMET.

tion, truck and plane assembly projects." In reply the War Department instructed Shingler to continue to deal directly with Washington on all matters previously handled by the Iranian Mission, "including supplies to Russia, construction projects, and truck and plane assembly," furnishing General Maxwell with copies of all actions taken, and consulting him in all matters of operational policy. The reply suggests that Washington had solved the problem of keeping the British happy by unifying the two missions and of keeping the Russians happy by not unifying them. In a letter to the Secretary of State, the Secretary of War explained that USAFIME was created "for the purpose of establishing a headquarters to control and co-ordinate U.S. Army activities in that area, and to centralize dealings with the British Middle East Forces." That meant that, although Cairo was in the saddle, the reins were lightly held. There was to be close oversight by the new theater headquarters of its easternmost service command, but working contacts and habits established by the Iranian Mission were not to be seriously disturbed.[11]

The Iran-Iraq Service Command of USAFIME was set up with headquarters at Basra, and co-ordinate headquarters for the Iranian District engineer at Ahwaz and for the Air Section at Abadan. At the service command headquarters, in addition to the usual staff sections, there were a Defense Aid director through whom lend-lease matters with the British and Russians were channeled; a financial adviser taken over from the district engineer; a surgeon; an engineer officer; and sections for ordnance, signals, and Army postal service. In the field were outlying detachments posted at Tabriz, farthest point of motor vehicle deliveries to the Soviets, Tehran, Baghdad, Andimeshk, Bushire, and Bandar Shahpur. On the staff of the Iranian District engineer, besides an adjutant and an executive, were chiefs of sections for engineering, operations, administration, contract and legal matters, and area engineers with subheadquarters located at Khorramshahr, Sabz-i-Ab [12]—just south of Andimeshk, where there was a construction camp—Ahwaz, and Kuwait, site of the barge construction project. Folspen's staff, under their foreign manager, Charles H. Sells, comprised, in part, a chief engineer, a highway engineer, a superintendent of equipment, office manager, chief accountant, camp and commissary steward, purchasing agent, warehouse controller, and recreational director. The Air Section, under Maj. Charles P. Porter, had a small

[11] (1) Rad AMSIR 389, Shingler to WD, 24 Jun 42. AG 400.3295 (8-9-41) Sec 4. (2) Rad AMSIR 310, Gen Marshall to Col Shingler, 26 Jun 42. AG 381 (2-24-42) 2, Hq AMET. (3) Ltr, Secy War to Secy State, 2 Jul 42. WD 320.2 (6-25-42) MS.

[12] Zabzab to the Americans.

headquarters staff and outlying detachments at Tehran and Shu'aiba as well as the offices of the Douglas Aircraft Company under Norman H. Millstead.[13]

In a July statement to his staff on their mission Shingler said, "The highest priority will be given to measures contributing directly and immediately to aid-to-Russia." [14] While including much of the substance of General Wheeler's Letter of Instructions respecting training Russian and British personnel in the use of American equipment and supplies and studying and reporting on operational methods "to facilitate the use of American equipment in future American operations," Shingler's statement reiterated the original purposes of the Iranian Mission in expediting the flow of war materials to the USSR, advising and assisting Allied forces in procurement, delivery, and proper utilization of American equipment, and maintaining close liaison with, and rendering technical assistance to, Allied forces in connection with lend-lease materials. The memorandum also provided for harmonizing plans for emergency military operations in the area with those made by the Commanding General, USAFIME, and local Allied commanders.

It was not long before the reins, held in Cairo, were tightened. On 11 August the Iran-Iraq Service Command was redesignated the Persian Gulf Service Command (PGSC), remaining directly under Headquarters, USAFIME. Colonel Shingler became its commanding officer on 13 August, and on 25 August received a Letter of Instructions from General Maxwell.[15] The area of the new PGSC was defined as comprising Iraq, Iran, and those parts of Saudi Arabia bordering on the Persian Gulf. Colonel Shingler was made responsible for the construction, maintenance, supply, and administration of all installations in his area including the Air Forces project at Abadan, but excluding all other Air Forces stations. Service to U.S. Army Air Forces units within the PGSC was to be such as would be directed by Headquarters, USAFIME. The PGSC would be responsible for the movement of U.S. military supplies within its area, and for aid as before to British and other Allied forces. The Commanding Officer, PGSC, was authorized to hire and contract locally but to make his requests for military personnel to Cairo. Direct communication with the War Department

[13] (1) Organization Chart, Iran–Iraq Serv Comd. 131 U.S. Military Mission to Iran—Miscellaneous. SL X–11,737. (2) Organization Lists. SWP Office.

[14] Stf Memo 2, Hq, Iran–Iraq Serv Comd, USAFIME, 22 Jul 42, sub: Mission of the Iran–Iraq Serv Comd. PGF 236.

[15] (1) GO 9, Hq, USAFIME, 11 Aug 42, under authority in WD Rad AMSME 308, 8 Aug. 42. (2) GO 1, Hq, PGSC, USAFIME, 13 Aug 42. (3) Ltr of Instructions, Gen Maxwell to PGSC, USAFIME, 25 Aug 42. 323.61 Establishment of Military Districts, SL 9008. Another copy PGF 259.

was to be restricted to "matters specified in Army Regulations for direct communication, on project matters covering administrative details of projects established by War Department, and routine details. All matters involving policy, operational details, personnel, matters involving the Command as a whole, and details of service to U.S. troops," the letter concluded, "will be communicated through" Cairo headquarters. Colonel Shingler was further instructed to submit to Cairo a monthly progress report. Except for the reference to maintenance of previous responsibilities for aid to Allied forces, the letter was silent as to direct consultation with local Allied commanders, leaving the impression that where these involved policy, operational details, and matters involving the command as a whole, consultation with local commanders would take place through Cairo, one thousand miles away. Unification of the American forces in the Middle East was now a fact. But it was a fact of short duration; for only two months later the pendulum began its swing back toward autonomy for the Persian Gulf area.

During the intervening period Colonel Shingler established within the PGSC a system of decentralized area administration which was to leave its mark upon the structural organization of the new regime of the following October. (*See Map 3, p. 223.*) This was a scheme of administrative areas, analogous to, but not patterned upon, the area system long used by the Corps of Engineers, and already in effect under the Iranian District engineer. The new areas, effective 1 September, were the Southwestern, with headquarters at Basra, the Central, at Ahwaz, and the Northern at Tehran. A fourth, the Eastern, at Zahidan, was never activated. The commanders of the respective areas were made directly responsible to the Commanding Officer, PGSC, for construction, maintenance, supply, and administration of all Army installations in their areas, as well as of civilian agencies operating directly under contract with the War Department; for the movement of all U.S. military supplies therein; and for all personnel connected therewith excepting those on the Air Forces project at Abadan, which remained directly under Headquarters, PGSC, and other Air Forces units.[16]

The areas were established to vest local responsibility for procurement and other strictly local dealings with the British forces in an American opposite number hitherto lacking. Previous to 1 September the heads of the various American operating agencies would go with their conflicting and overlapping requests to the local British repre-

[16] GO 2, Hq, PGSC, USAFIME, 30 Aug 42. PGF 259. Another copy DE File E–1.1 General Orders Mission, NADEF.

sentatives, who, in turn, would refer these requisitions to the Commanding Officer, PGSC, for correlation. Under the new area system the area commander would be the funnel through which these matters would flow.[17]

To supervise and co-ordinate the work of the area commanders, a special staff of eighteen officers was created to act for and in the name of the Commanding Officer, PGSC. The Iranian District engineer thus became a special staff officer who both supervised his construction activities throughout the several areas and carried on normal engineering work, such as maintenance and repair of buildings, utilities, engineer supply, mining, demolition, mapping, traffic control, and camouflage. Similar technical supervision was necessary, as a further example, on the part of the ordnance officer, who, as representative of the Commanding Officer, PGSC, co-ordinated as between the areas the work of unloading, assembling, and forwarding motor vehicles. The special staff were without authority as individuals when engaged in area activities, but possessed the full authority of the commanding officer when acting as his representative on technical matters appropriate to the staff position and when putting into effect the policies and instructions of the commanding officer. Special staff officers acted through the commanders of other units or their staff representatives except in emergency. Area commanders were fully advised of all technical instructions applicable to their commands. The area headquarters were small, numbering only two or three officers. With the bulk of operational work focused in the eighteen special staff officers at headquarters, a military staff of three divided the duties of S–1, S–2, S–3, and S–4. This arrangement continued until the arrival of General Connolly on 20 October.[18]

Militarization of Contract Activities

Militarizing contract activities was a good deal like rebuilding a complicated structure, such as a railroad station, without interrupting service. Boarded-up areas appeared and disappeared, commuters detoured through unfamiliar burrows, there was a thunder of riveting and hammering and shouting. When the dust cleared away, the old station was gone and a new one had been conjured out of the clang and confusion. Through it all the trains kept on running. In the Persian Corridor the transformation required more than a year.

[17] Interv, Gen Shingler with Victor Pentlarge, Pentagon, 22 Apr 46.
[18] (1) Stf Memo 3, Hq, PGSC, USAFIME, 31 Aug 42. (2) SO 13, Hq, PGSC, USAFIME, 1 Sep 42.

Of the four civilian contractors connected with Persian Corridor projects, only the J. G. White Corporation raised the question of the status of civilian employees overseas and urged from the start of conversations with the Army that the work ought to be militarized. The Ordnance Department, lacking manpower to operate overseas commitments on the scale called for by its program, preferred at first to get on with the job by means of civilian help, but ultimately accepted the argument that its special problems could not be solved by the contractor system and canceled the White program. Construction and assembly offered fewer immediate obstacles to civilian operation than did the ordnance program, and so the Army, sore pressed for manpower, launched three contractors into the field to carry on until the Army itself could take over. This logical sequence is what happened; not what was clearly foreseen in late 1941 as likely to happen. Indeed, the engineer, quartermaster, ordnance, and Air Corps contractors received no hint that their undertakings were to be of a stopgap nature, nor is there any evidence that the contracts were so regarded by the Army when they were signed.

Some of the impetus for militarization may be attributed to British initiative just as was the case in the unification of the Middle East missions. In the period between Pearl Harbor and Christmas, William Bullitt, the President's ambassador-at-large, was in Cairo where he talked with "the highest British authority," who requested prompt dispatch to the Middle East of 14,000 American service troops and 500 officers to perform definite tasks allotted by the British but to be under General Maxwell's mission and commanded by their own officers. With flattering confidence in American ability to take Pearl Harbor in stride, the British impressed upon Mr. Bullitt the strategic importance of the Middle East, and provided him with detailed information as to British needs in holding the fort against the Axis. Hitherto British needs had been expressed in terms of matériel to be furnished through lend-lease by a nonbelligerent America. Pearl Harbor permitted extension of the list into the field manpower. It was indicated to Bullitt at GHO that what the British had in mind was something like an advance component for a base ordnance workshop, signals units, construction sections, railway maintenance sections, transport companies, railway telegraph operators, electrical and mechanical companies, engineer base workshop personnel, not to overlook such combat troops as antiaircraft and coast defense units. This was not an official proposal, and the record of it states that Bullitt made no commitments. When the War Department had thought it over for a few days, General Maxwell was notified on 3 January 1942 that no U.S. service troops would be

sent to the Middle East "under present conditions." For Maxwell's sole information it was also stated that no U.S. combat troops would be sent either.[19]

The talk of military manpower, however, shows how promptly British thinking adjusted itself to the possibilities created by American belligerency. In October the Supply Committee of the cabinet had informed the British Supply Council and the Joint Staff Mission in Washington, "We should prefer that any of the projects undertaken [by the Americans] are established and operated by contracts executed and administered by United States War and Navy Departments with American Companies. It will, however, be essential that heads of American Missions should have full authority over all contractors. In the absence of any such control it would be quite impracticable for Commander-in-Chief to exercise any authority over development of these projects." In October the British cabinet had been thinking of the small military missions that were to supervise the civilian contractor forces as closely associated with GHQ, Middle East Forces. The same message to Washington said, "We note with satisfaction that the United States propose to send Generals Maxwell and Wheeler to Middle East and Iraq to initiate agreed action without delay. We suggest that General Maxwell should report to and work direct with General Headquarters Middle East." The conversations of December opened the prospect of expanding American military forces concurrently with sending out contractor companies. There was certainly no talk of dropping the contractors, whatever implications lurked in talk of military expansion.[20]

The President, appraised of Bullitt's conversations, wrote General Marshall, "Will you let me know what your plans are for reinforcing General Maxwell's Mission in Egypt and General Wheeler's at Basra." Next day General Marshall replied that General Maxwell in a series of radios had requested 1,000 officers and 24,000 enlisted men for supply services in North Africa. "General Wheeler has not requested any services of supply from the armed forces of the United States." This indicates that there was greater British interest in American troops at

[19] (1) Rad, Col Bonner F. Fellers, U.S. MA, Cairo, to TAG, 21 Dec 41. CofS 21276–21350. HRS DRB AGO. (2) Msgs, GHQ, MEF, Cairo, to War Office, London, 23 Dec 41 and 8 Jan 42, App. 7, American Aid in the ME, 1941 and 1942. MEF. (3) Rad 316, by direction Secy War to Gen Maxwell, 3 Jan 42. CofS File as in (1).

[20] (1) Msg LONUS 40, Supply Committee to Supply Council, 7 Oct 41, App. 2, American Aid in the ME, 1941 and 1942. MEF. Another copy AG 400.3295 (8–9–41) Sec 1. (2) The association was intended to be close, but not organic. Lt. Gen. Sir Balfour Hutchinson, who was the supply chief at GHQ in late 1941, has written: "As regards the H. Q. we planned to have them [the Americans] as close as possible but at no time did we ever propose to amalgamate them into one and absorb the American Mission into our H. Q." Quoted in Ltr, Brig W. P. Pessell, Hist Sec, Cabinet Office, London, to author, 21 Jun 48.

Cairo than at Baghdad. General Marshall's letter continued, "These requests have been discussed with General Wemyss of the British [Joint Staff] Mission who has stated that he has heard nothing from the London office about it. Furthermore, lack of shipping which is needed for more important purposes prevents the dispatch of such a force. The armed forces," concluded the Chief of Staff, "do not have the skilled supervisory personnel needed for certain work being undertaken under contract. The most expeditious means of accomplishing the work desired by the British in both the North African and Iranian areas is by using personnel under contract." [21]

Although the Chief of Staff's opinion disposed of the question of immediate plans to assign additional service troops to the Middle East, the Under Secretary of War, Robert P. Patterson, on 21 January prepared a memorandum summarizing his objections to indefinite continuation of the civilian-contractor system. Citing the unfavorable experience of the War Department with civilian contractors in France in 1917–18, and referring to the organization in January 1942 by the Navy of a regiment (the Seabees) to build overseas bases in combat zones, Mr. Patterson's memorandum stated:

> These civilians will be in the probable theater of military operations, but will not be under military control. As a result the contractors may abandon the work, or the employees may leave when they see fit. There is no assurance that the contemplated work will be done. The contractors and their employees will receive exorbitant compensation in comparison with soldiers with similar responsibilities.[22]

By February the determination of the War Department to militarize contract activities throughout the world was given force in a directive which provided that by 18 August 1942 all War Department contract activities would be terminated. These, and others approved but not yet initiated, were to be carried out thereafter by military organizations to be activated in the United States and sent overseas. Military personnel were also to be recruited from those employed on overseas contracts which would be terminated.[23]

[21] (1) Ltr, President to CofS, 16 Jan 42. AG 400.3295 (8–9–41) Sec 1. (2) Memo, CofS for President, 17 Jan 42. AG 400.3295 (8–9–41) Sec 1. An earlier draft in the file bears, in Marshall's hand, the words: "General Wheeler, incidentally, has not requested the large forces desired by General Maxwell."

[22] (1) Memo, Under Secy War for Secy War, 21 Jan 42. AG 160 (2–15–42) MSC–D–M. (2) Another memorandum covered much the same ground, adding reference to difficulties in the case of the death, wounding, or capture of civilian employees in combat areas, and recommended militarization where practicable with termination of contracts whenever military units would be ready to take over. G–3 for CofS, 29 Jan 42. AG 160.0, Hq AMET.

[23] (1) Rad 568 AMSEG 224, WD to Gen Maxwell, 10 Feb 42, announced that there would be certain necessary exceptions. AG 160.0, Hq AMET. (2) AG Ltr, 18 Feb 42, sub: Closing out of Overseas Contracts and Militarization of Contract Activities. AG 160 (2–15–42) MSC–D–M. There is a draft of 11 Feb. AG 160.0, Hq AMET. Memo, Gen

The basic principle having been adopted and a date fixed by which it was to be applied, it remained to figure out ways and means—a procedure, as events developed, which put the cart before the horse. The North Atlantic Division engineer wrote to the Chief of Engineers to propose that some engineer units should be sent overseas which could be trained on arrival by the civilians already on the job. Then, he suggested, the civilians could be inducted into the units, and those not liable under the draft law could be returned home. A great many plans were made, and estimates of required troop strength sprang up in all directions. The Corps of Engineers calculated that 15,852 men would be required for the two Middle East missions, to be organized in March and April and depart in May. The Ordnance Department estimated five regiments for the two missions, including provision for mobile ordnance establishments requested by the British to operate in the rear of British division shops and in advance of U.S. Army fixed shops and depots, a request caused by the tremendous amount of battle damage to American ordnance matériel in recent operations and great scarcity of British maintenance troops, previously reported by General Maxwell. At a meeting in Washington on 31 March General Aurand summed up the status of estimates then available to him. A maximum limit of 40,000 troops for purposes of militarization had been set, he said, by WPD, as against total estimates of 48,000 submitted by the various services. The estimates had forthwith been scaled down to 41,000 "and may eventually be reduced still further." General Aurand added that changing events would probably require the revamping of the approach toward the militarization of bases.[24]

In another part of the Services of Supply, the Plans and Operations Division, a considerably reduced set of figures was hatched. As of 1 April requirements for the missions were presented by this office in the form of two objectives, the first of 5,000 troops to be shipped by September, the second of 19,478 troops to be shipped by December. The memorandum estimated that 23,600 troops were required for

Somervell, ACofS, G–4, through Secy, Gen Staff, for TAG, transmitted the direction of Secy War that the directive be dispatched. AG 160 (2–15–42) MSC–D–M. Attached to the directive are comments of General Staff divisions pointing out contradictions, inconsistencies, and difficulties in effectuating the directive; but there were no exceptions affecting Middle East projects.

[24] (1) Ltr, Col John N. Hodges to CofEngrs, 24 Feb 42. AG 004.001, Hq AMET. (2) Ltr, Actg Chief, Troops Div, Corps of Engineers, to TAG, 7 Mar 42. AG 320.2 (1–27–42) 7. This estimate differs from that in Memo, Opns and Training Br, Troops Div, OCofEngrs, 3 Mar 42, sub: Commissioned Pers for Cons Units. 381 (Middle East) O&T Sec Files, Folio 1, Serials 1–175, OCofEngrs. (3) Memo, for TAG, 5 Mar 42. AG 320.2 (1–27–42) 7. (4) Rad AMSEG 87, Gen Maxwell to Maj Theodore S. Riggs, 16 Dec 41. Same file. (5) Memo, Melvin Sims for Col Ladue, 31 Mar 42. Contl Div ASF, HRS DRB AGO.

complete militarization of contract activities in North Africa and Iran. This figure greatly exceeded the total number of civilians ever gathered at one time in the field because it included estimates for additional projects of the sort mentioned by the British to Ambassador Bullitt.[25]

At Baghdad Colonel Shingler immediately took up with the British Tenth Army headquarters the disposition of the proposed American troops. The British account of the meeting records that the discussion was held in view of plans to militarize American projects effective 1 August, by which date there would be 23,400 American soldiers employed on American projects. Colonel Shingler arranged with the Tenth Army for housing, supplies and rations, ordnance, communications, medical services, vehicle repair and maintenance, petroleum products, postal service, water supply, security, command, and liaison. The Tenth Army commander decided that headquarters of "the U.S. Military Mission with Tenth Army shall be located at Basra." The arrangements envisaged a very close administrative connection between American and British forces, with British control over everything, including "co-ordinating the system of administration, discipline and command in the particular places where American troops are stationed." [26]

As the summer advanced and the arrival of ordnance heavy maintenance and quartermaster light maintenance companies and a base ordnance battalion grew imminent, a British plan to locate these American units at Shu'aiba and Rafadiyah was abandoned in favor of a suggestion by Colonel Shingler that, since the American effort was concentrated in the Persian line of communications, the grouping of U.S. Army units close to one another in that area would be preferable to spreading them out in Iraq and Iran. Tenth Army not only accepted the American suggestion but made available workshops and installations prepared for it at Andimeshk. It was agreed between Head-

[25] Memo, Brig Gen LeRoy Lutes, Dir, Plans and Opns Div, SOS, for ACofS, G–4, 9 Jul 42. AG 160 (2–15–42) MSC–D–M.

[26] (1) "Précis of a discussion which took place at Headquarters, Tenth Army, on Monday 6th April 1942 between the Army Commander, Col Shingler, U.S. Army, and D.A. and Q.M.G., Tenth Army, as amplified by telephone conversation, L.G.A., G.H.Q. M.E.F. speaking to D.A. and Q.M.G., Tenth Army." 206/32/2/Q1. Copy transcribed for the author by courtesy of the Historical Section, Cabinet Office, London. (2) Just before he was relieved as Commanding General, USAFIME, to become Commanding General, SOS, USAFIME, General Maxwell concluded similar arrangements for placing American detachments for the time being under the control of British commanders. Because of constitutional difficulties, no "formal ordinance" was entered into, disposition of units by "unilateral decision" of Maxwell and his "very ready co-operation" being relied upon as an informal working basis. The British did not, therefore, diminish their own units in compensation for those looked for from the Americans. General Connolly did not continue these arrangements after his arrival in the Corridor. Msg, War Office, London, to ME and Persia–Iraq, 25 Oct 42, and reply, Mideast to Troopers, PAIC, 4 Nov 42, transcribed for author by Hist Sec, Cabinet Office, London.

quarters, Tenth Army, and Colonel Shingler that Tenth Army would be the co-ordinating authority for the allocation of work, priorities, and production in maintenance and repair work; but that "the technical operation" of the quartermaster light maintenance company at Andimeshk after it should take over the wrecking and road service on the motor convoy route north of Andimeshk, as well as supervision of the lubrication and checking service at Tabriz, should remain under American control.[27]

It should be realized that until adoption of the Combined Chiefs' new plan in September, all plans and estimates for troops and troop assignments were on a basis of militarizing current civilian contract operations and of adding supplementary activities as required. Meanwhile, as small units of signal, ordnance, and engineer personnel went overseas under the normal plans made for the Iranian Mission and its successors, it had become apparent in Washington by July that militarization could not be effected by the date fixed. On 9 July Brig. Gen. LeRoy Lutes of SOS presented a memorandum to G–4 stating that "the militarization contemplated . . . has not been carried out, nor is it likely that it can ever be completely accomplished unless Operations Division, War Department General Staff, authorizes the necessary troops, equipment, and shipping to accomplish the projects." He noted that the engineer units authorized in March for militarization had been diverted to BOLERO, the operation for build-up in England of men and equipment for the invasion of Europe, "because no transportation was in prospect for shipment to missions." He recommended rescinding the directive of 18 February and adoption of more realistic measures.[28]

Accordingly, The Adjutant General by order of the Secretary of War issued on 17 July a letter rescinding so much of the directive of 18 February as required completion of militarization by 18 August, and amending that directive "to require the closing out of overseas contracts and their militarization as rapidly as can be accomplished within the limitations of the availability of troops, equipment, and transportation." [29]

In consequence of this decision the relatively small numbers of civilian employees overseas whose projects were to have been taken over and expanded by thousands of troops continued at their jobs, some of them well into 1943. The three contractors in the Persian Corridor

[27] Ltr, Hq, Tenth Army, to Hq, Iran–Iraq Serv Comd, 13 Aug 42; and Ltr, Col Shingler to QMG, Tenth Army, 24 Aug 42. PGF 259.
[28] Memo cited n. 25.
[29] Ltr, TAG, 17 Jul 42. AG 160 (2–15–42) 1.

were dispensed with in varying fashion. In general the transition was effected by a compromise with plans previously advanced. Contracts were closed out in whole or in part, while certain contract employees were placed as civilians on the War Department payroll, serving either directly under Army control or nominally so, with instructions coming to them from the Army through their own civilian foremen and supervisors. Very few of the civilian-contractor employees enlisted or accepted Army commissions. Many of them, particularly in the aircraft assembly operations, were of service in breaking in the inexperienced troops sent over to replace them.

The year 1942 began with a handful of men, soldiers, and civilians, set down in a far country to undertake heavy labors amidst the changing circumstances and pressing urgencies of war. The confusions endured and surmounted during that harassed year made more certain the achievements that came in 1943.

CHAPTER VI

Wharves, Roads, and Barges

When the War Department in February 1942 decided to militarize the civilian contractor projects in the Persian Corridor and in April shifted priorities from the British line of communications in Iraq to the Soviet supply line in Iran, it was preparing to assume a larger share of the British Russian-aid burden in the Corridor in two of its three categories—construction and assembly. The third category, transport, including both port operation and inland clearance by road and rail, remained in British hands until 1943.

In construction the British increased the wharf facilities at Bandar Shahpur and extended the ISR south from Ahwaz to Khorramshahr, linking that port by July 1942 to the main line of the railway. To the Americans fell the construction of additional wharfage at Khorramshahr, a permanent all-weather two-lane highway with a parallel temporary road north to Andimeshk, and necessary housing, storage, and shop installations. Completion of the Anglo-American tasks would forge a chain of facilities each of whose three links, ports, highways, and railway, was essential to the smooth delivery of an increasing flow of supplies to the Soviet Union. Construction was the critical operation of 1942, for not only must facilities attempt to keep pace with incoming shipping throughout the year but they must also be sufficiently advanced to be usable by December, the time planned for the arrival of the U.S. Army service troops. In addition, the assembly of motor vehicles and aircraft, the second main task assumed by the Americans, depended upon adequate port facilities for the landing of cased vehicles and aircraft, as well as upon adequate highway and rail capacity for delivery overland to Soviet receiving points.

Making Bricks Without Straw

Because of his primary responsibility for construction, the Iranian District engineer was a key factor in the American task. He and his constructor, Folspen, were to share many headaches, chief among them

shortages in personnel, supplies, and equipment. An estimate prepared in Washington shortly before Pearl Harbor had prophesied that within a few months perhaps four or five thousand American civilians would go to Iran. While the entrance of the United States into the war greatly enlarged its potential responsibilities, resultant shipping stringencies reduced the manpower, supplies, and equipment that could be delivered to the field. Writing to General Wheeler in January from his New York headquarters, the district engineer, Colonel Lieber, estimated that given a force of 1,300 American civilians he could complete the engineer tasks in four hundred days.[1] The ultimate failure to complete the task was in large part attributable to shortages. It was a case of making bricks without straw.

American methods of road building require a high degree of mechanized equipment such as tractors, bulldozers, mechanical shovels and graders, large capacity dump trucks, rock gravel plants, concrete mixers, and asphalt distributors. Without skilled operators this equipment is useless. The program assumed, therefore, provision of regular and adequate shipping to deliver the men, materials, and equipment. The War Department had promised a ship every two weeks for the Iranian projects and it was anticipated in the preliminary planning that all men and materials would reach the base before 1 May 1942. But for many crucial months after Pearl Harbor, while the Iranian projects languished, a combination of factors in the world-wide demand for American shipping made the Iranian Mission a stepchild. In consequence an adequate force of skilled American personnel did not reach the base until 1 September, and "sufficient and necessary construction equipment" did not reach the site until October.[2] A Folspen report states that War Department approval of a traffic manager for shipments overseas was granted in December 1941 "too late to be of service in the first and second shipments," and that "after Colonel Lieber left for Persia there was no one in the War Department who really had the job at heart and in hand." [3] On 19 January 1942 Folspen wrote the Chief of Engineers that they had hired men on the basis of promised transportation which had been successively withdrawn until their work was being dislocated and their planning and procurement were reaching a point that "now prejudiced the progress of work in Iraq and

[1] (1) Memo, 26 Nov 41, sub: Procurement of Supplies for the Iranian Mission. AG 400.3295 (8–9–41) Sec 4. (2) Ltr. Col Lieber to Gen Wheeler, 13 Jan 42, carried by Gen Greely. Afr. M. 24/3, NADEF. (3) Ltr, Col Lieber to Engr, NAD, 14 Jan 42. Iran 46/30, NADEF.

[2] Report of Foreign Manager on Fee Earned, WD Contract DA–W–1098–Eng–109, 20 Mar 43. SWP Office.

[3] A. J. Ruge, Project Manager, Report on Iranian Operations, 9 Mar 43. SWP Office.

Iran." The Deputy Chief of Staff replied that every effort was being made to find shipping, but that "an investigation reveals that delays in providing water transportation have been occasioned by scarcity of ships." [4]

The serious handicap of personnel shortages is illustrated by a few figures. Against Colonel Lieber's estimate of 1,300 men required, only 900 altogether were shipped to the base during the life of the Folspen contract and of these the peak number at the site at any one time was 751, reached in October. Hundreds of men were hired only to wait in New York for weeks on stand-by pay and per diem until shipping was provided. One shipment of 432 men, at a cost of $135,000 in stand-by pay and per diem, embarked in March on the ill-fated voyage of the *Agwileon* and did not reach Iran until July and August. Their ship, badly overcrowded, developed engine trouble off Freetown, Sierra Leone. With food, water, and medical supplies running low, they lay there for repairs and then limped on to Capetown. From there, after ten weeks' layover—during which the cost of housing and feeding the constructor's men ran to $83,000 exclusive of their pay—the last of them were transshipped to the Persian Corridor, many of them, by arrival, hardly fit for work. Three weeks before 19 November, when Folspen was ordered to cease further hiring, there were 358 men awaiting shipment from the United States.[5]

To offset the lack of American men and machinery it was determined in February to employ native workmen up to an estimated total of ten thousand, to be used chiefly in highway construction. Instead of bulldozers and tractors, primitive manpower, equipped with little shovels, filled potholes and heaped embankments against floodtime inch by inch with earth poured from small woven baskets filled by hand. Native labor was obtained at first through British agencies, and this sometimes resulted in the Americans getting less desirable workers. Later when the Americans issued coupons entitling the laborers to rations of tea, bread or rice, and sugar, they got their pick of the market without upsetting established wage scales. Labor was hired directly and, for certain projects, through labor contractors according to a

[4] (1) Ltr, Folspen to CofEngrs, 19 Jan 42. AG 400.3295 (8–9–41) Sec 1. (2) Ltr, DCofS, 4 Feb 42. Same file.

[5] (1) *Agwileon* File. PGF 260. (2) Data on personnel shipments in Charles H. Sells, Report of the Foreign Manager, 10 Mar 43, SWP Office (cited hereafter as Sells Rpt); Final Report of the Safety Engineer, App. I, SWP Office; Memo, 2 Jan 42, Afr. M. 11/12, NADEF; Memo, 17 Jan 42, AG 400,3295 (8–9–41) Sec 1; Rpt cited n. 3; Ltr, to Col Lieber, 11 Apr 42, quoted in Edmund A. Prentis, Progress Review of Construction Work, American Military Mission to Persia, 10 Mar 43, SWP Office; Report, Personnel Manager to Foreign Project Manager, Ahwaz, 21 Oct 42, DE File R–2, Reports, NADEF; Rad AMSIR 819, 29 Oct 42, quoted in Ltr, Dir, Contl Div, SOS, Hq 1616–A, Munitions Bldg, Washington, to Engr, NAD, 4 Nov 42, NA 2051 (AMSIR) 159, NADEF.

system used by the Anglo-Iranian Oil Company and the British Army. Skilled native labor, especially in the north, was adaptable, eager, and quick to learn new methods. They were certified for security by the British. As the labor force was a variable, no exact census is available for 1942; but as of 15 October there were only about 2,000 native laborers on direct hire, increased to 3,500 by 1 November, while contract labor on a unit-price basis accounted for some 3,500 more.[6]

No less serious than personnel shortages was the lack of mechanized equipment and construction supplies. With 10,000 long tons of engineer materials at sea in December 1941, the district engineer in January requested shipping for 12,000 additional long tons of space and noted that 10,000 long tons of road construction and quarry equipment were being procured, all of which should be shipped by 15 April. Between 14 February and 2 July, seven ships discharged cargoes of about 8,150 long tons [7] of construction supplies and equipment for engineer projects. Then came a disaster of the first magnitude when the eighth ship, the *Kahuku,* carrying 7,480 long tons of excavating, transportation, gravel, rock plant, and asphalt equipment was sunk on 15 June near Trinidad by enemy action. At one blow 60 percent of the required equipment for highway building was lost.[8]

In July Colonel Lieber reported to Colonel Shingler that the permanent road north from Ahwaz to Andimeshk, scheduled for completion by 1 September, was only 2 percent completed, and that with only about 20 percent of needed machinery on hand "the existing equipment situation in this district is critical." He noted the serious consequences, through the loss of the *Kahuku,* of having put all the eggs in one basket and urged that in future cargoes be divided among several ships in 500-ton lots.[9]

Intense efforts were made to obtain desperately needed items for use in the wharf and highway projects. A serious obstacle to wharf building was lack of piling. Under early high-level planning the British had

[6] (1) Rad 77 to Washington, 13 Feb 42. AG 400.3295 (8–9–41) Sec 4. (2) Sells Rpt. (3) Ltr, Foreign Mgr to Folspen, New York, 15 Oct 42. NA 2146 (AMSIR) 2, NADEF. (4) Chart 2.

[7] Converted from figure of 16,300 ship tons given in Shipping Rpts. SWP Office.

[8] (1) Monthly Rpt of Opns for Dec 41, Iranian Dist Engr to Engr, NAD. Iran 46/30 (another copy Iran 24/2–a), NADEF. (2) Memo, Iranian Dist Engr, 14 Jan 42. Iran 46/30, NADEF. (3) Shipping Rpts. SWP Office. (4) Rad AMSIR 296, 21 Jun 42. AG 400.3295 (8–9–41) Sec 4. (5) Memo, OpNav, 12 Jul 42, with Summaries of Statements by Survivors, 6 Aug. 42. Ships Casualty File, Water Trans Serv Div, OCofTrans. (6) Work on procuring replacements did not begin until April 1943, ten months after the sinking and four months after cancellation of the constructor's contract. It was estimated that replacements would not reach the field until November. Rpt from Washington Office of PGSC to CG, PGSC, on Activities for Week Ending 20 Apr 43, 21 Apr 43. PGF 225.

[9] Ltr, Col Lieber to Col Shingler, 12 Jul 42. DE File S–4, Ships, Shipping, and Sailings, NADEF.

undertaken to supply all piling; but the capture of the Andaman Islands by the Japanese on 23 March 1942 cut off the British source of promised timber. Many months were to pass before the British were able to deliver teakwood piles. These presented serious problems in construction which were satisfactorily solved by the Folspen technicians by an ingenious method of splicing.

In July, following the loss of the *Kahuku,* Colonel Lieber dispatched a representative to India to obtain buses for transporting men from the road construction camps to their sites of work, and to locate sources of pipe, reinforcing and structural steel, I-beams, blasting dynamite, drills, rock crushers, road rollers, pumps, and dump trucks. The report of the survey indicated that co-ordination between the various Allied services in Iran and India was not yet highly developed. For example, in the face of need of pipe for American projects, the British "had recently moved about 75 miles of six inch pipe from Iran to India." It was reported that some fifty crates of trucks and passenger cars had been standing idle on the docks at Karachi for the past three months. Machinery and equipment were scarce and expensive. Diversion of defense materials from China was investigated, but "General Wheeler stated that it would be impossible to secure anything from this source without an O.K. from Chungking which he knew would not be granted." [10] Diversion from India of goods formerly designated for Singapore was explored, in view of the loss of Singapore to the Japanese five months earlier; but the record does not reveal the results of the inquiry. There was a considerable reserve in India of construction equipment as well as of transport trucks, but it was held by the British and could not be obtained by the Americans for their Iranian projects except by the time-consuming process of making application to Tenth Army at Baghdad which would in turn apply to New Delhi. Fortunately, back in the Corridor, certain materials were plentiful along the route of the highway. Near Ahwaz was a quarry of low-grade sandstone which provided stone for the base course of the road. Twenty miles north of Ahwaz alluvial gravel was obtainable in ample quantities; and the Abadan refinery produced asphalt for top surfacing.

No catalogue of handicaps and discouragements that affected construction would be complete without mention of the climate. Although winter temperatures in the region from Ahwaz to the Gulf ranged from 35° to 70° F., with rain, the period between June and September rarely fell below 100° F. Average shade temperature at noon fluctuated be-

[10] Report of a Trip to Karachi, India, by Capt Lawson T. Blood, 18 Aug 42. DE File R-2, Reports, NADEF.

tween 120° and 140° F. Colonel Lieber has stated that in July and August at Ahwaz he would wait until the temperature dropped to 124°, an hour before midnight, before going to the roof of his billet to sleep.[11]

The handicaps under which the constructor forces worked took less toll of wharf construction than of highway building. After preliminary reconnaissance, undertaken while the Iraqi projects were still in progress, and after the ships *Texmar* and *Granville* were moved from Umm Qasr to Khorramshahr in April 1942 to off-load their cargoes of dock lumber and equipment, personnel were assigned on 26 April to begin construction of two deepwater berths with the necessary rail and road approaches. A completion date of 1 August was set.[12] Because the move from Iraq was still under way and engineer and Folspen headquarters were not permanently established at Ahwaz until June, the force was small. Khorramshahr at this time possessed only one small concrete wharf built in 1937 by European engineers. When the Americans arrived this wharf was covered by a large pile of coal and was not used for shipping. Its single crane has been described as "capable of lifting a ton or so when in working order." [13] The port was resorted to only when Bandar Shahpur was crowded.[14] The two additional berths undertaken by the Americans were designed, in conjunction with completion of the branch line of the ISR being built by the British, to raise Khorramshahr's capacity to 2,200 long tons per day from the early 1942 estimated capacity of between 200 and 700 long tons.[15]

Using materials brought from the United States, supplemented after midyear by British piling, the two new berths had been brought to 46 percent of completion by the end of June.[16] The British Tenth Army then requested construction of a third berth, increasing this later by three more. By the end of the year Folspen had built five open-deck pile trestle wharves sixty feet wide and had brought the sixth berth to 25 percent of completion, providing the equivalent of 2,125

[11] Notes and comments by Colonel Lieber for the author, 10 February 1949.

[12] Rad, Hq, Iranian Mission, Basra to Iranian Dist Engr, Ahwaz, 26 Apr 42, sub: Revision of Projects, cited HOTI, Pt. IV, History of the Ports, by Ogden C. Reed, p. 7 and n. 15. PGF.

[13] Notes and comments cited n. 11.

[14] Rpt by W. H. Lock, British Ministry of War Transport, quoted in General Summary Report of the Program of the War Shipping Administration for the Delivery of Russian-Aid to the Persian Gulf Ports and the Relations of the War Shipping Administration with Other Agencies, Public and Private, for the Period Ending December 1944, by Nels Anderson, ME Representative for Recruitment and Manning, WSA. PGF 257.

[15] Data sheet forwarded by Dist Engr to U.S. Naval Observer, Basra, 20 Jul 42. DE File P–9, Ports and Harbor Facilities, NADEF, A 1,000-foot lighterage wharf directed to be built was never begun "because of the failure to reach a decision as to the desired location." Sells Rpt.

[16] Rpt of Opns, Iran–Iraq Serv Comd, 1 May–30 Jun 42. PGF 239.

linear feet of deepwater berthing space. This represented 86 percent completion of the wharf construction task.[17]

Although the new wharf construction of 1942 provided for the greatly increased port capacity that was to follow the adoption of new methods of port operation in 1943, there was no great increase in tonnage discharge during the civilian construction period above the 700 long tons per day maximum estimated at the beginning of the year. Moreover, Soviet-bound goods tended by October to pile up in the Khorramshahr storage areas for lack of adequate inland clearance.

While the British struggled with their transport responsibilities, completion of the highway by the Americans increased in importance. Early planning for one thousand miles of highway construction, predicated upon adequate manpower and equipment, had contemplated that twelve construction units would operate out of four main road camps to be established in desert, plateau, and mountain areas. There were to be five quarry or gravel plant units.[18] By midsummer, with only about four hundred Americans on the highway task, there were six road camps: Desert Camps 1 and 2 close to Khorramshahr and Ahwaz respectively; the Kharkeh River, Shaur River, and Sabz-i-Ab Camps between Ahwaz and Andimeshk; and the Quarry Camp, called Foleyabad, three miles west of Ahwaz.

Although handicapped by early uncertainties in planning, bridge construction turned in a better percentage-of-completion record than the highway program as a whole. During the planning period in late 1941 it was not known how many bridges would be required for a road-building program not yet definitely located on the map. Indeed, Folspen were under the impression that the British would build all necessary bridges.[19] The general British commitment to provide construction materials at the site was relied upon during the stage of procurement of

[17] (1) Estimate in Tabulation of Directives, Change Orders, and Percentages Completed as of 15 Dec 42. DE File C–11.2, Correspondence on Directives, NADEF. (2) An estimate of 94 percent completion of wharf construction appears in Weekly Rpt of Opns to CG, PGSC, by Lt Col R. G. McGlone, Iranian Dist Engr, 26 Dec 42. DE File O–1, Operations, NADEF. (3) An estimate of 88 percent completion of wharf construction appears in Information To Be Furnished to the North Atlantic Division for the Purpose of Preparing a Completion Report for Contract DA–W–1098–Eng–109, as requested by letter dated 10 May 1943 from the North Atlantic Division and signed by Capt. H. G. Groves. NA 7205 (AMSIR) 13/2 and NA 319.2 (AMSIR) 38/2, NADEF. Another copy PGF 239. Varying estimates result from differing bases of calculation. (4) See also Ltr, Col McGlone to Dist Serv Comdr, Ahwaz, 27 Apr 43. DE File A–1.8/1, Contracts, NADEF. (5) Also Ltr, Capt Enos B. Cape, Actg Dist Engr, Ahwaz to Folspen, 20 Jan 43, DE File S–4, Ships, Shipping, and Sailings, NADEF. (6) Completion by the Army of the sixth berth in 1943, together with the original concrete wharf brought the installation up to 3,251 linear feet of berthing space.

[18] Ltr cited n. 1(2).

[19] Ltr, Sells to author, 10 Oct 49.

supplies. Arrived in the field, where they were ordered to build bridges from the start, the Americans had to hustle for materials. On the initiative of George Paaswell, Folspen chief engineer, who died of an illness contracted in Iran, steel girders from the recently demolished Sixth Avenue "El" of New York were shipped to Iran where they helped to bridge the Shaur River south of Andimeshk. Some steel beams from an underground cut-and-cover trench warehouse erected at Umm Qasr were brought over to Iran and worked into another bridge. A 900-foot concrete viaduct was built across the Bala Rud south of Andimeshk. All told, Folspen constructed twenty bridges totaling fifty-seven spans for an over-all length of 1,717.98 feet. By the end of 1942 the bridge-building task was 90 percent completed, although on the Ahwaz-Andimeshk leg of the highway completion was only 40 percent of the goal.[20]

There is no general agreement in the mass of reports by different hands as to percentage of completion during 1942 of the permanent highway from Khorramshahr to Andimeshk. The temporary highway, which was a resurfaced stretch of desert track generally paralleling the railway with occasional forages across country, was completed all but for bitumen surfacing over the 172 miles of its length between Khorramshahr and Andimeshk. Folspen estimated the all-weather 24-foot paved highway between Ahwaz and Andimeshk, which received first priority, was 50 percent complete; estimates for the section between Khorramshahr and Ahwaz range from 28 to 48 percent.[21]

Delayed by manpower and equipment shortages, the highway program was also haunted by changes in specifications. In the early spring of 1943 the normal rains and spring floods inundated an area of 1,200 square miles through which the American-built highway route lay, washing out two of the twenty bridges so laboriously and ingeniously built the previous year, and eight miles of road. Half the remaining mileage of completed highway was badly undermined and the trucking of Russian-aid cargoes inland away from the ports seriously slowed.

Following this calamity recriminations sputtered on all sides, particularly bitter on the part of the U.S. Army which took over from the engineer constructor in 1943 and was pushing the vitally needed artery northward with service troops and native labor. Flooding along the route was a known phenomenon taken into consideration in the preliminary planning by the J. G. White Corporation when it was engaged

[20] (1) Interv with A. J. Ruge, Project Mgr, SWP Office, 28 Oct 44. (2) Sells Rpt. (3) Ltr cited n. 6(3). (4) Information for Completion Report cited n. 17(3). (4) Tabulation cited n. 17(1).

[21] (1) Interv, Gen Shingler with Victor Pentlarge, Pentagon, 22 Apr 46. (2) Documents cited n. 17(1), (2), (3); and Sells Rpt.

under the ordnance program. The country around Khorramshahr, with the exception of a narrow strip along the riverbanks, is barren, flat desert subject to floods during the rainy season between November and April when precipitation averages 6.57 inches. To the north in the region of Ahwaz, the average precipitation reaches 8.92 inches, with flooding increased by the clayey nature of the flat desert and by drainage from a group of soft sandstone ridges northwest of the town. In their planning, Folspen, aware of the J. G. White recommendations, proposed a 10-foot elevation at the southernmost end of the highway and, beyond the coastal region, a minimum elevation of 3.6 feet with matched openings and flood-control dykes where the highway paralleled the railway. On 28 August 1942 Colonel Lieber approved these specifications, but later, for speed's sake, left the southernmost section at 10 feet but reduced the rest to a minimum of 3 feet and a maximum of 4 feet above the floor of the desert. His successor reduced the elevation of the first four miles inland from the river to 8.5 feet; and in November the third Iranian District engineer eliminated the control dykes, reduced the number of culverts, and cut the elevation of the road above the desert floor to only a foot and a half for all but a 25-mile stretch on the north end and a 4-mile stretch on the south, and for a short stretch encompassing five small bridges. The serious damage to completed roadways inevitably followed in the ensuing rainy season.[22]

Less harried by adverse circumstances than the highway and port tasks, the erection of necessary buildings was completed in 1942. The list of accomplished objectives included the laying of 8,000 square feet of concrete paving for the motor vehicle assembly plant being erected by the British at Andimeshk, buildings at Ahwaz providing 69,500 square feet of floor space, and offices, carpenter shops, equipment repair shops, motor service facilities, refrigerator installations, and cool rooms for food at Ahwaz and elsewhere.[23]

Barge Assembly at Kuwait

Included in the lists of American tasks drawn up by Generals Wheeler and Wavell in November 1941 was the assembling, for delivery to the Inland Water Transport agency of the British Tenth Army, of knocked-down prefabricated barges shipped from the United States. Before the war there was considerable barging up the Tigris River to Baghdad and some on the Euphrates. On the Karun River in Iran,

[22] David F. Giboney, Report on Drainage Conditions, Highways—Ahwaz to Khorramshahr (Iran), 22 May 43. SWP Office.
[23] Documents cited n. 17(1), (3).

barges had furnished the chief means, before the British extended the railway to Khorramshahr, of carrying cargoes inland to Ahwaz, although at times of low water it was an uncertain means. By request of the British authorities early in 1942 the Americans undertook to provide large numbers of new barges for the Inland Water Transport to meet increasing demands of river traffic controlled by that agency. The assignment went to the Iranian District engineer. On 5 March Colonel Lieber earmarked $100,000 for the cost of local assembly; on 13 April General Somervell notified Colonel Shingler that the first shipment of sixty-two disassembled barges which had been designed and procured in the United States would be shipped two days later; and Folspen, having been orally instructed to take charge of the project, notified their home office on 29 April that they were prepared to take over on 1 June.[24]

The site chosen for the barge assembly operation was the picturesque Arab town of Kuwait in the Sheikdom of Kuwait, a British protectorate sandwiched between Iraq and Saudi Arabia at the northwest corner of the Persian Gulf. Here an ancient hereditary guild of shipwrights, whose oral tradition claims that they once sent a party to the Mediterranean to instruct the Phoenicians, carried on a thriving native boatbuilding industry.[25] An adequate force of native craftsmen and carpenters was available to work under the supervision of a small number of American civilians responsible to an area engineer delegated by the Iranian District engineer. On 21 May a conference was held at Kuwait attended by Colonel Lieber, Charles Sells for Folspen, the British political agent for Kuwait, a representative of the Kuwait Oil Company, representatives of the U.S. Navy and Maritime Commission, and the adaptable and co-operative chief of the native boatbuilders' guild, Haji Ahmed bin Salmon.[26]

Because the sheik objected to the erection of an assembly plant within the walls of his city, a location was chosen in the quarter called Shuwaikh on a level beach near the oil company's pier. Since inade-

[24] (1) The account of barge assembly draws upon History of Al Kuwait Station, 19 Jun 42–10 May 43, by Ben W. Ferrell, PGF 28–D; Folspen Rpts cited in this chapter; HOTI, Pt. I, Ch. 8, Sec. 3, History of Movements Branch, Operations Division, Hq, PGC, prepared by Movements Branch, Operations Division, with Supplement by Laurence P. Corbett, and statistical appendix, Complete Summary of Port and Transportation Agencies Performance of PGC Operations through 31 May 1945, 5 July 1945, PGF; General Summary Rpt cited n. 14; Notes and comments cited n. 11; and Documents cited n. 17(1), (2), (3). (2) Formal authority to Folspen was Change Order 14, 8 Jun 42, effective retroactively. File, Foreign Directives and Change Orders, NA 7205 (AMSIR) 13/2, NADEF. Another copy PGF 239.

[25] For an account see Alan J. Villiers, *Sons of Sinbad* (New York: Charles Scribner's Sons, 1940), Ch. 18, "Kuwait—Port of Booms."

[26] Col Lieber, Record of Conference—Kuwait Barge Assembly, 21 May 42, at Kuwait, 1 Jun 42. DE File C–3, Conferences, NADEF.

quate or contradictory information arrived from the War Department on the number of barges being shipped, their unit weights, measurements, and delivery schedules, it was decided that the local guild would assemble a sample barge under engineer pay and supervision. Cost and time records were to be kept as a guide to future compensation on a contract basis under conditions of quantity production. Arrangements were made for construction of necessary plant facilities or adaptation of existing buildings, for unloading the barges, and for improvising necessary machinery and housing for the Americans. At this stage the number of barges was indefinite, but it was later set tentatively at five hundred. On 22 June an engineer lieutenant [27] and twenty-two Folspen employees reached the site. By 2 July, with the aid of local labor, they had constructed enough plant to commence assembly operations.

Camp facilities were prepared by renovating, repairing, and adapting two stone buildings formerly used as a community isolation hospital. These provided space for dormitories, offices, recreation, kitchen, and mess hall. Frame wash and latrine buildings were erected along with two Quonset huts for additional sleeping quarters and a first-aid station. A small stone house was put up for the area engineer and the camp manager. Other construction provided 2,000 square feet of floor area in two warehouses, and about 16,000 square feet of other space, of which nearly 11,000 were for two planking sheds, and the rest divided among repair shop, power plant, paint shop, carpenter shop, fuel storage, huts for interpreters and guards, and sun and cutting shelters.

On 7 July assembly of the first barge was begun and was finished on 21 July. The next day quantity production was started on a twin assembly line, one barge being started each day until, by the end of October, 23 were simultaneously under assembly. It was a new technique for the Kuwaiti workmen, but they took to it expertly. The barges, measuring 60 by 15 by 5 feet, weighed about seven tons and had a capacity of sixty tons. They arrived at the site knocked down, and their bolted framework was assembled upside down, the bottoms planked, and the canvas sides glued between two layers of planking. They were then turned over by cranes using improvised turning rigs. After the barges were turned over, their deck planking and hardware were fitted and the finished barges were ready to be towed away by sailing ships or motor launches to the waiting Inland Water Transport at Basra or Khorramshahr. The United States furnished the British with twenty-eight Eureka motor launches for this purpose, and a crew of men to instruct in their operation.

[27] Lt Walter W. Santelman, succeeded, Jan 43, by Capt Earl L. Icke.

The first shipment of barges to arrive for assembly consisted of 48 craft made by Higgins Industries, Inc., of New Orleans. These arrived complete with blueprints and planking schedules, and little difficulty was experienced in their assembly. Assembly of barges from other companies began before blueprints or planking schedules arrived and, as there were differences in specifications, considerable delay arose in the process of fitting. Forty barges furnished by another company showed a variation of a quarter of an inch in their planking, causing assembly trouble. The lumber proved more than normally susceptible to softening in water, making tight sealing of seams difficult.[28]

In the first month 20 barges were completed. By the end of 1942, 186 had been assembled of 213 received from the United States. The original American force of 22 men had become 18. After the termination of the Folspen contract, the district engineer continued to operate the Kuwait plant using about 185 native carpenters and about 85 unskilled laborers. With the launching of the 368th barge on 23 June 1943, the work was completed. The project was terminated on 28 June. Ten incompleted barges were sent to Khorramshahr and turned over to the Russians.[29]

Administrative Problems

Set down in a strange land, the constructor force found other problems in addition to those encountered in building wharves and roads and assembling knocked-down barges. Methods of local procurement had to be devised and carried out. Arrangements had to be tactfully agreed upon with local sheiks, khans, and tribal leaders. Security for the American operations and personnel had to be contrived in an area where the westerners' business was not always welcomed or understood. And there were problems connected with the health, status, and discipline of the American civilian employees.

Responsibility for procurement under the engineer contract belonged to the contracting officer, the North Atlantic Division engineer, New York, who delegated all field responsibility and authority to the Iranian District engineer, through whose finance officer all of Folspen's field expenses, including purchases of materials and supplies, building rentals, field payrolls less allotments, field contracts, and miscellaneous

[28] Barges also supplied by the Palatka Shipbuilding Company, Palatka, Fla.; the Scott-Graff Company, Duluth, Minn.; the Brownsville Shipbuilding Corporation, Brownsville, Tex.; the Lyons Construction Company, Whitehall, Mich.; and the C. D. Johnson Lumber Company, Toledo, Oreg.

[29] (1) Hist Rpt, 9th Port, Mobile, for Jun 43. PGF 12–F. (2) Hist Rpt, Kuwait Barge Assembly Project, for Jun 43. PGF 28–F.

accounts were met.[30] Procurement was not, for the American command, what it is for the housewife, who buys a pound of sugar at her neighborhood grocery. Procurement had to fit into agreed Anglo-American procedures which were in turn conditioned by the local economy. Then there were the stipulations about procurement and payments contained in the President's Middle East Directive, and, when it came to the final transaction, there were complications of foreign exchange.

The general theory was that local goods, services, accommodations, and rentals would be supplied in all possible cases by the British, and that necessary American local procurement would be conducted through existing British agencies and within price and wage categories determined by the British, so as to avoid competitive bidding and the upsetting of established practices. But Colonel Lieber soon noted objections to the literal implementation of the theory when, in practice, American requisitions upon the British for needed items might, in some cases, have to be referred to Baghdad, or where, in practice, economies of time and effort could be achieved by direct American procurement and settlement of local debts.

There was also the question of accounting for what was furnished by the British and efforts were made in Washington to define methods and procedures. The principle of reverse lend-lease was developed, sometimes called reciprocal aid, under which it was proposed to regularize aid furnished the United States by beneficiaries of lend-lease and to account for that aid. The Adjutant General issued instructions in June that "the services, supplies, equipment, or facilities will be inventoried, assessed as to value, and receipted for by the receiving unit. Agreement on estimated values will be sought with responsible representatives of the foreign government concerned. A record of dollar value of services . . . will be maintained in order that the government concerned may receive appropriate credit against his account on the lend-lease books." Items covered by American requisitions upon British Army authorities in Iraq and Iran were to be valued when possible in sterling. The principle of reverse lend-lease was officially put to work in the Persian Corridor on 1 August, but the arrangements were modified in the important matter of pricing and record keeping by an Anglo-American agreement published at British headquarters, Cairo, in September. By this time there were small but steady accretions of American military strength in the area, and the financial arrangements applied increasingly to transactions between British and American military forces. The basic principle of the Middle

[30] Minutes of meeting at Washington, 14 October 1942, where Colonel Lieber explained the procedures to a group of PGSC supply officers. NA 2175 (AMSIR) 2, NADEF.

East financial agreement, and in particular of those portions of it which applied in the Persian Corridor, was the abandonment of pricing. "The guiding principle to be followed in the case of all issues . . . as between the United States Forces and the British Army, and cash payments by the British Army on behalf of the United States Forces . . . is that no financial adjustment will be made. It will be necessary, however, to maintain a record of the transactions on simple lines. . . ." The principle was reciprocally applied. In greater detail, Anglo-American agreed practice in the Persian Corridor was

> . . . that any facilities or services requisitioned or requested by the United States Government in connection with the Aid-to-Russia program . . . would be furnished by or through the British, rent free or without charge; and further, the United States forces . . . likewise reciprocated in furnishing facilities constructed by the United States, rent free, to Allied Forces where such facilities were not required by the United States during the period in question.[31]

The policy was not followed in other commands or theaters. While its adoption facilitated the peculiarly complex problems of doing business in the Persian Corridor, it produced numerous financial riddles to be solved only by the final Anglo-American lend-lease settlement of 1948.[32]

As American Army strength increased in 1942 it was determined that in so far as possible American personnel would receive supplies from American sources. Bulk issue of basic ration components was drawn from British sources and reinforced by importation or local purchase. A central purchasing agency was created in each area of the American command for the co-ordinated procurement of supplies and the employment of labor. In view of the severe inflation and near-famine conditions which had developed in Iran by late 1942, the effect of heavy purchases upon local markets called for such controls as this

[31] (1) Memo, Col Lieber for Col Shingler, 18 May 42. DE File C–3, Conferences, NADEF. (2) Ltr, TAG, 22 Jun 42. AG 400.3295, Hq PGC. (3) Request to British by Hq, Iran–Iraq Serv Comd, 12 Aug 42. AG 400.3295, Hq PGC. (4) Cirs 23 and 25, Hq, USAFIME, 27 Jul and 7 Aug 42. (5) GO 1175, GHQ, MEF, 4 Sep 42, covered all financial arrangements for the maintenance of U.S. military forces. AG 323.61 Establishment of Military Districts, Binder 2, Hq PGC. The provisions of this general order were supplemented by an agreement on reciprocal arrangements for building and land occupancy reached at a meeting of British hirings officers and American reciprocal aid officer, PGSC, at the British Area Hirings Office, Ashar, Basra, on 26 October 1943. Otherwise the Anglo-American financial agreement of September 1942 was neither rescinded nor modified. (6) Last two quotations from Financial Agreements between British and United States Forces in the Area of the Persian Gulf Command [undated, but July 1945]. Details of Anglo-American procedures in financial matters in the Middle East are reviewed in this document. Real Property Record, Item 10 (1)–Part A, PGC, Iranian State Railway, Real Property Record, MRS, PGC, K, Part A–Vol. 1. Drawer 2, Cabinet 2477, SL AMET (AG decimal files from Hq AMET formerly filed in drawers and cabinets at St. Louis, now filed at the Kansas City Records Center, AGO, Kansas City, Mo.) 60.

[32] *Twenty-seventh Report on Lend-Lease Operations, Covering the Period from March 11, 1941, through March 31, 1948* (Washington: Government Printing Office, 1949), especially App. II, pp. 59–60.

agency could exercise. From February through November 1942, such foods as mutton, bread, rice, and flour were obtained locally through the British. In December the U.S. Army began purchasing meats locally. To help mitigate the conditions which produced local bread riots, the American command sold wheat or rice, sugar, and tea at legal prices and in rationed quantities to its native laborers. This practice increased the attractiveness of employment by the Americans, who—in their effort to protect the native workmen from the exploitation of millers, bakers, native labor foremen, and other elements in the local society that preyed upon the weak—hired native bakers and ovens and went into the baking business. The improved strength, efficiency, and morale of the native working force benefited the American war projects.[33]

Other local arrangements had to be made besides the financial to provide needed water and rail transport, rights of way, and clearances of various sorts. In making contacts of this kind the Iranian District engineer had the advice of four members of his staff who were familiar, through prewar experience, with the country, the languages, and local tribes and customs.[34] Iran, in spite of the centralization imposed under Reza Shah, possesses an ancient tradition of local and tribal autonomy. Great care was taken not to infringe local rights in obtaining such materials as earth for mud bricks and gravel and rock for construction. There is record, for example, of a conference at Ahwaz in May 1942 with His Excellency, the Governor of Khuzistan Province, at which Colonel Lieber inquired what arrangements were necessary in regard to such matters, including provision for damage which might be caused property holders. The governor stated that there would be no question about local materials and that he did not believe there would be any damage claims. Colonel Lieber offered to present a written plan of operations, but the governor replied most positively that while he desired to know the plan of operations, he requested that information be given orally and informally, inasmuch as written record would require reference to Tehran with resultant delay.[35]

[33] (1) Sells Rpt. (2) Arthur C. Millspaugh, *Americans in Persia* (Washington: The Brookings Institution, 1946), p. 45. (3) Notes and comments cited n. 11.

[34] Lt. Col. H. G. Van Vlack, chief of the health section; Capt. Paul D. Troxler, chief of the engineering section; Arthur W. DuBois, assistant to the foreign manager of Folspen; and David F. Giboney, assistant chief engineer of Folspen.

[35] (1) See Kermit Roosevelt, *Arabs, Oil and History* (New York: Harper & Brothers, 1949), Ch. XVIII, "Iran: Tribesmen, Soldiers and Intrigue." (2) Memo of Conf, 9 May 42. DE File C–3, Conferences, NADEF. Present: the Governor of Khuzistan; Colonel Lieber; Maj. C. M. Hearn, chief of operations for the district engineer; Charles Sells; and the local Iranian labor contractor, Mr. Nassery. (3) Some dental work performed at Colonel Van Vlack's hospital at Ahwaz for certain local personages contributed to co-operative and friendly relations. Notes and comments cited n. 11.

Security of American supplies and operations in southwestern Iran was noticeably enhanced by adoption of a policy of mutual trust rather than of force. After consultation with Iranian and British authorities, friendly negotiations were carried on by Lt. Col. H. G. Van Vlack and Arthur W. DuBois, of the Iranian Engineer District, with all important Arab sheiks and Lur khans in the area of operations in the province of Khuzistan. There, tribal chiefs who ruled thousands of followers assumed responsibility for enforcing upon the tribes respect for the security of American personnel employed on highway construction through lonely areas, and for the safety of American camps, stockpiles, and equipment. These chiefs supplied needed local labor, furnished guards and guides, and provided local supplies and incidental services. In return for their assistance the chiefs were paid a monthly honorarium of about thirty dollars, a sum wholly nominal to sheiks and khans already rich enough, but accepted by them proudly as a token of the confidence in which the foreigners held them.

Had the Americans chosen to assume toward the tribesmen an attitude of suspicion and hostility, the American projects in 1942, when British security forces were unequal to patrolling the territory, would have been helpless to withstand the incursions and raids that were customary, especially in the remoter regions. As it was, the policy of co-operating with self-respecting tribesmen, on the assumption that aims were held in common, limited petty pilfering to a minimum in spite of economic conditions which, as Mr. DuBois' report states, "brought the native population to extreme poverty and near starvation." According to the same report, the American alliance with the tribes established and maintained tranquillity in the area of operations, one traditionally harried by tribal raids. Furthermore, "a friendly hinterland was created to provide listening posts and a barrier to enemy activity," while the free offers of service by many tribal chieftains ranged them on the Allied side at a time when German agents were still operating in other sections of Iran. Reliance on the pledged word of the tribal leaders justified itself in practice. After considerable negotiation with the British, who were convinced of the effectiveness of American methods, DuBois obtained from them rifles and ammunition which he turned over on loan to the chiefs for distribution among their tribesmen. Every rifle was returned despite the fact that good weapons were scarce and the tribesmen cherished firearms above all else.[36]

[36] (1) Memo, by DuBois, Jan 43, sub: Report on Relations with Tribal Elements with Special Reference to American Operations in Southwestern Iran. Submitted to MID where it was impossible to locate a copy. Copy seen during interview with Mr. DuBois, Washington, 2 May 1947. (2) Ltr, DuBois to author, 25 May 50.

In the north, where no such arrangements prevailed, the presence of unfriendly tribes and bandits persuaded a planning group in Washington not to extend American civilian contractor highway operations northward. The tribal arrangements were not continued after full militarization of the American projects was achieved in 1943. In view of the American experience with the tribes in southwest Iran in 1942, it is interesting to note a report that in 1949 the government of Iran took steps to enlist the tribes as a part of the country's internal defense system.[37]

Despite the severity of the climate the health of the Folspen employees held up well—no small part of the credit going to the medical plans, preparations, and skill of Colonel Van Vlack. Between 4 February and 26 July 1942, 6.8 percent of total man-days worked were lost through illness; between 4 February and 1 December, however, the loss of time had averagd down to 2.7 percent of man-days worked. There were three deaths in line of duty.[38]

Discipline among the American civilians employed on engineer tasks was at no time a major problem. Of the nine hundred men shipped to the base, only fifty-five were discharged for cause during the life of the contract. There were some among them who had been hastily selected in the United States. The arrival in July and August of the large group of more than four hundred men who had experienced the demoralizing effects of the voyage on the *Agwileon* ushered in a brief period in September and October marked by shirking, drunkenness, and disorder, centered at Ahwaz. That this was confined to a minority of malcontents is attested not only by the small total of discharges for cause, but by the fact that peak construction activity was reached during those same months, the first in which adequate manpower and equipment were available. The bad behavior of the few does not reflect upon the achievement of the majority. It is recorded to illustrate how the few were dealt with by the military. As Colonel Lieber has written, "The loneliness and heat rapidly separated the men from the boys." [39]

On 10 September Colonel Shingler informed General Maxwell that some Folspen men were refusing to work in hope of being sent home.

[37] (1) Conference at Washington, 14 October 1942, attended by Col. Stanley L. Scott, Chief of Staff, Persian Gulf, SOS; Colonel Lieber; Mr. Ruge; Col. Roy C. L. Graham, G–4, SOS; and Col. Theodore M. Osborne. NA 2175 (AMSIR) 2, NADEF. After the success of the American plan, Brigadier Douglas, British commander responsible for the security of the area in which the Americans were operating, abandoned plans to post 3,000 armed guards in Luristan, and entered into arrangements with the Lurs for safeguarding the ISR between Andimeshk and Dorud. Interv cited n. 36(1). (2) Sam Pope Brewer, "Iran Incorporates Tribes into Army," *The New York Times*, May 14, 1949.

[38] (1) Health and Time Studies. SWP Office. (2) Sells Rpt.

[39] (1) Sells Rpt. (2) Notes and comments cited n. 11.

War work was thereby being delayed. Colonel Lieber had recommended that a Selective Service board be established to induct a few men, and Colonel Shingler concurred "that such action on a few malcontents is necessary." Inasmuch as civilians accompanying or serving the Army are subject to military law, General Maxwell replied that "against all civilians whose refusal to work delays war work, you are directed to institute proceedings under the 64th and 96th Articles of War." The first of these articles concerns assaulting a superior officer or disobeying his command, and carries a maximum death penalty. The second covers general and miscellaneous acts to the prejudice of good order. The Army therefore invoked the Articles of War, assembled the men, and read the articles to them. Three civilians were court-martialed and locked up. The British authorities had also complained that drunkenness and disorderly conduct were rather prevalent and were notified in reply that the American civilians, who had no American military police to look after them, "have been informed that they are subject to the authority of British MP's on the streets and in public places in Ahwaz." On 10 October Colonel Shingler requested the co-operation of Folspen leaders, and ordered the commanding officer of the Central District, PGSC, at Ahwaz to see that steps were taken to control drunkenness and brawling, to establish a curfew, and to inform all concerned that out-of-bounds zones would be established and culprits tried by American military courts. Matters promptly quieted down, and the Folspen foreign manager informed his home office on 15 October that "discharges have dropped so as to be almost negligible." He attributed improved conduct to the recent courts-martial, and to the fact that "we have reached the end of the rotten apples in the barrel. . . . There is also the added factor that the job is going ahead and interest in the work is growing daily." [40]

The Contract Terminated

In problems and uncertainties the last months of the year of confusion were no exception to their predecessors. In the period from September to the end of the year the Persian Gulf Service Command was reorganized to discharge the new mission, assigned it by the Combined Chiefs of Staff, to assume direct responsibility for the delivery of war matériel to the USSR. In the same period the War Department's policy

[40] (1) Ltr, Col Shingler to Gen Maxwell, 10 Sep 42. 250.1 Morals and Conduct, SL 8991. (2) Msg, Gen Maxwell to Col Shingler, quoted in Ltr, Actg Iranian Dist Engr to Folspen, 22 Sep 42. SWP Office. (3) Sells Rpt. (4) Ltr, Ex Off, PGSC, to British Asst Provost Marshal, Tehran, 25 Sep 42. SWP Office. (5) Ltr, Col Shingler to CO, Central Area, 10 Oct 42. 250.1 Morals and Conduct, SL 8991. (6) Ltr cited n. 6(3).

of militarizing overseas contract activities was applied to the Iranian District engineer's constructor, Folspen. Militarization was a policy determined long in advance of the change in the status of the American command in the Persian Corridor. But militarization in the Corridor was hastened by the rapid development of the new organization under General Connolly whose advance personnel reached the area in October, and whose first shipment of more than five thousand service troops went ashore at Khorramshahr on 11 and 12 December.[41] The termination of the engineer construction contract and plans to carry on construction by military instead of civilian personnel were distinct from the reception, accommodation, and employment of the service organization sent to Iran under the directive of the Combined Chiefs. It should be borne in mind, therefore, that the gradual increase of military personnel which raised military strength from 190 in July to over 400 at the end of October was a reinforcement of the Iranian Mission and its successors, the Iran-Iraq Service Command and the Persian Gulf Service Command, designed only to further their tasks in construction, assembly, and advice and assistance to the British in movement of cargoes to Soviet receiving points. In the final months of 1942, militarization of construction work and the establishment of General Connolly's command coincided in time; but almost to the end of the year they remained distinct but complementary activities. This accounts in part for uncertainties which accompanied termination of the Folspen contract.

This step was implicit in the War Department's policy decision of February 1942; but it did not become practicable until November. Even then some weeks were required to reconcile the views of Washington, Cairo, and Basra as to when and how it was to be accomplished.[42] On 18 November Services of Supply headquarters at Washington made to General Maxwell, Commanding General, SOS, USAFIME, alternative proposals: to terminate the Folspen contract, transferring the civilian personnel to Army payroll to carry on construction activities; or

[41] History: United States Military Iranian Mission, 20 Mar 43, prepared for Col Don G. Shingler, Chief of Mission, by 1st Lt Victor E. Dietze, Hist Off. PGF 242.

[42] For proposals, plans, and authorizations respecting termination and subsequent military construction activity, see: Rad AMSME 1869, Somervell to Maxwell, 18 Nov 42; Rad AMSME 2797, Maxwell to Somervell, 27 Nov 42, repeated, Rad, Maxwell to Connolly, 4 Dec 42; Ltr, Maxwell to Connolly, 3 Dec 42, sub: Termination of Spencer, White & Prentis and Foley Bros. Contracts, with 1st wrapper ind, Scott, CofS, PGSC, to Osborne, Dir of Cons, PGSC, 14 Dec 42, and 2d wrapper ind, Osborne to Connolly, 14 Dec 42; Ltr, Osborne to CG, PGSC, 5 Dec 42, sub: Cancellation of Contract DA–W–1098–Eng–109 with Foley Bros., Inc., and Spencer, White & Prentis, Inc.; Rad C–368, Connolly to Maxwell, 12 Dec 42; Rad 279–Z, Maxwell to Connolly, 14 Dec 42; Rad AMSME 3305, Lt Gen Frank M. Andrews, CG, USAFIME, to Somervell, 18 Dec 42; Rad AMSME 2510, Somervell to Maxwell, 25 Dec 42; Rad AMSIR BASRA 321–Z, Maxwell to Connolly, 30 Dec 42. PGF 239.

to militarize construction completely, and return to the United States any civilians not inducted. Maxwell replied on 27 November that militarizing by enlisting the civilians in the Army was impracticable inasmuch as a census just conducted revealed that only a few of the men would enlist and that under the draft laws and labor agreements their entry into military service was a voluntary matter. He therefore suggested placing under direct employment of SOS, USAFIME, all suitable and willing civilians then employed by Folspen, to be followed by a progressive discontinuance of construction by this working force until it had been supplanted by service troops who would complete both scheduled and new construction projects.

This plan was communicated to Headquarters, PGSC, on 3 December with a proposal that the progressive militarization of construction work be carried out by a general construction battalion of one thousand Corps of Engineers officers and men to be organized in the United States and shipped to Iran. In the opinion of Col. Theodore M. Osborne, Director of Construction, PGSC, the work could be accomplished by available civilian and military personnel before such an outfit could be trained and shipped to the site. He also pointed out in a letter to General Connolly that it was considered desirable to divorce the Iranian Engineer District from the Engineer Department and the North Atlantic Engineer Division at the earliest practicable date, transferring its activities to the jurisdiction of the PGSC under SOS, USAFIME. This suggestion indicates that consideration was being given in the field to ending the parallel responsibilities of the district engineer and the commanding general, and to finding a better means of centering control and authority in construction matters. Colonel Osborne proposed establishment in Washington of a section at SOS headquarters to take over the administrative functions being handled by the Folspen New York office; but this problem was to be handled otherwise. General Maxwell suggested, along the same lines, that personnel be transferred from the Folspen New York and overseas staffs and from the North Atlantic Division to the port of embarkation to carry on procurement and shipment functions after termination of the contract; but on 25 December General Somervell disapproved. Washington, Cairo, and Basra, though considering different means, were pursuing the same end: to continue construction operations according to the general pattern of 1942 rather than as an integral part of the new American responsibilities which were primarily concerned with transport.

Meanwhile, on 12 December, General Connolly notified General Maxwell that he was ready to take over the Folspen tasks; but General

Maxwell cautioned him that the contract could not be canceled without approval from Washington, and then only by the North Atlantic Division engineer in New York. Word that all necessary steps had been taken was dispatched to General Connolly from Cairo on 30 December. The War Department and the Corps of Engineers had decided to terminate those portions of the Folspen contract that dealt with construction and engineering work, but to leave in effect Folspen's responsibility for administration of matters relating to personnel supply and service.

The Folspen organization both at home and in the field was seriously affected by the uncertainties inherent in the Army's efforts to determine when and how to wield the ax. Personnel recruitment in the United States continued up to 19 November, when it was stopped. It was obvious that an adequate supply of trained technicians would be required in the field for some time to come regardless of what details were agreed upon for termination and progressive militarization. Other factors, too, contributed to uncertainty in the field and to a deterioration in relations of the constructor with the district engineers. Perhaps not the least of these was the departure of Colonel Lieber for Washington on 13 September to take part in consultations, at the office of the Chief of Engineers and in SOS, concerned with the planning and organization of the new regime to be headed by General Connolly. After Colonel Lieber four district engineers served in succession before their office was abolished.[43]

The lack of continuity in the office of District Engineer was reflected in a variety of ways, all of which tended to interfere with the performance of its work by the constructor. Folspen was called upon to furnish work, men, and materials outside the scope of the directives. The morale of Folspen employees was not improved as Army officers increasingly undertook direct personal supervision of work instead of issuing orders and directives through constituted civilian supervisors. There were many breaches of the established relationship between the engineer and his constructor: Folspen men were called upon to unload ships whose cargoes were not related to their projects; to handle, sort, transport, and store materials, supplies, and equipment pertaining to other organizations; to service, repair, and maintain such equipment; to transport personnel not connected with the constructor's work; to furnish engineering, designing, surveying, and blueprinting services to organizations other than the engineer's; to provide personnel, equipment, and materials for construction work other than that falling within

[43] The second Iranian District engineer was Lt. Col. Carl L. Meng; the third, Colonel Osborne; the fourth, Colonel McGlone; and the fifth, Captain Cape.

the engineer contract and directives; to surrender materials, supplies, equipment, and personnel to other organizations; and, in connection with the arrival of the five thousand U.S. service troops at Khorramshahr, to supply military personnel—often hundreds of men at a time—with food, housing, transportation, and equipment, at all hours, and with no advance notice.[44] Fearful that noncompliance or even determined protest would bring cancellation of their contract, Folspen attempted to co-operate until the work to which they were committed by contract was seriously obstructed.[45] Then, on 12 December, after the last of the troops had landed, Charles H. Sells wrote a letter to the district engineer. He stated that persistent but unconfirmed rumors of the termination of the contract reaching the employees had shattered morale and made continued orderly planning and prosecution of the work very difficult. He added:

> Consistent and continuing demands are made upon our warehouse by Army officers for supplies and materials entrusted to our custody pursuant to our contract, and orders and directions given by your officers to our workmen and foremen. Under the conditions, therefore, you are requested to immediately advise the Constructor . . . to the end that confusion may be eliminated, an orderly and efficient plan of future operations established, and the present violations of contract provisions eliminated.[46]

On 15 December Lt. Col. R. G. McGlone, district engineer, replied that the contract would be terminated on 1 January or as soon as possible thereafter. Individual personnel contracts would be transferred to the United States and the men placed under the direct orders of the district engineer. On 31 December Sells requested the engineer to speed the day inasmuch as the increasing extent to which Army officers were making extracontractual demands had drastically cut production below the highs of September–October. Formal termination followed by letter to Folspen dated 1 January 1943, relieving them "of all responsibility for construction and engineering work in this command," adding, "It has been agreed by your home office to continue in force those sections of the subject contract relating to personnel supply and service." On that date all equipment and materials in the custody of Folspen were turned over to the United States, and the district engineer took over direction of some seven hundred civilians and their projects.[47]

On 31 December the district engineer issued instructions so detailed

[44] List in Information for Completion Report cited n. 17(3), pp. 12–13.
[45] Interv with Sells, Pleasantville, N. Y., 28 Oct 44.
[46] Ltr, Sells to Dist Engr, 12 Dec 42. DE File, unnumbered folder, Administration NADEF.
[47] (1) Ltr, Col McGlone to Folspen, 15 Dec 42; Ltr, Sells to Dist Engr, 31 Dec 42; Ltr, Dist Engr to Folspen, 1 Jan 43. DE File, unnumbered folder, Administration, NADEF. (2) Sells Rpt.

as to list the assignment of named individual truck drivers to specified road camps. Certain newly arrived troop units were moved into sections of the incomplete Khorramshahr–Andimeshk temporary highway, whose completion depended on ability to move supplies of bitumen from Abadan. An effort was made to dispose available civilian and troop workers in such a way as to keep plant and equipment in continuous operation. A completion date of 15 February was set for the temporary road.[48]

In view of the difficulties which had dogged the construction program from its inception in 1941 to termination of the operational features of the Folspen contract at the end of 1942, it is noteworthy that final costs and the contractor's fee, estimated upon the basis of cost plus a fixed fee, fell well within original estimates. In 1941, when planning was necessarily highly tentative because tasks were as yet undetermined in detail, construction costs had been estimated at $25,000,000, for a fee of $1,250,000. Construction completed by Folspen amounted to $22,563,093, for a fee of $884,457.[49] To recapitulate the work done: Folspen had built five wharf berths at Khorramshahr and one fourth of a sixth berth. Twenty bridges, constituting 90 percent of projected bridge construction, were finished. The temporary highway between Khorramshahr and Andimeshk was ready except for bitumen surfacing. The permanent highway averaged less than 50 percent of completion. All buildings undertaken had been erected; and 186 barges assembled at Kuwait. With the termination of the Folspen contract, remaining construction was up to the Army.

[48] (1) Plan of Operation on Work under Direction of United States District Engineer, 31 Dec 42. DE File C–11.2, Correspondence on Directives, NADEF. (2) Ltr, Dir of Cons to CofS, PGSC, Basra, 31 Dec 42. 611 Roads, SL 9042.

[49] (1) Rpt cited n. 8(1). (2) Ltr, Contracting Off, NAD, to Folspen, 22 Apr 44, citing Final Estimate for Work Performed to Dec 31, 1942, and Rpts submitted to Div Engr, 27 Apr 43 and 10 May 43. SWP Office. (3) Rpt cited n. 2.

CHAPTER VII

Aircraft Assembly and Delivery

The British commitment to deliver supplies to the USSR through the Persian Corridor involved undertakings in three categories in which the United States participated. In construction and assembly, the United States aided as a British auxiliary in 1941 and 1942. From 1943 on, the United States, acting in logistic matters as a co-ordinate partner, added aid in transport to that previously rendered in the other two categories.

Early Plans

American aid to Great Britain in the assembly, storage, overhaul, and repair of United States aviation equipment sent to the Middle East was authorized by the President's Middle East Directive to the Secretary of War in September 1941, and implemented for the Iran-Iraq area by the Secretary of War's instructions in October to General Wheeler to establish and operate essential assembly facilities. The First (Moscow) Protocol of 1 October obligated the United States to make available to the Soviets large numbers of aircraft and posed the formidable question of their delivery. In November the Special Observer Group at London (General Chaney's mission) dispatched a representative to Russia to investigate routes over which American planes could be delivered. The Americans hoped at the time that aircraft could be flown via Alaska across Siberia to Soviet receiving points convenient to the battle areas in the USSR. After long delays they learned that the Russians, suspecting the Americans wished flight route information for strategic reasons, would refuse to approve any arrangement for delivery which involved flight by American pilots across Soviet territory. The Russians proposed that delivery be accomplished by ship to Archangel

and Murmansk, and at or outside the Soviet frontier in the Middle East.[1]

American aircraft were delivered to the USSR over three routes: by flight to Fairbanks, Alaska, where they were taken onward by Soviet pilots; by ship to Archangel and Murmansk, while those beleaguered ports were practicable for convoys; and by flight and ship to the Persian Gulf, the only all-year route. Of the 14,834 American aircraft made available to the Soviet Union under lend-lease, slightly less than one third, or 4,874, were delivered via the Persian Gulf, of which 995 were flown in and 3,879 were shipped.[2] Upon arrival these aircraft required refitting or assembly, as well as test flights. The variety of types and models, the complexity of aircraft construction, the need for skilled technical personnel, were special problems increasing the normal difficulties of the Russian-aid program in the Corridor.

The Douglas Aircraft Company had been selected in October 1941 to operate a British-aid air depot as contractor for the Air Corps within the framework of the North African Mission.[3] Project 19, as this operation was called, was located at Gura, Eritrea. In November General Maxwell took part in discussions of the American Aid Subcommittee at Cairo concerning possible American participation, through the Iranian Mission, in British aircraft assembly at Shu'aiba. In December General Wheeler, after inspection of sites in the Basra area and at Abadan, and with the concurrence of British and American air authorities, including a representative of Douglas, selected as the location of an American aircraft assembly plant the airfield three miles north of the Anglo-Iranian Oil Company refinery on Abadan Island.

Meanwhile, the Douglas Aircraft Company was authorized, by a War Department letter of intent dated 25 November 1941, to undertake the assembly task in the Persian Gulf. It was called Cedar Project, short for Civilian Emergency Defense Aid to Russia. The word *civilian* is a reminder that the United States was not yet a belligerent. A letter proposal by Douglas to the Matériel Division, Wright Field, Ohio, dated 1 December, specified that the contractor would undertake

[1] The Special Observer Group Prior to the Activation of the European Theater of Operations, October 1944, pp. 102–03, 105. Hist Sec, ETO. Study superseded by The Predecessor Commands: The Special Observers and United States Army Forces in the British Isles, by Warrant Officer (jg) Henry G. Elliott, Part I of The Administrative and Logistical History of the European Theater of Operations.

[2] The total given is that of the U.S. proposal to the USSR for settlement of the lend-lease account in 1947. See *The New York Times,* April 15, 1947. An earlier figure of 14,018 aircraft delivered by all routes between 22 June 1941 and 20 September 1945 is in Report on War Aid Furnished by the United States to the USSR, Foreign Economic Sec, Office of Foreign Liquidation, Dept State, 28 Nov 45, p. 18. See Tables 10, 11, and Chart 3.

[3] Lt Col Elmer E. Adler, Advance Air Force Plan for the North African Mission, 13 Oct 41. 319.1, ASF NCF.

Cedar Project, then planned for Basra, and would construct all buildings, hangars, power supply, improvements to real property, airfields, transmission lines, telephone, radio, water and sewage systems, storage warehouses, living quarters, mess halls, miscellaneous subsistence facilities and hospital, "and all other items incident to said depot," and that the contractor would supply equipment and spare parts and would operate and maintain the depot.[4] The Douglas proposal was followed on 20 December by a supplementary letter of intent increasing from two to five million dollars the amount allowable for preparatory expenses. The contract, signed 3 January 1942 and approved by the Under Secretary of War on 6 January, stipulated an estimated cost for Cedar Project of $7,259,548.08 and a fixed fee of $435,572.88. This Air Corps contract for "construction and operation of depot at or near Basra, Iraq, Asia," was to run until 30 June 1942. It was twice extended by change orders, first to 31 December 1942, later to 17 November 1943.[5]

Although the contract as signed omitted from the contractor's duties the construction of airfields listed in the letter proposal, its other provisions respecting construction are noteworthy as overlapping both the general Anglo-American arrangements for construction of Iranian Mission installations by the British and the responsibilities in construction assigned the Iranian District engineer. In its operational provisions the contract clearly stipulated that Douglas "shall organize, equip and operate" the depot, and exercise "exclusive direction and control" over all contractor civilian employees. The administrative status of Cedar Project with relation to the Iranian Mission and the Air Corps was from the start ambiguous. As described by Colonel Shingler in April 1942, the Iranian Mission acted in an administrative capacity, but technical supervision of operations "is exercised by the U.S. Army Air Corps through the Air Section" of the North African Mission at Cairo, whose air officer acted for the Iranian Mission.[6] There was no representative of the Air Corps contracting officer in Iran until May. The effect of the contract as planned before Pearl Harbor, but necessarily carried out under war conditions, was to place a civilian organization

[4] Letter Proposal, 1 Dec 41. Drawer 69, Prime Contract No. 1, Project 19, Douglas Files (Foreign Projects File, Storage Files, Douglas Aircraft Company, Santa Monica, Calif.).

[5] (1) Draft of Minutes, Board of Directors, concerning Project 19 and Cedar. Drawer 69, Board of Directors—Minutes. Douglas Files. (2) Harold Courlander, Paul L. Hoefler, and others, History of Project 19, Abadan Ch., pp. 65–87. Drawer 101, Douglas Files. (3) With the second extension of the Cedar contract to 17 November 1943, costs for 1943 were estimated at $1,946,160. Drawer 69, Prime Contract No. 1, Project 19, Douglas Files. (4) Contract DA–W–535–ac–870. Same file.

[6] Col Shingler, Rpt to American Aid Subcommittee, Cairo, sub: Status of Projects as of April 30, 1942. 334.8 American Aid Subcommittee, SL 9011.

in almost complete authority over its operations, including selection, hiring, and training of personnel; procurement of equipment, tools, and parts; the operation of aircraft assembly and disassembly; and maintenance, overhaul, and repair of aircraft, engines, propellers, and instruments. The contract stipulated that the Persian Gulf plant ought to handle each month 100 twin-engine light attack bombers (A–20's), 100 single-engine pursuit fighters (P–40's), and 12 twin-engine medium bombers (B–25's), subject to certain contingent circumstances named in Clause I(b)(4). This target, as the story will show, was not achieved. Inasmuch as the contract stipulated that American personnel would work at the site of the Persian Gulf plant, Douglas obtained a modification to allow as costs under the contract work performed by its employees away from this plant. During the life of the contract there was considerable fluidity in the assignment of Douglas employees to projects in Eritrea, Egypt, Iraq, and Iran.[7]

The Battle of the Backlog

A long road stretched between planning and expectations, as expressed in the contract, and performance. From the outset more planes arrived than could be processed. Throughout the history of plane assembly, both in the contractor period and in the period of Army operation after cancellation of the Douglas contract in March 1943, the battle of the backlog was fought against a variety of odds. The flow of planes to the Persian Gulf under the Moscow Protocol began with a first shipment from New York of four Boston light twin-engine bombers (A–20's) on 28 November 1941. When these reached Basra on 23 January 1942, one American Air Corps lieutenant and eight Douglas mechanics were there to supervise their erection.[8] This was an advance force, not the start of assembly operations under Douglas management. The first Boston bomber was delivered to the Soviets in February. During March only 5 additional craft were delivered, and an accumulated backlog of 33 planes warned that the flow was greater than the ability to take care of it. Yet at that time, the first shipload of Douglas materials was only just leaving New York. Not until early May was it offloaded at Abadan, to be followed on 17 May by the arrival of 356 Douglas employees, 122 of them transferred from Project 19 at Gura.

[7] Ltr, Chief, Contract Sec, Matériel Center, OofCG, Army Air Forces, 27 Jun 42. Tollefson's file, Douglas Files.

[8] (1) Unless otherwise noted, dates and figures are from PGC Historical Charts. PGF. (2) Aircraft Assembly Chronology. PGF 245. (3) Backlog figures from tables compiled by Hist Br, OTI, Hq, PGC. PGF 245. (4) History cited n. 5(2).

These, along with 9 Air Corps officers and 42 enlisted men, commenced aircraft assembly at Abadan under the Douglas contract on 20 May. Although 120 planes were delivered to the USSR by 31 May, the backlog had reached nearly 200.

Before the start in May of Douglas operations at Abadan, the Royal Air Force (RAF) undertook to assemble planes for the USSR until Douglas could take over. This agreement, reached on 22 December 1941, went beyond the earlier Anglo-American arrangements respecting establishment of an American plant at Abadan, under which the RAF was to erect planes for British use at Shu'aiba and elsewhere in the Basra area, reserving Abadan for Russian-aid assembly.[9] In an effort to cope with the backlog problem, the British, under the supervision of the American advance force, began on 2 February to modify the first Boston bombers, originally designed to RAF specifications, to make them suitable for delivery to the Russians. The alterations were chiefly in radio and armament. British willingness to surrender to the Soviets planes consigned to them was reciprocated later in the year when, because of the critical need for aircraft in the desert fighting west of Cairo, 40 A–20's consigned to the USSR were released on 11 July and flown to Egypt. It was during the interim period early in 1942 that Soviet complaints about the quality of assembly at Shu'aiba were referred to General Greely's mission for adjustment.[10]

Under the Abadan agreement the British were to provide local labor, utilities and land, and necessary housing and shedding; while the Americans would furnish tools, accessories and equipment for assembly, the planes to be assembled, and the skilled personnel for the operation, including instruction in flying and servicing the American machines. Construction, begun on 30 December 1941, was sufficiently advanced by early April to enable the RAF to begin limited assembly operations on Russian-aid planes at Abadan. The fifty RAF mechanics assigned on 8 April from the Basra area were soon increased to two hundred.[11]

Back in the Basra area the RAF assembled planes for both British

[9] (1) Rad, Air Ministry, Whitehall, from Air Vice Marshal Sir Arthur W. Tedder, to RAF, ME, 10 Dec 41. Chronology cited n. 8(2); another copy PGF 2. (2) First Progress Rpt, by Lt Col Robert C. Oliver, Actg Chief, Air Sec, U.S. Mil North African Mission, 11 Jan 42. NA 319.1 Progress Reports, Cairo (11–27–41), ASF NCF. (3) Memo, Hq, U.S. Mil Mission, Baghdad, 17 Jan 42, sub: Projects. PGF 125. (4) Rad AMSIR 10, to Gen Wheeler, 21 Jan 42, on agreement at Washington between Gens Sidney Spalding and Moore and British RAF representatives. MID 400.3295 1–21–42 (1–6–42).

[10] (1) Ltr, Capt A. B. Swank, Contl Div, Hq, PGSC, to CofS, PGSC, 18 Apr 43, sub: Status of Aircraft Deliveries at Abadan, PGF 2. (2) Ch. IV, p. 75, above.

[11] Memo, Hq, British Forces in Iraq, 27 Jan 42. AG 323.61, Hq PGC.

and Soviet account. The first twin-engine Mitchell medium bombers (B–25's) reached Basra on 12 March and nine days later, because Basra was considered unsuitable to process them, Shu'aiba became the B–25 receiving point. Russian-bound planes arriving by sea were off-loaded at Margil. Some were trucked overland to Shu'aiba for assembly; others were assembled at Basra and Margil and flown to Shu'aiba for further processing, final inspection, and check. American plans made before Pearl Harbor had contemplated the delivery, by American pilots flying to the Soviet border, of planes assembled in the Persian Gulf area; but after Pearl Harbor the shortage of available American pilots led to agreement by the Russians to take delivery themselves, first at Shu'aiba, and, after Abadan got into operation, at Abadan. It had also been contemplated that certain American planes could be flown direct to Tehran from the United States or from intermediate assembly points outside Iran. For a period later in the spring this plan was accomplished; but at the beginning planes arriving by air were delivered in the Basra area.

The processing of B–25's constituted a special problem. After the first delivery accomplished in the Basra area on 17 April 1942, it was decided on 24 May to remove B–25 assembly from Shu'aiba to Tehran, where on 12 January the British had rented an aircraft factory for the use of the Iranian Mission. The B–25's could fly direct to Tehran from Habbaniya without touching at Persian Gulf bases. To prepare them for delivery, thirty-two of the newly arrived Douglas technicians were loaned to Tehran from Cedar Project along with fourteen Air Corps personnel. On 31 July, upon completion of their work on the B–25's provided under the First (Moscow) Protocol, this small force of Americans returned to Abadan but went back to Tehran on 1 September to take care of B–25's arriving under the Second (Washington) Protocol. The Tehran plant was outstanding for its smooth operation and lack of friction with Soviet inspectors. Much credit is due to its commanding officer, Capt. John Allison, who later became a combat commander and Assistant Secretary of Commerce for Air. Colonel Shingler met Allison while the latter was on leave at Tehran after a period of service in the USSR as a technical expert in processing P–40's that arrived through north Russian ports. Impressed by Allison's knowledge of Russian and the Russian people, Shingler obtained his transfer to direct the work at the Tehran check point. On 15 September, in compliance with a Soviet request transmitted by Col. Leonid I. Zorin, the B–25 project was removed to Abadan, thus marking the final step in a process of

concentrating American aircraft assembly for the USSR at the Abadan depot.[12]

This process was first undertaken to relieve the pressure on the British plant at Shu'aiba and was accelerated both by the establishment of the Douglas organization at Abadan and by British agreement in midsummer to permit the assignment of Soviet mechanics to that plant. By 26 June congestion at Shu'aiba brought about the removal from Shu'aiba to Abadan of the final assembly operation hitherto done by the RAF. The small American group remaining at Shu'aiba followed on 4 September.

At Abadan the backlog was a pressing problem to be solved only by a sufficiency of mechanics. Colonel Shingler, now commanding officer of the Iran–Iraq Service Command, responsible to General Maxwell, commanding officer of USAFIME, reported to Cairo on 22 July 1942 that he had for some time fruitlessly urged Maj. Gen. G. de la P. Beresford, commanding general of the British Basra Line of Communications Area, to permit the transfer from Shu'aiba to Abadan of Soviet mechanics. Some 30 of them were sent to Shu'aiba on 26 May and their number had increased to 148 by midsummer. The British Foreign Office had allowed only 10 Russian technicians at Abadan, notwithstanding an absence of objection to the presence of Russians in that strategic location on the part of the AIOC, and the "apparent" approval of the British Air Ministry. Colonel Shingler stated, "Cannot continue as in past to cover up British reluctance to Soviet at Abadan. . . . Soviet after exclusion from our Abadan project is sending complaint from Moscow and Washington, D. C., while the same matters are probably being investigated by Faymonville while en route to Tehran." [13]

Although the British had officially abandoned in January 1942 an earlier policy to prohibit flight of Soviet aircraft over the British zone, the underlying caution behind that policy survived in the continuing British objection to the presence of Soviet mechanics at Abadan.[14]

General Maxwell promptly took the matter up with the Royal Air

[12] (1) Memoranda exchanged between Harry Hopkins and General Burns on 3 June 1942 in the course of the discussions with Molotov which preceded agreement on the Second (Washington) Protocol, indicate that Molotov was told the United States would fly 12 B–25 bombers monthly across Africa for delivery at Basra or Tehran, and would ship 100 A–20's to the Persian Gulf monthly for assembly there. Sherwood, *Roosevelt and Hopkins,* pp. 575–76. (2) Notes supplied the author by General Shingler, 16 May 1950.

[13] (1) Rad, Col Shingler to Gen Maxwell, 22 Jul 42. AG 600.12 Abadan, Hq AMET. (2) Attached papers, same file, for material in following paragraph.

[14] Rad 7, signed Walter Thurston, Kuybyshev, citing Faymonville, to State Dept, 3 Jan 42. 635 Airplane Assembly Bases (Aircraft for Russia), ASF NCF.

Force and the Middle East Forces in Cairo. While he was doing this, General Adler, whose Air Service Command, U.S. Army Middle East Air Force, Cairo, shared responsibility for Abadan operations, had cabled Lt. Gen. Henry H. Arnold in Washington. By the time General Arnold called upon General Maxwell for information, Maxwell was able to report the removal of British objections. The Soviet mechanics began arriving at Abadan on 22 August and by 8 September all 148 of them were there to help attack the backlog. Thus by mid-September the interim period of British help was over and plane assembly for Russia was concentrated at Abadan under American responsibility.

Meanwhile, the months immediately preceding the arrival of the main body of Douglas operatives in May 1942 had been marked by much confusion and delay in delivering planes to the Soviet Union. On 2 April General Wheeler had sent General Somervell a statement of difficulties. The inexperience of the RAF in the assembly of American machines, the necessity of familiarizing Russian pilots with them, and delays arising from changing the Bostons from British to Soviet specifications bulked large in the list.[15]

Prominent also was the insistence of the Soviets that planes be without flaw. Russian fastidiousness in inspection and Russian complaints brought, on 16 May, a detailed explanation to the Soviets by General Faymonville, head of lend-lease at Moscow, that in the opinion of Iranian Mission officers plane delivery was being impeded because of unnecessary objection on the part of Soviet officials. Matters were ironed out after the visit of Russian officers to Basra and adoption of more reasonable demands by Col. Ivan I. Obrazkov, chief of the Russian Air Force personnel in Iran.[16] In this connection it must be recalled that, under agreement, lend-lease goods became Soviet property at the point of departure from the United States.[17] Furthermore, as the commanding officer of Cedar Project reported in August to General Maxwell, hundreds of the first planes sent from the United States were old machines recognized by pilots as having been ferried by them earlier in the United States. Some had been used there for pilot training and had been repeatedly overhauled. They arrived without logbooks or spare parts. They were reconditioned upon arrival in the Persian Gulf and 339 out of 360 such craft were accepted by the Russians.[18]

[15] Rad, Gen Wheeler to Gen Somervell, 2 Apr 42. 323.61 Establishment of Military Districts, Binder 1, SL 9008.

[16] HOTI, Pt. I, Chs. 1–5, Administration, by George B. Zeigler and (Ch. 5 only) Wallace P. Rusterholtz, with Annex by Victor H. Pentlarge, Jr., pp. 21–22. PGF.

[17] Ch. I, p. 25 and n. 39, above.

[18] Rpt, Col Charles P. Porter to Gen Maxwell; and min of mtg in Gen Maxwell's office, Cairo, 22 and 25 Aug. 42. AG 600.12 Abadan, Hq AMET.

The most serious early handicap, in the opinion of General Wheeler, was "the lack of a senior air officer of field grade who is an expert in technical details and capable of co-ordinating airplane matters." [19] At the beginning, although his staff included two railway consultants and a pipeline consultant, there was no air officer, nor, in spite of Wheeler's appeal, was one assigned. Not until 25 May did Maj. Charles P. Porter, appointed earlier that month, arrive at Abadan to become commanding officer of Cedar Project.

Being under Air Corps contract, the Douglas-operated Cedar Project and Air Corps personnel connected with it found themselves involved in several chains of command. Functioning physically within the area of the Iranian Mission they fell administratively under its jurisdiction. But inasmuch as the Iranian Mission possessed no air officer and as air command for the Middle East was centered in Cairo at the seat of the North African Mission, they fell technically under the jurisdiction of the Air Section of that mission. Moreover, being engaged in highest priority Russian-aid work under lend-lease, they came logically within the purview not only of the Iranian Mission but (until its dissolution) of General Greely's mission to the USSR. Finally, as a further complication, the contractor, lacking for many months a representative on the spot as Air Corps contracting officer, was entitled, as was the Air Corps commanding officer of Cedar after his arrival in the field, to communicate directly with Air Corps officials in the United States.

The resultant confusion inevitably affected problems of supply, operation, continuity of policy, and relations with the British and Russians. As General Adler, chief of General Maxwell's Air Section, remarked in a message to General Arnold, instead of the original plan whereby Cedar was to be administratively under the Iranian Mission and technically under the Air Section of the North African Mission, the project found itself by mid-April 1942 embarrassed by a plethora of advisers, since the Maxwell, Wheeler, and Greely missions "are all involved in attempt to manage the project and to co-ordinate matters with the British and Russians." [20] This was, of course, the situation even before the arrival of the main Douglas contingent in May created daily problems in command responsibility; while on the other hand, the situation was somewhat eased by the abandonment of the Greely mission some two weeks after the Adler message.

The undefined boundary between administrative and technical responsibility created a no man's land of multiple command responsibility

[19] Rad cited n. 15.
[20] Rad 860, Gen Adler to Gen Arnold, 19 Apr 42. Russian Mission File, AME Theater Office, OPD.

which was to plague the project throughout its existence. At the start, as reported by General Maxwell's Air Section in early January 1942, "The Air Section has established excellent relations with Headquarters, RAF, Middle East and Air Headquarters, Egypt, the Chief of the Air Section having clearly established in their minds that he acts as the representative in this area of the Chief of the Army Air Forces, as well as the Air Officer on the Staff of the U.S. Military North African Mission." Soon afterward, in a letter to the vice president of the Douglas Aircraft Company, even more sweeping responsibility was claimed for the Air Section, when General Adler wrote that it was "charged with the administration of all air matters in the Middle East, including the Gura and Abadan projects." Yet the chief of the Air Corps, in a directive defining the authority of the Air Corps representative at Cedar over Douglas, appeared to overlook Maxwell's Air Section while stressing the primary responsibility of the Iranian Mission. The Air Corps representative, ran the directive, exercises jurisdiction over the contractor "under instructions from the Headquarters of the Iranian Mission, in the same manner as the district supervisor or factory inspector exercises jurisdiction over a contractor's plant in the United States." Matters were further clarified by General Maxwell's declaration in July to General Adler, formerly his air officer, and now, upon the organization of USAFIME, with its new authority over the Iran-Iraq Service Command, commanding general of the Middle East Air Service Command. With the single exception of aid from General Adler in technical matters, said Maxwell, he, as commanding general of USAFIME, was responsible for both the Douglas projects at Abadan and Gura.[21]

Although construction responsibility at Abadan was divided between the British Army and the Douglas Aircraft Company, with the Iranian District engineer helping out, necessary building was achieved with a minimum of confusion. The first Douglas ship, which arrived in May 1942, brought to Abadan 2 hangars, 14 warehouses, 120 Quonset huts, and 10 Dimaxion circular huts—all prefabricated and ready for quick erection at the site. Upon their arrival at Abadan the Douglas personnel found among the installations there—some of them recently erected by the British—3 hangars, 8 brick office and shop buildings, 36 India huts for living quarters, and 3 all-weather paved runways, one 5,500 feet long which was later extended by the AIOC to 6,500 feet.[22]

[21] (1) Rpt cited n. 9(2). (2) Ltr, Gen Adler to Carl Cover, 9 Feb 42. Drawer 69, Cairo Office, Douglas Files. (3) Directive, Chief, U.S. Army Air Corps, to CO, Cedar Project, 13 Feb 42. Drawer 69, Prime Contract No. 1, Project 19, Douglas Files. (4) Min Stf Mtg at Cairo, 14 Jul 42. AG 334.8, Hq AMET.

[22] Hist Rpt, Abadan Air Base, for Nov 41 through Nov 43, 1 Jul 44, pp. 7–8. PGF 2–K.

With their own equipment and locally secured materials, the Douglas people erected warehouses, a hospital, garage, shops, and living quarters; using bitumen from the AIOC plant on the island, they also laid hard-surface aprons in front of Hangars 1 and 2.

While construction proceeded, the personnel fluctuated both as to numbers and component elements of the staff. Unlike the engineer constructor, who worked under a small military staff, the Air Corps contractor had a considerable military staff to deal with at the start, and one which grew, proportionately, faster than did the numbers of civilians. By mid-August 1942, when Colonel Porter reported to General Maxwell in Cairo, there were 65 officers and men of the Air Corps assigned to Cedar and 354 Douglas civilians, of whom about a hundred, borrowed from Project 19, would soon return to Gura. Some 600 natives, principally employed upon construction work, plus the first arriving Soviet mechanics and the RAF men sent over from Basra and Shu'aiba completed the Cedar staff. As the construction program gradually attained its objective the number of natives diminished. The total number of Douglas men at Abadan tended to remain in the neighborhood of 200, although the number borrowed from Gura during 1943 varied from a low of 41 to a high of 199 in May. At mid-March 1943 there were 436 Air Corps officers and men assigned to the project, with 193 Douglas civilians, 165 Russians, and 54 native workmen.[23]

The relatively large numbers of military personnel, coupled with the contractual stipulation giving the Douglas Company full authority over its own civilian employees, led to considerable conflict as to local responsibility for the operation of the plant. On 10 June 1942 Colonel Porter, claiming that the Douglas management had failed to control its employees, placed them under military regulation. In an appeal to the men made also on that date, Colonel Shingler, chief of the Iranian Mission, reminded them that their work was as essential to the war effort as actual combat. In August Colonel Porter was able to report that, although internal quarrels among the local Douglas managerial staff had adversely affected morale and work for a time, the civilian staff was working well. But on 3 November he found it necessary to dismiss the Douglas project manager and one other for what he termed inefficient leadership, and for permitting feuds, absenteeism, inefficiency, and the violation of military regulations imposed through Colonel Porter by the PGSC or the British Tenth Army. At the same time Porter praised the work of the Douglas employees and, taking note

[23] (1) Rpt cited n. 18. (2) History cited n. 5(2). (3) Rpt, Plant Opns Office, Basra Dist, PGSC, 20 Mar 43. PGF 125–G.

that their contracts were soon to expire, hoped that they would see fit to renew and stay on at the base.[24]

Personnel, ambiguities in the chain of command, overlapping construction responsibilities—these were some of the factors affecting production of assembled aircraft ready to be flown away to Soviet battlefields. Although in any event production was dependent upon the number of skilled mechanics available, the highly variable rate of arrival of craft to be processed must be taken into consideration in any assessment of the efficiency of operations. For example, in one week in March 1943—the last month of Douglas management—90 aircraft arrived in the Persian Gulf, while only 18 were accepted by the Russians: 14 A–20's and 4 P–40's. In the following week only 14 aircraft arrived, and only 8 were accepted: 2 A–20's, 1 B–25, and 5 P–40's. The net total of unassembled (backlog) aircraft, under such circumstances, becomes quite meaningless as a measure of systematic operations.

Because aircraft of the same make and model differ in some small detail from each other, and since planes cannot be stamped out with a die like a piepan, assembly of any two planes of the same make and model cannot be standardized down to the last split second of time-study measurement. When a single assembly plant, moreover, handles a variety of models and makes and does not know from one day to the next which to prepare for, no standard routine can be established that can turn out work with the mechanical regularity of a doughnut machine in a shop window. The first P–40's (single-engine Kittyhawk pursuit planes) reached the Persian Gulf by ship on 15 November 1942. These were latecomers to Abadan, having been preceded since late 1941 by large numbers of Boston bombers (A–20's). The first Bell Airacobra fighter (P–39) arrived at Abadan by sea on 8 December and, though a new type at the plant, was finished and flown out on 13 December, to be followed the next year by over a thousand more.[25]

Because of the foregoing factors, the battle of the backlog was an uneven contest with the odds too often stacked against the human factor. At the end of the first month of Douglas operation—May 1942—nearly 200 aircraft were awaiting assembly. By the end of June this number had fallen to a little over 100, as against total deliveries that month of 128 craft. During the next few months, the backlog

[24] (1) Page 11 of Rpt cited n. 22. (2) Rpt cited n. 18. (3) History cited n. 5(2), pp. 76ff. The dismissals were concurred in by General Connolly and the air officer of USAFIME. Walter Beck, chief Douglas representative for the Middle East, considered them a question of personalities, with trivial aspects. The dismissed manager was Norman H. Millstead.

[25] Table 11.

averaged less than 25 unassembled machines, but rose again at year's end to about 75. By this time a total of 742 aircraft had been delivered to the Russians.[26] In February 1943, as greater quantities of crated planes were received, the backlog rose rapidly, reaching about 170 by the end of the month, and rising to 200 during March as against only 114 deliveries in that month. This was the state of affairs as the Douglas contract came to an end.

Militarization

It was ordained by the Washington directive of February 1942 that overseas contract activities should be militarized as soon as practicable. As the personnel figures have indicated, the Air Corps was able to throw military personnel into the Abadan project relatively faster than its contractor could supply civilians, with the result that Cedar Project, in a sense, automatically militarized itself. But so long as the Douglas contract was in force the preponderance of military over civilian personnel remained, from the point of view of control and management, an anomaly. The Douglas Aircraft Company, therefore, became the third civilian contractor to be dispensed with. The first Douglas contract, expiring in June 1942, had been renewed until the end of the year. On 15 November General Maxwell, as Commanding General, SOS, USAFIME, recommended that it be renewed only through 31 March 1943 and that two air depot repair squadrons and a headquarters and headquarters squadron of an air base group be assigned to reduce the backlog. On 17 November Air Corps officials in the United States renewed the contract for one year from that date instead of the period recommended by Maxwell; but at a meeting in Cairo on 14 January 1943, Lt. Gen. Frank M. Andrews, Commanding General, USAFIME, decided that sufficient military personnel were available to militarize Cedar Project as soon as possible. A few days later it was informally communicated to Bert N. Snow, Douglas representative at Abadan, that militarization would be accomplished by 1 April.[27]

At the end of 1942, while the change to militarization was merely a rumor among the men at Abadan, only 30 percent of them had ex-

[26] Table 10. This figure includes craft assembled by the RAF with American supervision and all craft delivered before the commencement of Douglas management and operation. The Douglas officials estimated 600 deliveries by their organization through 31 January 1943. Ltr, Bert N. Snow to Douglas Aircraft Company, 31 Jan 43. Drawer 211, Status Reports—Project 19 and Combined, Douglas Files.

[27] (1) Ltr cited n. 26. (2) Ltr, Maintenance Div, Hq, Air Serv Comd, Patterson Field, Ohio, to Douglas Aircraft Company, 23 Jan 43, transmitting rad from Bert Snow. Drawer 211, Status Reports—Project 19 and Combined, Douglas Files.

pressed a desire to renew their individual contracts into the new year. After the new situation was clarified, 87 percent of the available Douglas mechanics at Cedar Project signed on, to 31 March 1943, while Colonel Porter agreed with the Douglas representative that during that final contract period Air Corps officers would transmit orders only through the Douglas civilian superintendents.[28] In January 1943 the 82d Air Depot Group arrived at Abadan for a period of orientation before taking over from Douglas in April.

Notice of termination of the Douglas Cedar contract was given by Colonel Porter to Jack A. Ahern, the new Douglas manager, and Bert Snow, Douglas representative, under date of 2 March 1943. The notice stated that on or about 31 March the company would cease construction, the hiring, selecting, and training of personnel, and the procurement, warehousing, and all other work on aircraft, so that after that date "the Contractor shall have no further affirmative duty to perform" save evacuation of the site and return of his personnel to the United States.[29] On the same date Maj. Gen. Lewis H. Brereton, now commanding general of USAFIME, ratified General Andrews' previous decision to terminate the contract, and forwarded Colonel Porter a tentative draft of a comprehensive release of the Douglas Company which had been prepared by George Lupton, that company's legal counsel. The letter of termination declared:

> The Government hereby states that this notice is not being given because of the fact that the Contractor at any time has refused, neglected, or failed to prosecute the work required [but because] conditions have arisen in connection with the direction and prosecution of the current war . . . that [require that] work under the contract be discontinued.

Colonel Porter, having discharged an earlier Douglas project manager, gagged a bit at signing the release sent him ready-made from Cairo; but after a trip there and conferences at headquarters, he signed on 26 April a modified Release, Receipt, and Certificate of Performance in eight Whereases, one Now Therefore, and twenty-four Clauses. This document stated that all procurement was wise and prudent, all wage scales proper, all waste necessary, and all work of whatsoever nature performed at the command of, and by the specific authority of, the contracting officer under circumstances as healthful and free of hazard "as has been possible under the existing conditions"; and that not only did the contractor comply, clause by clause, with his contract, but that

[28] Ltr cited n. 26.
[29] History cited n. 5(2).

at all times his operations, books, and records were open and known in minute detail to Colonel Porter.[30]

Up to 1 April 1943, when the Air Corps took over management and operation of Cedar Project at Abadan, 1,025 aircraft were delivered to the USSR in the Persian Corridor, or an average of about 75 a month. Of these, 197 A–20's and 111 B–25's were flown in to the area, leaving 717 craft which were assembled after arrival by sea. The cost of the work performed under the Douglas contract was $3,795,735, about half the original estimate; but it must be realized that the target contemplated by the contract was not achieved. The fee to the Douglas Aircraft Company was $435,572, as originally estimated.[31]

[30] (1) *Ibid.* (2) Memo, Snow for Cover, 5 Mar 43. (3) Ltr, Snow to Cover, 28 Apr 43. With copies of documents cited, in Drawer 211, Status Reports—Project 19 and Combined, Douglas Files.

[31] (1) Table 10. Breakdown from source given in table. (2) Cost figures from Ltr, L. E. Tollefson, Contract Administrator, Douglas Aircraft Company, to author, 16 Jan 47.

CHAPTER VIII

Motor Vehicle Assembly and Delivery

In the manufacture of motor vehicles American methods of mass production have achieved quantitative results unequaled by any other industrial power. This industrial potential, a valuable asset in mechanized warfare, the United States shared with its Allies through lend-lease. To the Soviet Union through 20 September 1945 went 409,526 lend-lease trucks of United States origin. Some idea of the extent to which the United States shared its output with the USSR may be gained from figures of its production of military trucks during the war years. Total output during the peak year of 1943 was 648,404 military trucks. The trucks sent to Russia were thus the equivalent of seven and a half months of United States output at the highest annual rate achieved during the war years. It has been estimated that the lend-lease trucks received by the USSR from the United States represented two years and seven months of the prewar capacity of the less highly developed Soviet motor industry. American trucks therefore bulked large as an addition to Russian production capacity. Nearly 45 percent of these American trucks reached the USSR via the Persian Corridor. Of these, 88 percent were assembled in the American-operated plants at Andimeshk and Khorramshahr from March 1942 through April 1945.[1]

Though the Russians were the chief beneficiaries of the motor vehicle assembly program in the Persian Corridor, assemblies were also performed for the British Army, for the United Kingdom Commercial Corporation, for the American Army, and for the Iranian

[1] (1) Report on War Aid Furnished by the United States to the USSR, Foreign Economic Sec, Office of Foreign Liquidation, Dept State, 28 Nov 45, p. 19. (2) Official Munitions Production of the United States by Months, July 1, 1940–August 31, 1945 (Special Release, May 1, 1947), Civilian Production Administration (formerly War Production Board), p. 233. (3) Military Intelligence Division, *Review of Europe, Russia and the Middle East*, I (2 Jan 46), No. 10, estimates 370,000 trucks as equivalent to twenty-eight months of prewar Soviet production. (4) Table 7 and Charts 4, 5.

Government; nor were the American truck assembly plants (TAP's) the only ones in the region. Truck assembly was an important British activity which, by the Middle East Directive of September 1941, the Americans undertook to share.

Certain terms used in this chapter require explanation. After manufacture the vehicles were partly disassembled and crated for overseas shipment according to several patterns. The designation TUP covers several types of packing called two-unit, double-unit, or twin-unit packs, comprising two chassis and one cab or two cabs and one chassis. The so-called Beta Pack, a form designed by the British, included one complete vehicle with or without body packed in one, two, or more cases and required variations in the assembly process after unpacking. Properly this term is applicable only to British-specified vehicles, but the Americans seem to have employed it loosely and interchangeably to designate packed knocked-down vehicles in general, as well as the assembly apparatus used to put them together again after uncrating. The term *Beta Pack* is even applied sometimes in the records to the lumber used in the crates. The term *motor vehicle* includes trucks, trailers, jeeps, and weapons carriers. The generic term *truck* is employed in this text for the output of the TAP's.

In 1938, after Munich, the Overseas Division of General Motors Corporation had foreseen the need for locating emergency vehicle assembly plants at strategic sites. Foreseeing also the likelihood that the closing of the Mediterranean to shipping would heighten the importance of the Persian Gulf, General Motors at that time submitted to the British War Office a recommendation to establish emergency assembly plants at or near Basra. After the invasion of Poland a year later, the company designed an emergency TUP assembly unit with a bolted structural framework on a poured concrete floor, to be housed under canvas or other temporary shelter. Equipped with cranes, tractors, trailers, and battery chargers, this plant would have a capacity of fifty trucks per each eight-hour shift. A single such plant could therefore turn out 1,300 trucks in a month of twenty-six working days on a one-shift basis. The significant saving of shipping space by overseas assembly of cased knocked-down vehicles recommended the assembly plant idea, and in May of 1941 the British Purchasing Commission bought four of these plants for shipment to the Middle East. It was thus through the arrangements made between General Motors and the British, and through the availability of trained General Motors personnel in India, that the company was selected to carry out the truck

assembly operations undertaken by the Americans for the British in the Persian Gulf area.[2]

Plans and Plants

After some negotiation a letter of intent was issued by the Office of the Quartermaster General on 5 January 1942 under which the company operated while details of a contract were worked out. Later, the unsigned contract with The Quartermaster General was transferred to the Office of the Chief of Ordnance in a general shift of War Department responsibilities. The Ordnance-General Motors contract, signed 29 December 1942, was effective as of the date of the letter of intent, which was modified during the year by twelve supplements, the latest, of 30 December 1942, extending the General Motors contract to 30 June 1943.[3]

The work which General Motors, as a civilian contractor under the jurisdiction of the Iranian Mission, was to do fell within the authority given General Wheeler in his Letter of Instructions to render aid, through assembly operations, to British, Russian, and other friendly forces in his area. By early 1942 the British were already operating an assembly plant at Rafadiyah for their own military services. The Iranian District engineer furnished some technical advice and assistance at this plant and, when the American construction projects in Iraq were abandoned, this technical aid to truck assembly continued at Rafadiyah. A second British assembly plant, at Bushire, was busied chiefly in assembling American lend-lease vehicles from India assigned to the UKCC to enable it to carry out its motor transport mission.[4] Both plants were capable of assembling vehicles for Soviet account as well as their own when need arose; but together they were inadequate

[2] Unless otherwise noted, statements concerning General Motors operations are based upon: (1) Chart, Truck Assembly in Iran, seen at head office, General Motors Overseas Corporation (GMOC), New York. (2) General Motors Overseas Operations, *The War Effort of the Overseas Division* (1944). (3) Statistical Tables, Exhibits "A" and "C," filed at head office, GMOC, giving production figures for Andimeshk, 1942 and 1943, and Khorramshahr, 1943. (4) Intervs with A. S. Clark, General Staff, Foreign Affairs, and Henry M. Halsted, Jr., Regional Dir, Far East, GMOC, 25 Oct 44; and with L. C. Meyer, Head of Boxing and Inspection Dept, GMOC, 28 Nov 47. (5) Pamphlet, Packing Slip Summary: Equipment for TUP Mobile Assembly Unit, prepared by General Motors Overseas Operations. (6) Pamphlet, Methods of Packing . . . for Overseas Operations, prepared by General Motors Overseas Operations and submitted to QMG, 5 Feb 42. (7) File, General Motors: Confidential Correspondence, Miscellaneous General Motors Quartermaster Contracts, NYODF. (8) Ltr, Bruce Harmon to author, 6 Jan 50.

[3] (1) The contract was DA-W-398-QM-250, which became W-613-ORD-2930, for a fixed fee of $2,500 per month. 160 Genl Motors Overseas Corp Contract, SL 8982. (2) General shift authorized by WD Cir 245, 25 Jul 42. (3) Report on Overseas Assembly Plants, by Minna Grossman, 25 Jul 45. Hist Sec, OCofOrd.

[4] Request for American vehicles for UKCC submitted to Gen Wheeler by CinC, India, 23 Oct 41. Iran 5/13, NADEF.

to carry the expanded load of vehicles called for by the First (Moscow) Protocol. In addition to assembly operations, the British moved completed trucks, with and without cargo, in early 1942, over three highway routes to the Soviet delivery point at Tabriz.

When Generals Wavell and Wheeler discussed American aid projects at New Delhi in November 1941, they agreed on establishment of American truck assembly plants at Karachi and at the head of the Persian Gulf, but they did not agree on the allocation of assembled vehicles as between the British and the Russians or upon the routes over which assembled trucks would be delivered. The extent of the American task and the sites of its plants required further exploration. Wheeler submitted two proposals to the War Department: that a small TUP plant be installed somewhere in the Persian Gulf area, and that a plant big enough to serve the entire Middle East be installed at Karachi. It was at this time that large ordnance plans for Karachi were being hatched. The War Department, which had earlier hesitated to accept a British suggestion to create large American installations in India, forthwith made the counterproposal that it would be more efficient to enlarge the existent General Motors plant at Bombay, capable already of delivering 4,000 vehicles a month, and that a Beta Pack assembly plant now en route for Karachi could then be diverted to Basra. General Wheeler, however, adhered to his recommendation of Karachi, because of the advantages of shortened communications, port facilities, elimination of the transshipment Bombay would require, and better climatic conditions. In November Folspen, the American engineer constructor, was directed to erect an assembly plant in the Ahwaz–Andimeshk region.

In the course of three-cornered conversations held in December in Tehran among the Russians, the Tenth Army, and Wheeler, it developed that the Russians were strongly opposed to Karachi as an assembly point for their vehicles. They pointed out the difficulties of delivering trucks overland from there up the east Iranian border to Meshed and thence into the USSR. They preferred that major motor vehicle deliveries be effected not via the Persian Gulf but via the northern Russian ports, more accessible to the battle lines of Europe. Russian needs via the Persian Gulf were therefore estimated at only 2,000 vehicles per month, a figure confirmed to Wheeler by Washington after conferences there among Generals Sidney Spalding and Moore and British Army representatives.[5] The Russians therefore were pleased

[5] (1) Msg ARMINDIA Q (Ops) VVY/802/Q, GHQ, India, to War Office, Iraq, 14 Jan 42. NA 2051 (Iran DO-1), NADEF. (2) Rad AMSIR 10, 21 Jan 42. MID 400.3295 1-21-42 (1-6-42).

when Wheeler's decision to locate a Beta Pack assembly plant at Andimeshk was approved on 8 January 1942 by the Commander-in-Chief, India. Also pleased was the British director of transportation for Iran, because of Andimeshk's accessibility to the Iranian State Railway. The selection of Andimeshk was opposed by Kenneth Harker, representative of UKCC, and by a General Motors representative, who wrote of the site:

> Never were the factors of climate and human comfort more completely subordinated to military expediency. . . . The area is infested with malaria, sand fly fever, typhoid, and dysentery. The water supply runs through open ditches, and powdery clouds of dust are a constant plague to men and machines alike.[6]

In February General Wheeler advised Washington that General Motors should operate two TUP plants at Andimeshk to assemble 2,000 motor vehicles per month for the Russians; an assembly plant at Umm Qasr for 3,000 vehicles monthly for the British in Iran and Iraq; a plant at Karachi to assemble a similar number for delivery to the British; a service and repair station at Andimeshk to handle maintenance of 300 vehicles a month for the British Army and UKCC; a checkup station at Tehran for final check on trucks delivered there to the Russians before Andimeshk assembly was put into operation; a checkup station at Kazvin for final check on trucks delivered there to the Russians after being driven by Russian drivers from the assembly lines at Andimeshk; and body-building and engine-reconditioning plants at Umm Qasr and Karachi.[7] It was not long before this extensive program was whittled down, first, by the reduction of Karachi operations stemming from the reduced ordnance program; second, by the virtual American withdrawal from Iraq; and third, by the shift in American priorities from British to Russian aid. The Wheeler recommendation had proposed 6,000 monthly assemblies by American plants for British delivery and 2,000 for Soviet delivery. By the end of April 1942 it was reported that the Andimeshk plant was designed to process 2,000 trucks monthly for the Russians and 1,000 for the British. In actual practice, after work began at Andimeshk, its production was devoted almost entirely to vehicles for the USSR.[8]

The contract with General Motors provided that the company would be responsible for personnel, engineering and equipment specifications, procurement of equipment and tools, and management and

[6] The *War Effort* cited n. 2(2).
[7] Rad AMSIR BAG 12, Gen Wheeler to Gen Moore, 14 Feb 42. Folder, MT Repair—Umm Qasr, SL X–11,737.
[8] Col Shingler, Rpt to American Aid Subcommittee, Cairo, sub: Status of Projects as of April 30, 1942. 334.8 American Aid Subcommittee, SL 9011.

operation of plants; and that the Army would be responsible for priorities, shipment of plant equipment and truck material, construction of plant buildings, living quarters, and railway sidings, and the delivery of truck material for assembly at the site of the work. Certain of these U.S. Army responsibilities were assumed by the British, especially construction (housing, roads, utilities) and moving the boxed vehicles from shipside to Andimeshk. The British assumed all costs of installing equipment at the plant and agreed to make certain local arrangements concerned with labor, power, and water, as well as to provide all fuels and lubricants used for assembled trucks destined for the USSR. This last arrangement was interpreted by the Americans as requiring the British to replace oils and greases used at the checkup stations where vehicles were handed over to the Russians if the Russians refused to do so.[9] The British commenced construction at Andimeshk in February upon a concrete foundation laid by Folspen. Superstructure was then erected by the British under a subcontract from the American Army. Plans and supervision were furnished by General Motors. Neither of the two Beta Pack plants to be installed in the Andimeshk buildings when completed was as yet available. One was en route from the United States to Karachi; the other, borrowed by General Wheeler from the British base at Port Sudan, was scheduled to reach Andimeshk in late March, thus determining the earliest date at which Andimeshk assembly operations could start. The Americans undertook to furnish 2,000 vehicles per month, to deliver the two plants complete with cranes and tools, and to assemble and hand over the vehicles to Russian drivers at the point of assembly.

The last-named point, the means by which assembled trucks were to be driven from Andimeshk to Soviet receiving points in the north, went against local British policy. The Russians insisted upon driving the trucks north themselves, and the Americans proposed keeping at Andimeshk a rotating group of about 450 Soviet personnel for this purpose. A British report to the War Office in January noted the Russian demand and added, "Shortage of drivers . . . may make this desirable provided political factor permits." [10] Just as they had opposed the quartering of Soviet military personnel near the Abadan aircraft assembly plant, so the British regarded the presence of numerous Russians at Andimeshk and at checkup stations and traffic posts along the delivery routes as undesirable infiltration of the British zone of Iran. The prob-

[9] Memo 206/77/Q-1 and 206/15/77/Q-1, Hq, Tenth Army, 12 Feb 42, sub: Development of American Installations at Andimeshk. .004.04 AIOC, SL 8976.
[10] Msg cited n. 5(1).

lem was settled at Andimeshk by yielding to the Soviet-American wishes; but it was to arise again elsewhere.[11]

While construction at Andimeshk proceeded and the TUP plants were being waited for, a January message from Washington that 2,484 trucks for the USSR were at sea heading for the Persian Gulf made it necessary to plan for their assembly elsewhere than at Andimeshk.[12] It was decided to take advantage of the UKCC assembly plant at Bushire. The Iranian Mission entered into a contract whereby UKCC technicians and native laborers were to operate under the nominal direction of a single American officer. It was arranged that the assembled trucks were to be driven to Tehran by Iranian native drivers. At Tehran after rigorous inspection at a service and repair station run by a private local concern, also under contract to the Iranian Mission, the vehicles, if acceptable to the Russians, were to be transferred to Soviet control. Still driven by their UKCC-hired native drivers, they were to proceed to Tabriz for physical surrender to the Soviet authorities. The distance from Bushire to Tabriz was 1,179 miles over the worst of roads through hazardous desert and mountain country alive with armed bandits. To the damage inflicted by the execrable driving of the Persian drivers would be added the toll taken by the terrain and losses from pilferage or hostile attack. The Tehran contractor therefore would have his hands full before the Russians took over the trucks.

Problems and Performance

Between 2 February, when the first shipment of cased trucks reached Bushire, and 18 March, when the temporary arrangement with the UKCC ceased, 1,263 trucks destined for the USSR were assembled at Bushire under contract with the Iranian Mission.[13] The arrangement was only a stopgap one; but it relieved the pressure of accumulating unassembled trucks for Russia. The cost was high: a bill of $275,000 from UKCC for assembly and delivery overland to Tabriz, plus all costs for repair and servicing at the private contractor's establishment at Tehran. When the bad news reached Washington, an admonition went forth to Colonel Shingler to persuade the British to reimburse UKCC and collect from the Russians. This suggestion failed to observe three

[11] Folder, MT Assembly—Details of Transport, *passim*, SL X–11,737.
[12] Rad cited n. 5(2).
[13] (1) Ltr, Col Shingler to CG, SOS, 10 Apr 42, sub: Status of U.S. Mil Iranian Mission. PGF 70. (2) Ltr, Col Shingler to Dir, Intn Div, SOS, Washington, 3 Jul 42 (cited hereafter as Shingler Ltr), says Bushire work began 3 Feb 42. AG 400.3295 Russia, Hq AMET. Another copy .004.04 Beta Pack Assembly Plants, SL 8976.

realities: First, UKCC, a wholly state-subsidized entity, enjoyed two personalities—one as an official body, the other as a business enterprise, making it unlikely that the British Government would reimburse UKCC. Second, UKCC was under a contract to the American mission, which, however it may have been entered into, had to be honored. Third, the Russians were even then difficult to collect from. The bill stood at $275,000, and, although this sum was not so bad as the $600,000 erroneously reported as a fact in a later Federal Bureau of Investigation report, it was enough to exhaust the Quartermaster's allotment for 1942–43 of a quarter of a million dollars for assembling Soviet trucks. There are no comparable cost figures for later American truck assembly as the figures recorded for the Army-operated plant at Khorramshahr for February 1944 (about $28 per truck) and for February 1945 (about $17) represent chiefly payroll costs exclusive of U.S. military wages. But even if these partial figures were doubled, tripled, or quadrupled, they would still fall far below the UKCC's charge of nearly $218 per truck which, to be sure, allowed for the 1,179-mile drive overland to Tabriz, with Uncle Sam paying for the checkup at Tehran en route. The UKCC bill for Bushire assembly was an introduction to the Middle East for the Iranian Mission.[14]

While work at Bushire was nearing completion the mission sent to Bombay for two General Motors specialists who were to get assembly operations at Andimeshk started in the open air as soon as the borrowed Beta Pack plant should arrive from Port Sudan and without waiting for completion of the plant buildings being erected by the British from General Motors plans and specifications. One aspect of the employment of General Motors as a contractor was that a minimum number of their American technicians, most of them from their staff in India, could organize assembly operations using a maximum number of locally obtained foremen and laborers. On 14 March the two General Motors men arrived. On 26 March, just after the arrival of the Port Sudan plant, production at Andimeshk was actually under way. The rate, because the native workmen were green and the plant was exposed to sun and sand, was only about 25 vehicles a day. Colonel Shingler reported in early April the completion of 160 trucks and the accumulation

[14] (1) Memo for Intn Div, 2 May 42. Defense Aid Papers, Russia, Trucks, Drawer 3, Cabinet 67, Intn Div, ASF CCF. (2) Rads AMSIR WASH 146 and 147 to Col Shingler, 2 May 42. AG 400.3295 (8–9–41) Sec 4. (3) Rad AMSIR, from Basra, 30 Mar 42. Same file. (4) FBI Rpt, 27 Feb 44. MID 451.2, 24 Feb 44 (25 Jan 43). (5) Rad AMSIR 232, 30 May 42. Filed as in (2). (6) Hist Rpt, Plants Br, Opns Div, Hq, PGC, 6 Mar 45, Incl 4, Table, Truck Assembly Time and Cost per Truck Produced at TAP II, Khorramshahr, Period from Jul 43 through 31 Jan 45. PGF 125–Z. (7) Hist Rpt, TAP II, for Feb 45, 9 Mar 45. PGF 23–Z.

of 850 cased vehicles awaiting assembly. By the end of April, 322 cargo trucks had been assembled.[15]

So pressing was the Soviet need for trucks that sixty mechanics were brought down from Tehran to speed the work. On 25 April the second TUP plant—which had been shipped to Karachi, later located on the docks at Bombay, and forwarded to Iran—reached Andimeshk and added its production capacity to that of the plant from Port Sudan. Throughout March and April cranes and tools were borrowed from the Army or obtained from India, while construction of the main building, rail sidings, yard paving, living quarters, and utilities continued. On 6 May the still uncompleted main building was occupied, and in that month power-plant equipment borrowed from the Army was installed. By the end of June, after three full months of work, 3,509 assembled cargo trucks had been turned out and sent on their way to the USSR.

When April shipping information indicated arrival at Persian Gulf ports by the end of May of 4,130 cased trucks for the USSR, it was obvious that facilities at Andimeshk, designed for the 2,000 trucks per month stipulated the previous December by the Russians, would be swamped. Once again the UKCC plant at Bushire seemed the solution; but Bushire, the UKCC, the Soviets, and the British had by this time become entangled in a series of mutual objections which might have resulted in a stalemate, war or no war, except for American intervention. Russian objections to the UKCC were founded on the experiences of February and March which encouraged the Russians to suspect the company of profiteering and attempting to obtain a transportation monopoly in Iran and which indicated the inefficiency of overland delivery from Bushire to Tabriz via Tehran. In early February when the Russians announced their intention of sending a party to Bushire to reconnoiter the road, assist in traffic control of the convoys, and study the performance of the vehicles, the British, who did not want to see Russians operating so far south in Iran, objected. The American Minister at Tehran, Louis G. Dreyfus, Jr., treated with both sides and the Russians sent some drivers and armed guards to Bushire. Later, when Shingler proposed turning again to Bushire, the question was reopened and once again was settled through American good offices. To overcome the refusal of the Russian Ambassador at Tehran to accept any more trucks driven by UKCC drivers, the Americans proposed inspection by Iranian Mission officers throughout the process of assembly and

[15] (1) Ltr cited n. 13(1) gives date of beginning work as 27 Mar 42. General Motors records say 26 Mar 42. (2) Table 8.

delivery. With some compromising all round, it was arranged to assemble several shiploads of Russian-bound trucks at Bushire. A member of General Greely's mission, then observing from Tehran, reported in April, "There seems to be no difficulty in turning over trucks to the Russians at the point of assembly as it has worked out satisfactorily at Andimeshk." [16]

But there were difficulties, among them those arising from the necessarily increased American supervision of UKCC operations at Bushire. The single American officer was replaced in August by an officer and a small detachment of an ordnance medium automotive maintenance company. Even after the immediate emergency of April–May had passed, Bushire was continued as a supplementary assembly plant, since the rigors of the German submarine campaign had all but closed the north Russian ports and the flow of trucks via the Persian Gulf was expected to increase.

American supervisory personnel remained at Bushire well over a year, introducing several innovations which increased production. In all, 6,628 vehicles were assembled there for the Russians in this Iranian-worked, British-operated, and American-supervised plant.[17]

At Andimeshk performance from the beginning of operations late in March produced an erratic-looking curve on the chart throughout the rest of 1942. (*Table 9 and Chart 4, Appendixes A and B*) After slowness natural to the beginning of a new project, June assemblies reached 2,241 units, leaving at the end of the month 566 unassembled vehicles. During that period, while concentrating on Soviet-bound vehicles, the Andimeshk plant assembled 115 Studebaker tank trucks consigned, by Soviet permission, to the British because they were needed to supply gasoline to truck convoys in the area. The early output was achieved with small numbers of personnel and inadequate plant equipment which, as late as the end of 1942, constituted only 35 percent of specifications. By the end of July the staff at Andimeshk numbered 2 officers, 10 enlisted men, 10 General Motors executives, 150 skilled and semiskilled native workmen, and between 350 and 400 unskilled natives. The reduction in assemblies, precipitate after August, reflected a reduced flow of arrivals, not a diminished capacity to handle the work. To the end of June, Andimeshk assemblies of 3,509 units for the USSR contrasted with arrivals at Bushire of 2,268 units of which the

[16] (1) Special Rpt to Home Office, by Col John B. Luscombe, QM Off, USSR Mission, atchd to Weekly Progress Rpt 10, 21 Apr 42. 319.1 USSR, Intn Div, ASF NCF. (2) Folder cited n. 11.

[17] Table 7.

only available information merely indicates that nearly all had been delivered to the Russians.[18]

Whether because of the contrast between performance at the two plants or because of continuing Soviet hostility to UKCC assembly of Soviet-bound trucks at Bushire, Kenneth Harker of UKCC journeyed to Moscow and presented to General Faymonville a comprehensive and unfavorable estimate of American operations at Andimeshk and a request that he be sent to Washington to reveal the state of affairs at Andimeshk. The correspondence indicates that Harker's views were not shared by Grigori M. Polyansky, assistant commercial representative attached to the USSR Embassy at Tehran. He stated Harker was off by 180 degrees and his ejaculation, "God protect us from Bushire assembly!" was forwarded by Faymonville to Shingler via the American Legation in Tehran. Harker did not go to Washington. Investigation revealed that the Soviets had accepted 95 percent of trucks assembled at Andimeshk and Bushire. The episode closed with a statement by Shingler to Faymonville that the British, Russians, and Americans enjoyed "most cordial" relations, that "in British-Soviet dealings this mission functions as go-between," and that "improvement in mutual understanding will continue." It is not possible to state how far the British and Russians would have gone along with Shingler's statement of the American role or with his optimism. They were not newcomers to Iran.[19]

Although new arrivals of crated vehicles were to fall off after June, the visit of Molotov to Washington preliminary to the signing of the Second Protocol raised the Persian Gulf quota of trucks for Russia by 50 percent. On 3 June Harry Hopkins authorized General Burns to promise Molotov 3,000 American trucks per month.[20] Plans were therefore developed for erection of a second TAP, also to be operated by General Motors. A site was selected at Khorramshahr about two miles from the docks and adjacent to the new railway branch line and the highway being built to Ahwaz. General Motors delivered plant and building blueprints to the U.S. Army on 20 July, and the British started construction early in August. Provision was made for housing 15 General Motors and 7 U.S. Army executives, 48 skilled and 102 semiskilled

[18] (1) Shingler Ltr. (2) For strength figures, Memo, by Defense Aid Dir, Iran–Iraq Serv Comd, 27 Jul 43. 323.61 Establishment of Military Districts, Binder 1, SL 9008.

[19] (1) Alternative explanations suggested by Col Shingler in Rad AMSIR 361 to Washington, 17 Jun 42. 330.14 Criticisms and Complaints 1942, SL 9008. (2) Rad, Gen Faymonville to Col Shingler, copies for Gens Wheeler and Maxwell, 5 Jun 42. Same file. (3) Rad, Maj. John G. Ondrick, U.S. MA, Tehran, to Col Shingler, 17 Jun 42. Same file. (4) Rad S–309. Col Shingler to Amembassy, Moscow, for Faymonville, 28 June 42. Same file.

[20] Sherwood, *Roosevelt and Hopkins,* p. 576.

laborers, 30 Soviet officers, 250 Soviet soldier-drivers, and 378 native unskilled workmen. The plant was scheduled for completion by 30 September.[21]

Such was not to be the case, for construction delays ensued. Although the railway sidings were completed in October and the main building was under roof, employee housing was only just begun. Moreover, only 60 percent of necessary TUP assembly equipment had arrived from the United States; but this fortunately included two new plants. One of these was sent to Andimeshk to replace the British plant borrowed from Port Sudan. The other was retained for use at Khorramshahr. In December, as the arrival of increased truck shipments from America grew imminent, General Motors expressed its concern over delays in construction at Khorramshahr.[22] In consequence the Iranian District engineer supplemented the British construction forces. Work was far enough advanced by 26 January 1943 for assembly to begin. Aided by sufficient arrivals of plant equipment by 30 June to bring plant to 89 percent of full requirements, production at Khorramshahr rose steadily. At Andimeshk, 97 percent of necessary plant equipment reached the site and was installed by the end of March 1943, making it possible to handle the rising flow of incoming vehicles. In June Andimeshk assembled 4,066 vehicles, all for the USSR, while at Khorramshahr 3,116 vehicles, 459 of them for the U.S. Army, the rest for the USSR, rolled off the lines. The total, 7,182 vehicles, contrasts with the 2,241 turned out at Andimeshk alone a year before.[23]

June marked the final month of TAP operation by the civilian contractor. Effective 1 July 1943 General Motors became the fourth (and last) of the civilian contractors employed on U.S. Army projects in the Persian Corridor to be terminated, as General Connolly's new organization took over the TAP's and thus completed militarization of all projects. In exchanges which preceded the termination of the contract, General Motors had rejected a proposal that it carry on under some such scheme of divided responsibility as had been accepted by the engineer constructor, Folspen. In the company's view it could not separate operation and management responsibilities. It urged assignment of sufficient Army personnel before 30 June to provide time for training. The whole enterprise was growing and could not be handed over to untried management overnight. From the start a few Army personnel

[21] (1) Memo, 6 Sep 42. DE File C–3, Conferences, NADEF. (2) Ltr, General Motors Resident Deputy Regional Dir for Indian and Persian Gulf Areas to CG, PGSC, 14 Dec 42. DE File O–1, Operations, NADEF.
[22] Ltr cited n. 21 (2).
[23] Table 9.

were at both Andimeshk and Khorramshahr, and in the summer of 1942 a handful of military personnel and about 70 contractor employees were at the Tabriz–Tehran checkup stations.[24]

In August, when construction began on the new assembly plant at Khorramshahr, General Motors requested military personnel, to work at the site. Some 22 soldiers of the 3,474th Ordnance Medium Automotive Maintenance Company were put on the job and remained after January to work on the assembly lines. In April 1943 the contractor requested soldier assistance to speed unloading of cased vehicles at Khorramshahr. Two officers and 90 men of the 506th Ordnance Medium Automotive Maintenance Company were assigned. Up to ten days previous to the last day of the contract these were all the military at the two TAP's, when the company expressed to General Connolly its concern that "practically no military personnel" were available to take over the plants.[25] On 26 June, four days before termination, the 3,467th Ordnance Medium Automotive Maintenance Company reached Iran and was immediately assigned to Andimeshk. At about the same time the 3,455th Ordnance Medium Automotive Maintenance Company went to the TAP at Khorramshahr. The Army carried on from there.[26]

Mention has already been made of problems connected with delivery of assembled vehicles and of stations established in the north for final checkup before physical surrender to the USSR. The process of delivery of assembled vehicles into Soviet hands began at the end of the assembly lines where both Soviet and American inspectors stood watch. After passing this first inspection, the trucks proceeded to parking areas to await drivers. They were then loaded with cargo and started north in convoys over the long overland highway route, stopping at road camps originally set up by the UKCC which were made available to the convoys by the British. At the end of the journey the trucks again went through checkup, reconditioning, and inspection at northern checkup stations run by the Americans, and were finally turned over to the USSR. At each stage of this process difficulties multiplied.

In the first place, Russian inspection requirements were rigorous. In the words of Colonel Shingler, "Russian insistence upon perfection in each truck may be explained by the fact that the Soviet 'accepting' a truck is personally liable if any defect is found upon arrival in Russia. Endless time has been spent on inconsequential details. If uncorrected, however, the Soviets simply refuse to touch the vehicles in question.

[24] (1) File cited n. 2(7) *passim*. (2) Memo cited n. 18 (2).
[25] Rad, Sven Dithmer to Gen Connolly, 20 Jun 43. PGF 125.
[26] For transition see Ch. XIV below.

U.S. personnel have, therefore, been instructed to comply with every reasonable Russian demand." [27]

Next, there was not always sufficient co-ordination of planning to move trucks which had passed inspection, a notable instance occurring when, for a period in June 1942, 1,000 trucks stood at Andimeshk awaiting drivers. The Soviet colony there totaled about seventy-five officers in permanent residence as inspectors, guards, and checkers, while as many as 150 soldier-drivers sometimes arrived at once.[28] Pilferage and damage to vehicles took place from time to time in the car parks, and a disastrous fire at Khorramshahr on 24 May 1943 destroyed some hundreds of vehicles awaiting assembly.[29]

The checkup stations were a vital link in the chain of delivery. First planned for was a station at Kazvin, but the Soviets requested its location at Tabriz, inside their zone, and 300 miles nearer the Soviet border. Before the Tabriz station was established, however, provision had to be made for the trucks being driven up from Bushire in early 1942. Accordingly, the Iranian Mission, under advice from USSR representatives at Tehran, contracted for the services of a group of civilians employed by the Soviet Transportation Commission. This station provided 1,000-mile lubrication, tightening, and minor repairs.[30]

Establishment and operation of a checkup station had been stipulated in the General Motors contract; but as the two General Motors technicians sent to Tabriz to undertake the task were killed in a plane crash en route the Iranian Mission advertised for a local subcontractor. Colonel Shingler reported in July as follows:

> In negotiating informal contracts at Tehran and Tabriz the Soviets refused to permit our acceptance of the low bidder on the plea that the individuals were Nazis. Instead the Russians "required" employment of a particular Czech firm. It now develops the firm is headed by officials of the USSR Transportation Directorate and is a government subsidized concern. Even so, every nut and bolt required in servicing and repair operations is charged against the U.S. Mission.[31]

He added, "In conference with even the highest local officials of the Soviet Trade Commission, the thought is constantly expressed that the manufacturer must make good all damages, defects, or shortages, and the Soviets will contribute nothing to assist. This is applicable to trucks arriving at Tabriz after a 740-mile trip under a load with Russian drivers."

[27] Shingler Ltr.
[28] *Ibid.*
[29] Rpt cited n. 14(4). The number given is 350 crated chassis units and 100 crated cabs burned in the open desert. Monthly Hist Rpt, Khorramshahr Port and Station, May 43, PGF 16–E, puts the total damaged or destroyed at about 250.
[30] Memo, Mente for Shingler, 31 Mar 42. AG 095 UKCC, Hq PGC.
[31] Shingler Ltr.

The first contract was for 400 trucks to be serviced at about 25 U.S. cents each, the mission to supply oil, grease, and parts. At the signing of the second contract, the local firm raised its price to 67 cents. Against this increase the mission was helpless to produce cost figures in favor of the lower rate, for though it had reason to believe the labor cost per truck was about 22 cents, it had never placed a representative on the spot to check the company's costs or records. At the signing of the second contract the mission assigned an officer and four enlisted men to assist in operation. Colonel Shingler's report of this unhappy situation concludes:

> In spite of the obstinate Russian demands and the delicate relationships existing between Soviet, British, and Persian interests, the Mission has thus far been able to maintain the most cordial relations. The cost and effort required to effect truck deliveries in spite of all handicaps appears warranted and the time appears inauspicious to carry on heated discussions over "responsibilities." [32]

At the expiration of the second contract, the Tabriz station was moved in August 1942 to Tehran and was placed under U.S. ordnance mechanics with the aid of locally hired labor. In the following February 1943, upon Soviet request, an American officer and twenty-five enlisted men removed the station to Tabriz, but after eleven days, once again at Soviet request, they returned to Tehran.

Labor problems during the contractor period met with a variety of solutions. Over wage rates and working conditions at the UKCC plant at Bushire, the purely supervisory Americans exercised no control. They could only note the high degree of absenteeism which marked the working force in the early months of 1942 and an underlying spirit of hostility toward the Allied cause. As for wages, they noted that natives earned up to four U.S. cents per day while skilled mechanics on the assembly lines achieved up to a maximum of ten U.S. cents per day. American suggestions of bonus systems, both as incentive pay for increased production and as an amelioration of rates which in American eyes were uneconomic in the long run, proved difficult to bring to adoption. The British administration had with great thoroughness set up tables of wage scales, and American attempts to circumvent them, which were not infrequent, were invariably met by British protests that severe damage to the social structure of Iran would ensue from the payment of exaggerated rates. Such complaints, entirely legitimate from the British point of view, came to a head at a joint Anglo-American meeting in the British labor office on 15 June 1942 at which time the Americans yielded to the British request that they discharge all natives

[32] *Ibid.*

and artisans and rehire them through the British deputy assistant director of labor. This was what the Americans had undertaken originally to do, and the only point which can be raised in defense of their departure from the book was that increasing wages helped them get on with their urgent war tasks. After this agreement Colonel Shingler reported to Washington that wages were still a disturbing factor in a difficult labor pattern and that in his view they were too low.[33]

During 1942 the economy of Iran was affected by the stresses set up through the presence of British, Soviet, and American forces and their activities. Prices were inflated. Near-famine conditions obtained, in certain localities exaggerated by Soviet refusal to allow wheat from Azerbaijan to be brought to the south. In attempting under these conditions to attract labor vigorous enough to work, the Americans decided to supplement the fixed wage scales with food. A number of plans which enabled workmen to obtain tea, rice, and sugar succeeded one another, and in this respect American initiative obtained British support, as expressed by Maj. Gen. A. R. Selby in midsummer when he said he "felt the two governments should take a hand in the food situation and feed the workmen on some reasonable basis." [34] A similarly helpful flexibility was demonstrated by the British in the case of a number of skilled native mechanics when the American-supervised checkup station was moved from Tabriz to Tehran in August 1942. It was found that the rates paid in Tabriz were higher than those allowed for Tehran; but the British authorities acceded to the American desire to pay the higher wages in order to retain the good workmen. The permission stipulated, however, that employees hired in future must come under the regular scales, thus automatically providing a source of possible friction between groups of mechanics doing the same work on the same job but at different rates.

Of the many adjustments required to keep things going smoothly, one deserves to be recorded, not for its intrinsic importance, but for its value as an illustration. Early in 1942 the Russians officially protested to Colonel Shingler that the UKCC was advertising for sale, at something like one hundred dollars a thousand board feet, lumber derived from assembly operations. The Russians claimed that the lumber was salvaged from the packing cases in which trucks for the USSR were shipped. They further claimed that, since the cost of the trucks included the cost of packing, the lumber belonged to them and they

[33] (1) Memo of 15 Jun 42 Mtg. DE File C–3, Conferences, NADEF. (2) Shingler Ltr.
[34] Quoted Rpt by Maj C. M. Hearn, Chief, Opns Sec, Iranian Engr Dist, to Iranian Dist Engr, 22 Aug 42. DE File R–2, Reports, NADEF.

should at least control its disposition. In an effort to settle the matter it was eventually necessary for Shingler, accompanied by Minister Dreyfus, to call upon Soviet Ambassador Smirnov. The meeting, conducted in German, concluded in an arrangement whereby American agencies were allowed to take whatever materials were necessary to the accomplishment of the American mission, the British were allowed a certain percentage of material for their trouble in handling the salvage, and the Russians would be entitled to carry away such quantities as would not result in displacing available cargo normally carried in the trucks upon leaving the assembly plant. Later in the year—when the American command was hard pressed to meet construction deadlines for installations to accommodate the expected arrival of the first movement of service troops and was forced to every sort of improvisation—it was suggested that the agreement on packing-case lumber be reopened to provide for construction needs. Tentative conversations having shown that the Russians were prepared to refer the matter to their ambassador, Shingler advised that "we rock along under existing arrangements, taking only as much lumber as can be withdrawn *amicably.*" Thus was avoided a renewal of the small tempest which drastic shortages, a trying climate, and the natural rivalries and *amour-propre* of Allies had brewed.[35]

The truck assembly program was among the earliest of the tasks undertaken by the American command in the Persian Corridor. Operations began at Andimeshk even before the move from Iraq to Iran was completed. The contractor phase continued some eight months after the arrival of General Connolly in the field. During the period of General Motors operation, 20,081 vehicles were assembled at Andimeshk, 9,670 at Khorramshahr.[36] Of the total of 29,751 at the two plants, 29,069 vehicles, or 98 percent, were for the USSR. On 1 July 1943 the Army threw its resources into the task of handling the greatly increased flow of vehicles that was to come during nearly two more years of work.

[35] (1) Handwritten note, Col Shingler to Col Osborne, 14 Nov 42. DE File O–1, Operations, NADEF. (2) Notes supplied the author by General Shingler, 16 May 1950.
[36] Army figures. For General Motors figures see Table 7, n. *b*.

CHAPTER IX

Strengthening Iran

On a day in May 1942 President Roosevelt sat in the White House with his Secretary of State, Cordell Hull, the Soviet Ambassador, Maxim Litvinov, the Soviet Foreign Minister, Vyacheslav Molotov, and Harry Hopkins. The First (Moscow) Protocol was about to expire, and this was one of several meetings which produced the Second (Washington) Protocol. Harry Hopkins has left notes of an incident overshadowed by the main business of the meeting but not without significance:

"The President had two or three memoranda on his desk which I had never heard of before, which were obviously given him by the Department of State, in which the Department was offering their good offices in alleged difficulties between the Russians and the Iranians on the one hand and the Russians and Turks on the other. I gathered Molotov was not much impressed. I at any rate so imagined and in front of the President he raised the point that they thought they knew a good deal more about their relations with Iran and Turkey than we did. I confess I did not see in what way our good offices were to be executed." [1]

It would be misleading to blow up this little picture to the proportions of a mural painting entitled Historic Turning Point in Irano-American Relations. It was no such thing; but it was a moment to remember, an example of that subtlety in diplomacy of which Roosevelt could show himself a master. What he was truly driving at, why Molotov bridled—these are questions anybody may answer in his fashion. Interpretation of the scene starts with a concrete fact, known to the men there present. On 10 March Iran had been declared eligible for lend-lease aid. The three Americans at the White House knew that action to implement that declaration was currently being formulated; the two Russians, even if not specifically informed, were certainly aware that this must be the case. But none of this was mentioned or alluded to. Instead, in the midst of discussion of ponderables like munitions for the USSR, the President casually revealed the memoranda on his desk offering American good offices in alleged difficulties between the Rus-

[1] Sherwood, *Roosevelt and Hopkins*, p. 559.

sians and the Iranians. This delicate hint, this calculated irrelevancy, in the context of lend-lease for Russia, may well have been Roosevelt's way of putting his guests on notice that the welfare of Iran was of interest to the United States. Not the memoranda on the desk, but the major unspoken fact of lend-lease for Iran, gave substance to the President's casual gesture. Without words, the gesture could have meant that from now on American good offices would be expressed by deeds, not words; that Iran was to be helped to help itself. Molotov's acerbity would suggest that he got the point.

Before World War II

The situation in which Iran found itself in 1942, with foreign troops within its borders, had occurred before, and the United States had helped before. But in 1942 the Anglo-Soviet occupation and the conditions in effect by virtue of the Tri-Partite Treaty provided a more favorable milieu than previously for an American effort to help Iran help itself. Although American attempts to provide some sort of balance wheel in Iran date only from 1911, and therefore form the shortest chapter of the long book of Iran's relations with the West, they furnished a background of experience in problems still very much alive in 1942. Roosevelt was not initiating new policy when he indicated that day at the White House his interest in Iran's survival as an independent state. American aid to Iran in World War II established no new precedent; but because of the special circumstances arising out of the war, it was more effective than before.

The first gesture of American aid to Iran was not an official act of the American Government. It occurred when the American economist, W. Morgan Shuster, arrived in Iran late in 1911 to accept an invitation, delivered through the United States Government, to reorganize Iranian finances.[2] Shuster set to work on the assumption that as an employee of the government of Iran he was responsible to it alone; but he reckoned without the views of czarist Russia and imperial Britain. These nations, by the Convention of 1907, had virtually partitioned Iran into Russian and British spheres. Their watchful concern to preserve these precluded any effective development of the country as a whole. This strengthened the centrifugal forces which traditionally enabled tribal and provincial elements in Iran to defy authority at the capital, and tended to drain strength away from the national govern-

[2] The following account of the American civilian missions derives from George V. Allen, "American Advisers in Persia," *Department of State Bulletin*, XI (23 Jul 44) 88–93; and Lenczowski, *Russia and the West in Iran*, pp. 263–73.

ment. Shuster believed that possession and control by the central government of a strong and incorruptible rural police force or gendarmerie would further the maintenance of order, the collection of taxes, and the equitable distribution of the grain harvests. As a prerequisite to a governmental financial house cleaning, he proposed establishment of a gendarmerie free to operate throughout Iran, regardless of British or Russian spheres. To head and train it he nominated a British officer of long experience in the country and ready familiarity with its language and customs. But this strengthening of central authority in Iran was not, in 1911–12, congenial to either British or Russian policy. Sir Edward Grey, Foreign Minister, opposed in the House of Commons the principle of permitting an English officer to operate in the Russian zone as setting an uncomfortable precedent for the British zone. At Tehran the Russian Ambassador confronted the Iranian Government with a demand that it expel Shuster within forty-eight hours. Czarist troops crossed over into northern Iran and a regiment of Cossacks appeared at Tehran. Shuster departed.[3]

In World War I, Iranian neutrality was violated when British, Russian, and Turkish troops fought on Iranian soil. At the end of hostilities the British remained in the north as well as the south, while Bolshevik forces occupied positions in the northern provinces. During the early months of 1919, Lord Curzon, overwhelming opposition from many elements of English opinion, carried to an advanced state negotiations with the Iranian Government for an Anglo-Persian treaty. Under its terms a loan of two million pounds sterling at 7 percent, secured by customs receipts, was to be used for public works, including construction of a railway in which there would be a large British interest. Administrative reforms under British guidance, with appropriate powers and controls, completed a program which aroused strong opposition in Iran because of its one-sidedness. Its supporters were those who had negotiated the treaty and those who stood to benefit from the expenditures on public improvements. Those in opposition, troubled alike by the treaty and the occupation of their land by foreign troops, endeavored to obtain through President Wilson a hearing for their cause at Versailles.

This effort having proved vain, the new Soviet Government in June 1919 capitalized upon the resultant disillusionment with the West by making known through its representative at Tehran its willingness to conclude a treaty of friendship with Iran on highly favorable terms,

[3] Shuster's eight months' effort and his views upon the situation are preserved in his book, *The Strangling of Persia* (New York: Century Company, 1912).

including cancellation of debts and renunciation of valuable Russian concessions. The offer was not publicized by the Iranian Government and on 9 August the Anglo-Persian treaty was signed. Newspapers favorable to the government which had negotiated the treaty made much of Iran's being deceived in its reliance upon the Wilsonian principle of self-determination, and the Iranian Prime Minister in a public statement asserted that the United States had refused aid to Iran.

Thereupon, in a message of 4 September, Secretary of State Lansing authorized the American Minister at Tehran, John L. Caldwell, to

"Deny to both Persian officials and anyone else interested that America has refused aid to Persia. You may also inform them that the United States has often showed its interest in the welfare of Persia and that the American Commission in Paris endeavored earnestly, several times, to secure an audience at the Peace Conference for the Persian Commission, but the American Commission was surprised that it did not receive more support in this matter. However, the announcement of the recent Anglo-Persian treaty probably explains why such a hearing could not be obtained and it also appears that the Persian Government at Tehran did not give strong support to the efforts of the Commission. The American Government learned of the recent Anglo-Persian Agreement with surprise, for it seems to indicate that Persia does not desire American cooperation and aid in the future, even though the Persian delegates in Paris strongly and openly sought American support." [4]

Caldwell vainly sought to obtain publication of the American denial in Tehran newspapers. He then resorted to the unconventional device of printing it in leaflets which were circulated on the streets and in the bazaars. The truth thus made known heartened the opponents of the Anglo-Persian agreement and assisted its rejection by the Majlis early in 1921. With the collapse of Lord Curzon's treaty came the withdrawal from Iran of the British advisory mission headed by Armitage-Smith and James M. Balfour whose business it had been, under the treaty's terms, to diagnose administrative deficiencies and suggest cures. The setback to British influence was accompanied by the signature at Moscow on 26 February 1921 of a Soviet-Iranian treaty incorporating terms offered the Iranians in 1919 and granting the USSR the right of armed intervention in Iran in the event that a third power should attempt to use Iran as a base for military action against the USSR. One hundred days later Col. Reza Khan, Minister of War and coming strong man of Iran, forced the resignation of the Prime Minister and a

[4] (1) From *The Pageant of Persia*, pp. 340–41, by Henry Filmer, copyright 1936, used by special permission of the publishers, The Bobbs-Merrill Company, Inc., Indianapolis. (2) See also J. M. Balfour, *Recent Happenings in Persia* (Edinburgh and London: William Blackwood & Sons, Ltd., 1922), pp. 123–25; Lenczowski, *Russia and the West in Iran*, p. 74; Ch. I, pp. 12–13, above; and R&A 1206, Conflicts and Agreements of Interest of the United Nations in the Near East, 10 Jan 44, Research and Analysis Br, Office of Strategic Services, p. 26.

reorganization of the Iranian cabinet in which Reza Khan remained as War Minister.

With a treaty of friendship with the USSR and with British influence eclipsed, the new Iranian Government now sought technical advice and help in administrative reform from a quarter which would render it without demanding a *quid pro quo*. The choice fell upon the United States. By Iranian invitation Dr. Arthur C. Millspaugh, Economic Adviser to the Secretary of State, became Director General of Iranian Finances. With a small staff of assistants he served from 1922 to 1927.

During this period the Iranian Minister at Washington wrote the Secretary of State on 21 February 1924:

". . . the Persian Government and people have always recognized the altruism and impartiality which distinguish the American Government and people. They particularly appreciate the concern of the United States for fair play, for the respect of the independence of the smaller nations and for the maintenance of the economic open door.

"It was because of their implicit faith in the lofty ideals and trusted friendship of America that my Government, over a year ago, confided the reorganization of their finances to American advisers and have consistently courted the technical and financial cooperation of this country in the industrial and economic development of Persia." [5]

The confidence there expressed was reflected in the support which Millspaugh received, soon after his arrival, from Reza Khan. Shuster's plans were revived and a gendarmerie was organized to preserve internal order, collect taxes, and suppress fraud and corruption, particularly in distribution of the harvests. But early enthusiasm languished, and as Reza rose in the government (he became Prime Minister in 1923 and crowned himself Shah-in-Shah in 1926) his dictatorial methods and growing nationalistic spirit came into increasing conflict with a foreign mission which had been given extensive powers over domestic policies. Reza Shah Pahlevi was determined to devote what Millspaugh considered a disproportionate share of the national budget to support the Army. Over the resultant deadlock of opinion the two parted company and the Americans left for home in 1927.

The immediate consequence of Millspaugh's departure was that Reza Shah Pahlevi turned to Germany to supply a growing roster of technical and administrative advisers. If the United States possessed through Millspaugh's mission the opportunity to supersede the influence of other countries by means of its friendship, this opportunity passed with the influx of the Germans. On they came, first under the

[5] Allen's article cited n. 2.

Weimar Republic, then under Hitler, advising in education, lending technical skill, building docks, roads, and parts of the railway, adorning the new station at Tehran with the swastika (symbol of Aryan brotherhood), lecturing, giving parties, organizing Boy Scouts, and generally spreading the Germanic gospel as Kaiser Wilhelm had done in the nineties, when he opened wide his arms to his brothers in the Arab lands and simultaneously revealed to the world his plans for the Berlin-to-Baghdad railway. By the time the British and Russians entered Iran in 1941 some two thousand Germans had to be run to ground and taken into charge or under observation. The departure of the first Millspaugh mission, then, poses one of those unanswerable historical conundrums: What would have happened if American interest, in spite of discouragements and difficulties, had been continuously maintained in Iran? [6]

Of the many problems left unsolved at Millspaugh's going, the Gendarmerie, denied adequate funds and subordinated in the favor of the Shah to the Army, was only one. The size of the Army was another. On the credit side must be reckoned the Iranian State Railway which proved such an Allied asset in World War II. It has been said that the financial strengthening of Iran achieved by Millspaugh made it possible for the Shah to build the railroad.[7]

Inception of the American Advisory Missions

In the fourteen years between the departure of the Millspaugh mission from Iran in 1927 and the arrival of Soviet and British troops upon Iranian soil in 1941, the general internal position of the country had fluctuated both politically and economically. The ISR and other ambitious public works stood as monuments to the driving will of Reza Shah. But such representative democratic institutions as existed were sadly weakened by the long dictatorship; a little band of large landowners vied for court favor; the tribes remained active; while the people of Iran, modernized by royal decree to the extent of wearing European clothing, continued in the ancient ways of poverty and disease. The Anglo-Soviet occupation not only threw out Reza Shah, but perforce, for the duration of the war, detached from what there was of central authority in Iran most of the usual prerogatives of national sovereignty. Iran was sorely in need of two things: the will to help itself by rigorous self-discipline and internal reform; and the willingness to fol-

[6] For German penetration to 1941 see Lenczowski, *Russia and the West in Iran*, pp. 151–52, 160–62.

[7] Allen's article cited n. 2.

low the disinterested advice of a friend. So once again the United States, already present as Britain's helper in the Persian Corridor, was appealed to. The ISR had become an official lend-lease project almost six months before Iran itself was declared eligible for lend-lease aid in March 1942. When that declaration came, the new government of Iran was ready to direct American attention to pressing Iranian needs. As American policy toward Iran, still groping in the dark in 1942, gradually clarified, it was recognized that many kinds of aid, whether rendered under lend-lease or otherwise, nevertheless, by strengthening Iran, fulfilled the purposes of lend-lease, which were to assist all who were banded together against the Axis. The development of trustworthy security forces and the improvement of the economy of Iran were constructive ends, not only from this point of view, but also in relation to the Middle East situation in general, where weakness was prone to attract predatory strength and where disorder and political uncertainty operated against any interest, including the American, that was arrayed against the Axis. American policy gradually formed itself about the discovery that Iran was everybody's interest because a weak Iran invited disorder which would involve all alike.

Iran's request for help and American willingness to give it were, therefore, not the fruits of sentimentality or of after-dinner oratory. Wallace Murray expressed the American position as being based upon "our desire to bolster the somewhat shaky position of the present Iranian Government by providing it with concrete evidence of the willingness of the United States to provide all possible assistance." [8] Within the generalization were the specific needs of Iran (1) to bolster its Army and Gendarmerie and (2) to obtain direct access to the fountainhead of lend-lease supply.

In the first case, the Tri-Partite Treaty of alliance had limited the war assistance of the Iranian forces "to the maintenance of internal security on Iranian territory." This restriction effectively barred Iran from entering the war except as approved by Britain and the USSR.[9] But it did permit the co-operation of Iran in the maintenance of law and order along the Allied supply line through the Corridor. It was therefore as much to the advantage of the occupying powers that Iran should perform this service as it was an advantage to Iran to possess

[8] Ltr, Wallace Murray, Adviser on Political Relations, Dept State, to Gen Eisenhower, OPD, 29 Apr 42. OPD 210.68 Iran 3. The letter records that the Foreign Office, London, approved the principle of "Anglo-United States co-operation in Persian questions."

[9] Iran broke off relations with Bulgaria, Hungary, Italy, and Romania on 16 September 1941, after the occupation, but before the date of the treaty. It broke off relations with Vichy France on 5 February 1942; and declared war on Germany 9 September 1943 and on Japan 1 March 1945, retroactive one day.

efficient military forces. In the second case, because the chief agency in rendering lend-lease aid for military uses was the United States War Department, acting, in early 1942, through the Iranian Mission, Iran required a military contact to supplement the usual diplomatic channels.

On 1 April 1942 the Assistant Secretary of State wrote the Secretary of War that Iran desired an American officer to serve as Intendant General and reorganize the finance and army supply divisions of the Iranian War Department. The Department of State, it was added, approved the proposal as offering an opportunity to improve relations with Iran and thereby to aid the cause of the United Nations in the Middle East. The Department of State felt that the United States was favorably situated to undertake the task suggested "because both Great Britain and the Soviet Union are handicapped in their relations with Iran by the inevitable dislike and distrust of the Iranians for the powers which are in occupation of their country." [10] This was the first of steps which were to produce, after some experimentation, an American military mission to advise the Iranian Army. In further correspondence, in which the Department of State inquired whether the War Department, on the invitation of Iran, would make available Col. H. Norman Schwarzkopf, graduate of West Point in 1917 and at one time head of the New Jersey State Police, "to take charge of the reorganization of the Iranian national police force." War Department willingness was pledged, thus opening the way to organization of a second American military mission, one to advise the Imperial Iranian Gendarmerie.[11]

The second category of Iranian requests, those for assistance in the economic field, came later in the year. Dizzy with the problems arising out of the Allied occupation, the new Iranian Government of Shah Mohammed Reza Pahlevi, having returned to constitutionalism, asked the Department of State to recommend Americans for administrative and advisory posts. As a result, Dr. Millspaugh, invited by Iran, returned there as Administrator General of Finances on 29 January 1943. He accepted the invitation only after the Majlis on 12 November 1942 approved a contract embodying his conditions. By a further law of 4 May 1943 the Majlis empowered Millspaugh to establish or work toward rigid governmental regulation of grain collection, prices, transport, and distribution; and to recommend enactment of a high, graduated income tax to spread the tax burden more fairly and to combat inflation and other war-born evils. The Majlis also authorized employ-

[10] Ltr, Adolf A. Berle, Jr., to Henry L. Stimson, 1 Apr 42. AG 210.68 (4–1–42)(1).
[11] Ltrs, Berle to Stimson, 8 Apr 42; Stimson to Berle, 16 Apr 42; Berle to Stimson, 24 Apr 42. Abstracts PGF 261.

ment of up to sixty American specialists and gave Millspaugh power to direct the government's entire financial program, to draw up the budget, to supervise the operations of the Finance Ministry, to control the inspection department, and to supervise the Americans and Iranians who represented the Ministry of Finance in the provincial capitals.

The ramifications of Millspaugh's second economic mission to Iran extended to collection of the harvests and supplying bread for urban centers; control of the public domains and administration of the estates of the former Shah ceded to the government on his abdication; stabilization of prices; and regulation of the purchase, distribution, and control of goods. In this area, the Road Transport Department controlled movement of all kinds of goods over Iranian highways and was at one time aided by some fifty British and American Army officers lent by their governments. Another office, the Transport Priorities Office, determined priorities for all civilian goods moved by road, rail, or water. All of these controls were necessarily subordinate to the over-all controls over movements and priorities exercised under the Tri-Partite Treaty by the occupying powers.

Besides the members of the Millspaugh mission, who never exceeded thirty-five, other Americans served in various administrative and advisory capacities. One reorganized the police of Tehran and other cities. Another became in 1944 adviser to the Ministry of Public Health and attacked the increasing spread of typhus in the country. Still other experts supervised the importation of pharmaceutical supplies, and advised on soil erosion and irrigation, petroleum problems, and agricultural education. The account of their work lies beyond the limits of this volume. It is understandable that Millspaugh's mission, in view of its extensive powers and responsibilities, should eventually have run into trouble and, as in the earlier attempts by Shuster and Millspaugh himself, should have come prematurely to the end of its labors. Millspaugh resigned in February 1945, and, with the exception of a few who remained until 1948 under direct personal contract to the Iranian Government, most of his staff were gone by autumn 1945. Their departure was unmourned by many Iranians. It would be difficult to say who learned the least by the experience, the Iranians or the Americans.[12]

[12] Mohammed Reza Shah is directly quoted in an interview published in *The New York Times*, September 27, 1950, as saying, "The war completely disrupted our life. One of the worst of our experiences was Dr. Millspaugh, who has tremendous responsibility for our bankruptcy and lack of discipline, created by the occupation of our country." U.S. Ambassador Allen's contrary view regarding bankruptcy was alluded to above, page 161. Millspaugh's accounts of his missions are in his books, *The American Task in Persia* (New York:

In 1942, within a month after the Department of State informed the War Department that Iran had requested appointment of an American officer to serve as Intendant General of the Iranian Army, the dissolution of the USSR Mission on 2 May offered the opportunity of appointing General Greely, its former chief, to the position. General Greely had been in Iraq and Iran since the previous January, had come to know men prominent in the Iranian Government and the British and Soviet forces, and was familiar with the lend-lease program. On 10 April Somervell informed Greely that the Iranian Government desired a United States officer to take charge of the finance and army supply divisions of the Iranian War Ministry. But Greely notified Washington that he was coming home and was told by The Adjutant General on 16 May to stand by for further assignment. That his name was under consideration for the Intendant Generalcy is indicated by a message of the same date to the State Department from U. S. Minister Dreyfus at Tehran concerning the appointment. "General Greely," it ran, "has conducted himself very well in Tehran. . . . However, before he is designated, it would, I feel, be well to establish that he has technical training, administrative ability, and energy required for this difficult and important position." [13]

When word of what was in the wind reached Greely a few days later, he promptly informed the War Department that, if ordered to remain in Iran to organize a mission to its Army, he proposed to assume command, as ranking American officer, of all U.S. military personnel and activities in Iran. As promptly came the reply that he would do no such thing.[14] The proposal, if accepted, would have combined under single authority the entire American effort in Iran—both the program of aid to Britain and the USSR, being conducted by Colonel Shingler as chief of the Iranian Mission, and the new program of strengthening Iran, still being approached by Washington in gingerly fashion. Washington was not prepared at this time to unify these programs in one step. The American position in Iran, as a nonsignatory of the Tri-Partite Treaty, and as an auxiliary of one of the occupying powers,

Century Company, 1925) and *Americans in Persia.* See also Elgin Groseclose, *Introduction to Iran* (New York: Oxford University Press, 1947), pp. 181–84; and Millspaugh's letter to *The New York Times,* October 10, 1950.

[13] (1) Tab "A," Summary of the Record Relative to General Greely's Mission in Iran, atchd to Memo for CofS, signed Brig Gen St. Clair Streett, Actg ACofS, OPD, 17 Aug 42. OPD Exec 10, Item 56, OPD Hist Sec Coll, OCMH. (2) Rad, Greely to WD, 13 May 42. AG 210.31 (5–13–42)(14). (3) Rad, TAG to Greely, 16 May 42. Same file. (4) Rad 162, Dreyfus to Hull, 16 May 42. Dept State 891.20/134.

[14] (1) Rad AMSIR 2, Greely to WD, 20 May 42. Summary of Cables, Russian Mission File, OPD, Middle East, Abstract PGF 261. (2) Rad 17, WD to Greely, 22 May 42. Same file.

made inadvisable the taking of large strides. Washington preferred to keep in step with its Allies.

Secretary Stimson, therefore, having ascertained that the British approved appointment of an American officer as requested by Iran, wrote Secretary Hull on 20 May that without the consent of the Congress General Greely could not accept appointment to a foreign army, but that he might serve as an adviser. There was a further and more emphatic caveat from Dreyfus to Hull; but the War Department's decision was communicated to Greely in a series of messages. Greely was to become an advisory Intendant General to the Iranian Army; he was not to accept emoluments or office from a foreign government; he would investigate and report to Washington as to how best to meet the wishes of Iran; and he was to be guided by Minister Dreyfus who would be instructed by the Department of State.[15]

From the outset of the arrangement thus informally entered into, it was apparent that Greely's conception of his function was not in conformity with that of the State Department, whose political responsibility made its voice dominant. On two fundamental questions, the handling of lend-lease allocations to Iran and the direction to be taken by American foreign policy in Iran, Greely took positions which, no matter how well justified in his own view by future events, resulted in an impasse.[16]

In the matter of lend-lease, allocations for Iran were still under discussion at Washington which reported that their determination would take some time.[17] Urgent as Iranian needs were, they had to be fitted into the program of aid to Britain and the USSR. Decisions as to how to strengthen Iran were, under the circumstances, primarily political decisions, and it was therefore a nice question as to how far General Greeley's function as adviser on army finance and supply entitled him to go in determining what Iran should receive. The American War Department implemented lend-lease policy, it did not make it. In Greely's view, however, his job was to get as much help as possible to Iran, although he acknowledged that the Iranian idea of his resources,

[15] (1) Ltr, Stimson to Hull, 20 May 42. AG 210.68 (4–1–42)(1). (2) Rad 165, Dreyfus to Hull, 22 May 42. Dept State 891.20/138. (3) Memo, Greely for CofS, 7 Sep 42, sub: Rpt on Duty as Adviser, Iranian Army, 19 May–4 Sep 42 (cited hereafter as Greely Rpt). Case 45, Sec 1 OPD 210.684 Iran. (4) Rad, WD to Greely, 24 May 42. Cited Greely Rpt. (5) Rad AMRUS 19, TAG to Greely, 17 Jun 42. AG 210.684 (4–1–42). (6) Rad, Marshall to Greely, 23 Jun 42. AG 210.31 (5–13–42)(14).

[16] The basic documents on the Greely incumbency are: (1) Greely Rpt. (2) Memo, WD Summary, Maj Gen Thomas T. Handy, ACofS, OPD, for CofS, 1 Oct 42. Abstract PGF 261. (3) State Dept Summary by Wallace Murray, 3 Sep 42, inclosed in Ltr, Sumner Welles to Lt Gen Joseph T. McNarney, DCofS, 23 Sep 42. Dept State 891.20/175 PS/MEL.

[17] Rad AMSIR 354, Somervell to Shingler, 8 Jul 42. AG 400.3295 (8–9–41) Sec 4.

gained from the equipment and manpower at his disposal while he was head of the USSR Mission, was exaggerated.

This is a fine country [he wrote] with a virile people, and more could be done with it than MacArthur did with the Philippines, but it would be a long pull, and depend entirely on the course of the war. I know a lot of people from the Shah down, and they seem to like me. But it would be a mistake to detail me just as a gesture. They expect help rather than advice. They have had help from American missions and schools, and it would be a pity to spoil our reputation by giving them a Major General without anything to back him up.[18]

The Department of State had given instructions through Minister Dreyfus that in economic and political matters General Greely was to be guided by Dreyfus, remaining independent in technical military matters. Under this division of responsibility, not, to be sure, very exactly defined, Greely felt that the minister was withholding from him information necessary to his function. He informed General Marshall to that effect, and told Dreyfus:

Frankly . . . in a total war I considered that everything was subordinate to the military effort. On this account I would take no direct action in either sphere which called for his supervision, but [would] merely advise the Iranian military authorities. I added that since he refused me his confidence I could not trust him to be of assistance to me in my work and that for this reason I intended to have as little as possible to do with him.[19]

The result was a kind of deadlock of which Greely's efforts to secure two hundred motor trucks for the Iranian Army is illustrative. As his report makes clear, that Army was woefully lacking in motor transport and forced to obtain trucks virtually at haphazard from the UKCC which held at the time almost a monopoly of usable vehicles. But Greely's cabled request to the War Department for the trucks turned up soon after on Dreyfus' desk at Tehran via a wire from the State Department asking Dreyfus' opinion of General Greely's request.[20]

Further steps taken in the field of supply moved the situation into the field of foreign policy and brought matters to a quick decision. In a message to General Marshall on 14 July, General Greely observed that the British and Russians were hamstringing Iranian communications, and that, starting with a few trucks, Greely could reorganize the Iranian Army into an efficient force.[21] American supplies, then, were incidental to putting Iran into a position to enter the war as an active

[18] Ltr, Greely to Somervell, 30 May 42. Abstract PGF 261.
[19] Greely Rpt, 20 and 27 Jun 42. Marshall replied on 27 June that Dreyfus was being instructed to inform Greely fully on all matters concerning him and that Greely was to do the same for Dreyfus.
[20] Greely Rpt, 2 and 10 Jul 42.
[21] Greely Rpt, 14 Jul 42.

belligerent.[22] The message to Marshall, as Greely records in his report, had the approval of the Shah, who shortly afterward proposed to General Greely that the United States invite the Iranian Minister of War, Gen. Amanollah Jahanbani, to Washington with a view to committing Iran as an ally.[23] At this point matters moved with rapidity, for the proposal, if acted upon, would involve the United States in a question already settled by the Tri-Partite Treaty. Greely was ordered on 26 July to return to Washington to confer with the Chief of Staff.[24] But the next day Greely wired the War Department to take steps, through diplomatic channels, to invite the War Minister to Washington, adding, "Hurry because I leave within a week." [25] On 28 July Minister Dreyfus reported to the Secretary of State General Greely's effort to "commit the country as an ally," and added, "Greely's activities have now departed from realm of harmless interference and entered field of international politics." [26] Greely left Tehran for Cairo on 2 August and arrived at Washington on 11 August.[27]

General Greely's report ascribes the outcome of his efforts to the position taken by the Department of State in 1942 that American aid to Iran should be of a limited nature in that area of British responsibility. He prophesied that, unless American policy should change to greater responsibility for Iran as an ally, "any pretence of military assistance to Iran from the United States will remain only a futile gesture." Although for a time after 1943 the tide flowed toward the shore glimpsed by General Greely, his mission failed in 1942, not because all of his ideas were wrong, but because he was not the agency for the formulation of policy. His impatience in the face of what appeared to him to be indecision and fence-walking in time of national emergency disregarded the principle of due consultation with, and specific approval by, those whose business it was to view the war in global perspective. What Greely proposed to do in 1942 was judged by

[22] Ltr, Stimson to Welles, 1 Sep 42. Russian Mission File, Africa-Middle East Sec, OPD.
[23] Summary cited n. 16(3), citing Greely's authority.
[24] Greely Rpt. Memo cited n. 16(2) says 24 July.
[25] Rad, Greely to War Dept, 27 Jul 42. Dept State 891.20/164 PS/FPJ.
[26] Rad 243, Dreyfus to Hull, 28 Jul 42. Dept State 891.20/159 (Sec 1–2).
[27] (1) Greely Rpt and Memo cited n. 16(2). Greely's report states that he was relieved of his assignment without further discussion. He was, however, considered by the War Department for return to Iran, as indicated by a memorandum of a conversation, 22 August, between the Messrs. Murray and John D. Jernegan of the Department of State and Brig. Gen. Albert C. Wedemeyer, in which the State Department expressed willingness, if the War Department found it impossible to send another officer in his place, to agree to Greely's return provided "He should be carefully and precisely instructed as to the limits of his functions." Dept State 891.20/168 PS/FP. (2) Greely's recall from Iran was discussed at the War Department as early as 14 July, when the Assistant Chief of Staff, G–1, suggested assigning Lt. Gen. George H. Brett as Commanding General, USAFIME, and sending General Maxwell to replace Greely. Memo, Col Douglas V. Johnson for Gen Handy, 14 Jul 42. Russian Mission File, Africa–Middle East Sec, OPD.

the policy-makers to be premature and impracticable under the co-operative conditions in existence in the Persian Corridor. Therefore, General Greely had to go, and events had to unroll more slowly.

The Ridley and Schwarzkopf Appointments

In the middle of August, Colonel Schwarzkopf, who had been mentioned the previous spring as an adviser to the Iranian Government on the reorganization of the Imperial Iranian Gendarmerie, departed for Iran with Lt. Col. Philip T. Boone and Capt. William Preston. They arrived at Tehran on 29 August where they reported to Minister Dreyfus, under whose direction they were to serve as long as their relation with the Iranian Government remained that of advisers. A bill was pending in Congress to authorize U.S. Army officers to act as officials of a foreign government whose defense was considered essential to the defense of the United States. Until that bill became law, Colonel Schwarzkopf and his staff were to remain under Dreyfus' direction rather than under the orders of the War Department.[28]

Meanwhile the relentless advance of Axis forces toward the critical Middle East objectives of Suez and the Caucasus passes leading to the Iraqi and Iranian oil fields urgently focused attention upon the need to step up all plans for strengthening the Allied hand in the Persian Corridor. The British surrender of Tobruk on 21 June with the loss of 25,000 troops opened the way to Rommel's sweep toward Alexandria. When exhaustion of men and supplies stopped him soon afterward at El Alamein, he had taken toll of 80,000 British men and over a thousand British tanks. It was the lowest depth to which British fortunes sank in Egypt in that trying year. Along the Black Sea coast, after taking Sevastopol on 2 July and retaking Rostov on 25 July, the Germans on 8 August occupied the Maikop oil fields and advanced to capture, on 11 September, Novorossiysk, the seaport at the Black Sea anchor of the Caucasus range. To the north, massive German drives toward Stalingrad began from two directions on 19 and 22 July. In August, then, with the great tests of El Alamein and Stalingrad ominously impending, the Allied position in Iraq and Iran was anything but secure. It was necessary to plan for the worst at a time when there was slight hope of anything better. Hidden in the future was the British counteroffensive, which, beginning at El Alamein on 23 October, would turn back

[28] (1) Schwarzkopf's service dated officially from 7 August 1942. Memo, Secy War for President, 9 Jul 46. Abstract PGF 261. (2) Dept State VII–4–C, Iran—Foreign Advisers—U.S. Gendarmerie Mission, Div of Near Eastern Affairs. (3) Ltr, Berle to Dreyfus, 19 Aug 42. Abstract PGF 261.

the Axis forever from Suez. Hidden also was the frightful carnage at Stalingrad which, commencing on 31 August, would leave the ruined city free of the last Nazi by 2 February 1943 and the Caucasus invasion of Iraq and Iran a set of abandoned plans on the desks of the German General Staff.

In August the British informed Iran that, should the Germans reach Astrakhan on the Caspian delta of the Volga below Stalingrad, Tehran would probably be bombed. The Iranian Government, aware of the rising restlessness of the people, applied to the Allies to declare Tehran an open city.[29] In Washington conferees of the State and War Departments agreed to face the possibility that within three or four months, possibly less, a large part of the Middle East, specifically Iran, Iraq, and Palestine, would be under enemy occupation. It was further agreed that every effort should be made to save the Persian Corridor supply route, as an alternative to Murmansk and Archangel and as providing access to the Caucasus for military action and a base for air operations against the Balkans and German-occupied southern Russia. Moreover, it was agreed that the dispatch of American Army officers to advise the Iranian Army was desirable to frustrate the possibility of German political agents taking over Iran without a battle.[30]

How to carry on the commitment to the Iranian Army represented by the appointment of General Greely was the question. Iran indicated that a large mission of two or three hundred American officers would be welcome, and the British concurred.[31] Secretary Hull cabled Dreyfus at Tehran that the Department of State felt that an American military mission "would be most helpful in strengthening our position in Iran at the present time and in building a firm foundation for future relations." The message pointed out that efficient American administration would exert a favorable influence and counteract pro-Axis feeling.

> It would also place us in a position to observe and control any movement within the [Iranian] Army tending toward its use as a fifth column in the event of threatened Axis invasion. We further feel that an American group in key positions in the Army would be of great assistance to the various American advisers, in particular to the financial mission [under Dr. Millspaugh].[32]

[29] Iran's appeal was addressed to the British; Soviet and American military authorities were appealed to by Iran, but the United States refused to take a position, having no treaty ties with Iran. General Handy ruled that the War Department would follow the British lead on the question since Iran was within the British sphere of strategic operations. The Combined Chiefs of Staff were so informed. Dept State Memo of conversation between Jernegan and Col John E. Upston, Chief, Africa–Middle East Sec, OPD, 15 Aug 42. 200.H 42 (IM–L–5) Iran–Iraq, Vol. I, OPD.

[30] (1) Memo of conversation between Jernegan and Col Truman Smith, 13 Aug 42, referred to Gen Handy. Russian Mission File, Africa–Middle East Sec, OPD. (2) Memo, 22 Aug 42, cited n. 27(1).

[31] Memo cited n. 16(2).

[32] Rad 220, Hull to Dreyfus, 18 Aug 42. Dept State 891.20/165.

On 21 August the Department of State proposed to the War Department that it undertake a military mission to Iran with responsibilities greater than those assigned to General Greely, but less comprehensive than those which Greely had envisaged. To this proposal Secretary Stimson replied that the War Department was unwilling to undertake enlarged responsibilities toward the Iranian Army, but that it would continue to allow U. S. Army officers to advise in key positions. Stimson noted that General Greely's purpose to organize an Iranian army to fight with the Allies ran counter to the Anglo-Iranian-Soviet treaty which limited the use of Iran's forces to internal security functions. Reports showed, Stimson wrote, that the Iranian Army was too disorganized to render effective service as a combat force even after resupply, reorganization, and long training.[33]

In accordance with this decision the War Department, conscious that its "future commitments in Iran will be based very largely on his [the appointee's] reports and recommendations," proceeded with great care in the selection of an officer for the advisory post.[34] The nomination went to Maj. Gen. Clarence S. Ridley, an engineer officer who had served (1936–1940) as Governor of the Panama Canal Zone, who had also headed the Puerto Rico Hurricane Relief Commission, and who was at the time of his nomination in command of the 6th Motorized Division. The Letter of Instructions and a supplementary letter issued to General Ridley fixed two responsibilities: to investigate and report on the desirability of a large military mission, and to advise the Iranian Government on service of supply matters affecting its Army. "You will not, however," the letter cautioned, in view of what had gone before, "directly or by inference, commit the United States to any action whatsoever without specific authority from the War Department." The supplementary letter added that Ridley might advise the Iranian Government directly on supply matters, but that on questions relating to the use of the Iranian Army as a combat force, he must refer to the War Department. "Consult freely with Mr. Dreyfus, although it is understood that you will in no way be acting under his direction and control." Ridley was exempt from the command of the commanding generals of USAFIME and the Persian Gulf Service Command and he and Colonel Schwarzkopf were to be independent of one another.[35]

[33] Ltr cited n. 22.

[34] Ltr, Stimson to Welles, 3 Sep 42. Dept State 891.20/175–1/2 PS/DAB.

[35] (1) Ltr of Instructions, Gen Handy, ACofS, OPD, to Gen Ridley, 24 Sep 42; Ltr, Handy to Ridley, 7 Oct 42, sub: Interpretation of Instructions. Abstracts PGF 261. These letters, not rescinded when the Ridley mission later entered into contractual relationship with the Iranian Government, merely became inoperative. (2) Ltr, TAG to CG, USAFIME, 7 Oct 42, sub: Transportation and Administrative Facilities. PGF 261. (3) A letter,

After conferring at the State and War Departments and with General Greely, Field Marshal Sir John Dill, and the Iranian Minister at Washington, General Ridley, accompanied by Col. Fernand G. Dumont and Capt. Robert S. Conly, Jr., arrived in Iran on 30 October.[36] In proceeding to carry out that part of his instructions which called for a report on the advisability of a large American training mission, Ridley soon encountered the political pitfalls and diplomatic difficulties with which the country abounded. The Prime Minister had taken over the portfolio of the Minister of War and appeared to be jockeying with the Shah for control of the Army. The post of Intendant General involved the giving of advice for the reorganization and administration of the Army's finance, quartermaster, engineer, sanitary, veterinary, recruiting, military justice, transport, and remount departments. But soon after Ridley's arrival the Shah expanded his views of what he wanted Ridley to do, and proposed that Ridley take over reorganization of the entire Army and accept the rank of lieutenant general as Aide to the Shah. The Minister of War countered with an alternative proposal that Ridley become Assistant Minister of War.[37]

Inasmuch as the United States Congress had recently enacted legislation authorizing the President to detail officers and enlisted men of the Army, Navy, and Marine Corps to assist such governments as the President "deems it in the interest of national defense to assist," during the period of war or a declared national emergency, there was no legal bar to acceptance of either proposal.[38] After reviewing the arguments for sending a large military mission, General Ridley recommended that he be allowed to accept the proposal of the Minister of War that he become Assistant War Minister, and he suggested that an American quartermaster colonel be given the post of Intendant General.[39] This recommendation was disapproved in the War Department in January 1943.[40] It was felt that the direct responsibility which General Ridley would owe to the Iranian Government would involve the United States in the question of security of the Persian Corridor line of communications, which was assigned by the Tri-Partite Treaty to the joint care of Iran, Great Britain, and the USSR. The question of sending a full-scale American military mission to reorganize the Iranian Army as a

Welles to Dreyfus, undated, enclosing a copy of Ridley's Letter of Instructions, stated that Ridley was "not to be regarded as acting under your direction." Abstract PGF 261.

[36] (1) Greely Rpt. (2) Memo cited n. 16(2).

[37] Ltr, Ridley to Chief, OPD, 10 Dec 42. Mission Rpt File, Hq, U.S. Military Mission with the Iranian Army, War Office, Tehran.

[38] Public Law 722, 1 Oct 42, amending 44 Stat 565, 19 May 26.

[39] Ltr cited n. 37.

[40] OPD Memo, Jan 43. Case 53, Sec II, OPD 210.684 Iran.

whole was finally answered in the negative the following October when the Joint Chiefs of Staff decided that the separate Ridley and Schwarzkopf missions were sufficient.[41] The program to strengthen Iran by supplying expert military and economic advice and administrative assistance continued, therefore, according to the basic pattern laid down in 1942.[42]

[41] JCS 557, 30 Oct 43, sub: Mil Mission to Persia; and JCS 557/1, 2 Nov 43. Case 67, Sec II, OPD 210.684 Iran.

[42] The account of the Army and Gendarmerie Missions is continued in Ch. XXI below.

PART TWO

THE PERSIAN GULF COMMAND

CHAPTER X

New Job, New Tools: The SOS Plan

The Midsummer Crisis, 1942

The radical change in American responsibilities in the Persian Corridor which was decided upon in September 1942 was a change of method and pace, not of direction. The direction continued, as before, toward the objective of aiding the British in their efforts in the area, particularly their efforts to deliver supplies to the Soviet Union. But the old method of doing this—with the American task primarily in construction and in the operation of assembly plants, while the British, in addition to their other obligations, controlled and operated transport facilities—was superseded by the new American job. Henceforth, to speed the movement of supplies to the USSR, the primary American concern was to be in transport.

Although the accelerating imbalance between tonnages arriving at Persian Gulf ports and tonnages carried inland to Soviet receiving points was a vital factor in determining the change of method and pace, the decision to change was not a local one. It was not even a purely War Department decision. By midsummer of 1942 three broad lines of policy and action in the conduct of the war intersected to mark a point of crisis. The solution proposed to meet that crisis, in so far as Persian Corridor operations were concerned, was the so-called SOS Plan, giving the United States greatly increased responsibilities in the aid-to-Russia program. Dictated first by the military situation in the

Middle East, second by considerations of high policy toward the Soviet Union, and third by the crisis in Persian Corridor logistics, the decision was taken by the Combined Chiefs of Staff in accordance with principles agreed upon between the Prime Minister of the United Kingdom and the President of the United States. In listing the three factors in the decision no precedence is implied, for they were closely interrelated and not distinct phenomena. The lines of the war, of which these were but three, crossed and recrossed, tangled and knotted. These three happened to culminate in crisis at approximately the same time.

One of the factors influencing the American decision that summer to strengthen Iran was the ominous military situation in the Middle East at midyear: the surge of Axis forces toward critical objectives, from the west through Egypt and from the north around the Black Sea. It had other repercussions upon Persian Corridor planning; for simultaneously with the prospect that Axis forces would overrun the area, seize the oil of Iraq and Iran, and cut off the Russian supply line, the success of Axis submarines and aircraft in the Arctic was reducing almost to impotence the effort to supply Russia by the Murmansk route. With both northern and southern supply routes threatened with extinction, and with the threatened loss of the Middle East, the question of the degree to which Russian supply routes were to be defended became entangled with the question of military defense of the Middle East; and this had to be balanced against global policy. In the process, old plans and policies gave way to new.

In January the Combined Chiefs of Staff accepted a tentative plan for an Allied invasion of northwest Africa known as GYMNAST, but this plan was shelved in March. In April Operation BOLERO was conceived for the assembly or build-up in England of American forces for an ultimate cross-Channel attack. During the spring General Marshall and Harry Hopkins had reached tentative agreement in London with the British on plans for SLEDGEHAMMER, a cross-Channel landing and diversion operation for 1942, and a full-scale cross-Channel operation for 1943, called ROUNDUP. It was soon felt in the United States, however, that the British preferred postponing an assault upon the Continent until after 1942, and that they were interested in GYMNAST, whose adoption would render difficult any adequate build-up for a cross-Channel attack timed for the spring of 1943. Prime Minister Churchill therefore went to Hyde Park late in June for discussions which moved on to the White House. There, on Sunday morning, 21 June, President Roosevelt handed Churchill a slip of paper bearing news of the fall of Tobruk. The crisis thus precipitated by the retreat of the British to Egypt and the expectation of a junction of Germans and Japanese in

the Indian Ocean, strengthened Churchill's argument to postpone Channel plans in favor of GYMNAST. Churchill having returned a few days later to London, Roosevelt went back to Hyde Park whence he dispatched a telegram on 30 June to General Marshall on the increasingly serious situation in the Middle East. Marshall's replies of 30 June and 2 July were straightforwardly pessimistic.[1]

Axis success in Egypt and southern Russia was paralleled by the terrific losses inflicted by German submarines, surface craft, and aircraft upon Allied shipping on the perilous route to Murmansk. Thanks to the help the perpetual daylight in Arctic waters afforded Axis sea hunters during April, May, and June, of 522,000 tons which left United States ports, only 300,000 tons got through to Murmansk. From London on 13 July Averell Harriman, in a message to Hopkins, directly related the Murmansk sea toll to the need to step up shipments via the Persian Gulf route. He recommended that all planes and trucks beyond the capacity of the Alaska–Siberia route to the USSR be shipped to the Persian Gulf and that, to take care of this additional tonnage, the Iranian State Railway be operated by the United States. A memorandum of two days later from General Marshall and Admiral Ernest J. King for Hopkins agreed that convoys to the Persian Gulf would suffer less damage than those to Murmansk and indicated that steps were being taken to increase the tonnage to the Gulf and to develop increased inland clearance capacity. At the same time Churchill gave Roosevelt his opinion that sinkings in the Atlantic in the preceding seven days were at a rate unexampled in this war or the last. On the Murmansk route twenty-two out of thirty-three ships in a recent convoy had been sunk. The next day the Prime Minister sent the President a copy of a cable which he proposed to send to Stalin, reviewing the difficulties besetting the north Russia route and suggesting the suspension of further convoys during the rest of the summer. The President by cable of the same date (15 July) reluctantly approved the proposal and, connecting Murmansk and the Persian Gulf route, as Harriman had done, asked Churchill to consider whether American railroad men should run the line from the Gulf north to help take care of the new tonnage going to the Gulf instead of to Murmansk. Churchill's reaction was instantly favorable and he sent off to Harry Hopkins a draft acceptance of the railway proposal with certain important strings attached to it. Churchill's formal acceptance of the American offer followed after a month, as will appear later in the narrative. Whether

[1] See Sherwood, *Roosevelt and Hopkins*, Ch. XXV, and Winston S. Churchill, *The Hinge of Fate* (Boston: Houghton Mifflin Company, 1950), p. 382.

or not Hopkins discussed the Churchill draft with the President it is impossible to judge from available documents.[2]

At all events, by 15 July four questions of vital policy, each of which would affect future action in the Persian Corridor, demanded answers. First was the defense of the disintegrating military position in Egypt and the approaches to the Caucasus. Second was the virtual elimination of the Murmansk supply route to Russia. Third was the need to build up the Persian Gulf route as an alternative to Murmansk. And fourth, most important of all in its long-range implications, was the choice between continuing plans for a cross-Channel invasion in 1942 and reviving plans for an invasion of North Africa. Postponement of an assault upon the Continent of Europe, a second-front operation urgently desired by the Russians to offset German pressure on the Eastern Front, would, in conjunction with the drastic reduction of tonnages reaching the USSR via Murmansk, cause a most unfavorable impression among the Russians. Yet the situation in Egypt provided strong argument for an operation in Morocco and Algeria. The crux of the problem, then, was how to maintain a balance between the urgent needs of the British and of the Russians.

At the White House on the night of 15 July, Roosevelt, who had decided to send Hopkins, Marshall, and King to London to arrange definitive strategy for the rest of the year, told Hopkins that at London a determined effort should be made to obtain agreement that, if SLEDGEHAMMER could not be mounted in 1942, then another theater must be chosen "where our ground and sea forces can operate against the German ground forces in 1942." [3] Two theaters suggested themselves, North Africa and the Middle East, and in either one operations would entail a substantial reduction in BOLERO, and consequent disappointment of Soviet hopes for an early invasion across the English Channel.

The next day Hopkins, Marshall, and King left for London taking with them a detailed memorandum of Presidential instruction of which the eighth section dealt in nine subsections with the problems of the

[2] (1) Sherwood, *Roosevelt and Hopkins,* pp. 544, 600. (2) Rad ALUSNA, London to OpNav, 13122 CCR, 887–A Limited, Harriman to Hopkins, 13 Jul 42. Russia File (s) WDCSA. (3) Memo, Marshall and King for Hopkins, 15 Jul 42. Same file. (4) MS Index to the Hopkins Papers, Vol. I, Bk. V, Aid to Russia, pp. 14–16, Item 62. (5) The Murmansk convoys were not wholly suspended. A September statement indicates their relation to Persian Gulf planning: "If our shipping losses continue at the present excessive rate along the Northern Russian route, it may become necessary to use the Persian Gulf route entirely." CCS 109/1, Rpt, CSP for CCS, approved 22 Sep 42, sub: Development of Persian Trans Facilities. 323.361 General Connolly's Letter of Instructions, SL 9008. (6) Page 16 of Item 62 cited in (4). The Index entry carries the erroneous date 18 June for 18 July.

[3] Sherwood, *Roosevelt and Hopkins,* p. 602.

Middle East. Summarizing the "effect of losing the Middle East," the memorandum stated:

"You will determine the best methods of holding the Middle East. These methods include definitely either or both of the following:

"(a) Sending aid [air?] and ground forces to the Persian Gulf, to Syria and to Egypt.

"(b) A new operation in Morocco and Algiers intended to drive in against the backdoor of Rommel's armies. . . ." [4]

The London talks, having moved toward the second of Roosevelt's proposed courses, took up GYMNAST and prepared it for action. Renamed TORCH at a meeting of the Combined Chiefs of Staff on 25 July, it was subsequently carried out in the North African landings the following November.[5] Roosevelt's approval in July of the revival of GYMNAST was accompanied by his insistence that a European operation would not necessarily be postponed beyond 1943.

His first proposal, to send troops to the Persian Gulf, Syria, and Egypt, met a different fate from his second. Sending troops was not a new proposal. On 25 March Roosevelt had asked the Joint Chiefs of Staff and the Secretary of War their views on the dispatch of American combat troops to northwest Africa, Libya, and Syria, and had been informed by General Marshall on 2 April that it was believed American strength should be directed toward a cross-Channel assault and not toward the Mediterranean.[6] The July decision reversed that policy; but while it offered countermeasures of great potential effectiveness in the Mediterranean and Atlantic areas, it supplied no immediate solution to the problem of relieving German pressure against the Soviet Union. As unpublished papers reveal,[7] during July and August Roosevelt explored the possibility of an American air force to operate with the Russians in the Caucasus. He was encouraged in his design by Churchill's word that Stalin had once said he would welcome such a force; and Churchill, partly as a means of luring Turkey into the war on the Allied side, was eager to send Allied forces to the Soviet front. The Russians, however, refused the offer of air aid in the Caucasus, tentatively in August, then, as the battle of Stalingrad began, flatly in October.[8]

[4] Sherwood, *Roosevelt and Hopkins,* pp. 604–05.
[5] Harrison, *Cross-Channel Attack,* p. 31 and n. 106.
[6] Harrison, *Cross-Channel Attack,* p. 15.
[7] See: (1) MS Index to the Hopkins Papers, Vol. I, Bk. V, Aid to Russia, *passim.* (2) Prime Minister to President, Most Secret and Personal Msg 216, 2 Dec 42; and Msgs, Churchill to Roosevelt, Roosevelt to Churchill, and Roosevelt to Stalin, 30 Aug–9 Oct 42. OPD Exec 10, Item 63–a, OPD Hist Sec Coll, OCMH.
[8] Research Draft MS, by Edwin M. Snell, 2 Apr 48, sub: The USSR in the U.S.-British Plans and Operations in 1942, p. 34. OCMH.

There was only one possible means left of directly strengthening the Soviet hand in 1942, and that was to increase shipping to the Persian Gulf. This the Combined Chiefs of Staff authorized in August. New shipping priorities gave Russian-aid supplies going by way of the Persian Gulf the same general priorities as TORCH, while BOLERO and the Murmansk route dropped to lower positions in the scale.[9]

Ways and Means

The rearrangement of shipping priorities marked a last step in the process of developing and promulgating the policy of increasing aid to Russia via the Persian Corridor. Still to come was planning, the equation merging policy with performance. Up to the crisis of midsummer 1942 there had been no dearth of planning, first, for the initiation of Corridor tasks, and second, for means to prevent the choking of the supply pipeline. In the first case, the critical operation entrusted to the Americans was construction of such installations as docks, warehouses, and highways. In the second, the most troublesome phenomenon of the year was the problem of inland clearance. Successful movement required the provision of adequate ports, the establishment of efficient methods of ship discharge, cargo storage, and transfer to trucks and railway, the provision of overland highway routes, and the organization of trucking and railway services to carry the goods north as fast as they were landed. By midyear none of these goals had been attained. The threat of backlogs of Soviet-destined goods began to become an unmanageable reality. The new planning to take care of the increased load decreed by the July decisions therefore overtook and absorbed the improvisations by which the British and their American auxiliaries had been attempting hitherto to keep up with the job.

The Harriman suggestion in July that American operation of the railway would improve inland clearance revived talk along that line which ran back as far as Lord Beaverbrook's proposal of November 1941. In May 1942 General Somervell urged establishment of an American trucking organization as a means of ameliorating a worsening transport situation. Concern over inefficient port operations developed early in Washington and was not lessened by the January observations of William C. Bullitt, personal representative of the President. Washington was unsparing in its pressure on the Iranian Mission to improve cargo handling at the ports, but it is difficult to see how Washington expected that mission, whose transport activities were

[9] See P&P Records for August 1942. P&O, WDGS.

advisory only, to bring about effective changes in methods. There is at least one early British suggestion that the Americans "control" the ports of Khorramshahr and Bandar Shahpur, and that, to bring about better co-ordination, there should be American representation on British movements control committees and on the War Transport Executive Committee which was responsible to London. Though some representation was subsequently arranged, the Americans had no power to act either through the committees upon which they sat or through their own military mission; and the committees upon which they sat derived from sources of distinct authority as far apart as London and Basra.[10]

Although at midyear new British dock construction was behind schedule, theoretical port capacity at Basra had been considerably increased above prewar level; but actual discharge there fell below the previous year's average. Nevertheless, Basra was at the time the most active Persian Gulf port; but less than a quarter of its cargo discharge was destined for the USSR. The rest was for the British Tenth Army.[11] In Washington, Harry Hopkins received analyses of the Basra problem and in May a suggestion from General Burns, formerly assistant to Edward R. Stettinius, Jr., of lend-lease and then executive officer of the Munitions Assignments Board, Combined Chiefs of Staff, that a three-man survey group tackle Persian Gulf problems in co-operation with the other nations concerned. In June Burns suggested to Hopkins that Burns' assistant, General Sidney Spalding, head a group to go to Iraq and Iran to determine means of improving the situation.[12] Other suggestions sent in from the field sought to centralize authority and responsibility for port operations. One, from the War Shipping Administration's agent at Basra, requested increased American authority over local port agents when unloading American ships.[13] Another, from the U.S. naval observer at Basra, noting that no agency was solely responsible for deliveries to the USSR, recommended establishment of an Anglo-American board at Basra to function in this capacity only, and suggested as a suitable head Bosworth Monck, a Basra representative of the Ministry of War Transport, London, who had previously

[10] (1) For early railway proposals see Ch. XVII below. (2) Rad 177, Somervell to AMSIR, 9 May 42. AG 400.3295 (8–9–41) Sec 5. (3) See Memo, ACofS, WPD, incorporating a draft cable to AMSIR, Gen Eisenhower to TAG, 28 Mar 42. AG 400.3295 (8–9–41) Sec 4. (4) Rad Q/669, Gen Iraq [GOC, British forces in Iraq] to ARMINDIA, 8 Jan 42. Shipping Data, SL X–11,737.

[11] HOTI, Pt. IV, History of the Ports, by Ogden C. Reed, pp. 1–2. PGF.

[12] (1) Memo, John J. McCloy for Hopkins, 23 May 42, and Memo, Burns for Hopkins, 26 May 42. MS Index to the Hopkins Papers, Vol. II, Bk. VII, Lend-Lease Aid to Russia (1942), p. 3, Item 24. (2) Memo, Burns for Hopkins, 18 Jun 42. Same entry, Item 26.

[13] Rad, Eugene Seaholm to WSA, 30 Jun 42, repeated in and indorsed by Rad, Gen Spalding to WD, 30 Jul 42. Abstract PGF 236.

developed the port of Murmansk and who was thoroughly familiar with Russian needs.[14]

Most of these suggestions aimed at tightening administrative controls in order to increase performance; but there was the equally serious problem of the lag in construction. Without dock and highway facilities movement on a large scale was impossible. Both British and American dock construction at Basra, Bandar Shahpur, and Khorramshahr was far behind schedule at the middle of 1942, as was the American highway between Khorramshahr and Andimeshk. In fact, because of the shift in priorities and the move of the American constructor from Iraq to Iran, completed only in June, the American projects for Iran were barely begun. No adequate force of skilled Americans reached the site of work until September, and no sufficient quantity of construction equipment, especially for highway building, until October. War Department plans to militarize and expand the activities carried on under civilian contract owed their inception as much to the unsatisfactory progress of construction as to the unsuitability of maintaining civilians in a theater of war. But at midyear these plans were still in the talking stage.

The events of June and July, culminating in the high-level decisions affecting Persian Corridor operations, launched a period of intense activity.[15] General Sidney Spalding was sent from Washington; Prime

[14] Ltr, Lt Comdr Derwood W. Lockard to OpNav, via Dir, Naval Intelligence, 1 Aug 42. PGF 242.

[15] Much of the material in this section draws upon: (1) Analysis, Persian Gulf Capacities for Period 10 Oct–10 Nov 42 (August Shipments ex-USA), Result of Conf, 29 Jul 42, Gens Spalding and Faymonville, Col Shingler, Comdr Lockard, Bosworth Monck; Memo, ACofS, Opns, for CofS, Hq, PGC, 12 Nov 44, giving estimated British tonnages for Russian-aid cargoes during 1942. PGF 122. (2) Rad, Spalding to Washington, 30 Jul 42, copy; Rad, Lock, Basra, to RepMinShip New York, repeat Shipminder London, 30 Jul 42, copy; Rpt, Lt Col Alden K. Sibley to CG, USAFIME, through CG, SOS, USAFIME, 18 Aug 43, sub: A Brief Assessment of Two Years' Activities of U.S. Army Forces in the Middle East, 11 Sep 41–11 Sep 43. PGF 236. (3) Rpt Serial 138–42, Lockard, Basra, to Intelligence Div, OpNav, 1 Aug 42, atchd to Ltr cited n. 14. (4) Rads 135, Churchill to Roosevelt, 22 Aug 42, Harriman to Roosevelt, 23 Aug 42, AMSME 857, Maxwell to WD, 22 Aug 42, all being Incl I, Summary of Basic Correspondence, of Plan for Operation of Certain Iranian Communications Facilities between Persian Gulf Ports and Tehran by U.S. Army Forces, 3 Sep 42 (the SOS Plan); Summary of Present and Projected Shipping Capacities, and Target Estimates Persian Gulf Supply Routes as of 22 Aug 42, prepared by Col Shingler in conference with British officials, both atchd to Incl III, Ports, Facilities, Capacities, and Inland Distribution, of SOS Plan. Copy PGF 235. (5) Documents dated 13–17 Aug 42 on Harriman-Maxwell trip to Moscow. OPD–99–H–42 (FIME–L). (6) Sherwood, *Roosevelt and Hopkins,* p. 627. (7) History: United States Military Iranian Mission, 20 Mar 43, prepared for Col Don G. Shingler, Chief of Mission, by 1st Lt Victor E. Dietze, Hist Off, pp. 32, 34. PGF 242. (8) Min of Stf Mtg attended by Gens Wilson, Maxwell, and Spalding, Cairo, 24 Aug 42. AG 334.8 Hq AMET. (9) Rads, U.S. MA, Tehran, to G–2, Washington, 17, 18 Jul 42, quoted in Memo, Maj Gen George V. Strong for CG, SOS, 24 Aug 42; Memo, Gen Somervell for Gen Lutes, 29 Aug 42; Memo, Gen Spalding for Gen Somervell, 4 Sep 42, sub: Target Estimate of Persian Gulf Supply Routes. Atchd to SOS Plan, Copy Contl Div, ASF, Sp Coll, HRS DRB AGO. This last file contains originals and copies of planning papers which have supplied incidental information.

Minister Churchill himself went from London to Cairo and Tehran, as did Averell Harriman. Harriman and General Maxwell went to Moscow to consult Stalin on Soviet needs, and Harriman, after stopping off in Cairo on the way back to report to Churchill, proceeded to Washington. General Faymonville came down from Moscow. The signals offices at Cairo, Basra, Baghdad, and Tehran dispatched thousands of words of estimates, surveys, and recommendations. And all the while time was passing, and there was no time to lose.

When General Spalding reached Basra in the last days of July it was known that some twenty-eight ships, most of them from the United States, bearing 125,000 long tons of cargo for the USSR were scheduled to reach Persian Gulf ports beginning in October; and that some 7,000 additional tons from India, East Africa, and elsewhere were also coming. The immediate problem, therefore, was to devise measures for clearing 132,000 long tons of incoming Russian-aid matériel. In addition was the even graver problem of meeting a new target. By the July decisions, 200,000 long tons a month of Russian-aid deliveries was the new goal. It was double the figure originally set and at midyear so hopelessly far from attainment. In all of 1942, including the latter months when Soviet deliveries considerably bettered the record of the early months, the total lift for the USSR through the Persian Corridor attained only about 350,000 long tons. The new target therefore set a goal almost seven times as great as that actually achieved in all 1942; and it was set when the prospects for its accomplishment were at their dimmest. It was two and one third times the estimated August inland clearance capacity. It disposed of any thought of surrendering to the crisis by reducing Soviet tonnages, for it affirmed that, no matter what the difficulties, Russian aid would be increased.[16] With the sights drastically raised, it was up to the planners to devise ways and means to meet the new goals.

The preparation of recommendations for handling the cargoes soon expected and those to come in the new program required stocktaking of three sorts. First, present methods had to be reviewed, their deficiencies analyzed, and their improvement determined. Second, present and projected facilities had to be surveyed: docks and dock equipment, railway rolling stock, highway routes, labor, and construction equipment. On the basis of data developed from these two kinds of inquiry, the third step, preparation of capacity estimates for port discharge and

[16] According to Commander Lockard, W. H. Lock, Director of the Ministry of War Transport at Basra, who had gone to Washington to discuss port problems, was believed to have considered recommending a decrease in Soviet loads for Persian Gulf ports. Ltr cited n. 14.

inland clearance, could be taken. Many individuals and agencies shared in the arduous business of fact finding. Lt. Comdr. Derwood W. Lockard's probing analysis of the immediate need as well as the ultimate proved reliable and suggestive, although his estimates were nearly all increased as planning went on. American fact hunters were almost wholly dependent upon British sources for their information and, as there were many different British sources, estimates rarely agreed even upon vital points. Much information was channeled through Colonel Shingler's transportation officer, Maj. Erme B. Myott, to Shingler who, after consultation with local American, British, and Soviet authorities, prepared numerous comprehensive and detailed estimates for General Spalding. These became the basis of studies carried on by the G–4 staff at USAFIME headquarters, Cairo, which in turn were used in drawing up General Maxwell's recommendations to Washington after he and Spalding had conferred with Churchill, Harriman, General Wilson, Commander-in-Chief, PAI Force, and the top British Middle East transport and quartermaster men, Maj. Gen. Sir Donald J. McMullen and General Riddell-Webster respectively.

What to do with the incoming cargoes which were just over the horizon was Spalding's first order of business. Some decision had to be reached, and reached promptly, in order that the necessary shipping arrangements could be made at New York and other American ports. A conference at Basra on 29 July, participated in by Spalding, Faymonville, Shingler, Lockard, and Monck, concluded that, in the period 10 October to 10 November, when the 132,000 long tons would hit the Persian Gulf ports, inland clearance by road and rail—after deducting tonnages for the British military forces, the Iranian civilian economy, and the Polish refugees being cared for by the British military—could accommodate only 111,500 long tons for the USSR. Other figures, based upon data not used at that meeting or providing solutions different from those reached on 29 July, appear in messages and estimates which went from Spalding to Washington and from the Ministry of War Transport, Basra, to its officials at New York who had to load and route ships with due regard to the capacities of the various Gulf ports to receive certain kinds of cargoes. The significant general conclusion of the conference on the immediate problem was that as of 1 August there was an estimated gap of 54,000 long tons monthly between the capacity of the ports of Basra, Bandar Shahpur, Khorramshahr, Ahwaz (lighter port on the Karun River), and Bushire to receive all cargoes and the smaller capacity of existent rail and road facilities to carry all kinds of tonnages inland. It was obvious that substantial backlogs would accumulate at the ports until inland clearance could be brought into balance with

port capacities. The cargoes arriving in October–November would have to be processed under existing conditions and methods subject to whatever improvements were immediately possible to make; but General Spalding advised Washington that wharf cranes, diesel engines for the railway, road-making equipment, and military port operating personnel additional to that already requested by Colonel Shingler for the militarization and expansion of the civilian contract operations were urgently required.

The general problem of the new quota called attention first to existing organization and procedure. Some Americans whom Spalding consulted complained that, as Commander Lockard put it, plans to increase Russian loads "frequently have had only lip service paid them." This criticism was directed at the British who were at midyear solely responsible for transport matters. Whether accurate or not as a statement of fact, the criticism did not do full justice to the other responsibilities borne by the British forces in the Corridor. Indeed, when General Spalding told General Wilson at Cairo that "there has been no serious backing of the Persian supply route" by the British and American forces, Wilson in reply referred to a letter in which Churchill had once pointed out to Roosevelt that it would be difficult for the British to supply Russia and at the same time maintain British forces in a suitable state of readiness to repel invasion.

The tug of war between priorities for British and Soviet needs had resulted in numerous frustrations and alterations of plans, a striking example of which was furnished by the shift of the American tasks from the port construction at Umm Qasr and other Iraqi projects. It is easy to understand, long after the fact, that such difficulties were inherent in a co-operative rather than a combined operation; but the feeling was strong at the conferences held by Spalding that they might have been largely avoided if the British had not divided responsibility for their Russian-aid operations among at least five agencies. Within the area controlled by Tenth Army, transport facilities were created and operated by separate transport directorates for Iran and Iraq; the Ministry of War Transport and UKCC, independent agencies each reporting to London, shared in both policy and operation; and the busiest Persian Gulf port, at Basra, was nominally under the control of the Iraqi Government. Lockard's recommendations for improvement struck at the basic weakness of divided responsibility. Although Tenth Army, by virtue of the directive given in 1941 to Quinan, was responsible in general for the Russian-aid delivery program, no single agency responsible to Tenth Army had the matter in hand. Lockard noted that on 20 September the Quartermaster General, Tenth Army, would be-

come Inspector General, Communications for Iraq and Iran, and that he would be advised by directors of transportation and movements control whose functions, contrary to those of their parallels at GHQ, Middle East Forces, Cairo, were, as of 1 August, for local reasons, not clearly enough defined to prevent friction and overlap. The Lockard report recommended establishment of a permanent committee to suggest improvements in efficiency and to be presided over by a representative of the Ministry of War Transport. The other members would be an officer of Tenth Army and an American officer qualified as a transport expert. The committee would be responsible to Tenth Army, but would have the right to appeal to higher authority any movement ordered by Tenth Army detrimental to Russian aid. It was further recommended that the committee was to be solely concerned with Russian-aid movements and must have power to allocate priorities in both ship and land movements.

While improvement of methods and centralization of authority were vital parts of any scheme to increase performance, benefits resulting from them would be conditioned by the tools available for the job. Tonnage estimates therefore depended on the condition of ports, railway, and highways, and on the speed with which the disparity between port discharge and inland clearance could be wiped out. Up to midsummer of 1942, Basra, both as the sea gate of the British line of communications and as the best equipped port on the Gulf, had been discharging more cargo than Khorramshahr, Bandar Shahpur, and Bushire together. But until the port area of Basra was connected that summer to the ISR by the branch line to Cheybassi, Russian-aid goods, which approximated one fourth of Basra ship discharge, had to go overland by truck, and this threw a disproportionately heavy burden upon the UKCC and British Army motor transport services using the Khanaqin Lift and other highway routes north from Basra. On the other hand, Bandar Shahpur, where new dock construction at midsummer was far behind schedule, discharged much less tonnage than was cleared inland by rail. Bushire landed small tonnages and sent them inland over one of the worst roads in Iran. At midsummer Khorramshahr's discharge capacity was only half that of Basra's. Like Basra's, it was largely dependent, for clearance to Soviet receiving points, on road transport, for the new rail extension to Ahwaz, though completed in June, was not yet useful for heavy work. As Khorramshahr's docks were finished and put into service and as the new rail line gained capacity, that port would rise, as it eventually did, to top position. But the planners in August had to forecast as well as they could the rate of improvement in facilities and to provide a shift in loads from port to port as the relative pros-

pective capacities of ports to discharge and to clear inland altered. It was apparent that, until Basra's rail connection with the ISR could haul large tonnages, truck haulage out of Basra would have to be stepped up; and until the new highway out of Khorramshahr was ready, other highway routes would have to be utilized. The only hope of holding the accumulation of backlogs to manageable proportions was therefore to build up motor transport wherever possible during the remainder of 1942. Thereafter, if all went according to plan, motor transport would become secondary to the railway.

The procurement of enough trucks and drivers was a pressing problem, for there was no time to bring them from the United States. Lockard estimated that the UKCC had assembled—and as of 1 August was operating—1,300 lend-lease trucks and around 1,000 Iranian trucks on contract. There were perhaps 3,000 nonmilitary trucks in Iran, many of them laid up for lack of tires; but it was felt that UKCC could put tires on 1,000 of them from its stock of 16,000 tires, and thus add an estimated 7,000 tons to road capacity. The Lockard report recommended the drastic step of requisitioning all remaining nonmilitary trucks in Iran, and the equally drastic step of suggesting to the Russians that their trucks, which were driven north loaded, be sent over the route twice before delivery. Colonel Shingler's tonnage estimates, which went forward to Cairo and Washington, forecast that up to 1 January 1943 more than half of total inland clearance would be accomplished by truck, and that after that date more than half would move by rail. His figures showed an imbalance between ship discharge and inland clearance up to 1 December 1942, but optimistically (as the event proved) expected new construction, new methods, and increased manpower to even the score after that date. Procurement of trucks was essential to attainment of his goals.

The Shingler estimates were predicated upon the use of every known trucking route in the frantic search for maximum delivery, although in his view it was preferable to use those which were most convenient and quickly capable of development, expanding as a last resort to less desirable routes. His figures thus included calculations for use of highways in eastern Iran, including the Zahidan–Meshed route used for a time by UKCC and under improvement by a UKCC contractor. This route had been opposed by the Russians in January 1942 as delivering cargoes too far from their battle lines; and, since it terminated at Ashkhabad, inside the border of the Turkmen Soviet Republic, it would almost certainly continue to be opposed by the Soviets as requiring admission within their borders of American and British military personnel. As a minor feeder to these routes Shingler included the use

of Karachi for discharge of not more than 30,000 long tons monthly. Two highway routes originating in Iraq were also included in the Shingler estimates.[17]

The total discharge capacity of ports,[18] which was estimated at 189,000 long tons as of 1 August, rose in the Shingler tables to 252,000 for November, and 399,500 tons for June 1943, with the possibility of advancing the last figure to February. The last two figures, if attained, would be sufficient to accommodate both the new target of 200,000 long tons monthly for the USSR and mounting tonnages for British and American military needs, Iranian civilian economy, and the Polish refugees. The totals given included estimates that the ISR could haul 78,000 long tons north of Andimeshk in November, 90,000 in December, and 180,000 by June 1943, or 6,000 tons a day in contrast to its 1941 rate of 200.[19]

Concurrently with the assembly of these figures the process of relating them to available and prospective operational plans was going on. Churchill, Harriman, Maxwell, and Spalding concluded their various consultations at Moscow, Tehran, and Basra and reassembled at Cairo. There, just before Churchill's departure for London, Harriman repeated to him the suggestion that American service troops expand and operate Persian Gulf ports and the ISR. The fact gathering had now to be turned to account in devising methods of operation. The British and Americans who conferred together at Cairo had before them the suggestions of the past nine months. These were of three kinds: increased manpower; increased centralization of authority and responsibility within the British administration; and American operation of rail, port, and motor transport facilities. The first was being partly met by the War Department's militarization of civilian contract activities, service troops for which were proposed for shipment in the latter part of 1942. This program, conceived months before the midsummer crisis brought the SOS Plan into existence, was, while retaining its individuality up to a late hour, ultimately to be merged in troop estimates and dispositions for the SOS Plan. Centralizing within the

[17] Notes supplied the author by General Shingler, 16 May 1950.

[18] Basra (Margil and Tanuma), Ahwaz, Khorramshahr, Bandar Shahpur, Bushire, and Karachi.

[19] The Summary of Present and Projected Shipping Capacities, cited note 15(4), which eliminated the Basra-area port of Margil, estimated September capacity of Bushire, Bandar Shahpur, and Khorramshahr at between 99,000 and 129,000 long tons and rail clearance at 60,000. The same document estimated ultimate attainable target capacity for those ports plus the lighter basin later called Cheybassi at 261,000 long tons, with rail clearance of 180,000 tons and road clearance (not estimated for September) at 61,500 tons. Both estimates left a considerable gap which meant accumulation of backlogs; but the document noted that water and road routes in the Tigris valley, not included in the estimates, could be developed or utilized to close the gap.

American command responsibility for transport solved part of the old problem of divided British responsibilities. But there was still to be solved the intricate question of the relation of American to British responsibilities.

On 22 August General Maxwell sent to Washington the broad outlines of an American plan. This superseded a tentative plan sent to London a few days earlier by General Spalding. Maxwell's proposals embodied the conclusions of the conferees at Cairo and was concurred in by GHQ, Middle East Forces, subject to approval of a final general plan. Maxwell stated the purpose of the plan as twofold: to assist in increasing the flow of supplies to the USSR; and to provide the British forces in the Corridor with their necessary requirements. A basic target figure of 251,000 long tons monthly was established, of which 180,000 would be carried by the ISR north of Andimeshk. Inasmuch as this figure was for the ports of Khorramshahr, Bushire, Bandar Shahpur, and Tanuma only, it represented a decision to concentrate American activity at those ports, whereas the Shingler figure of 252,000 long tons monthly had included other ports. The basic American target therefore did not include the additional tonnage that could be handled at Basra by the British. It was further proposed that the American Army operate the ISR from Tehran to the Gulf, and that an American truck forwarding organization be set up to supplement the UKCC. In addition to units already planned for the militarization program, Maxwell proposed a total troop strength for the plan of 8,048 officers and men. He noted that Negro troops would be "acceptable" for port and truck units.[20]

The Maxwell message had this to say on the problem of authority and responsibility:

> The allocation of traffic in this area would be made by the British military authorities, even though the actual operations would be under control of the U.S. Army Forces in the Middle East. All action would be under a general policy to be established by the Combined Chiefs of Staff, which would take into consideration

[20] (1) Spalding discussed the employment of American Negro troops with Ministry of War Transport officials at Basra and the matter was referred to London. In recommending their use in a message of 30 July 1942 Spalding noted that the British had not specifically approved the idea. A condition of British approval of the importation of American Negro troops into Iran and Iraq was that they would be kept apart from the natives. Some Americans thought this was out of fear of the consequences of the disparity in rates of pay. Maxwell envisaged use of Negro troops in supervisory capacities. The SOS planners in Washington in September decided to refer the problem to General Connolly as commanding general, leaving him to dispose his troops as he saw fit. Memos of Sep dates in SOS Plan file cited n. 15(9). (2) The estimated strength figure was made up of 3 port battalions and a headquarters, totaling 2,667; 2 railway operating battalions and 1 engineer battalion totaling 2,363; and 3,018 for 2 truck regiments. Estimates of equipment called for 75 locomotives and 1,200 "wagons" of 20-ton capacity for the railway; and 7,200 trucks of an average capacity of 7 tons for the motor transport service.

all the principles which govern the amount of cargo which is agreed to be forwarded to the USSR. Inasmuch as the traffic is subject to emergency military demands, and because the facilities are within the British theater of operations, it is felt that the allocation of the traffic should rest with the British military authorities.

Two more messages served to transfer the planning to Washington. From London on 22 August Prime Minister Churchill sent his answer to President Roosevelt's proposal of the previous month:

I have delayed my reply until I could study the Trans-Persian situation on the spot. This I have now done both at Tehran and here, and have conferred with Averell [Harriman], General Maxwell, General Spalding and their railway experts. The traffic on the Trans-Persian Railway is expected to reach three thousand tons a day for all purposes by [the] end of the year. We are all convinced that it ought to be raised to six thousand tons. Only in this way can we ensure an expanding flow of supplies to Russia while building up the military forces which we must move into Northern Persia to meet a possible German advance.

To reach the higher figure, it will be necessary to increase largely the railway personnel and to provide additional quantities of rolling stock and technical equipment. Furthermore, the target will only be attained in reasonable time if enthusiasm and energy are devoted to the task and a high priority accorded to its requirements.

I therefore welcome and accept your most helpful proposal contained in your telegram, that the railway should be taken over, developed and operated by the United States Army; with the railroad should be included the ports of Khorramshahr and Bandar Shahpur. Your people would thus undertake the great task of opening up the Persian Corridor, which will carry primarily your supplies to Russia. All our people here agree on the benefits which would follow your approval of this suggestion. We should be unable to find the resources without your help and our burden in the Middle East would be eased by the release for use elsewhere of the British units now operating the railway. The railway and ports would be managed entirely by your people, though the allocation of traffic would have to be retained in the hands of the British military authorities for whom the railway is an essential channel of communication for operational purposes. I see no obstacle in this to harmonious working.

The change-over would have to be carefully planned to avoid any temporary reduction of effort, but I think it should start as soon as possible. Averell is cabling you detailed suggestions.[21]

Harriman sent a message to the President on 23 August. He strongly reinforced Churchill's cable by stating that the British did not possess the resources or personnel to carry out the expanded program even if the United States should supply the equipment. Furthermore, Harriman warned, "Unless the United States Army undertakes the task,

[21] Churchill's draft acceptance of 18 July 1942 (Item 62 cited note 2(4)) sent to Harry Hopkins read:

I welcome and accept your most helpful proposal contained in your telegram that the Railways should be taken over, developed and operated by the U.S. Army; with the railroads should be included certain Persian ports—though the allocation of traffic would have to be retained in the hands of the British military authorities for whom the railway is an essential channel of communication for operational purposes.

the flow of supplies to Russia will dry up as the requirements of the British forces in the theater increase." He added that the importance of developing the ISR could not be overemphasized and that "the condition in the Prime Minister's cable of the British retaining control of traffic to be moved is reasonable, offers no practical difficulty, and should be accepted." The message went on to recommend that the task be undertaken, and that a top-caliber railroad man of a western railroad be drafted and commissioned in the Army with the rank of brigadier general. He should be "vigorous and young, not much over fifty, with experience on mountain and desert operations, [and] ability to handle relations with different nationalities." With a party of twenty to twenty-five key men he should proceed at once by air to Iran to arrange with the British on the spot for the gradual taking over of the ISR south of Tehran. Noting that the turnaround of ships in the ports "is deplorably slow," Harriman recommended early dispatch of port battalions, including the transfer to Khorramshahr of one "now in Karachi which has not been allowed to function due to labor union restrictions." Karachi, an auxiliary port in Shingler's estimates, was thus eliminated by Harriman. Although Churchill's message had not touched on motor transport, Maxwell's proposal had included a trucking service while urging top priority for port and rail plans. Harriman noted, "The British are also asking for help with trucks and personnel to increase the road transports," and added, "This is an important proposal but of second priority to the railroad and ports."

On 25 August, the President directed General Marshall to prepare a plan for operation of certain Iranian communications by U.S. Army forces. This signal set in motion three more stages in the process of increasing aid to the USSR. First, a plan had to be evolved; next, it had to be considered and approved; and finally, it had to be mounted. It was now Washington's turn, for the first time in the war, to train its biggest planning guns upon a major Middle East project.

The Chief of Staff passed the President's directive to Operations Division which referred the whole business of planning to General Somervell's Services of Supply. The preparation of a detailed plan was assigned to the Strategic Logistics Division, SOS, Col. Dabney O. Elliott, Director, with over-all responsibility centered in General Lutes, Somervell's Assistant Chief of Staff for Operations.[22] On 29 August Somervell wrote Lutes that the plan was to be so complete that the signature of the President would set it into motion, down to the last detail. "This is the first opportunity," Somervell said, "that the SOS

[22] Detailed plans were presented him by the Corps of Engineers on 29 August, and by the Signal and Medical Corps on 30 August.

has had to turn in a report of this kind, and I wish it to be the best we can do." By 3 September the plan was completed by the Strategic Logistics Division, SOS. On the next day it was passed to General Somervell and by him to Operations Division and the Chief of Staff, equipped with a draft letter for the Chief of Staff to send to the President, submitting the plan to him, and a draft cable for the President to send the Prime Minister, stating, "I have approved a plan to put [Churchill's] proposal into effect."

But the plan was to take a different course. It was not, after all, a purely American plan, and so the President's approval would not have set it in motion. It was a plan for fitting increased American responsibilities within the already existing framework of British responsibilities and authority. From the office of the Chief of Staff the completed plan went, therefore, on 9 September to the U.S. Joint Staff Planners. Having received their approval it went on to the Anglo-American Combined Staff Planners on 11 September, who debated it, amended it, and recommended its approval by the Combined Chiefs of Staff. This was granted on 22 September by CCS 109/1 and the plan was returned to the U.S. War Department for action. On 25 September Maj. Gen. Thomas T. Handy, Assistant Chief of Staff, OPD, transmitted CCS 109/1 to the Commanding General, SOS, for his information and action. It was just one month from the date of the President's directive, just two months from the day the Combined Chiefs' naming of TORCH made inevitable increased aid to Russia through the Persian Corridor.

The SOS Plan

The Plan for Operation of Certain Iranian Communication Facilities between Persian Gulf Ports and Tehran by U.S. Army Forces, running to nineteen typewritten pages with ten inclosures, consisted of basic correspondence, estimates, appreciations of terrain and facilities, maps, organization charts and tables, and drafts of letters of instruction, activation orders, and movement orders.[23] Its provisions may be summarized under the general headings of logistics and administration.

Logistic Recommendations

Target Estimates. The plan assumed no carry-over of backlog tonnages from the period of special stress between August 1942 and June

[23] The basic documents for this and the following sections are: (1) SOS Plan copy cited n. 15(4). (2) SOS Plan copy cited n. 15(9). (3) CCS 109/1, cited n. 2(5), and Tab "A", draft telg to General Officer Commanding-in-Chief, PAI Force. (4) Another copy of CCS 109/1, with American and British drafts atchd. Registered Documents Room, OPD.

1943. On that basis it adopted the Maxwell-Shingler figure of 6,000 long tons per day (or 180,000 long tons monthly) for ultimate rail carriage of all cargoes north of Andimeshk. Its target for the ports of Khorramshahr, Bandar Shahpur, Bushire, and Tanuma increased the Maxwell-Shingler figure to 8,700 tons daily, or 261,000 monthly, for all cargoes. It looked forward to ultimate road capacity by truck of 172,000 long tons monthly, a figure greatly in excess of those previously set. The expanded highway estimate, if attained, would leave ample leeway for increased port performance which would otherwise overtax the railway.

Facilities, Manpower, and Equipment. The Maxwell recommendation that the four ports just named should be American operated was followed, as was the provision for three port battalions (including one to be transferred from Karachi to Khorramshahr, as suggested by Harriman). The Maxwell estimate of 3,121 men for the ports was likewise accepted. Concise information on port equipment was not available to the Washington planners, who noted that ample stocks were on hand at the New York Port of Embarkation and could be shipped out with the port battalions.

The composition of railway units was restated by the plan, although it followed the Maxwell strength figure of 2,722 officers and men. The units were to be one engineer railway grand division, one engineer battalion (railway shop), two engineer battalions (operation), and one engineer transportation company (less one platoon). The plan provided for 75 locomotives and 2,200 freight cars of 20-ton capacity, which included the 1,200 cars in the Maxwell estimate and 1,000 cars already ordered under lend-lease. To accomplish delivery the plan contemplated diverting to Iran 1,200 cars at Karachi destined for Iraq, but noted that this would be subject to procurement in the United States of adequate brake equipment for them for the mountains of Iran.

Three highway routes were listed in the plan in addition to that running north from Khorramshahr, a part of which was under construction by the engineer civilian constructor. The three others were: Khorramshahr–Ahwaz–Hamadan–Kazvin, Bushire–Shiraz–Tehran, and some portions of the route through Iraq via Khanaqin used by the UKCC and British military motor transport. The plan anticipated that truck deliveries would also be made at Tabriz and Pahlevi, both inside the Soviet zone of Iran. Like the Maxwell estimate, the SOS Plan expected to use native drivers to supplement American soldier drivers in the motor transport service; but the native role was somewhat di-

minished, while the military strength was increased to 5,291 officers and men for the trucks. In addition, the SOS Plan provided a large reserve of military personnel for highway maintenance, not to be shipped "unless experience dictates the need for them." This reserve comprised two engineer regiments, one engineer maintenance company, and three engineer dump truck companies. In addition an engineer headquarters (corps) was set up in the plan to supervise road maintenance and to go overseas "in the primary shipments."

The problem of estimating and providing trucks in suitable quantities and sizes illustrates the complexity of logistic planning. To begin with, the width and surfacing of highways to be used were determined by the potential traffic they would be called upon to bear. The traffic tonnage was conditioned by many factors, of which the chief one was the determination at highest levels of Soviet needs and the next in importance was the capacity of the ports to receive and discharge tonnage. Once upon the highway, tonnage was susceptible to a variety of treatments, these in turn conditioned by such diverse factors as terrain, climate, and the human element en route. During the days of intensive planning it was determined that the use of small trucks (under 3-ton capacity) was wholly out of the question because not only were there not enough drivers to man the larger number of trucks thus required to move a given tonnage but the larger number of trucks would call for an excessive number of maintenance crews and service stations. Moreover, more trucks per ton of haulage meant larger and less manageable convoys. And if these factors were not themselves controlling in the decision against small trucks, the hot and waterless terrain would, as always, have had the last word. It was the experience of the British in Iran that because of the dust trucks could not proceed safely closer than three hundred yards apart, double that if there were two lines of traffic. This was a problem in visibility, not in the comfort of the drivers. With such spacing in dusty areas the advantage lay with fewer and bigger trucks. In actual operation, photographs show that American convoys, depending on highway surface conditions, traveled from fifty feet to three hundred yards apart.[24]

The Maxwell estimate called for 7,200 trucks of 7-ton average carrying capacity. The SOS Plan noted that some 1,100 trucks could be found immediately, some of them, of 10-ton capacity, to be repossessed from a lot ordered by the British under lend-lease, and others, of unknown size, at Karachi "belonging to the Chinese." But, unfortu-

[24] British estimate of distance in Ltr, British Off in charge of highway construction by the contractor, Kampsax, to Gen Spaulding, 31 Jul 42, sub: Road Carrying Capacity. Contl Div, ASF, Sp Coll, HRS DRB AGO.

nately for the intention of the earlier planners, the remainder, stated the plan, would have to come from the stocks of 2½-ton trucks with trailers presently available or in production in the United States.

The plan included in its strength estimates a total of 822 officers and men for command headquarters, and 7,405 officers and men for miscellaneous services. The Signal Corps, for example, estimated that 1,181 officers and men would be required to establish communications between the command and Basra, Asmara, and Karachi; and within the command along the railway and highway routes. There would be need also to provide hospitalization for 10 percent of total troop strength; units and equipment for water purification, shoe and textile repairs, laundry, and sterilization; and limited ordnance supply and repair equipment, all at a 120-day supply level.

Overseas Movement and Future Supply of the Operation. Arranging for overseas movement was dependent upon settlement of a whole series of priority questions. First came priorities within the project itself, and these were basically determined by the plan's acceptance of the primacy of rail and ports operations. But then everything to go abroad had to be fitted into a prearranged spot on a ship; and the availability of ships was interlocked with the general conduct of the war and with the priority given to the Persian Gulf movement with relation to the many other movements competing for shipping at the same time. Nearly 40 percent of total planned strength was to be diverted from BOLERO.[25] The Combined Staff Planners, commenting on planned diversions of shipping, noted that forty-four cargo ship sailings diverted to the Persian Gulf would cost BOLERO, because of the shorter distance to England and quicker turnaround, a total of 110 sailings. In arranging personnel shipments, rail operating troops came first, followed by port and truck troops. These three groups, with accompanying housekeeping and general service and maintenance personnel, came to some 18,000 men. The planning indicated the following analysis:

Troops in area [26]	338
Port Battalion from Karachi	889
Available in area	1,227

[25] 8,969 out of 23,876.

[26] Consisting of

Hq 1616 (PGSC), 128 officers, 8 enlisted men	136
Part of 833d Signal Service Company	36
Company A, 84th QM Bn (LM)	166
Total	338

There was also a 50-bed station hospital staffed by 54 civilians who would have to be replaced. Incl VII, Troop Movements to Persian Gulf Serv Comd, SOS Plan copy cited n. 15(4).

Maxwell estimates	8,365
SOS Plan	9,769
Total from U.S.	18,134
Plus total available in area	1,227
Total	19,361
Deferred (highway maintenance and service troops)	4,515
Aggregate strength	23,876

A basic plan for movement overseas was presented on 30 August by the Transportation Corps. It calculated shipping for a total of 471,000 ship tons of cargo including provision for 16,159 vehicles. It was estimated that with shipping withdrawn from BOLERO and the Murmansk route, 50 percent of personnel could sail the first month of the movement, and that, beginning 1 October, cargo could be shipped at the rate of ten ships a month through January 1943. The Transportation Corps calculations counted on getting the initial echelon with its proportionate share of equipment out to Iran and at work there by the end of December 1942, completing the whole movement by late February or early March.[27]

The SOS Plan provided for carriage of 475,000 ship tons, but otherwise closely followed the estimate of the Transportation Corps. After some fifty-one vessels had carried the movement to Iran, it was estimated that two vessels a month of 8,000-ton cargo capacity each would be required to keep the force supplied. Although every effort would be made to get as many parts of the new task under way at once through simultaneous shipment of men and materials, the basic priority of shipments would be in the following order:

(1) The forward echelon of headquarters.
(2) Railway and port operating personnel.
(3) Equipment and supplies for operation of railway and ports.
(4) Personnel and equipment for motor transport operations.
(5) Miscellaneous service and other units to make the command self-sustaining.

Administrative Recommendations

In administrative matters the SOS planners confined themselves to general recommendations, inasmuch as the organization of the American command and its operation within the framework of British powers

[27] Memo, Maj Gen C. P. Gross, CofTrans, for Somervell, 30 Aug 42, sub: Trans Serv for Persian Gulf. SPTSA/370.5–A.

and responsibilities were matters respectively for determination by the American commanding general in the field and for mutual agreement between British and American field commanders, subject to the direction of the Combined Chiefs of Staff. It was recommended, therefore, that the Persian Gulf Service Command should be reorganized to continue existing American activities in construction and assembly and to carry out the new commitments. The organizational structure suggested was a simple one: a PGSC headquarters and three subheadquarters for ports, railway, and motor transport services to which the operating units of those services would report. Hospital, depot, and miscellaneous service units were also provided for. The Commanding General, PGSC, was to have wide discretion to deal directly on transport matters and allocations of traffic with representatives of Great Britain, the USSR, Iran, and Iraq "in conformity with policies established by the Commanding General, USAFIME," and was to be empowered to communicate directly with the War Department "except for military operational activities." [28] The SOS Plan thus envisaged a semiautonomous American organization nominally under the jurisdiction of USAFIME at Cairo but able to act promptly on vital local questions. "The importance of the Iranian supply routes," stated the plan, "renders it essential that the British and United States commanders have authority to take the necessary steps on the ground to remove any administrative or other hindrances to the smooth operation of this channel of supply at maximum capacity."

As had been recommended by Churchill, Harriman, Maxwell, and Spalding, the Americans were to operate transport services while the British were to continue to control traffic. The plan did not elaborate details for the working out of arrangements. In one field of activity in which Anglo-American co-operation would be required it did, however, venture a comment. It was noted that unrest in Iran might at any time give rise to acts of sabotage, especially against the railway, whose many tunnels and bridges made it peculiarly vulnerable. Enemy successes in North Africa and the Caucasus would increase the danger from this source, and to counter the danger British forces in Iran, according to information as of 15 May available to the planners, numbered only 15,000. The SOS Plan assigned only one military police battalion and one military police company to the American forces, and their functions would be confined to routine interior guard and police duties at ports and other American-controlled installations. In view of these scant means of enforcing security, the plan observed that Ameri-

[28] From Incl V–a, SOS Plan copy cited n. 15(4).

can railway units would have to be trained to defend themselves against marauders. "It is assumed," said the plan, "that since Iran is within the British area of responsibility, the necessary security of these supply routes and critical installations will be provided by the British."

The Plan Approved

The directive of the Combined Chiefs of Staff was the law and the prophets for the Anglo-American effort in the Persian Corridor. In the logistic field it accepted the recommendations of the SOS Plan in all but a few minor details. The Combined Chiefs added the barge port of Ahwaz on the Karun River to the list of installations to be operated by the American Army; and they adopted the recommendations of a combined military transportation committee for the overseas movement of the American forces which modified SOS Plan recommendations for shipping. The Combined Chiefs noted that no difficulty would be anticipated in effecting the first and second priority personnel shipments through early November; and that after that it would be necessary before arranging for further troopships to await word from the field as to how much native labor could be used on American projects, and whether economies in troop shipments could be achieved in this manner. In order not to overtax the still limited facilities at Persian Gulf ports, the Combined Chiefs reduced the monthly cargo ship sailing estimates for the movement from ten to five, and noted that as late as December the ports could handle not more than 34,000 long tons monthly for the overseas movement without reducing cargo handling for the USSR, British military needs, and requirements of the Iranian civilian economy. As it developed, even this figure proved optimistic.

The main business of the Combined Chiefs was to establish policy for co-ordinated Anglo-American operations, and more than half their paper was devoted to the definition of the respective responsibilities of the British and American armies. Three assumptions were stated as basic: "This area lies within the sphere of British strategic responsibility, which will require careful co-ordination regarding control, allocation, and priority of supplies"; to carry out its increased responsibilities in the Persian Corridor, the United States would have to divert personnel, equipment, and ships from planned use in other theaters; and the new plan would increase the strategic dispersion of United States military resources by throwing new forces into an area "definitely threatened by the German drive into the Caucasus." The second and third of these basic assumptions underlay the forceful statement which

was set as the first condition attaching to acceptance of the plan. The first assumption governed the remaining conditions.

The relevant passages from CCS 109/1 follow:

9 (a) (1) That the primary objective of the U.S. forces in this area will be to insure the uninterrupted and increased flow of all supplies into Soviet Russia. Over and above the *minimum* requirements for British forces consistent with their combat mission, and essential civilian needs, Russian supplies must have highest priority.

(2) That the necessary military protection be furnished by the British to insure adequate security of the railroads, roads, and harbor facilities against the threat of sabotage and Axis air, ground, and sea operations. The Commanding General, Persian Gulf Service Command, must be familiarized with the British plan in order that he may integrate his available local defensive means with those of the British.

(3) That the control of these railroads, road routes, and ports be exercised by the British General Officer Commanding-in-Chief of the Persia/Iraq Command as follows:

a. The Commanding General, U.S. Persian Gulf Service Command, will develop, operate, and maintain the port facilities at Bandar Shahpur, Khorramshahr, Tanuma, Ahwaz, and Bushire. He will assist in maintaining roads leading from these ports to the general vicinity of Tehran and will operate and control U.S. motor transport moving on such roads. He will develop, operate, and maintain the railroads leading from those ports to Tehran.

b. Priority of traffic and allocation of freight will be controlled by the British General Officer Commanding-in-Chief of the Persia/Iraq Command. Inasmuch as the primary objective of the U.S. participation in the operation of lines of communications from the Persian Gulf area to Tehran is to increase and insure the uninterrupted flow of supplies to Russia, it is definitely understood that the British control of priorities and allocations must not be permitted to militate against the attainment of such objective, subject always to the military requirements for preparing to meet a threat to the vital Persian Gulf oil areas. Should the British Commander in Chief make any decision which in the opinion of the Commanding General, U.S. Persian Gulf Service Command, would unnecessarily prejudice the flow of supplies to Russia, the latter will immediately report the circumstances through the Joint U.S. Chiefs of Staff to the Combined Chiefs of Staff in Washington.

c. U.S. troops in the Persian Gulf Service Command will be, for all administrative purposes, under the direction of the CG/USAFIME.

d. During any period of active or imminent British military operations in the area, the Commanding General, U.S. Persian Gulf Service Command, will conform to such decision, but if he does not agree will immediately report such disagreement, through the Joint U.S. Chiefs of Staff, to the Combined Chiefs of Staff in Washington, who will give a decision on the matter.

e. An uninterrupted and increasing flow of vital supplies over these routes to accomplish the primary objective (supplies to Russia) is contingent upon complete cooperation between U.S. and British Commanders in the area. In the event that problems arise which cannot be mutually solved, each Commander will communicate (the British Commander, if desired, through the War Office) with his respec-

tive Chiefs of Staff, who will in turn present the matter for the decision of the Combined Chiefs of Staff in Washington.

Unfinished Business

It was inevitable that both the SOS Plan and the directive of the Combined Chiefs of Staff would be modified when put to the test of actual experience in the field. The one was a forecast which on the whole proved remarkably accurate; the other was a working compromise whose ambiguities in certain important matters had to be clarified as the experiment in co-operation developed. Both papers left to the future a legacy of unfinished business not apparent in the summaries of their contents; and both embodied rejection or acceptance of varying points of view. Differences of opinion and ambiguities in policy were among the many obstacles besetting the Persian Corridor delivery program. It would require an Olympian omniscience to say that the job would have gone faster if this or that had been learned earlier; or to go even farther and say that all the main pitfalls were clearly foreseeable by September 1942 and therefore wholly avoidable. Such a sweeping statement would be false. Some of the unfinished business, broadly considered, was avoidable. Nearly all of it, if considered from such a single and limited point of view as the primacy of the logistic commitment to the USSR, was avoidable also. The entire operation under the SOS Plan, which had its origin in a tangle of global events and policies, was never free of their implications and influences, and cannot, therefore, be fairly judged by any limited criteria. This must be borne in mind in considering differences in point of view as expressed in the SOS planning period.[29]

A striking instance of delay in reconciling differences of opinion on a matter of major policy was transport operation by the Americans. When it was first suggested, the United States was not a belligerent, and for many months after Pearl Harbor the debate for and against American operation proceeded not as between the Americans on one

[29] A minority opinion about the SOS Plan as a whole was voiced by General Greely when asked his views by the Strategic Logistics Division, SOS. He felt, as did others in the War Department earlier in 1942, that U.S. service troops should not be used to support the operations of non-American forces. Therefore, he recommended that the midsummer crisis of 1942 should be met by the dispatch of U.S. combat troops to Egypt before any service troops should go to Iran. Such troops, if sent to Iran, should be limited to the task of moving supplies to the USSR, and only in such types and quantities as required for the Caucasus campaign. Greely recommended that Shingler be asked to estimate needs for such limited aid to Russia and that "he should be protected in his recommendations." Greely also thought that Iranian and Iraqi troops should be used to defend the oil fields. Memo, Dir, Strategic Logistics Div, SOS, for Gen Lutes, transmitting information from intervs with Gens Aurand and Greely and Col Hauser, 30 Aug 42. Contl Div, ASF, Sp Coll, HRS DRB AGO.

side and the British on the other, but as between disputants in each camp, whose arguments canceled each other out. It is an extreme simplification to say that American operation of the ISR came a year after it should have because a perverse and obstinate group of British Army men in the field delighted in keeping the railway to themselves and refused to extend themselves too strenuously in aid to Russia; and yet there were Americans who believed just that. A psychiatrist might trace the roots of their belief to the auxiliary status of the American forces in the area of British responsibility, and to their consequent feeling that, somehow, they were being put upon and were at a disadvantage which in some fashion represented a British success in extended Anglo-American maneuvers. But the auxiliary status went, as it were, with the job. When the British first asked American help in 1941, it was the only way help could be furnished. No evidence has been found that President Roosevelt demanded any *quid pro quo* whatever when the Iranian Mission was organized, or that at any time thereafter it ever occurred to him to do so. Although resultant conditions for members of the United States Army may have been, and indeed in many an instance were, personally galling, nothing illustrates more convincingly the disinterestedness of the American task as a whole than the continued auxiliary position of the United States forces in the Corridor. The position, while admirable, was not an easy one for the U.S. Army.

There was, for example, the basic assumption of the SOS Plan as restated and approved by the Combined Chiefs: American operation, British control of movements and allocations. Churchill had written Roosevelt, "I see no obstacle in this to harmonious working"; Harriman had called it reasonable, and had told the President it offered "no practical difficulty." The Maxwell proposal had accepted it as a matter of course; but then the Maxwell cable of 22 August had posited a dual mission for the American command: to provide British forces with their requirements and to supply the USSR. It is significant, however, that CCS 109/1 stated that the sole justification for U.S. Army activity under the SOS Plan was aid to Russia. There is no mention of aid to the British line of communications, Basra to Baghdad. Between the dates of the Maxwell recommendation and the directive of the Combined Chiefs of Staff the Combined Staff Planners had threshed out the problem of allocations. For American operation under over-all British control of movements was not just a question of division of authority. Control of traffic carried with it the implementation of policy, and would reflect basic decisions as to the priorities to be given to British and Soviet needs. It was an old and a sore point and had plagued the Americans since their first arrival in the field.

British control of movements and allocations wore three aspects. First, this control was essential to the exercise of British responsibility for the military security of the area. On this ground alone the American planners had no thought of challenging it. Second, British control, if not subject to fixed policy with regard to the primacy of Russian aid, might conceivably result in diminution of that program. This aspect worried the Americans among the Combined Staff Planners, and they succeeded after considerable exchange of ideas in achieving in CCS 109/1 the statement given above as paragraph 9 (a) (1), including the word *minimum,* which was not present in all preliminary drafts.[30] This statement, taken with that in paragraph 9 (a) (3) *b*, marked a meeting of minds and the establishment of unmistakably clear policy regarding priorities in Corridor movements. But American operation of transport within the over-all control of movements by the British offered still a third difficulty on the purely administrative level. Time and again the U.S. Army had, whether deliberately or inadvertently, experimented with this sort of divided responsibility in its relations with its own civilian contractors. There was evidence that, at least on that level, divided operational and managerial responsibility could not be efficiently administered. Because this third aspect of the control problem was tied in with the other two, the opinions of those who believed divided responsibilities to have been the bane of Persian Corridor activities in 1942 and equally undesirable as a feature of the SOS Plan were overridden in favor of the optimistic hopes of Churchill and Harriman.[31] This was the biggest piece of unfinished business left by the SOS Plan and the Combined Chiefs of Staff directive; but by 1 May 1943, as the story of subsequent operations will show, effective control of movements passed to the Americans. There is no doubt that Stalingrad and El Alamein had a lot to do with British willingness to delegate the controls they exercised under the Tri-Partite Treaty to the Americans, for the diminishing threat of Axis invasion enabled them to relax a full state of readiness to repel invaders. But the change, which was the only fundamental alteration in the SOS Plan under pressure of field conditions, was equally attributable to the inefficiency of di-

[30] This word is omitted from the draft telegram recommended by the Combined Chiefs of Staff to be sent as basic instructions to the General Officer Commanding-in-Chief, PAI Force (cited n. 23(3)). Paragraph 2 (a) of that draft includes the sentence, "Therefore, after meeting the requirements for British forces and essential civilian needs, Russian supplies must have highest priority." This is considerably less rigid than CCS 109/1 itself and is illustrative of the devices by which the Combined Chiefs attained harmony and agreement.

[31] General Greely's former chief of staff of the USSR Mission, Colonel Hauser, when consulted by the Strategic Logistics Division, SOS, voiced "the definite opinion that a U.S. organization subject to British control of traffic will not be successful." Memo cited n. 29.

vided responsibility and to the mutual confidence in which the Anglo-American partners held one another.

In September 1942 the turning back of Axis pressures against the Middle East was not even a plausible hope; hence the Combined Chiefs' proviso that, although British control of priorities and allocations must not militate against the flow of supplies to Russia, such control would be "subject always to the military requirements for preparing to meet a threat to the vital Persian Gulf oil areas." This proviso indicates how closely interwoven were the issues of movement control and security, for both of which the Combined Staff Planners assigned responsibility to the British. But whereas movement control ultimately became effectively American, security was in practice enforced by both armies. There were two categories of security to be covered by the planning: the over-all military security of the area, a problem which diminished as Axis threats disappeared in 1943; and the local security of ports, docks, storage areas and warehouses, property in transit, vehicles, men and equipment, telegraph systems, oil and gasoline refueling stations, rail and highway bridges, tunnels, and rights of way—a complex agglomeration of liabilities, from the security point of view, which had to be taken care of by both the British and the Americans. In this second category of security responsibilities it was never a practical possibility to draw a distinct dividing line between British and American jurisdiction. Both the SOS Plan and CCS 109/1, therefore, confined themselves to a statement of basic and comprehensive British responsibility for all kinds of security. The draft telegram prepared by the Combined Chiefs for the General Officer Commanding-in-Chief, PAI Force, was broadly expressed. "You will be responsible," it said (paragraph 2 (d)), for providing the necessary military protection "to insure adequate security of the railroads, roads and harbor facilities against sabotage and Axis air, ground and sea operations." The instruction continued: "You will also insure that such defense means as are available to the Commanding General, U.S. Persian Gulf Service Command, are co-ordinated with yours, without interfering in any way with any arrangements made by him for the local protection of his forces." The wording should be compared to the language of CCS 109/1 (paragraph 9 (2)).

Both versions provide for the protection of day-to-day logistic operations, as well as for the contingent duty of repelling invasion. The two texts perhaps reveal a secret of the success of the Combined Chiefs in directing a great wartime coalition: they were not unnecessarily dogmatic, nor were they tiresomely consistent in details. Theirs was the task of making a shoe that would fit in all weathers and outlast, if

necessary, a succession of wearers. The problem here was one of command relationships. In the discussions of the Combined Staff Planners the American members respected the paramountcy of British responsibility for security under treaty obligations. Moreover, the SOS Plan provided, as has been noted, only the most meager American military police forces for the most routine of interior guard duties, and the planned American force was for service, not combat. The American planners, however, did feel it desirable that the British commander in the field should acquaint his American opposite with his security plans, and this stipulation was incorporated in CCS 109/1 (paragraph 9 (2)). On the other hand, the draft instructions for the British commander (paragraph 2 (d)) laid upon him no obligation to communicate his plans for security to the American commander. The draft instructions were wholly silent on this question, with the result that the British commander was free to proceed either in accordance with the directive paper or with his specific instructions, both of which emanated from the same supreme source of authority. This was a piece of unsettled business which, unlike other ambiguities, caused no future trouble since there was no invasion and therefore no necessity to put any American soldiers in the area under British command.[32] Nor was there any time during the rest of the war when either the British or the American commander used the machinery of the directive to appeal disputes to the supreme authority of the Combined Chiefs. Once again cooperation worked.

Although the SOS Plan and CCS 109/1 left a few important questions to the future, the biggest of these problems, control of movements, was promptly solved by straightforward adjustment in the field. The closely related questions of security responsibility and command relationships, while never precisely defined, were answered from day to day by a working compromise between a unification of forces, which the

[32] (1) While the Combined Staff Planners were meeting, Colonel Shingler was holding informal conversations with his British opposite numbers in the field about many problems that would arise when large numbers of American troops would come. It was unofficially agreed that "some form of Anglo-U.S. unified command" was called for to deal with the co-ordination of Iranian native manpower to prevent uneconomic and inefficient competition for services, inequalities in pay rates, and similar disparities between un-co-ordinated British and American agencies. It was also unofficially agreed that, after the disposition of the new American service troops, "Administrative command should be British where such machinery exists at present, and American in any future station where American units only will be functioning." British Summary of "Talk with Col. Shingler, U. S. P. G. S. C. on 13 September 42." PGF 131. (2) Shingler held similar talks in April 1942 to prepare for the then expected arrival of troops in August under the militarization program; and Maxwell in October reached informal agreements in Cairo as to relationships between American and British forces. Neither of these tentative explorations was connected with the implementation of the SOS Plan.

Americans did not desire, and a separation of forces, which no one desired.[33]

Some further recommendations of the SOS Plan and CCS 109/1, which chiefly concerned internal affairs of the American command and which were altered after a period of trial and error, require comment. Two of these were in the logistic field, two of them in the administrative. The SOS Plan, perhaps influenced by the interim proposals put forward in July and August to deal with the immediate problem of backlogs, recommended several highway routes for the use of American motor transport. As soon as construction permitted, American trucking was assigned to the road between Khorramshahr and Kazvin. To Churchill's suggestion that the Americans operate the ports of Khorramshahr and Bandar Shahpur, the plan added Bushire and Tanuma, suggested by Maxwell. The directive added Ahwaz. By decisions reached in the field only Khorramshahr and Bandar Shahpur were taken over by the American command, although the lighterage basin near Tanuma, which was later designated Cheybassi, was taken over in addition and operated between July 1943 and October 1944. Bushire was eliminated as a port for American expansion and operation early in 1943, and Ahwaz, as a busy center of British Inland Water Transport activity, handled too little Soviet cargo to justify its inclusion in the American program.[34]

Although the SOS Plan recommended wide powers for the American commanding general to deal locally with representatives of the other nations concerned with supply and although it permitted him to communicate directly with the War Department, it left him subject to the commanding general of USAFIME. This decision represented a rejection of opinion within the War Department which advocated separation of the American command in Iran from USAFIME.[35] But the separation did not take place until 10 December 1943, following the declaration of Tehran respecting the sovereignty of Iran.

A similar ambiguity in administrative controls concerned the intentions of the SOS planners as to the administrative relationship between

[33] Security as an administrative problem is discussed in Chapter XI and as an operating problem in Chapters XVI, XVII and XVIII below.

[34] Maj. George L. Morton inspected Bushire in November 1942 and reported to Col. Donald P. Booth that improvements in discharge and clearance there without an increase in ship arrivals would be pointless. A subcommittee of the War Transport Executive Committee considered Bushire in January 1943 and concluded that the port's shallow offshore roadstead, the execrable highway inland, the distance of the port from Tehran, and the lack of truckable cargoes for inland carriage by vehicles assembled at the UKCC plant made improvement of Bushire less desirable than expenditure of equal effort at more promising locations. Pages 4–5 of history cited n. 11.

[35] See Memo cited n. 29.

the American command and the representative of the War Shipping Administration. A draft Letter of Instructions for the Commanding General, USAFIME, stated that in port matters under the jurisdiction of the War Shipping Administration, the Commanding General, PGSC, "will be assisted by their local representative, who will operate under his supervision." [36] This established one of those situations where "control" and "supervision" overlap, sometimes with unfortunate consequences. Although the draft just quoted never became a binding statement of policy, it suggests that the planners were willing to take a chance on the consequences of leaving certain areas of port management divided between the American command in the field and the civilian War Shipping Administration.[37]

Implementing the Plan

While the SOS Plan was still in the mill the War Department on 14 September ordered Brig. Gen. Donald H. Connolly from Headquarters, Army Air Forces, to Headquarters, Services of Supply, to prepare to take over command of the new American force for the Persian Corridor. Connolly was an engineer graduate of West Point (1910) and had served several assignments as district engineer on rivers and harbors projects. On detached service in 1934 he had, as Administrator of the Los Angeles Civil Works Administration, come to know Harry Hopkins. In 1935–39 he served as Administrator of the Works Progress Administration at Los Angeles. In 1940 he was Corps Engineer of the Ninth Army Corps; from 1940 to 1942, Administrator of Civil Aeronautics, Department of Commerce, directing construction of many airports; he served also as a member of the National Advisory Committee for Aeronautics; and in 1942 he went to Headquarters, Army Air Forces, Washington. The SOS planners had made numerous recommendations for key personnel for the new Amercian command, but only one was put into force. Their recommendation that Shingler be made chief of staff was effective briefly until Connolly's personal choice, Col. Stanley L. Scott, arrived at Basra to relieve Shingler. Scott, like Connolly, was an engineer graduate of West Point (1916) and was brought by Connolly to Washington from a position as Division Engineer of the Southwest Division. As Chief of Staff of Headquarters 1616, the name the newborn organization for Iran took from its office space in the Munitions Building in Washington, it was to be his job to direct

[36] Incl V–b, SOS Plan copy cited n. 15(4).
[37] The relations between WSA and the American command are touched upon in Chapter XVIII below.

the mounting of the SOS Plan. A wide range of assignments had preceded this one, including a term as district engineer at Honolulu when he was head of the Public Works Administration for the Territory of Hawaii (1931–34), service in the Office of the Chief of Engineers, instruction at West Point and Fort Belvoir, and district and division engineer posts from 1938 to 1942 in which he was in charge of construction programs for rivers and harbors, dams, locks, and airfields exceeding a billion dollars in value. His new task involved the selection of some forty key personnel who were flown to the field during October, November, and December ahead of the first shipment of troops. Colonel Scott also assigned final priorities of men and materials for shipment. Working within the broad outlines of the SOS Plan which had recommended the form of three operating services, he was to devise a pattern of organization for the reorganized PGSC.[38]

On 1 October Connolly was issued a Letter of Instructions as the commanding general of the PGSC. Leaving Scott in Washington to see to the mounting of the new undertaking, Connolly reached Basra on 20 October. Colonel Shingler, who had continued field command of PGSC, now became Connolly's acting chief of staff and served until Scott, who was chief of staff of the headquarters at Washington, arrived at Basra on 20 November and relieved him. On 25 October Connolly was promoted to major general.[39]

Planning for the overseas shipment of Movement 1616 and its successors occupied General Connolly during the brief period of his stay in Washington, and Colonel Scott until his departure in November. On 2 October the President sent a memorandum to the Secretary of War and other cabinet and administration officials in which he informed them of the circumstances which had made it imperative to increase aid to the USSR via the Persian Gulf in order to meet the quotas set under the Second (Washington) Protocol for the period 1 July 1942 to 1 July 1943. He urged "that the project for the operation and enlargement of the transportation facilities of the Persian Corridor

[38] (1) Intervs with Scott, Pentagon, 7, 8 Jan 48, and Connolly, Pentagon, 18 Aug 50; biographical information in PGF and AGO; and WD SO 249, 14 Sep 42. (2) GO 6, Hq, PGSC, USAFIME, 20 Nov 42, in accordance with Ltr Orders TAG, 15 Oct 42. (3) Sherwood, *Roosevelt and Hopkins*, pp. 83, 85, 100.

[39] (1) Scott became a brigadier general 28 October 1942. (2) By GO 13, Hq, PGSC, 21 December 1942, Shingler became District Commander, Basra District, serving until 3 March 1943. He served as Director, Motor Transport Service, from 13 March to 22 September 1943, and was promoted to brigadier general on 18 March 1943. He departed for the United States on 4 September 1943. An inquiry from Wheeler to Connolly in January 1943 as to whether Connolly would release Shingler for service with Wheeler in CBI drew the reply that Shingler's work was "very important" to the command and that Shingler was willing to remain with PGSC. Rad TIGAR TTA 63, Wheeler to Connolly, 3 Jan 43, and abstract of reply. PGF 262.

be given sufficient priority and support in the form of men, equipment and ships to insure its early and effective accomplishment." [40]

On 5 and 6 October Colonel Scott presented General Somervell with two memoranda based upon the estimates of the SOS Plan and subsequent estimates which had been sent in by Maxwell and Shingler. These papers listed troops, supplies, and equipment needed, divided into five priorities. The first embraced troops and supplies for 10,000 men's subsistence, including a 150-day supply for water purification equipment, refrigerants, and cleaning and laundry supplies. The second category was port unloading equipment. The third was locomotives, with diesels ahead of steam engines. The fourth included small trucks, pumps, machinery, and construction equipment. The fifth was larger trucks. Other papers reveal the multiplicity of items necessary for the expedition: quartermaster materials for truck repair and maintenance; ordnance, engineer, and signals materials; and for the railway such details as grinding wheels, steam gauges, and tubular water glasses for boilers. The variety was endless.[41]

The groupings listed indicated relative importance of the several items in point of their arrival in the field. Their shipment was fitted into over-all shipping priorities. In arranging these Colonel Scott and General Connolly altered the order previously accepted. General Maxwell had recommended equally high priorities for the railway and the ports, and Harriman had likewise subordinated personnel and equipment for trucking to the other services. The SOS Plan had adhered to these recommendations but had stipulated that, if simultaneous shipment for ports and railway could not always be accomplished, personnel and equipment for the railway should take precedence. Priorities for Movement 1616 placed the ports first, followed in order by the railway and the motor transport requirements, though it did not follow that everything for the ports had to be shipped before anything for the railway. Items were fed into the pipeline, however, in that general order, and as much went forward together as shipping space permitted. After he had been in Iran for about six weeks, Connolly told Somervell that this was "my biggest mistake," for he had supposed that the physical task of unloading ships at the ports was the bottleneck. Upon arrival, however, he learned that the rate of unloading ships, under existing condi-

[40] (1) All Washington functions completed, Rear Echelon, Headquarters 1616, ASF, was dissolved 22 March 1943. Home Office Rpt to Hq, PGSC, 23 Mar 43. 336.01 International Agreements, SL 9012. (2) Memo, President for Secy War *et al.*, 2 Oct 42. 092.2 Tripartite Pact, SL 9012.

[41] Memos, Scott for Somervell, 5, 6 Oct 42, sub: Movement of Troops, Equipment, and Supplies to PGSC. Abstracts PGF 262.

tions, was determined by the ability to move cargoes inland. "If I had known the above before leaving Washington, I would have arranged my priorities of men and equipment differently," he wrote.[42]

In view of the agreement among those who conferred in July and August with General Spalding that immediate provision of greatly increased truckage was urgent, some explanation is required of the relatively low priority which the SOS Plan assigned to men and equipment for a motor transport service. The explanation is a simple one: the SOS Plan aimed not at a temporary need, but at long-range requirements. Properly developed, the railway would obviously handle the lion's share of inland clearance, with motor haulage supplementing it. The conferees were faced with an immediate problem whose solution was sought locally because there was no time to wait for an SOS Plan to be developed and mounted. The interval between midsummer and the early months of 1943, when the Americans took over their new assignments, saw little diminution of the critical transport crisis, so that in time the problem, which had been a British one, was merged in the new American effort. The trucks and motor transport personnel which were shipped out for the SOS Plan from October onward eventually did their part in bringing backlogs under control.

Meanwhile, until he was relieved by Connolly Colonel Shingler attempted, with what incomplete information Washington supplied him, to fit the plans for the militarization of civilian contract activities into the new plans for reinforcing and expanding the American task. To a memorandum addressed to Spalding on 12 September Shingler attached "compilations showing U.S. Army Service units deemed necessary to support the Special Units assigned or planned for operation of facilities in the Persian Gulf Area." [43] A list of equipment for road work was carried by Colonel Lieber, who departed the next day for Washington. Shingler's memorandum reported a somewhat cool response to efforts he had been making to discuss the proposed American commitments in the field of transport with British military authorities. It furnished a footnote to Churchill's assertion to the President that the changeover of certain operations from British to American hands would have to be carefully planned to avoid "any temporary reduction of effort." Shingler wrote, "Apparently word of our prospective participation had spread since several British underlings appear to be 'resting on their oars' awaiting our appearance. Port conditions are

[42] (1) Interv with Scott cited n. 38(1). (2) Ltr, Gen Connolly to Gen Somervell, 1 Dec 42. OCofTrans, Hist Br—Overseas Comd, Pentagon.
[43] Memo, Shingler for Spalding, 12 Sep 42. PGF 259.

particularly disturbed. . . . It is obvious to all that we are of necessity concerning ourselves with conditions over which we have neither the authority nor the physical means to improve now." The root difficulty during the period of transition which was beginning was that until Connolly arrived in the field with a new mission in transport, Shingler's responsibilities remained the old ones in construction and assembly, and his efforts in transport would continue to be purely advisory. His message to Spalding would indicate that he was not informed how far the SOS Plan had progressed, and his planning was therefore along the old lines of the militarization program.

The merging of that program with the new undertaking came very late in the day and without any formal abandonment of the militarization program. As has been told, estimated troop strength under the SOS Plan included the Shingler-Maxwell estimates for personnel, plus the strength previously earmarked for militarization, plus supplementary estimates. Until General Connolly's assumption of command on 20 October, it would appear that planning in the field was for an expanded militarization program with added responsibilities. This conception of the situation underlies a letter from Shingler to Louis Dreyfus, American Minister at Tehran, on 18 September, only a few days before the Combined Chiefs of Staff approved the SOS Plan and issued their directive. The letter discussed the procurement of Iranian drivers up to the number of 6,000 for the fleet of 7,200 trucks "to be operated by this headquarters" in moving tonnage to northern Iran and beyond. It noted that, while "a certain percentage of drivers" would be provided by the U.S. Army, "It is quite essential that a major portion of the truck drivers be civilians, and secured in Iran." Dreyfus was requested to make inquiries of the Iranian Government's attitude in the matter and was told that in view of present British intentions to recruit a smaller number of native drivers "primarily for military" haulage, it was Shingler's hope that Americans would not be excluded "through treaty provisions or other considerations" from utilizing native manpower. An initial group of 2,000 would be required by November.[44] It can be inferred from this letter that Washington, in its intense preoccupation with preparation of the SOS Plan, had not fully informed Shingler that the plan would provide over 5,000 American soldier drivers for the truck fleet, and that Shingler was thus proceeding, in accordance with the situation as it existed during the midsummer conferences with Spalding, to make provision for a solution of the trucking problem that was dependent primarily upon native drivers. It was well

[44] Ltr, Shingler to Dreyfus, 18 Sep 42. PGF 259.

that he did, for the American trucking service ultimately found it necessary to use several thousand native drivers.[45]

Thus, while the plan itself was getting off to a very good start in Washington, its eventual implementation in the field was headed for many months of difficult transition. Once put into action, the plan gradually brought order out of confusion. How long this toilsome process took is apparent in the statistical tables in this book. By the middle of 1943 there was evidence enough that the new tools would do the job.

[45] (1) See Ch. XVI, p. 323, below. (2) An indication of how closely guarded from those in the field were Washington's plans is furnished by a personal letter written before Connolly's arrival by Philip C. Kidd, civilian representative of lend-lease in Iran. Kidd wrote that it was not known what relation Connolly's new command would bear to USAFIME, or whether Shingler would be reassigned or would continue as administrative head of the command while Connolly would "run the railroad." Abstract PGF 262. (3) Spalding reported on his return to Washington that both Maxwell and Shingler felt the need of a liaison officer in Washington familiar with specific area problems. Although Somervell proposed to Maxwell an arrangement to meet the need, nothing significant developed. Ltr, Somervell to Maxwell, 22 Sep 42. AG 210.31 (9–22–42) (40).

CHAPTER XI

Blueprint for the Machine

This is a chapter about paper—that indispensable commodity without which modern war could scarcely be sustained. Those who do the paper work, generally held in contempt by the men of action, carry a heavy burden of importance and responsibility. So all-encompassing is the paper side of war that it is sometimes hard to tell where the paper-shuffler leaves off and the man of action begins. Sometimes they are one and the same person, embodying inseparable functions of command. And all their papers—the orders and counterorders, the designations and redesignations—and all their charts with those ubiquitous, those mystical, little boxes connected, straight or zig-zag, but connected, somehow, by lines of authority, make up the blueprint for the machine that goes by the name of administration.

Theoretically, organic structure, like Jefferson's idea of government, is best when at a minimum essential to efficient operation; worst when bud proliferates to leaf, and leaf to branch, until a jungle dimness obscures the light. This tendency to overexpansion, common to all types of organization, civil or military, is especially marked under field conditions of great urgency, when extravagant use of manpower may be justified by the results obtained. It is only one of several obstacles to a simple description of the paper side of the American task in the Persian Corridor. If two heads are observed growing upon a stalk where one is normal, the botanist, torn between his admiration of nature's little prank and his curiosity concerning the soil that produced such luxuriance, stuffs his notebook with exceptions and monstrosities and forgets the species for the sport. It is thus also with the too literal chronicler of the paper side of war.

Organization provides the machinery for carrying out duties by attaining objectives. In this sense, function, which is the definition of objectives, is inseparable from organic structure, which is the form of function, and from operation, which is the expression of function. Only a static function amidst static conditions could produce an administrative machine that would keep still long enough to be photographed.

But static is hardly the word for the American operation in the Persian Corridor. Yet some kind of picture must be secured. It must be caught from the spate of organization charts and manuals which issued from the various headquarters. These documents are exercises in theory. They seek a generalized solution for specific problems. They represent an agreed way of doing tasks whose common elements are thought susceptible to a common treatment. But, although they are the revered icons of the paper shufflers, they are not inviolable. In instances where their theoretically inflexible generalizations clash with ever changing fact, they prove themselves surprisingly flexible. Though they decree, for example, that administrative subareas shall control all building construction within their respective borders, they permit an exception where a certain subarea is equipped to perform this function not only for itself, but for its neighbor, who is thereby relieved of that responsibility. This is flexibility for the sake of efficiency; but too many departures from the charts produce overlapping and duplication. Efficiency suffers, and more change is required to correct the situation. And so ad infinitum.

The administrative evolution of the American command in the Persian Corridor was marked not only by this kind of change. There were also shifts to accommodate new functions, and shifts to improve procedures for carrying out old functions. And there were shifts, alas, whose motivation, if ever significant, seems somewhat less than that in retrospect. For it must be conceded that there are some paper shufflers who shuffle purely out of habit. Charts and manuals, then, do not tell the whole story. That must be left to some future devotee of the mysteries of administration.

The Structure of American Headquarters [1]

When General Connolly assumed command of the PGSC on his arrival at Basra, 20 October 1942, the strength at his disposal com-

[1] Unless otherwise indicated, the first two sections derive from the following sources. These provide materials for more detailed study than is possible in this book: (1) Chart 1. (2) Organization Charts for PGSC and PGC: (a) As recommended in SOS Plan, sec. III, par. 9, and Incl V, PGF 235; (b) Tentative, approved 30 Nov 42, 323.61 Establishment of Military Districts, Binder 2, SL 9008; (c) Mar and Jul 43, in Organization Manuals of those dates, PGF 240; (d) 7 Nov 43, 384, Special Questionnaire from Gen Somervell, SL 9016, another copy PGF 240; (e) Oct 44, PGF 240; (f) Proposed, 12 Dec 44, 323.361 Powers and Duties, SL 9008; (g) 1 Feb 45, filed as in (e); (h) Mar 45, PGF 240; (i) Basra Dist and Ports Serv, 2 Jan 43, PGF 240. (3) Organization Manuals for the Comd, for 43 and 44, PGF 240; and for certain stf divs and operating servs, PGF 122. (4) The separate files of each general staff division and headquarters for each operating service, district service command, camp, post, and station, formerly at St. Louis, now filed at the Kansas City Records Center. (5) Rosters to February 1943, and records of unit activations, arrivals, and assignments to 20 July 1944. PGF 245 and 259. (6) Files of General and

prised some 400 officers and men of the Services of Supply and the Air Forces and just under 1,000 American civilians. In eight months' time PGSC strength would approach its maximum of nearly 30,000 service troops, with only a handful of civilian technicians remaining after completion of militarization of the contractor projects. (*Table 12 and Chart 2, Appendixes A and B*) In a little more than two months' time, the first echelon, numbering some 5,000, would land at Khorramshahr to take over the new American responsibilities. By the first week in January 1943, PGSC headquarters—temporarily carrying on at Marine House, Ashar, where almost from the first the Iranian Mission and its successors had been established—would move to Tehran to interim offices on Shah Reza Avenue. On 18 July the nerve center of the American command would be permanently established at Camp Amirabad, the great new community it was to build for itself on the outskirts of Tehran, complete with fine hospital, brick barracks, shops, offices, warehouses, and recreational facilities, where, one day in December, the President of the United States was to surprise and delight the men by a visit and a warmly appreciative little speech.[2]

The prospective sevenfold increase in strength between October 1942 and the following midyear indicates that the new command, which continued the name given its predecessor under Colonel Shingler in August 1942, was to pass through no ordinary reorganization. The snake was not shedding its skin for a new one; it was to become, and that in a space of months, a brand new snake of which all that was to remain of its former state was its name. As the increase in size mirrors the increase in function, so the change in the location of headquarters, from the sea end of the British line of communications to the capital city in the Russian line of communications, reflects the change in function. That change was the Combined Chiefs' directive to the new

Special Orders, located as in (4). (7) Detailed Studies in HOTI: (a) Pt. I, Chs. 1–5, Administration, by George B. Zeigler and (Ch. 5 only) Wallace P. Rusterholtz, with Annex, Analysis of the PGC Districts, by Victor H. Pentlarge, Jr.; (b) Pt. I, Ch. 6, History of the Office of Technical Information, Pt. I, Chs. 9, sec. 1, and 10, History of the Supply and Fiscal Divisions, and Pt. III, History of Construction, by Pentlarge; (c) History of Civilian Personnel Branch Activities, Administraton Division, by Col Richard W. Cooper; (d) Pt. I, Ch. 8, secs. 1, 3, 4, and 5, History of the Control, Movements, Documentation, and Plants Branches, Operations Division, and Pt. I, Ch. 11, History of the Foreign Claims Commission, Administration Division, by Laurence P. Corbett. PGF.

[2] History: United States Military Iranian Mission, 20 Mar 43, prepared for Col Don G. Shingler, Chief of Mission, by 1st Lt Victor E. Dietze, Hist Off, pp. 55, 65–66. PGF 242. (2) Monthly Rpt of Activities of PGSC, Oct 42, to CG, PGSC, 5 Nov 42. PGF 259. (3) Memo, Hq, PGSC, 15 Jan 43, sub: Rpt of S–2 Activities Aboard Transport 441. PGF 242. (4) GO 3, Hq, PGSC, 20 Oct 42. (5) Memo, Hq, PGSC, 6 Jul 43, sub: Movement of GHQ Equipment and Personnel to Amirabad. PGF 259. (6) Troop shipments were planned for five shiploads to sail between October 1942 and March 1943. Memo, Lt Col N. M. Martin for Connolly, 21 Dec 42. PGF 225. (7) GO 43, Hq, PGSC, 14 Jul 43.

command to insure an ever increasing flow of supplies to the USSR. At the same time, by order of the U.S. Chief of Staff, the PGSC was to continue the projects undertaken by the Iranian Mission. To accomplish these missions—the one primary, the other secondary—General Connolly's Letter of Instructions authorized him to effect such reorganization of the PGSC as might be necessary.[3]

Between 20 October 1942 and the arrival, exactly one month later, of General Scott, who immediately became chief of staff, relieving Colonel Shingler, temporarily acting chief of staff, no important changes were made in organizational structure. Before Connolly's arrival the Shingler organization had consisted of a general staff of three for performance of S–1, 2, 3, and 4 duties at headquarters, a special staff of eighteen to supervise operations, and three territorial area commanders with headquarters at Basra, Ahwaz, and Tehran. There was also the separate organization of the Iranian District engineer at Ahwaz. The Shingler structure had been adequate for the direction of the old organization's limited operations in construction and assembly; but it required revamping to accommodate the new operational responsibilities in transport provided in the SOS Plan. In accordance with that plan's priorities for projected railway and port operations, Col. Paul F. Yount had reached Basra on 5 October to begin preliminary arrangements for taking over the ISR from the British. Some 1,200 officers and men for the Military Railway Service (MRS) landed at Khorramshahr on 11 and 12 December, and that organization's field career began formally on 17 December. Col. Donald P. Booth and five officers of his staff reached Basra on 1 November, followed in December by 940 officers and men of the port organization that was to serve under him. The advance echelon of the Motor Transport Service (MTS) arrived in December. In preparation for the commencement of work, seven general staff divisions and five operating services were set up on 25 November under the commanding general. As the preliminary planning in Washington had anticipated no need for territorial administrative subareas, the area commands established on 1 September by Colonel Shingler were left undisturbed pending further study. By recommendation on 26 November of Colonel Booth, Director of Ports, new instructions were issued to area commanders in view of the need to distinguish between their functions and those of the new operating services being set up alongside them. Area functions were defined as

[3] (1) Rad AMSME 1787, Marshall to Connolly, through CG, USAFIME, 13 Nov 42. 323.35 Hq PGSC (1 Jan–31 Jul 43), SL 9008. Abstract, 14 Nov 42, PGF 259. (2) Gen Connolly's Ltr of Instructions, 1 Oct 42. 322.361 General Connolly's Letter of Instructions with Amendments, SL 9008.

"administrative control of all U.S. Army activities" in the respective areas: supply, housing, security, transportation, and procurement, but not storage or construction. Appointments to directive positions were made on 25 November for general staff divisions for administration, personnel, intelligence, plans and training, operation and supply, control, and movements; and to the following operating services: Railway, Ports, Motor Transport, Construction, and Signal Communication. A tentative organization chart, approved 30 November, shows also, as reporting to the commanding general through the chief of staff, but independent of the general staff divisions, an inspector general and a public relations branch.[4]

This was the first blueprint for the machine that was to move so many millions of tons of goods to the USSR, and it was to be modified repeatedly. While there was a tendency to consolidate general staff functions by a reduction of divisions in that category, executive and advisory offices tended to cluster about the chief of staff and the commanding general as certain new problems and responsibilities in dealing with other Allies in the Corridor cropped up and could not be assigned elsewhere. The functions of the seven general staff divisions are indicated by their titles; but there was some overlapping among them. Although the Personnel Division was charged with formulating general policy relating to the employment of civilian personnel by the operating services, the Control Division formulated labor relations policy also. Similarly, although there was a Construction Service—charged with designing and building authorized new projects and major modifications to existing installations including all roads, rail trackage, port structures, and utilities—nevertheless, the Railway Service was to construct such modifications to its facilities as were authorized and practicable for them to do with their own forces, and this same charge was laid upon the Ports Service. Maintenance and motor vehicle repair responsibilities were similarly divided among MTS, areas, and the Op-

[4] (1) GO 11, Hq, PGSC, 17 Dec 42. (2) GO 7, Hq, PGSC, 25 Nov 42. (3) Interv, Gen Booth with Victor Pentlarge, Pentagon, 11 Apr 46. (4) Memo, Booth for Scott, 26 Nov 42. 326.61 Establishment of Military Districts, Binder 2, SL 9008. (5) By General Order 7, confirming General Order 2 and General Order 3, Headquarters 1616–A, Washington, the following were appointed directors of the divisions and services indicated, effective on arrival in the command: Col. Arthur C. Purvis, Administration; Lt. Col. George B. Buell, Jr., Personnel; Col. Robert H. Givens, Jr., Intelligence; Lt. Col. Byron E. Bushnell, Plans and Training; Colonel Graham, Operations and Supply; Colonel Martin, Control; Maj. Victor E. Maston, Movements; Colonel Yount, Railway Service; Colonel Booth, Ports Service; Col. Mark V. Brunson, Motor Transport Service; Colonel Osborne, Construction Service; and Lt. Col. Samuel M. Thomas, Signal Communication Service. Subordinate appointments to four services and two divisions were made by Special Order 80, Headquarters, PGSC, 25 November 1942.

erations and Supply Division. As time went on, some of these overlaps were eliminated in subsequent reorganizations.

The basic plan of command organization was a line and staff one. The line organization consisted of the operating services, the areas or districts, and exempted establishments, all directly responsible to GHQ. On them fell responsibility for the execution of the primary mission of the command. The operating services were concerned with direct field operation of ports, railway, motor transport, and signals activities. The areas or districts operated posts, camps, and stations located within their boundaries and, in addition, were charged with specific operational duties assigned by GHQ. Direct operational responsibility for assembly plants, for instance, belonged in theory to the districts, although general staff responsibilities sometimes overlapped. Exempted establishments were those installations which came under direct control of GHQ. The staff existed to advise the commanding general in the fields of their respective functions, to develop plans, formulate policies, and establish procedures. They supervised operational activities assigned them and sometimes through their field agencies directly controlled these operations. Soon after adoption of the first plan of organization in November, directors of general staff divisions, operating services, and territorial districts were called upon to submit to GHQ detailed plans and charts for their organizations.[5] A brief review of some of the many reorganizations in administrative structure which followed will indicate in a broad fashion how changing function was reflected in the machinery.

An early reorganization of January 1943 can be regarded as mainly experimental, for it not only continued the dispersal of general staff functions among many divisions, but, by assigning the director of ports to general staff status, it departed from the basic principle which distinguished planning and direction of policy from operations. A reshuffle in March moved intelligence out of the general staff to an association with the Office of the Chief of Staff. The same happened to the Control Division which in June was redesignated the Executive Office of the Chief of Staff.[6] A new Office of Technical Information was attached to the commanding general. It absorbed the previous Public Information Office, and included in addition an office for analyses to be made for the commanding general as contrasted to the logistical analyses entrusted to the former Control Division. The Office of Technical Information also included a Historical Section and sections for activi-

[5] GO 11 cited n. 4(1).
[6] GO 36, Hq, PGSC, 15 Jun 43.

ties involving interpreters and military correspondents. In anticipation of the reduction of its role as an operating service, as construction of facilities caught up with the program, the Construction Service was abolished and its planning functions absorbed within a new Operations Division, which, destined to become the most important of the general staff divisions in the conduct of the primary mission of the command, absorbed also the former Plans and Training, and Movements Divisions. The Personnel Division went into Administration, leaving only three general staff divisions for Administration, Operations, and Supply. There were now three operating services, MRS, MTS, and the Signal Service. Ports Service was amalgamated with Basra District, which, with Ahwaz and Tehran Districts, made up the active territorial subareas.

The July chart, besides reflecting the redesignation of the previous May whereby the districts became Gulf, Desert, and Mountain, showed a number of new offices clustered about the Offices of the Commanding General and the Chief of Staff. These now comprised the Offices of the Inspector General and the Provost Marshal, the Executive Office of the Chief of Staff, and the Office of Technical Information. The Operations Division contained the following branches: Control (moved back from the Executive Office), Executive, Movements, Plants (responsible for assembly and container plant operations), and Construction. In a later reorganization, Executive Branch was replaced by Documentation Branch. The names of these branches give an idea of the general functions exercised by Operations Division as the clearinghouse and mainspring of all of the complicated co-ordination necessary to the carrying of supplies overland to the USSR. The workings of the process are shown in some detail later in this book where operation of the ports and the railway is discussed, and that aspect of administration is explained which shows what it meant to take a crate of canned fish from a ship lying in the Karun River and hand it over to the Soviet representatives where and when they wanted or needed it for the particular war needs wired to them from their commanders and supply experts responsible for provisioning the Eastern Front. Ship discharge, overland routing, and delivery were operational phases of the logistical process which affected the "ultimate consumer," the USSR, very closely; but these were in turn conditioned by the total flow of tonnages to and through the Corridor.

The flow to the Corridor was determined by allocations under the several Russian protocols. The rate of arrivals was subject to shipping and to the capacity of Corridor facilities at ports and for inland clearance. Calculations were based upon the collection and correct interpre-

tation and prompt dissemination of statistics affecting capacities and operations. The Control Branch was responsible for the calculations which regulated an even flow of traffic and sought to utilize all available equipment. For this purpose it maintained close liaison with the British, the Russians, the ports, and all the forwarding agencies.[7] A meeting was held bimonthly to determine the capacities of the ports, assembly plants, and transportation agencies. This meeting studied current operational activities, including the motive power and rolling stock of the railway; car utilization and turnaround; the effect of non-Russian-aid requirements on MRS, MTS, and UKCC; the number of trucks and aircraft that could be assembled; and the number of ships that could be berthed and discharged in a month's time. Then Washington was advised of the capacity so that the proper number of ships could be allocated. Those who attended the capacity meetings were the regional director, War Shipping Administration, a representative of the British Ministry of War Transport, and representatives of UKCC, British Movements, Baghdad, and British Movements, Tehran; and, for the U.S. Army, the assistant chief of staff for Operations, and representatives of Movements, Plant, and Control Branches, Operations Division, as well as of MRS, MTS, and the Office of the Petroleum Adviser.

Following the capacity meeting, a joint target meeting was held for the purpose of determining the maximum cargo that could be moved within the limits of the capacity of the Corridor. The arrival of ships and the available cargo in storage areas (backlog) had to be considered because these factors would affect the size of the target. If ships scheduled to arrive in a certain month were delayed, the target would be greater if there was a sufficient backlog available for forwarding than if the storage areas were nearly empty. In addition to the representatives of British and American agencies who attended the capacity meetings, the USSR had the following representatives at the target meetings: the chief of the Soviet Transportation Commission, the chief of Iransovtrans, and two other Soviet transport experts. Each agency presented a report at these meetings.

The MRS furnished information on total capacity of the railroad already determined at the capacity meeting, along with estimates of the number of days' turnaround for freight cars in the USSR zone, monthly bulk fuel requirements for railway operations, and internal requirements for the Iranian civilian economy. The MTS reported its capacity as determined at the capacity meeting. The petroleum adviser

[7] The following material on capacity and target meetings is paraphrased from the Control Pranch History cited note 1(7d).

acted in a supervisory capacity concerning the requirements and commitments of the U.S. Army, the USSR, the local civilian economy, and various transport agencies, for petroleum products. The assistant chief of staff for Operations was chairman of the meeting and exercised staff responsibility for the whole program. His Control Branch was responsible for co-ordinating, analyzing, and assembling all information pertaining to the target figure. His Movements Branch analyzed all traffic operations through the Corridor. His Plants Branch furnished information on the number of trucks and aircraft arriving, and being assembled, and the amount of cargo the assembled motor vehicles could carry north. The British representatives were responsible for estimating the tonnage of petroleum and wheat products to be moved and for indicating how they should be transported to their destinations. In addition, they supplied information on total Iranian civil and British military needs. The Soviet representatives [8] were responsible for accepting all USSR cargo moving through the Corridor, and for forwarding it into the USSR. In the process of establishing the monthly target, their requests and suggestions were fundamental to the task. Much lengthy discussion at these meetings was bypassed by previous exchange of information by letter. Informal meetings were also customary between Movements and Control Branches, the MRS, MTS, and British Army Movements.

The procedure just outlined may be taken as the average; it does not necessarily represent the way things were literally done at any given period. It was a device made as simple and efficient as the cumbersome circumstances permitted; but it took a lot of paper, and a lot of desks and filing cabinets to make it work. The general outlines assumed by Operations Division in the March 1943 reorganization, when it drew together many functions hitherto scattered, were refined and modified in succeeding reorganizations; but the machine itself proved to have attained workable form very early in the history of the command.

A reorganization of November 1943 produced quite a shuffle. The provost marshal went from the level of the commanding general's group of offices to the general staff level, and was replaced at the commanding general's level by the petroleum adviser. Fiscal matters were separated from the Administration Division and made into a Fiscal Division of the general staff. On the operating level, Ports Service reappeared on

[8] From 1 November 1942 the Russians maintained at Tehran a representative of the Peoples' Commissariats of Internal and Foreign Affairs under whom Iransovtrans functioned. This official was initially Engineer Colonel Zorin, whose deputy for the south of Iran was Lt. Col. Michail F. Lengnik. These officers were the supreme authorities on the Soviet side for the transportation of goods to the USSR. Ltr, Zorin to Hq, PGSC, 31 Oct 42. AG 400, Hq PGC.

the charts with the three other services (MRS, MTS, Signal) but was connected through dual command to Gulf District. It was generally felt [9] that by the middle of 1944 the structure of the command had evolved into a smooth-running machine, and the absence of that sort of acute administrative jitters which gave birth to the word *snafu* was marked. The chart of the October 1944 reorganization therefore crystallizes the blueprint for the machine whose performance in moving supplies to Russia reached its peak in that year. Only the Offices of the Inspector General and of Technical Information remained directly attached to the commanding general; a special staff was created to include the Offices of the Executive Officer, the Petroleum Adviser, the Provost Marshal, and the Headquarters Commandant; and, as indication of the prominence now given to the increasing activities of the Air Transport Command in the area, the special staff included an air officer. The general staff divisions remained at four; but the Fiscal Division had grown as the complex functions of finance had grown. It now consisted of a big headquarters office at Tehran, and thirteen field branches. Operations Division, with its five branches (Control, Movements, Plants, Documentation, and Construction), now possessed eleven field offices.

The reorganization of December 1944 reflects the passing of the peak work load for the command and the beginning of reduction of the administrative machine, especially in the territorial areas. Of these, only the Mountain District, now called Tehran Area, remained. Gulf affairs were absorbed partly by Ports Service, partly by assumption of functions by Operations Division. Administrative services, formerly handled in rather complicated fashion for MRS by the several territorial areas through which the rail line passed, were now assigned to the single MRS directorate to carry on under more unified control. Desert District had disappeared to be replaced by a more restricted Andimeshk Area. This tendency to eliminate the full headquarters apparatus for the territorial areas and to amalgamate their functions with those of local posts continued in the February 1945 reorganization, which shows Mountain District affairs handled by Amirabad Post, and Desert District affairs by Andimeshk Post, no longer regarded as an area.

The March chart is unchanged from February, save for the appearance on the special staff of a liquidation commissioner, a reflection of the vast task that lay ahead when the job would be done and installations and equipment to the value of tens of millions of dollars would

[9] Interv cited n. 4(3).

have to be disposed of. After March 1945, the process of contraction continued as military strength was reduced and projects were finished or abandoned.

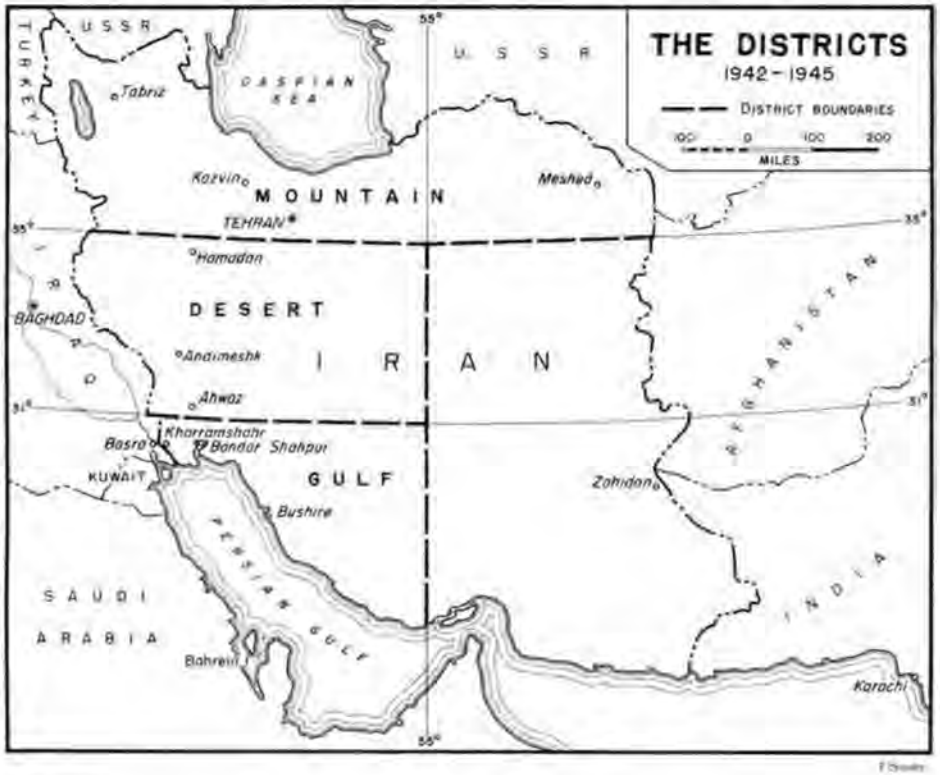
In a memorandum for staff divisions and directors of operating services at the time of the December 1944 reorganization, the chief of staff, then General Booth, noted that the new plan "has been predicated upon the assumption that the elimination of Districts would effect an appreciable saving in overhead personnel." [10] This was not the first allusion to be made to the overmanning of the administrative side in the building of the machine. A report made by the Plans and Training Branch, Operations Division, as early as May 1943, developed the estimate that, according to planned disposition of personnel, present and to come, "Out of a total of 1,522 officers slated for duty in the PGSC, 44.5% are to be engaged in administrative, staff and supply duties, while 55.5% are to be actually engaged in the 'Aid-to-Russia' program. Considering all personnel, officers and enlisted men, 36.3% are to be engaged in administrative, staff and supply duties, while 63.7% will be engaged in the primary mission of the command." [11] Although this report recommended economy in future administrative planning for utilization of manpower, economy was not always achieved; and in the over-all structure of the command, perhaps the feature most vulnerable to overmanning was that of the administrative territorial subareas.

The Districts

When Colonel Shingler set up his geographical subareas in September 1942, the chief motive was to provide American opposite numbers for the British officials with whom the Americans had to deal in matters of local procurement and local maintenance of their projects. Because of the small size of the American command and the limited nature of American responsibilities for construction and assembly operations, these local transactions were vital to the welfare of the projects and required the elimination of any delay in obtaining decisions such as had taken place when varieties of local requests from un-co-ordinated field agencies had to be processed. The areas provided the needed co-ordination. The new American command, however, was designed to be self-sufficient, and was big enough to maintain local offices able to take care of its local needs without the intervention of established British agencies, many of which, with the enlargement of

[10] Memo, Booth for all Stf Divs and Dirs of Servs, 12 Dec 44, sub: Reorganization of the PGC. PGF 240. Another copy 323.361 Powers and Duties, SL 9008.

[11] Memo, Capt Robert M. Wilbur, Chief, Plans Sec, Plans and Training Br, for Col Osborne, ACofS, Opns, 20 May 43, sub: Troop Disposition in PGSC. PGF 240.



MAP 3

The area of Gulf District included all of Iraq and the south shore of the Gulf. The district was previously known as Southwestern Area and as Basra District. Its headquarters was moved from Basra to Khorramshahr in May 1943.

Desert District was first called Central Area, then Ahwaz Service District. Its headquarters was moved from Ahwaz to Andimeshk in November 1943.

Mountain District, whose headquarters was always at Tehran, was organized first as Northern Area, then redesignated Tehran District.

Zahidan was to have been the headquarters of an Eastern Area which was never activated.

the American force, had reduced their own numbers. During the planning period in Washington for the new command it had been expected that the pattern of the U.S. corps area, or service command, would be followed and that the several field operating services would be responsible for their own field maintenance. After his arrival in the field, however, General Connolly realized that the diverse sorts of personnel (stevedores, truck drivers, railroad men, signals technicians, construc-

tion men) and their far-flung activities called for a uniform administrative and supply system for their maintenance. Accordingly, after a brief period in which the old Shingler areas were left undisturbed, their duties were modified in November, and in December they were redesignated and reorganized.[12] The function of the new districts was defined as follows by General Order 11:

> Districts are organized for the purpose of decentralizing administration, housekeeping, and construction functions within designated geographical areas. The District Headquarters are sub-headquarters of the Central Headquarters, Persian Gulf Service Command, and, as such, report directly to the Commanding General. The District Commanders do not exercise command over the units assigned to Services and Divisions. They will, however, exercise control over general administration, housekeeping, hospitalization, housing, and general supply for all establishments within their jurisdiction. Their responsibilities will also include internal security, labor relations, local procurement of supplies and services as authorized by the Commanding General, all operating under general policies promulgated by the parent staff division of General Headquarters. . . .
>
> Services are operating units with definite responsibilities. The districts are organized to facilitate the operations of the services; they have no control over the employment of units not specifically assigned to them. The District functions best when it renders greatest service to the units operating in its territory.

That was the theory: the district commander, as deputy of the commanding general in his own area, co-ordinated the activities of the several operating agencies within his area, applying to this duty the general policies laid down by the general staff divisions. Although the district commander had no control over the targets and schedules of the operating services, he was empowered to settle any disputes among them which might arise within his district, and to reconcile conflicting requisitions which might pass through his headquarters. At no time in the history of the districts did the operating services feel it necessary to appeal to the commanding general the decision of a district commander.[13] Beyond maintaining, training, and disciplining the troops within their areas, providing local security, and co-ordinating operations, the district commanders came in time to exercise important operating responsibilities of their own. In this respect the general theory of the subcommands was stretched rather far.

The instructions given district commanders in November 1942 had exempted them from responsibility for construction, which was to be performed throughout the command by one of the then existing operating services, the Construction Service. The Construction Service was abolished in the reorganization of March 1943 and its purely planning,

[12] By GO's 11 and 13, Hq, PGSC, 17 and 21 Dec 42.
[13] Statement by General Booth cited by Victor Pentlarge in Annex cited note 1(7a).

standard-setting, and policy functions transferred to Operations Division of the general staff at Tehran. Even before this, General Order 11 had in December 1942 foreshadowed the coming decentralization of construction responsibilities by assigning to the Ahwaz District, in which lay the headquarters of the Iranian District engineer, all construction duties for building at the ports, which lay in Basra District. In May, the districts were made responsible for all new construction within their boundaries authorized by GHQ.[14] The other important direct operating responsibility laid upon these nominally administrative agencies was that for the running of the aircraft, motor vehicle, barge, and container plants. As the Construction Branch, Operations Division, formulated policy and exercised general supervision over construction within the several districts, so at first the Supply Division, and later Plants Branch, Operations Division, acted in behalf of these other projects.

One factor in the manning of the district headquarters organizations makes it difficult to determine the extent of their drain on the available pool of manpower in a command whose primary duty was movement of supplies. With their separate staff sections and organization charts patterned after GHQ, the districts constituted a sort of superimposition, administratively, of Pelion upon Ossa. The difficulty arises from the fact that a considerable proportion of the headquarters staffs of most of the districts were manned by officers and men who belonged to operating services at work in the area. It has been estimated that 350 persons staffed the three district headquarters at their maximum, and of these many were also performing operational work at the same time.[15] Yet it must be realized that any headquarters with a full staff has more work for some members than for others, and that some duties of a headquarters nature are nominal. Furthermore, a headquarters must provide for its own maintenance, and this can mushroom into a variety of service units which must be provisioned, housed, paid, and accounted for—with the usual paper work and clatter of typewriters. At the start, the district organizations were necessary to handle tasks impossible for the operating services to perform for themselves, and to

[14] (1) GO 30, Hq, PGSC, 15 May 43. Subsequent changes in the powers and duties of the districts may be traced in: GO's, Hq, PGSC, 31, 16 May 43, 37, 18 Jun 43, 42, 8 Jul 43, and 51, 25 Aug 43; also GO's, Hq, PGC, 1, 5 Jan 44, and 51, and Memo, Col Graham, Actg CofS, for CO's of Gulf, Desert, and Mountain Dists, 6 Jan 44, sub: Reorganization of Districts, Posts, Camps, and Stations. PGF 240. See also the Pentlarge Annex, cited note 1(7a), which incorporates interviews with Colonel Martin, 11 April 1946, and Generals Shingler, 22 April 1946, Booth, 11 April 1946, and Scott, 22 March 1946. (2) The evolution of administration of construction is treated in Chapter XII below.

[15] Pentlarge, after interview with Colonel Martin, formerly executive officer to the chief of staff, cited note 14(1).

provide uniformity of standards and economies in administration. As time went on, however, the larger posts within the districts became familiar with the work of the districts and therefore could, theoretically, have supplanted the district organizations. This process occurred in a few instances even before the contraction in command organization set in; but its general application was delayed beyond the time, stated to have been any time after July 1944, when it could, theoretically, have occurred. Posts did not wholly supplant the district organizations until January 1945.[16] Perhaps the outstanding example of overstaffing of this sort was the Mountain District headquarters, located at Camp Amirabad right next door to GHQ itself. Its function was the administration of the immediate vicinity of GHQ, and yet there was GHQ, and there also was the headquarters staff of Camp Amirabad. In January 1945 this anomaly was righted by the abolition of Mountain District.

The question whether the virtues of the district system outweighed its defects would require, for answer, detailed examination of a mass of evidence. When it is considered that the districts provided decentralized administration for widely disparate operations extending over an area as large as Texas and California combined, and that structural organization necessarily reflects the complexity of the function it is designed to execute, the conclusion is unavoidable that, although the districts were expensive in terms of manpower, they contributed to the accomplishment of the American mission. The whole matter of the administrative machine cannot justly be judged as one would measure the time studies of a long-established chain-store system whose operations have been streamlined by efficiency experts.

Evolution of the Persian Gulf Command

The rearrangements in the internal structure of the command, which were required to accomplish its increased functions, were accompanied by a readjustment of its administrative and command relationships to headquarters of USAFIME at Cairo. Of the three chief pieces of unfinished business left by the SOS Plan and the directive of the Combined Chiefs of Staff, that of the independence of the new American command in the Persian Corridor was the thorniest. The other two dangling compromises of September 1942—the control of movements (whether to be British, as hitherto, or American) and security for operations—depended in no small measure for their resolution upon the

[16] Interv cited n. 4(3).

ability of the American command at Tehran to act authoritatively and promptly without recourse to echelons imposed between itself and Washington.

When the PGSC was so designated in August 1942, as a part of the unification of the U.S. Middle East theater, it was directly under the commanding general of USAFIME, General Maxwell. This was still its status when Connolly supplanted Shingler on 20 October. But when General Andrews relieved General Maxwell on 4 November 1942 and Maxwell became Commanding General, SOS, USAFIME, the PGSC dropped one rung further down the ladder of command and found itself designated as one of the service commands of USAFIME along with the Eritrea, Delta, and Levant service commands, with none of whose tasks or problems it had anything in common whatsoever, either qualitatively or quantitatively. The subsequent ascent up the ladder toward independent command lasted just over one year, during which time, although there was a steady drift toward Tehran's autonomy, command responsibility for the increasingly complex job in Iran rested in Cairo, more than a thousand miles away.

General Connolly's Letter of Instructions of 1 October 1942 had placed him under the "administrative supervision" of the commanding general of USAFIME and this phrase was subject to varying interpretations by Maxwell and Connolly. When General Marshall issued his Letter of Instructions of 24 October to General Andrews it was explained that "administrative supervision" meant "command" and Andrews was instructed to exercise all the prerogatives of a commander over PGSC.[17] This tightening of the grip of Cairo was followed, after the early November changes at USAFIME headquarters, by General Maxwell's calling for "a multiplicity of detailed reports" from PGSC and issuing "a lot of instructions, the gist of which was that nearly everything had to be approved in Cairo before action could be taken." As General Connolly put it, "We were tied hand and foot as far as getting anything done was concerned." [18] Although the mission of PGSC was now very different from the earlier mission under Colonel Shingler, administrative procedures suffered as they had earlier when it sometimes took as long as three weeks for PGSC to get a reply from Cairo on pending matters.[19] In the important field of direct negotiations between the American command and the British there was a seeming

[17] Ltr of Instructions, Marshall to Andrews, 24 Oct 42. OPD 384 ME (10–24–42).
[18] Ltr, Connolly to Somervell, 20 Dec 42. Abstract PGF 262.
[19] Interv with Lt Col Philip C. Kidd, G–5 AMET, at Cairo, 6 Jul 45, citing Shingler's authority for the statement.

contradiction between Connolly's instructions and the views held by Maxwell in Cairo. Connolly's instructions permitted him to deal directly with the British, Iranians, and Russians on all matters not requiring diplomatic channels, provided Cairo was informed and provided this information was furnished in accordance with instructions emanating from Cairo. Difference in interpretation of the Washington instructions in this respect was resolved when Maxwell informed Connolly on 14 November that by agreement between American and British headquarters at Cairo, liaison between PGSC and PAI Force would henceforth be made directly between Connolly and General Wilson.[20] But the larger question of command relationship remained for solution.

On 12 December General Andrews, accompanied by his staff, went to Basra on the first official visit to the Corridor on strictly theater business made by a commander of USAFIME since the unification of the previous June.[21] As a result of conferences between Andrews and Connolly, agreement was reached to relieve PGSC from assignment to SOS, USAFIME, and to put it directly under the commanding general. Connolly wrote Andrews, after the latter's return to Cairo, "The proposed change will in my opinion clear up the confusion which now exists and will greatly facilitate the operations of this command. . . . Your trip over here has had a marked influence on morale, indicating to the personnel that you consider the work they are doing to be important to the war effort." To General Somervell, Connolly wrote, "Our relations with Cairo have been cleared up." [22] It would have been perhaps more accurate to have said that they had been clarified; for although General Andrews' proposed action was to begin a new period of greater autonomy, it did not bring independence.

The first step toward autonomy was formalized by the issuance on 20 January 1943 of a clarifying directive to Connolly from Cairo. It provided that he could henceforth requisition directly upon the War Department; it delegated to him authority to represent the Commanding General, USAFIME, in negotiations with the British, Irani, and Iraqi representatives, with final authority reposing in Connolly for all matters not requiring diplomatic channels; and it empowered him to procure personnel beyond that already authorized to go through USAFIME, as well as to submit recommendations for promotions. Connolly was authorized to undertake any construction necessary to

[20] Ltr, Maxwell to Connolly, 14 Nov 42. PGF 259.
[21] General Maxwell had passed through in August 1942 with Averell Harriman en route to Moscow.
[22] (1) Ltr, Connolly to Andrews, 20 Dec 42. Abstract PGF 262. (2) Ltr cited n. 18.

accomplish his mission but to obtain approval from Cairo for all other construction.[23]

Beyond this point the further evolution of PGSC toward independence of command became involved with the twin questions of intelligence activities and security responsibilities. Here the basic point at issue was whether the carrying on of routine intelligence activities by the American command was consistent with its primary mission of delivering supplies to the USSR. It had been assumed in the planning period at Washington that, as Averell Harriman put it to the Strategic Planning Division, SOS, the new command ought to possess "a good G–2 in the headquarters [to] keep in touch with the military situation and also with the sabotage situation." [24] Accordingly a supplementary Letter of Instructions had been issued to General Connolly on 21 October 1942 by Maj. Gen. George V. Strong, G–2, War Department, placing under Connolly's command all War Department intelligence personnel in Iran and Iraq and on the southern shores of the Persian Gulf and the Gulf of Oman; their selection, location, transfer, and administration to be determined by the War Department.[25]

On 26 March 1943 General Connolly sent the following message to General Marshall:

> Supplemental letter of instructions . . . charges this command with responsibility for War Department intelligence for this theater. Experience has shown that this is not compatible with my primary mission and Russians very suspicious of our G–2 activities since they see no need for such activities in furthering our mission. This suspicion of our motives is hampering our obtaining the operational data we must have in order to carry out efficiently our primary mission. As our operations increase in volume it will become of even greater importance that the Russians have confidence in our sincerity of purpose. Under decision of the Combined Chiefs of Staff, British have full responsibility for security our operations south of the vicinity of Tehran inclusive, which necessarily includes collection of necessary intelligence. If the situation ever develops that we do any operating north of the vicinity of Tehran [26] Russians will have full responsibility for security. Thus the PGSC as such has no need for military intelligence.[27]

[23] (1) Directive, CG, USAFIME, to Connolly, 20 Jan 43, sub: Operation of PGSC. PGF 240. (2) GO 6, Hq, USAFIME, 20 Jan 42. (3) These orders were issued in the name of General Brereton who was Commanding General, USAFIME, from 31 January to 5 September 1943. GO 8, Hq, USAFIME, 31 Jan 43; WD GO 59, 5 Sep 43. General Andrews left Cairo on 30 January to go to England to take over from General Eisenhower command of U.S. forces in the European Theater of Operations. Andrews was killed in an air crash in Iceland 3 May 1943. (4) General Maxwell was relieved by General Crawford on 18 March 1943. 1st Ind, Ltr G–2, 18 Mar 43. AG 350.05 (3–14–43) Hq AMET.

[24] Memo, Col Elliott for Somervell, 4 Sep 42. SOS Plan, Copy Contl Div, ASF, Sp Coll, HRS DRB AGO.

[25] Strong to Connolly, Supplement to Ltr of Instructions: Mil Intelligence Instructions, 21 Oct 42. MID 904 (10–21–42), OPD Registered Documents Room.

[26] It never did.

[27] Rad AGWAR 689 TN–2640, Connolly to Marshall, 26 Mar 43. 384 Conduct of War, SL 9016. Another copy AG 371.2 (2 Apr 42–1 Nov 44) Hq AMET.

Operations Division, Washington, promptly revoked the supplementary Letter of Instructions, and effective 1 May the Intelligence Division of General Connolly's general staff was dissolved, and all military intelligence functions of the American command abolished save only map procurement and distribution, and censorship. These functions were assigned to the provost marshal. As a part of this sweeping gesture of friendly compliance with Russian desires, all intelligence offices in the various district headquarters were likewise abolished.[28]

Although this decisive action removed from Connolly responsibility for intelligence activities while his command remained subordinate to Cairo, the feeling in Washington that such responsibility properly belonged to an independent theater commander again made the question an issue in the negotiations to separate Tehran from Cairo, for Connolly remained unwilling, even as a theater commander, to worry the Russians by sponsoring an intelligence division. When Maj. Gen. W. D. Styer, Chief of Staff, ASF, passed through Tehran in June en route to the China-Burma-India theater, he and General Connolly discussed the status of PGSC and the efficiencies that might be obtained through independence of Cairo. As a result of Styer's report to Washington of this discussion, General Marshall informed Connolly that "it is believed administrative delays due to distance from Cairo can be reduced considerably by delegation to your headquarters of further powers to which the Commanding General, USAFIME may be agreeable." What followed was a delegation of power to Connolly to make contracts; to return officers and enlisted men to the zone of the interior; to reclassify, promote, and appoint officers; and to exercise the power to review conferred on theater commanders by War Department Circular 21 of 15 January 1943.[29] But Washington still believed that if PGSC were established as an independent theater, it should possess an intelligence division. At a conference at Cairo later in the summer Connolly is reported to have said that "any high-powered G–2 activities under his jurisdiction would interfere with his

[28] (1) Rad, Gen Handy to Gen Connolly, 3 Apr 43. OPD 617 Persia (3–26–43). (2) GO 26, Hq, PGSC, 30 Apr 43. (3) General Wedemeyer, reporting to General Marshall on a visit to the PGSC very early in 1943, said: "Connolly is accomplishing difficult objectives without fanfare. Good judgment, hard work, and tact all mark his approach to solution of problems involving other nationals. He definitely has their respect and may be expected to gain increasingly their co-operation." Rad, Wedemeyer to Marshall, signed Brig. Gen. Clayton L. Bissell, from New Delhi to AGWAR, 2 Feb 43. CM–IN 1102 (3 Feb 43).

[29] (1) Rad AMPSC 989, Marshall to Connolly, 28 Jun 43. 384 Conduct of War, SL 9016. (2) Rad, Connolly to Brereton, 1 Jul 43. Same file. (3) Rad AMSME 748–P, Brereton to Connolly, 18 Jul 43. Same file. (4) Rad AMSME 649–P, Brereton to Connolly, 29 Jun 43. PGF 248. (5) Rad AMPSC 1175, Marshall to Brereton, 28 Jul 43. 323.361 Powers and Duties (General), SL 9008.

primary mission, that is, the supply of equipment to the Russians." [30] Washington decided to leave the question of independent command in abeyance inasmuch as Brereton, who had succeeded Andrews, was shortly to be relieved as Commanding General, USAFIME.[31]

The new USAFIME commander, Maj. Gen. Ralph Royce, took over on 10 September. As a result of correspondence and personal consultation between Royce and Connolly over the following months, and of consultations with high officials from Washington who came to Tehran for the three-power conference held there from 28 November to 1 December, a new Letter of Instructions was issued by General Marshall to General Connolly under date of 10 December 1943.[32]

Effective that date, the new Persian Gulf Command (PGC) became directly responsible to the War Department through OPD. The mission of the command was broadly worded. It was "to further the objective of the United States in the prosecution of the war." Primary was the continuance of the task imposed by CCS 109/1. In addition, the Commanding General, PGC, was to co-ordinate American activities under his command with those of other United Nations; to direct and control representation of the War Department in dealings with friendly governments in all matters not requiring diplomatic channels; to carry on supply activities, and all Army Air Forces activities except the Air Transport Command; and to exercise the usual powers and perform the usual administrative duties of a theater commander. Although the whole area of Saudi Arabia was reserved to USAFIME, it was provided that the Commanding General, USAFIME, might delegate to the Commanding General, PGC, construction activities by the U.S. Army "in the eastern part of that country," as well as the representation of the War Department in negotiations or other actions pertaining to the development or production of petroleum products by U.S. interests in eastern Saudi Arabia.[33] In continued deference to the wishes of the Russians, only such intelligence activity was authorized as was necessary to the security of the new command and this was carried on as a part of the routine work of the provost marshal. The

[30] Ltr, Brig Gen Gilbert X. Cheves (who relieved Crawford as CG, SOS, USAFIME, on 25 Jun) to Gen Styer, 21 Aug 43. SP 323.31 (7–26–43) (1) Opns Br, AGO.

[31] Rad AMPSC 1379, Marshall to Brereton and Connolly, 1 Sep 43. PGF 248.

[32] (1) Ltr of Instructions, Marshall to Connolly, 10 Dec 43. PGF 248. Other copies 323.361 General Connolly's Letter of Instructions with Amendments, SL 9008, and SP 323.31 (7–26–43) (1) Opns Br, AGO. (2) Memo, Marshall, 10 Dec 43, sub: Establishment of PGC. 323.361 Powers and Duties (General), SL 9008. This file also contains radios, memoranda, and drafts of proposed instructions drawn up by Connolly and Royce for forwarding to the Chief of Staff, Washington.

[33] Both were delegated by letter, Brig. Gen. Benjamin F. Giles (who relieved Royce at Cairo on 10 March 1944) to Connolly, 13 June 1944. Abstract PGF 262.

PGC did not set up a G–2 division, and General Connolly exercised intelligence responsibility only for such investigations as pertained to the safety of American operations in moving supplies to the Soviet receiving points.

With the command relationship to Cairo thus settled, PGC settled down to devote its energies directly, and without the administrative complexities inherent in the earlier command structure, to its primary mission. The year 1944, which produced peak deliveries to the USSR, saw also the rounding out of the administrative machine. On 24 December General Connolly was relieved as Commanding General, PGC, in order to become deputy commissioner of the Army-Navy Liquidation Commission at Washington. He was to return to the Corridor a year later to serve briefly as director of Foreign Liquidation.

Succeeding Connolly as commanding general was General Booth, an engineer graduate of West Point (1926) who, like Connolly and Scott, had seen service in district engineer work in the United States, particularly at Rock Island, Illinois, and at Seattle. He came to the command of PGC via the posts of Ports Service director, commander of Basra District, director of Operations Division, and chief of staff.[34] Following General Booth as chief of staff was Col. Samuel M. Thomas, who had come into the Corps of Engineers through the Officers' Reserve Corps, and whose specialized training included courses at the Army Signal Corps School and the Command and General Staff School. He served as director of the Signal Service from his arrival in the Corridor late in 1942 to his assignment as chief of staff in January 1945. When Thomas, then a brigadier general, was ordered to the United States in July 1945 he was succeeded as chief of staff by Col. Gustav A. M. Anderson. Anderson had served in the command as director of the MTS, commanding officer of the Mountain District until its inactivation, and assistant chief of staff for Administration. When General Booth was ordered to the United States in August 1945, Colonel Anderson became Commanding Officer, PGC, and saw the American effort in the Persian Corridor through to the end. His chief of staff was Lt. Col. Edwin B. Woodworth.[35]

[34] Booth relieved Scott as chief of staff on 29 February 1944. Abstract PGF 262.

[35] (1) Connolly served briefly as Commanding General, USAFIME, from 5 September 1943 to 10 September 1943, when Royce relieved him. WD GO 59, 5 Sep 43, and GO 23, Hq, USAFIME, 10 Sep 43. (2) GO 89, Hq, PGC, 24 Dec 44. (3) Key Personnel. PGF 246. (4) GO 78, Hq, PGC, 15 Jul 45. (5) Rad, CO, PGC, to CG's, USFET [and] AMET, 15 Aug 45, abstract PGF 262, and GO 93, Hq, PGC, 15 Aug 45. The wind-up of the command is told in Ch. XIX below.

Division of Responsibility With the British

To the extent that structural organization provides the means for executing function, the structure of the American command and its status with regard to USAFIME headquarters at Cairo were both subject to the status of American responsibilities relative to the controlling British powers and duties. The SOS Plan provided a definition of American functions and a suggested skeletal organization. The directive of the Combined Chiefs defined the continuing duties of the British under the Tri-Partite Treaty. It was left to the British and American commanders in the field to work out the problem of fitting the new American command and its functions into the framework of these British responsibilities.

Accordingly, during the early months in which the newly arrived American service troops were taking over certain British functions assigned by CCS 109/1, British and American headquarters were studying the problem. It was soon apparent that the central aspect of the problem of meshing the activity of the two commands was control of movements. This was the governor of the machine, the means by which the whole process of discharge of cargo at the ports, allocation of traffic, and inland clearance was regulated. At a meeting held at Tehran on 7 April 1943 a joint agreement for the control of movements in Iran was signed, to become effective when PGSC was ready to take over movements responsibility. On 21 April, PGSC notified PAI Force that the American command would be ready to take over on 1 May; and from that date Movements Branch, Operations Division, assumed responsibility for controls to be exercised within the over-all responsibility of the British.[36] This aspect of the agreement, whereby one party retained the last word while delegating actual authority to the other party, marks the highest and most difficult achievement in the Persian Corridor experiment in co-operation. Only a high degree of tolerance between the partners in so complex an intermeshing of prerogatives could have assured the successful operation of the agreed plan.

The joint agreement began by restating British responsibility for

[36] (1) Joint Agreement between Persia and Iraq Forces and the Persian Gulf Service Command for the Control of Movements in Persia, 7 Apr 43. 323.361 General Connolly's Letter of Instructions with Amendments, SL 9008. Another copy 092.2 Treaties and Agreements, SL 8978. Appendixes A and B cover the constitution and functions of the monthly capacity and target meetings; Appendix C deals with priorities; and Appendix D covers the respective responsibilities of the PAI Force and PGSC Movements staffs. (2) Hist Rpt, Movements Br, Opns Div, Hq, PGSC, 16 May 43, p. 4. PGF 126-D. (3) Rad AGWAR 2894, Connolly to Marshall for Spalding info Harriman, 1 Nov 43 (summarizing Anglo-American responsibilities). 384 Conduct of War, SL 9016.

internal security; for providing all possible assistance to insure the maximum of aid to Russia; and for the control of priorities of traffic in Iran. The American responsibility for delivery of maximum tonnage to the USSR was also restated. Under the first point, internal security, British responsibility entailed provision "of such garrisons in Persia as may be considered necessary; the maintenance of the food and fuel requirements of the civilian population; and of the requirements of essential industries." British logistical responsibility, under the second point, was defined as embracing the discharge of goods at Iraqi ports and their carriage over the line of communications through Iraq; the provision of port lighterage and inland water transport on the Karun River; the provision of military or UKCC motor transport over the Khanaqin Lift; and undertaking the improvement and maintenance of road communications with such American assistance as might be decided upon jointly between the parties to the agreement. Under the third point, over-all British responsibility for priorities was to be exercised through the machinery of the monthly target and capacity meetings which were held under American chairmanship; and priorities for movement of British military and essential civil traffic would be requested by British Movements of the American command which would take the necessary action. The movement of American personnel, military freight, and aid-to-Russia tonnages was to be under American control. In the event that local agreement could not be reached between British and American representatives to accommodate demands for movement of British categories of traffic within the current capacities determined for aid-to-Russia tonnages, the matter was to be referred to GHQ, PAI Force. If a decision were rendered on that or any other matter by the General Officer Commanding-in-Chief, PAI Force, contrary to CCS 109/1, the Commanding General, PGSC, was authorized by his Letter of Instructions—in conformity with the terms of the Combined Chiefs' directive and instructions to General Wilson of PAI Force—to report the matter immediately through the U.S. Joint Chiefs to the Combined Chiefs. No such appeal was made at any time.

The agreement assigned to the Americans authority over movements hitherto exercised by the British, except for movements required for British military personnel and stores, and essential civilian needs including oil. As the Americans were primarily concerned with aid-to-Russia movements, the arrangement left them effective control of the lion's share of inland clearance over their own line of communications from the Gulf to Soviet receiving points in the north, and it gave them also the right of fitting British requirements into the larger pattern,

subject to appeal to British headquarters. Short of a grant of absolute authority, impossible to give an auxiliary force not an occupying power in Iran, this arrangement accomplished the necessary centralization of the chief means of traffic movement the lack of which had hitherto plagued the aid-to-Russia program in the Corridor.

The joint agreement left the control of inland water transport in British hands, including the allocation of barges and lighters; but monthly capacity of barge lift was determined at the monthly capacity meeting at which the American voice was strong. Allocation of incoming shipping as between ports in Iran and Iraq likewise remained with the Basra Transport Executive Committee, on which sat representatives of the British Ministry of War Transport, GHQ, PAI Force, the War Shipping Administration, the PGSC, and the USSR. At American-operated ports, British Movements was to be responsible only for arrangements connected with embarkation and disembarkation of British military and Polish personnel. At British-operated ports, the British were responsible for all documentation and handling of stores, including those for American and USSR account. On the ISR the British Movements staff was similarly responsible only for arranging with the American staff for movement of British and Polish personnel and stores, for essential civilian traffic, and for the necessary documentation for those movements. In motor transport, the American command was responsible for the co-ordination of its own truck fleets with those of UKCC and ultimately exercised complete control over all traffic on American highway routes, while British control prevailed in all respects over the uses to which British highway routes were to be put. The American command, in consultation with British Movements, was made responsible for obtaining disposal instructions and priorities from the Soviet authorities for all cargo destined for the USSR, and the Americans were to notify British Movements Control at Tehran of the instructions regarding Soviet cargo handled by the British through British-operated ports.

The joint agreement was essentially a division of responsibility according to function. Each party retained authority for its internal necessities, and each received authority for those of its duties which may be called external: in the British case, for its obligations as an occupying power toward the Iranian civil population; in the American case, for the movement of goods to Russia, which constituted the bulk of all movements in the region. Yet within the broadly defined and clearly distinguishable areas of responsibility, it is plain that the functioning of transport required, at almost every step, a close collaboration and a delicate balancing of prerogatives. In the process the wheels of

the Anglo-American machine developed some friction. The Americans, for instance, chafed at British controls over inland water transport. But on the whole the control of movements remained the outstanding instance of successful co-operation.

The joint agreement, while affirming British responsibility for internal security, was not concerned in detail with that problem, beyond stating that the American command was responsible for guarding American traffic and for notifying British Movements Control when guards would be required for Soviet cargo. "The responsibility for providing required guards rests on British Movements." That was the theory, which, stated another way, provided that American security responsibility was confined to American installations other than those classified as direct aid-to-Russia installations, and to protection of cargoes solely for American military requirements. All other security responsibility was in the hands of the British. As defined by them this covered

> "The ports of Khorramshahr and Bandar-Gulf [Bandar Shahpur], American Aid-to-Russia plant at Abadan, the rail line of communications to Teheran, barge traffic on the Karun and Shatt-al-Arab rivers, vehicle traffic on the Khorramshahr-Kazvin road route, also all installations on those routes used by the Americans for Aid-to-Russia traffic." [37]

This was, in effect, a sweeping British assumption of security control over virtually the entire American effort in the Persian Corridor. Theoretically, the arrangement was of advantage to the American command inasmuch as it relieved it of the necessity to provide large numbers of investigative and police personnel. Practically, because the British were physically unable to provide equivalent necessary police protection for the activities and installations included in their field of responsibility, the burden was divided, and that part of it which was borne by the American command was exercised by virtue of the security authority possessed by the British. The American provost marshal, Lt. Col. George P. Hill, Jr., estimated that to carry out their security obligations properly, the British would have needed to double their military strength in all categories of troops.[38] But after Stalingrad the British removed the Tenth Army from the area and reduced military strength as much as possible. In view of the ever present problems of pilferage, theft, banditry, and the threat of sabotage to the railway and other in-

[37] Report of Military Police Activities, PGC, United States Army, p. 11. PGF 130. This document of 132 pages and Appendix of 39 Items furnishes a thorough study of the American security problem.

[38] Memo, Lt Col George P. Hill, Jr., for Provost Marshal General, Washington, 30 Apr 44, sub: Provost Marshal Activities, PGC. Item 1, App., Rpt cited n. 37.

stallations, the Americans were forced into providing security measures of their own while relying at the same time upon the British. In general practice, British security forces were used for protection against tribal disturbances, banditry, and sabotage; American, for local guard duties. But even this division of labor was not so clear-cut as it sounds, for in practice it was not possible to draw a sharp distinction in the face of a situation calling for immediate action. In consequence—unlike the division of responsibility for movements control, which was reasonably distinct and where lines of responsibility and command were clear—security problems were a source of constant, if usually minor, irritation between the British and American forces. Because of the primary responsibility of the British in security matters American representatives were in a subordinate position at security conferences with British, Russian, and Iranian authorities. British officials made the final decisions in shaping policy, determining procedures, and defining the limits of responsibility.

In this connection the provost marshal records:

> The British once refused to furnish guards for an oil storage tank along the railroad on the grounds that the oil was not intended for Russian consumption, although this storage constituted the principal source of gasoline supply for the Southern Division of our Motor Transport Service. Upon practically all occasions where questions of policy were discussed it became necessary for PGC to take the firmest possible stand to insure that the British did not use the loophole of definition to evade their full responsibility.[39]

Colonel Hill gives a further illustration of the embarrassments inherent in the American position:

> Too often U.S. requests for action have been treated with maddening delay and perfunctoriness. To give a specific example: An American truck was fired upon in the Gulf District by ruffians of a nomad tribe. The District Provost Marshal went out to investigate the incident and himself was fired upon. Military Police followed the camel tracks of the offenders to the entrance of their village, then reported the incident immediately to British security personnel. The British wasted three days consulting with their consul and conferring with one official and another over the question who should take action, British or Iranian authorities. By the time the issue was decided the nomads had trekked on beyond possibility of apprehension. It was a different story a few days later when another group of nomads fired upon a British colonel. An entire company of Punjabs raced to the scene and quickly captured the guilty parties.

These incidents, typical of the sort of difficulty that arose because of the anomalous position the Americans held as nonoccupying-power nationals in Iran, illustrate that at its worst the vague division of re-

[39] Page 12 of Rpt cited n. 37.

sponsibility left the Americans unprotected, whereas at its best, the security situation functioned only through close and sympathetic cooperation by the Americans with the British but without command responsibility or control. The arrangement, unavoidable so long as the Combined Chiefs' directive imposed entire responsibility in PAI Force, was unfortunate, for it both failed to provide entirely satisfactory security for the American operations and created considerable ill feeling in the ranks. In the words of the provost marshal, "Anglophobia became a common disease of the American provost personnel."

Although this situation was a fly in the ointment of generally satisfactory Anglo-American relations in the Corridor, it never endangered the effectiveness of operations in the area. If it had, the policy would have required review by the Combined Chiefs. The British proved entirely able to cope with the defense of the area, as was shown by their arrest in August 1943 of the celebrated German agent, Franz Mayer, chief of German intelligence in Iran, along with thirty-one of his accomplices who were employed on the ISR. And the combined efforts of British, American, Soviet, and Iranian authorities succeeded in reducing looting and attacks upon trains and truck convoys to a minimum. It was only in its minor aspects that the situation proved more annoying than dangerous.

Because of its adverse (if minor) effect upon the Anglo-American partnership, it may be wondered why the policy-makers, even if they failed to heed American warnings in the planning period and went ahead with the Combined Chief's plan, did not bring about some modification which, while not called for through any distinct peril to the operations, would have eliminated a fruitful source of friction. For they were well and truly warned. In June 1942 Colonel Shingler, whose responsibilities, it will be recalled, were limited to construction and assembly projects for the British in the aid-to-Russia program, asked Washington for a military police unit for control of American soldiers, seamen, and civilians and for protection of U.S. equipment and assembly plants. Even at that time he noted that British protective measures were "insufficient and sabotage [presented] serious problems." [40] During the planning period immediately preceding adoption of the SOS Plan, General Strong presented a memorandum to General Somervell citing cables received from the American military attaché at Tehran to the effect that British interest in the security of the ISR was very considerably less than the military attaché thought it ought to be. One of these messages contained the statement, "I feel that in order

[40] Rad 349, Shingler to AMSIR Wash, 15 Jun 42. PGF 236.

to carry out our great program of shipping supplies through Iran . . . we must transcend the political policies of British rule in Iran." [41]

Shingler did not get his MP's, and when the SOS Plan tables of organization were drawn up, they provided for one military police battalion and one military police company. After Connolly's arrival in the field, with the outcome of battle at Stalingrad still perilously uncertain, and a deterioration of economic, social, and political conditions in Iran, he, too, requested Washington to increase the number of MP units authorized or the new command.[42] On 11 December the 727th MP Battalion arrived with the first shipload of service troops. It was followed on 7 August 1943 by the 788th MP Battalion. As of 30 April 1944 the eight companies of these two battalions, scattered in small detachments among seventeen locations in the command, were the only MP personnel under Connolly's command, and they were not of the first quality.[43] To assist them in their local duties, other men were drawn from operations and hastily trained. It was clearly Washington policy, in view of the British responsibility for security matters, to limit American power in the Corridor to act in the same matters. And as time went on and certain annoyances developed, no one was willing to disturb the *status quo*. Security is an essential and inalienable function of military command, and military command in the Corridor south of Tehran, in all aspects which relied upon control of security measures, was British. Even if it had been possible, under the Tri-Partite Treaty, for the British to designate areas over which they would delegate military authority to the American command, that delegation would have caused the right of the Americans to be present at all to be challenged by the other signatories to the treaty.[44] Subordination in security matters was a part of the price the Americans paid to serve the Allied cause in the Persian Corridor.

[41] Memo, Strong for Somervell, 24 Aug 42, citing cables of 17 and 18 Jul 43. SOS Plan, Copy Contl Div, ASF, Sp Coll, HRS DRB AGO.

[42] Rad, Connolly to Scott, 7 Nov 42. PGF 259.

[43] Rpt cited n. 37 and Memo cited n. 38. The provost marshal states in these documents that the 727th MP Battalion contained "castoffs of infantry and other arms and services . . ." and 15 percent limited service men; and that although the quality sent him in the 788th MP Battalion was better, 50 percent of the officers of both battalions "were not qualified to perform the duties of their grades."

[44] As a matter of fact the question was raised anyhow by the Russians and Iranians. See Ch. XX below.

CHAPTER XII

The Machine at Work

A Bird's-Eye View

The machine conceived by the SOS planners and tentatively designed by General Connolly's advance field group was a multipurpose one. Not only did it have to take over and expand the assembly and construction projects already in existence, it had also to assume the transport responsibilities assigned by directive of the Combined Chiefs of Staff as the new command's primary mission. It had to be versatile enough to meet demands upon it as widely disparate as the conduct of negotiations with foreign representatives and the provision of water in the desert; as varied as the operation of a railroad and the operation of a small station for changing truck tires high in a snowy mountain pass. The arrival of the first service troops in December 1942 set the machine in motion, a machine composed of men: American soldiers, the American civilians who remained during the transition from the contractor system to militarization, and, finally, the civilian army of natives whose labor and good will were indispensable to the success of the aid-to-Russia program.[1]

The first large troop shipment came to Khorramshahr after a voyage which began at New York on 1 November on the *West Point* and was continued, from Bombay, on British ships of smaller draft, the *Rhona,* the *Lancashire,* and the *Dilwara.*[2] By the middle of 1943 the military strength of the command approached the maximum assigned strength of nearly 30,000 officers and men reached in early 1944. The year 1943 brought the highest number of native employees on American projects, approximately 42,000 men and women—Iranians, Iraqi, Polish refugees, and a sprinkling of other nationalities and races. In

[1] For plans for work assignments, see Orders for Processing Shipment 1616 at Khorramshahr. 323.61 Establishment of Military Districts, Binder 2, SL 9008. Port troops were at work unloading ships under British control the day after their landing. Dir of Ports, Monthly Rpt of Opns to 28 Feb, 1 Mar 43. PGF 26–A.

[2] For an account of the voyages of the *West Point* and other ships which brought the new American command to Iran, see HOTI, Pt. V, History of the 3d Military Railway Service, by 1st Lt Francis J. Lewis, pp. 32–48. PGF.

addition an average of 15,000 Iranian civilians was employed directly by the ISR during the period of American operation. Railway employees at the height of operations in 1944 reached 30,000. Although exact figures for native employment are not available, it was estimated that during the busiest months of 1943 and 1944 the combined Anglo-American operations in the Persian Corridor used about 100,000 natives. Because of the greater mechanization of American projects, the higher proportion of these workers was employed by the British.[3]

Table 13 gives an idea of the scope and variety of the tasks undertaken by the American command. Taken with Chart 2 it helps indicate the shifting emphases that fell now upon one sort of task, now upon another. The two provide a kind of bird's-eye view of the operation as a whole. They show, for instance, that military strength was brought to its peak quite early in the game, as all units allocated by the SOS Plan, with subsequent accretions, were thrown promptly into the field to serve as the machine's basic force. The operating services set up under the plan each generated its own pattern. The American command took over the port of Khorramshahr on 7 January 1943, and the top month of ports operations came in July 1944. The Motor Transport Service began active operations in March 1943 and closed on 1 December 1944. The Military Railway Service took over the southern sector of the ISR from the British on 1 April 1943 and handed the line back on 25 June 1945. Peak strength in native labor, reached in November 1943, some months after the peak in military strength, preceded by eight months the highest month for ports traffic attained in July 1944. This reflects the heavy expenditure of manpower required to prepare the facilities—highways, docks, warehouses, camps, posts, stations, and other installations—prerequisite to the flow of maximum traffic through the Corridor to USSR receiving points. The mission of the command was declared accomplished on 1 June 1945. Assembly operations proceeded throughout most of the period in a curve which reached its maximum in 1944 and then tapered off. The picture as a whole is one of a region extending from Khorramshahr to Kazvin—a

[3] (1) Peak assigned U.S. military strength came in February 1944 with 29,691 officers and men. In addition to the assigned strength, attached military personnel served in the command area, most of these—sometimes reaching 2,000 in the later period—being personnel of the Air Transport Command. (2) An estimate in February 1943 that combined Anglo-American native laborers numbered 125,000 is supplemented by a statement at a meeting in that month that 81,000 natives were then being provided food rations and that a maximum limit of 100,000 was agreed between the British and Americans for native food rations. Memo, Maj Richard W. Cooper, Chief, Labor Relations Br, to CG, PGSC, 2 Feb 43, sub: Policy on Feeding Native Laborers; Memo, Maj H. R. Eichenberg, Dist QM, Tehran Dist, 16 Feb 43, sub: Summary of History of Native Feeding, PGSC, Aug–Nov 42; and Min of Mtg, U.S. Army, British Army, and USSR, 16 Feb 43, sub: Native Feeding. PGF 234.

distance almost exactly that which separates New York from Detroit by road—dotted from end to end by American installations serving a dozen principal activities, each keyed to its own tempo, but interdependent and co-ordinated by a central purpose and design.

The distribution of the machine's working parts—its military personnel and civilian labor forces—among the several tasks illustrates the complexity of planning and co-ordination. During the peak of operations, from February to September 1944, for example, 17 percent of the military strength of the American command was assigned to operation of the MTS; 14 percent to the MRS; 3 percent to signals work; and the balance of 66 percent to working the ports, assembly plants, and depots, to construction and maintenance, and to the overhead and housekeeping activities necessary to the existence of the command itself.[4] Earlier and later periods show variations in distribution of military strength by tasks. The sampling of trends in civilian employment by tasks furnishes another means of measuring the shifting of emphasis from one type of work to another, though not an infallible one, because its yardstick excludes the military personnel who performed all the work of the Signal Service and much of the highway construction program.

But the trends can be generalized. Table 13 correctly suggests, for instance, the conclusion that the greatest activity at the beginning of General Connolly's regime was in construction other than highways, and that the construction peak was reached early. Highway construction and maintenance, also an important early activity, rounded its rising curve later than other types of construction and then declined. In the earliest period sampled, the very high civilian employment figure for ordnance activity reflects the initial arrival and disposition of heavy machinery and equipment which was a nonrecurrent task. The service and supply item grows larger as the command's logistical performance rises, but continues to increase in the final period sampled when military strength was matched, almost man for man, by native laborers, three fifths of whom, at that time, were occupied in service and supply activities. Port operations employed civilians in a curve which parallels the development of port capacity to handle the increasing loads shipped into the Corridor. Employment at depots, other than ordnance, roughly parallels the curve of port operations, but the civilian employee total reached its peak earlier, and tapered off

[4] (1) HOTI, Pt. I, Chs. 1–5, Administration, by George B. Zeigler and (Ch. 5 only) Wallace P. Rusterholtz, with Annex by Victor H. Pentlarge, Jr., p. 84. PGF. (2) Ltr, CO, PGSC, to House Subcommittee on WD Appropriations, 5 Oct 45. AMET 314.7 Military Histories, SL 8997.

sooner than that for the ports themselves, reflecting the intensive efforts required to prepare and put into operation a storage and warehouse plant which would be capable thereafter of handling maximum loads as called upon, and which was geared, after the initial preparations, to operate maximum loads with a decreasing labor force. Interpretation of the figures for the railway and motor transport services requires the more detailed information furnished in the later chapters devoted to their work. The civilian railway figures are not significant, showing only those employees who for special reasons were directly employed by the U.S. Army; and the MTS figures indicate only that the American trucking system, to which the SOS Plan assigned a relatively lower priority than to the other two chief operating services, depended upon a large supply of native labor to keep it rolling during the comparatively brief period of its most intensive activity.

As the story of the command's chief activities proceeds, the routine work, which cannot be dealt with in detail, must not be forgotten. Construction, signal communications, assembly, and the operation of ports, railway, and truck convoys, were to be the main business of the Americans for three years to come. But without the steady performance of more humdrum assignments common to military establishments, though beset in the Persian Corridor by their own peculiar problems, the accomplishment of the primary mission would have been impossible. There were the quartermaster troops and their native helpers, who ran great depots at Khorramshahr and Ahwaz, operated bakeries, laundries, ice-cream plants, and refrigerated warehouses; they conducted salvage and repair, took care of supply of troops and installations, and maintained cemeteries. There were also the men of ordnance with their depot at Andimeshk and their far-flung activities; the medical, dental, and hospital personnel; the military police; and those in charge of water supply—all shared in the common task, the primary mission of getting supplies through to the USSR.[5]

Certain personnel problems applied to the command as a whole. Because of the extraordinary demands upon the available labor supply imposed by war-born activities, it was essential that Iranian, British, Soviet, and American authorities should agree upon general wage rates and principles of hiring. Otherwise competition for labor would seriously derange the economy and frustrate the activities of the four nations in the area. Basic American policy was established in December 1942 and was generally adhered to throughout the remaining period of

[5] Documented details of these tasks are in the indexed Persian Gulf Files (PGF) and are summarized in an unused draft chapter, "Supporting Services," filed with the manuscript of this book in OCMH.

operations. Labor policies set by the British deputy assistant director of labor and enforced by local British labor officers were accepted by the Americans. No one could be hired away from any Allied war organization, including the ISR, the UKCC, the Anglo-Iranian Oil Company, or Soviet or British military organizations, nor could any person be hired who resigned from these groups with the intent of joining American enterprises. Rates of pay were to be, in general, those set by the British authorities.[6] To maintain amicable relations with the government of Iran it was later determined that American agencies would not hire persons employed by the Iranian Government, unless applicants furnished a release or a leave of absence signed by competent Iranian authority.[7] While it cannot be said that these general policies prevented dislocations in the labor market or some raids by one group upon the labor supply of another (instances occurred on the part of all four national groups), the policy was more honored in the observance than in the breach.

The Iranian economy was nevertheless unfortunately and inevitably upset during the war years. Inflation and scarcity of commodities, particularly in the summer of 1942, produced food riots at Ahwaz and Andimeshk resulting in some deaths. Joint Anglo-American action in September instituted a daily ration of flour, tea, and sugar, charged for at the rate of two rials [8] against daily wages. The rioting stopped, absenteeism diminished, and productivity on war work, especially highway construction, increased, because of the encouragement to steadier employment and the increased vigor of the workers. After the new American command had established itself, the British authorities raised the question of reducing food rations for native workmen, on the ground that the required tonnage threw too great a burden upon the transportation system. During early 1943 the Americans experienced some difficulty in obtaining tea and sugar for native rations from local British sources. The Americans were not in favor of reducing the rations and pointed out that 80 percent of the required amount would be used within a 150-mile radius of the ports, and that 600 tons monthly would suffice. It was preferable in the American view to feed the natives entirely than to dispense with their labor and have to rely on increased American and British military manpower, whose rations would have to be imported.

By the Tri-Partite Treaty Great Britain and the Soviet Union undertook to cause a minimum of disturbance to Iranian economic life.

[6] Memo, Gen Scott, 1 Dec 42, sub: Labor Policy. AG 230.05, Hq PGC.
[7] Civ Pers Cir 2, Hq, PGSC, 20 Jan 43. Abstract PGF 261.
[8] By WD Cir 130 (Jul 43), the rial was valued at $0.03125.

They pledged their best endeavors to safeguard Iran's economic existence. At a conference on 16 February 1943, attended by American, British, and Soviet representatives, it was agreed that responsibility for the civil population belonged to the Iranian Government but that when food was otherwise unobtainable the Allied war agencies should provide rations for workmen according to the American-suggested scale. The British were to be responsible for the supply of sugar and tea from British military stocks, and of wheat, to be procured through the Middle East Supply Center and drawn through British military stocks. By this agreement a serious impediment to the successful conclusion of operations in the Corridor was averted.[9]

In the south smoldering antagonism between workmen of Arab and Persian stock was a fairly constant problem. At some installations there was little or no friction; at others the situation required careful handling. In the summer, when the Persians migrated to the north, the proportion of Arab laborers tended to increase. The passage of Iraqi nationals across the border to the Iranian ports sometimes produced difficulties when British security authorities considered border controls inadequate. Matters came to a head in the latter part of 1943 with an American protest against British closing of the border to all but specialized technical people from Iraq. Measures of control were jointly devised which led to confirmation by PAI Force on 5 July 1944 of an agreement for frontier control in the Basra-Khorramshahr area.[10]

The employment of American Negro units in Iran did not receive the unmixed blessing of the British authorities, who feared that unless Negro troops were isolated from the natives the differential in rates of pay would cause trouble. They also pointed out that because some Arabs and Persians had been slave dealers it would not be tactful to place American Negroes in supervisory capacities in the Persian Corridor. It was American policy that Negroes should serve in the armed forces in numbers proportionate to the population ratio, and it was understood that they would serve under General Connolly and be used at his discretion. The original troop disposition plans made in Washington called for three Negro port battalions and two engineer dump truck companies, and the first troop shipment on the *West Point* included the 435th Engineer Dump Truck Company and Company B of the 611th Quartermaster Bakery Battalion les one platoon. During the life of the American command Negro troops served in port opera-

[9] Documents cited n. 3(2).

[10] (1) Hist Rpt, Hq, Abadan Air Base, PGC, Oct 44. PGF 2–V. (2) Ltr, Hq, PAI Force, to Hq, PGC, 5 Jul 44; and Ltrs, U.S. Provost Marshal to CO's of PGC Dists, 8 and 18 Aug 44. 010.8 Traffic Regulations, SL 8976.

tions, highway and airfield construction, maintenance, and motor pools. In general, they were assigned to Gulf District, but units also worked in the Desert and Mountain Districts, some being stationed at Tehran and Hamadan. The 352d Engineer Regiment, whose band was the pride of the command, received a wide variety of assignments. Its units were stationed in many parts of the Corridor in 1944 before departure on 9 November for another theater.

At no time very numerous, Negro troops at the end of February 1945 constituted a little over 10 percent of the strength of the PGC, which was in proportion to their percentage in the Army as a whole. In July 1944 the PGC proposed to supplant its Negro units by importing Italian prisoners of war. Whatever the long-range pressures which may have motivated the proposal, it offered a solution for the relief of two Negro port battalions whose reduced efficiency after long service at the docks was of immediate concern to GHQ. Washington rejected the proposal as violating the principle that each theater commander must maintain a certain percentage of Negroes in proportion to all troops. The status of American troops in the Persian Corridor was not a matter of formal international understanding, and the American position, as an auxiliary force, was sometimes difficult. It is not surprising that, within this general pattern, the special problems arising from the presence of Negro troops in Iran were also difficult.[11]

The Army Takes Over Construction

The construction program carried on by the Iranian District engineer in 1942 suffered more vicissitudes than any other part of the task assigned to the Iranian Mission and its successors throughout that year of confusion. Handicapped by the late start resulting from the shift to Iran from Iraq in the spring and dogged by drastic shortages of men and materials which were not overcome until October, just as the new regime of General Connolly was taking over, the 1942 opera-

[11] (1) Rad, Connolly to Scott, 7 Nov 42. PGF 259. (2) An article on a Negro bakery outfit in Iran appeared in *Yank*, May 21, 1943; GO 4, Hq 1616–A, SOS, 16 Oct 42; History: United States Military Iranian Mission, 20 Mar 43, prepared for Col Don G. Shingler, Chief of Mission, by 1st Lt Victor E. Dietze, Hist Off, PGF 242; Memo, Plans Div, Hq, SOS, 9 Sep 42, SPOPP 370.5 (9–8–42). (3) Hist Rpt, Engrg Br, Opns Div, 15 Feb 44–1 Jun 45, PGF 127–1–D; for an account of the 352d Engineer Regiment's service and that of the 435th Engineer Dump Truck Company, see HOTI, Pt. III, History of Construction, by Victor H. Pentlarge, Jr., pp. 34–45, PGF, where the work of other engineer units is also recorded. (4) Strength of the Army, prepared for War Department General Staff by Machine Records Branch, Office of Adjutant General, under direction of Statistics Branch, GS, 1 Mar 45. (5) Rad WAR 70749 to Connolly, 26 Jul 44. 291.2 Negro, SL 8992. (6) Ltr, Maj Gen John E. Hull to Gen Handy, 24 Jul 44. Paper 991, Bk. 21, File 9, OPD Executive Office File.

tions nevertheless brought to five the number of berths at Khorramshahr, produced a temporary road in partly usable shape from there to Andimeshk, and completed twenty bridges and the buildings contemplated in the first planning. But the new construction fell far short of what had been planned to meet traffic requirements even before the increased aid-to-Russia commitment. The amount of work which remained to be done to reach SOS Plan requirements therefore assumed almost staggering proportions. Every link in the chain of supply operations from Khorramshahr to Kazvin had to be strengthened and new facilities provided, not only for the work of the three chief operating services, but for the accommodation of the service troops of the new command. After the grievous troubles of 1942 the provision of adequate manpower and equipment—coupled with a plan of operations no longer, after Stalingrad, subject to overriding tactical priorities—threw construction into high gear. By the end of 1943 few major construction projects remained to be completed.[12]

In construction affairs the transition to the Army's militarized program was complicated by the necessity of meshing the new machine with the old Iranian District engineer organization while providing continuity and simultaneously launching new undertakings. All this had to be done at top speed because port, rail, and motor convoy operations could not attain maximum efficiency until facilities were provided.

The administrative machinery which was evolved to carry construction operations through the period of transition and onward into the activity of 1943 was more complex on paper than in action. When General Connolly's principal engineer officer, Colonel Osborne, arrived in the field in early November 1942, construction was still in the hands of the Iranian District engineer's office at Ahwaz. Colonel Osborne brought with him a small group of six officers and fourteen enlisted men called the Engineer Headquarters (Corps) 1616. They had been organized the previous September at the Engineer Organization Center, Camp Claiborne, Louisiana, and were trained to conduct engineer headquarters activities in the field. In accordance with the

[12] (1) Hist Rpt, Cons Br, Opns Div, 15 Aug–15 Dec 43. PGF 127–K. (2) Except as otherwise noted, authority for the rest of this section is derived from History cited note 11(3), including the section on the Construction Service; Hist Rpts, Cons Div, Cons Br, Opns Div, and Engrg Br, Opns Div, 15 Feb 43–1 Jun 45, PGF 127; Completion Rpt, Aid-to-Russia Highway, prepared by Engrg Br, Opns Div, Hq, PGC, PGF 127; Semimonthly and Monthly Rpts of Civilian Employees, 15 Apr 43–31 Jul 45, PGF 151; Hist Rpts, Civ Pers Br, Admin Div, same period, PGF 151; HOTI, Pt. I, Ch. 7, History of Civilian Personnel Branch Activities, Administration Division, Hq, PGC, by Col Richard W. Cooper, PGF; and Memo, Opns Div, Jun 45, for House Mil Affairs Committee, sub: PGC Installations and Facilities, 319.25 Compilations and Gathering Data, SL 9008.

functional plan adopted for the command, construction activities, being among the most pressing duties to be performed at the outset, were to be carried on by an operating service. When in November five operating services were set up, Colonel Osborne became the first director of the Construction Service, which, like its parallel services, derived its powers and duties from the commanding general.

Organization of the Construction Service did not immediately result in the extinction of the Iranian District engineer, whose powers and duties stemmed from the Chief of Engineers, Washington, through the North Atlantic Division engineer, New York. For more than a year the Iranian District engineer and the commanding officers of the Iranian Mission and its successors had worked out a *modus operandi* in spite of the theoretical overlapping of their powers and duties. It was necessary to eliminate even theoretical overlapping before the new command got up to its neck in operating responsibilities. Colonel Osborne—serving in the triple capacities of General Connolly's chief engineer officer in charge of construction, Iranian District engineer, and commanding officer of the Engineer Headquarters (Corps) 1616—personified the unification of overlapping responsibilities. But although the establishment in November of the Construction Service combined personnel of the district engineer's staff and of the Engineer Headquarters (Corps) 1616 with the personnel of the new operating service, the organizations whose roots extended beyond the Persian Corridor continued to survive. Even before Osborne recommended to Connolly the abolition of the Iranian Engineer District, steps were being taken in Washington, in view of the militarization of civilian contract activities, to simplify procurement and supply for engineer work by turning over the duties and property of the two engineer districts in the Middle East command to theater services of supply. But the wheels moved slowly, and the Iranian Engineer District did not disappear from view until 1 May 1943. The Engineer Headquarters (Corps) 1616 remained a headquarters within the construction machinery until 20 February 1944.[13]

Through the device of combining overlapping functions in a single person, construction policy and operations were effectively controlled

[13] (1) Memo, Gen Styer, CofS, SOS, for CofEngrs, 28 Oct 42, sub: Amalgamation of Dist Engr Offices with Serv Comds and/or SOS in the USAFIME. PGF 239. (2) Rad AMSME 1869, Somervell to Maxwell, 18 Nov 42; and Rad 256–Z, Maxwell to Connolly, 4 Dec 42. PGF 239. (3) Ltr, NAD Engr to CofEngrs, 8 Apr 43. NA 323 (NAD) 4, NADEF. (4) GO 11, OCofEngrs, ASF, WD, 17 Apr 43. Same file. (5) Rad, Gen Robins, Actg CofEngrs, to Connolly, 1 May 43. 384 Conduct of War with Relation to Commands, SL 9016. (6) Ltr, TAG to CofEngrs, 24 Sep 42. AG 370.5 Shipment 1616, Hq PGC. (7) GO 8, Hq, PGC, 20 Feb 44.

by command headquarters from the start. Like Pooh-Bah, the Lord High Everything Else in *The Mikado,* the director of construction could do in that capacity what he might not do as Iranian District engineer. A further step toward administrative simplification was the early decentralization of operational responsibility, when the geographical subareas were provided with engineer officers and charged with construction duties for their areas. In the Ahwaz Area, long the headquarters of the Iranian District engineer, the Ahwaz District engineer and the Iranian District engineer were the same person. An exception to the rule which made each geographical district responsible for its own construction, the Ahwaz District performed construction tasks also for Gulf District until 1 June 1943, when, by a process of biological division, a Gulf District engineer office was established with personnel from Ahwaz. That the job was not all blueprints and desk conferences was grimly emphasized only a few days later. Prospecting an uncertain desert track between Ahwaz and Tanuma to determine the route of a new road, the Gulf District engineer and his companion lost their way and perished under the blazing sun. Search parties found their bodies on 12 June.[14] In a context of administrative arrangements it is too easy to forget the land that had to be subdued to the purposes of the war and the men who subdued it.

Colonel Osborne served only briefly as the first Director, Construction Service, for in November he went on to head the new Operations and Supply Division, being succeeded in construction by Colonel McGlone, who, like himself and all who headed construction work thereafter, had previously served as an Iranian District engineer. But the success of delegating responsibility to the territorial districts soon dictated the abolition of the Construction Service in the interests of simplification of administrative machinery. The headquarters reorganization of March 1943, therefore, eliminated the Construction Service, but established within a reorganized and newly named Operations Division a Construction Branch, whose chief, Colonel McGlone, reported to the division's director, Colonel Osborne. While actual construction was carried on by decentralized district engineers, plans and policies were set at GHQ by Construction Branch. This arrangement continued for the life of the command, although the branch was redesignated Engineering Branch in March 1945.[15]

[14] Hist Rpt, Cons Br, 15 May–15 Jun 43, PGF 127–F, names Maj E. D. Park, but omits to name the sergeant who shared his fate.

[15] (1) Colonel McGlone and Colonel Cape, his executive officer, both served as Chief, Construction Branch, Operations Division. (2) SO 47, Hq, PGSC, 16 Mar 43; SO 89, Hq, PGSC, 8 May 43; GO 38, Hq, PGC, 28 Feb 45; SO 68, Hq, PGC, 15 Mar 45.

The construction program proceeded in three waves of priority determined by need and growing troop strength and materials. First priority went to roads, docks, assembly plants, and storage buildings, in a continuation and extension of the work already under way in late 1942. Hospitals, mess halls, barracks, and latrines received second priority; while administration buildings, service clubs, and miscellaneous structures came last. As a general policy, work was performed by U.S. Army service troops and native labor; but some projects, including over one hundred buildings erected at Hamadan and road construction north of Andimeshk, employed local contractors. Because of the local availability of mud bricks, kiln bricks, and stone in a country where lumber was scarce, the Persian Corridor was one of the few overseas areas where permanent or semipermanent construction was used. Among many problems arising from climate and local conditions was roofing for buildings in the south. After unsuccessful experiments with tar paper over boards taken from truck packing cases, a sand asphalt compound was developed which stood up well under the sun. Electrical and plumbing fixtures came largely from the United States.

As the American tasks were being transferred from Iraq to Iran, Colonel Shingler in April 1942 directed the Iranian District engineer to complete a temporary road and a permanent two-way highway between Khorramshahr and Andimeshk and a branch road across to Tanuma–Cheybassi by 1 December.[16] Because of uncertain security conditions to the north of Andimeshk, it was decided in Washington in October not to attempt road construction in that region with civilian constructors. With only the temporary road completed but not wholly surfaced beween Khorramshahr and Andimeshk by December and the branch westward to Tanuma–Cheybassi as yet unattempted, it was decided to concentrate highway building upon the permanent road to Andimeshk and, in conjunction with the British, using military forces and native labor, to convert the existing rough road from Andimeshk to Kazvin to a highway suitable for heavy truck convoys.[17]

The branch road from Khorramshahr to Tanuma was built by U.S. engineer troops between July and December 1943. It was extended five and a half miles upstream from Tanuma to Coal Island by British contractors with U.S. engineer help. The longer link was maintained by the American command until mid-November 1944, the

[16] Ltr, Shingler to Lieber, 18 Apr 42. PGF 127.

[17] A British request to the Americans to build a road from Andimeshk to Baghdad was disapproved as not contributing to the accomplishment of the PGSC's primary mission. Colonel Osborne recommended that such aid to the British be deferred until completion of the projected aid-to-Russia highways. Ltr [n. d., but after 1 Oct 42], Osborne to Scott; and Ltr, PGSC to PAI Force, 24 Dec 42. DE File D–1, Operations, NADEF.

shorter until April of that year. After taking over the Khorramshahr–Andimeshk highway from the engineer constructor and repairing the serious damage caused by the floods of March 1943, the new command completed the permanent road that year. From Khorramshahr to fifteen miles south of Ahwaz a bitumen surface was laid on an embankment of compacted earth. North to fifteen miles beyond Ahwaz a sandstone base on earth embankment was used with bitumen surface. Beyond, to Andimeshk, the base layer was gravel. The cost of 173 miles of road was $28,896,000.[18]

Before 1942 the British and Iranians had worked on the old road between Andimeshk and Kazvin; but when the U.S. engineers began work on it in June 1943, it was unpaved or badly paved at intervals. This long stretch of road was jointly constructed and maintained by an Anglo-American agreement reached in August 1943 and revised in April 1944.[19] The United States built or rebuilt 252 miles; the British, with American aid, 178 miles; and the British alone, 30 miles. Because of large British contributions of labor and materials, their share of the cost was $9,832,000 as against the American share of $5,936,000. The road was improved by straightening curves, relocating some stretches, cutting away hills, and replacing the surface. Although convoys used it during construction, by the coming of first snow most of the length was paved or surfaced with gravel which was replaced by paving in 1944. Upon an earth embankment was laid a gravel base, surfaced with bitumen.

Maintenance of highways, as agreed between the British and American commands, was an American responsibility for the Khorramshahr–Andimeshk road until 1 December 1944, and was shared between Andimeshk and Kazvin until June 1945; but winter maintenance policy, separately agreed upon in July 1943, handed over to the Americans entire responsibility for flood, slide, and snow control from Khorramshahr all the way to Kazvin. For the greater part of 1943, while the northern part of the road was under construction, this responsibility threw a severe burden upon American engineer troops and heavy equipment, for at the beginning of the year about half the route north of Andimeshk was unsurfaced and was being maintained by native labor with picks and shovels. By throwing everything into maintenance, by watering, blading, and adding gravel, the road surface was

[18] This and subsequent breakdown costs are derived from the sources used for Table 14, where estimated costs of constructing American fixed installations in the Persian Corridor have been consolidated under general headings and classifications.

[19] Joint Directive on Aid-to-Russia Road Construction, Policy, Procedure, and Co-operation, on the Route Andimeshk–Malayer–Hamadan–Kazvin, signed 9 Aug 43. 092.2 Treaties and Agreements, SL 8978.

sufficiently improved to speed up travel time for the motor convoys, and this resulted in reducing maintenance time and labor hitherto expended on the vehicles. By the end of 1943 not more than fifty miles of road remained unpaved between Andimeshk and Kazvin.

A detailed inventory of other construction throughout the command would produce a bewildering jumble of items, large and small. Dock construction was, fortunately for incoming cargoes, soonest completed. The sixth new berth at Khorramshahr—which, with the old concrete berth there before the war, provided seven berths—was completed late in May 1943. Sentab Jetty, described in the later chapter on port operations, had been extended from a pygmy a little over 400 feet long by 50 feet wide to a giant over 3,000 feet long, widened, by April 1944, to over 100 feet, and served by access trestles and a maze of approach railway tracks. New water lines for fire protection and an elaborate system of lighting for night operations made the jetty capable of handling the heavy stream of cargo which tested its design and efficiency successfully in 1944. The jetty at Failiyah Creek at Khorramshahr was completed in May 1943, and by August of that year the decking laid at Bandar Shahpur on the new British contractor-built jetty was in service.

At Amirabad, on the rising ground between Tehran and the mountains where the Iranian Government had planned a five-year construction program for a cantonment, permission to use the site was granted to the American command, and work began early in December 1942 on the extensive headquarters camp. It was occupied in July 1943. At Andimeshk, which was developed into an important rail-to-road transshipping station, base ordnance workshops were established and camps for some 3,100 officers and men of ordnance, MTS, and MRS units. By the end of 1943, thirty-six posts, camps, and stations, to house and serve nearly 30,000 troops, had been completed at a cost of $19,633,900. By the end of 1944, airstrips and runways had been constructed, resurfaced, or extended at Andimeshk, Ahwaz, and Abadan; and the British had been furnished blueprints for modifications and extensions to Royal Air Force fields used by the Americans at Sharja in Trucial Oman, Bahrein, Landing Ground H3 in western Iraq, and at Habbaniya. At the Soviet-controlled airfield at Tehran, Qaleh Morgeh, jointly occupied by Russians and Americans, temporary construction, the only sort allowed by the Russians, was accomplished. In 1945 little construction work remained to be done except such desirable flourishes as swimming pools and the installation of air-conditioning apparatus.

The cost estimates in Table 14 furnish a reliable index to the scope

and distribution of the construction program by large categories; but, because they do not include such items as the expense of maintaining the military establishment which did the constructing, they fall short of expressing the full expenditure of treasure which went into the facilities essential to deliver supplies to the USSR. The table does not show individual projects, like that at Khurramabad where installations exceeded one million dollars; or Amirabad, which came to more than two and a quarter millions; or Ahwaz, to over two millions. It does not itemize the nearly ten millions of dollars which went into the port of Khorramshahr, in which the British interest came to one third; or the nearly four millions required to put Bandar Shahpur into shape, less than one quarter of that amount being American interest. Of the total consolidated cost estimate, approaching one hundred million dollars, more than half was required to create the aid-to-Russia highways used by American truck convoys, and by far the greater part of that amount was borne by the American taxpayer. But more than one third of the estimated cost of constructing American fixed installations fell to the British share in the experiment in co-operation.

Signal Communications

Of the five operating services established in November 1942, the Signal Service, originally called the Signal Communication Service, was the smallest, its military strength at the peak of signals activity in July 1944 numbering about 1,000 officers and men including a headquarters staff at Tehran of about 150. Its first director, Colonel Thomas, served from his arrival in the field in November 1942 until he became Chief of Staff, PGC, in January 1945, when he was succeeded by Lt. Col. George H. Combel.[20] The Signal Service was dissolved on 14 August 1945, being replaced by Signal Branch, Operations Division.[21]

Administratively the Signal Service was a command-wide operating service which derived its powers and responsibilities from the commanding general. It exercised direct control over all signal installations

[20] Relieved 15 June 1945 by Major Sherwen. Rpt, Ex Off to CofS, to CofS, 22 Jun 45. PGF 251-C.

[21] (1) For technical details of signals operations see Communications in the Persian Gulf Command, edited by Capt Sidney L. Jackson, Historical Section, OCSigO, October 1944, filed as Pt. I, Ch. 8, sec. 2 of HOTI, PGF; and Pentlarge's A Supplement to Communications in the PGC, Apr 46, filed as above. (2) The basic sources for this section are the Historical Reports of the Signal Service, 15 May 43–15 Aug 45, PGF 133, and especially those for 10 Aug 44, 14 Jul 45, and 15 Aug 45. Also GO 34, Hq, PGSC, 31 May 43 (defining signal functions); Interv with Col Thomas, 1 Dec 44; Ltr, Gen Thomas to Col A. F. Clark, Jr., 22 Apr 46, PGF 133; and A Brief Description of the Development and Present Operations of the Persian Gulf Command, prepared 31 Aug 44 for the Superintendent, U.S. Military Academy, and transmitted by Ltr, 24 Oct 44, Historical Report 1944, SL 8997.

and facilities in the command, equally for construction, operation, and maintenance. It could call upon the district commanders for unit supplies and help in other housekeeping matters in which districts acted as service organizations. At the outset local responsibility was exercised through subordinate signal headquarters within each of the command's territorial districts; but after a period of trial this arrangement was found to handicap the development and operation of continuous lines along the railway by subjecting them to the separate local authority of the district signal officers across whose territories the railway communications ran. Effective 1 June 1943, therefore, four signal sectors independent of the district organizations were set up. Three of these sectors corresponded in territory to the districts, and maintained headquarters at Basra, Ahwaz, and Tehran. They were not concerned with railway communications, but rather with local wire and radio installations within camps and stations. The fourth sector, with its headquarters at Tehran, was responsible for what eventually became, in effect, a long-lines system for the whole command, extending from Khorramshahr, Bandar Shahpur, and Tanuma–Cheybassi to Tehran, paralleling the railway, and operating as a single unit of communication. Auxiliary functions of the Signal Service included the installation of beacons for aircraft, train and road dispatch systems, and facilities for the Iranian Government.

At the time of the Anglo-Soviet occupation of Iran civil communications were rudimentary. Two circuits ran from the Gulf to Tehran, and these were supplemented by British improvements during 1942. With the arrival in December of the 833d Signal Service Company the Americans began to establish radio communication between major posts in the command. Construction of wire facilities started with the arrival in March 1943 of the 95th Signal Battalion, but proceeded slowly because their equipment, shipped separately, arrived months after they did. Meanwhile they borrowed what they could from the British, mostly for local telephone systems, and relied upon radio for intracommand communication. When the 231st Signal Operation Company reached the field in the middle of 1943, the 95th Signal Battalion was freed for additional construction and for maintenance of wire lines already strung. By early 1944 major signal construction was completed. At peak command operations that year, the Signal Service operated 11 fixed radio stations, 15 teletype stations, and 17 telephone switchboards with a capacity of 40 or more lines. About 500 miles of pole line had been erected, over 8,000 miles of wire strung, and 12,000 miles of wire maintained. In maintenance there was a division of labor with the British, who were responsible for all wire along the highway

route. The American command maintained all wire along the railway line. Because of their overriding responsibility for security in the Corridor, the British were charged with protection of all long lines between American camps, American security responsibility being confined, in theory, to local lines within the boundaries of U.S. installations; but in practice, American troops aided in guarding lines wherever there was greatest incidence of thieving or threat of sabotage.

Throughout the history of the command signal operations were hampered by wire thefts. It was the practice of marauders to cut long lengths of copper wire, for which they showed a marked preference, from the poles and then to escape before security patrols or automatic alarm systems could act effectively. Some of the copper so lifted would turn up in the bazaars as trinkets or coat hangers. It has been estimated that about 250 miles of copper wire was stolen.[22] The disruption of service through wire thefts was a disturbing factor in telephone and teletype operations, and contributed to the decision to keep the radio system intact after the completion of the faster and more efficient wire systems rendered radio a less desirable means of communication. The major dependence of the command upon wire systems is indicated by the monthly total of five million groups transmitted by teletype at the peak of operations, contrasted to half a million groups per month by radio. In addition, toll calls by telephone approximated 25,000 per month.

When time came to contract communications in keeping with the general reduction in command activities, wire installations were among the first to be discontinued. Arrangements were concluded late in February 1945 to give over to the British the lines between Bandar Shahpur and Ahwaz for maintenance and the signal office at Bandar Shahpur for operation. Late in July all wire teletype equipment was removed from service; but Khorramshahr–Tehran and Khorramshahr–Abadan radio teletype circuits remained, as did the telephone lines. By the end of September the signals men were no longer operating long distance telephone lines, and had turned them over to the British for disposal. Thereafter only local switchboards were maintained and operated by the Americans. In October Operations Division, Headquarters, PGSC, was notified that the British had sold the combined Anglo-American telecommunications system to the Iranian Government for approximately a million dollars, of which the American share was approximately $310,000, amounting to 17 percent of the cost of construction, including materials and labor. Almost to the end of the command's

[22] Ltr cited n. 21(2).

existence radio served for communications, both within the command's territory and between PGSC and the Africa-Middle East Theater in Cairo, but for the last few days PAI Force furnished the Americans what communications service they required.[23]

The bare and brief recital of facts leaves to be read between the lines the achievement of the men of the Signal Corps who, starting almost from scratch, created a network of instant and reliable communication without which the work of moving supplies to the USSR would have been severely handicapped. Not the least of their triumphs was the picturesque feat of stringing more than forty miles of open wire through railway tunnels 7,000 feet aloft in forbidding mountains, while trains laden with the materials of war rolled by at 30-minute intervals. Man for man, the contribution of the Signal Service to the success of the command's mission was no less significant than that of the larger numbers at the docks, in the storage yards, repair shops, and assembly plants, or pushing north by truck and train.

The Command and Air Activities

Official American air transport to and through the Persian Gulf area was accomplished by the Air Transport Command (ATC). Its operations were subject to its own determination but there was an administrative relationship between ATC and the theater command.[24]

From 8 February 1943, all weather, airway communications, and ATC units or detachments operating in the PGSC were attached to that headquarters for administrative supervision. This meant that the command held housekeeping responsibility for ATC installations including the following services: base censorship; third, fourth, and fifth echelon repair for vehicles; hospitalization; laundry; military police; supply other than Air Corps technical; postal; bakery; post exchange; runway maintenance; salvage; repair and disposition; utilities; and burial.[25]

Iranian airfields used by ATC were located at Abadan, Tehran, and Kazvin. Airfields used by ATC outside Iran were at Basra, Sharja, Bahrein, Habbaniya, and Landing Ground H3. In June 1943 ATC units at Basra moved to the Anglo-Iranian Oil Company airfield at

[23] (1) Rpt, Ex Off to CofS, to CofS, 1 Mar 45. PGF 251–C. (2) Rpt, Sig Serv to CofS, 27 Jun 45 and 1 Aug 45. PGF 251–B. (3) Rpts, Opns Div to CofS, 3 and 18 Oct 45. PGF 251–B.

[24] In addition to the airfields operated or used by ATC, the headquarters flight of the American command occasionally used airstrips at Ahwaz, Andimeshk, Khurramabad, Sultanabad, and Hamadan.

[25] (1) HOTI, Pt. II, Ch. I, The Abadan Aircraft Assembly Plant (and Air Base), by Wallace P. Rusterholtz, p. 2. PGF. (2) Hist Rpt, Ports Serv, Feb 45, p. 1. PGF 26–Z.

Abadan because the Margil airport at Basra was too small.[26] Under agreement with the British the Abadan field was operated by the ATC. Operational personnel and air operations were under the direct control of the ATC.

Abadan Air Base was used extensively, particularly as a stop on the route from Cairo to Karachi. Aircraft assembled for the USSR at the Abadan plant were flown away from the Abadan Air Base. The number of landings ranged from approximately 500 to 1,500 per month. During October 1944, one of the field's busiest months, 1,649 landings were made there. In order to provide for the large numbers of transients passing through and for ATC personnel assigned to Abadan, the command, in 1944, undertook some major construction. The housing area was enlarged from a 200-man camp to a 2,900-man camp. Mess halls, recreational facilities, and air conditioning were installed and utility systems were completely revised. Besides construction, PGC's housekeeping services at Abadan were expanded according to the planned increase in operations. For instance, during the month of October 1944, 1,373 PGC military personnel were attached to Abadan to provide necessary services. In addition, 1,100 native employees served the ATC in aircraft and post maintenance and in improving the runways.[27]

At the RAF fields at Sharja, Bahrein, Habbaniya, and Landing Ground H3, the ATC was at first assigned landing rights only but later was allowed to conduct its own operations under British over-all control. PGC was responsible for conducting negotiations between the RAF and ATC. ATC provided information regarding required facilities at the fields which PGC relayed to the RAF. Actual construction was the responsibility of the British, but a PGC officer was stationed at each field to act as liaison between the constructing agency and PGC.[28] Extensive ATC operations at Bahrein began in the summer of 1944. From February to May 1944, the ATC units at Bahrein were detachments from those at Abadan. PGC provided housekeeping services for ATC personnel operating at Bahrein. ATC required some extensive construction at Bahrein for which PGC supplied some materials and co-ordinated requests with the British.

The first ATC operations at Habbaniya in October 1943 were few; but by April 1944 ATC required housing for 250 operating personnel and 250 transients. These ATC troops were under the administrative

[26] History cited n. 25(1).
[27] (1) Rpt cited n. 10(1). (2) Page 10 of Rpt cited n. 11(3). (3) Station List, Hq, PGC, as of Oct 44. PGF 230–V.
[28] Page 4 of Rpt cited n. 11(3).

jurisdiction of PGC. In October 1944 80 PGC troops were at Habbaniya carrying out the PGC mission there.[29]

ATC operations at Sharja began early in 1944. In June 1944 a request to provide quarters for 115 officers and 185 enlisted men was handled through the PGC. A complete camp, including living quarters, operations building, water facilities, recreation building, and warehouse, had to be constructed at Sharja. In October 1944, 116 PGC personnel were assigned there. PGC responsibility for ATC operations at Landing Ground H3 was the same as that for other British-controlled fields. In October 1944 nine PGC military personnel were at Landing Ground H3.[30]

The Qaleh Morgeh airport at Tehran was under USSR control, but the ATC was allowed to use the field. PGC provided facilities and administrative services for the ATC there. Repairs were made on an existing hangar utilized by U.S. personnel. A temporary terminal building was built, runway lights were installed, and other improvements were made at the field. As late as November 1944 General Connolly expected that he might have to build an airfield at Tehran.[31] Studies made for an all-American airfield with two runways and all navigation and maintenance equipment went no further, as joint Soviet-American use of the Qaleh Morgeh airport continued to the end. The Soviet-controlled airfield at Kazvin was used by ATC for emergencies only. No U.S. personnel were stationed there.

Logistical Support of FRANTIC Mission

This survey of command activities as a whole will conclude with mention of two of its undertakings in support of other theaters of operation. The first of these tasks was to contribute, though briefly, to the war in the European theater. The other was in aid of China–Burma–India.

On 1 November 1943, a U.S. military mission to the USSR, headed by Maj. Gen. John R. Deane, was organized. Deane's mission achieved many things in the Soviet Union. Most pertinent to this history was the successful negotiation of Soviet permission to establish airfields in the Soviet Union from which shuttle bombing of German territory could be accomplished. Soviet approval for the project was given on 2 February 1944, whereupon the Eastern Command, code-named

[29] (1) History of the North African Div, ATC, 1 Mar 45–30 Sep 45, p. 497. Archives of the Air Hist Office, File 313 A (Mar 45–Sep 45). (2) Station List cited n. 27(3).
[30] (1) Page 516 of History cited n. 29(1). (2) Rpt cited n. 10(1).
[31] Ltr, Connolly to Giles, 16 Nov 44. AG 686 Dhahran, Hq AMET.

FRANTIC Mission, was established to carry out the shuttle-bombing operations. Late in February General Connolly was notified that he would be responsible for supplying FRANTIC Mission and that all air shipments required in the establishment of FRANTIC would be routed through the Persian Corridor.[32]

By the end of March agreement with the Soviets was reached that U.S. personnel would arrive at FRANTIC bases via Tehran where Connolly would secure group visas for them from the Soviet Embassy.[33]

Construction of airstrips with steel mats and necessary buildings on the sites agreed upon at Poltava, Mirgorod, and Piryatin in the Ukraine, was begun in the spring of 1944. These bases were completed in May and the first shuttle-flight landings were made in June 1944 by seventy-three Fortresses which had left Italy and bombed a German airdrome at Debrecen, Hungary.[34]

The PGC acted as the services of supply or base section to the Eastern Command. Items for issue to FRANTIC Mission were requisitioned by PGC and transported through PGC to the bases. Three types of transport were used in the Persian Gulf area: motor, rail, and air. PGC co-ordinated emergency shipments by air and sorted and transshipped necessary items.

In addition to requisitioning supplies, providing motor vehicles and rail cars, and co-ordinating air shipments, PGC arranged for uniform billing and marking to insure prompt delivery to the Eastern Command; stored supplies for which transportation was not immediately available; and co-ordinated with the Soviets in Tehran the proper clearance of personnel and cargo. Shipments were routed through Tehran and Tabriz, and Moscow and Poltava were advised when supplies left both points.

Though the first echelon for FRANTIC Mission entered the USSR from the PGC on 25 February 1944, major personnel shipments were not begun until 22 April. These went overland from Cairo to Hamadan under British auspices. From Hamadan, MTS transported them to Tabriz, at which point the Soviets provided for the remaining portion of the trip. All records testify to the comfort and efficiency of the accommodations provided by the Soviets over that part of the men's journey which lay within their borders. Altogether 1,276 persons were shipped through the PGC to the Eastern Command.[35]

[32] Memo, Col N. M. Martin for Lt Col Augustus H. Martin, 7 Jun 44, sub: Establishment of the Eastern Comd, USSTAF. PGF 237.
[33] Deane, *The Strange Alliance*, p. 112.
[34] Deane, *The Strange Alliance*, pp. 118–21.
[35] (1) Memo cited n. 32. (2) Memo, 1st Lt William G. Lerchen, Jr., for Ex Off to CofS, Hq, PGC, 21 Jul 44, sub: Status of Eastern Comd Project. PGF 237.

Aside from supplying the shuttle bases in the USSR, PGC gave technical assistance, established a replacement pool, and assumed medical responsibility for FRANTIC Mission.

During July 1944 PGC was concerned with plans for the staging and transportation to Poltava of the 427th Night Fighter Squadron, but this project, called Mission 16, was abandoned in August.[36]

The shuttle bases served eighteen missions in the early summer of 1944; but two developments shortened the life of FRANTIC. First, the Germans promptly harried Poltava, beginning on 22 June, only twenty days after the first landings there by American shuttle bombers. Then later, as the fighting front receded westward, the usefulness of the bases diminished. On 24 September the withdrawal of Eastern Command personnel was ordered. Four days later, General Deane notified PGC that two trains would leave Poltava on 2 and 9 October, respectively, carrying 40 officers and 360 enlisted men each. Some personnel were to be evacuated by air and 200 were to remain at Poltava for the winter. PGC was responsible for the evacuation of all supplies and personnel and, throughout the winter, continued to send supplies to the winter detachment remaining at Poltava. The last U.S. soldier left the Ukraine in April 1945.[37]

The total logistical support given FRANTIC Mission by the PGC is difficult to estimate on the basis of available statistics. The MRS transported 8,513 long tons of Eastern Command cargo north of Andimeshk from June through September 1944.[38] To this figure must be added the amount of cargo evacuated from the Eastern Command by MRS as well as the contribution of the MTS which carried personnel and cargo to Tabriz and which also evacuated supplies from Tabriz during September and October.

The Command and Project LUX

In the fall of 1944 an urgent need for 500 cargo trucks developed in the China–Burma–India theater. Some forward air bases had been lost or were about to be lost so that supplies could no longer be flown to the front. Trucks were needed to transport goods along the ever lengthening supply lines. The most logical source for these was the Persian Gulf Command which was assembling trucks for the Soviets, whose requirements by late 1944 were beginning to decline. The diffi-

[36] Extracts, Rpts, Ex Off to CofS. PGF 251–A, B.
[37] (1) Deane, *The Strange Alliance,* p. 124. (2) Rpt, Eastern Command, based on undated Memos by Col Martin, Ex Off to CofS. PGF 237.
[38] Table 5.

culty lay in getting the trucks from the PGC to China. All of China's ports were in the hands of the enemy and the Burma Road was still closed. The one open route was from Iran through Turkestan Soviet Socialist Republic and Sinkiang Province in China to Kunming. (*Map 1—inside back cover*) This route was peppered with obstacles. It wound through some of the most difficult terrain in the world—plateau, desert, and mountain. None of it was well mapped, the climate was known to be extremely cold, and the territory was inhabited by hostile nomads.[39]

On 4 October 1944, a cable signed by General Marshall was dispatched to General Connolly stating that 500 trucks were to be transferred from PGC to CBI. The cable stipulated that PGC personnel would convoy the trucks and that PGC and CBI would decide whether personnel would be retained by CBI after their arrival. MTS trucks or Soviet vehicles were to be used.

Planning for the operation was delegated to Headquarters, MTS, until 31 October 1944, when the project was officially entitled LUX and a separate headquarters for it was established within the PGC. Liaison officers from CBI were attached to the new organization.

The total convoy strength, as planned, was to be 1,100 including two quartermaster trucking battalions, one maintenance company, and engineer, signals, and medical detachments. PGC and CBI disagreed as to plans for the disposal of convoy personnel upon completion of the mission. CBI wished to retain the drivers as there were no surplus trained drivers in that theater. PGC maintained that it could not continue its operations at full tilt with a deduction of 1,100 men. Shrinkage in MTS operations by November enabled the War Department to settle the matter by allocating LUX convoy personnel to CBI. Disagreement also arose over troops, CBI insisting that only white troops be used in China, while PGC urged that the proportion of Negroes be the same as existed in the command. PGC was overruled on this point, also, and convoy personnel included no Negro troops.

The LUX convoy route as mapped out was estimated at 8,000 miles. From Ashkhabad in Turkestan SSR for 3,000 miles to Sary-Uzek, the convoy was to be transported by the Trans-Turkestan Railway. The remaining 5,000 miles were to be covered by truck convoy. The ad-

[39] (1) The sources for this section are Hist Rpt by Lt Col Charles E. Stilson, Ex Off of Movement 59003, 29 Dec 44, PGF 164; other Hist Rpts and photographs, Oct–Dec 44, same file; six unnumbered folders on Project LUX (Movement 59003), AG Files, Hq PGC; and HOTI, Pt. VII, Ch. 3, History of Project LUX, by Victor H. Pentlarge, Jr., PGF. (2) A fuller treatment of LUX appears in Charles F. Romanus and Riley Sunderland, The U.S. Army and the China–Burma–India Theaters: Vol. II, Command Problems, 1943–1944, a volume now in preparation in this series.

vance party was scheduled to leave Ahwaz on 30 November 1944 with eleven serials following. It was calculated that the whole movement would take about three months.

The Soviets agreed to release to Project Lux 493 trucks already assigned to them. They further offered to transport the whole convoy over about one third of its journey, through Turkestan, and to render substantial assistance in the way of food, communications, and gasoline. Final plans assigned the convoy 500 vehicles: 423 2½-ton 6 x 4 Studebaker trucks, each with a 1-ton trailer; 50 winch-equipped 6 x 6 cargo trucks; 20 weapons carriers; 3 command cars; and 4 ambulances. Provision was also made for the amounts of gasoline, food, and water to be carried, allowance being made for possible restocking along the route; arctic clothing and other equipment were duly planned for, as were communication facilities for the convoy. Lt. John Clark, a CBI expert on North China who was flown to Tehran as adviser to Lux, felt that if the convoy displayed insignia and properly identified itself, it would pass unscathed through certain parts of Kansu Province where, since mid-July, intermittent mining and raiding had been occurring. On the other hand, information transmitted by the Soviet Foreign Office through the American Embassy at Moscow indicated disturbance along the convoy route in Sinkiang so severe as to make postponement of the movement of trucks to China, in Soviet opinion, highly desirable. Confirmation came shortly afterward from Maj. Gen. Albert C. Wedemeyer, Commanding General, U.S. Forces, China theater, that disturbances around the city of I-ning were increasing. General Deane radioed from Moscow that the Soviet Government would not now undertake to assist the agreed movement through Turkestan, and General Connolly decided to hold up the convoy at Ahwaz.

On 30 November, the day the convoy was to have set out, the War Department advised that final decision on the convoy's departure would come from Washington. On 7 December General Wedemeyer notified the War Department that conditions in Sinkiang were growing worse and indefinite postponement of Project Lux would be justified. Two days later, General Marshall cabled Connolly that the War Department wished to move Lux convoy by water to Calcutta and from there overland to China as soon as the Burma Road could be used. Connolly replied that more rapid delivery could be made by sending the convoy to Zahidan and thence by rail to Karachi and across India. General Wedemeyer thought that time thus saved would not justify wear and tear on the trucks.

The original route and all alternatives except General Marshall's were abandoned, and it was finally decided to move the convoy in ac-

cordance with the Chief of Staff's cable. New plans were therefore developed in the PGC to crate and ship LUX cargo vehicles to Calcutta for later reassembly; to leave behind trailers and special vehicles not needed for the new route; and to ship a few other vehicles already assembled. Its planning function ended, the organization at PGC headquarters which had been responsible for Project LUX since 31 October was inactivated on 17 December. The operation proceeded to Calcutta by three ships, the first of which left the Persian Gulf on 24 December 1944, and the movement of all echelons of LUX from the Persian Gulf to Kunming was completed on 12 March 1945. The route, covering 1,775 miles, used ships to Calcutta, rail to Assam, and the Burma Road beyond Assam. No part of the original cargo was lost in transit. Thus, after a good deal of planning and a great heave of performance, PGC discharged this service to CBI without interfering with its primary mission.

CHAPTER XIII

The Air Corps Takes Over Aircraft Assembly

The assembly of aircraft for the USSR under the several protocol agreements, by which the United States in conjunction with the United Kingdom and the Dominion of Canada promised material aid to the Soviet Union, was one of the tasks assigned to the Iranian Mission and continued by its successors. In accordance with the pattern of the 1941 planning period, operating responsibility for aircraft assembly at Abadan was at first exercised by the Douglas Aircraft Company under contract to the U.S. Army Air Corps. During the period of Douglas operation, ending on 31 March 1943, about seventy-five planes on an average were delivered monthly to Soviet pilots who flew them off to the battle lines. During the period of Air Corps operation, from 1 April 1943 through 31 January 1945, when the Abadan aircraft assembly plant was disbanded, deliveries to the Russians averaged 182.9 aircraft monthly. The flow of aircraft from the United States to the USSR was greatest during the period of the Third (London) Protocol, 1 July 1943 through 30 June 1944, when 5,735 planes were delivered by the United States to the Russians at Fairbanks, Alaska, the north Russian ports of Archangel and Murmansk, and via the Persian Gulf. In this year, 2,902 aircraft were delivered by the U.S. Army in the Persian Corridor. During the peak year of American shipments of aircraft to the USSR, Abadan, therefore, accounted for half of all the aircraft delivered, in contrast to its one third share of the total made available by all routes for the entire period of lend-lease deliveries.[1]

The Pressure of the Protocols

The ability of the American command to raise the average monthly output of assembled planes by almost 150 percent and to handle half

[1] (1) Table 10. (2) Report on War Aid Furnished by the United States to the USSR, Foreign Economic Sec, Office of Foreign Liquidation, Dept State, 28 Nov 45. (3) See also Chart 3.

the total world-wide deliveries during the peak year can be ascribed to the increase in manpower and resources which followed militarization of the project in April 1943. But this increase was not always commensurate with the flow of incoming aircraft. Throughout the life of the assembly task, the struggle against the backlog remained, as during the period of contractor operation, the chief problem to be surmounted. In ordinary assembly operations where the quantity of materials may vary it is customary to maintain a fairly constant backlog to provide continuity of production. But assembly of aircraft for the USSR was not an ordinary operation. Provision of the maximum number of planes for use against the enemy made the reduction of backlog to zero the desirable but unattainable ideal. Furthermore, the accumulation on the ground of serviceable aircraft was a constant invitation to enemy bombing raids. The fact that no such raids took place did not cancel out the wisdom of providing against their possible occurrence. The battle of the backlog may seem merely of statistical significance, a humdrum matter of figures which ought to balance: so many arrivals, so many assemblies, so many deliveries. (*Tables 10 and 11, Appendix A*) It was actually anything but humdrum. Creatures of the unexpected and the unpredictable, the figures measure success or failure in the effort to meet inexorable protocol demands.

There was, in the first place, the highly variable rate of arrivals which never could be systematically co-ordinated with the supply of manpower. One reads, for example, the message sent in April 1943 from General Sidney Spalding in Washington to Averell Harriman at London. The Prime Minister had just forwarded to Harry Hopkins a proposal for the British to ship 285 aircraft due from them under the protocols to the USSR via Abadan. The Abadan plant was then in the throes of transition from civilian to military operation; but Washington approved, stating, "This number of airplanes may temporarily overload erection facilities and result in some delay in delivery to Russia. Army Air Force agrees to strengthen Abadan as much as possible to facilitate erection of the 285 airplanes." [2] It was up to Abadan after that, whether or not the strengthening was achieved in time or ever.

Then there was the weather, that unappreciated hobgoblin of the Persian Corridor. As of 1 April, when the Air Corps took over Douglas's Cedar Project, what a report calls "unusual weather conditions" had for some time prevented the take-off of completed planes from Abadan with the result that 107 of them waited at the field to be flown away.

[2] Rad, Gen Sidney Spalding to Harriman, 23 Apr 43, cited MS Index to the Hopkins Papers, Vol. II, Bk. VII, Lend-Lease Aid to Russia (1942–43), p. 5, Item 48.

This kind of situation offered continuing obstacles to the smooth flow of the assembly and delivery process. To cite a further example of the unpredictable, on 1 April, among the 192 aircraft on hand which were either not yet assembled or not yet put into serviceable condition were 16 P–40's immobilized because their belly fuel tanks had been borrowed by the Russians to enable them to fly out Spitfires delivered to them at Abadan by the RAF without auxiliary tanks. These were among a lot of 50 Spitfires being delivered to the USSR by the RAF in return for 40 Bostons lent by the Russians to the British the previous summer during the crisis in the fighting in Egypt. Not a week passed without its quota of similar problems requiring special adjustment and solution in a hurry. They must be read between the lines of the humdrum story.[3]

Manpower, Procedures, and Production

On 1 April 1943 Colonel Porter, commanding officer of Abadan Air Base and of headquarters, 82d Air Depot Group, had at his disposal 436 officers and men of the Air Forces, of whom 334 were members of the 17th Depot Repair Squadron which had been on detached service with the 82d Air Depot Group since January, learning from the Douglas civilians the special points of assembly at Abadan. There were also 165 Soviet operatives and 54 native laborers; but of the 193 Douglas civilians at the site on that date, only 125 stayed to the end of the month. Of these only 55 were of the former Cedar Project, the rest being borrowed from the Douglas Project 19 at Gura, Eritrea. Some civilians, their contracts concluded, were returned to the United States. Although this working force delivered 214 aircraft to the USSR in April, a peak figure to that date, the backlog at the end of the month was 235. Progress in one direction was vitiated by backsliding in the other. It was a time for strengthening manpower. But just at this point, on 2 May, the 17th Depot Repair Squadron departed to join the Ninth Air Force in North Africa, leaving Colonel Porter with a serious manpower shortage. An appeal to General Connolly for the loan of 36 enlisted men for thirty days was refused on the grounds of personnel shortage in the command generally; but the visit to Abadan on 16 May of Maj. Gen. George E. Stratemeyer, Chief of Staff, U.S. Army Air Forces, resulted in a requisition being made on Washington to ship 65 men. It did not help the immediate situation that in April the 18th Depot Repair Squadron of 10 officers and 338 enlisted men had been shipped from the United States to replace the 17th. The 18th did not

[3] Ltr, Capt A. B. Swank, Contl Div, Hq, PGSC, to CofS, PGSC, 18 Apr 43, sub: Status of Aircraft Deliveries at Abadan. PGF 2.

arrive until 12 July, by which time the backlog had risen to 550. Meanwhile deliveries dropped in May to 152, in June to 96. The backlog exceeded 200. With some Douglas civilians borrowed from Gura to make a total of 185 for June, and with 140 officers and men of the 82d Air Depot Group, Colonel Porter faced the rising backlog with only slightly over half the Americans, military and civilian, that were at Abadan three months earlier. June also brought word from Patterson Field, Ohio, that nearly 300 aircraft would reach Abadan in July for processing. To intensify the crisis, the number that arrived exceeded 490. With its working force cut in half, Abadan faced its biggest work load. Patterson Field advised Colonel Porter to inform the British at Basra that the RAF representatives in Washington had been told that the RAF in Iraq could expect to be called upon to help out at Abadan. This appears something like the "strengthening" mentioned in Washington in April in connection with the extra shipment arranged between Churchill and Harry Hopkins. Colonel Porter, 12,000 miles nearer reality than Washington, replied that the RAF was itself undermanned and could not supply the help it had offered on an earlier occasion.[4]

The arrival of the 18th Depot Repair Squadron on 12 July would ease matters somewhat after the new men had learned their jobs; but meanwhile Abadan buzzed with a hornet's nest of administrative complications. Command and responsibility at the assembly plant were not clearly defined during the contractor period, nor were they any clearer in early July 1943. The plant came under the Commanding General, PGSC. Immediate administrative supervision over its activities was delegated by him to the commanding officer of the geographical subarea of the PGSC, Basra District. But PGSC came under USAFIME at Cairo, and Abadan was subject in technical matters not only to USAFIME's air officer, but to Air Corps authority in the United States. On 13 July Maj. Gen. Lewis H. Brereton, commanding general of USAFIME, protested to General Arnold by message to Washington that certain orders had gone direct from America to Abadan, as a

[4] (1) Ltr, Col Porter to Douglas Company, 26 Apr 43, quoted Harold Courlander, Paul L. Hoefler, and others, History of Project 19, Abadan Ch., pp. 65–87. Drawer 101, Douglas Files. (2) Backlog and arrival figures from tables compiled by Hist Br, OTI, Hq, PGC. PGF 245. See also tables, PGF 2, 125. (3) Rad 148, Col Porter, signed Connolly, to Patterson Field, Ohio, relayed to Washington AGWAR 1664, 30 Jun 43. PGF 2. (4) Rad AMPSC 340, Gen Marshall to Gens Brereton and Connolly, 4 Mar 43. PGF 2. (5) Hist Rpt, Abadan Air Base, for Nov 41 through Nov 43, 1 Jul 44. PGF 2–K. (6) Ltr, Col Porter to Col Harry S. Bishop, CO, Project 19, Gura, 26 Jun 43. Drawer 211, Status Reports—Project 19 and Combined, Douglas Files. (7) HOTI, Pt. II, Ch. 1, The Abadan Aircraft Assembly Plant (and Air Base), by Wallace P. Rusterholtz, p. 5. PGF. (8) HOTI, Pt. I, Ch. 8, sec. 3, History of Movements Branch, Operations Division, Hq, PGC, prepared by Movements Branch, Operations Division, with Supplement by Laurence P. Corbett, and statistical appendix, Complete Summary of Port and Transportation Agencies Performance of PGC Operations through 31 May 1945, 5 July 1945, p. 62. PGF.

result of which "there is a great deal of confusion." [5] Brereton insisted that responsibility for aircraft assembly at Abadan must rest with the Commanding General, PGSC. Arnold's reply admitted that direct orders had been sent "in the interest of expediting this important project and thereby assisting your headquarters," adding, "One cannot overstress the importance of the accomplishment of the mission of this establishment for which you are fully responsible," that is, the Commanding General, USAFIME, not the Commanding General, PGSC.[6]

On 14 July, as a sequel to Colonel Porter's attempts to obtain personnel from Gura, the RAF, and the American command, General Brereton noted, in a message to Porter, the existence of "confusion concerning requests for assistance," and that Porter had been receiving "functional instructions" direct from the Air Service Command, Patterson Field, Ohio. Brereton added, "Responsibilities and administration of Abadan are a responsibility of CG, PGSC, with direct communication to Air Service Command, Patterson Field on technical matters only." [7] On 29 July, Headquarters, PGSC, set forth a clarification, authorized by Washington and Cairo. The Abadan aircraft assembly plant and all related activities on Abadan Island were placed under the "jurisdiction and control of the Commanding General, PGSC, except that direct communication with Patterson Field, Ohio, has been authorized for technical matters only." The Commanding Officer, Gulf District (Basra District was thus redesignated in May), PGSC, was "responsible for supervising and co-ordinating the activities of the Abadan Aircraft Assembly Plant," and was to handle administrative, operational, and supply matters on behalf of the commanding general in the same manner as other assembly plant operations within the command. The Operations Division, Headquarters, PGSC, was made responsible for "general supervision and documentation," and for establishing monthly production targets in consultation with the commanding officers of the plant and of Gulf District. On 24 August the functions of Operations Division respecting Abadan were assigned to its Plants Branch.[8] Thus a local *modus operandi* was established within the framework of the PGSC, itself within the framework of USAFIME, while the Air Corps at Patterson Field kept its finger upon the technical aspects.

While this was going on, the plant raised production in July to

[6] Rad AMSMEAF 1627, Gen Brereton to Gen Arnold, 13 Jul 43. AG 600.12, Hq AMET.
[6] Rad, Gen Arnold to Gen Brereton, 15 Jul 43. AG 600.12, Hq AMET.
[7] Rad AMPSC, AMSMEAF P–28, Gen Brereton to Col Porter, 14 Jul 43. PGF 2.
[8] (1) GO 45, Hq, PGSC, 29 Jul 43. (2) Rad, Gen Scott to Col Donald P. Booth, 24 Aug 43. AG 635 Abadan Aircraft Assembly Plant, Hq PGC. (3) Hist Rpt, Plants Br, Opns Div, Hq, PGC, for Aug 43. PGF 125–H.

141; but this was highly unsatisfactory to the Russians. On 28 July General Arnold notified General Brereton at Cairo that "Russian officials in Washington" were requesting "immediate action . . . to assure assembly of 300 aircraft per month." [9] The Russians complained that assembly was inadequate, and that insufficiently protected planes lying about in crates at Basra and Margil invited local sabotage. It developed that there had been confusion at these landing ports as to the responsibility for the safety of cargoes of U.S. aircraft consigned to the British but to be diverted to the USSR. The Americans assumed the responsibility.

In August, although new arrivals of aircraft had fallen to 275 and deliveries had risen to 204, the backlog exceeded 600. It was now General Connolly's turn to appeal for additional help. In early September he informed General Brereton that he would require 19 officers and 270 enlisted men to meet the new monthly quota of 300 aircraft.[10] He did not get them immediately; but Abadan did come in promptly for a visit from Maj. Gen. Ralph Royce who had just succeeded Brereton as commanding general of USAFIME. Washington had inquired why the rate of delivery at Abadan had declined during August. Royce replied that he would report to General Arnold after personal investigation. He radioed on 26 September that Abadan was "a very disorganized installation," with insufficient officers, men, and equipment to complete its mission.[11] Colonel Porter, who had borne the burden and heat of the day for the past nineteen months, had been returned to the United States on 11 September. He was followed by four successive commanding officers in three months, after whom two more served out the time that remained until the plant was closed down in January 1945.[12] Continuity of operations for a time, therefore, largely depended upon the Douglas civilians, who were veterans of longest service, upon the military force, and upon the supervisory functions exercised by Plants Branch, Operations Division.

The full force of the increased deliveries under the London Protocol now began to reach the Persian Gulf. In September, in spite of the

[9] Rad AMSME 5991, Gen Arnold to Gen Brereton, 28 Jul 43. AG 323.3 Abadan, Hq PGC.

[10] Rads, Gen Connolly to Gen Brereton, 7 and 14 Sep 43. AG 600.12 Abadan, Hq AMET.

[11] (1) Rad 6758, to Gen Royce, 12 Sep 43. Notebook North African Mission, Vol. II, Africa ME Office, OPD. (2) Rad AMSME 8162, Gen Royce to Gens Marshall and Arnold, 26 Sep 43. AG 400.3295 Russia, Hq AMET.

[12] After Colonel Porter the commanding officers were: Lt. Col. Richard J. Kirkpatrick (11 Sep–29 Oct 43); Lt. Col. Cedric B. Davis (29 Oct–4 Nov 43); Col. James L. Jackson (4 Nov–3 Dec 43); Col. Phillip A. Roll (3–9 Dec 43); Colonel Davis (9 Dec 43–30 Aug 44); Lt. Col. Chester E. McCarty from 30 Aug 44. (1) GO 8, Hq, Abadan Air Base, 30 Aug 44. Hist Rpts, Abadan Air Base, (2) Dec 43, PGF 2–L; (3) for Nov 41 through Nov 43, 1 Jul 44, PGF 2–K.

succession of commanding officers at Abadan, deliveries reached 253 aircraft. But the backlog rose ominously to 670. On 1 October 1943 additional Air Corps personnel reached the site, 100 of them earmarked to move on to India as soon as the state of the backlog permitted. With this extra force at work, October deliveries of 395 aircraft struck the maximum attained at any time during the life of the project; but the inflow of new planes provided an unwelcome reservoir of 829 awaiting assembly on 10 October. This was also a peak figure, and a challenge to the approximately 500 military personnel and 69 Douglas civilians at the plant.[13] By their efforts the figure receded to 607 at the end of the month, and fell below 100 by the end of January 1944. Although it was to rise again by mid-July to 155, the tide turned in October 1943 and the battle of the backlog was finally won.

In Table 10 can be read the story of deliveries to the USSR during the rest of 1943 and the year 1944. Progress during 1944 was such that on 19 July General Marshall informed General Connolly that, as soon as aircraft on hand and en route were delivered to the Russians, the War Department planned to disband the plant. After one or two postponements that time came on 1 February 1945, when operational responsibility for remaining work at the plant was assigned, upon its disbandment, to the Air Transport Command. Ninety-one officers and men were transferred to the ATC and 244 shipped to the United States.[14]

Abadan Air Base

The falling off of shipments of incoming aircraft which occurred after the end of the London Protocol period in June 1944 initiated the declining curve of assemblies at Abadan; but meantime there had been steadily increasing activity at the Abadan Air Base, to which the ATC had moved from Basra in June 1943 when the field at Margil proved too small for its expanding mission. On 12 August 1944, with assembly operations at Abadan entering their last lap, came official recognition that the function of Abadan Air Base had shifted from assembly to air operations. On that date the 82d Air Depot Group and the 18th Depot Repair Squadron were disbanded, and their personnel and equipment transferred to Headquarters and Headquarters Squadron, Abadan Air Base, with an aggregate strength of 26 officers and 502 enlisted men,

[13] The contracts of the civilians expired in December 1943 and they returned to the United States with a commendation from General Royce dated 10 October 1943. Drawer 69, Termination of Project 19, Douglas Files.

[14] (1) Rad 67209, Gen Marshall to Gen Connolly, 19 Jul 44. AG 635 Abadan Aircraft Assembly Plant, Hq PGC. (2) GO 22, Hq, PGC, 31 Jan 45. (3) Hist Rpt, Abadan Air Base, for Jan 45. PGF 2–Y.

plus 100 enlisted men attached additionally as Air Corps unassigned.[15] The commander of the base was responsible for remaining assembly operations, while Plants Branch, Operations Division, handled production schedules, processed requisitions, and, with the Gulf District commander, supplied advisory staff functions chiefly relating to over-all production and target obligations. But in all other respects Abadan had become a busy airfield, with its transient planes and passengers and all the elaborate installations required to serve them. By the time the ATC took over completely on 1 February 1945, Abadan was mightily transformed from the relatively unimproved space three miles north of the Anglo-Iranian Oil Company refinery to which the first American workers came early in 1942.

That is why, in July 1944, there was a considerable to-do over the report that the AIOC contemplated buying the land on which the Americans had lavished their peculiar talents for doing things on the grand scale. "Without notifying us," General Connolly radioed to Washington,

> AIOC . . . has applied to the Iranian Government on this transaction. We have requested the American Embassy to initiate necessary action to stop the purchase of this land until Washington has advised us on the situation. This transaction vitally hampers our possibilities for disposition of our enormous investment or for our postwar rights to mediate in operation of airfields.[16]

American rights to occupy the land next the refinery were informal, not to say tenuous. The Douglas Aircraft Company came in by virtue of a purely verbal agreement, there being "no lease or any other form of written agreement" between them and AIOC, or between AIOC and the United States Government.[17] United States operation of the Abadan assembly plant had of course been a matter of Anglo-American understanding in Washington in January 1942, but the legality of land occupancy had not been established by formal document.[18] Much later, after the ATC had moved to Abadan and had undertaken its program to expand facilities there for regular flights, the Commanding General, USAFIME, received on 27 January 1944 from headquarters of the RAF, Middle East, a statement of British willingness to prepare airfields for ATC use which contained no reference to terms, tenure, or

[15] (1) GO 53, Hq, PGC, 12 Aug 44. (2) Hist Rpt, Abadan Air Base, for Aug 44. PGF 2–T.

[16] Rad, Gen Connolly to Gens Somervell, Arnold, and Maj Gen Thomas T. Handy, 1 Jul 44. 095 AIOC, SL 8979.

[17] 1st Ind, 28 Dec 43, to Ltr, Chief, Cons Br, OPD, PGC, to CO, Gulf Dist, PGC, 22 Dec 43. 095 Douglas Aircraft Company, SL 8979.

[18] Rad AMSIR 10, to Gen Wheeler, 21 Jan 42, on agreement at Washington between Gens Sidney Spalding and Moore and British RAF representatives. MID 400.3295 1-21-42 (1-6-42).

leases. This paper has been described as "the only documentary form of agreement . . . covering U.S. Army use of the subject field." [19] The matter became engulfed in the infinite maw of official files on both sides of the Atlantic. The United States remained in occupancy of Abadan until the end of its operations in Iran in 1945, and its property rights in buildings and installations there were duly adjusted as a part of the postwar settlements with the United Kingdom and the government of Iran.

In a story which has necessarily concentrated, as did the sweating men who made their contribution at Abadan, upon the assembly and delivery of thousands of aircraft for Russia, the human factor has been submerged under the facts of human achievement. It was a job by men for men, even though there were times when, as the Russians felt, the machine, not the man, was irreplaceable and of prime importance. But there were other times when men counted as men: such highlights as the visit of the Shah to the plant in February 1944, and the good-will party also held that month for forty Soviet officers headed by Maj. Gen. Ivan I. Obrazkov, commandant of the Soviet air detachment at Abadan.[20] On that night, the oratory, heard over the clinking of glasses, made much of the co-operation of the United States and the Soviet Union in providing craft for Soviet fighters. The echoes of that evening's celebration have long since faded in the clangor and hissing of the near-by refinery. But the fact of that co-operation and its fruits is something time cannot alter.

Tucked away in the files is a mimeographed sheet handed to the men of the 18th Depot Repair Squadron as they arrived in July 1943.[21] It cannot now be read as they read it in the burning heat of unfamiliar Abadan but it will serve as a reminder of the human factor:

> This depot is an International Settlement. You will work with American Soldiers, highly skilled American civilian technicians, a detachment of the USSR Air Corps . . . RAF, Iranians, Iraqi, Arabians, and Indians. Such success in our work as we have had has been built on the cooperation and mutual understanding among these groups. It is essential that this "good will" be maintained and we count on you to maintain it. Due to the heat, our meal and work schedule is as follows:
>
> 3:30 early morning coffee; 3:55 muster at hangars; 4:00–7:30 first work period; 7:30–8:00 second breakfast; 8:00–12:00 second work period; 12:30 lunch; 13:30 bus leaves mess hall for swimming (Sats thru Thurs); 17:45 dinner; 20:00 movies (Sunday, Tuesday, Thursday).

[19] 3d Ind, by AGO, Washington, 9 Jun 45, to Ltr, ACofS, Opns, Hq, PGC, to CG, U.S. AAF, Washington, 6 Apr 45. 092 Agreement Concerning Use of Abadan Air Field, SL 8978. The RAF letter was titled Development of North African Air Route to India.

[20] Hist Rpt, Abadan Air Base, for Feb 44. PGF 2–N.

[21] Signed by Colonel Porter. PGF 2.

If you find this camp a bit rough at first remember that many of us have been here for over a year and raised what we have from the open desert. You will join in completing the new PX and other construction needed, so that we can all enjoy a more comfortable camp. You will be able to make your own barracks more comfortable during your free periods in the afternoons and evenings. Lumber is available.

. . . Every additional aircraft that we can send North now, may save hundreds of American lives next year. Working together we can top our best production records.

LET'S GO!!

CHAPTER XIV

The Army Takes Over the TAP's

General Connolly's primary mission, movement of supplies through the Persian Corridor to Soviet receiving points, did not preclude his continuing unfinished tasks in British or Russian aid undertaken by predecessor American commands. Assembly of partly knocked-down vehicles at some point in their journey to destination was unfinished business of this sort; but it was also a part of the transportation process. After the Army took over the truck assembly plants on 1 July 1943, there was no change in the pattern of assembly and delivery set during the contractor period. The vehicles were processed as before, and driven away, as before, by Soviet drivers over the road to Khurramabad and Malayer, east to Sultanabad, and north to Tehran. There were changes, though, in quantity and tempo. More trucks by far arrived from overseas than during the earlier period, and there were more Americans, more natives, and more machines to deal with them. Working 59 percent of the period of truck assembly operation, the Army assembled for all purposes 82 percent of the vehicles. Because there was so much more to do, it was done faster. The figures measure increased work load and increased capacity. They do not imply less efficiency for the contractor period.[1]

Plant

In July 1943 four TAP's with which the American command was concerned were in service. TAP I at Andimeshk and TAP II at Khorramshahr were American staffed and operated. TAP III at

[1] (1) A Brief Description of the Development and Present Operations of the Persian Gulf Command, prepared 31 Aug 44 for the Superintendent, U.S. Military Academy, and transmitted by Ltr, 24 Oct 44. Historical Report 1944, SL 8997. (2) This chapter makes extensive use of HOTI, Pt. II, Chs. 3–5, U.S. Truck Assembly Plants, by Laurence P. Corbett. PGF. (3) Tables 7, 8, 9, and Charts 4, 5.

Bushire, run by the United Kingdom Commercial Corporation with some American supervision and advice, ceased work in which there was American interest that month. At TAP IV, the British-operated plant at Rafadiyah, an American officer was stationed for purposes of liaison, collection of statistical data, comparison of methods, target, and output, and exchange of information. TAP IV's production affected that of the plants at Andimeshk and Khorramshahr—as when in August and September 1944 a stoppage at Rafadiyah, caused by change-over from Studebakers to Chevrolets, produced a production deficit which had to be made up by TAP's I and II to meet theater targets. In October 1944 TAP IV was closed down and TAP's I and II assumed the entire truck assembly load for the Persian Gulf.

Under the structural organization of the American command, Plants Branch, Operations Division, was responsible for the direction, co-ordination, and operation of the TAP's. In this capacity, Plants Branch functioned like any headquarters staff agency. It computed and reported plant capacities, co-ordinated operations so that supply and output would be in balance and in accordance with headquarters policy, and established a statistical reporting system to serve the needs of over-all control and co-ordination of all agencies in the logistical process. Responsibility for administration, supply, training, security, and operation of the plants was decentralized and handed over to the local district commanders set up in December 1942 for the Gulf, Desert, and Mountain Districts. Between May and August 1943, the district commanders for the Gulf and Desert Districts, in their capacities as deputies of the commanding general, set up procedures for operating the TAP's under technical instructions and directives proceeding from GHQ. Officers were assigned in charge of the plant. They transmitted statistical information to Plants Branch. At Khorramshahr a Plants Branch suboffice was established by the Gulf District commander to provide more direct control.[2]

At Khorramshahr were detachments of the 3474th and the 506th Ordnance Medium Automotive Maintenance Companies, as well as the 3455th Ordnance Medium Automotive Maintenance Company; at Andimeshk, the 3467th Ordnance Medium Automotive Maintenance Company.[3] The group at Khorramshahr had to contend with an initial hospitalization of 20 percent of its strength on account of the heat, as well as a heavy labor turnover among the native workmen.

[2] (1) Hist Rpt, Plants Br, Opns Div, Hq, PGSC, 22 Jul 43. PGF 125–F. (2) See also SO 68, Hq, PGC, 15 Mar 45. (3) HOTI, Pt. I, Ch. 8, sec. 5, History of the Plants Branch, Operations Division, Hq, PGC, by Laurence P. Corbett. PGF.

[3] In January 1944 the 3556th Ordnance Medium Automotive Maintenance Company was assigned to TAP II and the detachments of the 506th and 3474th were reassigned.

At Andimeshk the newly arrived service troops went to work only four days after reaching Iran. A report treats with some bitterness of conditions at the take-over. The chief complaint was that General Motors, in striving to attain record production in its last month, had neglected the important duty of keeping the flow of incoming cased vehicles going, so that when the Army assumed responsibility on 1 July it found 280 freight cars of cased trucks standing unloaded in the yards. Furthermore, a drastic shortage of nuts, bolts, and spare parts meant that July production would have to wait for local manufacture of some parts and requisitioning of others. Finally, it was charged that the Army had to cope with claims by native laborers for pay increases and leaves of absence promised them by General Motors. The report stated that the Army had instituted three shifts a day and hoped by ironing out difficulties to get production on both assembly lines up to between sixty and a hundred trucks a day.[4]

It is not remarkable that the first month of operation under Army management failed to reach target levels. August brought a greater familiarity with the job and TAP I produced 923 vehicles above its target of 2,500 while TAP II bettered its target of 3,500 by 261. All hands received the commendation of General Connolly for fine August performance.

Problems connected with adapting American factory techniques to local conditions, problems growing out of ever present wearing out or shortages of tools and parts, production problems arising from necessary change-overs from time to time from Chevrolets to Fords to Studebakers to Mack trucks to Bren gun carriers to jeeps, very difficult problems relating to batteries, and, above all, the eternal problem of the weather, ranging from half a foot of mud and water underfoot to unendurable heat overhead—these were routine at Andimeshk and Khorramshahr. With the essential pattern of assembly already established before it assumed operating responsibility, the Army settled down to routine production, improvement of methods, and the introduction of refinements in efficiency. Since the voluminous records of the activities were not kept according to a uniform plan, they provide no basis for statistical comparisons of periods. Some figures for TAP II indicate, however, the decided improvement in efficiency of operations in general at that plant. Tables for February 1945 show total assemblies 155 percent greater than for February 1944, accomplished with an average daily employee roster only 68 percent of the

[4] Diary Report and Information on Condition of TAP I, Andimeshk, on Termination of General Motors Contract, by Capt Jack C. Schoo, Ord Sec, Opns, Plants Br, TAP I, 6 Jul 43. PGF 70.

earlier date. Man-hours worked per vehicle were more than halved, and the labor cost per assembly, exclusive of the pay of military personnel, was reduced in the year to 58 percent of similarly computed costs in the earlier month.[5]

Problems

The Army's performance represents the routine solution of many problems, four in particular. These were fitting truck assembly to the over-all logistical process within the theater, native labor, Russian checkup stations, and the question of damage and sabotage.

The assembly in Iran of vehicles manufactured in the United States, to be delivered by highway or rail or both, was so closely related to other links in the logistic chain as to require, for its smooth functioning, the most detailed co-ordination. Ideally, the port would be forewarned of the arrival of crated vehicles and thus be prepared to off-load cargoes promptly; ideally, rolling stock would be at hand at the ports to convey the crates to the assembly plants where their arrival, known in advance, would be met by sufficient forces to unload, uncrate, denail, stack, store, or move them to the assembly line. All this meant planning at each step, from shipside in the United States onward, in accordance with totals and allocations agreed at the highest levels. As the logistic chain grew in length and distance from the United States, these broad strategic allocations narrowed and were transmitted into monthly, weekly, and daily plant targets, feverishly worked for by assembly-line crews. In the end those strategic quotas, set in Washington, Moscow, and London, were met by the sweating soldier-workman and his native helpers.

Then, at the line's end, after an ideally smooth passage facilitated by a plenitude of tools and parts and accessories, the finished vehicle, having come up to manufacturers' specifications and having survived rigorous American and Soviet inspections, passed on in the logistic chain, northward toward the Soviet Union. Failure of any link, even lack of accurate statistical data, would be reflected immediately in operations. At the TAP's, daily tallies, accounting, and record-keeping were corrected by monthly inventories. If, for instance, a chalked tally written by a checker on a case being unloaded at the docks were rubbed off by contact with another case, a discrepancy in tallies would get into the records all along the line until caught by monthly inventory totals.

[5] Computed from: (1) Hist Rpt, Plants Br, Opns Div, Hq, PGC, 6 Mar 45, Incl 4, Table, Truck Assembly Time and Cost per Truck Produced at TAP II, Khorramshahr, Period from Jul 43 through 31 Jan 45. PGF 125–Z. (2) Hist Rpt, TAP II, for Feb 45, 9 Mar 45. PGF 23–Z.

The even flow of vehicles was interrupted seriously when a cargo ship ran aground off port in the Persian Gulf in 1944. The results were a seven-day stoppage in September at TAP I, a monthly target missed, and insistent calls from the Soviets for the trucks they had planned for.

The mechanism which regulated the machine was supplied by the Control and Plants Branches at headquarters in Tehran. By May 1943 Control Branch was responsible for conducting monthly capacity and joint target meetings while Plants Branch was charged with collecting from the assembly plants statistics for use at those meetings, a development which coincided with the taking over by the PGSC from the British of cargo movements control for the Corridor.

At the monthly joint target meetings, Plants Branch furnished an analysis of the USSR and PGSC cargo manifests, giving a detailed list, by make and model, of vehicles to arrive between the twenty-first of the current month and the twenty-first of the ensuing month, with a 5-percent allowance for damaged or short-shipped vehicles. In computing the targets, district commanders submitted recommendations indicating the minimum and maximum production estimates for the coming month. In addition, a plant inventory was submitted estimating the production for the remaining part of the month so that the approximate number of vehicles on hand for the next month's assembly could be determined. Plants Branch maintained liaison with the Russians concerning truck assembly and with Control Branch concerning berthing schedules, arrival dates, and future scheduled arrivals of vessels carrying cased vehicles. After final agreement with the Soviets the monthly quota was fixed and all data forwarded to the district commander and to the commanding officers of the TAP's.[6]

Generally speaking, the native labor problem diminished as time went by and experience increased. When the TAP's came under Army operation the Andimeshk plant employed about 1,700 workmen; Khorramshahr, about 2,200. These natives worked as foremen, group leaders, mechanics, truck conditioners, material handlers, unloaders, and crane operators. Being unskilled, they had to be taught as they worked, to the detriment of efficient operations. Initial turnover was as high as twenty to thirty daily separations for absenteeism, malingering, inaptitude, or resignation. During the winter of 1943–44 there was some suffering by natives, who shivered in inadequate clothing on the night shifts. Work schedules varied: sometimes there were two shifts of 8 hours; sometimes, a 10-hour day shift and a 9-hour night shift; and in March 1944 the night shift was dropped.[7]

[6] Opns Div, PGC, Manual for Dec 44.
[7] Rpt cited n. 2(1).

From then on, due to an increase in the local labor supply which enabled better men to be selected, a greater stability in labor conditions brought plant operations nearer to the techniques familiar in the United States. Improvement in native housing and messing, or rationing for those not housed at the site, plus introduction, in August 1943, of a wage incentive system rewarding production above a standard minimum, brought improvement in plant capacity. Workmen's compensation, however, introduced by General Motors, was modified by the Army, and the worker who had received pay for job-incurred injuries and pay while hospitalized now found his wage stopped when he entered the hospital. Furthermore, after recovery he had to file a claim and only after it was approved did he receive his lost wages. In most cases this worked a hardship upon natives who lived from hand to mouth and had no accumulated reserves to call upon in time of need.

Traditionally suspicious of one another as well as of foreigners, the native workmen found American timecard systems used for pay-off difficult to cope with. Identity badges were forged, timecards stolen or sold, and the paymaster's life generally made miserable. Countermeasures and new devices were employed to ensure, in so far as possible, honest and fair pay-offs. Theft, both petty and large scale, posed problems of discipline and these were not always fairly solved—the Iranian police frequently releasing suspects arrested on American complaint, and the Americans, on their part, sometimes carrying search of native quarters to lengths of severity not countenanced in the States.[8]

Production figures, however, testify to the establishment of generally smooth relations with an efficient labor force.[9] The brightest aspect of the labor picture was the adaptability of the native workmen to American assembly-line industrial techniques, and here, as time went on, the patience of Americans as teachers was rewarded by the eager willingness of the learners. Greater progress in this respect was made after the Army took over and could mingle large numbers of American soldier-instructors through the lines. The TAP's distinguished themselves by their ability to take mutually distrustful racial groups, ignorant, slow-moving, underfed laborers, camel drivers, and desert nomads, and make of many of them skilled factory hands and even supervisors. It may be that American machines do not, after all, require supermen to operate them, and that sociologists and statesmen have

[8] (1) Hist Rpt, TAP II, for Sep 43. PGF 23–I. (2) Hist Rpt, TAP II, for Sep 44. PGF 23–U. (3) Report of Military Police Activities, PGC, United States Army, Pt. II, sec. III, and Pt. III, sec. II. PGF 130.

[9] HOTI, Pt. I, Ch. 7, History of Civilian Personnel Branch Activities, Administration Division, Hq, PGC, by Col Richard W. Cooper, p. 19. PGF.

something startling to learn from the speed with which Khorramshahr scaled, if not the heights, at least the foothills of Detroit.[10]

When the Army took over truck assembly, Plants Branch assumed responsibility for the checkup station at Tehran, operated by an ordnance medium automotive maintenance company detachment and some two hundred and twenty native workmen, as well as a small checkup station established, at Russian suggestion, at Khurramabad on the highway north of Andimeshk. The Khurramabad station, manned by a handful of American soldiers, was from time to time the object of Soviet criticism. A demand that the Americans change the oil of Soviet vehicles there was refused after a thorough test of the condition of oil in vehicles after arrival at Tehran, which showed an oil change en route unnecessary. The Soviets moved in some Red Army men, but further complaints were registered against the condition of vehicles serviced there. After an inspection trip by Soviet and American officers these complaints were admitted to be groundless. Next, in June 1944, the Soviets requested expansion of the station, but after thorough study of the proposal by the Americans it was refused. Meanwhile, the Russians assigned 6 officers and 40 men to Khurramabad and began to service their own vehicles. In September 1944, 10 American soldiers were removed, leaving 4 until January 1945 when the Soviets took over full control of the station.

At the big Tehran checkup station rigid inspection, lubrication, tightening, and maintenance were the final operations of the Americans before handing over the vehicles to the Soviets. In spite of the very large numbers of vehicles which passed through the routine, Russian complaints against the quality of the work were numerous and could be met only by willingness to correct defects. It was suggested, after a complaint of April 1944, that the Soviets set up an inspection system outside the American plant in order to eliminate the interference with American operations by Russian inspectors in the plant. In April 1945 the Russians took over the Tehran checkup station.

Among the most serious problems was that of damage to parts and vehicles. Often defective packing in the United States or rough unloading at the ports resulted in damage which showed up in poor performance of assembled trucks. Not only did many crates arrive in damaged

[10] (1) The article by Nels Anderson, "Give Us More American Education," *Survey Graphic*, January 1946, pages 13ff., tallies with the detailed labor records kept by the Army, as well as with the testimony of civilian foremen and service troops who worked with native workers in the truck assembly plants. (2) General Scott, Chief of Staff, PGC, in an address at Khorramshahr on 26 January 1944, marking the end of the first year's operations at TAP II, thanked "the officers and men of the PGC, the Russian troops, and the Iranian workmen" equally for their contribution to the war in their truck assembly work. PGF 244.

condition, but boxes would slide off trucks into the highway to be descended upon by eager natives who, before the military police could arrive, would carry off parts, tear away the crating lumber, and expose equipment to sun and dust.

Beginning in June 1943 a rising tide of complaints from the Soviets called attention to persistent breakdown of Studebakers, Fords, and Chevrolets assembled at Andimeshk and Khorramshahr, breakdowns not attributable to the rough overland journey northward after assembly or to the sometimes reckless operation by native drivers. From G–2 at USAFIME headquarters, Cairo, went a report of the situation with a request to the Federal Bureau of Investigation to conduct a study of factories in the United States to determine whether sabotage was taking place there or in Iran. Investigation which followed at the Studebaker Hercules plant at Canton, Ohio, and at the assembly point at South Bend, Indiana, revealed some defective materials going into pistons, but no sabotage, and a report in May 1944 tossed the ball back to the Persian Gulf with the suggestion that if there was sabotage it must be occurring in Iran. The upshot of all this was that the Army tightened up processing of waybills and improved handling methods from the docks to keep damage of cased vehicles to a minimum. All material was recorded as to condition at arrival, and widespread breakdowns of delivered vehicles declined.[11]

The End of Operations

By November 1944 the American plants at Andimeshk and Khorramshahr were the only TAP's left operating. As the Eastern Front had receded westward farther and farther from the Persian Gulf line of communication, and as the Mediterranean was again open for Allied shipping, plans went forward in high places to develop a supply route to the USSR through the Black Sea. On 28 November it was recommended by the Munitions Assignments Board at Washington that either TAP I or TAP II be turned over to the USSR to be re-established for use in assembling trucks to be shipped to Russia via the Black Sea route.[12] Meanwhile, on 19 November the War Department had instructed the Persian Gulf Command that plant operations were to be adjusted to permit the prompt dismantling of TAP I for shipment to the USSR, and orders to dismantle the Andimeshk plant came through on 7 December on the heels of the authorization by the Munitions Assignments Committee (Ground) on 30 November to transfer one

[11] See under 9 Jun and 18 Nov 43, and 22 May 44. MID 451.2 (22 May 44) (25 Jun 43).
[12] Memo, 28 Nov 44. AG 400.3295, Hq Amet.

plant to the Soviets. A formal communication was sent to Col. Leonid I. Zorin, Deputy Chief of Iransovtrans, and on 10 December a Russian Acceptance Committee arrived at Andimeshk. The entire plant, stacking yard, and salvage area were divided into smaller sections with a Russian officer, an American officer, and an interpreter assigned to each group. While this was going on native workmen were discharged in daily batches. December output of 550 vehicles brought to 79,370 Andimeshk's assembly for all consignees. By 17 January 1945 the entire TAP had been dismantled and shipped by rail to the Soviet Union. It was a considerable consignment, carried in 115 freight cars, two of them special low-bed cars for hauling the bulky cranes in the equipment through the narrow tunnels of the railway. The men of the 3467th Ordnance Medium Automotive Maintenance Company, who had been at Andimeshk since June 1943, completed cleanup of records and were relieved on 4 February 1945. After that Khorramshahr carried on alone.

It is a curious thing how trucks kept pouring toward the Persian Gulf even at this late date, with the Russian front nearly two thousand miles from Tehran. But the long pipeline from the United States kept filling in the west and discharging in the Persian Gulf, and upon TAP II fell the task of keeping things moving as before. Personnel came down from Andimeshk, two shifts were worked, and in January the TAP produced 5,582 trucks.

Matters were drawing to an end, however, for in February the two main assembly lines at TAP II were authorized for transfer to the USSR and actually stopped work in mid-March, leaving only the Mack line to carry on until 20 April, when it, too, was dismantled. By 24 April the entire plant had been dismantled and moved toward Russia in 146 rail cars plus another 114 cars carrying cased vehicles and salvage. Two ordnance units remained behind amidst what must have seemed to them, after former activity, the desolation of the desert. There were also three large cranes awaiting low-bed cars to get them through the tunnels on their journey north. When the 3556th and 3455th Ordnance Medium Automotive Maintenance Companies were relieved before 1 May the American truck assembly mission in the Persian Corridor was completed.

From March 1942 through April 1945 the four TAP's in Iraq and Iran assembled 191,075 units for all consignees. Of this total the two American plants turned out 88 percent, or 168,021 units.[13] During the fifteen months of the contractor period, Andimeshk and Khorramshahr produced 29,751 units, 98 percent of which were for the USSR.

[13] Exclusive of the 599 vehicles noted Tables 8, 9, n. *c*.

The Army, in its twenty-two months of operation assembled 137,671 units. Of these 96 percent went to the Russians, reflecting the increased amount of work done in the later period for consignees other than the Russians, notably the U. S. Army. In comparing the performances of the two periods it must be borne in mind that, by the time the Army took over, the assembly buildings except for Khorramshahr were virtually complete. Adequate machinery and equipment had been installed. Military manpower was sufficient and could be shifted to meet sudden demands, as the labor force of the contractor could not. Moreover, the heaviest flow of vehicles coincided roughly with the development of capacity.

In this respect the truck assembly program was fortunate. Unlike the aircraft assembly operation, it did not have to struggle for most of its existence to meet targets while sometimes hopelessly handicapped by shortages of manpower, materials, and equipment. Then, too, in contrast with the experience at the ports, truck assembly did not develop capacity significantly in excess of the load it was actually called upon to bear. The variables and uncertainties which beset so many other activities of the American command afflicted the TAP's to a lesser degree. Whether by design or by fortuitous circumstance, production proceeded, except for the early 1942 period, as the statistical tables show, according to a reasonable rising and falling curve. When demand accelerated, capacity was ready; when the progress of the war removed the demand, no time was lost in closing out the project. How the King of Hearts would have applauded the TAP's for following his advice to Alice: "Begin at the beginning, and go on till you come to the end: then stop."

CHAPTER XV

Oil for the War

No matter how well fed, equipped, or officered, without oil and gasoline the modern army is a helpless monster, mired and marked for destruction. It has been calculated that between 40 and 50 percent of the total supply tonnage of a combat division's daily consumption is petroleum.[1] Because of variables in the equation, there are no accurate criteria for estimating the ratio of oil used in the noncombat activities of an army to the total tonnages required to carry on such activities. Oil, the lifeblood of mechanized warfare, must flow by the oceanful.

To meet their world-wide requirements for petroleum products, the British and Americans virtually pooled their oil resources. The Soviet Union, possessor of large supplies within its own borders, characteristically remained aloof from the joint arrangements of the western Allies, refusing even to exchange information on oil.[2] Russia was not, however, entirely self-sufficient, for during the period of lend-lease the United States shipped to it 2,113,449 long tons of petroleum products.[3] Because the Persian Corridor runs through one of the world's principal oil-producing areas, only certain types of lubricants of American origin passed through it to the USSR. The great bulk of American lend-lease petroleum went by other routes. The responsibilities of the American command in the Persian Corridor for petroleum shipments to Russia were therefore relatively minor, both as compared with total American petroleum shipments to Russia and as compared with the total of other cargo tonnages delivered via the Corridor.

The varied responsibilities and activities of the several national army forces within the Persian Corridor and in Iraq, not to mention the civilian economies, called for large quantities of oil. As the American

[1] (1) Hist Rpt, Office of Petroleum Adviser, Opns Div, Hq, PGC, Mar 43–Jul 45. PGF 8–E. (2) Rear Adm. Andrew F. Carter, one-time executive of the Army-Navy Petroleum Board, told an audience at the National War College on 6 February 1947 that the British calculated petroleum as 69.9 percent of total movement; the Americans, as 50 percent.

[2] Herbert Feis, *Seen from E. A.* (New York: Alfred A. Knopf, Inc., 1947), p. 136.

[3] To this figure should be added 621,826 short tons (555,202 long tons) shipped from the United States to the United Kingdom to replace petroleum shipped from the Abadan refinery to the USSR, charged as British reciprocal aid to the United States. Tables 1, n. *g*, and 2, n. *g*.

command increased its responsibilities in the field of inland transport, it extended its participation in the movement of oil through the area, and in addition to serving its own housekeeping needs, assisted in supplying the other army forces as well as the civilian economies. But that was not the limit of American responsibility for POL.[4] From the period of early planning in 1941 for extensive pipeline construction, the complex business of distribution of oil for the war was a part of the general logistical problem the United States, by its presence in the Persian Corridor, undertook to help solve. The problem also included efforts, shared by the Americans, to increase Middle East refinery capacity, and American operation of plants for the manufacture of oil drums and jerrycans.[5]

Early Pipeline Projects

The usefulness of pipelines in reducing the burden of transporting oil by ship, rail, and truck early suggested an ambitious program of pipeline construction in Iran and Iraq. In broad outline, the program, which first involved construction of the lines for the British by the American engineer contractor using lend-lease materials, later provided for construction by the Anglo-Iranian Oil Company using British labor and lend-lease materials. In due course, after the Americans had made known their position that their assistance would be limited to pipelines required by military necessity, and that they would insist on a voice in postwar disposition of installations using lend-lease materials, the program was radically scaled down.

According to a memorandum prepared by the British Purchasing Commission in September 1941, the pipeline project had been discussed and its "need . . . carefully considered and agreed by the Joint Anglo-American Mission to Russia," the Harriman-Beaverbrook mission, whose labors resulted in the First (Moscow) Protocol.[6] The British pressed the matter and on 25 October Brigadier W. E. R. Blood, of their Staff Mission in Washington, presented to General Wheeler, newly appointed chief of the U.S. Military Iranian Mission, a memorandum which stated that the project's objective was to end the traffic bottleneck in the Bandar Shahpur–Andimeshk area. The paper proposed constructing a pipeline to parallel the existing AIOC line from

[4] A British term adopted by the Americans for its brevity. It stands, loosely, for petrol (gasoline, benzine, kerosene), oil (raw oil, fuel oils, and all petroleum derivatives except petrol and lubricants), and lubricants (grease). POL means petroleum and any or all of its products.

[5] A rectangular can of four to five gallons' capacity and varying design, especially as to cap, lip, or spout, indispensable, because of its portability, for refueling in areas unsuitable for mobile tankers. A German innovation in World War I, hence, *jerrycan,* generic term for all variants, British or American.

[6] Memo, prepared by British Purchasing Commission, 25 Sep 41. Iran 28/17, NADEF.

Abadan to Ahwaz, two lines from Ahwaz to Andimeshk, and lines from there to Dorud or Azna and to Hamadan. Estimated capacity of the completed installations would be 2,000 long tons per day.[7] This plan would facilitate the movement of crude petroleum from the chief oil fields in the neighborhood of Ahwaz to the refinery at Abadan and would also provide for the transportation of refined petroleum products well north of Andimeshk to Dorud or Azna on the railway to Tehran, or even farther north and west to Hamadan in the direction from which any Axis incursion through the Caucasus would come.

By the end of November, General Wheeler had left the United States and set up his headquarters at Baghdad, leaving behind at the home office of the Iranian Mission in Washington Captain Yount to handle the pipeline matter as part of the engineer program being prepared in consultation with Folspen, engineer constructor. It is possible that Wheeler's feeling that he could not include pipelines among the American projects discussed with Wavell at New Delhi that month arose from his knowledge that pipelines were being handled at Washington. The laying of 600 miles of pipe in Iran, using American materials, was one of the projects included in the Washington task list of 24 November, although pipeline was absent from Wheeler's list of projects issued at the same time. During that month, the British Ministry of Supply pressed the Lend-Lease Administration so strongly to hurry the procurement and shipment of pipeline material that it was arranged that the Office of the Chief of Engineers, War Department, would report frequently on the status of pipeline procurement to General George Spalding of the erstwhile Division of Defense Aid Reports, Office for Emergency Management, who would pass on the reports to the Lend-Lease Administrator, Mr. Stettinius, who would in turn reassure the British.[8] The early plans contemplated connecting the proposed pipeline system with six container plants in order that manufactured drums and jerrycans could be filled at the plants themselves. Specific pipeline routes were placed under study and the engineer constructor alerted to undertake the construction of the lines and twelve pumping stations, using "materials furnished through Lend-Lease on a British requisition." The first requisition for 600 miles of 6-inch pipe (later increased to 760 miles) was nearly all shipped from the United States by January 1942 and it was expected that by May all necessary pipe and couplings would reach Iran.[9]

[7] Memo, Brig W. E. R. Blood for Gen Wheeler, 25 Oct 41. Iran 5/13, NADEF.
[8] Documents dated 28 Oct and 24 Nov 41. 679 Pipe Line, Oil, Iran, Intn Div, ASF NCF.
[9] Memo for Gen Aurand, 23 May 42, sub: Pipelines in Iran and Iraq. 679 Pipe Line, Oil, Iran, Intn Div, ASF NCF.

On the date of Captain Yount's report on construction needs, which was prepared at Washington, General Wheeler informed General Moore, Deputy Chief of Staff for Supply, War Department, that negotiations were under way in the field for the pipeline construction to be done by the AIOC. "Unless otherwise directed," said the message, "contractor need not be prepared for this work." [10]

Although this was an indication of the direction in which matters were moving, it was not final, and planning continued in the United States. Like everything else, planning for pipeline construction involved a great deal of detail, and, like everything else, much of this detail required solution in high places rather than in the field. For instance, a difference over joints had developed in the field between Colonel Gillies, commanding the Basra subheadquarters office of the Iranian Mission, and the local British representative. The British wanted welded joints; Colonel Gillies recommended dresser joints. The matter was referred to Washington where Brigadier Blood and a representative of the Office of the Chief of Engineers decided that, although it was general practice for the Americans in constructing a pipeline system for the British to follow British wishes, dresser joints would be used, subject to the approval of the Commander-in-Chief, India.[11]

On 24 December 1941 a preliminary report on the Iranian pipeline project was submitted to the recently appointed District Engineer for the Iranian Engineer District, Colonel Lieber.[12] The report dealt with the following six proposed pipeline routes together with necessary pumping stations and communications:

(1) Ahwaz–Dizful–Hamadan	320 miles	refined products
(2) Ahwaz–Dizful	100 miles	fuel oil
(3) Abadan–Basra	35 miles	refined products and fuel oil
(4) Baghdad–Khanaqin	110 miles	refined products and fuel oil
(5) Kirkuk–Mosul	100 miles	refined products

[10] Rad, Wheeler to Moore, 24 Nov 41. DE File D–2, Directives, NADEF.

[11] Memo for file, by Maj T. T. Molnar, Supply Sec, Defense Aid Unit, OCofEngrs, 4 Dec 41, concerning meeting held 2 Dec 41. 381 (Middle East) O&T Sec Files, Folio 1, Serials 1–175, OCofEngrs.

[12] A Preliminary Report on Iranian Pipeline Project, 24 Dec 41. Iran 45/1, NADEF.

(6) Kirkuk–Baiji	66 miles	refined products and fuel oil

This very considerable network, when added to existing oil lines in the area, would provide the British oil fields in Iraq and Iran with alternative connections with Mediterranean outlets, and would also establish an integrated oil transport system extending from the Persian Gulf far into the northern interior. In a memorandum prepared in January in the home office of the Iranian Mission in Washington, supposed Axis strategy against the oil fields, the Suez Canal, and the Persian Corridor supply line was examined with relation to possible routes of enemy attack upon these regions. The pipeline program was presented as directly meeting or preparing "for an enemy drive southward and from between the Caspian and Black Seas." Nevertheless, it was observed that without detailed study of transportation conditions in the field it was impossible to estimate the amount of relief the proposed pipelines would afford existing highway and rail transport.[13]

By early January the negotiations referred to by General Wheeler in November resulted in the War Department's proposing to furnish materials, which were then actually en route to Iran, while the AIOC would construct the lines with British labor. The proposed routes were reduced to five, namely numbers 1, 2, 3, and 6 as listed above, and either 4 or 5.[14]

At this time a meeting was held in the Division of Near Eastern Affairs, Department of State, to consider the postwar implications of the pipeline project and to determine what agreement the State Department should endeavor to reach with the British Foreign Office regarding ownership and use of the proposed pipelines in the postwar period. Prior to the meeting the Department of State had informed the War Department that, although it did not wish to delay matters or to cast doubt upon the War Department's judgment of the military value of the projects, the State Department was concerned with protecting American oil interests "in the future developments in this area and preventing a repetition of the events of the period immediately subsequent to the first World War." [15]

[13] Memo, signed by Maj H. Case Willcox, 7 Jan 42. 679 Pipe Line, Oil, Iran, Intn Div, ASF NCF.

[14] Memo of conversation, State Dept, 12 Jan 42, sub: Postwar Economic Implications of Plans of the WD to Furnish Wheeler Mission with Lend-Lease Materials for Cons of Mil Pipelines in Iran and Iraq. 679 Pipe Line, Oil, Iran, Intn Div, ASF NCF.

[15] Memo, Capt Yount for Gen Moore, 13 Jan 42. 679 Pipe Line, Oil, Iran, Intn Div, ASF NCF. The account of the meeting, except as otherwise noted, is based upon this memorandum and that cited note 14. Present at the meeting were Wallace Murray, Chief of the Division of Near Eastern Affairs, Paul Alling, his Assistant Chief, Max Thornburg, and

At the meeting Wallace Murray, Chief of the Division of Near Eastern Affairs of the Department of State, and later Ambassador to Iran, presented an account of the exclusion of American interests from the development of the Iraqi oil fields following failure of the United States to ratify the Treaty of Versailles. He told how the Colby-Curzon correspondence of 1920–28 led to the British Government's allowing American interests a 23.75-percent share in the Iraq Petroleum Company in 1928, and he sketched the history of the D'Arcy concession of 1901 granted to the AIOC and renewed with some limitation in 1933. In view of the predictions of experts that American domestic oil supplies were not inexhaustible, the State Department, taking a long-range view of American requirements, wished to ensure that American interests in Iran would not be put at a disadvantage by the proposed pipeline construction in Iraq, where American participation in the oil company was a minority one, and in Iran, where the AIOC enjoyed, save for the five northern provinces, exclusive rights to exploit oil resources. It was thought that an arrangement protecting the interests of all concerned, American as well as British and Iranian, might "relieve Iran from possible British postwar pressure to make the lines available exclusively to the AIOC." [16] The lack of lend-lease agreements with Iraq and Iran at the time of the meeting complicated the postwar disposition of any pipelines which might be built on their territory with American materials.

Consideration was therefore directed to whether the proposed routes were for strictly strategic use or based primarily upon future commercial requirements; to the effect of the lines upon postwar distribution of refined products and upon development of new oil fields; to the question whether their construction would operate to bar American participation in future oil developments in this area; and finally to the question of how to agree to safeguard American interests without jeopardizing military necessity.

It was concluded that the State Department would explore the matter with the Foreign Office; that ownership would remain in abeyance during the war; that after the war it was desirable that ownership and disposition of the lines be settled by agreement among the United States, Iran, and the United Kingdom; that pipelines be regarded

Mr. Parker, for the State Department, and General Moore, Maj. A. N. Wood, Captain Yount (the latter two from the Home Office of the Iranian Mission), Philip Young of the Lend-Lease Administration, Fred H. Kay, Vice President, Standard-Vacuum Oil Company, R. C. Stoner, Vice President, Standard Oil Company of California, F. A. Davies, President, California-Arabian Oil Company (later Arabian-American Oil Company, i. e., Aramco), and C. E. Olmstead, Vice President, Texas Company.

[16] Memo cited n. 9.

as in the same category as other material assistance from the United States carried out under the terms of lend-lease, such as port development, railway rolling stock, and highway improvement; and, finally, that no delay in the project be interposed by the United States.

General Moore advised that the British be notified that they could not dispose of lend-lease projects without American permission, and that General Wheeler be formally directed to examine all lend-lease proposals "from the standpoint of military necessity." There is no record that such instructions were formally delivered to Wheeler, but Captain Yount, who proceeded to Baghdad shortly after the meeting, informed Wheeler fully as to its deliberations and conclusions.[17]

The protection of American postwar interest in the proposed lines, the question involved in General Moore's first suggestion, was promptly undertaken by the State Department and record of their action transmitted on 30 January to the home office of the Iranian Mission "with reference to the meeting concerning a proposal to construct pipelines in Iran." The method followed by the State Department was to instruct U.S. ambassadors at London, Kuybyshev, and Tehran to protest against the provisions of Article IV of the draft treaty then being negotiated by Britain, the USSR, and Iran to formalize the situation resulting from the invasion and occupation of Iran by British and Soviet forces in the preceding year as a counterstroke against Nazi forces working for the control of Iran. Article IV read:

> A special agreement shall be concluded between the Allied governments [the United Kingdom and USSR] and the Imperial Iranian Government defining the conditions of any transfers to the Imperial Iranian Government after the war of buildings and other improvements effected by the Allied Powers on Iranian territory. These agreements shall also settle the immunities to be enjoyed by the Allied forces in Iran.

The instructions forwarded to the American ambassadors cited this article as appearing "to envisage subsequent negotiations restricted to Great Britain, Soviet Russia, and Iran, involving the disposition of property which would apparently include American lend-lease material and affecting the long-range interests of the United States in Iran." The ambassadors were instructed therefore to request assurance from the United Kingdom and the USSR that no such negotiations as were referred to by Article IV should be undertaken "before this Government has been consulted and has given its consent to any provisions at present affecting, or which may in the future affect American property, rights or interests in Iran." [18]

[17] Memo, Gen Yount for author, 24 Dec 48.
[18] Document and incls dated 26 Jan 42. 679 Pipe Line, Oil, Iran, Intn Div, ASF NCF.

The upshot was that the only construction under the original program was the short line from Abadan to Basra listed as route 3 above. Pipe was supplied under lend-lease for construction by the British. The installation was estimated to carry 192,000 gallons a day. Although Folspen was relieved of responsibility for construction, as foreshadowed in November by General Wheeler, the American engineer constructor was nevertheless requested by the British to provide some welding equipment and welding supervisors and some technical supervision. Thus the early plans for an elaborate Iran–Iraq pipeline network of more than 700 miles were modified down to 35 miles. The episode furnishes an instructive military footnote to the larger story of Middle East oil which lies beyond the limits of the present history.[19]

Increase of Middle East Refinery Capacity—Bahrein

Although oil existed in plenty in Iraq and Iran, and there were Allied-controlled refineries at Haifa, Bahrein, and Abadan, the exigencies of the war situation in the Middle East in 1941 and 1942 tended to limit the use to which these vital Allied war assets could be put in behalf of the war effort. As Dr. Herbert Feis has written, "The dangers of German destruction or conquest of Middle Eastern oil fields and refineries, the virtual closing of the Mediterranean to tanker transport, and the length of the sea haul from the Persian Gulf to western Europe combined to confine the usefulness of Middle Eastern oil mainly to nearby military operations and safely accessible points until 1943–4." American interest in increasing Middle East refinery capacity was expressed late in 1941 by the U.S. Army Air Forces. In November arrangements were made by the appropriate governmental agencies to expedite shipment of needed machinery and equipment to Abadan for increase of its output. Early in the new year, 1942, the Office of the Petroleum Co-ordinator (which in December 1942 became the Petroleum Administration for War) asked the Bahrein Petroleum Company (BAPCO) to submit proposals for the addition to their refinery of 100-octane gasoline facilities. At the same time the co-ordinator, Harold Ickes, proposed a general program to increase Middle East

[19] (1) Interv with Ambassador Murray, Tehran, 30 Jul 45. (2) Memo cited n. 9, quoting Rad, Col Shingler to Washington, 16 May 42: "All pipeline projects in Iran-Iraq have been canceled" with the exception of sections of routes 1 and 2 given in the list in the text. These sections would run only from Ahwaz to Andimeshk and were designed for 70,000 gallons and 150,000 gallons per day, respectively. According to Ambassador Murray even this reduction of the original program was abandoned. (3) Memo cited n. 9. Ltr, Edmund A. Prentis, Folspen, to Missions Br, Intn Div, SOS, Washington, 18 Jun 42, indicates that Folspen was then working on plans for anchorages for a 6-inch dresser-coupled oil line. 679 Pipe Line, Oil, Iran, Intn Div, ASF NCF. (4) Rpt on Trans-Iranian Railway, by Capt Yount, 5 Jan 42. WPD 4596 to –15 Iran (Persia) HRS DRB AGO.

refinery capacity which was deferred on the advice of military officials pending clarification of the war situation in that area. Further shipments to Abadan of machinery and equipment were expedited in May and July 1942 and in May and June certificates of priority for materials for the general expansion of the refinery at Haifa were issued. In 1943 agreement was reached to undertake the Bahrein plant expansion. In the same year the construction of the Arabian American Company's refinery at Ras Tannura, Saudi Arabia, was begun. By the end of the war all this activity had provided an increase of 43 percent in total Middle East refinery capacity, that at Abadan amounting to more than 100 percent.[20]

In the case of the refineries at Abadan and Haifa, American aid was limited to expediting allocation and shipment of machinery and equipment. The Bahrein and Ras Tannura construction was facilitated on the urgent recommendation of the Army-Navy Petroleum Board—established in 1942, later (1943) an agency of the Joint Chiefs of Staff—in order that its output might serve American military and naval needs in the Pacific war. Only in the case of Bahrein were United States Government funds employed or did the War Department, through its commanding generals at Cairo and Tehran, assume even indirect responsibility.

This responsibility for operations at the Bahrein refinery was indirect because there was no contractual relationship regarding the refinery between the War Department and BAPCO.[21] It would be more accurate, therefore, to say that, instead of responsibility, the War Department exercised a paramount interest in the progress of the high-

[20] (1) Feis, *Seen from E. A.*, p. 100 and n. 4, p. 171. See also *Thirteenth Report to Congress on Lend-Lease Operations for the Period Ended November 30, 1943* (Washington: Government Printing Office, 1944), Ch. 7, "Lend-Lease Petroleum in the War," pp. 39–45. (2) Interv with Admiral Carter, National War College, 6 Feb 47. (3) Interv with Dr. John W. Frey, Historian, Petroleum Administration for War, Interior Dept, 13 Jan 47. (4) Preliminary Report of Observations on Bahrein Island, 27 Jun 44, by Maj Gus R. Bartels, Deputy Provost Marshal, PGC, to CG, PGC (cited hereafter as Bartels Rpt). Seen by the author at office of Bahrein Petroleum Company, Awali, Bahrein Island, Jul 45. (5) *A History of the Petroleum Administration for War, 1941–1945*, prepared under the direction and editorship of John W. Frey and H. Chandler Ide (Washington: Government Printing Office, 1946), p. 265. (6) Interv cited n. 20(3).

[21] (1) But see *Container Plants at Abadan and Bahrein*, below. (2) See also under date of 29 Mar 44. AG 095 Bahrein Oil Co, Hq AMET. (3) The only other direct connection occurred over the sale to the company of surplus heavy construction equipment. On 2 September 1943 the company requested USAFIME to sell it such equipment in accordance with Army policy designed to save shipping. After discussion between USAFIME headquarters and the War Department it was decided on 29 April 1944 to supply BAPCO from the Persian Gulf. History of ACofS, G–4, AMET, par. 16. Hq AMET. The material was transferred, the transaction being legalized on 31 July 1944 by a contract signed between the Persian Gulf Command and BAPCO for the sale (with right to repurchase) of $120,927.39 worth of machinery, equipment, and supplies under existing law, authority, and declarations, which indicated that the national defense and the war effort would be promoted by speeding construction of aviation gasoline facilities. See Contract W–7358–PGC–1. AG File, Hq PGC.

octane aviation gasoline expansion program and that this interest found expression in assumption of jurisdiction over American employees of the companies on Bahrein Island. To understand the resulting situation, never clearly defined, it will be necessary to review certain aspects of the refinery project although construction and operation of the refinery were the direct responsibility of BAPCO and outside the jurisdiction of War Department agencies.

The oil concession held by BAPCO, a Canadian subsidiary of Standard Oil Company of California, was first granted by the Sheik of Bahrein, through the good offices of the Department of State, to another American company. After BAPCO took over, it started work on the island in 1931, bringing in the first oil strike the next year. The first crude was shipped out in 1934. A refinery, built in 1936, was enlarged in 1937 and 1940. The high-octane plant additions begun in 1943 were undertaken under a contract with the Defense Supplies Corporation, a subsidiary of the Reconstruction Finance Corporation, Defense Supplies Corporation putting up 75 percent of the cost in return for taking the entire high-octane output as agents for the U.S. Army and Navy. The first shipment of 100-octane gasoline from the new plant occurred in July 1945. New plant construction was carried on for BAPCO by a subcontractor, Compania Constructora Bechtel-McCone (BMC), a Venezuelan corporation.[22]

Three factors in the eventual exercise of interest by the War Department require notice: first, the political situation at Bahrein Island; second, certain proposals made during the contract negotiations; and third, early difficulties in operations which threatened the success of the undertaking and brought about the exercise of the War Department's interest.

The Sheikdom of Bahrein is a British protectorate, British rights on the island having existed from about 1820. Pursuant to an agreement between the British Government and the Sheik Isa in 1909 and a Bahrein Order in Council of 1913, the British political agent on the island conducted on behalf of the Sheik all foreign relations and exercised on behalf of the Sheik exclusive jurisdiction over all non-Bahreini on the island. During the period under review (1943–45) the British political agent was endowed with sweeping power to deport any American or British subject, without reference to the Sheik, for "intrigue" or "conduct prejudicial to good order and disturbance of

[22] (1) Feis, *Seen from E. A.*, p. 103 and n. 7. (2) Interv with Ward Anderson, General Mgr, BAPCO, Awali, Bahrein Island, 11 Aug 45. (3) Interv cited n. 20(2). The Defense Supplies Corporation later modified the contract and had to pay damages for reducing the specified quantity. *The New York Times*, March 17, 1947.

the peace," or for offenses, misdemeanors, or felonies.[23] Furthermore, although the BAPCO concession was granted by the Sheik, it was under the jurisdiction of the British Government which could control or pre-empt it. A challenge to British interest in Bahrein was offered in November 1927 when the government of Iran claimed sovereignty over the island; but this was met by notice served by the British of their intention to protect Bahrein against all other claimants. In 1943–45 there was no United States consul or other American political representative on the island, a proposal by the State Department to send a consul having been protested by the British.[24]

Partly because of this political background, BAPCO, when asked by the Office of the Petroleum Co-ordinator in January 1942 to submit proposals for construction of 100-octane gasoline facilities, complied in March with the suggestions that the plant be owned by the United States Government; security be provided by military police (American); the United States Government assist in recruiting, deferring from the draft, and transporting civilian employees; necessary priorities and shipping space be assured; and in the event of enemy attack the United States Government evacuate the construction forces.[25]

Because of the reluctance of the Army to proceed with a general program of Middle East refinery expansion until the war situation had become clarified, the BAPCO reply was held for some time under advisement until in December the Army-Navy Petroleum Board, on behalf of the Joint Chiefs of Staff, authorized the Petroleum Administrator for War to inform BAPCO that the project at Bahrein was urgently desired. Accordingly, BAPCO submitted new proposals in January 1943 looking to completion of the plant by the middle of 1944. Long consideration of the contract with the Defense Supplies Corporation ensued, and construction personnel did not reach the island in substantial numbers until early 1944. The target date was consequently advanced to March 1945, and, as has been stated, the first shipment of high-octane gasoline was not made until July 1945.[26]

It is important to note, for its effect upon future developments, that under the contract finally agreed upon the United States accepted only BAPCO's third and fourth proposals and that no responsibility was assumed by the United States for security of plant or for jurisdiction over civilian personnel.

[23] Bartels Rpt.

[24] (1) See under date of 6 Jul 44. AG 250.401 Court Martial Jurisdiction, Hq PGC. (2) Bartels Rpt. (3) Interv cited n. 22(2).

[25] Bartels Rpt.

[26] (1) Interv cited n. 20(2). (2) This "costly" delay is listed in the Bartels Report among eight factors in deterioration of contractor-personnel morale which aroused the War Department's interest.

After the commencement of construction numerous difficulties arose which tended to delay the project and to foster poor morale among the civilian construction workers for BMC, the BAPCO subcontractor. Among these difficulties was a marked underestimate of personnel needs, placing undue burdens upon an insufficient force at the beginning. There were also delays in delivery of men and materials, abnormally slow discharge of cargoes by the local British lighterage firm (Gray Mackenzie & Co., Ltd.) when they did arrive, shortage of materials, equipment, and motor transport, and shortage of native unskilled labor because of the numbers required by the Royal Air Force in its construction of airport facilities on another part of the island for the Air Transport Command. There was also an average weekly wage differential of one hundred and fifty dollars to the disadvantage of the BMC employees at Bahrein as compared to wages paid by the M. W. Kellogg Company to Americans on its refinery project at Abadan.[27] All of this contributed to an abnormally high labor turnover which was both costly and inefficient and which reflected an increasing spirit of unrest among the American employees at the refinery whose numbers rose from twenty-five in December 1943 to over 1,000 in 1944–45 for both BAPCO and BMC.[28]

Unrest culminated on the night of 17–18 June 1944 in "the incident at the gate," in which two Americans, attempting to enter the refinery without passes, resisted the local Bahreini police.[29] It was understood by the contractors that under local law and the conditions of their concession their employees properly came under local police jurisdiction. The incident at the gate merely dramatized and focused attention upon the refusal of a malicious element among the employees to recognize that jurisdiction. Apprised of the resultant impasse and the threat it implied to the success of the Bahrein aviation gasoline project, General Connolly promptly dispatched his deputy provost marshal to Bahrein to investigate. This action, justified by the general responsibility of Connolly for maintenance of War Department interests, rested

[27] Bartels Rpt.

[28] The normal complement of the BAPCO refinery before commencement of the aviation gasoline program was about 150 Europeans and 1,500 natives. Between 19 May 1943, when the high-octane plant project was begun, and the close of business on 12 August 1945 (when figures were prepared), 91 percent of European employees processed had been terminated. That is, out of 1,104 men processed for the payroll and shipped to Bahrein Island, only 101 remained. Resignations, discharges, and 30-day terminations accounted for 33.5 percent of the total employment roster, while 48 percent remained at the plant to the end of their contracts. Average turnover approximated one third of total enrollment. Personnel figures prepared and information furnished by Walter Hillman, Personnel Manager for BMC at the refinery; Mr. Hanson; and Julius Fifer, Manager of the BAPCO refinery.

[29] Bartels Rpt.

upon a presumption of specific jurisdiction rather than upon any clearly defined jurisdiction.

The Army authorities possessed the right to apply the Articles of War to War Department civilian employees under their jurisdiction. At Bahrein, however, neither contractor nor employees operated under War Department contract. The question of Army jurisdiction over Bahrein's refinery had come up in November 1943 when General Royce, then commanding general of USAFIME, cabled General Somervell that he had heard that responsibility for it was to be assigned to the Persian Gulf Service Command, then still a part of the USAFIME command. To General Royce's suggestion that jurisdiction be assigned USAFIME, Somervell replied that, although the jurisdiction was automatically USAFIME's under the command setup, it was desirable that "any army responsibility be relegated to CG PGSC as it is believed that his technical staff is especially qualified to handle this." [30] Under other circumstances the Judge Advocate General later, on 13 May 1944, advised the Commanding General, USAFIME, not to court-martial American civilian employees of BAPCO while they remained within the limits of the Middle East theater as it was doubtful whether such procedure would be sustained if tested by habeas corpus or other civil proceeding.[31] The lack of clearly defined jurisdiction as between USAFIME and the American command in the Persian Gulf over the Bahrein project further complicated the problem of controlling the transfer of ex-employees of BAPCO and BMC to the payrolls of USAFIME civilian contractors, a factor in the high Bahrein labor turnover which General Connolly labored more than a year to eradicate by agreed controls and arrangements with Brig. Gen. Benjamin F. Giles, who became Commanding General, USAFIME, in March 1944.[32] Some weeks previous to the incident at the gate, General Connolly had informed the American chargé d'affaires at Tehran that the

[30] Rad AMSME 9141, Royce to Somervell, 6 Nov 43, and atchd papers. AG 095 Bahrein Oil Co., Hq AMET.

[31] JAG to CG, USAFIME, 13 May 44. AG 095 Bahrein Pet. Co., Hq AMET.

[32] See Rad PX–14789, Connolly to Giles, 2 Jun 44. AG 095 Bahrein Pet. Co., Hq AMET. The radio warned that both USAFIME and its contractors were hiring ex-Bahrein employees, causing unrest and high turnover in "this high priority work." Connolly requested Giles to check with him to assure that job applicants have a release from PGC regardless of "what appears to be a bona fide release from our contractors." Both the phrase "our contractors" and the reference to release by the military indicate a *de facto* assumption of jurisdiction. Giles replied, agreeing to check and pointing out that an agreement to clear with the oil company and PGC had existed since the previous 17 February. Rad, Giles to Connolly, 6 Jun 44. Same file. But a message from Royce to PGC, dated 23 February, after the agreement cited by Giles, promised to hire no more men without oil company clearance, thus suggesting that the agreement did not always govern. Rad, Royce to PGC, 23 Feb 44. Same file.

Persian Gulf Command could not control the American civilians at Bahrein because they were not employees of the War Department or of a War Department contractor.[33]

Such was the situation when General Connolly met the fact of civilian resistance to local authority by the dispatch of his deputy provost marshal. This officer reported under date of 27 June 1944 that the British political agent claimed exclusive jurisdiction over the American civilians but promised to appoint Americans as his agents in any trials resulting from lawbreaking. The American recommended the assignment to Bahrein of an American commanding officer to be responsible to the Director of Ports and Gulf District, PGC, and the assignment of twelve American military policemen and two Counter Intelligence Corps agents.[34]

General Connolly forthwith notified BAPCO on 5 July that neither the War Department nor the Department of State recognized local British jurisdiction over American civilians and that any deputizing should be done by the Sheik and not by the British political agent. When BAPCO replied that because of the local conditions already explained this was impossible, Connolly referred the matter to General Somervell with a request to the Department of State to handle the situation. A prompt reply advised Connolly to let the *status quo* stand, nor were matters clarified by a radio from Somervell on 16 July stating that the Provost Marshal General had ruled that the PGC was not responsible for jurisdiction over the American civilians, but that the Commanding General, PGC, might remove or exclude undesirables upon notification of the U.S. consul. As there was no U.S. consul at Bahrein, the consul forty miles across the water at Dhahran handled necessary consular duties.[35]

Thus matters stood through the rest of 1944 and 1945 while the aviation gasoline project was brought to completion, the bulk of American civilians withdrawn, and the PGC itself ultimately deactivated. With the arrival of ATC troops at the airfield at Muharraq, at the other end of Bahrein from the refinery at Awali, the presence of American military personnel with a direct administrative link to the PGC contributed to the security of the refinery without disturbing the established local jurisdiction of the British political agent.

[33] Ltr, Gen Connolly to Richard Ford, Chargé d'Affaires, U.S. Embassy, Tehran, 25 Apr 44. AG 201 Dreyfus, L. G., Jr., 1944, Hq PGC.

[34] Bartels Rpt.

[35] Communications of 5, 6, 8, 10, and 16 Jul 44. AG 250.401 Court-Martial Jurisdiction, Hq PGC.

Container Plants at Abadan and Bahrein

The rather minor responsibilities of the U.S. Army for establishment and operation of plants for the manufacture of jerrycans and oil drums in the area of the Persian Gulf fell within the framework of a program for the whole Middle East initiated at Cairo. Rommel's successful push into Egypt in May 1941 literally blew the extensive British stockpile of jerrycans sky-high. These indispensable containers are difficult to destroy; but when some three million of them are hit by shellfire and blast, it is scarcely practicable, under fire, to run about the desert and pick them up again. They are a total loss. For the next year the British attempted to resupply themselves. Increasing needs, not only of the British Army and Royal Air Force but of the American Air Forces, led to discussion at Cairo for reproducing drums and cans in requisite quantities. By September 1942 General Maxwell was planning for factories at Haifa, Cairo, Alexandria, Tanta, Abadan, and Tehran. He requested General Marshall to send six complete plants by mid-October. On 24 October Maxwell asked General Somervell to give the plants top priority because of their urgent need. On 2 January 1943 Maxwell asked Somervell for ten additional plants.[36]

The ultimate program was on a smaller scale. On 17 May a contract was approved between the Ordnance Department and the Overseas Steel Container Corporation, a subsidiary of the U.S. Steel Corporation, for management, operation, and maintenance of plants for the production of steel drums, pails, and jerrycans in North Africa and the Middle East. By Anglo-American agreement in June USAFIME was responsible for five container plants as part of a coordinated group to receive quotas established by the War Office, London, and allocated by the Deputy Director of Works, Middle East Forces, Cairo. In August it was settled that after installation by the Corps of Engineers operation of the plants would be by the Overseas Steel Container Corporation under ordnance supervision.[37]

Meanwhile arrangements were made for establishment within this general program of a container factory at Abadan. In an exchange of views on the subject in April 1943 between American headquarters at Cairo and Tehran, General Connolly stated that, although the pro-

[36] (1) Ltr, Maxwell to Marshall, 21 Sep 42. Cited G–5 File 457, Hq AMET. (2) Rad AMSME 2095, Maxwell to Somervell, 24 Oct 42. AG 463.7 (13 Jun 42–30 Apr 43), Hq AMET. (3) Rad AMSME 3618, Maxwell to Somervell, 2 Jan 43. G–5 File 457, Hq AMET.

[37] (1) Contract, 17 May 43, was for estimated cost of $5,105,356, at a fixed fee of $299,400. 160 Contract Overseas Steel Container Corporation, SL 8982. (2) Ltr, Gen Giles to GHQ, MEF, 24 Jun 43, citing Ltr, Gen Crawford to Lt Gen Sir Wilfred Lindsell, 5 Jun 43, and reply, 13 Jun 43. G–5 File, Can and Drum No. I, Hq AMET. (3) Ltr, Ord Off, USAFIME, to CG, SOS, USAFIME, 24 Aug 43. Same file.

posal to set up a plant at Abadan was one for determination at Washington, it was the view of both the American and British commands in his area that no need for such a plant existed. General Crawford, commanding Services of Supply, USAFIME, replied that the matter had been studied from a theater point of view and agreement with the British had been reached.[38] Plans, therefore, went ahead, the British constructing the necessary buildings at Abadan for three American plants—one for jerrycans, one for 36-imperial-gallon drums, and a third for U.S. 55-gallon drums. There was a temporary crisis in August, after the buildings were erected and the plants were arriving for installation, when there was a sudden decision to ship everything to Bahrein Island, but this was rescinded in a few days.[39] The Abadan factory was to be operated by the Overseas Steel Container Corporation as long as required to train British personnel. It was agreed that in return for supplying the materials for cans and drums, the British would take the full output during 1943. No agreement as to costs or distribution of output was reached. It was assumed that the British, who required containers for their campaigns in Southeast Asia, would assign production where most needed.

It is not clear from the record whether the plants at Abadan were ever American operated, although Americans, acting under the responsibility of the Commanding General, PGSC, instructed the Indian Army labor battalion, which worked the plants, in their operation and lent a hand later on from time to time when their knowledge of the machinery was required to surmount difficulties or to get things started again after breakdowns.

Since the output was to be wholly allocated to British uses, it was recommended early in September, before operations began, that the plants be turned over to the British. In October Washington relieved General Connolly of his responsibility for the container plants at Abadan, the Overseas Steel Container Corporation faded from the picture, and the British took over responsibility for operation, while title to the plants was held by the Commanding General, SOS, USAFIME. The Abadan plants appear to have begun operation late in 1943 and, except for the jerrycan plant, to have continued into 1945.[40]

[38] Rad TN 3099, Gen Connolly to Gen Brereton, 5 Apr 43; and reply, Gen Crawford to Gen Connolly, 10 Apr 43. AG 600.12 Abadan, Hq AMET.

[39] Penciled notation on copy of Rad AGWAR 2227, 27 Aug 43. AG 635 Drum Assembly Plant, Hq PGC.

[40] (1) Memo, Ord Off, SOS, USAFIME, for CG, USAFIME, via G–4, 8 Sep 43. AG 635 Drum Assembly Plant, Hq PGC. (2) Rad AMPSC 1599, to Gen Connolly, 7 Oct 43. Same file. (3) Memo, Overseas Contracts Sec, Field Serv Div, OCofOrd, 9 Oct 43. Same file. (4) Ltr, CofS, PGC, to CG, ASF, 20 May 45. AG 635 Pertinent Correspondence—Drum Plants—Contl Br, Opns Div, Hq PGC.

Meanwhile General Connolly, who still found no necessity for the plants and believed that neither the British nor the Americans would use any large production from them, accepted the decision of higher authority to proceed anyhow and in September 1943 suggested locating one or two 55-gallon drum plants at Bahrein Island. This would provide, in case of loss or damage at the Abadan plant, an alternative plant seven or eight days nearer the CBI theater than those in the Mediterranean area. The recommendation was shortly followed by conclusion of a contract with BAPCO to establish and operate at their works two 55-gallon plants.[41] The War Department was to furnish the necessary manufacturing machinery, some of which was shipped to Bahrein from Mombasa, to reimburse the contractor for half the cost of the necessary buildings and to offer him the first opportunity to purchase the machinery at the termination of the contract. In turn the contractor was to manufacture drums at a fixed price per completed drum in quantities ordered by the government and to furnish all labor and materials not specified in the contract. Since the government controlled the rate of production, the contractor was to be paid a stated monthly sum for all fixed charges not affected by the rate of production. Administratively the Bahrein plant's connection with General Connolly's headquarters was through Plants Branch, Operations Division, which co-ordinated operations through the commanding officer of the Gulf District. The Plants Branch also acted as liaison agent with the Petroleum Adviser, Operations Division, and reported monthly the number of drums necessary to produce. It also maintained close contact with the Assistant Chief of Staff for Supply on matters pertaining to materials and equipment. As a statistics office, Plants Branch obtained weekly and monthly production reports and retained copies of receipts for plant equipment and materials used by the contractor.

The Bahrein plants went into production on a two-line basis on 1 August 1944 and almost immediately shut down because of lessened demand for 55-gallon drums and stood by for instructions from the Army-Navy Petroleum Board. By November, when authority was received from Washington to devote total output to British requirements in Southeast Asia, operations were on a three-shift basis. Total production of drums to the year's end was 41,307 accepted units. Because of increased labor force, better contractor supervision, and the

[41] Rad AGWAR 2444, 20 Sep 43. AG 635 Drum Assembly Plant, Hq PGC. The contract, W–7366–Ord–1, was signed between 9 October and 21 November 1943, according to memorandum cited note 40(3). There was also a contract, W–7366–QM–8260, with BAPCO.

arrival of needed equipment, production for the month of February 1945 reached 41,691, rising in April to 48,949.[42]

Meanwhile, in March certain complications arose as to continued operation of the plant. A general policy had been evolved in Washington to sell all American drum plants in areas where the United States had no supply responsibility, and BAPCO had evinced an interest in buying the two drum plants, War Department owned, at their refinery. Responsibility for over-all policy regarding the plant now rested with the Commanding General, Army Service Forces, and the Army-Navy Petroleum Board, who advised Headquarters, PGC, that production was to continue as long as required to meet operational demands for containers. Although a stock pile of some 76,000 drums had accumulated at Bahrein and supplies on hand there were sufficient for six months' production at the monthly quota of 40,000 units demanded by the British, Abadan production, owing to shortages of steel and supplies there, had fallen off drastically and might fall farther. The Bahrein plant was thus useful in supplementing Abadan production; but in the opinion of Headquarters, PGC, it seemed, even in these circumstances, to be producing more than conditions warranted. Accordingly, authority was requested from the Army-Navy Petroleum Board to reduce production to a one-line, two-shift basis at a minimum target of 40,000 per month until the British could demonstrate their ability to move out the accumulated stock pile. Permission was granted, effective 1 May, and the authorities at PAI Force were so informed.[43]

Up to 1 May Bahrein's cumulative production amounted to 188,346 accepted drums. During that month, however, with a return to the one-line, two-shift plan of operation, and because of breakdowns of machinery which, in spite of appeals to AIOC, Middle East Forces, Africa–Middle East Theater, and India, could not be replaced, the monthly total fell to 23,665 accepted units, but rose again sharply next month.[44]

The American decision to reduce production had been met with British demands for an increase. At first the Americans countered with the suggestion that, since the Bahrein and Abadan output was solely destined for British uses in Southeast Asia, the Abadan plants be moved to India and their production taken up by the plants at Bahrein and

[42] Hist Rpts, Plants Br, Opns Div, Hq, PGC: (1) 4 Oct 44. PGF 125–U. (2) 15 Jan 45. PGF 125–X. (3) Table 14.

[43] (1) Hist Rpt, Plants Br, Opns Div, Hq, PGC, 2 May 45. PGF 125–B. (2) Extract, 21 Mar 45, Rpts, Ex Off to CofS, PGC. PGF 251–A, 251–B. (3) Rad WARX 60174, 29 Mar 45, referred to in Rpt cited in (1). See also Extracts, 23, 30 Mar 45, Rpts, Ex Off to CofS, PGC. PGF 251–A, 251–B. Responsibility for filling the drums rested with BAPCO and PAI Force, the War Department's interest being solely in maximum production.

[44] Table 15.

those in the Africa–Middle East Theater. Before this went any further the progress of the Japanese war determined Washington that continued operation of American-sponsored drum plants in the Persian Gulf Command was inconsistent with a policy of troop withdrawal and redeployment, and in June PGC was advised that the British Army Staff in Washington had been notified to that effect.[45]

In accordance with this decision the Director, Readjustment Division, Army Service Forces, declared surplus Abadan plants 166–A, 187–A, and 127–B, along with the Bahrein plant, effective 1 August 1945, and terminated the Bahrein contract as of 31 July. Plants Branch, Operations Division, PGC, prepared schedules of equipment for the Supply Division, Headquarters, PGC, to process prior to turning over to the Army-Navy Liquidation Commission for disposal. It was later discovered that, because of provisions in the Bahrein contract, that plant could not be declared surplus, and the Jersey City Quartermaster Depot was designated by the War Department to negotiate with BAPCO for sale.[46]

Supply of POL Within the Command

Inherent in its primary mission as a supply line was the responsibility of the Persian Gulf Command and its predecessors for the movement of POL.[47] Within the area of the command, of course, lay not only a large part of the civilian population of Iran with its normal petroleum demands, but also those organizations, principally military, of Iranian, British, Soviet, and American nationality, which required petroleum products in large quantities, both to fill the normal housekeeping requirements for maintenance of military establishments and forces and for the operation of shipping, ports, highway convoys, railways, and industrial enterprises such as motor vehicle and aircraft assembly plants.

The top authority over production and distribution of petroleum products in the area was the Baghdad Petroleum Advisory Committee,

[45] (1) Extract 25 Apr 45, Rpts, Ex Off to CofS, PGC. PGF 251–A, 251–B. (2) Ltr cited n. 40(4). (3) Rad WARX 280146Z, Jun 45. AG 635 Pertinent Correspondence—Drum Plants—Contl Br, Opns Div, Hq PGC.

[46] Hist Rpt, Plants Br, Opns Div, Hq, PGC, 10 Aug 45. PGF 125–F.

[47] Unless otherwise noted, authority for facts and statistics in this and the next section rests upon: (1) HOTI, Pt. I, Ch. 8, sec. 3, History of Movements Branch, Operations Division, Hq, PGC, prepared by Movements Branch, Operations Division, with Supplement by Laurence P. Corbett, and statistical appendix, Complete Summary of Port and Transportation Agencies Performance of PGC Operations through 31 May 1945, 5 July 1945. PGF. Certain figures given in the text are the result of new computations based upon statistics in the Supplement. (2) Memo, Maj Lester S. Thompson, Petroleum Adviser to CofS, Hq, PGC, for CG, PGC, 28 Jan 44; sub: Relating to the Procurement, Storage, and Distribution of Petroleum Products. PGF 8–T. (3) Rpt cited n. 1(1).

upon which a representative of the American command served with representatives of the AIOC and affiliated companies, PAI Force, the RAF, and the Petroleum Division of the British Ministry of Fuel and Power, London.[48] The findings and recommendations of the committee's monthly meetings were submitted to the ministry in London, and through it to the U.S. Army-Navy Petroleum Board at Washington. Production and distribution were interpreted as covering oversight of responsibility and accountability for consumption, and, of course, all plans for distribution including highway, barge, rail, and pipeline transport, and the construction, location, and operation of container and filling plants. In the practical application of these responsibilities within the area, final decisions and allocation of responsibility for carrying them out were arranged by mutual agreement between the British and American local commands. This allocation shifted during the period of American activity in Iran, from rather incidental responsibility on the part of the Americans for their own early projects in 1942, to the fullest measure of responsibility in 1944–45, the period in which the American command virtually took over all Persian Corridor transport direction and control. During the period 1941–45 many agencies carried petroleum products within the area—agencies both civilian, like the United Kingdom Commercial Corporation and the AIOC, and military, like PAI Force, the RAF, and Soviet military organizations. American statistics cover petroleum hauled by American-operated transport agencies, but do not necessarily cover all petroleum hauled, non-American records being unavailable.

The complexity of the task of petroleum distribution can be gauged by a listing of the consumers within the area. Within the jurisdiction of the successive American commands, of which the Persian Gulf Command was the last, the largest consumers of fuel oil, which originated in Iran, and of lubricants, which came from the United States, were the Military Railway Service, which operated the railway, and the Motor Transport Service, which operated the convoys of trucks. The ISR had its own purchasing contract with the AIOC, but American petroleum statistics include, nevertheless, not only the fuel thus purchased to run the railway, but also the petroleum products carried over the railway for Soviet account under the several protocols and for all other purposes. Other requirements for petroleum products within the American command included that for operation of posts, camps, and stations; aviation gasoline (in addition to that carried north for Soviet account) for the American Air Forces and ATC; and POL

[48] State Dept Rpt, British Controls in Iraq, by Richard E. Gnade, 25 Feb 44. Mid 330 Great Britain, 3 Apr 44 (12 Mar 43).

for the Eastern Command, briefly located inside Soviet territory in the shuttle-bombing program which was supplied through the Persian Corridor. There were also needs connected with the testing and flying of USSR aircraft assembled in the Corridor.

Other consumption in the area, for which at one time or another the transport facilities operated by the American forces hauled petroleum products, included Soviet air force and armies, PAI Force, Soviet military transport, the newly assembled Soviet trucks, newly assembled UKCC trucks, and the Iranian Army, Gendarmerie, military transport, and civilian needs. It is notable that in 1943–44 nearly twice as much fuel was delivered for Iranian domestic and civilian commercial use as ever before, and that the amount was further increased the following year in the face of all other demands that were being met within the Corridor. This was the result of increased oil production and refining as well as of vastly increased transportation facilities. Although during the Allied occupation Iran experienced inflation and a period of food shortage, the presence of foreign forces was accompanied by increased domestic civilian consumption of petroleum products. In spite of the increased civilian consumption, American officials stated that there was no basis for the complaint of two Soviet officials in August 1943 that the "private motorist in Persia" was getting gasoline needed by the Soviets for the battles of Orel and Kharkov.[49] Over-all Soviet petroleum requests were fully met.

After General Connolly's arrival in the field in October 1942, a Movement Division of the Persian Gulf Service Command was set up in Basra. Since the previous July an American movements representative had performed liaison there between the small American detachment and the British forces and continued in general liaison work including the co-ordination of information relating to the first large-scale arrival of American troops in December 1942. The new Movement Division was officially activated on 5 January 1943 at Khorramshahr, with three branches, including a Transportation Branch from which, by a reorganization of 15 March 1943, developed the Oil Section, Movements Branch, Operations Division. The Americans took over from the British on 1 May 1943 the control of USSR cargoes. The setting up of a separate Oil Section, as distinct from a Transportation Section within Movements Branch, emphasized the need for an office to deal with control and distribution of tank cars. Although after January 1945 AIOC became responsible for maintaining full storage by means of an agreed allotment of tank cars, PGC still had to account for

[49] Notes of Mtg held at Soviet Transportation Directorate, Tehran, 18 Aug 43. AG 337, Hq PGC.

operating delays in transit. Therefore, the Oil Section continued actively until May 1945 when it was incorporated into the Inland Traffic Section.

To represent the command on the Baghdad Petroleum Advisory Committee, to act as technical adviser on all petroleum matters, and to co-ordinate petroleum activities within the theater, the Office of Petroleum Adviser was established in March 1943 and the adviser attached as special assistant to the chief of staff. On 23 December 1944 the office was transferred to Operations Division and was dissolved on 1 August 1945.[50] The petroleum products obtained by the American forces from the AIOC were supplied on reciprocal aid by requisitions made upon PAI Force.

The movement of a basic commodity like petroleum must be accurately traced and exactly measured if it is to be statistically evaluated with relation to other types of cargoes. In the Persian Corridor the numerous agencies, with their different record-keeping systems, make a valid statistical analysis of petroleum movement performed by the U.S. Army impossible. Totals, unrelated to other figures, are difficult to comprehend and not significant in themselves; but they furnish the only materials for evaluation.

American Army operation up to 31 March 1945 consumed 537,804 long tons of petroleum, exclusive of lubricants. The ISR, whose cargoes were proportionately the greatest in the Corridor and are reliable as indicators of movement, carried 4,638,095 long tons north of Andimeshk from August 1942 through May 1945. Of this total, 2,934,443 long tons, including petroleum, were destined for the USSR. One source states that of that Soviet-destined tonnage carried by the ISR, 653,659 long tons of petroleum were delivered at Tehran.[51] The Soviet share of total cargoes hauled north of Andimeshk by rail during this period was 63 percent; 40 percent of total rail tonnage was petroleum, more than one third of which was for Russia. The total rail cargo hauled north of Andimeshk in this period and not destined for the USSR was 1,155,041 long tons, more than half of it oil. The railway itself received 258,695 long tons in bulk oil; 553,014 long tons were for the Iranian civilian economy; and the balance was for American, British, and Russian military and civilian agencies in the area.

The figures indicate that getting oil to many different consumers was no small task. Getting oil to the USSR, the high-priority consumer

[50] GO 85, Hq, PGC, 30 Jul 45.

[51] This figure is from History cited n. 47(1). The Report on War Aid Furnished by the United States to the USSR, Foreign Economic Section, Office of Foreign Liquidation, Department of State 28 November 1945, gives the figure 555,202 long tons of Abadan petroleum products delivered to the USSR. The difference was petroleum imported into Iran.

of the Persian Corridor for whose supply the American command primarily existed, was a special problem, additional to the general problem of oil transport.

Gasoline for Russia

In the spring of 1943 it was apparent that the exigencies of the struggle on the Eastern Front would soon require the Soviets to call for greatly increased supplies of aviation gasoline from the Western Powers. On 12 May a message went from General Somervell to General Connolly requesting advice as to the feasibility of sending bulk shipments of aviation fuel via the Persian Corridor.[52] The Aviation Gasoline Program, world-wide in scope, was based, in the Persian Corridor area, upon an agreement reached in following months whereby the AIOC made available for Russian delivery amounts of high-octane aviation gasoline to be delivered by the American-operated transport agencies. The gasoline was supplied on reverse lend-lease, subject to delivery in the United Kingdom of equivalent amounts of petroleum from Western Hemisphere sources to compensate the United Kingdom for AIOC products normally intended for their uses. The Persian Gulf part in the program came into effect as of 1 July 1943 under the Third (London) Protocol and continued through the Fourth (Ottawa) Protocol, which was effective through 12 May 1945. Over half a million long tons thus went to the USSR from the Abadan refinery.

Preliminary estimates in May 1943 were for haulage of 5,000 long tons per month. To superimpose the new burden upon the already increasing transport demands in the Corridor required not only new and complex arrangements for railway tank cars, highway haulage, shipping—including tankers and barges—storage facilities, and container filling, but development of new transport means such as pipelines, and a high degree of co-ordination of all these factors. As arrangements developed, capacity estimates by July 1943 had increased to 10,000 long tons per month and were projected at that level through June 1944. By November 1943, however, it was possible to raise the target to 25,000 long tons per month, and in the following July the target was stepped up to 37,000, of which 23,000 were to be carried in railway tank cars and 14,000 in drums. The figure of 37,000 long tons per month continued to April 1945, dropped in May to 25,000, and on 1 June 1945 the program was terminated.[53]

[52] Rad, Somervell to Connolly, 12 May 43, AG 337, Hq, PGC, quoted HOTI, Pt. VII, Ch. 7, Information on Gasoline to Russia, by Ogden C. Reed. PGF.

[53] During 1944 planning included commitments for FRANTIC, the U.S. Army Eastern Command shuttle-bombing mission located in the USSR. A large proportion of the tonnage hauled over the ISR during June, July, August, and September 1944 for that mission consisted

The steady increase in USSR bulk petroleum products (high-octane gasoline and alkylate), carried from September 1943 on into 1945, was accomplished without affecting the distribution of petroleum for other uses within the Corridor. This achievement was made possible through a number of factors. The fleet of tank cars available in July 1943 for USSR petroleum was only forty cars. By March 1945, 400 tank cars transported 32,855 long tons of high-octane gasoline. The tank car turnaround period of fifteen days in 1943 dropped to half that in 1945. Economies and efficiencies all down the line contributed; but the most significant factor was the erection of new installations, called Petroleum Base 4 (P–4) and Petroleum Base 7 (P–7) near Khorramshahr.

Although by the summer of 1943 the AIOC in conjunction with PAI Force had already established a number of fuel bases for reception, storage and distribution of petroleum, the increased requirements called for additional facilities. A site two miles north of Khorramshahr adjacent to the PGSC's Ports Service Motor Pool was selected and in August 1943 construction of P–4 was begun. Leveling of the area and laying the concrete floor was accomplished by American Khorramshahr Post engineers while above-ground facilities were constructed by the British Royal Electrical and Mechanical Engineers. The AIOC installed pipelines and distribution points and on 25 November 1943 rail tank cars began to move north out of P–4.

P–4 thus became the terminus of pipelines from the Abadan refinery. At this base fuel was distributed to tank cars by use of small pressure pumps. The installation also filled drums for truck haulage. In addition it served as a transportation clearing yard for rail and truck movements to the Soviet receiving points on the Caspian Sea. The drumming of gasoline, with which American troops were particularly concerned in this co-operative Anglo-American undertaking, did not commence until May 1944. Responsibility was divided among numerous agencies. AIOC supplied the gasoline; U.S. Khorramshahr Port Transportation along with British Movement Control arranged for transport scheduling; the 6th British Petrol Staff and the 153d (later 154th) Indian Depot (Indian Army Service Force) filled tank cars and tested, washed, and filled drums; while American personnel from Khorramshahr port handled the loading and unloading of drums

of aviation gasoline. The tonnages hauled by rail north of Andimeshk for FRANTIC were: 1,230 long tons, June; 6,547, July; 678, August; and 58, September. A radio from Connolly to Somervell indicates that the American command was prepared to haul 12,000 long tons for FRANTIC in August. The reduction and eventual conclusion of that mission made this unnecessary. Rad 28 Jul 44, AG 337, Hq PGC, quoted History cited n. 52.

and the spotting of rail cars and trucks. Russian inspection officers completed the P–4 team.

P–4 had been in operation something over a year when acute need for further facilities set the Americans to construction of the near-by sister installation, P–7, designed to serve for 100-octane fuel, while P–4 would handle 70-octane. Construction was quickly accomplished; but by January 1945, P–7 became a storage area and P–4 handled all 100-octane gasoline. At the end of April the U.S. Army withdrew, handing over to PAI Force, although the American Port Transportation Office continued to assist in movement matters. During the period of its operation P–4 cased and shipped over 275,000,000 gallons of 70- and 100-octane fuel to Soviet receiving points. The base averaged 1,200 tank cars or over 9,000,000 gallons of gasoline monthly by rail and approximately 2,500,000 gallons in drums monthly.[54]

[54] Hist Rpt, Ports Serv, Apr 45. PGF 26–B.

CHAPTER XVI

Truck Transport

Construction, assembly, and petroleum operations were vital but secondary parts of the American mission. By directive of the Combined Chiefs of Staff the primary mission was transport. An American trucking service, first proposed in May 1942 by General Somervell, was regarded by the SOS planners as supplementary to existing British trucking organizations.[1] It therefore received a priority lower than that accorded to the American organizations for ports and railway. This was not because the planners failed to recognize urgent trucking requirements. The crisis of midsummer 1942 had demonstrated that, until rail capacity in the Corridor could be vastly improved, the only hope of dealing with mounting backlogs of cargo at the ports was to strengthen the existing British motor transport system, as operated by the United Kingdom Commercial Corporation and British military trucking units. The assignment of third priority status to an American trucking organization resulted rather from the long-term view that, since there was no possibility of organizing and shipping a fully functioning American trucking outfit to the Corridor in time to affect the immediate problem that faced the planners in August 1942, it was best to encourage such local assistance to UKCC as was possible while organizing and putting into the field an American motor transport service. American trucks would strengthen the British services. Unlike the American port and rail services, the Motor Transport Service was not to supplant any existing British activity.

In a country of desert and mountain, ill supplied with highways, relatively waterless, and subject to extremes of climate, transport by road was less efficient by all measurements than bulk transport by rail. Furthermore, granting adequate capacity both by road and rail, there would always be cargoes that were not truckable; and granting maximum rail development, the need for truck operations would correspondingly decrease. Planning for a motor transport service was thus subject to greater contradictions and more uncertainties than was

[1] Rad 177, Somervell to AMSIR, 9 May 42. AG 400.3295 (8–9–41) Sec 5.

planning for rail expansion. A trucking organization, even as a temporary expedient, required highways adequate to heavy usage. To this contradiction between permanent highways and temporary planned use were added the basic uncertainties existing at the time the SOS Plan was being evolved. The SOS planners' estimates, which depended on important unknowns such as the routes to be used and the extent to which an American motor transport service was to supplement UKCC operations, were subject to further variables inherent in the nature of truckable cargoes. Estimates relying upon a steady flow of tonnages were at best tentative.

In its provision for trucking the SOS Plan therefore confined itself to a statement of general intentions. Its estimate of required personnel proved accurate enough: 5,291 men for road operations plus an additional 4,515 for highway and vehicle maintenance. Estimates of required vehicles and anticipated targets, on the other hand, were not achieved. The hope of the planners to supply 7,200 trucks of 7-ton average capacity was not realized, and all calculations based upon the use of larger trucks were overturned when the Motor Transport Service found it would have to use whatever vehicles it could get. In the matter of target estimates, the SOS planners were in no position to indicate what proportion of the 172,000 tons of ultimate monthly road capacity it expected the MTS to handle and what proportion was for British agencies, nor could the plan indicate precisely what part of the total it expected to be USSR tonnage. With only the vaguest of maps, MTS launched itself upon a road wrapped in mists and marked by unexpected turnings.

The Preliminaries

Planning, early organization and procurement, overseas shipment, and early operations were all carried forward under the necessity of adjusting the concepts of the SOS Plan to field realities. On 9 October 1942, shortly after approval of the SOS Plan, Headquarters and Headquarters Company, MTS, was formally activated at Camp Lee, Virginia, with Col. Mark V. Brunson as director. He was assisted by two Regular Army officers and three experienced truck fleet operators and maintenance experts commissioned from civilian life.[2]

[2] Unless otherwise noted, this chapter draws upon: (1) Historical Outline of Motor Transport Service 1616-D, U.S. Army, PGC, PGF 131-B. (2) Monthly Hist Rpts, MTS, 1 Mar 43 through 31 Oct 44, with atchd Accident Rpts. PGF 131. (3) Monthly Rpts of Opns, MTS, for Mar, Jun, Jul, Aug 43. PGF 131. (4) History of the Motor Transport Service [unsigned and undated but late 1944]. PGF 131-W. (5) HOTI, Pt. VI, History of the Motor Transport Service, by Wallace P. Rusterholtz. PGF. (6) Plan for the Operation of the Motor Transport Service, PGSC, by Col Brunson, 15 Jan 43. PGF 131. (7) Functions

Personnel estimates called for two truck regiments totaling 3,270 officers and men. This somewhat greater than standard strength allowed for unpredictable operating situations. A minimum of two automotive maintenance battalions—one medium and one heavy—was provided for, with a considerable assortment of engineer troops for highway construction and maintenance and for construction of sheds, shops, camps, and other necessary facilities. Recruitment was marked in its first stages by haste and confusion; however, it was distinguished by the effort to obtain from the ranks of experienced trucking men both top experts and the great body of drivers, mechanics, and dispatchers upon whose skill and fortitude hung the ability to throw an organization together in short order. The quartermaster authorities, to whom Headquarters 1616 delegated the trucking problem early in October, appealed to the American Trucking Associations, Inc., at Washington for advice and assistance in speedily assembling adequate numbers of experienced men. In five days the organization, through telegrams to 350 regional members of its Special War Committee who in turn vigorously stimulated enlistments locally through handbills and radio, brought in to the Army from the ranks of the civilian trucking world 5,377 applications for enlisted grades and 263 officer candidates. The response exceeded expectations and was due, in part, to the fact that word got around that the new recruits would be eligible for advanced grades and would be exempt from many features of Army training. When this impression was corrected—as it was promptly—enthusiasm somewhat diminished. Evidence conflicts as to how many men were actually inducted from among the applicants solicited; but the 516th Quartermaster Truck Regiment was largely staffed by officers who had been fleet maintenance men, traffic experts, and specialists in fuel distribution and cargo handling, and manned by experienced dispatchers, drivers, and mechanics. The other regiment called for by the SOS Plan, the 517th, suffered from the reaction which set in among truckmen after the confusion over promises had been cleared up. Its strength was largely composed of assignments and transfers from other troop units in the Army and not of men with specific trucking skills and experience.[8]

of MTS and Troop Units Assigned Thereto. PGF 122. (8) For data on performance and civilian personnel see Tables 4, 6, 13 and Charts 2, 6.

[8] The recruiting campaign was conducted in consultation with Army officials. Colonel Brunson and others conferred at the American Trucking Associations' headquarters in Washington and worked closely with the association; there were no written instructions or commitments. The present account draws upon Interv with John Lawrence, Mgr, American Trucking Associations, 16 Mar 50. Hist Rpt, 2d Bn, 516th QM Truck Regt, Nov 42, PGF 52-2-J; and pages 2-3, Outline cited n. 2(1).

Step by step the organization took shape. In November Colonel Brunson and three officer assistants arrived by air at Basra to investigate routes and sources of fuel supply; to accept some two hundred trucks turned over by UKCC and the British Army at Bushire and Tehran; and to plan for establishment of MTS relay stations along the highway from Khorramshahr northward, for schools to train native drivers and mechanics, and for fleet operations. On 17 December the MTS was established as an operating service of the American command.[4] When command headquarters moved early in January 1943 to Tehran, MTS moved its headquarters there, too. In December 1942 the 429th Engineer Dump Truck Company and a First Provisional Truck Company, composed of men drawn from other PGSC units in the field, were assigned to MTS. Their first duty was to accept and assemble the trucks received from the British, and to drive administrative vehicles for the three territorial districts of the command. In January 1943 a school for training native civilian driver-interpreter-instructors was opened at Tehran. It turned out some seventy instructors and paved the way for the opening in February of a school at Andimeshk to train native drivers. The start of this enterprise was delayed until the arrival from the United States of Headquarters and Headquarters Company, MTS, from which its staff of instructors was drawn supplemented by graduates of the interpreter school. The roster of MTS was further strengthened in February by the arrival of the 3d Battalion of the 26th Truck Regiment, a Negro outfit destined to join the 517th Truck Regiment when it should complete its training and arrive in the field. In anticipation of the commencement of trucking operations, the 3430th Ordnance Medium Automotive Maintenance Company, an early arrival, was assigned in February to establish and man relay, service, and repair stations along the route from Khorramshahr to Kazvin.

The assembly of men and equipment, the laying out of service stations, and the gathering of data were among the preliminaries that had to be accomplished before regular American trucking service could begin. There were also problems related to the route itself which pressed for early solution. Because of the concentration of American activity at the port of Khorramshahr and the impossibility of manning, fueling, and provisioning more than one route, the highway north from there provided the inevitable route for the MTS. But no part of the highway to Kazvin, in December 1942, was fit for heavy and continuous traffic. The sector from Andimeshk south by the year's end was

[4] GO 11, Hq, PGSC, 17 Dec 42.

provided with a temporary roadway. Bridges and some road construction had been accomplished on the permanent road; but, thanks to the floods of March 1943 which washed away much of what had been built up to that time, construction of the permanent all-weather, two-lane highway from Khorramshahr to Andimeshk occupied the greater part of 1943. As for the northern sector, where the problem was the improvement of an existing road, the American engineer troops did not begin work until June. They progressed so well, along with companion British forces, that by the end of the year barely fifty miles remained unprovided with a hard surface.

The route from Khorramshahr to Andimeshk crosses a low, sandy plain, varying in elevation from 10 feet at Khorramshahr to 70 feet at Ahwaz and 500 feet at Andimeshk—windy, hot, and dry, swept in summer by dust storms and in winter by heavy rains. (*Map 4*) The Karun River and the Ab-i-Diz, roughly paralleling the road, run close enough to provide the flood hazard which proved so damaging just as MTS was going into action. Beyond Andimeshk the terrain is characterized by deep gorges and rugged mountains. Some of the ascents are abrupt and steep, occasionally rising as sharply as grades of 10 to 12 percent (roads in the United States seldom exceed 10 percent). A notable example of this is the Avej Pass (elevation 7,776 feet), the highest point along the MTS route. Heavy snowdrifts and bitter cold in winter, with temperatures dropping as low as 25° F., below zero, proved hazardous features of this 5-mile climbing section of the road.

Along this route, UKCC, which had been hauling Russian-aid, British military, and other cargoes since late 1941, had established a chain of repair and rest stations at Ahwaz, Andimeshk, Khurramabad, Hamadan, and Kazvin, with a northernmost terminus at Tabriz, capital of the province of Azerbaijan, well within the Soviet zone. Plans for a supplementary American trucking service over the same route had assumed the farthest destination. The SOS Plan had stated, "Truck convoys will pass over these routes to Tabriz, Pahlevi, and other delivery points to the Russians," and Colonel Brunson's January 1943 plan for operations listed Tabriz as the destination of first priority, with Chalus and Pahlevi, on the Caspian, following—all of them inside the Soviet zone. This understanding was confirmed in conference on 16 January with the Soviet liaison officer for lend-lease shipments, Colonel Zorin.[5]

Developments in February threw into doubt the several termini for American operations. The Soviets refused to issue passes to Ameri-

[5] Memo, Col Ward, Deputy Dir, MTS, PGSC, for CG, PGSC, 16 Jan 43, sub: Conf with Col Zorin. PGF 131.


Zenjan
Chalus
Kazvin
Takistan
Camp Amirabad
THEATER AND MTS HQ
TEHRAN
Camp Atterbury
MRS HQ
Avej Pass
Hamadan
Qum
Camp Schindler
Malayer
Sultanabad
Camp Scott
Burujird
Khurramabad
Dorud
Camp Gillies
Jelogir
Bolarud
Camp Kramer
Andimeshk
Dizful
Karkheh R.
Karun R.
Euphrates R.
Camp Lowe
Ahwaz
Cheybassi
Basra
Tanuma
Khorramshahr
Abadan
Bandar Shahpur
AMERICAN-OPERATED ROUTES
ROAD, OPERATED BY THE MOTOR TRANSPORT SERVICE
RAILROAD, OPERATED BY THE 3D MILITARY RAILWAY SERVICE
MOTOR TRANSPORT SERVICE STATION
50 0 50 MILES
APPROXIMATE
R. Johnstone

MAP 4

can soldier-drivers and workers and notified General Connolly that special application and arrangements would have to be made for sites for American camps near Tabriz, Zenjan, and the Caspian ports. Such applications, promptly made, went unanswered. Suspecting that the difficulty may have arisen from a conflict of overlapping Soviet jurisdictions, Connolly appealed to General Faymonville at Moscow for help and warned that if the destinations planned for were not available, MTS cargo would have to be dumped at Kazvin, on the border of the Soviet zone, to be carried forward from there by the Soviet forces. On 19 February, no change having taken place in the situation, General Connolly wrote to Gen. Anatoli N. Korolyëv, Chief of the Soviet Transportation Department in Iran, that all movement orders to American troops beyond the zonal border had been revoked. By 1 March Kazvin was agreed upon as the delivery point for MTS cargoes and, despite a change of mind by the Soviets within a week, when they again suggested that the Americans deliver cargo to the Caspian ports and Tabriz, Connolly held his ground and so reported to the American Embassy, Moscow, and to General Marshall. Although the Soviets made a specific request in June for delivery of cargo at Pahlevi, Kazvin remained the American terminus with the exception of a brief period between September and November 1944 when special MTS convoys, equipped with their own radio communications, went through to Tabriz. The situation recalls the similar uncertainty of Soviet policy in the matter of the terminal checkup stations which were a part of the system for delivering assembled motor vehicles.[6]

Meanwhile in January an understanding was reached with the British on the gradual meshing of the new American trucking operation with the existing services of UKCC. At a meeting attended by General Connolly for PGSC, General Selby of GHQ, PAI Force, and R. H. Evans, Managing Director of UKCC, it was agreed that by 1 March a small American fleet could be assembled and manned to begin trucking as far south as the condition of the road permitted and to continue to whatever northern terminus was being used at that date. Pending the time when sufficient men and vehicles would permit full-scale MTS operations, the Americans would act as unpaid contractors for the UKCC fleet and UKCC would make no demand upon the USSR for

[6] (1) Ltr, Gen Scott, CofS, PGSC, to Col Zorin, 5 Feb 43. PGF 131. (2) Rad TN 1162, Connolly to Faymonville, 16 Feb 43. PGF 131. (3) Ltr, Connolly to Korolyëv, 19 Feb 43. PGF 131. (4) Rad TN 2054, Connolly to Standley for Faymonville, 12 Mar 43. PGF 131. (5) Rad TN 2056, Connolly to Marshall, 12 Mar 43. AG 400.3295 Russia, Hq AMET. (6) Ltr. Connolly to Korolyëv, 4 Aug 43. PGF 131.

payment for carrying goods by MTS trucks.[7] The MTS would use UKCC and British military staging camp facilities and services along the road and was to be responsible for guarding its vehicles and for supervising their loading and unloading, while UKCC would arrange for loading and unloading and would perform all accounting. It was further agreed that when MTS went into full-scale operation on its own, UKCC would transfer its facilities at Andimeshk and appropriate adjustments in traffic control of the highway would be made. From then onward, during a period of anticipated rising tonnage, UKCC would serve as an unpaid contractor to MTS. This last provision did not become effective. Concerning lend-lease vehicles, parts, equipment, and supplies there was some disagreement. The Americans proposed that as these had been allocated to the British for transporting Russian-aid cargo and since that function was being assumed by the Americans all such equipment as was in storage, en route, or on order should be consigned to PGSC for proper allocation, General Selby disagreed, stating that he understood allocations would be made by the British in consultation with the Americans. The maturing of MTS as an operating agency of PGSC eventually eliminated occasion for disagreement on this point.[8]

The Trucks Start Rolling

Although there was a small amount of loading activity in late February, MTS operations began officially on 1 March when some 400 trucks started moving Russian-aid cargo out of Andimeshk. The road south of there was not yet usable for regular service. Inasmuch as the 516th Truck Regiment did not reach the field until May, the 517th until July, and other increments of strength and equipment until November, early operations were on a small scale. Available MTS manpower was supplemented by drawing upon other PGSC units; and as MTS strength, before May, was heavier in mechanics and maintenance men than in drivers, these categories were called upon for duty in both capacities. The small fleet of trucks grew by fall to about 2,500 vehicles, reaching by September 1944 a total somewhat in excess of 6,000. Smaller than the fleet projected in the SOS Plan, the total nevertheless

[7] The size of the UKCC fleet was estimated by Lockard, as of 1 August 1942, as 1,300 lend-lease trucks directly operated by UKCC and about 1,000 Iranian trucks operated on contract. The U.S. military attaché at Tehran reported on 5 December 1942 that UKCC was then operating directly some 1,330 trucks. Rpt 32, 5 Dec 42, MID 523.091 Iran 12–5–42 (11–23–42). How many of these vehicles were in service over the usable portions of the Khorramshahr–Kazvin–Tabriz highway it is impossible to state.

[8] Min of UKCC Conf held at U.S. Hq, 9:30 A.M., 20 Jan 43. AG 334.8, Hq AMET. Another copy PGF 131.

proved adequate for the shorter route actually used in MTS operations.

The first trucks out of Andimeshk drove as a closed convoy to Kazvin, arriving on 4 March. They were followed by daily departures; but the month's score in Russian-aid cargo came to only 3,570 long tons. (*Table 6, Appendix A*) Whether the score was high depended on how much truckable cargo was available and what MTS capacity was at the time—both being unknown quantities. Perhaps it should have been higher; in any case, March conspired to demonstrate in one compact lesson many of the problems that would have to be solved before MTS could make a significant contribution to inland clearance. The weather was unusually severe and Avej Pass was closed to traffic for one week of the month. It was to be months before systematic road improvement and maintenance north of Andimeshk started and the road was therefore a hazard in itself; for the rest of the early story, the word *inadequate* covers the numbers of men available for driving, maintenance, loading, and unloading and characterizes supply and security measures taken against pilferage of cargo.

General Connolly was not satisfied with the share of the inland clearance burden being borne by MTS and felt that tighter organization, improved operating methods, and more vigorous command could make better headway against the many handicaps so apparent in early March. It had been expected that, until the railway attained maximum capacity, trucking would play a large part in taking cargoes away from the ports, and, as the figures show, MTS tonnages through March 1943 were small. Accordingly, Connolly suddenly asked Colonel Shingler to take over MTS on 13 March. Shingler was tested by long experience in the area. He had come out in 1941 with Wheeler, succeeded to the command of the Iranian Mission on Wheeler's departure for India, and had served as commanding officer of the successor organizations until Connolly's appointment late in 1942. He then acted as chief of staff until General Scott's arrival in November. Next month Connolly put Shingler in command of Basra District, with jurisdiction over the critical early operations at the ports. Experience qualified Shingler as a number one trouble shooter. The task he assumed was both delicate and critical, for MTS was largely staffed with professional truckers from civilian life and military transportation experts. His most important contribution to increased MTS performance was the prompt introduction of the block system of dispatching vehicles, noticed later. He also instituted changes in truck servicing at transfer points and devised more expeditious methods of loading and unloading. The immediate result was doubled tonnage for April, and a score for September, the last month of Shingler's service, nearly seven times

that of March. Methods of trucking developed by him in the Persian Corridor were effectively used in Europe in 1944 in connection with the Red Ball Express.[9]

The administrative organization of MTS early assumed the basic form which, despite minor changes, was to continue to the end. The effort to distinguish functions as administrative and operational resulted at the start in an arrangement whereby serving under the director were an executive officer in charge of Administration and Supply Divisions and a manager in charge of Operations and Maintenance Divisions. This continued until Col. Glenn R. Ward, who had been manager, was elevated to the post of director and combined in himself both the administrative and operational functions of command. A fifth staff division, called Training, appeared in the March 1943 organization chart. It was charged with training both military and civilian drivers. The November 1943 chart shows this function, as regards military training, transferred to the Administration Division. A new division, for civilian personnel, handled all matters pertaining to the recruiting, training, pay, and administration of native employees. At MTS headquarters at Tehran branches for investigation, traffic control, accident prevention, and statistical analysis and compilation (a function different from documentation, which was performed within the Operations Division of MTS) were in November 1943 directly tributary to the office of the MTS executive. Later they were absorbed into the staff divisions.[10]

Provision was made in the earliest organization plans for field stations along the highway. These were to furnish necessary services, and as time went on they took on similar characteristics and functions, each being provided with a refueling point, grease pits, tool room, battery recharging unit, storage rooms, open sheds with bays for second and third echelon maintenance and repair, and accommodations to feed and house the drivers. Some of these functions were of a housekeeping nature and were exercised by the district commanders of the three territorial districts. Others, especially such as were uniquely applicable to a motor transport service (the provision, for example, of fuel oil, lubricants, and gasoline), became the specific responsibility of MTS. Field services were consolidated in time by the division of the

[9] (1) Interv with Gen Connolly, Pentagon, 18 Aug 50. (2) Notes supplied the author by General Shingler, 16 May 1950. (3) Shingler was succeeded on 22 September 1943 by Col. Glenn R. Ward, who joined MTS under Colonel Brunson at activation. He was relieved on 27 October by Brig. Gen. Joseph B. Sweet, who served until MTS was disbanded on 1 December 1944. Between September and November 1944, in Sweet's absence in the United States, Colonel Anderson served as director. Ltr, Gen Sweet to author, 12 Jul 50.

[10] Organization Manual for Mar 43; Charts for Mar, Nov 43, Oct 44. PGF 240.

highway route into two sectors designated as the Northern Division—from Kazvin south to Khurramabad; and the Southern Division—from Khurramabad to Khorramshahr. In October 1943, after the arrival of nearly all troops assigned to MTS, a rearrangement of stations brought all units of the 516th Truck Regiment into the Northern Division and placed all units of the 517th in the Southern Division. The respective division commanders, who were the regimental commanders, were responsible to the director of MTS for operation, maintenance, traffic control, cargo handling, supply, administration, discipline, and housekeeping in their divisions. The Northern Division functioned through main field stations at Khurramabad, Hamadan, and Kazvin, and minor stations at Burujird and Avej; the Southern Division maintained principal stations at Khorramshahr, Ahwaz, and Andimeshk, and a minor station at Jelogir. A separate office for an MTS port officer was at Khorramshahr.[11]

On the administrative side MTS developed, as an expression of its special operating function, not only a semiautonomy in supply which distinguished it from the other operating services of the command but also virtual autonomy (always within the limits governed by paramount British responsibilities) in security and related matters. After MTS began its regular trucking operations but before it was clear just what would be its eventual responsibilities in control of the highway route, its director proposed that all the military police in the command be assigned to MTS for use in traffic regulation. Half of the military police in the command, constituting B and D Companies of the 727th Military Police Battalion, were assigned to MTS and were placed under a command so all-embracing that the provost marshal was later forced to take steps to prevent use of MP's as truck drivers at times when MTS manpower was inadequate and desperate measures were called for to meet assigned targets.[12] The duties of MP's thus placed under MTS command were defined and their activities regulated by MTS.

Security, in the sense in which the word had meaning for MTS operations, covered several important aspects of the motor transport

[11] In April 1943 the Third Provisional Truck Company was diverted from duty with the MTS to haul U.S. Army cargoes from Khorramshahr to Ahwaz and Andimeshk (Table 6, n. *d*). Because it took over from port transportation officers incidental haulage difficult to co-ordinate with their main functions, and because it did not operate within regular MTS schedules, this company served, from 14 May 1943 to 27 September 1944, under jurisdiction of Movements Branch, Operations Division, suboffices at Khorramshahr and Ahwaz. Memo, Maj Gordon D. Cornell, Ex Off, Office of Port Comdr, Khorramshahr, 24 Apr 43. PGF 26–A.

[12] Report of Military Police Activities, PGC, United States Army, p. 121. PGF 130. Section VIII of this report, especially those portions (pp. 108–22) dealing with traffic control for MTS and with convoy problems, with exhibits and appendixes, is a valuable and detailed source of information.

mission. Fundamentally, it included the execution and enforcement of regulations established for the dispatch and movement of MTS vehicles; and, while there was no American responsibility for over-all security, MTS, by Anglo-American agreement, had to look out for its own property and the safety of its own troops and employees. The MP's, who were spread out from eleven police stations up and down the line of traffic—Company B within the Southern Division; Company D, the Northern—had therefore not only to keep traffic moving but to check individual trucks and drivers, to enforce rules for speed, distance, stopping, and starting, to prevent and to investigate accidents, to deal with pilferage, and to detect illegal haulage of cargo and passengers.

Full American control of the highway came slowly, following American responsibility for road maintenance and the steps by which UKCC reduced its own activity over the route. In fact, except for developments in operational procedures such as loading and unloading and highway and vehicle maintenance, nearly all the mileposts in the MTS story mark decisions and policies which can be related to the primary problem of traffic control—the dispatch and movement of trucks.

Two methods of dispatching MTS trucks were used. For the first four weeks they proceeded in normal military convoy units; but, as the shortage of trucks was greater than the shortage of drivers, this method, which entailed taking trucks through to destination with one driver, left trucks standing idle while drivers were resting. A secondary disadvantage arose from the climatic changes through which the route passed. A driver starting at the desert end in thin clothing met with snow and freezing weather north of Andimeshk and either proceeded with inadequate protection or had to stop to change, thus delaying the run.

On 28 March Colonel Shingler introduced the block system. The route was divided into four blocks with an MTS camp at the end of each—at Andimeshk, Khurramabad, Hamadan, and Kazvin—the four blocks requiring respectively 8, 12, 12, and 8 hours' running time. Under the block system drivers operated out of home stations, taking their trucks to the next station where they handed them over to the driver on the next block. After a rest period of a day or overnight, the drivers drove empty southbound trucks back to their home stations. Vehicles could thus be operated night and day, with time out only for servicing and maintenance. At the terminals of the route, schedules permitted time for thorough overhaul before redispatch of vehicles. Having served during the heaviest period of hauling activity, the block system was replaced on 28 August 1944 by the convoy system. In effectiveness there was little to choose between the two methods, given

the same number and type of trucks and equal resources in manpower. With limited equipment but ample personnel, on the one hand, the block system, permitting round-the-clock operation, was the more expeditious. On the other hand, the normal military convoy system required less elaborate station operations and smaller maintenance plants manned with fewer service men and, since the driver was responsible for his truck and cargo the full length of the trip, checking of cargoes at transfer points and need for precautions against pilferage were reduced.

The control of traffic passed through several phases. For some time Gulf and Desert District commanders were responsible for the control of MTS convoys south of Andimeshk, but exercised no responsibility for the other users of the road—Iranian civil and military vehicles, Russian soldiers driving trucks north from the Khorramshahr Truck Assembly Plant, and British vehicles under the control of the British Army, UKCC, and AIOC. In July, UKCC, having previously transferred its large rail-to-truck transfer installation at Andimeshk to MTS,[13] rerouted its heaviest traffic westward to the Khanaqin Lift, thus relieving the Khorramshahr–Andimeshk leg of the highway of a considerable burden as well as the section between Andimeshk and Hamadan. But at Hamadan the British trucks from Khanaqin and Kermanshah rejoined the American route and proceeded thence to Kazvin and beyond. Especially during the rest of 1943, when the whole length of the route from Khorramshahr to Kazvin was still under construction and repair, congestion continued. American traffic beyond Andimeshk had for some time been regulated by the MP's assigned to MTS; but, although an international Highway Traffic Committee met periodically to consult on traffic problems, no unified control—save that nominally provided by British security authorities—existed.

Congestion was not the only road hazard nor the only cause for delays and difficulties. Truck drivers were not experienced in military traffic procedures and had to be trained while operations continued. Military police were at the start inadequately trained. There were reports in April 1943 that some American drivers held to the center of the road to prevent others from passing; that Russian convoys were disregarding one-way traffic control and going through to the confusion of others; and that Russian vehicles parked in the middle of the road for repairs and rest. Many of the Soviet convoy trucks were driven by soldiers recuperating from battle wounds, assigned to the Persian

[13] As compensation the sum of 2,356,752 rials (over $70,000) was charged by UKCC to the British Army which in turn debited the amount to PGSC as reciprocal aid. Rad, Hq, PGSC, to Hq, PAI Force, 1 Jun 43. AG 095 UKCC, Hq PGC.

Corridor for a kind of holiday and making the trip for the first and only time over unfamiliar terrain. Native drivers of UKCC, MTS, and Iranian vehicles posed numerous problems. To centralize control it was therefore agreed that MTS should regulate traffic using the highway between Khorramshahr and Takistan, twenty miles south of Kazvin—civil and military, American, British, Iranian, and Soviet.[14]

The first fruit of the new responsibility was the introduction in September 1943 of a system of time bands to minimize congestion and to give necessary priority to MTS convoys, which in that month began a quick rise in delivered tonnage that was to attain in December the highest all-cargo and the second highest Russian-aid total achieved in the life of the service. Each hauling agency using the road was allotted specific hours of the day (time bands) during which its trucks were assured operating priority on certain sectors of the road. Outside the proper bands, the movement of as many as ten vehicles in any 24-hour period was permitted without restriction. MTS received two 5-hour bands per day in each direction when it had priority. Within each of the four time bands—two north and two south each day—MTS trucks moved in serials containing from twenty-five to thirty-four trucks each. Midway stations were established in all blocks where trucks were fueled, the oil checked, and the drivers given rest and food. In the southern area water stops were set up along the way. After eight to twelve hours of driving time trucks stopped for checkup and relief drivers took over.

Operations and Obstacles

The equitable sharing of the road among many users was an important accomplishment. It proved easier to bring about than the solution of such problems as training native drivers, reducing the rate of accidents, preventing pilferage, establishing communications, overcoming shortages in men and machines, and maintaining personnel and equipment in good working order.

The provost marshal of the command has stated that the program for training native drivers "reflects great credit" upon the MTS.[15] The condition of driver shortages was chronic with the MTS until well past the middle of 1943, and in times of special stress there were never enough military drivers to meet emergency increases in tonnages. To deal with the problem, mechanics, clerks, and even MP's were summoned to duty from time to time; men with only four hours' rest were

[14] Cir 73, Hq, PGSC, 13 Aug 43.
[15] Page 111 of Rpt cited n. 12.

sent back to the road; and men unfamiliar with the road or, for that matter, with driving great trucks or responding to convoy signals were pressed into service. The number of soldiers was limited; and therefore, very early, a systematic program was undertaken for training natives. The shift in March from the convoy to the block system called for increased overhead and station personnel months before the scheduled arrival of the first truck regiment from the United States could supply them.

A drive to recruit 3,500 natives as mechanics and drivers, begun in January 1943, was supplemented in that month by establishment of the school at Tehran to train driver-interpreters. Its seventy graduates furnished a pool of instructors for the three drivers' schools, the first of them opened at Andimeshk in February, followed by others at Hamadan and Kazvin. A supplementary diesel school held for specially selected drivers in December 1943 produced 800 qualified drivers. When it is realized that the pupils in these schools had most of them never ridden in a motor vehicle, that their instruction originated in English, that the American instructors did not understand and could not correct what their native interpreters said to the pupils, the difficulty of turning out skilled drivers and mechanics can be appreciated. Then, too, although there was plain bad driving among all nationalities using the road, the natives supplied a fancy variety of their own: Moslem fatalism which accepted the crash that followed rounding a sharp curve on the wrong side of the road as the will of Allah; or the instinct that met the discovery at the top of a steep hill that the brakes had ceased to function by leaping from the cab and letting the burdened truck careen to its destruction and the endangerment of all else on the road. There were also the handicaps imposed by widespread opium addiction. The reports are in agreement that after training the skill and competence of the native drivers for MTS were of high quality, a tribute to their intelligence and spirit as well as to their instruction.[16]

The drivers' schools enrolled by the end of July 1944 approximately 16,566 natives and graduated 7,546.[17] Yet maximum native driver employment, reached in February 1944, was only 3,155. The relatively

[16] (1) The first truck drivers' schools were established in 1942 by Folspen. (2) For documentation on native driver problems see The MTS Native Drivers' Schools, by George B. Zeigler, 1 Sep 44, PGF 131; Memo, Maj Dishman for Col Shingler, 25 Aug 42, PGF 259; Memo, Brunson for Cooper, 16 Jan 43, sub: Employment of Qualified Truck Drivers, PGF 131; Ltr, Lt Vincent P. Donahue to Maj Clarence D. McGowen, 16 Apr 43, sub: Employment of Native Drivers by Russia, PGF 131; and Rad TN 3890, Shingler to Cooper, 22 Apr 43, PGF 131. (3) Connolly, in notes for the author, states British estimated native driver addiction at 75 percent; Shingler, at 65 percent.

[17] The figure includes the diesel course at Andimeshk.

small numbers of graduates and the small total of surviving drivers in service require interpretation. The figures reflect not only the winnowing process of training but other factors in the general employment situation. Particularly during the early days of the training program it was widely felt by the Americans in charge that irresistible temptation was offered the natives both during and after training to leave MTS. It was said, for example, that drivers working for the Soviet services were not forbidden when piloting deadheading vehicles to pick up passengers and cargo on the side and to pocket the resultant baksheesh. This made working for the Soviet agencies more attractive, inasmuch as the highest wage paid MTS drivers in the early months was 1,800 rials per month, as contrasted to reported scales paid by the Russians and UKCC ranging from 2,500 to 5,000 rials per month. The student wage at the MTS schools of 20 rials a month, plus shelter and a food ration not widely appreciated, tempted students to leave the schools and seek employment elsewhere.

MTS raised the student wage to a range between 450 and 750 rials per month; but at a conference held in May 1943 by representatives of MTS, AIOC, UKCC, and the British and Soviet Armies, the Soviets declined to standardize wage scales. Agreement was reached, however, on more stringent inspections of cargoes to prevent the carrying of unauthorized passengers and loads, and the suggestion was advanced that a system of controlling the movement of drivers from one agency to another be instituted. These measures did not prevent the dissipation of MTS-trained native drivers into other Allied services.[18]

The course of the civilian-driver training program as well as the accumulation of experience by MTS personnel can be traced in the fluctuating rate of accidents per million truck miles. During April 1943 the rate was computed at 24.9 with nine deaths, eight of them civilian. Overworking of drivers to attain targets; excessive speeding which reflected insufficient MP strength to patrol the roads, as well as inadequate road signs at that early date; heavy dust conditions in the south; and the poor condition of the highway were contributing factors. During the period from July to November the number of civilian (native) drivers rose above seven hundred and the urgency of target requirements made it necessary to place most of them on the road straight from their training courses without enough supervised road experience. The accident rate rose in November to 103 per million truck miles. An intensive safety campaign was inaugurated in December, accompanied by incentives such as certificates granted civilians

[18] Memo, Capt Charles E. Berman for Col Edward F. Brown, 14 May 43. MTS 319 Hq PGC.

for 10,000 miles of accident-free driving and War Department awards for soldiers. Trips to Cairo and the Holy Land rewarded the soldiers with the best records, and a white elephant emblem was presented each month to trucking companies with the worst records. The decline in accidents which followed reached its lowest rate, 6.7 per million truck miles, in October 1944. In general, soldier-driver accidents during 1944 were caused by mechanical defects, speeding, and driving at improper intervals, while the highest percentage of native-driver accidents resulted from loss of control of the vehicle, driving at improper intervals, driving in the wrong lane, and speeding.

The hard-pressed MP's on patrol were never free from security problems, of which the block system of operation posed that of checking cargoes at the points where one driver handed over to the next. It was usually impossible to make a thorough check until the end of the line was reached. By that time native bandits and pilferers had done their work, aided by sharp turns and steep inclines in the road which forced drivers to slow down, permitting the thieves to drop from overhanging banks in the mountainous sections upon the slowly moving trucks, slit tarpaulins, and throw off items like tires, ammunition, sugar, flour, beans, and cloth. Sometimes pilferage was accomplished by native drivers who succeeded in making their way out of a serial to points off the road where they unloaded. At night cargo was sometimes hurled from the trucks to waiting confederates. Native huts in which to store the plunder sprang up along the route, but these were all eventually burned. In December 1943 continued losses of cargo and equipment led to the assignment of special investigators. Cargo was checked thoroughly at each station before drivers were released, loads were sealed, and the system of waybilling at points of origin was improved; but loss through pilferage was never eliminated.

The dependence of traffic and security controls upon signal communications was early recognized. By December 1942 radio stations at Khorramshahr, Ahwaz, and Andimeshk were available for MTS uses and by April 1943 additional stations at Khurramabad, Hamadan, and Kazvin, the last named being a mobile set, were in service. In May 1943 the MTS requested the Signal Service to plan, install, and operate a radio system for its own use so that communication would be available from one division point to another. Two nets were set up with a maximum of one relay from any one point to another along the entire supply line. Small semifixed stations, installed at intervals between the larger fixed stations, served in emergencies for sudden calls for wreckers and ambulances and for security purposes. In addition, telephone service between Tehran and Kazvin was established. After the completion of

the teletype network for the command in January and February 1944, the lessening need for radio warranted the removal of the stations at Khorramshahr, Ahwaz, and Andimeshk. Eventually radio service was entirely supplanted by teletype and telephone.

Maintenance of vehicles was a never ceasing problem. At the beginning of operations, when parts and servicing apparatus were in drastically short supply, maintenance difficulties were aggravated by lack of buildings and lighting for the bulk of the work, which had to be done at night. Then, as the end of 1943 saw the virtual completion of the building program and as the shortage of parts gave way to better supply, the growth of the fleet, coupled with the increase—through the aging of vehicles in constant and hard use—of the rate of obsolescence, meant that the work of the indispensable mechanics and repair men was never done. In February 1944 the number of deadlined vehicles for which no parts were available was mounting despite every effort to improvise, repair, manufacture, and reuse parts. Deadlined trucks were systematically cannibalized to keep as many others in service as possible. At the same time truck companies in the north reported being handicapped by lack of proper winter equipment such as skid chains of the right sizes, antifreeze, and windshield wipers and curtains.[19] By the end of July roughly 10 percent of the fleet was deadlined—over six hundred trucks; but the reduction of the number to ninety-seven by the end of October illustrates the extremes of crisis to which maintenance was subjected by the uncertainties and vagaries of truck operations in the Corridor as well as the ability of the untiring maintenance troops to meet the crises.

Of the trucks in the MTS fleet, certain types of Internationals, Studebakers, and Mack diesels, none of them specifically designed for the peculiar conditions of Corridor operation, bore the chief burden of the load. It was reported that, all factors considered, the Studebaker 6 x 4 tractor with 7-ton trailer and the 2½-ton cargo trucks gave good service.[20] It was stated that these vehicles could cover 50,000 miles before repair became uneconomical. Generally, the basic chassis developed only a few serious faults: the cabs, fenders, hoods, dust skirts, and other sheet metal parts failed rapidly, and other failures occurred on hood side panels, hood tops, transmission cover plates, radiator cores, storage battery supports, fan belts, and distributor caps. Studebaker 1-ton trailer mortality was high, largely as a result of abuse when

[19] Initial Hist Rpt, 3923d QM Truck Co, Hamadan, 15 Feb 44. PGF 208–M.
[20] Ltr, Myott to Ward, 23 Oct 43, sub: Suitability of Trucks in Operation. Cited p. 79 of History cited n. 2(5).

operated empty. Tarpaulins required frequent repair. The Mack diesel 10-ton 6 x 4 cargo trucks were considered well adapted to MTS needs. They were good for 100,000 miles before repairs became uneconomical. Parts consumption was low and failures infrequent, but their bodies were too small and were structurally weak. Mack weaknesses were in the radiator, cowl, starter switches, series parallel switches, flexible fuel lines, fuses, and air cleaners. Most diesel road failures were caused by clogged fuel lines. On the basis of experience in MTS, it was felt that the ideal truck would have been a 6 x 4 tractor-trailer diesel with air brakes and a 150-horsepower engine, ten forward speeds, a maximum speed of forty-five miles per hour, power to carry its net load of fifteen tons up 15-percent grades, and stamina enough to operate 100,000 miles over mountainous roads. The trailer would have had a dual axle with air brakes and a van type of body 28 feet long, 7 feet high, and 8 feet wide. But there was no time, in setting up the MTS, to design and produce the perfect truck for the job. It was a supplementary service with a limited life to live and it made the best of available equipment.

It was not only the trucks that took a beating on the highways of Iran. Morbidity studies of the Army personnel of MTS reveal one ailment peculiar to them. Until the entire route was hard surfaced, driving was an ordeal regardless of the weather. Mile after mile of washboard roads took toll of men as well as vehicles. As an anonymous military scribe put it, vibration "shook the trucks to pieces . . . and pounded the men's kidneys to jelly." [21] A medical survey in late 1944 of low-back injuries throughout the command during the previous twenty months laid special emphasis on the extent of such complaints among the truck drivers. It was found that of the 466 cases in the command requiring hospitalization one third of the whole were truck drivers who constituted only one tenth of the strength of the command. Rough roads, hard, uncomfortable seats, lack of drivers' belts as supports (these were not included in the Tables of Equipment of truck companies sent into the field), long hours of driving without sufficient rest, army cots which sagged, failure of drivers to seek proper massage and heat for tired back muscles, neglect in reporting for medical care until symptoms were severe, and vehicle accidents were listed as the causes. In other respects, the health of the men did not differ from the average in the command.[22]

[21] History, 3951st QM Truck Co. PGF 187-N.

[22] Rpt, Study of Low-Back Injury Cases Admitted to Hospitals, PGC, by Maj Thomas S. Cotton, Nov 44. Cited p. 105 of History cited n. 2(5).

The Score

According to plan, as soon as the ISR demonstrated its ability to serve adequately as the sole agency for inland clearance of Russian-aid cargoes, the MTS would be dispensed with. Washington's decision in November 1944 to close out MTS promptly served notice that, in Washington's view, regardless of the remaining course of the war, the railway would be adequate for all demands to come. MTS ceased operations on 30 November 1944.

Comparison of the tonnage accomplishments of the railway and MTS will show clearly why road transport was the first to go and why it went when it did. (*Tables 5 and 6, Appendix A*) Through 1943 MTS haulage of Russian-aid cargoes steadily mounted. In May the condition of the highway was such that it was possible to begin loading both at the Russian Dump at Khorramshahr and at dockside. Rail-to-truck loadings continued as a regular procedure at Andimeshk until August, after which time loadings there were resorted to only when there was a shortage of truckable cargo at Khorramshahr. How desperately the organization worked to meet the targets set for it at Tehran has been shown by references already made to overworked and inexperienced men being pressed into service as drivers. The July delivery of 17,068 long tons of Russian-aid cargo exceeded by 14 percent the target for that month, the highest set up to that time. Month after month the target continued to be met or exceeded. It was not until January 1944, in a month when truckable cargo at the port proved less than expected by the target makers and when driving through swirling clouds of snow in the treacherous twistings of the mountain highway slowed progress, that, for the first time, MTS failed to reach its target. January's score of 32,385 long tons of Russian-aid cargo fell under expectations by 5 percent. In February the target was slashed drastically and MTS exceeded it by 4 percent. With an interlude of high demand for movement in March, cargoes again fell steeply in April and May to rise in July to the peak for Soviet deliveries. That was the feverish month when the whole command, being challenged by maximum pressures of tonnages, not only rose to them but exceeded them all along the line. After July MTS' share of tonnage was reduced, first gradually, then precipitately, while the railway was pressed to achieve its peak Russian-aid haulage in September. In that month, while the trucks were hauling 8,187 tons for delivery to the USSR, the railway carried 170,100.

When MTS shut up shop and added up its performance, the total of all cargoes carried came to 618,946 long tons. Two thirds of this,

or 408,460 long tons, were carried for the Russians. The total, while small relative to command totals, was no drop in the bucket. To accommodate what the men of MTS and their native co-workers delivered to Soviet receiving points would have required a line of standard U.S. Army 2½-ton 6 x 6 cargo trucks standing bumper to bumper all the way from Baltimore to Chicago.

As was the case with nearly everything the American Army undertook to do in the Persian Corridor, the establishment of a truck service under the conditions met by MTS was without exact precedent or parallel. There is therefore nothing by which to measure MTS achievement. Even UKCC, being an agency of government endowed with the privileges and characteristics of a private corporation (including those of charging for certain services) is not strictly comparable to MTS. Moreover, since UKCC operated trucking services over many routes in Iran and Iraq from late 1941 until long after MTS' dissolution, and since available performance figures do not break down UKCC's totals into time periods or by routes served, there is no common denominator.[23]

The record of MTS must stand, then, on its own, as a supplementary part of the total Anglo-American program, which in its brief span of activity shouldered something like one tenth of the total American share of Russian-aid deliveries. If the progress of the war and operating conditions in the Persian Corridor had only proceeded in accordance with sound and logical business principles, it could be concluded that the effort, the expense of spirit, treasure, and skill that went into the organization and operation of MTS were not, bookkeeping-wise, commensurate with the proportionate results attained. But a realistic appraisal must conclude that, in spite of its slow start—conditioned by the state of the highway and by the priority which assigned to the railway and ports the paramount considerations of time, manpower, and equipment—MTS was on hand to deliver the goods at a time when, if there had been no American trucks, cargoes would have

[23] Under date of 27 May 1945, UKCC informed Headquarters, PGC, that, while UKCC "deprecate comparison between the achievement figures of the different Allied agencies carrying goods in Aid to Russia, the ton/kilometres operated by the United Kingdom Commercial Corporation from the commencement to September 30th 1944 amounted to a total of 795,138,536." AG 095 UKCC, Hq PGC. Reduced to ton-kilometers, MTS' Russian-aid haulage totaled 418,058,810 for its shorter single route and shorter period of operation. If the estimate of tonnages carried by British motor agencies given in Table 4 is taken as consisting chiefly of UKCC performance, it would appear that UKCC and MTS hauled very nearly the same total tonnages in Russian-aid cargoes over their own routes; but it must be borne in mind that the UKCC figure may, on the one hand, include some tonnages credited also to MTS because of the close association of the services early in 1943, and may, on the other hand, not include some haulage by UKCC over Iraqi routes for which information is not available. The slight difference between metric tons (UKCC) and long tons (MTS) must also be considered.

accumulated unmanageably at the ports. As a reserve supply line in case of sabotage on the railway it was indispensable. Its effort must be judged not by its cost in men and equipment, not by its relative contribution to the total logistic achievement, but by the fact that MTS manned the breach when no other means were available to meet a pressing urgency.

CHAPTER XVII

The Railway

The Anglo-Soviet occupation of Iran in 1941 would have been less essential to Allied war purposes had the Iranian State Railway not existed. For unwittingly Reza Shah Pahlevi, who opened the $140,000,000 line on 26 August 1939 after more than seven years of construction, had forged in the ISR a powerful weapon against the very Germans whose accepted friendship hastened the wartime occupation and his abdication. As a ready-made link between Western Hemisphere sources of supply and the Soviet battle lines, the railway hauled three out of every five tons of supplies delivered through the Corridor to Soviet receiving points by combined British and American effort. Virtually all of those three tons were delivered to the Russians during the period of American operation. The figures are 5,149,376 long tons, 2,989,079 long tons, and 2,737,677 long tons.[1]

The railway operation was impressive; but the totals do not make real its sheer mass of steel, manpower, and planning. Other figures indicate the extraordinary rate of increase. Before the Anglo-Soviet occupation the railway could haul 200 tons a day. During the period of all-British operation for which figures are available the daily average haul of Russian-aid freight was 661 long tons. The daily average haul in the peak month of British operation (September 1942) was 790 long tons of Russian-aid cargoes. In the period of interim Anglo-American operation (January through March 1943) the daily average of Russian-aid cargo hauled climbed to 921 long tons. The daily average for the whole period of American operation (April 1943 through May 1945) was 3,397 long tons of Russian-aid freight. Nor was this the full measure of the capacity to which the ISR was brought. In the last five months of British operation, August through December 1942, the daily average of all freight hauled was approximately 1,530 long tons, a notable improvement over the capacity inherited by the British in 1941. For the whole period of American operation this figure

[1] (1) Tables 4 and 5 and Chart 7 for all tonnages unless otherwise noted. (2) *Railway Gazette* (London) 74 (1941) 634 (6 Jun 41) and *The Middle East, 1948* (London: Europa Publications, Ltd., 1948), p. 132, for costs. Other sources estimate costs as high as $200,000,000.

rose to 5,336, an average which reflects not only the limited accomplishments at the beginning, but also the peak performance of 1944. The daily average for that year was 6,489 long tons, and for July, the top month of 1944, 7,520.[2]

A comparable increase in capacity, achieved in peacetime by a well-equipped modern railway under the blessings of a management beholden to none but its own judgment, would be hard to find in the annals of railroading. Yet the performance wrung from the ISR between 1941 and 1945 was marked up on the record in the face of the usual Persian Corridor headaches: a kitchenful of cooks stirring the broth to the loud accompaniment of arguments on precedence, proper handling of the ladle, the ingredients, and determination of the appropriate rental owed to the owner of the pot and of the cook or cooks liable for its payment.

For this reason the tangle of agreements and arrangements, not to speak of tensions, that existed among the authorities is as important a part of the railway story as the record of day-to-day operations. Neither aspect of the story sufficiently explains the secret of the prodigies of performance that, among them, the Americans, the British, the Iranians, and the Russians extracted from the ISR. Certainly the prodigal expenditure of American material resources in expansion of rolling stock and improvement of maintenance of way, operating facilities, and methods greased the wheels; while on the other side multiple authority and differing national aims and temperaments operated as a brake. From the moment of the Anglo-Soviet occupation the ISR was destined to carry the main burden of Russian-aid traffic. When, after a year of British operation, the Combined Chiefs turned the job over to the United States Army and coolly raised the target to 6,000 long tons daily for all cargoes, the grim fact was that, from then on, the ISR would have to live up to expectations, would have to carry loads undreamed of. It is perhaps because of this necessity that all other factors appear as secondary explanations of the ultimate feat. The necessity itself provided the key to the result. The ability of the railway to carry so much of the burden of Russian-aid tonnage was essential to the success of the supply program. The railway had to succeed.

And it did, but not without dust and heat: the dust of minutes and memoranda; the heat of the day's work on the line and in the yards. The peculiar nature of the railway operation, involving as it did complicated adjustments at the diplomatic as well as the military

[2] British experts, after more than a year's experience with the ISR, believed that a theoretical maximum daily capacity of 5,200 long tons was actually as remote as infinity. Memo Gen Yount for author, 24 Dec 48.

level, overshadowed all merely operational problems. These adjustments, whether they concerned military command, or whether they involved national pride or prerogatives, in essence were adjustments of authority.

One should not give a man a job to do without clothing him with the requisite power and discretion to do it. Normally there is no separation between authority and responsibility. But the four-power partnership in the Corridor posed abnormal conditions which affected the railway task no less than other parts of the supply program. In September 1942 the Combined Chiefs, as told in Chapter X, gave to the Americans responsibility for transport operations while leaving undisturbed the primary British authority over security and movements. In the interest of efficient operation it became necessary for the commanders in the field to effect, by delegation of authority and other adjustments, as close an identity of authority and responsibility as the abnormal Corridor situation permitted. How this was done for the transport task as a whole (trucks, ports, railway) was told in Chapter XI. The effort to harness authority and responsibility into one team is a main thread in the story of the railway.

Authority and Responsibility

The basic charter under which all wartime activity on the ISR was carried on was the Tri-Partite Treaty; but as a guide to railway matters its grants of authority to the British and Soviet Armies were general. It did not specify how their control of Iranian communications would apply to the specific business of running the railway. Moreover, as the treaty was not signed until January 1942 and as the railway problem pressed for action if not for solution from the moment of occupation the previous August, there was no time for dispassionate consideration of ways and means. The British and Soviets proceeded, under the preliminary terms accepted by Iran in September 1941, to exercise control of communications within their respective zones. It cannot be said that this was a deliberately chosen policy, although the separate assumption of operating and supervisory responsibility for a railway thus arbitrarily divided into two segments at Tehran established a precedent which had the full force of chosen policy, and which, as time went on, proved the fixed and never altered basic operating plan for the railroad. In the remaining months of 1941 this basic decision-which-was-not-decided was taken, as it were, by default.

The alternatives, as they appeared from time to time in the endless discussions among the Corridor partners, were two: operation of the

line as a whole from Gulf to Caspian by a single responsible authority with power to take decisions; or a division of the line at Tehran with co-ordination to be provided by a joint operating commission representing Iran, Great Britain, and the Soviet Union. The first, the logical solution, failed of adoption whenever it was proposed because it was incompatible with the basic Corridor situation—a partnership of expediency without unified local command. The second was a compromise whose experimental execution dwindled into early oblivion.

From the beginning the United States was drawn into both alternatives as well as the *de facto* Anglo-Soviet arrangement. Churchill's appeal a few days after the occupation for American locomotives, rolling stock, and technical advice bulked large in the War Department's decision to establish the Iranian Mission, the selection as its first chief of General Wheeler, a railroad expert, his choice as civilian contractor of Foley Brothers, Inc., an engineering firm experienced in railroad construction and, above all, the designation of the ISR as an approved lend-lease project months before the designation of Iran as a nation eligible for lend-lease aid. When in September 1941 the lend-lease authorities were unable to find a suitable top railroad man to advise Harry Hopkins on the equipment needed to meet the Churchill-Beaverbrook requests, the matter of strengthening the ISR was handed over to the War Department and by it referred to General Wheeler and his new Iranian Mission. The commissioning of John A. Gillies, General Manager of the Santa Fe Railway, as a lieutenant colonel and his dispatch to Iran in October to investigate and report followed.[3]

The United States thus assumed from the beginning responsibilities in the railway task without receiving authority for their execution. It undertook to supply equipment and technical advice to be used at the discretion of the Anglo-Soviet Armies whose authority was not only split—each in its zone of Iran—but was in turn derived from the Iranian Government as owner of the ISR. It was some time before the ambiguities of the situation resolved themselves into a series of understandings, some definite, some no more definite than an absence of objection by one party to the actions of another. In September 1941 the Soviet Ambassador at Tehran proposed that each occupying power operate the rail lines within its respective zone of occupation. There was no formal agreement to that effect, but separate operations proceeded as if there were. The British commissioned Sir Godfrey Rhodes, General Manager of the Kenya and Uganda Railways and Harbors, a brigadier and flew him early in October to Tehran to become director

[3] (1) Memo, Hopkins for Stettinius, 19 Sep 41, transmitting Msg, Churchill to Hopkins; (2) Ltr, Wheeler to Stettinius, 28 Oct 41. WPD 4596 to -15 Iran (Persia) HRS DRB AGO.

of transportation; but when the Russians established a Soviet railway headquarters at Tehran it was reported to Washington that the British in Iran viewed the act with some dismay and feared that divided operating control would make for reduced railway capacity and would cause complications with the Iranian railway administration.[4]

Before the end of 1941 both alternatives to divided operating control appeared on the scene. The suggestion was made for a joint operating commission; and, early in November, Lord Beaverbrook expressed the hope that the United States would operate the ISR. The reactions to the latter differed. General Wheeler reported that informal conversations with the Iranian Prime Minister, the Iranian Foreign Minister, and the Soviet Ambassador at Tehran indicated a favorable attitude, but that the British transportation directorate in Iran was opposed. On the other hand, the British War Office in London, in a message in January 1942 requesting India's views, noted that operation of the railroad by Americans as allies was a different proposition from operation by Americans as nonbelligerents, the American status at the time of the Beaverbrook proposal. London requested Indian headquarters to consider the matter from the point of view of (1) the use that could be made elsewhere of British personnel released by American operation, and (2) the psychological effect on the British forces in Iran who were developing the railway of having it handed over to Americans. When India referred the proposal to Baghdad for an opinion, the response was favorable to American operation of the ISR. Baghdad said, "Psychological effect on our transportation personnel should not be taken into account. Operation Persian Railway by Americans extremely desirable every point of view. We should discard all stipulations and give Americans complete control." [5]

This opinion might have carried more weight in British councils had it been advanced as a matter of general principle; but the Baghdad message, by asserting that British transportation personnel in Iran replaced by Americans would be "invaluable for employment in Iraq," showed that its advocacy of American operation was colored by the pressing need of the British forces in Iraq for increased strength, and was not necessarily a considered opinion as to the best way of solving the railway problem in Iran.

At Washington caution marked discussions between the State and War Departments, and pessimism a memorandum by War Plans Divi-

[4] Rad, Wheeler to Moore, 15 Jan 42. WPD 4596 to –15 Iran (Persia) HRS DRB AGO.
[5] (1) Rad, Wheeler to Moore, 21 Dec 41; (2) Rad, War Office, London, to GHQ, India, and British Army Stf, Washington, 3 Jan 42. WPD 4596 to –15 Iran (Persia) HRS DRB AGO. (3) Rad Q/669, Gen Iraq [GOC British forces in Iraq] to ARMINDIA, 8 Jan 42. Shipping Data, SL X–11,737.

sion which, while accurately assessing present difficulties, can hardly be blamed for not achieving equal accuracy regarding the future. Noting that the "Southern area served by the railroad is unhealthful," the paper went on to state:

> U.S. civilian or military personnel, not acclimated, would not be efficient or effective. . . . Bad living conditions, shortage of water, unsatisfactory legal status and difficult working conditions make it questionable if competent U.S. Civilian railroad technicians could be *retained*. . . . Should U.S. Railroad units operate Trans-Iranian Railroad, the next logical step would be for U.S. Quartermaster units to operate the docks and U.S. Quartermaster truck companies to do the trucking. This could only be justified if it were contemplated that U.S. combat troops were later going to operate in this area. Since this is not the current plan, U.S. Army service troops should not be provided for this duty.[6]

Both American chiefs of missions in the Middle East saw the logic behind the proposed American operation. General Maxwell told his staff at Cairo that, to obtain maximum efficiency uncomplicated by rivalries over controls, the ultimate objective was American operation. General Wheeler, after conference at New Delhi with the Acting Commander-in-Chief, India, and his staff, reported that he shared British apprehension over divided (Anglo-Soviet) control of the ISR. He urged American operation by an American staff, or, as an alternative, a variant of the proposal for a joint supervisory committee which would entrust supervision to a small American headquarters staff, an arrangement which would require a high degree of co-operation by the British, Soviet, and Iranian authorities. Along the lines expressed by the WPD memorandum, Wheeler stated that the United States should come in only if the ISR were to be used for delivery of large quantities of supplies for the USSR, or for maintaining large British or American forces in northern Iran against Axis invasion. If these were not to be the proposed uses of the railroad, then he recommended that the British and Russians should work out their problems alone. Wheeler advised caution in making big plans because he had been told by the Soviet Ambassador that Moscow demanded only 2,000 motor trucks per month and 100 aircraft to be delivered by the Persian Gulf route, and this did not place too heavy a strain upon the railroad's capacities. Nevertheless, he concluded, because it might be necessary for British and American troops to operate in northern Iran and the Caucasus against Axis forces, some state of readiness of the railroad should be provided. He therefore recommended that if it should be

[6] (1) Memo of conversations between State and War Depts [Jan 42], sub: Political Factors Involved in Provision of Trans Facilities in Iran; (2) Memo, Lt Col Clayton L. Bissell for Col Handy, WPD, 5 Jan 42, sub: Trans-Iranian Railroad; (3) See also Draft of Memo, Jan 42, prepared in WPD for submission as recommendation to CofS, unused. WPD 4596 to -15 Iran (Persia) HRS DRB AGO.

considered politically expedient to attempt to harmonize all interests, the United States should offer to Britain and Russia to provide American management with a small headquarters staff.[7]

Neither the Wheeler suggestion, designed to fit into the Corridor situation so long as no extraordinary demands were to be made of the railroad, nor the Beaverbrook suggestion, which would have required a radical alteration in the basic Corridor situation, attracted sufficient strength to come into effect. In both British and American camps, arguments pro and con canceled one another out. But early in 1942, acting by request of the Tri-Partite powers, the United States designated Colonel Gillies to act as "mediator" on a joint board of representatives of Iran, Great Britain, and the USSR. Gillies served until his death in line of duty on 28 February 1942. No successor was appointed.[8]

Early in 1942 a detailed document was negotiated upon a foundation of Iranian proposals modified and extended by British and Soviet suggestions. Entitled "Regarding the Affairs of the Ministry of Ways and Communications," it was designed to establish a contractual relationship to govern British operation of the ISR. As the agreement was never approved by top authorities, the British proceeded under a simpler plan which they submitted to Iran but not to the USSR. Meanwhile the Russians had been going their separate way in their zone.[9]

Thus matters rocked along until mounting tonnages and global pressures produced the crisis of midsummer 1942, one of whose resolutions, as told in Chapter X, was the assignment of the operation of the British sector of the ISR to the U.S. Army. It is recorded that when all the preliminaries were over and Averell Harriman at Cairo told Prime Minister Churchill that the U.S. Army was ready to undertake the assignment, some British officers once again expressed alarm at putting control of an essential line of empire communications into foreign (i. e., American) hands; whereat Churchill dismissed the objection with the words, "And in what *better* hands could it be?" [10]

[7] (1) Min, Stf Mtg at Cairo, 17 Jan 42. Maxwell Papers. (2) Rad cited n. 4.

[8] Memo, Col John E. Hull for ACofS, WPD, 17 Mar 42, sub: American Opn of Trans-Iranian Railroad. WPD 4596 to -15 Iran (Persia) HRS DRB AGO.

[9] (1) Copy with atchd papers in 336.01 International Agreements, SL 9012. (2) Ltr, Col John B. Stetson, Jr., Fiscal Adviser to CG, PGSC, 19 Jul 43. Same file.

[10] Sherwood, *Roosevelt and Hopkins,* p. 627. This was while Churchill was en route home from conferences with Stalin at Moscow in which Harriman took part. Churchill records in his memoirs (*The Hinge of Fate,* p. 474) that on 11 August on the way to Moscow he and Harriman attended with "various high British and American railway authorities" a long conference in the garden of the British Legation at which "it was decided that the United States should take over the whole Trans-Persian railway from the Gulf to the Caspian." If matters reached that point at that time, the decision was soon reviewed and limited. It is a moot point how close the United States came, at various times, to being given that logical, but,

American control, however, was at that time not contemplated, since the Combined Chiefs' directive studiously avoided any modification of British authority over movements and security. Operation and control were to be in different hands. American responsibilities had been enormously enlarged, but once again it was responsibility without authority, an anomaly from every point of view and one whose adverse effects upon operations called for the prompt attention and vigorous negotiation which General Connolly gave to the problem as soon as he arrived. If there had been in anybody's mind the thought that the new American command was to be integrated with the British, or subordinated to it, it soon become clear that the meshing of the two forces would be much subtler than that. Connolly wrote candidly in December 1942 to Somervell:

> . . . we are setting up our show on the Pershing pattern. This naturally does not, and cannot be expected to, arouse any great degree of enthusiasm on the part of our British cousins. They have been dominating the situation south of Tehran and competing with the Russians in Tehran. It is understandable that they want to keep a grip on all facilities and resources both for use during the war and for afterward. Up to date our arguments with them on labor, covered storage, supplies, etc., have been on a very friendly and cooperative basis. The idea is gradually percolating that this is a part of the U.S. Army—not part of the British Army.[11]

When, a few days after this letter was written, the first five thousand American service troops reached Khorramshahr, the relation between the American and British forces appeared to the Russians and Iranians to call for explanation. As is told hereafter in Chapter XX, they inquired whether the Americans, coming to Iran at British invitation, were to be considered as a part of the British command, and whether, if they were not, their presence prejudiced Iranian sovereignty and the rights enjoyed by the signatories to the Tri-Partite Treaty. The prolonged diplomatic exchange which followed provided the background against which negotiations to reconcile operational responsibility and authority were carried on. "The next big argument," General Connolly wrote in the letter just quoted, "is going to be over control of the railroad." Its culmination was the "Joint Agreement between Persia and Iraq Forces and the Persian Gulf Service Command for the Control of Movements in Persia," signed 7 April 1943.[12]

in view of the Soviet's exclusion of others from the northern zone, unlikely, solution to the railway problem. In the opinion of an American in close touch with Iranian affairs, the Russians would in time have accepted American operation of an undivided line, Gulf to Caspian, but were alienated from the necesary confidence by their distaste for General Connolly's firmness. This footnote to history, communicated to the author, is recorded not as fact but as opinion from a significant source.

[11] Ltr, Connolly to Somervell, 1 Dec 42. OCofTrans, Hist Br—Overseas Comd, Pentagon.

[12] See Ch. XI above, pp. 233–36 and n. 36.

By this agreement, which gave the American command effective control over movements, the gap which separated responsibility and authority was considerably narrowed and operational problems proportionately simplified. In the course of the negotiations the old question of a unified rather than divided operation of the railway line again made its appearance when the American Ambassador at Moscow, Admiral William H. Standley, informed the Department of State that he possessed information that Iran wished the United States to take over not only the British sector but the Soviet sector as well. The information, while indicative of a trend in Iranian thinking and maneuvering, was, as General Connolly advised Washington, not accurate as to official Iranian policy. The question was settled, at least for the time being, by the decision of the Departments of State and War that, even should the offer to entrust to the U.S. Army operation of the ISR from Gulf to Caspian be forthcoming, it would be declined.[13]

The agreement on movements control made it possible for an independent American command to work, by means of delegated authority, *with* rather than *under* the British command. Since control of movements was essential to the carrying out of American operational responsibility, the agreement with the British proved, as Connolly reported after seven months' trial, "extremely satisfactory." [14] Yet it was little more than a detailed working arrangement in the all-important field of allocations, priorities, and movements. Efforts were therefore made to supplement it with other agreements defining the status of the American command in the Corridor, and, more specifically, the degree to which British responsibilities regarding the ISR were assumed by the U.S. Army when it took over operation of the British sector of the line. Although the negotiations to these ends were inconclusive they illustrate further some problems inherent in a situation which by its nature precluded either unified command or the exact definition of responsibilities.

The Power of the Purse

As the Combined Chiefs' directive said nothing about railway finances, the power of the purse figured prominently in the effort of the American command to control effectively the operations it had undertaken. The basic and thorny question focused upon British obligations

[13] (1) Rad 215, Standley to Dept State, 26 Feb 43. Case 7, OPD 617 Iran, Sp Coll, HRS DRB AGO. (2) Min, Mtg of Representatives of Depts State and War, 1 Mar 43. Same file.
[14] Rad AGWAR 2894, Connolly to Marshall for Spalding, info Harriman, 1 Nov 43. 384 Conduct of War, SL 9016.

to the ISR. By agreement with the Iranian Government, the British had guaranteed to it an annual net sum, or profit, equivalent to that earned by the ISR between 21 March 1940 and 20 March 1941. The net revenue to Iran was accordingly fixed at 103 million rials per annum (equivalent to $3,218,750). British Army freight was to receive a 50-percent concession in rates to be agreed, and transit freight, which meant goods destined for the USSR, would receive a 20-percent concession for all over 500,000 tons monthly. Capital expenditures beyond normal expansion were to be borne by the Ally, British or Soviet, making the demand for them; and the Allies contracted not to interfere more than necessary with Iranian civilian needs.[15]

The guaranteed annual net profit was to be calculated after a balancing of receipts and expenditures, with war-caused expenditures to be excluded from the ISR's operating budget. The crux of the financing problem was freight charges. At the beginning of the plan the UKCC was to pay freight charges incurred for the USSR, the funds coming from the War Office, London, while the British Army drew upon War Office funds paid out by PAI Force in Baghdad for their own charges. After September 1943 the British Army paid all charges except those for Iranian civil goods and USSR internal movements. In April 1944 this method was dropped and the British resorted to cash advances on the tenth of each month to cover the difference between ISR civil earnings and the amount needed for current operating expenses, such as wages. Very substantial payments, totaling $14,782,727 as of 1 June 1945, were made by the ISR for stores of British, U.S. lend-lease, and U.S. Army non-lend-lease origin.[16]

When the American command took over operations from the British in 1943, along with the rolling stock came a complex of bookkeeping between the British Army and the Iranian railway directorate: cash advances, expenditures, book credits, and adjustments—all involved in the general financial arrangements under which British operations were conducted. Exchanges of views as to American financial responsibilities were promptly begun and continued until the lend-lease settlement with Great Britain in March 1946. Throughout, British pressure was doggedly exerted to prevail upon the United States to assume, as of 1 April 1943, "sole responsibility for making

[15] (1) Documents cited n. 9. (2) Rpt on Financial Responsibility for the Iranian State Ry, 18 Jun 45, forwarded under covering Ltr, Gen Booth to Gen Marshall, 21 Jun 45. OPD 617 Iran, Sp Coll, HRS DRB AGO.

[16] (1) Rad AGWAR 1515, Connolly to Marshall, Somervell, and Rear Adm Andrew F. Carter, 14 Jun 43. 120 Funds, Disbursements, Laws, Regulations, SL 8979. (2) Rpt cited n. 15(2).

advances or meeting bills in the first instance" on the ISR.[17] The British felt moreover that this liability should be supplemented by American agreement to pay the cost of all British as well as American internal traffic after 1 April in return for the British paying for their own and American traffic before that date. The United States would thus find itself saddled with liability for everybody's expenses plus the guarantee to Iran, and all this in addition to the ever mounting costs of maintaining and operating the American command in the Persian Corridor, which was already a heavy contribution toward the joint war effort in that area.

But the cardinal consideration from the point of view of the American command was not the cost involved in accepting the British proposal, for cost was not reckoned in the American effort to bring aid to Russia. Acceptance of the British financial liabilities toward the ISR would mean that American money would go directly into American operations instead of being siphoned into them via lend-lease to Britain. It was felt in the American command that taking over the British financial responsibility would increase American operational efficiency and authority by reducing the number of voices to be consulted over policy. The power of the purse gave the British ultimate control over operational matters whose cost (in American dollars) they could approve or disapprove when it was chargeable to the British share in lend-lease. In short, the Americans reasoned, if the money were to be spent anyhow, it was simpler for it to pass directly from American hands to the ISR instead of from Washington to Tehran via London.[18] The American command therefore proceeded for some time to negotiate with the British upon the basis of the Americans taking over the British working agreement with the ISR. This involved not only an American guarantee of a minimum annual sum to Iran, as proposed by General Connolly on 21 July 1943, but American assumption of all costs, including USSR transit freight, which exceeded ISR revenues. Tentative agreement was reached along these lines, to be effective on 1 August. But on 19 July the Americans informed Brigadier Rhodes that there would be a delay. As it turned out the delay proved permanent.[19]

The crux of the opposition which Washington soon expressed was the Combined Chiefs' directive (CCS 109/1). This provided only

[17] British Army Stf, Washington, to OPD, 22 Sep 43. Case 8, OPD 617 Iran, Sp Coll, HRS DRB AGO.

[18] Interv with Gen Connolly, Pentagon, 18 Aug 50.

[19] (1) Stetson to Rhodes, 19 Jul 43. 336.01 International Agreements, SL 9012. (2) For Connolly's proposal see Case 8, OPD 617 Iran, Sp Coll, HRS DRB AGO.

that the U.S. Army should serve in the place of the British Army in certain undertakings in the Persian Corridor. It did not alter basic British responsibilities or mention finance. Since financial matters lay at the heart of control, General Marshall advised General Connolly that any alteration of the financial arrangements existing at the assumption of American operational responsibility would require the Combined Chiefs of Staff to reopen "the entire question of responsibility for and control of the transport routes." [20] General Connolly was therefore committed to continuing negotiations in the financial field within the prescribed limits of the *status quo* as of the date of CCS 109/1, as modified by the working agreement over movements signed with the British in April 1943. And there were the other arrangements to be made to define American relations with the Corridor partners. Respecting these negotiations, opinion at Washington was divided as to whether they should proceed at the military level or the diplomatic level, and whether unilateral agreements or a general pact would be desirable. In time all talks merged with the negotiations over final settlement when the Americans, their mission over, returned the ISR to the British.

Iranian Minister of Foreign Affairs Mohammad Sa'ed directed a stream of inquiries, expostulations, and expressions of indignation at United States Minister Dreyfus, who in due course transmitted some of them to General Connolly. In April 1943 Mr. Sa'ed wanted to know whether the new working agreement between the Americans and the British had been consented to by the Russians; in May he deplored the chaos resulting from ill-defined operational control of the ISR; in July he demanded a direct Iranian-American agreement; in August he complained that the American railway director, Colonel Yount, without negotiation had presented to the railway administration for signature an operating agreement; and he ventured to point out that no matter how eager the government of Iran was to co-operate in friendship with its Allies, the ISR was the property of Iran and nothing, no action, should take place save under "the stipulations of a general agreement to be signed by the Governments of Iran and the United States." [21]

Mr. Sa'ed was reassured: that the United States was merely sub-

[20] Rad, Marshall to Connolly, 5 Aug 43. OPD 617 Iran, Sp Coll, HRS DRB AGO. A suggestion to cut the Gordian knot of authority by reviving, for the last time, the proposal for all-American operation from Gulf to Caspian appeared at this time. Memo, Stetson for OPD, 4 Aug 43. Same file.

[21] Ltrs 410 and 1113, Mohamed Sa'ed to Dreyfus, 28 Apr, 15 Jun 43, 336.01 International Agreements, SL 9012; Ltrs 1548 and 2118, Sa'ed to Dreyfus, 11 Jul, 12 Aug 43, 092.2 Treaties and Agreements, SL 8978. The replies referred to, as well as texts of tentative agreements, will be found in these two files under the dates cited in the text.

stituting for Great Britain in the matter of the railway, and that, as the British had informed the government of Iran, nothing had affected British obligations under the Tri-Partite Treaty; that, instead of chaos, General Connolly was able to report (21 June) improving tonnages for the USSR and for the Iranian civilian economy as well and harmonious relations between Colonel Yount and Hossain Nafisi, Director-General of the ISR, and to explain (23 August) that the administrative agreement referred to in one of the diplomatic communications was actually a bulletin on personnel procedure, adopted after long conferences, and in agreement, with Nafisi; and finally, that Nafisi had been informed on 3 August that the working agreement with the British "will be subordinate to the final covenant between the U.S. Army and the ISR."

The files abound in drafts and counterdrafts for such a covenant, and the summer of 1943 witnessed simultaneous discussions of three sorts: between the Americans and the British, on the military level, to determine financial obligations; between the Americans and the Iranians, on the political level, to discuss a bilateral railway agreement (perhaps as a part of a larger agreement as to American status in Iran); and four-power discussions toward a railway agreement.[22] While Connolly was thus attempting to be, like "Mr. Cerberus, three gentlemen at once," in Mrs. Malaprop's phrase, the War Department in August 1943 reached a conclusion and advised him as follows: First, the Anglo-Iranian arrangements were so complex the United States could not hope to do them justice if the British should withdraw altogether in the matter of the railway. Second, since the United States was not a party to the Tri-Partite Treaty, it was inappropriate for it to join in a four-power railway agreement. Third, Connolly should negotiate an operating contract with the ISR, obtaining therefor the concurrence of the governments of the United Kingdom, USSR, and Iran. Fourth, the British should continue, as in 1941–1942, to bear the ultimate financial responsibility.[23]

To some extent the War Department's policy decisions were helpful, for they cleared the air with regard to what financial liabilities the United States would assume. Thenceforth, General Connolly and his fiscal adviser, Col. John B. Stetson, Jr., could be as adamant in their assertion that the U.S. Army was agent only, and not financially liable, as were the British in insisting that as of 1 April 1943 a new deal in finances ought to take place. General Connolly may have been reluc-

[22] Rad 1001, Dreyfus to Dept State, 16 Oct 43. Case 8, OPD 617 Iran, Sp Coll, HRS DRB AGO.

[23] Memo, 27 Aug 43, and atchd papers. OPD 123 (5 Aug 43).

tant to proceed with the delicate palavers prerequisite to an operating contract signed with the ISR and blessed by Britain and the USSR, for, as already noted, he was satisfied with the working agreement with PAI Force. Meanwhile, it appears that the British desired settlement of railway matters at the political level, and Minister Dreyfus concurred.[24] It must be supposed that the British took this position, not because they were dissatisfied with the successful movements agreement which had been worked out at the military level, but because of the financial stand now being taken by the Americans. The view of the Department of State was therefore communicated by Dreyfus to Stetson at American military headquarters, through quotation of a telegram from the Acting Secretary of State to Dreyfus, as follows:

> If it is necessary to conclude an agreement on a political level covering the operation of the trans-Iranian Railway, you are authorized to initiate and negotiate such an agreement satisfactory to the American military authorities. While War Department orally concurs in this, it nevertheless has expressed a preference for an agreement by the military authorities concerned.

To this Stetson replied in part as follows:

> Understand, of course, that it was the view of PGSC to negotiate this agreement on the military level and not on the political level. The War Department, however, refused to PGSC authority to make any financial commitments binding the United States with respect the railroad.
>
> In view of this decision, I informed the British that the entire financial responsibility was theirs, and that we as operators of the railroad are acting for them in the position of agent. They have elected, therefore, to make the agreement with respect to the railroad on the diplomatic level.[25]

Actually the situation was not essentially changed. The British maintained their financial convictions, but in March 1944 the War Department indicated that it would be willing to credit the cost of U.S. Army freight by entering it on the books as reverse lend-lease, provided the British paid it in the first instance.[26]

But when on 31 May 1945 representatives of the British and American Armies sat down together to discuss the return of the ISR to the British, it was found not only that the British still expected the Americans to pay for everything after 1 April 1943 but that the British proposed stopping their interim payments to the ISR after 30 June 1945 and that they would regard any subsequent breakdown as a joint Allied responsibility.[27]

[24] Rad cited n. 22.

[25] (1) Ltr, Dreyfus to Col Stetson, 2 Nov 43. 092.2 Treaties and Agreements, SL 8978. (2) Ltr, Col Stetson to Richard Ford, Chargé d'Affaires, American Legation, Tehran, 6 Nov 43. Same file.

[26] Memo, John J. McCloy, Budget Div, OCofS, prepared for OPD, 14 Mar 44. Case 10, OPD 617 Iran, Sp Coll, HRS DRB AGO.

[27] Rpt cited n. 15(2).

Up to 1 July 1945 the cash advanced by the British to the ISR was more than twenty million dollars less than the ISR claimed the British owed for payment of USSR transit freight charges. If the ISR would agree to a reduction of the rates, as proposed but never settled, to three tenths of a rial per ton kilometer, then the British had overpaid by more than three and one half million dollars. As such overpayment did not cover costs of delivered stores and all operating expenses, there was a considerable gap to be made up to reach the guarantee of one hundred and three million rials net annual income. These matters were adjusted on paper by discovering and agreeing upon a freight rate that would even matters up pretty much as they were. So much for the British obligation to the ISR. After 1 July 1945 the British proposed that the United States, the USSR, and themselves pay the ISR separately for bills incurred; but the Americans pointed out that unless the British gave the ISR sufficient funds to settle its accounts with the United States for heavy purchases of supplies, stores, and equipment, against which account the United States had withheld payments to the ISR for command internal freight charges, then the United States, while paying off the ISR account, might not be paid in return.[28]

In view of the difficulties which beset a financial settlement limited to the railway, the American command felt that the total effort of the United States Army in the Persian Corridor was relevant. Such a factor as American improvement and maintenance of highways over and above its obligations under the Combined Chiefs of Staff directive should offset British claims for compensation for freight charges on the railway.[29] Since the question appeared incapable of solution in the field, it passed to higher authority and was ultimately swallowed up in the over-all lend-lease settlement between the British and American Governments. In this final settlement a notation appears that a British claim for compensation from the United States for twenty-five million dollars for USSR transit freight carried over the ISR was disallowed by the United States.[30]

There is a bright side to the tedious record of all these negotiations in which the Americans, for the sake of efficient operations, strove to attain as close an identity between responsibility and authority as the Corridor situation permitted. If that situation could have been altered

[28] *Ibid.*

[29] (1) Intervs with Col Stetson, Tehran, 3–4 Aug 45. (2) Correspondence by Col Stetson in 323.361 and 550.3, SL 9008.

[30] *The New York Times*, March 28, 1946. This "final" settlement was followed by a supplementary settlement covering disposition of, and method of payment for, all wartime installations in the Middle East, signed at Washington on 12 July 1948. *The New York Times*, July 13, 1948.

by negotiation to provide unified operation of the ISR from Gulf to Caspian or even to invest the American command with primary authority as well as responsibility, the operational problem would have been noticeably eased and the results achieved even more striking than those summarized at the beginning of this chapter. But it is a commentary upon Anglo-American temperaments that, during the years when American and British officialdom strove in paper after paper and talk after talk to determine who could properly do what and who should pay for what, their colleagues were running the trains, doing the job, delivering the goods to the Russians. Nevertheless, as that part of the story now unfolds, the murmur of innumerable conferences and the rustle of carbon copies will still be heard above the clang of freight cars in the assembly yards and the deep-throated whistle of the diesels echoing in the high mountains of Iran.

The Americans Take Over

The railway itself is a notable engineering accomplishment.[81] Its single-track, standard-gauge main line extends 865 miles from the southern terminus of Bandar Shahpur, a tidewater port at the northern end of the Persian Gulf, to Bandar Shah on the southeastern shore of the Caspian Sea. (*See Map 4.*) Within its span many phases of engineering and railroad construction are combined in somewhat unusual concentration.

Soon after completion of the main line, construction began on two branches. In 1939 the railway extended a branch northwest from Tehran toward Tabriz; in 1941 this line had passed Zenjan and was carried on to Mianeh in 1942, a total distance of 272 miles. Some work was done west of Mianeh, but the plans based on the former Shah's insistence upon driving the line from there straight through, rather than around large hill masses, proved too costly and the project withered. The other branch, running eastward from Garmsar through Samnan to Shahrud for a distance of 196 miles, was placed in service in 1940. In 1942 the British, purely as a military measure, constructed two more branches. One 77 miles in length, extended from Ahwaz to Khorramshahr; the other was a 27-mile extension from this line to Cheybassi, lighterage port up-river from Tanuma and opposite Margil, in the port area of Basra.

[81] The description of the railway derives from (1) HOTI, Pt. V, History of the 3d Military Railway Service, by 1st Lt Francis J. Lewis (cited hereafter as HOTI–V), pp. 3–5, PGF; and (2) MA Rpt 222 from Tehran, 14 Jan 44, MID 617 Iran, 14 Jan 44 (29 Dec 41).

From Bandar Shahpur the line runs northward for 69 miles, across marshland and the Khuzistan Desert, to Ahwaz, crossing a 3,512-foot bridge over the Karun River at that point. Following the course of the Ab-i-Diz River, the railroad continues northwest for 87 miles across the desert to Andimeshk in the Zagros foothills, where it embarks on the first of two of the most dramatic railroad sections in the world.

The Zagros Mountains are forbiddingly devoid of vegetation, their lonely, rocky façades utterly bleak, the ravines between the profusion of their peaks sheer and desolate. North of Andimeshk as far as Dorud, 130 miles distant, the railroad hugs the course of the Ab-i-Diz, crossing it many times in that section, high in the mountains. The railroad plunges through tunnel after tunnel—135 of them in one stretch of 165 miles—and permits glimpses of breathtaking sweep as it emerges time after time to skirt the brinks of deep and precipitous canyons. The first American soldiers traveling north to their station in Tehran, in January 1943, found no comfort in the fact that the locomotives hauling them over the single-track railroad were without headlights in this succession of tunnels. There are many bridges and there are miles of retaining walls of massive design and galleried sheds to protect the track from snow and landslides. North of Dorud the line ascends to an altitude of 7,272 feet and, emerging upon a high plateau, reaches Sultanabad, 91 miles away, and Qum, 87 miles beyond Sultanabad. From there it is 111 miles to the capital city, Tehran.

From Tehran, the main line turns abruptly southeast for 71 miles to Garmsar, skirting the high wall of the Elburz Mountains. At Garmsar, the line veers northeast again, entering a lofty pass in the Elburz and climbing to a height of 6,927 feet. In this 65-mile section the railroad performs veritable gymnastics, with spiraled switchbacks, tunnels which burrow through the rock in sweeping curves, and, at one point, a corkscrew climb in which four elevations of track lift the railway with a grade of one in 36. One hundred and fifty-three miles from the summit in the Elburz lies Bandar Shah, which is 85 feet below sea level.

Beginning at Tehran, the Soviet sector of the ISR comprised 757 miles of line running east from the capital to Bandar Shah and Shahrud, and west to Mianeh. The British sector extended for 680 miles of main and branch line southward from Tehran, through the mountains and across the desert to the Gulf. Over this route the first American railroad troops rode to Tehran on a train drawn by a little prewar Ferrostaal locomotive with copper firebox and brightly trimmed wheels. Their journey was enlivened when, in the wilds of the Zagros Mountains, they had to get out and push the train up the more difficult grades. That ludicrous first experience was to fade into the incredible

past as the great diesels from beyond the Atlantic took over the rails in Iran and the trains lengthened and the tonnages grew.

One year before, while the newly arrived British were working to increase the prewar capacity of the ISR from its 200-ton daily level, General Wheeler had estimated that, using existing inadequate equipment, American operation might raise capacity for all types of cargo to 600 tons daily, capable of increase to 1,800 tons by the addition of American rolling stock. The British had set themselves a goal of 2,000 tons daily to be reached by April 1942.[32]

With a military operating and supervisory staff which reached a maximum of 120 officers and 3,900 engineer (sapper) troops and using the existing ISR civilian administrative and operating staff, the British Army had brought the railway in the last five months of 1942 to a daily average for all cargoes of some 1,500 tons. To do so they had doubled the trackage in the yards at Andimeshk, Ahwaz, and Tehran, and had constructed over one hundred miles of new line. They doubled the area of the erecting shops at Tehran and put up new sheds, storehouses, workshops, and offices in various localities, as well as new wire installations for telephone and telegraph up and down the line. They doubled rolling stock, including motive power. Their achievement was not to be underrated; but it fell far short of the 6,000-ton target now set by the Combined Chiefs of Staff.[33]

General Connolly soon found that the inability of the railway to take away landed cargoes from the ports was the key problem to be solved in the new transport task facing him. The prospect was hardly pleasing. He wrote in December:

> My biggest mistake in estimating the situation before leaving Washington was in thinking that the ports were the bottleneck. I find that at present the rate of removing cargo from shipside determines the rate of unloading ships. There is no storage at the docks. There are not sufficient trucks and railroad rolling stock available, and what they do have they do not operate efficiently. If I had known the above before leaving Washington, I would have arranged my priorities of men and equipment differently.[34]

As told in Chapter X, rail operating units which had received top priority for overseas shipment in early SOS planning shared equal priorities with port and trucking troops in the revised arrangements.

[32] (1) Rad cited n. 5(1). (2) Review and estimates of tonnage situation at end of 1941 in Report on Trans-Iranian Railway, by Capt. Paul F. Yount, 5 January 1942, and in British and American naval intelligence studies attached thereto or cited therein. WPD 4596 to –15 Iran (Persia) HRS DRB AGO.

[33] (1) PAI Force History, II, 203, 8–10, 13. (2) Ltrs, Lt Col A. E. M. Walter, Asst Dir Trans, British Army Stf, to: Brig Gen T. H. Dillon, 19 Sep 42, sub: Locomotives and Rolling Stock—Persia; and Brig Gen Sidney P. Spalding, 25 Sep 42, sub: Rpt on Car Position on the ISR. OCofTrans, Hist Br—Overseas Comd, Pentagon.

[34] Ltr cited n. 11.

Next after troop shipments came port unloading equipment, with diesels in third place. The transition from British to American operation of the railway was therefore prolonged over several months during which the American railway troops were arriving, learning their jobs, and gradually taking over the line.

To command them General Connolly had selected Colonel Yount who had come to the area in 1941 as a transportation expert with General Wheeler's Iranian Mission and had then gone with Wheeler to India. Recalled from India, Yount reached Basra on 5 October 1942, where, with a small forward echelon which arrived later from the United States, he established a temporary railway headquarters. In December, with its headquarters now moved to Ahwaz, the Military Railway Service was established as one of the operating services of the American command.[35]

A survey tour of the line conducted by Colonel Yount and conferences with Iranian, Soviet, and British officials laid the groundwork for the gradual process of take-over. This took place as fast as trained troops became available. The first outfit to arrive was the 711th Engineer Railway Operating Battalion. Unlike other units which were sponsored by American railways and later incorporated into the MRS, the 711th was all Army. Activated in June 1941, it was ready for work when it reached Khorramshahr in December 1942. Starting on 1 January 1943 by taking over from the British operation of the line from that port to Ahwaz, by the 16th it was running the trains from Dorud to both Khorramshahr and Bandar Shahpur.[36]

To provide headquarters staff personnel for administration of the MRS, the 702d Railway Grand Division arrived in January. Recently activated in October 1942, this group was sponsored by the Union Pacific Railroad and was largely staffed by ex-civilian railroaders with a minimum of military training and indoctrination. On 9 February, with his headquarters moved from Ahwaz to Tehran, Colonel Yount formally assumed command as director and general manager of MRS and of the 702d Railway Grand Division. An organization chart for March shows a staff division of functions, into sections for Administration, Transportation, Water, Equipment, Engineering, and Supply, with operating functions centralized in two railway divisions—the

[35] (1) Rad, Gen Somervell to Gen Wheeler, 9 Sep 42, Hq, ASF, Theaters of Opns, PGC (12) 1942–1943, HRS DRB AGO. (2) GO 11, Hq, PGSC, 17 Dec 42.

[36] The account of organizational matters is based upon: (1) HOTI–V, pp. 27–48. This entire study of 153 pages is valuable for its detailed field-level story of the whole railway operation. (2) Mil History, 711th Engr Ry Operating Bn, MRS, PGSC, Feb 43. PGF 45–A. (3) Mil History, Hq, MRS, PGSC, Mar, May 43, PGF 132–B, D. (4) Mil History, 762d Ry Diesel Shop Bn, MRS, 10 May, 7 Jun 43, PGF 60–D, E. (5) Organization Manuals filed under dates cited. PGF 240. (6) Mil History, Hq, 3d MRS, PGC, 1–31 Dec 44. PGF 132–X.

Northern, extending from Tehran to Dorud; and the Southern, from there to the ports. The operating battalions derived their authority directly from the director. Among the more important accomplishments of this headquarters group, during the period of joint British-American operations, was the taking over by its Equipment Section in February of responsibility for all railway rolling stock and equipment. The Transportation Section, as a preliminary to the assumption of full American operating responsibilities, found it necessary to prepare a book of rules—the railroad man's bible—which would establish uniform procedures based upon explicit instructions. The ISR possessed no automatic signals, no interlocking or multiple tracks, and few grade crossings. Existing ISR rules had to be co-ordinated with such American methods as could be modified to local conditions. After protracted discussion with Soviet and Iranian railway people, a standard book of rules was promulgated by common consent on 1 April.

Meanwhile other operating units were arriving from the United States. In January the 730th Engineer Railway Operating Battalion, sponsored by the Pennsylvania Railroad, joined the 711th, which was already in charge of the Southern Division. By the end of March, the 730th was ready to operate the Northern Division. A few days previously, the 754th Railway Shop Battalion, just arrived, took over the ISR's principal locomotive and car repair shops at Tehran.

These four organizations, the administrative unit, two operating battalions, and the shop battalion, totaled 3,067 officers and men, a number slightly greater than the strength allotted to the American railway service by the first estimates under the SOS Plan. Revised Tables of Organization provided for an additional shop battalion to handle the American diesel engines which were to take over the heaviest work from the steam locomotives.[37] Accordingly, the 762d Railway Diesel Shop Battalion added 632 officers and men to available manpower upon its arrival in March. During April and the first week of May it took over the shops at Ahwaz, consisting of back shop, the freight car assembly shops, and the powerhouse.

By that time the MRS was already running the railway from Tehran to the Gulf. As of 1 April 1943 "responsibility for control of operations and maintenance of the Iranian State Railway between Tehran and Persian Gulf Ports formerly exercised by the Transportation Directorate (Persia) of PAI Force" devolved upon the MRS. On 1 May, when the Anglo-American agreement for control of movements came into

[37] (1) Ch. X, p. 193, above. (2) Memo, CofS for Opns, SOS, for G–3, 20 Sep 42; Memo, ACofS, OPD, for G–3, 21 Sep 42. OPD 617 Iran, Sp Coll, HRS DRB AGO.

effect, railway movements, including allocation, scheduling of trains, and distribution of rolling stock passed also to the Americans.[88]

At the beginning of May there were about 3,700 officers and men of the MRS working on the railroad. Their numbers and the types of units assigned had been determined at the War Department. The resulting Tables of Organization, compiled far from the scene of activity, were not entirely adapted to field conditions. In War Department theory an operating battalion was to have jurisdiction over a stretch of 60 to 120 miles of single-track railway, including one terminal. A railway grand division would direct two operating battalions and one shop battalion, or a maximum of 240 miles of single-track line and two terminals. In actual practice the 702d Railway Grand Division was supervising two operating battalions and two shop battalions, spread over 677 miles, as well as eight terminals; the 711th Railway Operating Battalion operated 388 miles, and the 730th, 289 miles. An attack upon the problem of thinly spread manpower was made when on 1 May the MRS activated the 1st Provisional Railway Operating Battalion, later designated the 791st Railway Operating Battalion. Men for the new outfit were drawn from those battalions already in the area plus personnel from other units in the command with prewar railroad experience. The new unit was assigned the 221-mile stretch of mountainous country between Andimeshk and Sultanabad. Since this rearrangement left the 711th with 258 miles and the 730th with 198, the theoretical limit of 120 miles was still far from attained. At the same time the two railway divisions were divided into three: the Northern, from Tehran to Sultanabad; the Central, from Sultanabad to Andimeshk; and the Southern, from there to the ports.

The conclusion of these arrangements in May 1943 gave the MRS organization a form which remained essentially unaltered throughout its existence. This structural stability was important to the success of the railway task. MRS strength rose slightly after this date, but at its peak of about 4,000 it was almost identical with the maximum strength of the British military railroaders who preceded it.

One administrative change did occur, but this was largely a matter of redesignation to make practice conform to theory. The 702d Railway Grand Division, the administrative dynamo which powered the organization of MRS, was intended by the War Department to be comparable to a civilian railway regional headquarters; but it found itself actually serving as a military railway service headquarters to which

[88] (1) GO 3, Hq, MRS, 31 Mar 43. (2) Hist Rpt, Movements Br, Opns Div, Hq, PGSC, 16 May 43, p. 4. PGF 126–D.

grand divisions were intended by the Tables of Organization to be subordinate. Although the MRS had been designated by PGSC as a military railway service, it was not so recognized by the War Department, whose Military Railway Service, up to November 1942 an organization within the Corps of Engineers, was that month transferred to the new Transportation Corps and assigned the duty of operating and maintaining all military railways in theaters of operation.[39]

By the summer of 1943 the headquarters staff of about one hundred, including forty-three officers, was hard put to it to supervise the activities of 4,000 men in five battalions, and of approximately 15,000 ISR native employees. The Tables of Organization made up at Washington did not recognize the comprehensive functions of the staff under actual conditions. They provided, for example, eighteen stationmasters with the rank of captain, but these were not needed because ISR employees filled those positions. On the other hand the T/O made no provision for specialists in labor relations and left heavily undermanned the administrative control of supply and accounting. In the latter field, particularly, it was necessary to keep accurate financial records against the day of final reckoning with the British and Iranians. Accordingly, on 20 July Colonel Yount requested that the War Department authorize establishment of an approved Headquarters, MRS, to replace the 702d Railway Grand Division. General Connolly, in forwarding his recommendation, asked also for officers to fill important functional gaps. After a delay of many months, during which time the MRS reached the first of its two great peaks in tonnage performance, approval came through from Washington, and on 10 April 1944 Headquarters, 3d MRS, PGC, was activated.[40]

Colonel Yount remained only a few weeks longer, for in May he was ordered to the CBI theater to face fresh railway problems. His long period of service had seen not only establishment of a pattern of organizational structure and procedure which withstood time and vicissitude but also the achievement, through increasing efficiency, of tonnages to which, to put it mildly, the ISR was not previously

[39] (1) Situation Report on Railway Troop Units, by Chief, Mil Ry Br, to CofTrans, 19 Nov 42, SPTOR 320.2, as of 15 Nov 42, when they were transferred from Corps of Engineers pursuant to WD GO 60, 5 Nov 42. (2) Brig Gen Andrew F. McIntyre, "How the Army Has Learned to Railroad," *Railway Age* 117 (1944) 849–51 (2 Dec 44).

[40] (1) Rpt of Labor Sec, Hq, 3d MRS, PGC, by Maj Henry Dawes, ISR Liaison and Labor Off, to Col Richard W. Cooper, Civ Pers Off, PGC, 12 Jan 45. PGF 132. (2) GO 23, Hq, PGC, 10 Apr 44. (3) U.S. Army Transportation in the Persian Corridor, 1941–1945, Monograph 25, Hist Unit, OCofTrans, ASF, Feb 46, by H. H. Dunham, pp. 172–73 (cited hereafter as Dunham). (4) No exact figure for Iranian employees of the ISR exists. The number was, moreover, variable. General Yount stated to the author that 15,000 was a reliable average figure for the whole period of operations. Of these, 8,000 were employed in the southern sector; 7,000, including all headquarters ISR office workers, in the Tehran area.

accustomed. He was succeeded as director by Col. Frank S. Besson, Jr., who served until May 1945 when as a brigadier general he left Iran for a new assignment. Under Colonel Besson the MRS met the test of the peak loads of the latter part of 1944. Besson's two successors, Col. Aubrey M. Bruce and Lt. Col. L. D. Curtis, carried on to the end of operations.

MRS organization charts show, in the latter period, little change from the beginnings. In November 1943 the headquarters staff had five instead of six sections, that for Water being eliminated, and the Supply Section being redesignated Stores and Purchase. Five instead of four operating battalions came under the director's command. The chart for October 1944 shows no change from the preceding year. That for March 1945 indicates a distinction between staff functions, still administered through five sections, now called Administration, Operations, Transportation, Equipment, and Stores, and line functions. The last, with line of command extending back to the director's office, consisted of the running of trains—functioning through the Northern, Central, and Southern Divisions—operation of the six railroad camps scattered along the line, and maintenance operations at the shops at Tehran and Ahwaz.

Men at Work

When General Connolly observed in December 1942 that moving cargo inland was at that time a tougher problem than unloading ships, he was indicating that until port and rail capacities could be brought into balance the logistic pipeline would tend to choke up altogether or feed its transit tonnage spasmodically. Rail and port performance, though they must be recorded as distinct enterprises, are nevertheless to be considered as intimately affecting one another. In evaluating the ups and downs of tonnages hauled by the ISR it is obvious that maximum rail haulage was possible only when maximum cargoes were available at the ports. Table 3 and Charts 8, 9, and 10 help to tell the rail story. When the statistical record shows rising ship discharge accompanied by rising rail tonnage, it reveals ability of the railroad to keep pace with demand. On the other hand, low rail tonnages may indicate either inability of the railroad to carry cargoes away from the ports, or, as was the more usual case after the apprentice period, diminution of incoming cargoes.

Although the entire transport operation was affected by administrative and policy controls at the highest levels, their primary point of contact at the operating level was at the ports. Here was the first test of co-ordinating various functions which touched so closely that,

without clear-cut definition of what belonged to ports operation and what to rail, confusion was inevitable. The two services, Ports and MRS, took over their new responsibilities in alternating steps. On 1 January 1943 MRS began to operate trains out of Khorramshahr. On the seventh, port operation of Khorramshahr by Americans began, although British units remained to help. By 18 January MRS was running all the trains from Khorramshahr and Bandar Shahpur to Dorud; and in mid-February American units assumed interim operation of the port of Bandar Shahpur, with continuing British help. On 1 April both ports and railroad commenced all-American operation, and on 1 May began effective American control of movements in the British zone. But even before the first American assumption of operating responsibilities, Colonel Booth for Ports and Colonel Yount for MRS had, in December 1942, agreed on a division of labor at dockside, where their jurisdictions met and were likely to become operationally entangled. The ports organization would control the rail yards including car loading, and storage operations, while MRS would control switching engines, and would maintain technical supervision over rolling stock in the rail yards.[41]

Car switching at the ports was a crucial part of the process of making up trains and speeding removal of landed cargoes inland. This was particularly so at Bandar Shahpur, where the only means of inland clearance from the island was by rail. By February 1943 nearly 20 percent of the total available strength of the 711th Railway Operating Battalion were switching cars at the two ports. Charts 9 and 10 show that at both ports, but especially at Khorramshahr, ship discharge outran rail clearance during the early months of 1943. To obtain closer co-ordination of rail and port functions Booth and Yount agreed in May to put all railway terminal operations at Khorramshahr under port operating command. This settlement left the railway free for its single task of running trains and placed all strictly port functions under port control. By simplifying the MRS task, it contributed in no small measure to the stability of that organization's functional pattern and soon bore fruit in rising efficiency.

The Americans were active in many other ways during those early months of 1943. Locomotives were assigned to districts according to power requirements; American and Iranian personnel made studies of track construction, sidings, tunnels, and bridges, and improved trackage at Ahwaz and Khorramshahr to expedite car handling. Distribution of air-brake equipment and hand brakes in trains was standardized. Studies were begun for improvement of water facilities, for

[41] Ch. XVIII, pp. 381, 387–88, below.

the installation of diesel fuel oil storage tanks, and for storing "dead" engines at Tehran. New engine sheds at Ahwaz were projected. Damage to the communications system by thieves, electrical and snow storms, and the March floods was inspected and repairs begun. All along the line from January through March there was intense activity as the date neared for complete American take-over. American soldiers observed British and Iranian operations to familiarize themselves with procedure, the nature of available equipment, and the railway line itself. American mechanics studied at the British shops in Tehran the peculiarities of the locomotives they were to inherit. Tests were made of air sanders on British locomotives, and of hand brakes on American flatcars and tank cars. As fast as they arrived the new diesels were erected. The first diesel-hauled train moved from Ahwaz to Andimeshk in March. In another month all freight trains and mixed trains from ports to Andimeshk were powered by these 126-ton, 1,000-horsepower engines.

The heavy March rains that flooded the newly built road out of Khorramshahr also caused a serious traffic delay on the railroad. Several thousand feet of track and one bridge were washed out on the Khorramshahr–Ahwaz line, suspending train movements for ten days except for one train each way on alternate days. Track gangs worked in driving rain to prevent spreading of the damage. Though Soviet haulage fell off in March as a result of the floods and of several accidents, the total of all cargoes showed a slight increase over February.[42]

In spite of such troubles, the interim period of joint Anglo-American operations achieved in March two encouraging records. On the third the 711th Battalion moved 6,402 long tons up to Andimeshk in seven trains, eclipsing any previous single day's record in ISR history. Thus, even before the Americans came into full control of operations, it was demonstrated that the ISR could be made to meet and to exceed the new target set for it by the Combined Chiefs of Staff. On 29 March a speed record was set when a special diesel-powered passenger train bearing Her Majesty Taj-ol-Moluk, the Queen Mother of Iran, covered the eighty-seven miles between Ahwaz and Andimeshk in two hours and thirty-eight minutes.

The setting of targets was a matter of concern to all operating authorities. One American consideration during the negotiations which led to American assumption of movements control was the feeling that if targets could be more accurately estimated than hitherto there would be less chance of disappointing the Russians. It was desirable

[42] The account of operational matters, except where otherwise noted, is based upon HOTI–V; and Hist Rpts, Hq, MRS, and 3d MRS, for periods given. PGF 132.

to reduce complaints by reducing the errors of optimism. The policies and methods by which tonnage targets for the railway were established were determined during the first half of 1943. Each monthly target for MRS was set after the capacity of the railroad had been determined, the potential capacity being based on the number of cars and locomotives available in serviceable condition. A preliminary monthly target meeting was then held by American and British representatives to estimate the amount of essential internal tonnage—American and British military freight and Iranian civil freight—which could be moved in the following month. The internal tonnage thus determined was then deducted from the potential capacity, itself a species of over-all target. The difference was the Russian-aid target or estimated cargo tonnage for delivery to the Russians at Tehran.

Although Table 5 shows rising Russian-aid haulage for each of the months of April through July 1943, the target was not always reached. Tonnage for April, for example, fell short by 10 percent, but nevertheless represented the most the Russians had got in any one month up to that time. August, when tonnages fell off sharply, was the last month during the period of MRS operations in Iran in which performance fell below the target level. And thereby hangs a tale in which the Russians figure prominently.[43]

The division of labor in May 1943 between the Ports Service and MRS made for closer co-ordination of loading at the ports. The trouble lay not only in some confusion resulting from divided responsibility for what was determined to be a strictly port function but also in a problem much more difficult to control, namely, the availability of cars for loading. Here the necessity existed for more efficient use of cars within MRS; but the availability of cars was even more importantly related to Soviet operations north of Tehran. If the Soviet railway organization could not take away loads as fast as they were delivered, or if they did not return empty cars from their zone to the MRS with sufficient regularity, congestion was bound to occur in the south. It was clear from the first that MRS had to provide adequate numbers of cars at the ports. To that end, beginning in March 1943, adjustments were made to facilitate car turnaround from the Soviet zone. Delays north of Tehran arose in the first instance from heavy rains and snowstorms which cut off train movements for a day or two at a time. At a meeting of Soviet and American representatives in March the Americans agreed to assign cars temporarily to the Russians

[43] Opns Directive Consecutive 1, Hq, Opns Div, PGSC, signed by Col Theodore M. Osborne, ACofS, Opns, 30 Mar 43, sub: Target for April. PGF 26–A. First of a series of monthly target papers.

to haul track ballasting material to repair and strengthen damaged portions of their line. The Americans also agreed to furnish locomotives when needed to assist the Russians' train movement. In all, seventy-six American locomotives were so lent during 1943. It was further agreed that as fast as the MRS could repair worn-out or damaged locomotives belonging to the ISR they would be delivered for use by the Russians. Eventually MRS repaired nearly all locomotives and cars used by MRS and the Russians.[44]

The provision of emergency aid to the Soviet railroaders was the first task of the March meeting; but agreement as to car allocations up and down the ISR from Caspian to Gulf was equally important if traffic was to move smoothly. The Americans proposed allocations for different sectors, for different types of cars—such as ballast and service cars and oil tankers—and for different kinds of cargoes. But the Russians would not commit themselves. They expressed general satisfaction with the assignments proposed but needed time for analysis. They questioned the necessity for the allotment of cars provided between the ports and Tehran to meet Iranian civilian, and British and American military, needs, suggesting that these be reduced in favor of Russian-aid traffic. And they blandly pointed out the fact that no formal operating agreement existed. The Anglo-American discussions as to authority were still going on and feelers were being actively put out in the direction of both bilateral agreements and a general four-power agreement. Under the circumstances the Russians would not recognize American authority to allocate cars, and they were unimpressed by the Americans' suggestion that, since the only business in hand was to speed aid-to-Russia traffic, it was best to make all necessary arrangements for operating whether or not the formal paper agreements had yet been concluded.

The next month, after the movements agreement with the British was signed, the Americans tried again. At a meeting in Colonel Yount's office on 19 April further car allocation proposals were made to the Russians, who countered with a request for increasing the target for tonnages to be carried north of Andimeshk. The Americans replied that the present target was based upon a 22-day car turnaround between the ports and destinations in the Soviet zone and that, since the turnaround

[44] The account of car turnaround and relations with the Russians is based upon: (1) Interv with Gen Connolly, Pentagon, 18 Aug 50. (2) Dunham, pp. 155–59. (3) HOTI-V, pp. 111–13. (4) Ltr, Yount to Col J. A. Appleton, 28 Apr 43, cited Dunham, p. 155. (5) HOTI, Pt. I, Ch. 8, Sec. 3, History of Movements Branch, Operations Division, Hq, PGC, prepared by Movements Branch, Operations Division, with Supplement by Laurence P. Corbett, and statistical appendix, Complete Summary of Port and Transportation Agencies Performance of PGC Operations through 31 May 1945, 5 July 1945, pp. 5, 27. PGF.

was currently greater than that, the target figure would have to stand. Although Russian-aid freight hauled by the Americans increased steadily from April through July, it was necessary to bolster the Soviet sector of the ISR by constant loans of locomotives and air-braked cars, essential for train operation in the mountainous country north of Tehran. MRS, by careful planning, gradually raised the percentage of air-braked cars available for Soviet-operated trains from fifteen to forty. To reduce the job of reclassification in the Tehran yards otherwise needed to provide these air-braked cars, MRS began to make "blocked" trains at Andimeshk composed of cars with a common through destination.

Even with such help, the Soviet trainmen continued to falter in the race to carry away from Tehran what the MRS brought to them. In July 1943 tank cars for high-octane gasoline were making a 30-day turnaround between Khorramshahr and Bandar Shah on the Caspian, and this was twice as long as American calculations provided for. During July and August such a congestion of traffic occurred in the Soviet zone between Tehran and Bandar Shah as to choke the yards at Tehran with loaded cars waiting to go on and to leave the Gulf ports almost void of empty cars for loading at shipside. The pipeline, clogged at its northern end, was unable to take in cargo at the south, and an embargo resulted. From 8 to 13 August the Americans at the Gulf ports stopped loading cars for Bandar Shah to give the Russians time to catch up. Russian haulage fell off from July to August by 12,000 long tons.

The summer crisis forced General Connolly to inform General Korolyëv, Chief of the Soviet Transportation Department in Iran, that it might be necessary to go even further, and to stop all shipments into Iran if the Russians could not tighten their operations procedures enough to put Soviet and MRS haulage into balance. As a result the Russians promised to make improvements, and kept their promises; but at the end of the year Tehran saw a new transportation chief for the Russians, Maj. Gen. Ivan V. Kargin.

Except for a hesitation in November, Russian-aid tonnages carried by MRS to Tehran rose steadily for the rest of 1943; but not without periods of serious congestion when it was necessary to store loads at stations south of Tehran because of Soviet inability to accept anything more at the capital. The vigorous efforts of MRS management gradually improved car turnaround. A backlog of 906 cars of USSR-bound cargo at Andimeshk early in September was reduced in three weeks to 281 loads by shifting extra enlisted men of the 762d Battalion to detached service at the Andimeshk yards to speed the work. Even more spectacular improvement was achieved in the matter of the tank

cars whose Gulf to Caspian turnaround in July had been thirty days. By increasing the loading facilities at the Gulf end and the unloading facilities at the Caspian, by improving train schedules, by blocking such cars into special trains rather than mixing them with other types of car, by giving priority to all Soviet-destined gasoline, and by time saving resulting from improved communications, the average tank car turnaround fell in 1944 to ten days and in 1945 to eight.

The banner year, the year in which the ingenuity and resourcefulness of MRS management and the hard work of its men paid off in tons, was 1944. That is not to say that 1944 was all plain sailing. Persistent attack on the problem of car turnaround continued, the outstanding innovation being the blocking of trains at the ports instead of at Andimeshk, thus reducing switching time at Ahwaz and Andimeshk and causing a speed-up in the total running time of given cargoes.

Three accidents, two on the Soviet sector of the ISR, interrupted the flow of traffic but failed to dent the statistical record. In February trains were backed up for a time while track, torn up by an accident, was repaired; and in May a washout on the line east of Tehran stopped operations for two days. In the second case, MRS rushed forty-two men to the scene and repaired the damage, and the Russians who, under the circumstances, offered no objections to the penetration of their zone by the Americans, came through with official commendations. On the American part of the line the summer saw the destruction by fire in the mountains southwest of Sultanabad of a train of twenty-five cars, most of them carrying high-octane gasoline to the Russians.[45]

On 28 July the delivery of the one-and-a-half millionth ton to the Russians called for a celebration. A 48-car train which stopped for flourishes at all the main stations along the northbound route was the center of culminating ceremonies at Tehran on that date. Fanfare, speeches, and a souvenir pamphlet took their due places in history and, as the American soldier railroaders handed over the trainload of tanks and war matériel to their Soviet opposites, one of them gave a cigarette to the burly Russian girl who was fireman on the northbound engine. Cameras clicked. There were cheers.[46] The American command eventually overcame the objections of the British and Soviet commands to public announcement of the extent of American aid-to-Russia

[45] (1) Mil History, Hq, 3d MRS, PGC, 1–29 Feb 44, 1–31 Aug 44, PGF 132–N, T. (2) Memo, Col Curtis, Ex Off, Hq, 3d MRS for CG, PGC, for CofS, PGC, 31 May 45, sub: Aid and Favors to Russians. PGF 132. (3) Rpt of Ry Opns, Hq, 3d MRS, PGC, Sep 44, p. 2. PGF 132–U.

[46] (1) Mil History, Hq, 3d MRS, 1–31 Jul 44, and 1–31 Aug 44, PGF 132–S, T. (2) PGC pamphlet, *Souvenir of an Accomplishment,* 15 Sep 44.

operations in the Corridor. In the United States the public in time came to know something of the American achievement.

While internal traffic maintained a fairly steady level through 1944, Russian-aid tonnages fluctuated with the rates of ship discharge. The charts show that Khorramshahr experienced two sharp recessions in cargo arrivals, Bandar Shahpur three, while both ports were equally affected by the sudden and precipitate upsurge in midsummer. At Khorramshahr the MRS kept ahead of the game in handling Soviet-bound tonnages except for the peak month of landings, July; that month produced the railroad's all-time top for total cargoes, but it did not achieve its highest Russian-aid haulage until September. Similarly, at Bandar Shahpur there was only the briefest period at year's end when MRS fell temporarily behind landings. The year proved that MRS could absorb everything that was thrown at it and come back for more.

Problems and Solutions

Many of the most pressing problems which confronted the MRS arose from activities not directly connected with the running of trains. Upon their solution the success of operations hung no less than upon such matters as car allocations. There were questions of security and safety, of public relations and personnel administration. There were maintenance and repair and the development of adequate communications facilities; and there were matters of procedure and practice in the fields of purchasing, procurement, and accounting.

Security and Safety

The 702d Railway Grand Division, which was later merged into the 3d MRS headquarters, found itself plunged into many unfamiliar and unexpected responsibilities. Among these was security of train operations against sabotage, banditry, and pilferage. The SOS Plan provided only two military police battalions for the American command on the presumption that security was a British obligation. When it became clear that railroad security required supplementary American surveillance, MRS established at its headquarters in February 1943 a Security Section to work under the American provost marshal's office and in collaboration with British and Soviet field security forces in Iran.[47]

Scattered up and down the line these attempted to curtail pilferage. Small tools, sugar, tires, arms, and ammunition were particularly

[47] At one time General Connolly arranged with General Wilson of PAI Force for the U.S. command to assume full responsibility for railway security, but Washington vetoed the idea. Interv with Gen Connolly, Pentagon, 18 Aug 50.

vulnerable to theft. Copper wire and brass were welcomed on the black market, as were all manner of American post exchange supplies and lend-lease materials intended for Russia. Some Americans trafficked in items that found their way into the black market and when possible they were apprehended and court-martialed.[48]

In spite of the posting of guards along the railway, by the end of 1943 pilferage of cargo had reached alarming proportions and monthly conferences were held to discuss solutions for the problem. As a result, in January 1944 Russian guards were placed on trains from Andimeshk to Tehran. Only those persons, exclusive of American and Iranian crews, possessing temporary passes were permitted by Russian guards to ride freight trains. Furthermore, self-locking American car seals were installed on cars to minimize car pilferage.

To curtail pilferage among Iranian laborers in the shops and camps and to prevent entry of natives who were not ISR or MRS employees, systems of button and card identification were instituted. Too many of the natives employed by the railway could not resist the temptation to purloin whatever could be concealed beneath their garments and it became necessary to search their persons before permitting their exit from their posts. Natives found guilty of thefts were turned over to the Iranian Gendarmerie for prosecution.

As new measures to alleviate a current situation became effective, fresh problems arose. The overlapping of British and American responsibilities had been handled for a year on a day-to-day basis of mutual convenience. Some Americans felt some British lacking in a proper realization of the importance of policing the line adequately; but in this respect American complaints of British indifference or worse diminished as American responsibilities and experience in the field increased. The American command, in a circular published in February 1944, recognized the working responsibility of MRS for protection of command supplies in transit.[49]

Two months later, looting of northbound trains was resumed on the line south of Andimeshk. Indian guard detachments were reinforced and, as the raiding parties suffered numerous fatalities, pilferage declined once more. Particular emphasis was placed on guarding com-

[48] (1) Report of Military Police Activities, PGC, United States Army, pp. 62–63. PGF 130. (2) HOTI-V, pp. 96–100.

[49] In mid-1942 the American military attaché at Tehran was much concerned over British laxity in security matters on the railway. Col. H. Norman Schwarzkopf also reported unfavorable impressions he received on an inspection trip and these were relayed to Washington in October. But after an agitated attaché report in March 1943 of inadequate British railway police arrangements, the files grow cooler on this subject. (1) MID 617 Iran 12–5–42 (12–29–41) and 8–24–42 (12–29–41). (2) Cir 15, Hq, PGC, 7 Feb 44, as amended by Cir 37, 27 Mar 44.

mand cargo and in April, for the first time in MRS operation, there was a report of no pilferage of that class of cargo along the railway. Three months later, at a joint conference held on 7 August 1944, the Russians were able to report that pilferage was currently at the lowest point since supplies started moving over the ISR to Russia. Nevertheless, during August 1944 it was reported that the Desert and Mountain Districts recovered $23,317.16 worth of pilfered command and Russian-aid goods.[50]

Security measures in Iran extended beyond precautions against pilferage and black market activities. Nazi interest in Iran for purposes of securing access to Iran's oil fields and India was undeniable. A pro-German attitude was prevalent in many quarters and there was an undercurrent of resentment toward Allied intrusion in Iran. The arrest because of active Axis sympathy, in August 1943, of fifty ISR employees attested to these facts. Those arrested included chiefs of many ISR departments. On the Sultanabad division of the ISR so thorough a purge was made that no one in authority remained to administer the division which employed 3,000 men. Papers found in the possession of many of the accused proved that they were members of an Axis spy ring which had definite plans for sabotaging the ISR. Their arrests coincided with that of the chief of German intelligence in Iran, Franz Mayer, whose main interest was in disrupting Allied aid to Russia by brigandage directed against the railroad and highway routes.[51]

A safety program was established concurrently with the security program, but it suffered an indifferent existence until the MRS had operated for many months in Iran. One of the earliest safety measures—the issuance of a book of rules—was prompted by an accident which occurred at the outset of MRS operations. The trains which moved the men of the 711th Battalion to their various posts were manned by enlisted members of that battalion, in company with Iranian crews and under British control. On 24 December 1942 a group of U.S. Army men left Khorramshahr for Andimeshk. The derailment of a boxcar in Khorramshahr yard delayed the train's scheduled departure that evening and the train actually left Khorramshahr shortly after midnight. Early Christmas morning, when the passengers were asleep, the train crashed head on into a southbound freight train. Both trains were running without lights. One soldier was killed and fifteen were injured and, though none of the crew was held

[50] Rpts of Ry Opns, Hq, 3d MRS, PGC: (1) May 44, p. 8. PGF 132–2–Q. (2) Apr 44, p. 7. PGF 132–1–Q. (3) Aug 44, p. 7. PGF 132–1–T. (4) Page 66 of Rpt cited n. 48(1).
[51] (1) Rpt cited n. 40(1). (2) Mil History, Hq, MRS, PGSC, 1 Aug–31 Aug. PGF 132–H. (3) HOTI-V, p. 122–23. (4) Page 55 of Rpt cited n. 48(1).

responsible for this first wreck, preventive measures were immediately taken.[52]

Following the accident regulations were tightened. One American conductor and, when possible, one American engineer were to be on each train, the latter to supervise the work of the Iranian engineer. The conductor was to be in charge of the train, supervise the work of the Iranian crew, and assume responsibility for the safe movement of the train. Before departure from each station the conductor was to notify the American dispatcher at the next station and also check with the Iranian conductor to make certain of clearance.

An intensive study was made of the operating conditions in the Tehran yards where delivery was made to the Russians of cargo destined for the Soviet front. Standard procedure provided that the "consist" of each train leaving Andimeshk be teletyped to Tehran. This was a kind of manifest which showed the number of each car in the train, its contents, and its destination. The yardmaster in Tehran, informed in advance of the arrival of each train, assigned a track. On the train's arrival in the yards each car was inspected for mechanical defects and the condition of its seals, proper reports were rendered, and any defective cars were segregated for repair. Thereafter the train was split up; cars destined for Bandar Shah were placed on one track, those for Shahrud on another, and those for Mianeh on still another. Cars containing civil Iranian freight billed to Tehran also were placed on a different track, to be moved later to proper destination—the customs yard, the Tehran Silo, the Anglo-Iranian Oil Company, the Goods Shed, or the Russian Dump. After trains were separated for movement west or east of Tehran, all cars were again checked as on arrival, especially those loaded with explosives or inflammables. All air brakes were rechecked. The increase in the number of cars equipped with air brakes from 12.5 percent to 70 percent in two years of American operation was an important factor in the safety record established on the ISR, as was the rigid mechanical inspection of each train at each terminal.[53]

In 1944 a comprehensive safety program was inaugurated; posters were produced monthly for distribution at all installations under MRS jurisdiction and safety was made part of the training program. Awards in the form of certificates were given those whose records showed that, for six or twelve months, they had observed safety rules.[54] During the winter of 1944–45 train schedules were revised to restrict operations to

[52] HOTI-V, p. 52.
[53] HOTI-V, pp. 60–61.
[54] HOTI-V, pp. 100–101.

daylight hours. It was hoped in this way to decrease hazards along the tunnel sector between Andimeshk and Dorud.

Public Relations

Americans have learned slowly and with bewilderment to defend themselves against charges flung at them by those whom they have attempted to help. It always proves puzzling to learn how readily the beneficiary perceives in a disinterested action some Machiavellian design. Iran was no exception, and those elements in the community that chose to blame their country's war-born difficulties upon the Americans easily fitted the railway into their patterns. The ISR was mercilessly attacked in Tehran newspapers for losses of shipments and alleged graft, and two successive ministers of roads were reported to believe conditions as bad as some papers alleged. The Americans, as mentors of the ISR, came in for blame. Students of American soldier-instructors in English classes—instituted by the Labor Section of MRS and attended by Iranian Army officers, businessmen, and employees of the railroad and of other government agencies—when asked their opinions of the ISR seldom spoke well of it. Most of them had no idea what the ISR was doing. And perhaps the most unfortunate circumstance of all was that no one in Iran seemed aware that, under American operation, the railroad in 1944 was transporting twice as much Iranian civilian tonnage as had been hauled before 1943. There was even a general expectation that the Allies would pay Iran heavy damages for disrupting its internal economy by appropriating the ISR for the purposes of the war. After the war, "Prince" Mozaffer Firouz, when he was briefly serving as Iranian Ambassador at Moscow, claimed, in a bold sally into statistics, that half a billion dollars' worth of unspecified damage had been done to the ISR during the war.[55]

Elements in the Iranian Government itself, unhappy over the cooperation given by Hossain Nafisi, civilian director-general, sought his dismissal. After obtaining the prior approval of the British and Soviet Embassies, General Connolly authorized the director of the MRS on 18 October 1944 to issue a memorandum which stated that neither the American nor the Soviet transportation authorities recognized any change in Nafisi's status, and this stand was vigorously backed three days later by the commander of PAI Force.[56]

[55] *Washington Post,* March 29, 1947. Anticipating need for accounting of stewardship, General Connolly engaged the Stone and Webster Engineering Corporation of Boston to study the question. Their Report on Capital Improvements to the Property of the ISR during the Period of Allied Use of Its Facilities was submitted to him under date of 28 February 1945.

[56] (1) Interv with Gen Connolly, Pentagon, 22 Aug 50. (2) Memo by Dir, 3d MRS, 18 Oct 44. AG 323.361, SL 9008. (3) Ltr, General Officer Commanding-in-Chief, PAIC, to HBM Embassy, Tehran, 21 Oct 44. Same file.

Though the immediate issue of administrative procedure and authority was thus settled, by the end of 1944 the Iranian press had grown so voluble against American management that on Colonel Besson's initiative special efforts were launched to inform the public. Press tours of line and installations had been held from 1943 on. One was arranged in December 1944, followed in May 1945 by another arranged for the Shah, the Queen, members of the Majlis, and other government officials. On this latter occasion the presentation by the Shah to Mr. Nafisi of the Iranian Medal of Merit marked the distance traveled toward public enlightenment.[57]

Personnel Administration

MRS operated through its own military personnel and the existing staff of the ISR, a total force averaging some 19,000 persons. The standardization implicit in Tables of Organization posed numerous problems. Some positions these established were found unnecessary, as in the case of the stationmasters already cited. One instance of snafu occurred in which several Pullman porters arrived to join a railway operating battalion.

Hurried recruitment and training of professional railroaders showed up significant differences between a good railroad man and a good military railroad man. An Army officer is responsible for his men, day and night, and under all circumstances. Officers commissioned directly from successful professional experience in railroad operation brought with them no such special competence. The consequent assignment of some men to positions for which they were not qualified, and the lack of men for specific needs led, for a while, to acute dissatisfaction throughout the organization. In time, as men were trained and commissioned in the field, and as rotation and new assignment altered conditions, the situation was improved.[58]

The problems which went along with MRS dependence upon Iranian labor were varied. The war had upset the Iranian economy and a crop failure had induced widespread hunger. Wages had not kept pace with prices, which had skyrocketed 800 percent in three years. Bread riots were rife in Tehran. Furthermore, bound by its instructions to comply with Iranian laws and regulations, the MRS inherited conditions under which the vague and inadequately codified regulations of the ISR had long encouraged administrative looseness. The MRS

[57] PGF 132 *passim*, especially Ltr, Col Besson to CG, PGC, 27 Nov 44, and atchd papers.
[58] (1) HOTI-V, p. 58. (2) Ltr, Col L. D. Curtis, former Ex Off and later CO, 3d MRS, to author, 4 Jun 48. (3) Intervs cited ns. 18, 56(1).

Labor Section undertook to introduce a western consistency not altogether welcome to the eastern mind.[59]

The first serious labor problem was presented in March 1943 by the floods which damaged some nine miles of line on the desert below Ahwaz. Not a single laborer could be procured to work on the washed-out section because of the competition for Iranian labor among various American Army services in the area and because at the time the ISR could employ none to work in that locality. The Army was then extending to native labor, in addition to regular wages, a daily allowance of two rials with which to purchase a ration of tea, sugar, and flour. The MRS determined to extend the same privilege to ISR employees south of Ahwaz, and when a large group of natives had been convinced of the availability of food in that section a trainload of them was dispatched to the scene. Later, railroad labor was accorded the same ration as skilled labor in Ahwaz, and an average of 4,500 employees per month received that ration.

There were early labor troubles at Tehran. In April 1943 native train and engine crews began absenting themselves from duty because food was too hard to get on the lines out of Tehran. Since regular train service had to be maintained to move the freight destined for Russia, conferences were held with the American adviser to the Iranian Ministry of Foods.[60] A contract resulted whereby the ISR would distribute government-rationed bread to its employees in Tehran. A rationing system was developed, ration cards were distributed, two Army trucks were secured for transportation, and five stores were opened in the Tehran yards on 12 April 1943, when 7,000 of the flat, native loaves of bread were sold. Within a few weeks, sales on peak days reached 12,500 loaves. The Americans somehow contrived to fulfill their promise of daily bread sales; when the supply threatened to be exhausted, the bakery was pressed to speed its production, and distribution continued. It became necessary to provide Americans to maintain order at the stores to ensure first-come, first-served treatment. The Labor Section was proud that no employee who applied was denied bread. Within the ISR, the Food Department, which was charged with the responsibility of buying food for resale to native employees, required westernization. In January 1943, for instance, dried beans mixed with pebbles were being sold to the natives. Wheat contained so much foreign matter that its consumers suffered severe headaches and digestive ills. The MRS took control, placed an American officer in charge,

[59] The account of labor matters is based upon (1) Rpt cited n. 40(1). (2) HOTI-V, pp. 101–08, 119–20, 144–45. See also Table 13.

[60] Joseph P. Sheridan.

and improved the situation. By June 1943 monthly sales of all food had reached 500 tons.

In April 1943 there also occurred a wage crisis which was attributed to inequities in government regulations and to indifference among ISR officials. Approximately one third of the skilled and semiskilled roundhouse employees at Sultanabad had quit in one month. The MRS studied the situation and found that wages of some employees with seniority were extremely low and that new employees were being hired to do the same work for more pay. There were no accurate lists of employees and no personnel data. Falsification and guesses existed in the ISR lists. The names of Armenians and Turks were omitted; friends were tabulated at higher wages than those to which their duties entitled them. Eventually, personnel lists were revised and reclassification and wage adjustments accomplished, so that a measure of seniority and equity was accomplished in the wage conditions of ISR personnel.

During the summer of 1943 it had become apparent that the ISR was effecting discharges adverse to the interests of the MRS. Political in essence, this situation entailed lengthy controversies with the ISR and with the Ministry of Roads. The MRS finally developed a system of transferring to its payrolls any employee whom the ISR elected to discharge but whom the MRS considered necessary to keep.

In December 1943 strikes threatened the ISR and the success of MRS's mission. There were various causes, one of which stemmed from the ISR's failure to make the so-called "high cost of living allowance" authorized for all government employees. Actually, a technicality which had required action by the Council of Ministers was responsible for the ISR's failure. Agitators spread rumors to the effect that ISR had refused to make the payment, and many of the employees, easily inflamed against any form of real or imagined tyranny, were quickly aroused. The MRS counteracted the threat by guaranteeing that the bonus would be paid. The first monthly installment was made in December and ISR labor was quieted. Other trouble developed because a few enginemen failed to receive wage increases and because of irregularities in the distribution of free uniforms. It was soon learned that ISR men were being formed into organized unions. The Railway Workers' Union, however, professed to be opposed to strikes, and various intercepted communications sent by it to its local committees were found to demand that there be no union interference with the movement of war goods to Russia. Occasional meetings were held between MRS personnel and union leaders and a number of the union's recommendations were acted upon. It was reported that very few unreasonable requests were presented.

Twice in 1944 the strikes threatened in 1943 occurred. In March, government employees at the Tehran Silo struck for higher wages and obtained a wage increase for unloading laborers who were railway employees. In August 1944, 500 unloading natives in the Goods Shed in Tehran went on strike. The reason was that ISR employees under Russian supervision had been granted a wage increase of ten rials per day. Since labor working under Russian supervision represented about 3 percent of all such labor employed in the Goods Shed, it was finally determined that the daily wage would remain at thirty rials. An increase in the wage for that class of employee would have resulted in increases for 10,000 on the ISR payrolls, and elsewhere there was adequate labor willing to work for 30 rials daily.

American supervision of the Iranian labor force on the railroad provided an interesting experiment in the introduction of western ideas. The willingness and adaptability of the ISR civilian administrative staff were important factors in the experiment's success. A minor illustration points to the small revolution in ideas which accompanied the war effort on the ISR. Although in the offices of the chief of police and chief of secretariat Moslem custom still forbade approval of the employment of women, by January 1945, 150 women were working in the offices of the ISR.

Maintenance and Repair

Maintenance of way and rolling stock, as well as continued operation on an increasing tonnage scale, required as routine measures steady improvement to physical plant. New trackage installed included passing sidings, freight and sorting yards, and rail-to-truck transfer tracks at Andimeshk and Tehran. Engine sheds were built at Ahwaz, warehouses at several points, and sandhouses were spaced from Andimeshk north to provide adequate supplies of screened sand in the mountains. Tanks for storage of water and others for diesel fuel oil were placed where needed. Perhaps the strangest work of all was the virtually new construction required through the mountains where the light rails, laid to carry only the mild and infrequent little trainloads of prewar times, "crept" under the weight of war tonnages. Reballasting and elaborate rail anchorage solved this serious problem.[61]

Water facilities on the ISR became one of the first problems for the MRS. In Iran, water comes from wells, springs, and streams, but there is little water reserve because there is little moisture. There is a great diminution of water supply in the hot autumn months, before the wet season replenishes it, and consideration had to be given to the

[61] (1) HOTI-V, p. 67. (2) *United States Army Dispatch,* PGC, August 1, 1945.

need for uninterrupted water supply. At one point water was pumped twenty-five miles to the place of consumption from a river which has been known to rise as much as thirty feet in one night during the rainy season. Existing ISR water facilities were improved by installation of additional pumps, settling basins, and storage tanks. To utilize every possible agency by which to increase water supply, the MRS in four places tapped the ancient Persian qanat system of distributing water underground by gravity. The ISR then contracted with village owners for the use of this water.[62]

It is easy to understand why diesel locomotives were assembled in Iran as rapidly as they arrived. After two years of service, the diesels used only twenty gallons of water per trip from the Gulf to Tehran. They did not have to draw upon the various water stations along the line. Moreover, their slight exhaust created none of the distress suffered by the men on steam trains in the long unventilated tunnels. By 1 July 1943, 57 of these diesels had been erected and put into service on the line. Ninety-one American mikado locomotives, as well as 8 reconditioned Hong Kong engines, were in use. In addition, there were the 240 locomotives already operating in March; 143 locomotives of the 2–8–0 class furnished by Great Britain, and 57 Ferrostaals of the 2–8–0 and 2–10–0 classes and 40 steam locomotives of miscellaneous types which belonged to the ISR. The coming of the diesels dramatized the face lifting of the line, and the augmented numbers of locomotives contrasted with the 110 steam engines, mostly unserviceable, which the British took over in 1941.[63] Of nonpassenger cars, the British found 1,998, divided among 924 boxcars, 457 low-side gondolas, 87 freight cars, 295 tank cars, 170 ballast cars and 65 rail cars. Of the total, far too many lacked brakes of any sort, and such hand brakes as were in use were inadequate for heavy loads on steep grades. In their first year the British imported 891 additional cars and 1,990 were shipped in from the United States, to bring the total to 4,779 freight cars, still a number considered altogether insufficient to handle the Russian-aid target. By 1 May 1943 there were 5,088 cars of all classes on the line, most of them hand braked and all having screw couplings. As of mid-June 1945, after 2,906 cars had been brought to Iran by the MRS, the total of working cars was 7,994. Sixty-five percent of the new arrivals

[62] (1) L. M. Winsor, "Irrigation in Iran," *United States Army Dispatch*, PGC, March 20 and 27, 1944. (2) For a description of the qanat, see Donald N. Wilber, *Iran: Past and Present* (Princeton, N. J.: Princeton University Press, 1948), pp. 121–23.

[63] Equipment figures from: (1) Dunham, pp. 36–37. (2) HOTI-V, p. 69. (3) 3d Military Railway Service Equipment Section Records, cited HOTI-V, p. 69. (4) For the period of British operation, Dunham draws upon British reports and the Stone and Webster Report cited note 55. The two sources do not tally, but their differences are minor, and irrelevant to present purposes.

were air braked, and, with the diesels, they bore the brunt of the heavy war traffic.

One very important aspect of MRS operations was the business of the 762d and 754th Shop Battalions. Responsible for the repair of a great variety of locomotives and cars of British, German, and American origin and, at the same time, faced in early 1943 with a critical shortage of locomotive and car parts, the shop battalions did a remarkable job. Many mechanical items were not procurable in Iran and those which could be found were exorbitantly costly. It became obvious, therefore, that parts would have to be manufactured by the men in order to repair equipment and keep it serviceable. Both foreign and obsolete tools had to be used until American tools arrived.

Methods of tool and parts manufacture were crude. For instance, there was an acute need for quantities of brake shoes. They could not be procured in Iran, nor was the ISR, which before the war had ordered them from the German manufacturers of its equipment, equipped to manufacture its own. The 754th Battalion established a foundry at the Tehran shops. Molds for the brake shoes were fashioned in the hard earth, which was the floor of the foundry, and the molten iron poured in. Although the process was primitive, production by native workers under American soldier supervision was substantial. In the month of August 1944, 2,450 brake shoes were manufactured. The total for two years of operation was somewhere near 50,000.

No less useful, though of less heroic proportions, was the foundry's contribution to the art of dentistry. The 19th Station Hospital at Tehran needed castings for a great number of dentures for command personnel and the 754th was requested to furnish them, which it did, all in the day's work.[64]

One of the first tasks of the 762d Battalion was the erection of diesels and rail cars as they arrived in Persian Gulf ports. Tools to be used for this purpose had to be devised from the scant material at hand and methods had to be improvised, but the battalion carried out the demands made upon it. By the end of 1943, 2,210 cars and the fifty-seven 1,000-horsepower diesel locomotives previously mentioned had been assembled.[65] A total of 1,076 freight cars had been equipped with heavy couplings and friction draft gear. The month of December 1943 saw virtual completion of the programs for car erection and installation of air brakes. During 1943, 854 cars were equipped with

[64] (1) Mil History, 754th Ry Shop Bn, 3d MRS, 12 Sep 44. PGF 102–T. (2) HOTI-V, p. 75.

[65] Rpt of Ry Opns, Hq, MRS, PGC, Dec 43. PGF 132–1–L. For repair figures for June 1943 and December 1944, see PGF 132–F and PGF 132–1–X.

air brakes. Mikado-type locomotives were modified by installing improved sanders with enlarged boxes. The slipping of locomotives on grades was thus reduced to a minimum and more rapid turnaround resulted. The use of grease rather than oil lubrication for rod bearings reduced the incidence of overheated bearings and consequent engine deterioration. The increase in demand made upon the shop battalions is best illustrated by a comparison of the number of cars repaired during certain specific months. In June 1943, 144 cars were repaired; in December of the same year 2,704 cars were repaired; the number increased to 6,985 cars repaired during the month of December 1944.

A further contribution of the shop battalions was their supervision and training of ISR employees in modern methods of locomotive and car repair and modification. The assembly line replaced the Iranian system of bunching workers to repair a single locomotive or car. Schools were set up to teach natives the reconditioning and salvaging of usable spare parts. They also taught the repair, improvisation, and maintenance of machine-tool equipment. There was some difficulty at first since those who made drawings for modification had to work in millimeters, inches, kilograms, British and American tons—and in four languages. The language difficulty was partly overcome by publication of a booklet on locomotive parts printed in English, French, Russian, and Persian. Copies of the booklet were distributed to all points on the ISR. In its many schools for ISR employees, MRS was conspicuously successful in developing large numbers of skilled workers.[66]

The dependence of the shop battalions upon an uncertain flow of supplies, whether from the local market or from the United States, called for ingenuity in improvising in frequent periods of dearth. In April 1943 the Stores Section of the ISR was transferred to the jurisdiction of the MRS to cut down stealing by substituting disciplined supervision. This was part of a general arrangement with Millspaugh whereby MRS kept an eye on ISR finances. Americans had previously been assigned to familiarize themselves with Iranian and British stocks and a small British cadre was retained temporarily to advise. The ISR system of classification of supplies was cumbersome and impractical; their three types of supplies were subdivided into fifty or more. MRS simplified the classification system and set up records which would indicate what supplies were available.

Acute shortages existed in small tools, spare parts for locomotives, freight car wheels, and axles. Arrivals of railroad supplies from the United States between May and August 1943 alleviated the situation

[66] (1) Memo, Col Curtis, for CG, PGC, for CofS, 31 May 45, sub: Aid and Favors to Iranians, pp. 4–5. PGF 132. (2) HOTI-V, p. 70.

to a considerable degree, but the shortage of freight car wheels and axles created a serious problem again in June 1944. Shipments finally arrived in July and August and these parts were installed immediately on cars which had been held up for some time for lack of them. Shortages in specific items continued to exist so that by February 1945, 6,266 items had been on requisition for twelve months.[67]

Railway Communications

Communications facilities directly required in railway operations were regarded by the American command as a part of its signals responsibilities. Although the Americans had engaged in both construction and operation of signals facilities on a small scale before 1943, British signal troops, for lack of American, had operated, maintained, or, through their control of the ISR, had supervised railway communications facilities even after the MRS took over the line. In March 1943, after the arrival in the field of the 95th Signal Battalion, the Signal Communication Service of the American command was directed to operate and maintain such signals facilities as were required by the MRS. From 31 May responsibility fell upon that service for wire circuits and railway signals installations, whether Iranian, British, or American, along the line from Tehran south to Khorramshahr, Tanuma, and Bandar Shahpur. The service therefore organized a Railway Sector to parallel the regional sectors already set up to cover administrative requirements within the command districts. The Railway Sector handled not only MRS business, but also provided a through service for administrative traffic common to the command districts.[68]

The year 1943 saw the most substantial addition to railway signals facilities. Wires in railway operational use in late 1942 had consisted of a galvanized iron ground return circuit. This was reserved for ISR use, but British signal units operated over it a net of teletype machines with printers at Tehran, Dorud, and Andimeshk, and a physical relay at Dorud. The circuit provided both a telegraph line and a block-to-block telephone service for train control. There was also a copper dispatch circuit, under British control, reserved for ISR operations. Both these circuits were carried on steel poles.

In the spring, as American responsibilities for railway communications increased, selective ringing equipment was installed on the

[67] Rpt of Ry Opns, Hq, 3d MRS, PGC, Feb 45, p. 7. PGF 132-1-Z.

[68] The account of railway signals is based upon: (1) Communications in the Persian Gulf Command, edited by Capt Sidney L. Jackson, Hist Sec, OCSigO, October 1944, pp. 5, 12, 13, 16, 18, 21. Filed as HOTI, Pt. I, Ch. 8, Sec. 2. PGF. (2) Hist Rpt, Sig Serv, 16 Aug–15 Dec 43. PGF 133-K. (3) Ltr, Brig Gen Samuel M. Thomas to Col A. F. Clark, Jr., 22 Apr 46. PGF 133.

dispatch circuit. Additional voice lines were constructed to carry Persian-language railway traffic and by year's end two grounded telegraph circuits, with drops at intermediate stations, provided additional facilities for train dispatching. Two complete circuits, built through the tunnel sector from Andimeshk to Dorud, were extended to Tehran. Whereas in early 1943 the teletype taken over from the British constituted virtually all the teletype then in use by American agencies in the command, the end of the year found teletype, thanks to increased wire facilities, carrying the burden of communication within the command.

The theft of wire by tribesmen or roving independents with an eye for quick profits became critical. Arrangements were concluded in May 1943 for patrol of railway wire lines by Indian infantry under British command. A supplementary force of Iranian gendarmes was assigned to help patrol the wires, but even this was not sufficient to curb thefts. In the spring of 1944 the situation became so critical that arrangements were made to have units of the Iranian Army help guard certain sections of the line. Thefts continued in spite of increased precautions and, though the extent of impairment to MRS operations as a whole does not show in available records, theft of railway wire must have composed a substantial portion of the total of 219,033 feet of army wire reported stolen in the period from 1 October 1943 to 30 September 1944.[69] Installation of electrical shock devices to discourage thieves failed when the natives began to use ropes to break the wire. Next tried, and more effective, was the "tattle-tale" system which gave instant warning of interrupted circuits.

Local Procurement

The Purchasing Section established in the MRS effected many improvements in local procurement methods employed by the ISR. Some time-consuming routines which grew out of the formality of Iranian business practice were eliminated, and a purchase order form was introduced that cut down the number of weeks required to handle documents. Commodity price charts were made and price trends of important commodities reported weekly; these records were used as guides in awarding large orders and preventing overpayment. Several ISR employees were arrested for thieving.

Procedure in procuring railway maintenance supplies was a problem early in 1944. At that time the War Department suggested that such supplies be procured from American lend-lease goods delivered to the Iranian Government. That is, the Iranian Government would

[69] Page 78 of Rpt cited n. 48(1).

request needed supplies through American lend-lease; then they would be made available to the MRS for use on the railway. The command had already established a steady, dependable source for railway maintenance supplies which involved passing requisitions through Army channels in the United States. The cost of the supplies was in turn paid by the ISR. This repayment procedure was already quite complicated since it involved dealing with both ISR officials and the British Army. General Connolly protested the new War Department proposal, insisting that to change the procedure of procuring supplies and to require the Army to procure them via lend-lease to the Iranian Government would threaten the success of his mission. He added that the officials in Washington could not realize the consequences of introducing Iranian politics and local customs of trade, barter, and ethics into procurement. Connolly described his efforts to obtain railroad ties locally as the equivalent of a nightmare. First, there was the railroad, which of course was government owned; then, there was the Iranian Minister of Communications, under whom the railroad nominally operated; and finally, there was the Minister of Agriculture, from whom permits to cut lumber were obtained. The effort to purchase the ties had begun in September 1943; no deliveries had been made by February 1944, largely because certain individuals in each of the three agencies were interested in obtaining what were called their perquisites. The delay caused the procurement officer of the command to buy ties on the open market, turn them over to the railroad, and request reimbursement. Had it not been for the red tape involved, American lend-lease could have been used to supply the ISR. General Connolly's plea, "Without the railroad the mission of the PGC fails," was heeded and he was allowed to continue procuring railway maintenance supplies from his normal source in the United States, the Charleston Port of Embarkation.[70]

Accounting

Examination of the ISR accounts revealed practices which struck the Americans as both unfamiliar and unconventional. As no reconciliation of bank statements with the railway's books had been made in two years, the ISR's true bank balance was unknown. Deposits were taken to the bank about once every three months. The monthly summarized cash statement consumed twenty days in preparation; errors were numerous; the accounts were about a year in arrears.[71]

[70] Rad AGWAR 688, Gen Connolly to Gens Marshall and Somervell, 19 Feb 44. OPD 617 Iran, Sp Coll, HRS DRB AGO.

[71] (1) Memo cited n. 66(1). (2) HOTI-V, pp. 114–16.

This situation was of concern to those in MRS who had to keep the record straight. Four railroad accounting officers were therefore requisitioned from the United States and accountants transferred from headquarters. To remedy chaotic accounting for materials and supplies, the MRS Accounting Section in August 1943 introduced centralized material accounting at Tehran. It also introduced a new timekeeping system in the ISR Traction Department by which employees were paid only for time worked.

An innovation which paid off in increased efficiency was the introduction of American waybills for freight carried over the ISR system, Tehran and south. These ensured trustworthy delivery records for goods and provided for accurate accounting of both cargoes and cars. Delivery was expedited and pilferage reduced by eliminating the possibility of cars containing valuable merchandise going astray. In anticipation of final accounting, a project undertook to abstract all waybills prepared at ISR stations since the beginning of the movement of Allied traffic.

Banking procedures were improved by reconciliation of ISR books (in both the Bookkeeping Department and the Cash Office) with the Bank Melli statements. Deposits were made three times a week and, through better methods, the time required for the preparation of the monthly summarized cash statement was reduced from twenty to five days per month and its accuracy increased. Likewise, the system of clearing cashiers, which had formerly taken two to three months, was reduced to five days.

The Last Months

The third year of American operation opened with rather large tonnages; but February and the succeeding three months saw the reduction of Russian-aid cargoes to minor proportions. After March 1945 petroleum products furnished the principal freight. Shop operations decreased proportionately with freight curtailment, though car and engine repair continued until American operations ceased. Effective 10 April the monthly aid-to-Russia target for the MRS was reduced to 60,000 long tons of dry cargo and 40,000 long tons of POL. In addition, internal cargo was lowered to 50,000 long tons.[72]

On 25 May the commanding general of the PGC was authorized to announce that, as of 1 June 1945, the mission of his command would be accomplished. That meant an early end to MRS. After some weeks

[72] (1) Mil History, Hq, 3d MRS, 1–31 Jan, 1–31 Mar 45. PGF 132-Y, 132-1-A. (2) Ltr, Ex Off to CofS, PGC, to Dir and Gen Mgr, MRS, 10 Apr 45, sub: Reduction in MRS Target. Secret and Security Room, ORB, RAC, Cabinet 18, Drawer 1, Folder 4, SL PGSC.

of special training of railway personnel, chiefly Iranian, the physical return of control to Headquarters, PAI Force, Baghdad, was accomplished as of 25 June. The British lost little time after receiving the railway from the MRS in handing it over to the Iranian Government. From the time of handover, all northbound freight for the USSR and PGC was carried under Iranian operation. On 15 July the 3d Military Railway Service was discontinued. Its remaining duties—direction of details of handover and disposal of locomotives and rolling stock—were assigned to a new Military Railway Division of the general staff at headquarters.[73]

Numerous documents covering the transfer both of the railway as a whole and of constituent parts and embodying detailed exhibits of fixed assets were duly signed. These documents reflected the complicated nature of the financial problems involved in American operation and return to British control. The instruments of transfer stated that the United States, having received the railway properties from the British on 1 April 1943, returned them plus additions (regardless of the nation or agency making them or paying for them). They further stated that the British agreed that improvements made by them were returned by the United States in good order; that improvements made by the U.S. Army were received on a temporary loan with permission to transfer them to Iran on a care, use, and maintenance basis until final disposal; and that handover of operational responsibilities in no way prejudiced the rights of the U.S. Government relative to fixed assets or equipment "and that final settlement therefor will be made as agreed upon by the parties hereto in the future." [74]

Additions to the capital structure of the ISR subsequent to 1 April 1943 fell into three categories: those financed through the ISR's own capital budget, those financed by the British through the medium of MRS work orders, and those financed by the United States by means of construction directives issued by the command. The first of these categories comprised projects required by the normal expansion of the railway. The others were projects essential to furtherance of the Allied war effort.[75] Instances arose where it was difficult to draw the line. In many, improvements needed to carry cargoes to the Russians remained with the ISR.

[73] (1) Rpt of Ex Off to CofS, PGC, 25 Jun 45. PGF 251-C. (2) Ltr, ACofS for Opns, Hq, PGC, to Hq, Persia and Iraq Command, 27 Jun 45. 323.31, SL 9008. (3) GO 75, Hq, PGC, 15 Jul 45.

[74] (1) Ltr, Hq, 3d MRS, to CG, PGC, 26 Jun 45. 092.2 U.S. Army, British Army, and Iranian State Railroad Agreements Covering Transfer of Railroad, SL 8978. Ltr covers agreements and exhibits referred to. (2) Rpt cited n. 55.

[75] PGC Real Property Record, Mil Ry Serv, PGC-K, Pt. B, Vol. 1, Insert., Iranian State Railway. Drawer 2, Cabinet 2477, SL AMET 60.

The railway had responded well to the demands the war laid upon it; and, while fulfilling the Anglo-American commitment to the USSR, it did not fail as the essential artery of Iran's economy. In the year before the occupation the ISR had carried 460,000 passengers and 205,000,000 ton miles of freight. In 1943, under MRS operation, it carried, wholly additional to its work for the Allies, 710,000 Iranian passengers and 625,000,000 ton miles of Iranian civil freight.[76]

During the last months of MRS operations effort was made to bring the ISR and its equipment to the highest possible pitch of fitness for postwar use. Concern for the Iranian economy after the war was not lacking in the consultations which preceded the handover. The Secretary of State notified Ambassador Wallace Murray at Tehran in June 1945 that the British desired that the railway be left capable of handling 50,000 long tons a month. Murray replied that, with its own property and what he understood the American command planned to leave behind, capacity would exceed 87,000 long tons per month. By letter of 11 July the Acting Secretary of State reminded the Secretary of War of the commitment on economic assistance subscribed to by the United States in the Declaration of Tehran. Action subsequently taken provided the ISR with rolling stock sufficient to accommodate 50,000 long tons per month.[77]

Many factors were responsible for the success of the American railway operation. Among them the availability in ample supply of the finest equipment and rolling stock, as used by ingenious and resourceful men who gained valuable experience on the spot, must rank foremost. Improvement in operative and administrative methods, the help extended to the Russians in tightening car turnaround, and, by no means least, the success achieved in winning the indispensable support of native workmen through patient instruction and fair labor administration—these, too, rate high. But when all is added up, the sum spells an intangible: a rugged will to see the job through.

If a single thread can be discerned running through the complicated story, it is the determination to achieve efficient operations at almost any cost of effort and treasure. Handicapped throughout by the indeterminate status of the American force in Iran, the Americans sought consistently to cut through knotty questions of financial and command authority and responsibility. In several instances efforts made in the

[76] (1) Memo cited n. 66(1). (2) Table 5.

[77] (1) Rad 288, Secy State to Wallace Murray, 8 Jun 45; and Rad 390, Murray to Secy State, 12 Jun 45. Case 15, OPD 617 Iran, Sp Coll, HRS DRB AGO. (2) Ltr, Actg Secy State to Secy War, 11 Jul 45. Case 18, same file.

field to obtain or to assert a larger degree of direct control over their operations than seemed intended by the Combined Chiefs' directive were restrained by Washington. Notable among these were Connolly's arrangement with Wilson to assume entire responsibility for railway security; his willingness to take on additional financial burdens in order to simplify operating controls; and his readiness to carry the whole railway burden from Gulf to Caspian.

On the other hand, when the long-drawn-out negotiations over status and prerogatives proved fruitless, General Connolly, though he joined with Iranians, British, and Russians in conversations to clarify these matters, preferred, so far as the railway was concerned, to rock along with no more exact definition of his powers than was contained in the April 1943 movements agreement with the British. Though co-operation rather than unified command was the hard way, the results proved that it was enough.

CHAPTER XVIII

Port Operations

In the scheme of transport the sea gates to the Corridor were basic. Into their maw would pour more than four million long tons of Russian-aid and other incoming cargoes handled by the American Army at Khorramshahr, Bandar Shahpur, and Cheybassi.

In the planning stage the ports seemed the key to the smooth flow of tonnage and the planners concentrated their procurement of men and equipment and their priorities upon this vital spot in the logistical pipeline. The test of actual operation revealed the interdependence of numerous factors of which the functioning of the ports was but one item. Performance at the ports was affected by factors which spanned the whole range that lies between ship discharge on the most fundamental operating level and administrative controls proceeding from the highest levels of strategic planning. Ship discharge was conditioned by the adequacy of ships' gear as well as of cranes, fork lifts, and similar equipment at dockside. Adequacy of berthing space and labor supply also influenced performance. The handling of landed cargoes determined in its way the rate of discharge, for inadequate dock, warehouse, and open storage space, and insufficient intraport transport, such as railway, trucks, barges, lighters, and tugs, caused the piling up of goods and diminished the capacity to unload shipping. These factors in turn affected the rate of inland clearance via rail and highway, as they were equally affected by the efficiency of inland clearance. Administrative controls, likewise, by determining the flow of shipping to the ports, the berthing of ships, and the allocation of movements and priorities (British, American, and Soviet), bore down heavily upon the ports.

If all these factors were in perfect and harmonious balance, then the Ports Service could function at top efficiency in its critical spot in the supply pipeline; but such perfection does not happen. Nobody expected that it could happen in Iran where four different nations theoretically concerned themselves with each turn of a ship's winch; where the spilling of dried beans from an ill-packed consignment burned up the wires (and the bureaucrats) halfway round the world;

and where a deficiency in Soviet shipping at Caspian ports caused the backing up of supplies in the pipeline all the way to North America.

Direction of the American-operated ports was consequently the most complex of the subordinate posts in the American command. It was a tough assignment, and it fell to Colonel Booth. After a year as director of ports,[1] Colonel Booth's comprehensive schooling in manifold troubles qualified him for transfer to headquarters at Tehran. There he served first as assistant chief of staff for operations, next as chief of staff, and finally, then a brigadier general, as commanding general. The Ports Service became for the American command not only a school of experience, but a touchstone of the command's ability to solve problems, surmount difficulties, and deliver the goods.

Evolution of American Responsibility

The SOS Plan contemplated American operation of certain ports within the framework of the British communications responsibilities that were stipulated by the Tri-Partite Treaty. This meant that American operations were to be subject to British control of traffic. Managerial responsibility and discretion were thus, in the plan, restricted to the operational level, and a simple operating organization was proposed, to consist of a port headquarters and a subordinate working force of port battalions.[2] Details and modifications were to be worked out in the field as experience dictated.

Headquarters and Headquarters Company, 9th Port of Embarkation—which had been activated in the United States on 14 July 1942 and during the next three months organized, trained, and equipped—was selected to provide the administrative port troops for the Persian Gulf assignment and divided into three echelons for shipment. The advance party, headed by 9th Port's commanding officer, Colonel Booth, and consisting of five key officers, reached Basra on 1 November.[3] The first troops came ashore at Khorramshahr on 11 and 12 December. They were the 378th Port Battalion of 940 officers and men (white) and some personnel of the 9th Port. They were followed on 27 January 1943 by the 380th Port Battalion of 19 white officers and 927 Negro troops along with the rest of 9th Port, to be augmented still later by the 482d Port Battalion (white officers, Negro troops), the 385th (white), and finally by a new 380th. These were the troops to

[1] The title Director of Ports will be uniformly used in this chapter although it actually varied from time to time. The Ports Service was similarly called by several names.

[2] Plan for Operation of Certain Iranian Communication Facilities between Persian Gulf Ports and Tehran by U.S. Army Forces, 3 Sep 42, Sec. III, par. 9, and Incl V. Copy PGF 235.

[3] Hist Rpt, 9th Port, Mobile, Supplement, 19 Jul 42–1 Mar 43. PGF 12-B.

do the job; but from the beginning there were complications. The British were everywhere in charge, and there was nothing automatic about taking over from them, especially as much of Colonel Booth's attention was occupied after his arrival in assisting in the final determination of what ports should be taken over as well as how. By early January Khorramshahr and Bandar Shahpur, the two ports served by the ISR, had been settled upon, as originally proposed by Prime Minister Churchill, for American operation.[4]

Between the arrival of the first port troops, in December, and 1 May 1943, the Americans passed from the condition of voluntary helpers to the status of fully responsible operatives. At Khorramshahr the men went to work on 13 December, the day after they landed, working as volunteers under the direction of the British. On 7 January the port was formally transferred to American operational control, but some British forces remained, at American request, throughout that month to help with the transition. In a letter to GHQ, PAI Force, the American commanding general requested also that the British continue "to handle Movement control until the necessary American personnel arrive and are trained to properly man the jobs." [5] The request reveals that already the American command had determined that one of the necessary modifications in the field of the generalizations of the SOS Plan would be to end the division of responsibilities for operational control and control of traffic, by the plan allocated respectively to the Americans and the British, and to unite them in American hands. This very important step followed soon. The interim period, with the Americans in charge and the British still helping, ended on 1 April when American operational control of the ports became fully effective. On 1 May, although under the Tri-Partite Treaty the British still exercised final authority over communications and movements in the Corridor, the American command became the determining agency in movements control, setting targets, and allocating traffic. At the port of Bandar Shahpur the same evolution took place. American troops first reached there on 2 February 1943 where they learned their jobs as volunteers under British direction. As of midnight of 17–18 February, the port was transferred to the Americans, who carried on with some British assistance until 1 April when American control of operations became complete.

[4] (1) The lighterage basin at Cheybassi was added six months later. (2) Ltr, Gen Connolly, CG, PGSC, to GHQ, PAI Force, Baghdad, 9 Jan 43, sub: Preliminary Plan for Taking over the Operation of Certain Port, Railway, and Motor Transport Facilities in the Persian Corridor. PGF 26–A.

[5] Ltr cited n. 4(2).

The interim period was not propitious for the setting of records. Indeed, whether during the phase of British responsibility with American help, or that which followed, of American responsibility with British help, both Armies shared the difficulties of mutual accommodations to one another's methods and temperaments under circumstances unfavorable for efficient results. With storage areas at Khorramshahr and Bandar Shahpur congested, inland clearance very slow and, in January 1943, sixteen out of twenty-eight cargo ships in the area lying idle for lack of accommodations at ports, and with 165,000 long tons of cargo undischarged and no prospect of relief in sight, some Americans were inclined to think ill of British operations.[6] Too many ships arrived without cargo gear. When they arrived at Bandar Shahpur during the period when unloading equipment at dockside was nonexistent, things went badly; and when lighterage capacity dwindled to three 100-ton lighters, throwing the chief burden for discharge upon the docks, matters were not improved. Some Americans complained that, though they were on duty fifteen hours a day, they stood around for many hours waiting for freight cars which existed, they felt, in plenty, but which were not available at dockside because of the derelictions of British Movements Control. The Americans were indignant when the British authorities in charge of allocations of berthing space put ships with Russian-aid cargoes to anchor in the channel and docked ships carrying British military supplies.[7]

There was merit in such complaints and in others buried in the files; but it was not always realized that throughout 1942 the commander of the British forces was responsible not only for maintaining communications from Basra to Baghdad and from Khorramshahr to Tehran, for improving ports, highways, and railways to accommodate ever increasing Russian-aid tonnage, and for moving that tonnage to Soviet receiving points. He carried also the supreme responsibility of maintaining up to ten divisions of troops against the strong possibility of enemy attack through the Caucasus or through Anatolia, a threat which was not relieved until after Stalingrad. If British operation of the various Gulf ports in 1942 was not a marvel of efficiency and was hopelessly inadequate to handle the mounting flood of Russian-aid shipping

[6] General Summary Report of the Program of the War Shipping Administration for the Delivery of Russian-Aid to the Persian Gulf Ports and the Relations of the War Shipping Administration with Other Agencies, Public and Private, for the Period Ending December 1944, by Nels Anderson, ME Representative for Recruitment and Manning, WSA, p. 67; and covering Ltr, to H. Chase Stone, Asst Deputy Administrator for Recruitment and Manning, WSA, Washington, 15 Dec 44. PGF 257.

[7] U.S. Army Transportation in the Persian Corridor, 1941–1945, Monograph 25, Hist Unit, OCofTrans, ASF, Feb 46, by H. H. Dunham, pp. 26, 27, 30 (cited hereafter as Dunham).

toward the end of the year, steady progress was nevertheless made in the provision of additional docking space at Khorramshahr and Bandar Shahpur, and in other extensive construction, some of it delegated to the American Army. The additional facilities, as they came into use, increased port performance and encouraged the British to urge upon the Americans at the turn of the year a 10-berth building program to provide a 30-percent reserve port capacity over and above estimated road and rail clearance capacity. Colonel Booth advised the American command that improvement of existing facilities and methods would be preferable to additional construction.[8] Differing opinions and policies were inevitable in the interim period and if some of the newly come Americans were irked by the creaking British machinery, they nevertheless learned how to get along with it, for it was all there was to work with.

The central British agency for shipping was the War Transport Executive Committee,[9] directly responsible to the Ministry of War Transport in London. Established in the Basra port area on 23 October 1941, its authority embraced Iraq, Iran, and all territories bordering on the Persian Gulf. It was the central clearinghouse and final authority for movements information, berthing and allocation of ships, arrivals and departures, loading and unloading priorities, port operations, and co-ordination with inland clearance. Its daily meetings were attended by representatives of the British director of transportation at Tehran, PAI Force Movements and Transportation officers, the Royal Navy, whose Sea Transport officer contracted for labor through the firm of Gray Mackenzie & Co., Ltd. (which had handled British shipping interests locally since 1851), and the United Kingdom Commercial Corporation, which was responsible for documentation of Russian-aid cargoes. The Royal Air Force and the Anglo-Iranian Oil Company were also represented. With all these interests were co-ordinated the civilian requirements of Iraqi and Irani trade. In addition the existent Basra Port Directorate and the Khorramshahr Port Committee, set up in May 1942 to co-ordinate interests at that port, arranged matters concerning dredging, channel markers, removal of sunken obstructions, and piloting. The British Army's Inland Water Transport organization provided river and interport barge service, and lighterage and tug services. As an instrument of the Ministry of War Transport, the powerful War Transport Executive Committee's policies and acts were sub-

[8] (1) Ltr, GHQ, PAI Force, to Hq, PGSC, 1 Jan 43, sub: Movements and Trans. Gulf Dist (Gulf District Hq Files, PGC, now filed at the Kansas City Records Center, AGO, Kansas City, Mo.) 563.52. (2) Ltr, Col Booth to CofS, PGSC, 17 Feb 43. Same file.

[9] W. H. Lock, Chairman.

ject to British cabinet policy and, as an agency in a theater of war, its authority and acts were subject to the overriding priority of British military and naval operational requirements. Matters which could not be settled in committee had to be referred to London for determination.[10]

In the early days of the committee in 1941–1942, the United States Military Iranian Mission had no shipping responsibilities whatever and no interest in shipping except to see to it that supplies and equipment required by its civilian contractors were expeditiously unloaded. To keep an eye on American shipping in the Persian Gulf, a U.S. naval observer was stationed at Basra in October 1941 and a regional director for the War Shipping Administration (WSA) was appointed on 1 November 1941.[11] Both these men sat with the War Transport Executive Committee, being joined in July 1942 by a representative of the U.S. Army.[12] After the arrival of 9th Port personnel, signifying that the new SOS Plan, with its increased responsibilities and tasks for the United States, was operative, the American port commander for Khorramshahr attended the committee's meetings for the first time on 11 January 1943 as a representative of the U.S. Army, being succeeded later by a representative of Movements Branch, Operations Division, Headquarters, PGSC.[13]

The interim period came to a close on 1 May 1943 when the American command assumed, in effect, control of Movements. In so far as American operations through the Corridor were concerned, the recommendations of the American members of the War Transport Executive Committee increasingly influenced policy and action. Delays caused by reference of disputed matters to London were virtually eliminated. In fact American controls over the berthing of ships were extended in certain instances even beyond the American-operated ports by an Anglo-American agreement of 10 September 1943;[14] and when an American served as chairman of the War Transport Executive Committee, though no new powers were added, a fitting symbol of the American share in the common task was made visible.

[10] British Rpt, Persian Gulf Ports and Inland Transport Facilities and Organizations: Report on a Visit to Iraq and Persia, October 5th–November 2d, by R. S. Mactier, Basra, 1 Nov 41. PGF 26–A.

[11] Lt Comdr Derwood W. Lockard and Eugene Seaholm.

[12] Maj Erme B. Myott.

[13] (1) Maj James W. Rattray and Maj Elmer E. Anderson. (2) Rpt cited n. 6. (3) State Dept Rpt, British Controls in Iraq, by Richard E. Gnade, 25 Feb 44. MID 330 Great Britain, 3 Apr 44 (12 Mar 43).

[14] Min of Allied Mtg, Hq, PGSC, 10 Sep 43, quoted HOTI, Pt. IV, History of the Ports, by Ogden C. Reed, p. 135. PGF.

The American Organization and Its Functions

Just as port operation developed ramifications unforeseen by the SOS planners, so port administration eventually required a more elaborate organization than that suggested in the SOS Plan; but at the start it resembled the SOS suggestion for a simple administrative headquarters and a subordinate working force. Colonel Booth, designated Director of Ports Service,[15] was already in command of the small group of administrative personnel comprised in Headquarters and Headquarters Company, 9th Port of Embarkation, and these mainly staffed the new Ports Service headquarters which he established at Khorramshahr. His working force of port battalions would operate and maintain port facilities and execute construction jobs which, at the beginning, were restricted to the modification of existing installations. After the arrival of the first large shipment of American port battalions and administrative troops, Ports Service headquarters was removed on 21 December to Basra, where it was in direct contact not only with the War Transport Executive Committee, but with Headquarters, Basra District, PGSC.[16] This administrative subarea of the American command inherited from its predecessor headquarters certain functions connected with ports and shipping which had evolved in pre-SOS days when there had been no direct American responsibility for port operations or shipping. Colonel Shingler, the commanding officer of Basra District, found himself charged with responsibility for construction activities at ports as well as with liaison with the British agencies and the WSA in such matters as the collection of shipping information.

There was thus at the outset an area of responsibility for shipping and port matters which was occupied in part by both Colonel Shingler and Colonel Booth, each of whose commands stemmed, in the PGSC organization, directly from General Connolly. Possibility existed for a conflict of authority as well as of duties. Moreover the district, as an administrative subarea of the PGSC, exercised wide responsibilities for both administrative and operational activities. Among these, the office of director of ports was placed under the commander of Basra District, and the ports of Khorramshahr and Bandar Shahpur were administratively responsible to him, though their troops and administrative officers and men, as members of the port battalions and of 9th Port, came under the director of ports. Of such is the Kingdom of

[15] Col Booth was designated Director as of 1 Nov by GO 7, Hq, PGSC, 25 Nov 42.
[16] PGSC Headquarters were then also at Basra, but moved to Tehran in January 1943. For removal of Ports Serv Hq to Basra, see SO 1, Hq, Basra Dist, 22 Dec 42. PGF 13.

Snafu, never happier than when founded upon strict obedience to logic and the principle of historical survival.

The situation was soon righted when on 3 March 1943 Colonel Booth assumed command of Basra District. He immediately consolidated his three commands into one organization.[17] Ninth Port remained the source of trained shipping personnel in the administration of district and ports activities. The Ports Service was predominantly operational, while the district became predominantly administrative. The organizations of the port commanders at Khorramshahr, Bandar Shahpur, and Cheybassi (when in July the American command began operations there) were brought under unified command and direction, and Ports Service became, in effect, an autonomous operating service.[18]

With the consolidation of the ports and district headquarters, manpower economies were reflected in the reduction of officers from 46 to 35, and of enlisted men in the headquarters detachment from 195 to 179. Those released from administrative assignment became available for operations.

On 16 May 1943 Basra District was redesignated Gulf District, and the combined District and Ports Service headquarters continued at Basra until its removal late in September to Ahwaz.[19] The ensuing year brought only minor readjustments in the organization chart; but the passing of peak operations made possible a progressive contraction in the organization. First, operational direction of Khorramshahr and Bandar Shahpur was taken over late in 1944 by the Ahwaz office of the Port Operations Branch, Operations Division. The next step in contraction followed on 24 February 1945 when Gulf District was abolished and Ports Service moved to Khorramshahr, effecting a reduction in the Ports Service organization from six to two staff divisions for service and operations. This arrangement continued until 10 October

[17] Hist Rpt, 9th Port, Mobile, Mar–Apr 43, p. 1. PGF 12–C, D.

[18] (1) At Khorramshahr, after brief periods in which Major Rattray and Lt. Col. John S. Wilfley served as commanders, Col. Bernard A. Johnson bore for eighteen months the brunt of the early and difficult days of adjustment as well as the strains and satisfactions of the period in 1944 of highest efficiency and peak performance. At Bandar Shahpur Maj. Harry C. Dodenhoff served from 2 February 1943 to November 1944, from the very beginning nearly to the date of returning the port to the British. He was succeeded by Lt. Col. Gordon D. Cornell of 9th Port. Colonel Booth was succeeded as Director of Ports and Commanding Officer, Gulf District, on 17 November 1943 by Col. Theodore M. Osborne, who, on 31 October 1944, as a brigadier general, was succeeded by Colonel Johnson. Informal Hist Rpt, Mil Pers Br, Adm Div, PGC, 19 Dec 44. PGF 150–W. (2) When Gulf District was abolished on 24 February 1945, Colonel Dodenhoff became Commanding Officer, 9th Port, and Director, Ports Service. Hist Rpt, Ports Serv, Feb 45. PGF 26–Z. (3) Colonel Dodenhoff was succeeded on 23 May 1945 by Col. Louis T. Vickers. Hist Rpt, Ports Serv, May 45. PGF 26–C–1.

[19] Movement Orders 2, Hq, Dir of Ports and Gulf Dist, PGSC, 28 Sep 43. PGF 13. Move completed 10 October 1943. GO 57, Hq, PGSC, 21 Sep 43. Same file.

when Ports Service was terminated. The next day all of its remaining functions were assumed by Transportation Branch, Operations Division. In its thirty-four months of existence, Ports Service had come full circle, from Khorramshahr through periods at Basra and Ahwaz and back to Khorramshahr again, expanding and contracting with the job to be accomplished.[20]

The scope of port operation required collaborative effort or, at the least, efficient liaison, with other organizations—American, British, Soviet, and Iranian. In the early days when growing pains were continuous and violent, Colonel Booth had written:

> The Ports Service is charged with more duties and responsibilities in this theater than landing cargo. Landing the cargo is the easiest phase of our operation and is the phase in which we are best equipped with experts. Storage, documentation, guard, rail and truck loading operations and operation of internal use motor trucks are duties and responsibilities that Ports Service is now charged with.[21]

He might have added that the ports organization usually found itself in the middle of the logistical mill, ground by upper and nether stones. Those who were primarily interested in speeding ships' turnaround joined with those interested in speeding the turnaround of railway cars to urge the ports organization to do something about their complaints. As a result functions were often redefined and reallocated to tighten performance, simplify procedure, or increase efficiency.

The shift of certain Gulf District responsibilities in 1944 to the Ahwaz office of one of the command's general staff divisions diminished Gulf District powers. A transfer of responsibility in the contrary direction occurred when certain functions passed in January 1944 from Movements Branch, Operations Division, to newly established port transportation officers within the ports organization. This took place as part of a reorganization, promulgated by Gulf District, assigning to the Army Transport Service of the combined ports organization responsibility for the movement, loading, and discharging of ships, and to the port transportation officers the movement of freight and passengers to and from the ports and the procurement and allocation of all transportation facilities for the ports. In addition they were to perform all documentation and maintain current records on all freight stored

[20] (1) GO 36, Hq, PGC, 24 Feb 45. (2) PGC Headquarters had moved from Tehran to Khorramshahr on 15 September 1945. The command in October became a service command of the Africa–Middle East Theater. GO 111, Hq, PGSC, 10 Oct 45. (3) Final Hist Rpt, Ports Serv, for 1 Sep–10 Oct 45, 22 Oct 45. PGF 26–G–1.

[21] Memo, Hq, Office Dir of Ports and CO, Basra Dist, for Off in Charge, Opns, Basra Dist, 15 Apr 43. PGF 26–A. The director of ports was also responsible for training and processing arriving troops and handling departing troops.

or in transit at their ports.[22] These duties were partly operational and partly executive or of a staff nature; yet, in the sudden rush of developments, they had come to be exercised by Movements Branch, which, as a general staff office outside the ports organization, was less suited to perform the operational functions than an office within the ports structure. Hence the change.

Yet Movements Branch had earlier been brought into the picture in an effort to improve the situation at the start of operations. On 11 March 1943 Colonel Booth appealed to General Connolly for closer co-ordination with the Military Railway Service in the matter of speeding the turnaround of freight cars at the ports. By an agreement of 29 December 1942 between Colonel Booth and Colonel Yount, Director of MRS, port commanders were to control yards and storage, tally and load cars, and prepare and distribute shipping tickets for each car, while the MRS would operate switch engines and have technical supervision of rolling stock in yards and on the main lines. But loading was subject to priorities, and these were arranged through Movements Branch of Operations Division, the staff division responsible for the supervision and control of matters relating to the whole lend-lease activity of the theater. In consequence of Colonel Booth's appeal, branch offices of Movements Branch were established on 17 March 1943 to facilitate the processes of documentation and administrative direction. With this help the ports organization at Khorramshahr in particular was urged to speed loading. Stress was laid on the fact that the Russians had in only seventeen days reduced from 1,330 to 728 the number of freight cars held in their zone north of Tehran. The port commander at Khorramshahr was therefore told that of the 500 cars standing in his yards, 250 must be dispatched by the end of May. A further tightening of organizational structure occurred when on 29 May railway terminal operations at Khorramshahr passed from MRS to the port commander.[23]

Through its representative at Basra who sat with the War Transport Executive Committee, Movements Branch provided liaison between the American and British operating agencies, obtaining from the

[22] (1) HOTI, Pt. I, Ch. 8, Sec. 3, History of Movements Branch, Operations Division, Hq, PGC, prepared by Movements Branch, Operations Division, with Supplement by Laurence P. Corbett, and statistical appendix, Complete Summary of Port and Transportation Agencies Performance of PGC Operations through 31 May 1945, 5 July 1945. PGF. (2) Ltr, Col Osborne, Dir of Ports and Gulf Dist, to CG, PGC, for ACofS, Opns Div, 18 Dec 43, sub: Establishment of Port Trans Offs. PGF 26–A.

[23] (1) Dir of Ports Instruction Bull 1, 29 Dec 42. Gulf Dist 563.52. (2) History cited n. 22(1). (3) Rads, Col Booth to Col Wilfley, 19, 26 May 43. Gulf Dist 453.0 (4) Page 62 of History cited n. 14. (5) Loading of trucks at the ports was done by Motor Transport Service personnel. Dir of Ports Instruction Bull 2, 29 Dec 42. Gulf Dist 563.52.

British all available shipping information for transmittal to Ports Service and to GHQ at Tehran. In the early period the WSA representative received directly from arriving ships stowage plans and manifests which he distributed to port agencies. After July 1943 ships' papers were received in advance of ship arrivals, thus greatly speeding the processes requiring manifest and stowage information; but in the course of time the function of the WSA became largely advisory, supplying Movements Branch with shipping forecasts and information, and technical advice on loading, safety, and routing.[24]

Two other offices within Operations Division were closely involved with shipping and port matters. Control Branch, which was responsible for advising the commanding general on target estimates, received recommendations on port capacities from the Gulf District organization. While the Movements Branch officer at Basra maintained liaison with the British agencies, the Ocean Traffic Section of Movements Branch at Tehran was the agency for co-ordinating Soviet movement and priority requirements. Established on 1 February 1943 as the Traffic Control Section, its primary function was to perform liaison between the American and Soviet headquarters in obtaining disposal instructions for all cargoes destined for the USSR.[25] The chief Soviet agencies involved were the Soviet Transportation Directorate and Iransovtrans. The latter's office in Tehran was divided into suboffices for processing such disparate items as tanks, food, clothing, and engineer equipment. The Ocean Traffic Section had to screen the often conflicting demands of these separate offices. In general, cargoes for Bandar Shah on the Caspian Sea were appropriate for their destinations in the central Russian manufacturing area. Those headed for Dzhul'fa along the motor truck routes were chiefly commodities such as food, clothing, ammunition, spare parts, and similar items destined for immediate use on the battle front.

The process by which Soviet requirements were translated into American action was unavoidably cumbersome. It began with the manifests of incoming ships. At the outset these came through the British, then through the WSA, often at the last minute and in so few copies as to be almost useless. Later these came in advance by courier; finally via the Movements Branch office in Basra. Copies of the manifests were then forwarded to Tehran and translated into Russian. The Ocean Traffic Section began the process of breaking them down into categories, and the various offices of the Soviet agencies got to

[24] Memo, ACofS Opns for CG, 8 Jan 45, sub: Relations between WSA and PGC. Historical Data on PGC Furnished Mead Committee, SL 8997.
[25] History cited n. 22(1).

work making up their requirements in accordance with their latest orders from the battle front and their latest information as to Soviet ability to receive cargoes at the transfer points and carry them on to Soviet destinations. In the end each item of a ship's manifest was listed according to destination. The detail was enormous and exacting and intensified by the unremitting pressure for speed. Thousands of commodities were sorted out on paper in this way at Tehran and designated for eleven different destinations. Then the lists were sent to the ports for action; but at the ports, especially in the first year, the local Soviet representative was likely to make last-minute adjustments, usually dictated by alterations in front-line requirements. Any such change would affect co-ordinated loading plans for northbound trucks and trains and slow the flow of tonnage, so that the very act of accommodating American operations to Soviet requirements was likely to bring a protest from the Soviets against American delays. The Russians were implacable in their demands for speed and quantity, and where there were so many protests and suggestions, many were bound to be justified. This was especially true in the early months, and Colonel Booth called upon his port commanders in March 1943 to improve the loading of freight cars, after Soviet complaints of incompatible cargoes such as sugar and iron wire in one car, or improper stowage of airplane engines, leading to damage in shipment, or overloading of cars. Betterment followed automatically when an increase in available rolling stock improved the selectivity of freight cars and therefore the efficiency with which a trainload of hundreds of different kinds of items could be made up.[26]

Sometimes Russian suggestions were less to the point than those concerning loading. At a conference on 8 May 1943 with Lt. Col. Harry C. Dodenhoff, the port commander at Bandar Shahpur, the Soviet representatives suggested night shifts at the docks, although floodlighting had not yet been installed. And sometimes a congenital cautiousness in the Slav nature compromised American actions designed directly for Soviet benefit. Such an instance, occurring in January 1943, though originating at the shipping level ultimately occupied the time and attention not only of the highest War Shipping and Maritime Commission officials in Washington, but of the Commanding General, PGSC, and the Russian Ambassador at Tehran. Because of the large number of ships at anchor at the head of the Gulf awaiting discharge, General Connolly, in accordance with WSA's instructions to clear the Shatt al Arab, diverted a limited tonnage of relatively

[26] Rad, Gen Booth to Port Comdrs at Khorramshahr and Bandar Shahpur, 31 Mar 43. Gulf Dist 453.0.

low priority to Karachi, where the ships could be more promptly unloaded and returned to America for fresh cargoes for the USSR. But the local Soviet authority, in the words of General Connolly's reports to Washington and the United States lend-lease representative at Moscow,

> . . . resisted each, every and all diversions and no concrete recommendations could be obtained from him. He was informed that if he did not act in the matter that I would be forced to fix priorities. . . . It is obvious here that Soviets prefer holding excess cargo in ships idling in ports. . . . Russians apparently consider that their recommendation on low priority cargo would be sanctioning diversion to Karachi, which they oppose.

The dispatch adds, in connection with Soviet implications that the American effort in their behalf is not all it might be, "Needless to say we are vitally interested in increasing flow of supplies to USSR. That is our only reason for being here." The War Department backed Connolly and the diversion relieved the shipping glut in the Gulf.[27]

Sometimes Soviet ideas were tried out with no very encouraging results. An instance is an attempt to improve the dispatching of cargoes from Bandar Shahpur by rail. In November 1944 an agreement between Iransovtrans and the American command provided, first, for shipment of commodities by individual order numbers in carload lots, and, second, for holding for complete discharge and segregation before dispatch certain items specified by headquarters at Tehran on disposal instructions.[28] The immediate result of the agreement was that, at the close of the month of November, the Storage and Transit Area at Bandar Shahpur was glutted with cargo which, instead of being loaded at shipside directly for its northern (Soviet) destination, had to be sent to the dump and sorted. Fortunately the last ton of Russian-aid cargo was cleared from Bandar Shahpur on 31 December. The new instructions did not prevail long enough to bring to serious proportions the accumulation of backlog they seemed destined to create. Their promulgation is a further monument to the American effort to oblige the Soviet Ally.

Because of their inflexibility and literalness, the Soviet representatives were never easy to please; but the record shows that, after the early months, Soviet-American procedures settled down to a working basis. If they had not done so, the total tonnages would tell a different story.

[27] (1) Rad, Gen Connolly to Gen Sidney Spalding, repeated to Admiral William H. Standley, U.S. Ambassador at Moscow, for Gen Faymonville, 16 Jan 43. PGF 26–A. (2) Interv with Gen Connolly, Pentagon, 18 Aug 50.

[28] Hist Rpt, Bandar Shahpur Port, Nov 44. PGF 9–W.

The Ports and Their Problems

Even a sampling of ports relations with other agencies shows that getting the cargoes off the ships was, as Colonel Booth had said, the least of his worries, though one of his biggest jobs. Problems and operations were synonymous. The physical ports were a problem. The troops who disembarked at Khorramshahr in December 1942 had sailed some seventy miles up the Shatt al Arab River. Sentab Jetty, the port's chief installation, was situated on the east bank of the Shatt half a mile upstream from its confluence with the Karun River. Along these two rivers, bordered by groves of date palms, and in the flat desert spaces enclosed by them, busy construction activity betokened the efforts, begun by the British in the previous year, to transform a sleepy native village and its single concrete berth, connected with the interior only by a desert road fit for camels, to a vital port of entry for millions of tons of war material destined for the USSR. In December 1942 a rail branch and an incompleted modern highway stretched inland from the docks to Ahwaz, eighty miles away. By the following May new construction gave Sentab Jetty seven berths connected with the shore by six trestle approaches for railway tracks and trucks. It stretched 3,251 feet parallel to the shore. Its width had been doubled and it was paved level from end to end to allow trucks to drive over the three railway tracks which extended its full length. It was floodlighted for night operations. (*Map 5—inside back cover*)

By May the fearful summer had set in, with the thermometer regularly climbing above 100° F., and afternoon shade temperatures ranging between 110° and 125°. After May and continuing to October sun temperatures would exceed 140° accentuated by spells of high humidity and severe periodical dust storms. Only October and November provided pleasant weather. When the first troops came ashore in December the nights were cold, the days often lashed by torrential rains, and this was to continue into March, followed by heat and drought. It was a miserable environment which the troops entered after forty-one days at sea and, though much construction had preceded their arrival, housing was lacking so that they had tents pitched for them in a muddy flooded area about a mile inland from the jetty. Six months later the main camp of adequate mud-brick barracks being erected on the same site for Khorramshahr's permanent troops was only half completed. When the camp was finished in August, a serious drag on efficient operations was ended by the improvement in housing.[29]

[29] (1) Ltr, Lt Col B. E. Bushnell, to CO, Gulf Dist, PGSC, 7 Jun 43, sub: Inspection of Motor Transport and Cons Equipment, Khorramshahr, Iran, p. 2. PGF 26–A. (2) By way



AERIAL PHOTO OF KHORRAMSHAHR



AERIAL PHOTO OF BANDAR SHAHPUR

Besides Sentab Jetty there were three other dockage installations at the port of Khorramshahr. The Anglo-Iranian Oil Company wharf at Abadan handled heavy cargoes like locomotives from shipside to barges. The barges proceeded to about a mile above the jetty where Failiyah Creek entered the Shatt al Arab River. Just within the creek, on its east bank, a wooden bulkhead was extended by additional construction. By March 1943 a lighterage wharf 1,500 feet long and 10 feet wide, connected with the adjacent railway system by three tracks and served by a 100-ton electric derrick and a 5-ton crawler crane, was ready to unload barge cargoes for placement upon railway cars. The leveling of ground along the tracks provided ample open storage space.

Two small lighterage wharves completed the dockage facilities used by the U.S. Army. At the junction of the Karun and Shatt Rivers, the Customs Jetty, enlarged by the British in 1942 and 1943 and provided with rail approaches, was mainly used for commercial lighterage; but the U.S. Army was authorized to use it when there were available facilities. About three miles up the Karun River, on its west bank, was Khumba Wharf, extended and improved in 1943 by port of Khorramshahr engineers, and used mainly for landing crated trucks and unloading barges containing engineering supplies.

The chief storage area at the port was called the Russian Dump, formally known as the Transit Storage Area. This was a 32-acre tract situated next to the railway yards about a mile inland from Sentab Jetty. Provided with railway tracks running parallel with storage sections, and with 1,800 feet of gantry-crane track, this area furnished space for temporary storage of overflow Soviet cargo. Here Russian-aid cargo was segregated, checked, loaded, and dispatched northward by rail or truck.

In the early days when much American equipment was arriving, destined for the Ahwaz General Depot 77 miles north, it had been stored in an area adjacent to the Russian Dump where pilferage was prevalent. The construction of three open-sided warehouses provided shelter for receiving and sorting American matériel. As the cargoes passed through to Ahwaz, subsequent arrivals were stored at Customs Jetty warehouses for Khorramshahr subdepot use.[80]

The officers and men of the 378th Port Battalion and of 9th Port, who arrived at Bandar Shahpur on 2 February 1943 as an advance

of contrast, the men at the British Ordnance Base at Shu'aiba were still under canvas nearly two years after their arrival, and their officers remained in tents for another year. PAI Force History, II, 40.

[80] (1) Rpt, Port Facilities at Port of Khorramshahr, prepared by Opns Div, Hq, PGC, for U.S. MA, Tehran. PGF, 26–A. (2) Maps of Khorramshahr. Hq Port and Gulf Dist File, SL 8973.

echelon of the Army Transport Service to take over the port from the British sixteen days later, had already come ashore at one Persian Gulf port and had found it no paradise. They did not know, when they approached the low, miasmal shore of Bandar Shahpur, what life there was like; but they may have suspected, as they looked about them, that whatever was climatically bad at Khorramshahr would be worse at Bandar Shahpur, whatever was climatically good at Khorramshahr could be no better at the primitive island port fifty-four miles to the east. Lying on an island in the Khor Musa, an inlet at the head of the Persian Gulf about forty-three miles from the Gulf itself, Bandar Shahpur was built as the sea terminus of the ISR. There was no town, only a native village of conical straw mats lashed to ballie poles,[21] sprawling over 70 percent of the port site. There was no landward communication save the single-track railway which, carried on 900 feet of trestle from the single jetty, reached the island, stretched across it on raised ground through the classification yards to the north side, and then spanned the mud flats of the Khor Musa to the mainland over a 6-mile embankment. Isolated, treeless, and dismal, Bandar Shahpur, too, was no paradise; but in 1942 under British operation it had received half the Russian-aid cargo arriving at Persian Gulf ports, and it was to bear its fair share in 1943 and 1944.

The first American group were housed in mud huts used by the Royal Air Force. The second, arriving soon after, pitched their tents knee-deep in mud, and fought off flood conditions that were inevitable on a low, flat island unprotected save by primitive dikes. Life was not sweetened by the proximity of the native laborers' camp, infested with vermin and strewn with refuse; but by the end of the first month, February, nearly all the natives had been moved to Sar Bandar where, at a location six miles away on the mainland, just west of the railroad, a camp was contrived for them which, at the peak of operations, accommodated some 4,000 persons.

Beginning in March 1943 wooden sidewalks were laid, drainage installed, and lighting wired in the enlisted men's washrooms. By May barracks were started. By December much needful construction, including two tidal gates to control the flooding of the mud flats, had been finished. It was right that at Bandar Shahpur, where the men's living conditions at the first had been even worse than at Khorramshahr, improvement was prompter.

The port installations were relatively simple. The old jetty, extending far into the water because of the shallow shore line, was of

[21] Roughhewn poles used in Iran for structural framework.

wooden piles. Its two berths totaled 800 feet in length and the jetty was 40 feet wide, bearing three lines of railroad track. During the months of June to August, the new jetty, which had been under construction for over a year by the British firm of Braithwaite, Burns, and Jessop under contract to the British Army, was put into use, adding three berths. Seventy-seven feet wide, its steel-piled length, curving 1,680 feet in the opposite direction to that of the old jetty, completed a flattened Y-shaped structure. Its tail was the 900-foot trestle carrying the single rail track to shore. At these jetties ships tied up and discharged their cargoes by the use of ship's gear directly to the rail cars, while some cargo was manhandled to cars and some was transferred overside to lighters.

At the beginning, the only usable lighterage wharf was the Bazaar Wharf, unhappily located on a creek which was dry at low tide. This was abandoned after American engineers, working from March to October, had enlarged and reconstructed Khor Zangi, an old wharf on the mainland two miles north of the island. With two rail spurs to the main line, and three powerful cranes in concrete foundations, the enlarged wharf, 660 feet by 20 feet, situated on deep water, was able to discharge loads directly from lighters to the railway cars on which they proceeded north. Small buildings for offices, storeroom and gear stowage, supplied with utilities, completed the equipment of Khor Zangi Wharf.

Open storage was provided on the island between the railroad tracks, and at Sar Bandar, where the Americans installed three portal cranes, in unlimited area on the flat ground. Three corrugated iron warehouses and some smaller structures on the raised ground of the railway yards furnished covered storage. Fresh water, particularly in quantities for provisioning ships, had come originally in tank cars by rail from Ahwaz; but the Americans improved that, too, by increasing the capacity of an existing pipeline which brought water forty miles from an inland creek.[32]

The difficulties posed by the physical condition of the ports themselves gave way in time before the steady improvements made in facilities and equipment. Even the heat, for which early planning had made allowance in expectation of a 20-percent reduction in ship discharge during the worst months, failed to produce the expected seasonal slumps. In fact, although at Bandar Shahpur during a measured five weeks' period in the first summer, there was "ten to twenty times as

[32] (1) Rpt, Port Facilities at Port of Bandar Shahpur, prepared by Opns Div, Hq, PGC, for U.S. MA, Tehran. PGF 26–A. (2) Hist Rpt, Bandar Shahpur Port, Dec 43. PGF 9–L. (3) Map, Annex 7–C of Rpt cited n. 47 below.

much heat exhaustion and heat stroke" as at Khorramshahr, both ports managed to attain maximum discharge in July of 1944.[33] To be sure this performance reflected the matured organization and techniques gained in more than a year of operations, as well as the virtual completion of construction and improved inland clearance; but the human factor was basically and doggedly there, too. When General Styer, Chief of Staff, Army Service Forces, visited the command in July 1943, he reported to General Somervell, as an instance of troop morale at Bandar Shahpur, that when it appeared that the port might not meet its May target, port troops had asked if they might increase their working time to two 12-hour shifts.[34]

A distinctly human problem caused some trouble in the first months of port operations when it was discovered that pilferage was by no means confined to the native workers at the docks and storage areas. Some of the American port battalion troops found post exchange and canned subsistence items irresistible, and opinion surveys revealed that they reasoned, somewhat imperfectly, that since these, and other items of lend-lease cargoes, had been paid for by the American taxpayer, they were entitled to help themselves.[35] Such reasoning, while hardly to be condoned, is not wholly incomprehensible in a world in which travelers have long indulged, with the tacit consent of society, in the purloining of hotel silver, linen, crockery, and even the pictures on the walls; but when pilferage extended to war matériel, no excuse could be allowed. Moreover, the Russians put in a prompt complaint, to both British and Americans, and action followed. "It is a paradox," wrote Colonel Booth to the Khorramshahr port commander, "that we should work hard, collect and ship goods 15,000 miles and then not protect them to the best of our ability." He then empowered the port commander "to stop pilferage on the part of natives by the use of weapons, and under regulations, to deal with any of our own troops caught pilfering." [36]

Several steps were taken which shortly proved effective: additional guards were stationed at the sorting sheds, at holds of ships when they were open, and at each ramp leading to the Sentab Jetty; a fence

[33] Memo, IG, PGSC, for CG, PGSC, 3 Sep 43. PGF 26–A.

[34] Rad AGWAR 1801, Gen Styer to Gen Somervell, 15 Jul 43. PGF 26–A. This was no isolated case either for the Ports Service or for the other agencies in the command. There were numerous instances of the sort over the years, but this one emerges from anonymity because it was lucky enough to come to the attention of the high command.

[35] Report of Military Police Activities, PGC, United States Army, p. 62. PGF 130.

[36] (1) Ltr, Iransovtrans (Mr. Krasnov) to U.S. and British Movements Contl, 4 Mar 43. Gulf Dist 400.6. The Russians stated that they shot those caught pilfering. (2) Ltr, Col Booth to Port Comdr, 9 Mar 43. PGF 13.

was built around the sorting shed area; boxes broken on arrival or in handling were isolated, put under guard, and sent to be recoopered.

Although the matter of pilferage consumed most of the month of March, it was by no means either the sole or the chief problem to concern Colonel Booth as Director of Ports Service and Commander of Gulf District. Indeed, the colonel learned, as did the King in *Hamlet*, that

> When sorrows come, they come not single spies,
> But in battalions. . . .

The investigation of pilferage, coupled by the 9th Port's inspector general with the problem of security at Khorramshahr, also served to throw into high relief many defects in the machinery.[37] The pilferage was but a symptom, a part of the larger problems of officer competence and assignment, efficient use of enlisted men, employment and supervision of native labor. These factors spread in widening circles, to include such larger considerations as cargo handling, packing and storage, dock equipment, and, inevitably, the meeting of targets, the need for speed, always more speed, with the Russians clamoring for goods, and authorities all the way back to Washington bearing down with increasing pressure to reduce the number of ships, loaded or half loaded, lying idle in the outer anchorages, waiting to be discharged and to return home for a new cargo. On 27 February a message went to General Connolly from General Somervell:

> All plans for your Command are being attacked by reason of ship delays. Everything must be done to eliminate this. . . . Desire that all-out effort be made to unload and release ships which have been delayed in turnaround at PG ports. Even if it means rehandling of cargo, this effort must be made. A similar effort must be made to move this cargo into USSR.[38]

Called upon for a report, Colonel Booth stated to General Connolly on 1 March that daily average ship discharge for Khorramshahr had risen from 958 long tons in November, two months before American port troops went into action, to 2,234 long tons in February.[39] But this improved performance fell well under the 100,000 long tons per month designated by Washington planners for shipment to the Persian Gulf ports. Among the several factors working against further improvement were manpower and equipment. Manpower consisted of two classes

[37] Rpt, Investigation of Pilferage and Security at the Port of Khorramshahr, by Maj Cornell and Capt Joseph W. Kuns [n. d.]; and, *passim*, Gulf Dist 400.6.

[38] Rad AMPSC 309, Gen Somervell to Gen Connolly, 27 Feb 43. PGF 26–A.

[39] Ltr, Col Booth to Gen Connolly, 1 Mar 43, sub: Monthly Rpt of Port Opns, Khorramshahr, Period to 28 Feb 43. PGF 26–A. Tonnages discharged or landed, unless otherwise indicated, will be found in Table 3.

of supervisors and two classes of working forces. Supervisors responsible for operations were officers from 9th Port. Since nearly all experienced stevedore officers were 9th Port men, their limited numbers were spread thin, one being assigned to each ship. The second class of supervisors were the port battalion officers, who were responsible for command of troops at the ship and saw to it that troops performed according to the requirements of 9th Port operation officers. This group were described by the Army Transport Service officer in charge of dock operations at Khorramshahr as "young officers recently from OCS and splendid fellows and willing to learn, but I don't know one instance of them having previous shipping experience." [40] In addition to this severe handicap to efficient performance, port battalion officers, too, were spread thin because of the necessity of using port battalion personnel in other than stevedore duties. Consequently, too few supervisors were available at the docks. The solution, Colonel Booth wrote on 3 March, was better distribution of enlisted men; but even as late as 15 April Colonel Booth was forced to admit, with regard to supervisory personnel, "I see no way to avoid using the white Port Battalions on supervision. The Ninth Port is not large enough to take the entire duty." A request for more 9th Port officers, directed to Washington as early as February, had produced no officers as late as 10 August.[41]

The working forces consisted of U.S. Army troops and of native laborers. The first port battalion to reach Khorramshahr, the 378th, had received training in stowage methods, materials handling, winch operation, and cargo knotting and lashing. Among them were some experienced stevedores, winch operators, and shipping clerks; but in the judgment of a responsible 9th Port official, it "was not a well trained organization upon arrival" and "received practically all of its technical training after debarking at Khorramshahr." [42] The 380th Port Battalion, which arrived in January, had, in the language of its chronicler, been "hurriedly trained." Both groups had to learn on the job and both job and cargo tended to suffer in the process as relatively green men became crane operators, cargo checkers, warehouse foremen, transportation clerks, pump tenders, and even guards, truck drivers, blacksmiths, towmotor operators, and malaria control technicians.[43]

[40] Testimony of Maj. Walter D. Brennan quoted Rpt cited n. 37. His remarks concerned the 378th Port Battalion only.

[41] Ltr, Col Booth to Maj Brennan, 3 Mar 43, quoted pp. 41–42 of History cited n. 14. (2) Memo cited n. 21. (3) Rpt on Port Opns at Khorramshahr, by Maj Anderson, for Dir of Ports, 10 Aug 43. OCofTrans, Hist Br—Overseas Comd, Pentagon.

[42] Rpt cited n. 41(3).

[43] (1) Hist Rpt, 380th Port Bn, 2 Jul 43. PGF 24–E. (2) Hist Rpt, 378th Port Bn, 31 Jul 42–31 Jul 43. PGF 19–E.

To compensate for shortage of port personnel, increased use was made of the second class of worker, the native laborer. Recruited, paid, and regulated by the Gulf District labor relations officer, native labor at Khorramshahr was hired directly by the labor officer and collectively through local labor contractors, who received a fixed rate per ton, the rates being adjusted from time to time as experience dictated. At Bandar Shahpur all labor was hired directly. At both ports the natives, almost wholly inexperienced, learned as they worked. Under such conditions cargo damage was inevitable; but the American soldier supervisor-instructors produced among their thousands of native workers not only stevedores and longshoremen but also operators of such machinery as winches. This was achieved with a minimum of friction. To the ports operation as a whole the contribution of native labor was indispensable.[44]

In the matter of certain equipment the early story was also one of shortages, ironically the result of reliance in Washington upon a report from the field during the early planning in July 1942 that there was a sufficiency of cranes and gear. But in January 1943 power machinery for unloading and loading railway cars at the Russian Dump at Khorramshahr consisted of two small gantry cranes so that much of the cargo, including steel rails badly needed by the Soviet forces, had to be loaded by hand. A month later, two additional 3-ton portal cranes and one 5-ton crawler crane were in operation, and during March and April four more portal cranes, ordered after Colonel Booth's arrival in the field in November, arrived and were erected. In January, at the height of the shortage, British PAI Force recommended joint pooling of Anglo-American crane facilities, suggesting that the British director of Ordnance Services be empowered to register and allocate all cranes, including those to arrive in future. The suggestion was declined by the American command, co-ordination of cranes was effected through the War Transport Executive Committee, and by August there was a sufficiency of cranes, but still a shortage of rigging and gear.[45]

Lighters and barges come under the heading of equipment factors affecting port operations. Lighters were used from berth to berth in the same port and barges in ferrying discharged cargoes from one port to another. Their supply and allocation tied in very closely with port performance. After 1 May 1943 control over barges, lighters, and tugs, exercised by the British Inland Water Transport (IWT), was the only

[44] (1) Chs. 3, 4, 5 of History cited n. 14. (2) HOTI, History of Civilian Personnel Branch Activities, Administration Division, Hq, PGC, by Col Richard W. Cooper. PGF.

[45] (1) Rpt cited n. 43(2). (2) Memo, Deputy QMG, GHQ, PAI Force, for Hq, PGSC, 27 Jan 43, sub: Persian Ports. PGF 26-A.

element in port operations still in British hands. With the increase in the number of barges resulting from the American barge assembly operation at Kuwait, the problem of their use in time boiled down to allocations. The Americans were not satisfied with the service IWT gave them. There were instances of delays in ship discharge caused by late arrival of barges in spite of ample advance notification to the IWT; and there were instances in which more lighters were assigned to a ship than were required. In April, having consistently received inadequate lighterage allocations from the IWT to whom application was made at the daily berthing committee meetings at Margil (Basra port), Colonel Booth requested the Operations Division at Tehran headquarters to apply to PAI Force headquarters at Baghdad to approve an estimate of requirements for adequate barge and lighterage tonnage for Khorramshahr and Bandar Shahpur. In July, after months of somewhat desultory discussion and correspondence between the top headquarters, the British, while refusing to grant the Americans control of lighterage operations, obtained concurrence at Tehran to an allocation considerably smaller than that first proposed by Colonel Booth. Thus matters rocked along thenceforth.[46]

As if to top off the difficulties of the early months, torrential rains in March washed out large sections of the newly built highway and damaged the rail line so that inland clearance by rail and road between Khorramshahr and Ahwaz was severely restricted. Tonnage piled up at the Russian Dump at Khorramshahr and damage to stored cargo resulted.

In the midst of all this, representatives of the Washington headquarters of the Transportation Corps, on a world tour of inspection, arrived on 15 March for a stay of some nine weeks.[47] It was hardly a propitious moment for visitors. The seventh (and last) berth at Sentab Jetty was still under construction; the command was still shy at least ten thousand American troops; and the visitors from Washington early discovered what was already all too well known in the command—that more cargo was being shipped in these early months than could be

[46] (1) Memo, Col Osborne for Col Booth, 28 Apr 43, sub: Lighterage Facilities; and 1st Ind, Col Booth to Col Osborne, 6 Jun 43. PGF 26–A. (2) Ltr, Col Booth to Col Osborne, 29 Jul 43. PGF 26–A.

[47] Report on Transportation at Persian Gulf Ports, by Lt Col Benjamin C. Allin and Capt Robert G. Stone [n. d.]. OCofTrans, Hist Br—Overseas Comd, Pentagon. Supplemented by: Ltr, Col Allin and Capt Stone to CG, PGSC, 22 Apr 43, sub: Report on Port Study, Persian Gulf Ports; and Memo, Col Allin for Maj Gen C. P. Gross, CofTrans, 10 Jul 43, sub: Operating Conditions at Persian Gulf Ports. PGF 26–A. Colonel Allin and Captain Stone were traveling under letter orders dated 11 March 1943. No copy exists in the files of the Office of the Chief of Transportation, Historical Branch—Overseas Command, but Dunham (page 115) indicates their instructions covered survey and recommendation on port discharge (equipment, method) and clearance, but not inland clearance by road and rail.

unloaded and that more cargo was being unloaded than could be transported to the USSR. They were also no less disturbed than was the command, from General Connolly down, over the length of days ships spent at port in the process of discharge.[48] And so they settled down to study the ports.

The diagnosis, embodied in papers which for convenience will be called the Allin reports, covered most of the ailments which had been worrying the director of ports from the beginning. It was summarized almost too simply: "Two definite bottlenecks exist in the Persian line of communication, namely, interior clearance and port clearance." To that no one could have taken the slightest exception, nor to the visitors' "opinion that the interior clearance from the ports to Russian delivery is the major bottleneck." That had been General Connolly's diagnosis of the previous December. To a number of conditions in port operations the Transportation Corps specialists called attention with helpful results. As a consequence of their diagnosis of Sentab Jetty, that key installation was widened by new construction which began in March. Unloaded cargo could then be temporarily stored at shipside, thus speeding discharge without waiting for removal of cargoes from the dock. The efforts of the Ports Service to recooper damaged crates and boxes both at the ships before unloading and at the storage areas received the blessing of the Allin reports, and were accelerated by them.

Recognizing factors beyond the control of the command in the field, the reports recommended improvements in dunnage and ship stowage, and in the system of supplying manifests, along with other changes in procedure which had to be effected in the United States. These were to prove helpful; but the command was seriously disturbed at the recommendation which went forward to Washington to effect "a moratorium or suspension of shipments to the extent of one-half month's program, namely, 100,000 cargo tons. . . ." [49] Of this more will be said later; but the suggestion echoed General Somervell's February warning that plans for General Connolly's command were under attack because of ship delays.

The Allin reports also dealt with problems of personnel. They noted a low state of morale, "evidence of friction among officers," "a dis-

[48] The Allin reports say the delays (as of mid-April) ran up to 58 days for a single ship. The report cited note 41(3) gives the following "average number of days elapsed since ship arrived in Gulf until discharge completed": March, 50; April, 51; May, 45; June, 40; July 26.

[49] Prior to receipt of the Allin recommendation in Washington, the home office of PGSC had prepared a report for General Connolly indicating that a maximum of 200,000 long tons per month of shipments was under discussion. Rpt of Activities 7–29 Mar 43, Proposed Opns, 27 Mar 43. 336.01 International Agreements, SL 9012.

tinct feeling that the officers have been passed over in the matter of promotions," and insufficient recreation and rest camp facilities for the men. This last matter was remedied before midyear by planning and new construction which had been impossible at the beginning. Exception was also taken in the reports to the transfer to other duties of the first Khorramshahr port commander, it being asserted that he was a trained shipping man and that his place was taken by a non-shipping man who was a "previous acquaintance of the Commanding Officer of the Basra District." On this matter the position of the commanding officer of the district and director of ports was that although the first man was a shipping man he was not a successful administrator; [50] and it is a matter of record that the second Khorramshahr port director served in that capacity only some two months, being relieved by the director of ports, like his predecessor, for "failure to produce." [51] General Styer reported to General Somervell the "gratifying results" being obtained by their successor, Col. Bernard A. Johnson.[52] To assist in port operations, the Allin reports of April urged the assignment to the theater of "an officer skilled in stevedoring," an assignment which had been asked of Washington by the command in that very month, when Maj. Emery C. Creager of the Los Angeles Port of Embarkation was requested by name. When by the following July Washington had done nothing about it, Lt. Col. Benjamin C. Allin renewed his request directly to General Gross, and Major Creager was ordered to Iran 17 July.[53] He was followed shortly by Col. Hans Ottzenn, Superintendent of the Water Division, New York Port of Embarkation, detailed by the Transportation Corps on the orders of General Somervell and with the concurrence of General Connolly to visit Khorramshahr and inspect stevedoring operations with a view to correcting any observable deficiencies. On 5 August Colonel Ottzenn informed General Connolly that he was unable to make recommendations for improvement in port operations "other than those which upon investigation I find are already planned. . . ." At the same time Colonel Ottzenn urged the War Department to see that the WSA did not reduce shipping to the Persian Gulf as urged by Colonel Allin's reports. The command's monthly capacity figures, he felt, accurately reflected current ability to handle cargoes and use Corridor facilities

[50] Rpt cited n. 41(3).
[51] Rad cited n. 34.
[52] *Ibid.*
[53] (1) Dunham, p. 121 and n. 87. (2) As of 1 August 1944 Lt. Col. Emery C. Creager was Operations Officer, Water Division, Ports Service. List of Personnel Assignments as of 1 Aug 44. PGF 26–A.

to capacity, which would be wasted and partly idle if ship arrivals were diminished.[54]

The allotment of total shipping to Persian Gulf ports was a matter of top war policy. While General Connolly strove to develop maximum capacity to handle what higher authority shipped to him for the USSR and while the USSR strove continuously to obtain ever increasing tonnages, Washington had to apportion shipping within the total requirements of a global war. An instance of the Russian pressure was passed on to General Connolly from the American lend-lease representative in Moscow in June 1943. During the discussions over the Third Protocol tonnages—those to be supplied the USSR from July 1943 through June 1944—the Soviets, aware of Washington talk of reducing Persian Gulf shipments, complained that General Connolly's capacity was not being fully used and urged increased rather than decreased shipments. On the other hand, Washington's effort to balance its global program was reflected when, in March 1944, the War Department indicated that after April tonnage should drop to 160,000–180,000 long tons, and not again exceed 200,000 long tons. Furthermore, the command in the field was cautioned to clear with Washington before agreeing to Soviet requests for increased commitments. The word was to cooperate with the Soviet "within the scope of our present commitments." [55]

Matters had obviously improved since the early months of 1943; but there was to be one more report which upon reaching Washington caused elaborate repercussions. The Allin reports had contained the following reference to relations between the command and the WSA:

> Effort should be made to secure the co-operation of the officer personnel with representatives of the War Shipping Administration. Of all the theaters we visited, this is the sole exception where the assistance of the War Shipping Administration representatives has not been received and made use of. It is our opinion that in this theater the lack of co-operation is the fault of the Army and not the War Shipping Administration.

It will be recalled that before the coming into effect in late 1942 of the SOS Plan the indirect shipping interests of the United States in the Persian Gulf had been looked after by the U.S. Naval Observer,

[54] (1) Rpt, Col Hans Ottzenn to Gen Connolly (through Dir of Ports), 5 Aug 43. Hq, ASF, Theaters of Opns, PGC (13) 1942–1944, HRS DRB AGO. General Connolly forwarded this report to General Somervell under covering letter of 11 August 1943. (2) Rad, Col Ottzenn to Gen Gross, 5 Aug 43. Same file.

[55] (1) Rad, Gen Faymonville to Gen Connolly signed Standley, 12 Jun 43. 400.3295 Lend-Lease Russia, SL 9021. (2) Memo, Col N. M. Martin to CG, PGC, 26 Mar 44, reporting on conferences in Washington and transmitting OPD instructions. 322 War Dept Conference on Theater Administration 1944, No. 1 Organization, SL 8961.

Basra, and by the regional director of WSA, Mr. Seaholm. In the early days of the new regime under the SOS Plan, as the American command gradually assumed more and more direct responsibility for shipping as a part of its logistic mission in the Corridor, WSA, as has already been stated, had performed certain functions at the ports in liaison with the War Transport Executive Committee. But as the American command's organization expanded to handle increasing responsibilities, Movements and other regulatory offices were established to operate, for efficiency's sake, within the chain of military command. Inevitably WSA's functions became increasingly advisory.

Under date of 20 June 1943, and in Mr. Seaholm's absence in the United States, Oscar A. J. Henricksen, assistant regional director, addressed a letter to the Director, Foreign Service Division, WSA, Washington.[56] Although it was a personal letter transmitting personal impressions, its author stressed its official importance. He wrote:

> Mac, these are harsh words but they are the truth and if anybody ever sat down and wrote about the actual conditions out here and they were published in the United States, all I have to say is that somebody better get out from under. There have been numerous representatives of the Army investigating the conditions at Khorramshahr, but as to the actual report turned in, no one knows.[57] In this connection I wish to state that I take personal responsibility for everything mentioned in this letter, let the chips fall where they may.

The WSA on 3 July passed the letter on to General Burns, Executive, Munitions Assignments Board, Combined Chiefs of Staff, who forwarded it to General Somervell, who sent it to General Connolly with a letter containing the following passage:

> I enclose copies of correspondence that reflect upon the discipline of port troops and the efficiency of the operations of your port organization at Khorramshahr. There have been other reports of a similar nature indicating a lower state of discipline, a poorer relationship with WSA authorities, and less efficiency of technical stevedoring operations than obtains in any similar location in the world.[58]

[56] (1) Ltr, Oscar A. J. Henricksen to W. S. McPherson, 20 Jun 43. PGF 26-A. Another copy Hq, ASF, Theaters of Opns, PGC (13) 1942–1944. HRS DRB AGO. Other documents referred to in the text following and filed in the latter file are: (2) Ltr, Gen Somervell to Gen Connolly, 10 Jul 43. (3) Rad SPTTT 7, Gen Gross to Gen Styer, 10 Jul 43. (4) Rad cited n. 34. (5) Memo, Gen Styer for Gen Somervell, 24 Jul 43, sub: Rpt on Investigation of Complaint Made by WSA Representative at Basra re Handling of Shipping by PGSC. (6) Rpt and Rad cited n. 54. (7) Ltr cited n. 54(1).

[57] An apparent reference to Colonel Allin and Captain Stone. The reports were known to General Connolly, the Chief of Transportation, Washington, and the Commanding General, ASF, Washington, to whom the full versions were submitted, and to the following officers of the command in the field to whom Colonel Allin communicated his full views in a personal conference on 22 April: the executive officer of Basra District, Colonels Osborne, R. C. L. Graham, A. C. Purvis, Maj. J. V. Story, and Capt. A. B. Swank. No representative of WSA was present at this meeting.

[58] An apparent reference to the Allin reports.

General Somervell announced his intention of sending Colonel Ottzenn to investigate, and of assigning "a competent officer to take charge of your stevedoring operations without delay." This was gratifying, in view of the theater's previous application for a stevedoring expert. General Somervell went on to speak of Henricksen's allegation that personal favoritism instead of shipping competence determined appointment of the Khorramshahr port commander, a charge likewise made in the Allin reports, and concluded, "I appreciate that this action is taken [59] without knowledge of the full story, but the unfavorable reports coming in and the low performance in unloading requires vigorous response by all of us." Through his chief of transportation, General Gross, General Somervell also requested his chief of staff, General Styer, who was in the CBI theater, to proceed to Khorramshahr "to look into complaint made by WSA representative."

Arriving at Basra early on the morning of 15 July, General Styer was met by General Connolly and Henricksen (among others) and they proceeded with military staff members to Khorramshahr where a conference was followed by a tour of the docks.[60] Before leaving for Cairo en route home next day, General Styer reported by radio to General Somervell, supplementing this message with a full written report dated 24 July. Henricksen explained to General Styer that his letter described conditions as of 31 May, that "he did not claim Army port operations inefficiently handled, but complained that in unloading of ships more attention was paid to meeting target than to care of cargo and wear and tear on ships' gear," that he "did not state that competent shipping personnel is not used," a statement attributed to him by the radios out of Washington, and, finally, that "considerable improvement" had occurred since 31 May and that he believed "that targets will be met unless there is a serious exodus of labor during the date picking season."

The considerable time lag between the period covered by the WSA complaint and the visit of General Styer had brought about improvements. Thus the recooperage carried out aboard ship on badly packed cargoes, a procedure begun at the time of the Allin reports, now rendered less likely such spillage and waste as when Henricksen saw it "snow sugar and hail beans, and this is not a joke, as I have seen beans an inch deep on the dock which were later shoveled overboard." But the burning of drums of vegetable shortening, also reported by Henricksen, proved on investigation to have been an instance of a ship-

[59] I. e., dispatch of Colonel Ottzenn.

[60] At the conference and on the tour were Connolly and Styer, Booth, Osborne, and Johnson, Brennan and Hill (assistant to Brennan), and Henricksen and French of WSA.

ment spoiled in transit and destroyed with Soviet concurrence after condemnation by the U.S. Army veterinarian.[61] Unskilled native labor and inexperienced Army supervision were responsible along with defective packing for cargo losses and damage; but General Styer was disinclined to regard all of the instances complained of as indicative of fundamentally unsound conditions. He wrote, "Another instance pointed out by Mr. Henricksen concerned the capsizing of a barge loaded with some vehicles. He felt that this could have been prevented with proper supervision. This is not a daily occurrence. I have seen similar accidents happen in New York harbor with highly skilled crews." Likewise General Styer found that the complaint that port crews were undisciplined in their relations with ships' officers and crews was founded upon "only two instances," and that "Mr. Henricksen's statements about these were so general that I could get no more specific impression than that Mr. Henricksen thought they should accept suggestions from the ships' officers and crews in all cases and should not have talked back in the cases cited."

General Styer concluded his report with tentative figures of target estimates and actual discharge. They showed that during the interim period to 1 May discharge did not come up to target but that in the third month (July) of full American responsibility the target was exceeded. "General Connolly," he wrote, "has a difficult job well in hand. In my opinion he now has it organized and built up with necessary facilities to the point where he will successfully accomplish his mission."

General Connolly did not forward his accounting to General Somervell until after the arrival of Colonel Ottzenn. Colonel Ottzenn's favorable impression of conditions and steps being taken has already been noted. He too recorded that Mr. Henricksen was satisfied with present operations, and added figures to indicate the manpower handicap suffered at Khorramshahr. In contrast to the 5.4 Army Transport Service officers available for supervision of each ship at the New York Port of Embarkation, only 1.9 officers were available at Khorramshahr.

General Connolly's letter of 11 August to General Somervell summarized the difficulties and concluded as follows:

> Considering the heat and other difficulties of the area, morale is high. Performance is the best standard for judging morale. You may be interested to know that the rate of movement of USSR supplies through the Corridor as set up for August is about five times the rate existing prior to the arrival of the PGSC, and the rate actually attained in July was four times that rate. The August rate (for Russian tonnage alone, and disregarding British, Iranian and PGSC cargo) is

[61] Rpt cited n. 41(3).

eleven times the maximum rate at which supplies moved over the Burma Road during its peak month. This should be sufficient evidence to any fair-minded person that the Command is not only efficient but has good morale.[62]

Tabulation of port discharge tonnages from July 1943 to the end of operations amply justifies the confidence of General Connolly, General Styer, and Colonel Ottzenn that, as General Styer put it, the command was "over the hump and will meet or exceed future forecasts if ships and cargo are furnished." The WSA did not institute a moratorium on shipping, and by the last month of 1943 total port discharge reached a tonnage which was only exceeded during one month in the busy year of 1944. In February 1944 the deputy representative of the British Ministry of War Transport for Abadan reported:

> One thing is quickly apparent to the observer, all junior officers have become exceedingly proficient at the work and there is a fine team spirit—quite apart from the keen competition between individual groups to turn out the best results each day.[63]

The following December the WSA stated:

> With the U.S. Military, WSA has very cordial relations, due largely to the quality of the officers we have worked with and also to the fact that among them and the enlisted personnel are many men who have had previous experience with stevedoring, railroading, trucking, etc.[64]

Performance [65]

The most pressing objective of the ports organization was to get ships unloaded and returned to sea. Ship discharge was the first link in the logistical chain, prerequisite to all others. During the period from the end of October 1942, months before the arrival of the American port troops, to 22 January 1943, "average turnaround time" according to WSA calculations was 55 days. In the first five months of 1943, the period of greatest ship congestion at Persian Gulf ports, including the American-operated ports, the WSA noted:

[62] What the general meant by "rate of movement" is obscure. The CBI Section, OCMH, states that between 11,000 and 20,000 long tons were hauled over the Burma Road in its peak month of December 1941. The general therefore does not seem to have meant long tons accepted in August by the USSR at their receiving points, as 157,388 long tons of all cargo (USSR, British, Iranian, American) were discharged at Khorramshahr and Bandar Shahpur in August 1943.

[63] (1) Rpt, by R. Player, Feb 44. Gulf Dist 323.361. (2) Competition between port companies and battalions at berths was intensified by use of numbered flags according to berth tonnage performance. It was rumored that wagers amounting to as much as $4,000 were made by various crew members. Hist Rpt, 9th Port, Mobile, Jun 43. PGF 12–F.

[64] Covering ltr cited n. 6.

[65] Charts 8, 9, 10, 11 and Table 3.

59 vessels in the area remained 40 days or more.
46 vessels in the area remained 50 days or more.
33 vessels in the area remained 60 days or more.
22 vessels in the area remained 70 days or more.
9 vessels in the area remained 80 days or more.
5 vessels in the area remained 90 days or more.

Of the last group, one horrible example remained 124 days in port "before getting rid of her load"; but it is noted that she was "held up on priorities and for other reasons." [66] The note is a further reminder that port operation was not simply a matter of removing cargo from ships' holds. High turnaround time was not necessarily a reflection upon the stevedores, though of course speedy turnaround was impossible if operations were inefficient. Not only could turnaround figures produce a possibly misleading impression when scrutinized at a distance of ten thousand miles from Khorramshahr and Bandar Shahpur. Failure of discharge totals to come up to target estimates could also mislead if the estimates were not accurate. The Allin reports had observed that in the early months these estimates seemed sometimes impossibly high and unrelated to the realities, and in both April and May estimates were modified.[67] In time the mechanisms for producing accurate estimates improved, and the passing of the target in July 1943 marked not only this improvement but improvement in techniques of port operation as well. A WSA report shows that ship turnaround time fell steadily from an average of 51 days for April 1943 to 18 in December, and dropped during 1944 to 8.2 in September.[68]

Improvement in the rate of discharge was a formidable factor in bringing operations in October 1943 to a current basis; but in that month some berths were vacant for several days because of a temporary diminution in shipping. This allowed clearance of all cargo from the Russian Dump. More ships arrived in November and December, and in the latter month Khorramshahr discharged over 155,000 long tons. On 21 December the American port troops at Khorramshahr unloaded 7,041 long tons from seven ships. Two days later the Ministry of War Transport sent congratulations and dispatched men to study the

[66] Pages 15, 19 of Rpt cited n. 6.

[67] (1) Opns Directive Consecutive 1, Hq, Opns Div, PGSC, signed by Col Osborne, ACofS, Opns, 30 Mar 43, sub: Target for April. PGF 26–A. (2) Ltr, Port Opns Br, Gulf Dist, to CG, PGSC, 13 May 43, sub: Study of Port Performance. PGF 26–A. (3) Ltr, CofS, PGSC, to CO, Gulf Dist, 31 May 43, sub: Estimated Ship Clearances. PGF 26–A.

[68] Page 20 of Rpt cited n. 6. The figures are ascribed to American command sources but do not tally with them in every instance.

methods used. The record was exceeded on 13 February 1944 when 7,693 long tons were likewise discharged from seven ships at Khorramshahr. On 8 March 2,458 long tons were unloaded from a single ship in 24 hours at Khorramshahr, and on 15 May Bandar Shahpur set a record not to be surpassed by discharging 4,475 long tons from a single ship in 24 hours.[69]

It should be realized that these figures, while correct as absolute measurements of achievement on a given ship at a given time, are no more indicative of relative efficiency than are the more abstract figures of average turnaround time or average tons per ship day. Because of the differences in ships, cargoes, and other variable factors, neither absolute daily discharge tonnages per ship nor abstract averages are reliable indexes of efficiency, as they are not based upon comparable factors. The number as well as the competence of labor gangs, the weather, and the nature of cargoes are too diverse to combine into comparable averages, and this is true in spite of the fact that operating officers found such averages, though abstract, to be useful day-to-day guides in estimating performance. For instance, the ship from which the record cargo was discharged at Bandar Shahpur carried a cargo of sugar in bags and possessed eight hatches instead of the usual five of Liberty ships. An unusual concentration of ships' gear, deck cranes, locomotive cranes on the dock, and the availability of an abnormally large working force all contributed to the record performance.[70] An equally large labor party, using equal quantities of equipment in exactly similar weather, might, while working with equal skill and diligence, take twice as long to unload a ship whose cargo was diversified and cumbersome. Records should therefore be analyzed in the light of the considerations stated. Under the far from standard conditions in effect at Persian Gulf ports no statistically reliable means of recording comparable discharge tonnages existed. Total tonnages remain the best index of performance and efficiency.

During the first six months of 1944 available shipping fluctuated and monthly discharge totals failed to reach the level attained in December 1943. While totals fell off somewhat, the abstract tons per ship day figures increased. Subject to the reservations in the foregoing analysis, the rising tons per ship day figures indicated that, in general, increased efficiency had less cargo to work on. During this period the Chief of Transportation, Army Service Forces, officially recognized increased efficiency in a letter stating that among U.S. Army overseas

[69] Pages 22, 70, 71 of Rpt cited n. 6.
[70] Hist Rpt, Gulf Dist, May 44. PGF 13–Q.

ports, Khorramshahr had placed second for discharge improvement, fifth for gross discharge, and tenth in turnaround.[71]

In July 1944, with 2,956 port troops on the job,[72] Khorramshahr attained its peak performance by discharging 192,761 long tons of cargo, a comfortable improvement over the 41,421 long tons of the first month of American port operation there in January 1943. Sentab's seven berths and four anchorages were used almost to capacity, two berths being empty for a day. The port handled 34 ships that month—30 carrying cargo for the USSR, 3 carrying U.S. Army cargo, and 1 carrying both kinds. During July, 28 ships completed their discharge and sailed away. The installation for lighterage of heavy cargoes at Failiyah Creek took care of 70,069 long tons in July 1944 in contrast to 35,000 in April 1943 and its estimated capacity of only 9,000 in January 1943.[73]

After July 1944 Khorramshahr operated below its capacity. In August, when the discharge total dropped to 124,004 long tons, there were fifty-seven empty berth days and a general relaxation of pressure.[74] The coming into use at the end of 1944 of the shorter Russian supply route through the Dardanelles was reflected in the decline of the Persian Gulf route.

American operations at the Customs Jetty and at Khumba Wharf were discontinued in August, and thereafter Sentab Jetty's berths were often vacant. By March 1945 the primary functions of Failiyah Creek were the receipt and clearance of alkylate and cumene in drums for forwarding by rail to the USSR.[75] In early March the remaining Soviet-bound cargo at the Russian Dump, including sheet steel, pipe, rails, oleomargarine, canned meat, and galvanized wire, was dispatched by rail and Soviet trucks. By the middle of the month the dump was terminated as an active installation.

In March 1945 discharge at Khorramshahr had dropped to 30,216 long tons. In effect, the port had completed its Russian-aid mission and turned its efforts to outgoing cargoes amounting that month to about half of the incoming total. In May the same proportions held good for Sentab Jetty, while Failiyah Creek was busy barging outgoing

[71] Ltr, covering period 1–15 Apr, CofTrans, ASF, 25 Apr 44, quoted Hist Rpt, Gulf Dist, Apr 44. PGF 13–P.

[72] Of these troops 1,800 were white, with 327 of them attached to headquarters companies; and 1,156 were Negro, with 34 of them attached to headquarters companies. Station List, Hq, PGC, as of 31 Jul 44, Sec. 3. PGF 230–S.

[73] (1) The operations during July 1944 at Sentab Jetty, Failiyah Creek, the Russian Dump, Customs Jetty, and Khumba Wharf are described in detail in Hist Rpt, Khorramshahr Port, Jul 44, PGF 16–S; and Hist Rpt, Gulf Dist, Jul 44, PGF 13–S. (2) Ltr, Col Booth to Maj Daniel P. Caulkins, 13 Jan 43. Gulf Dist 823.361.

[74] Hist Rpt, Khorramshahr Port, Aug 44, p. 2. PGF 16–T.

[75] Hist Rpt, Ports Serv, Mar 45. PGF 26–A–1.

American locomotives. It was returned to the British on 24 June. The mission of Khorramshahr as a Russian-aid port was formally declared terminated as of 1 June 1945.[76] During the months that followed the port's main job was evacuation of American equipment and troops.

After hitting its stride in the latter half of 1943, Bander Shahpur's developed capacity was consistently underused. Strengthened by new construction, extensive use of lighterage, the sweat and grunts of port troops and native laborers, and mounting efficiency in the loading and dispatching of rail cars, the port was able to handle more tonnage than came to it in ships' bottoms. With discharge in December 1943 in excess of 71,000 long tons, the military strength at the port was 1,676.[77] But ships consigned to the port diminished in numbers until in April 1944 only twenty-five out of a possible 150 berthing days were used, and no ships were docked between the eighth and twenty-first days of that month. The command, finding itself in the position of a restaurant keeper who does not know how much patronage to plan for, reduced the military strength of the port to 1,247 in July.[78] But shipping rose and discharge reached its peak of 95,156 long tons in spite of the reduced military manpower. By the following November, with 1,508 port troops, discharge had fallen to about one third proved capacity.[79]

December 1944 was the last month of Russian-aid operations at Bandar Shahpur, and the next month the Americans discharged 1,199 long tons of British cargo before they climbed aboard boxcars for Ahwaz and Khorramshahr and new assignments. By the end of January the process of handing over to the British was virtually completed. A handful of American soldiers stayed on at Bandar Shahpur most of the year performing guard and caretaking duties.[80]

At Khorramshahr the Shatt al Arab River turns and for some twenty miles runs westward to Basra. Eight miles west of Khorramshahr the international boundary separates Iran from Iraq. By the terms of the Anglo-Iraqi arrangements of early 1941, the relatively well equipped little Iraqi port[81] was controlled by the British. It was the sea entrance to the British line of communication which extended to Baghdad, and, like Baghdad, with its Habbaniya military airport, Basra had its Shu'aiba military airport, both of them manned and controlled by the British under their treaty rights. Basra was, operationally

[76] Page 1 of Rpt cited n. 18(3).
[77] Rpt cited n. 32(2).
[78] Of these troops 555 were white, 183 of them attached to headquarters companies; 692 were Negro, 18 of them attached to headquarters companies. Station List cited n. 72.
[79] Rpt cited n. 28.
[80] Rpt cited n. 20(3).
[81] In 1941 its capacity was about 3,000 long tons a day.

speaking, British. It was essential to the supply of the Tenth Army, and the gateway to the sea for the whole of PAI Force. Russian-aid activity at the port was therefore additional to the essential business of supplying the British Army.

In the midst of this British area the SOS planners had proposed to assign to the American command responsibility for the operation of a lighterage basin known as Cheybassi. Cheybassi was not even a native village, though there were a few huts there in the palm grove along the river. In fact, as a port it was not even known as Cheybassi until the local name was officially adopted to distinguish the American operations there from the British depot activities about two miles downstream at Tanuma, whose name had been used for the whole region on the north (or east) side of the Shatt.[82] But although included in the SOS calculations for American operations, Cheybassi remained in British hands until 1 July 1943, landing lightered British military stores intended for the Tanuma Depot and an occasional consignment for the USSR. In all of 1942 no Russian-aid tonnage passed through Cheybassi.

By early June 1943 it was apparent that the American Ports Service, having settled down to its tasks at Khorramshahr and Bandar Shahpur, was ready to take over Cheybassi. Colonel Booth so recommended on 2 June; an Anglo-American agreement ratified his recommendation on 23 June and set the date for taking over as 1 July. Cheybassi was designated a United States port with the same status as Khorramshahr and Bandar Shahpur. On 28 June 17 enlisted men and 6 officers arrived to take over, and by the end of July the station had reached a strength of 10 officers and 110 enlisted men of whom 8 were from 9th Port and 75 from the 378th Port Battalion which had also started things off at Khorramshahr and Bandar Shahpur. Port troops filled supervisory and technical jobs. Native labor supplied by civilian contractors were stevedores, while directly hired natives were used for such station operations as intraport railway, utilities, and anti-malarial work. As of 30 September 1943 there were 736 native laborers at Cheybassi.[83]

[82] The name was given to Cheybassi by Cir 53, Hq, PGSC, 20 Jul 43, as recommended by Ltr, Dir of Ports and Gulf Dist to CG, PGSC, for ACofS Opns, 1 Jul 43, citing recommendation in Min of Basra Port Committee, Mtg 416, 24 Mar 43. PGF 26–A.

[83] (1) Rad, Col Booth to Brig Gen Stanley L. Scott, CofS, PGSC, 2 Jun 43. PGF 162. (2) Min of Allied Mtg, 23 Jun 43. Gulf Dist 323.361. (3) Effective 6 Dec 43, Cheybassi became a subport under the Port Comdr, Khorramshahr. GO 27, Hq, Dir of Ports and Gulf Dist, 5 Dec 43. PGF 26–A. (4) Hist Rpt, Cheybassi Port, Jul 43. PGF 162–G. (5) For Cheybassi see also Rpt, Port Facilities at Port of Cheybassi, prepared by Opns Div, Hq, PGC, for U.S. MA, Tehran, PGF 26–A; Hist Rpts, Gulf Dist, 1944, PGF 13; Ten-Day Rpts and Rpts of Cheybassi Port Opns, 1943, Gulf Dist 323.361. (6) The Port Comdr was Capt W. H. Besselman.

The facilities, though modest, were more than adequate to take care of the traffic. There was the basin itself, jutting into the north bank of the Shatt, flanked by wharves. There were a concrete runway into the water for use by amphibious vehicles, and raised concrete platforms for loading direct to rail cars. There were two 3-ton portal cranes and a 50-ton floating crane. Cargo came from ships in the stream or lying at the docks at Basra's port of Margil across the river from Cheybassi. Access was provided by rail and road. A meter-gauge rail line connected Cheybassi and Margil over a remarkable vehicular bridge whose center span sank into the river instead of rising to make way for ships. At Cheybassi's transfer yard this meter-gauge line met the standard-gauge, single-track spur of the ISR which the British had constructed in 1942, and this spur, like the ISR south of Tehran, was American operated.[84] Access roads connected Cheybassi with Tanuma and Khorramshahr on its side of the Shatt, and with the Basra dock and business areas of Margil and Ashar on the opposite bank. In August the Cheybassi operating troops occupied new barracks built a mile and a half inland on the desert to avoid the mosquitoes which plagued the river bank.

From the start, operations at Cheybassi differed from those at the other American ports. For one thing, there was much less variety in cargoes handled, Cheybassi's function being primarily to handle heavy cargoes like tanks which could not be trucked from the Basra area over the British highway route to Tabriz and which were therefore lightered to Cheybassi and put directly aboard ISR flatcars for the journey to Tehran. For a time petroleum products and alkylate in bulk tins and drums from the Abadan refinery were lightered to Cheybassi for transshipment to the USSR. In addition there was at all times an agreed American obligation to provide unloading at Cheybassi on twenty-four hours' notice for British military stores up to 200 long tons per day. Though the total never exceeded 2,500 long tons in a given month the proportion of British stores to USSR cargoes handled varied. Russian-aid cargoes ranged through the period of American operation at Cheybassi from 50 percent to 90 percent of the total at a given time.

In a second respect Cheybassi differed from Khorramshahr and Bandar Shahpur, for Cheybassi was, as it were, an American enclave in British country. Even its tonnages derived from British tonnages, for nearly every ton that was landed at Cheybassi by the Americans had already been discharged elsewhere under British operation. Relations were bound to be close, and co-operation was cordial and efficient. By

[84] In February 1945 it reverted to ISR operation.

the Anglo-American agreement of June 1943, the American port commander operated the Cheybassi lighterage basin, adjacent docks and open storage areas, camp, and ISR railway spur. In return the British retained control over movements and security, maintained the wharves, and operated light and power services, while their IWT supplied lighters and tugboats along with a daily statement to the American commander as to lighter cargoes destined for his port. There is no record of difficulties arising over allocation of lighters such as occurred at the Iranian ports. It is a fair assumption that these things were more smoothly managed not only because the American and British forces were actually engaged at Cheybassi in joint work but because the American staff there was in direct and personal touch with the IWT.

In one respect Cheybassi was similar to the other American ports, for all three developed more capacity than was used. Cheybassi, though, had not the comfort of reaching its full potentiality, if only once or twice. The SOS planners in 1942 had estimated a monthly tonnage of 30,000 for the port. In August 1943 there were landed 19,731 long tons, being followed in December by a performance of 19,840 long tons. In the following eight months landings ranged between 12,000 and 19,000 long tons; but the December figure was the peak, far below estimates. As in the case of the other ports, the organization was ready but the business went elsewhere, as the European war receded westward.[85]

Because Margil, the port of Basra, had been eliminated by Allied planning as a Russian-aid port and because the petroleum and alkylate shipments from Abadan had been diverted to Failiyah Creek, it was decided that Cheybassi was no longer required. With landings at the vanishing point in September, the port in effect returned to British control. Official transfer took place on 5 October 1944.[86] In fifteen months of American operation total landings were 235,000 long tons.

Four ports in the Persian Gulf area, although operated by the British, received Russian-aid cargo in which the American command had a direct interest. Bushire, the ancient seaport of Iran some 200 miles down the east coast of the Gulf beyond Khorramshahr, had been marked in the SOS Plan for American operation but was eliminated early in 1943. Until July it received consignments of crated motor vehicles from the United States which were assembled at Bushire for delivery overland to the USSR. After July no Russian-aid cargoes passed through Bushire. Because of its possession of suitable dock facili-

[85] Hist Rpts, Gulf Dist, Aug 43–Aug 44. PGF 13–H, L, P, Q, R, S, T.
[86] (1) Hist Rpt, Gulf Dist, Oct 44. PGF 13–V. (2) Rad, Gen Booth to Brig Rhodes, info Col Osborne, 18 Aug 44. PGF 26–A.

ties, the wharves on the island of Abadan in the Karun River just below Khorramshahr landed a substantial portion of the crated aircraft shipped from the United States for assembly at Abadan and delivery to the USSR. Most of these aircraft were discharged first at Khorramshahr and barged to the British-operated docks at Abadan. At Ahwaz, seventy-seven miles up the Karun River, the British operated a barge terminal where, in the beginning, minor quantities of U.S. Army cargo and some Russian-aid cargo were landed from barges. The experiment of hauling U.S. Army cargoes by barge from Khorramshahr to Ahwaz was dropped by the end of April 1943.[87] Because the American mission was primarily to speed the flow of supplies to the Soviet Union and because only 10 percent of the Ahwaz tonnage was destined for the USSR, Ports Service recommended that the American command should not take over Ahwaz operations from the British. Soon afterward both American and Russian-aid cargoes were diverted elsewhere.

At Margil, the dock area on the Basra side of the Shatt al Arab River opposite Cheybassi (Basra is some two miles inland), Russian-aid cargoes arrived in considerable quantities during 1943 and 1944, and American port officers were therefore stationed at Basra to coordinate movements with the British. Between June 1943 and November 1944 these cargoes totaled 446,430 long tons.[88] The lion's share of the total was discharged at Margil and trucked overland to Tabriz via the British-operated Khanaqin Lift. The balance was carried across the Shatt by lighter to Cheybassi and thence by the American-operated ISR to Tehran. Concentration of Soviet-bound freight in the latter half of 1944 at the American ports and abandonment of the Khanaqin trucking route reduced Margil's Russian-aid tonnage to a trickle in September 1944, and to nothing at all after November.

After the inactivation of Ports Service in October 1945 and the taking over of its functions by Transportation Branch of Operations Division, close-out and evacuation loomed ahead, posing fresh problems. Indeed, for the ports men, who had to carry on until the last anchor was weighed, headaches were not to cease until the shore faded astern over the shimmering horizon of the Persian Gulf.[89]

The return to the British in June 1945 of the lighterage terminal at Failiyah Creek left only Sentab Jetty among dock facilities under

[87] Command policy as announced by Col Osborne, ACofS, Opns, at meeting at office of Port Comdr, Khorramshahr, 23 Apr 43. Memo, signed by Maj Cornell, Ex Off, Office of the Port Comdr, Khorramshahr, 24 Apr 43. PGF 26–A.

[88] Page 46 of History cited n. 22(1).

[89] Colonel Ottzenn, who had returned to the United States after temporary duty in the Persian Gulf, came back in early December to assist in close-out and evacuation. Top Secret Book IV, p. 551, European Sec, OPD.

American control, and even there the British firm of Gray Mackenzie & Co., Ltd., took over the handling of British shipping.[90] There remained only the formidable task of preparing to ship out men and equipment when the time should come. As of 30 November there were still 4,263 [91] American troops in Iran and mountains of supplies and equipment.

At that time, in response to a request from the War Department for shipping estimates, the command replied that its port troops, augmented by a civilian contractor, could outload ten Liberty ships and one locomotive carrier up to date of departure. After 1 January 1946 the contractor, the American Iraqi Shipping Company,[92] could carry on. The ships were dispatched, all but the locomotive carrier; but the estimate proved altogether too optimistic, for it was reported to Washington on 15 December that by 27 December, the date upon which port operations would cease, Army port battalions would have loaded one ship with organizational equipment for the United States and one and one-half ships with United Nations Relief and Rehabilitation Administration rolling stock for China, leaving cargoes for eight and one-half ships and one locomotive carrier to be loaded by the contractor after departure of troops. This amounted to 70,000 weight tons of railway rolling stock, 20 locomotives, and 270 trucks. The contractor worked on through January and February and the last ship left for China on 24 February 1946.

Meanwhile, about 1,000 troops left by air and small cargo ships, and the Iranian Army on 26 December assumed security responsibility for Khorramshahr and began taking over control of the port. Beginning on that day the remaining troops began to board the transport *General Richardson.* On 30 December the transport sailed, and the American job at the Persian Gulf ports was history.[93]

[90] Rpt cited n. 20(3).

[91] Strength of the Army, prepared for War Department General Staff by Machine Records Branch, Office of Adjutant General, under Direction of Statistics Branch, GS, 1 Dec 45, p. 6. See also Table 12 and Chart 2.

[92] A subsidiary of American Eastern Corporation whose Basra representative was Mr. Seaholm, formerly with WSA.

[93] The following Rads have been drawn upon: WARX 85023, WARCOS to CG, AMET, 24 Nov 45; PX 32580, CO, PGSC, to WARCOS, 25 Nov 45; Ocean Traffic Br, Water Div, CofTrans, to CO, PGSC, 6 Dec 45; PX 32640, Hq, PGSC, to WD, 8 Dec 45; DTG 121117Z, Hq, PGSC, to WD, 12 Dec 45; PX 32700, CO, PGSC, to WD, 15 Dec 45; BD 200, CO, Abadan Field, to WD, 25 Feb 46. Ocean Traffic Br, Water Div, OCofTrans.

CHAPTER XIX

Target Zero

Before the last man crossed the gangplank of the *General Richardson* many men had consumed many reams of paper for more than a year planning for that inevitable moment. On 12 May 1945, four days after V-E Day, the War Department designated the Persian Gulf Command an inactive theater. This action was one of a series of steps which included the disbandment of the Motor Transport Service on 1 December 1944, the closing of the port of Bandar Shahpur for Russian-aid purposes that month, the ending of aircraft and motor vehicle assembly early in 1945, the relinquishment of the railway in June, and a progressive contraction in function, structure, and personnel paralleling the falling off of incoming shipments. Later in May General Marshall notified PGC that its mission would be declared accomplished on 1 June. On that date the target would become zero.[1]

The Chief of Staff's message also indicated that operation and maintenance of transport agencies would revert to the British by 1 July, an aim not fully achieved by that date. Circumstances altered cases in the ending of things, even as in their early planning. Indeed, the nonexistent powers of divination and infallible judgment were no less prerequisite to a perfect ending than to a flawless beginning. Of the two, divination would perhaps have been the handier in planning to close out the PGC.

To dismantle and dispose of its installations and provide for its men was the job to be done. But how? where? when? It would have been convenient to know when the war in Europe would end. Some thought they knew, but their calculations were badly jolted by the Battle of the Bulge in December. It would have helped, also, to know how fast and how fully to bring into use the Black Sea shipping route to Russia after the Mediterranean was cleared of the Axis. It would have been invaluable to know what to do about the continuing war

[1] (1) Rpts, Ex Off to CofS, to CofS, PGC, for May 45. PGF 251–C. (2) Rad WARCOS, 24 May 45. 323.361 General Connolly's Letter of Instructions with Amendments, SL 9008. (3) HOTI, Pt. VII, Ch. 1, The Closing of the Command, by Victor H. Pentlarge, Jr. PGF.

against Japan; whether, for instance, to move the PGC apparatus, lock, stock, and barrel, off to the Far East, as General Connolly once proposed. Men planned as they could for what they could foresee; but the Japanese signature, affixed aboard the *Missouri* on 1 September 1945, set them to planning anew. With the sailing of the *General Richardson* evacuation of the command's troops was completed. On the last morning of 1945, as Khorramshahr stirred, a note, long heard, was silent. No bugle sounded reveille. The Americans had gone.

The Process of Contraction

The progress of the war in Europe in the summer of 1944 not only aroused hope, too soon proved vain, of an early German surrender, but, by removing the Eastern Front farther and farther from the Persian Gulf supply line and by clearing the Mediterranean Sea, made it feasible to plan for a shorter sea route to the USSR by way of the Black Sea. The strategic necessity for further large-scale shipments through the Persian Corridor was diminished. Beginning in September the Army Service Forces (ASF) at Washington prepared a series of studies to determine the future of the PGC.[2] The purpose of the studies was to reconcile existing Persian Corridor supply obligations with current developments. The supply obligations to the USSR were established by the several protocols, of which the Fourth (Ottawa) Protocol, though not formally signed until 17 April 1945, was planned for the period between 1 July 1944 and 30 June 1945. Two sets of plans for reduced operations were required, both subject to change in view of the highly fluid conditions. By the first set, the ASF at Washington had to determine how long and to what extent to continue Corridor operations; by the second set, the PGC had to plan, within targets fixed by Washington, how to reduce its operations. Only one point was wholly clear when the planning began in September and that was that PGC was scheduled for progressive reduction. It was so notified on 15 September 1944, and ordered to prepare plans accordingly. The ensuing plans, code-named KARO, will be noticed later.[3]

An ASF study of 15 January 1945 notes the following tonnages allocated under the Fourth Protocol to be shipped from the Western Hemisphere to USSR receiving points:

[2] (1) A study prepared by Theater Br, Planning Div, Office of Dir of Plans and Opns, ASF, 5 Sep 44. Contl Div, ASF, Sp Coll, HRS DRB AGO. (2) A study, 15 Jan 45, reviewing one of 24 Oct 44. 384 Conduct of War with Relation to Commands, SL 9016.

[3] Rpts, Ex Off to CofS, to CofS, PGC, 13 Dec 44 and 1 Jan 45. PGF 251–C.

Via the Far East route	3,719,497	long tons
Via north Russian ports	2,032,754	long tons
Via Persian Gulf and Black Sea	870,416	long tons
Total	6,622,667	long tons

It had already been decided that PGC would be closed out as soon as the Black Sea route and a contemplated route through the Baltic could assume its undelivered tonnages, and in accordance with this basic policy the PGC had been notified on 11 November 1944 that the MTS would be discontinued forthwith. This was the first major reduction in the command's operating machinery. By the date of the January study only 287,273 long tons remained to be shipped under the Fourth Protocol allocations from the Western Hemisphere via the Persian Gulf route and the Black Sea route to whose ports the first ships came that month. Spread over the remaining life of the Ottawa Protocol, that total, to which must be added petroleum products transported through the Corridor from Abadan, fell far below the developed port and inland clearance capacity of the Anglo-American forces. In view of this fact, it was incumbent upon the planners to consider whether the PGC could not be shut down altogether rather than continued at much less than its capacity. The problem was colored by two unknowns: the duration of the war in Europe and the peculiar circumstances governing the use of the Pacific route to eastern Siberian ports. This route was affected by uncertainty as to Japan's attitude toward it. By means of the Siberian shipments, the United States, at war with Japan, was reinforcing the USSR, ally of the United States and enemy of Japan's ally, Germany. But, because the USSR was neutral in the war between Japan and the United States, Japan did not blockade shipments to Soviet ports. To obviate interception of American vessels at sea bound for Soviet ports, some one hundred and twenty-five American ships in this service were transferred under lend-lease to Soviet control. The fear that this somewhat unreal contrivance might be exploded whenever it suited Japan's convenience overhung the operation from its inception.

Two conditions were therefore posited in the ASF study: (1) Could the PGC be shut down if Japan closed the Pacific route and thus threw the entire burden of shipment under the Fourth Protocol upon the remaining routes? (2) Could the PGC be closed out if the Pacific route remained usable? In the first case it was decided that the PGC must operate until the Black Sea route, whose estimated capacity for February was set at only 40,000 long tons per month, could reach 269,000 long tons per month, or, in the event of the defeat of Germany, the

Black Sea route and the Baltic together could handle that amount. It should be noted that this plan envisaged supplying the USSR after the defeat of Germany. What actually happened was that on 12 May, after the capitulation of Germany, the Fourth Protocol ceased to be operative and was replaced by other arrangements for continuing supply to the USSR.

It was concluded in the January study that, if the Pacific route should remain open, all PGC activities could be discontinued by April except those required to ensure the movement of petroleum products, and these, it was suggested, might well be taken over by the British. The paper therefore recommended stopping motor vehicle assembly operations at the Khorramshahr plant by 1 April, by which time it was estimated that unassembled vehicles on hand in January, plus those to be delivered through March, would be disposed of with the aid of the British plant at Rafadiyah.

The ASF transmitted its study to the Operations Division on 16 January with recommendations to accept and, in case the decision was to discontinue PGC, to arrange with the British to continue petroleum deliveries from Abadan to the Soviet Union. On 24 January OPD notified the ASF that PGC would have to be continued as assurance against the closure of the Pacific route, at least until deliveries via the Corridor, added to those that could be achieved via the Baltic and Black Seas, reached 269,000 long tons monthly. But any excess above that figure was to be subtracted from the PGC target and the PGC's operations and strength reduced accordingly. The Commanding General, ASF, was instructed that when in his opinion PGC could be eliminated he was to recommend its closing to the general staff.[4]

On 3 February General Scott, formerly Chief of Staff, PGC, and now Director of the Planning Division, ASF, wrote to General Booth that planning for the PGC in the field would be affected by the imminent removal of the Khorramshahr assembly plant for shipment to the Soviet Union and by the limit of the capabilities of the Black Sea ports. From then until the surrender of Germany in May, PGC planning strove to provide for progressive reduction of operations within a flexible range of diminishing targets. The reduction of the target to zero by 1 June, and Washington's desire that transport operations be handed over by 1 July, put subsequent planning on a less uncertain basis. Henceforth not slowdown, but close-out, was the goal; the only uncertain element was the time limit to be applied.[5]

[4] (1) Ltr, Gen Styer to OPD, 16 Jan 45. Filed as in n. 2(2). (2) Ltr, Gen Hull to CG, ASF, 24 Jan 45. Same file.
[5] Ltr, Scott to Booth, 3 Feb 45. Filed as in n. 2(2).

By the time word came that the command's mission was accomplished and its target zero, reduction plans (KARO Plans A and C) had been approved and put to work. Plan A, effective 5 January 1945, was adjusted to a monthly capacity of 194,000 long tons. Though nearly 100,000 tons under the 1944 peak load, the Plan A figure exceeded anything actually attained in 1945. The precipitate drop in tonnages which came with the new year was not even faintly suspected in the year-end planning. (*Chart 8, Appendix B*) KARO Plan C, prepared in readiness for lowered targets, became effective in April after receipt of a War Department message drastically reducing monthly POL requirements to 40,000 long tons and shaving dry cargo down to a mere 10,000 long tons monthly. Staff and operating agencies were busy applying the pattern of Plan C to their own jurisdictions—the plan called for a reduction of command troop strength to about 8,000—when the message of 24 May arrived slashing target all the way down to zero. The subsequent KARO Plan E, adopted in June, concentrated therefore on evacuation and redeployment; but it did not go into effect until the PGC had been structurally absorbed into the American command at Cairo.[6]

This development was sparked by a War Department message in July to Cairo and Tehran that PGC might be reincorporated into AMET (USAFIME was redesignated the Africa–Middle East Theater on 1 March). General Giles of AMET dispatched a plane load of officers to Tehran to study the problems involved in consolidation.[7] A report for the Chief of Staff, PGC, presented by Operations Division, reviewed the effect of consolidation upon the organization and work of that division. While the tasks of the petroleum adviser, and the Control, Documentation, and Plants Branches could be closed out, and air services improved, the duties of Movements and Engineering Branches, it was concluded, would be hampered by subordination of PGC to AMET. In the case of Movements Branch, direct relations with WSA at Khorramshahr and with Washington and the local British command in obtaining shipping space for personnel and supplies would be subjected to additional channels of command with resultant delay and loss of efficiency. The work of the Engineering Branch in preparing construction cost data and final property records would be embarrassed by the necessity of adjusting to AMET's dif-

[6] Rpts, Ex Off to CofS, to CofS, 10, 24 Jan, 22 Mar, 25 Apr, 8, 14, 22 Jun, and 5 Jul 45. PGF 251–C.

[7] Rad WARX 36990, WARCOS to Cairo and Tehran, 23 Jul 45, and Rad, COMGENAMET to Booth, 24 Jul 45. Filed as in n. 2(2).

ferent procedures and rules as to fixed assets, agreements with the British, and declarations of surpluses.[8]

On 3 August the War Department ordered consolidation of PGC under AMET, effective on 1 October. The conditions were to be agreed upon in accordance with the recommendations to be made by PGC. General Booth was ordered back to the United States as of 15 August, and was succeeded by Colonel Anderson. A further message late in August confined the responsibilities of the headquarters at Cairo and Tehran to support of the Air Transport Command, general supervision of remaining lend-lease activities, disposal of salvage, excess, and surplus properties, and the reduction of strength commensurate with these duties.[9]

Conferences and correspondence carried on by the authorities of PGC and AMET, in spite of producing the somewhat less than precise statement that PGC was to "continue operating more or less independently" of Cairo, settled the general basis of the approaching consolidation.[10] V-J Day clarified, though it could not exactly fix, the time element, hitherto wholly uncertain, and left only administrative details to be agreed upon. PGC stipulated that it must continue to handle all movement matters as before, through direct communication with WSA, the British Ministry of War Transport, the British Army, and Washington, and must process its own excess personnel. PGC conceded that AMET was to have the last word in awards and promotions, except that promotions of enlisted personnel would remain the prerogative of the PGC. The terms of consolidation agreed between Cairo and Tehran were embodied in AMET's general order establishing a Persian Gulf Service Command as a subcommand of AMET and a Letter of Instructions later issued by General Giles to Colonel Anderson. These documents brought the American command in the Corridor one step nearer to the final dissolution which was officially recorded as effective 31 December 1945.[11]

[8] Memo, ACofS for Opns, for CofS, 25 Jul 45, sub: Consolidation of PGC with AMET. Filed as in n. 2(2).

[9] (1) Rad WARX 43729, WARCOS to Cairo and Tehran, 3 Aug 45. Filed as in n. 2(2). (2) Rad WARX 55388, WARCOS to Cairo, Liberia, and Tehran, 27 Aug 45. Same file.

[10] Memo, CofS, PGC, for all Stf Divs, 7 Sep 45, sub: Confs with Hq, AMET, Regarding Consolidation on 1 October. Filed as in n. 2(2). Another copy 323.361 Powers and Duties, SL 9008.

[11] (1) GO 83, Hq, AMET, 21 Sep 45. Filed as in n. 2(2). Ltr of Instructions, Giles to Anderson, 25 Oct 45. 323.361 General Connolly's Letter of Instructions, SL 9008. (3) As of 15 September 1945, the last roster of the several headquarters of PGC showed at Tehran, in addition to Colonel Anderson and Colonel Woodworth as commanding officer and chief of staff respectively, a staff judge advocate, a chief surgeon, an inspector general, and directors of fiscal, administration, operations, supply, and military railway divisions. Only two other important headquarters existed in the dwindling command. At Khorramshahr, Col. Louis T. Vickers was commanding officer; at Amirabad Post, Maj. Winsor L. Finney, Jr., was com-

Within the command itself the process of contraction, begun with the first KARO plan, became a long-drawn-out sequence of detailed actions, confusing and even disconnected if itemized, but coherent when viewed in perspective as a whole.[12] The underlying pattern of the process was the gradual shift of functions from agencies to which they had been delegated back to the source of command authority and responsibility, the commanding general and his general staff. After the disbandment of the MTS at the end of 1944, the next part of the machinery to go was the scheme of territorial districts whose functions were absorbed by other agencies. The Mountain District disappeared in January 1945, its functions being taken over by Amirabad Post; Desert District folded its tents soon after, as Andimeshk Post took over; and in February Gulf District handed over to Ports Service at Khorramshahr.

The next step, which came in June, brought further consolidation of structure to reflect concentration of function. Amirabad Post took over housekeeping, administration, and supervision for all installations north of Andimeshk; Ports Service for all south of Andimeshk. Andimeshk itself continued those duties for the post and for what remained of the installations at that once important rail-to-truck transfer point which had embraced not only Camp Kramer, MTS Camp Number 4, and the great ordnance depot, but also the headquarters of Desert District and the Southern Division of MTS. After 25 June the Iranian Government, having taken over the operation of the ISR from the British, ran the trains south of Tehran, while MRS personnel assembled and prepared rolling stock for outward passage. Nearly 3,500 freight cars were knocked down at Ahwaz and fifty-seven diesel locomotives formerly used by the MRS were shipped out of the command before September.

By 1 July only Amirabad and Khorramshahr remained as important American posts. The road camps dotting the long route of the truck convoys were, with five exceptions, all closed and put under security guard early in 1945. The exceptions were lent for short periods to British or Soviet agencies. In October Iranian forces of the Army or Gendarmerie assumed guard responsibility for the closed road camps.

manding officer. See Ltr, CO, PGSC, for House Subcommittee on WD Appropriations, 5 Oct 45, sub: Rpt Concerning the PGC. AMET 314.7 Military Histories, PGSC, SL 8997. (4) Rad, Giles to WARCOS, 10 Jan 46. CM-IN 2277, Organization Directory File, AGO.

[12] The chief steps are recorded in: (1) Memo, Booth for all Stf Divs and Dirs of Servs, 12 Dec 44, sub: Reorganization of the PGC. PGF 240. Another copy 323.361 Powers and Duties, SL 9008. (2) Ltr, CofS to Dir, 3d MRS, sub: Transfer of Jurisdiction to MRS Camps. Latter file. (3) Rpt, CO, PGC, to CofS, 30 Sep 45, sub: Final Rpt from PGC. PGF 259. (4) GO's, Hq, PGC, 1945: 11, 12 Jan; 16, 18 Jan; 19, 20 Jan; 22, 31 Jan; 36, 24 Feb; 65, 21 Jun; 78, 15 Jul; 92, 14 Aug; 93, 15 Aug; and (Hq, PGSC) 111, 10 Oct 45.

On 11 October the remaining functions of Ports Service were assumed by Transportation Branch, Operations Division, as Ports Service was disbanded.

With the command's last transport responsibilities focused at Khorramshahr and its other duties concentrated on evacuation and liquidation of property, the continuance of GHQ far to the north at Tehran, while the outward tide flowed southward, came seriously into question as early as July. In a message to General Marshall, then at the Potsdam Conference, General Booth stated that he would like to keep headquarters at Tehran until 1 November. He estimated that between 700 and 800 men would be required there to man ATC operations, headquarters, the liquidation office, and maintenance and security activities. He added that, if necessary, headquarters could be moved to Khorramshahr earlier, leaving liaison and liquidation groups at Amirabad, but that this would be done "at considerable handicap in efficiency and some delay in program." [13]

On 15 September GHQ was removed from Tehran to Khorramshahr, leaving within the city limits of Tehran the few officers and men of the U.S. Military Missions to the Iranian Army and Gendarmerie, and at Amirabad 53 officers and 402 men, a contingent which fell by 30 October to 51 officers and 286 men. Of this total, 254 were engaged in maintenance and security activities, while the rest were divided between liquidation duties and weather and communications units necessary to continuance of the movements of ATC and Headquarters Flight.[14]

At the time of the move the duration of the Americans' stay at Amirabad was uncertain. It was understood that the British expected to leave fewer than 60 soldiers at Tehran after 15 October and to evacuate to Iraq shortly after that all of their 18,000 troops then in Iran. The Russians evacuated Qaleh Morgeh airport at Tehran on 18 September and were expected to remove all their troops from Tehran soon after that.[15] The Americans planned to stay on at Amirabad as long as liquidation and ATC activities continued, and, if the camp were turned back to the Iranian Government before these activities ceased, to transfer remaining personnel to the American Embassy compound. But events moved more swiftly than anticipated, for Amirabad was taken over by the Iranian Army on 9 December. Remaining American personnel—with the exception of a handful of Airways and Air Communi-

[13] Rad P-31256, Booth to Marshall, 26 Jul 45. Filed as in n. 2(2).

[14] (1) Rad P-32135, COPERGULF to WARCOS, 18 Sep 45. Filed as in n. 2(2). (2). Rpt, Hq, PGSC, to AMET, 30 Oct 45. 323.361 AMET Powers and Duties, SL 9008.

[15] (1) Rad cited n. 14(1). (2) Rad PX-32139, COPERGULF for WARCOS, info COMGENAMET and CONAFD ATC, 19 Sep 45. Filed as in n. 2(2).

cations Service, weather, and liquidation people—were ordered out of Tehran on the 15th, and the handful followed on the 25th.[16]

That left only Khorramshahr. The camp there was taken over by the Iranian Army on 26 December, and from the next day outloading operations at the port were handled by the American-Iraqi Shipping Company assisted by 20 enlisted men discharged from service, working as civilians. An American civil airline, Transcontinental and Western Airways, accepted a contract to take over flights from ATC, aided by 150 discharged ATC personnel turned civilians and 15 technicians similarly discharged from the Airways and Air Communications Service and Army Air Forces Weather Service.[17]

Evacuation and Redeployment

Although the plans for evacuation were on a somewhat more leisurely scale than those which were actually carried into effect, the reason was not a reluctance on the part of the Americans to leave Iran.[18] They were willing enough to go when the job was done. The question was, when could the job be considered done? Up to a late date some American planners reckoned on the terminal date for Allied evacuation, set by the Tri-Partite Treaty as six months from the cessation of hostilities between the Allies and Germany or Germany's associates. That date, which was later to figure in portentous international discussions because of the failure of the Russians to honor it, was 2 March 1946. Others, recognizing that the United States was not a signatory to the treaty and desiring to give Iran no possible grounds for resenting an overstay of its welcome to the Americans, determined that regardless of British and Russian evacuation plans the Americans should not stand upon the order of their going, but go. As early as 25 July a message

[16] (1) Rad, Sasser (Tehran) to Anderson (Khorramshahr), 10 Dec 45. Filed as in n. 2(2). (2) Rad, PGSC to War, signed Connolly, 17 Dec 45. CM–IN 4728, Organization Directory File, AGO.

[17] Rad cited n. 16(2).

[18] This section draws upon: (1) Rad WARX 76255, WARCOS to Cairo, info PGSC, 16 Oct 45. Filed as in n. 2(2). (2) Rad, Marshall to Booth, 25 Jul 45. Filed as in n. 2(2). (3) *Facts on File,* V (May 30–June 5, 1945), No. 241, 175. (4) *The New York Times,* May 31, November 27, 1945. (5) Rad cited n. 13. (6) Rad WARX 65046, WARCOS to Tehran and Cairo, 15 Sep 45. Filed as in n. 2(2). (7) AGO Ltr, 29 Nov 45, AGPO–A–N–200.4 (28 Nov 45). (8) The last outgoing shipment included some 2,000 replacement troops whose arrival on 20 November 1945 the Department of State had attempted to forestall because of the possible adverse impression upon Iranian opinion of so late a reinforcement; but the ship which brought the new troops took away 1,170 men on 24 November. Rpts, Opns Div to CofS, PGSC, for Nov 45, PGF 251–B; and Rad cited in (1). (9) For redeployment accounts and estimates see: (a) Memo, Hq, PGC, for members of House Mil Affairs Committee, 25 Jun 45, sub: Redeployment of Troops from PGC. 319.25 Compilations and Gathering Data, SL 9008. (b) Rad cited n. 13. (c) Ltr, 25 Jul 45, sub: Estimated Strength of PGC Installations by Month, Aug through Nov 45. Secret and Security Room, ORB, RAC, Folder 23, Drawer 4, Cabinet 18, SL PGSC.

from Potsdam to Tehran warned, "There may be a decision to withdraw from Iran within sixty days the greater part or all U.S. forces except for essential ATC units." The message added that the Russians and British had agreed to withdraw from Tehran "in the near future, and PGC should be withdrawn from Tehran immediately except for the minimum essential to operations conducted in the area." General Booth was requested to submit alternative plans for withdrawal of all nonessential forces within sixty and a hundred and twenty days. The question of Allied withdrawal from Iran had been raised by the government of Iran soon after the end of the war in Europe when, on 30 May, it formally requested the three powers to restore a normal situation in Iran by removing their forces. General Booth reported to Potsdam on 26 July that the U.S. Ambassador at Tehran had informed him that, despite the Iranian Government's formal request for withdrawal, the Iranian Foreign Office continually urged the retention of American forces in Iran and reiterated its confidence in American intention to keep faith with the Declaration of Tehran regarding Iranian sovereignty. Later, as field plans indicated to Washington the time estimated to close out all commitments in orderly fashion, the War Department advised both Cairo and Tehran, "Political considerations make it important that U. S. not be subject to criticism for lagging in Tehran evacuation."

On 2 October a conference of Allied foreign ministers at London ended after legalistic wrangling over a date for troop withdrawal had produced no agreement. On 24 November the United States delivered a note to the Soviet Union proposing 1 January 1946 for departure of all Allied troops from the country. Disorders had broken out in October in the province of Azerbaijan which culminated on 12 December in the declaration of an autonomous republic by a national assembly convened at Tabriz. The American note and a parallel suggestion by the British were rejected by the USSR, which pointed out that its treaty of 1921 with Iran permitted the right to introduce troops into the territory of Iran. President Truman nevertheless desired to speed evacuation of Allied forces and thus contribute to a settlement of the difficulties in Azerbaijan. Word was passed that American troops should leave the country by 31 December. Secretary of War Patterson dispatched General Connolly to Iran to see that this was done.

The reduction of troop strength from the peak figure of midsummer 1944 to the 4,000 who sailed away on the *General Richardson* proceeded over a period of more than a year in accordance with estimates which necessarily altered as controlling factors decreed. The plans which were made and unmade are of less significance than the fact

of reduction. (*Table 12 and Chart 2, Appendixes A and B*) By V-E Day command strength had been reduced by approximately 16,000 troops, who had been redeployed to other theaters. By the end of July command strength was down to 40 percent of its peak. Estimates made at that time of probable strength at the end of the year came very close to the actual fact. As fast as functions ceased, the men thereby released were shipped out of the command. The departure of the last man two months before the treaty date of 2 March 1946 was in accordance with the spirit in which they had come: to do a job, and then be off.

Liquidation of Property

No aspect of the history of World War II is open to greater misunderstanding than the disposal of property no longer deemed necessary to be held for the government. It is a subject virtually impossible to explore in limited space with hope of reaching the ultimate truth. For good or ill, the disposal of unwanted property after the war became so entangled in red tape as to be incapable of being reduced, at least on the theater level, to brief and reliable form. The problem was world wide, and this fact in itself made confusion worse confounded as field representatives of the military services, the Department of State, and the Foreign Economic Administration came into contact, at home and abroad, with representatives of the myriad agencies of government which had things to dispose of. In general, an article not required locally was declared "excess" to authorities next higher, and so on up to the top of the command, who could then certify the property as "excess" to the command. It was then available to be shipped elsewhere if it could be used elsewhere, or if not, a multiplicity of higher authorities were empowered to declare it "surplus." This made the property eligible for disposal. But there were numerous categories, and there was much hairsplitting and sharp definition, which resulted in complicating the process of disposal. Most of these were safeguards. Aircraft and items peculiar to aircraft, for instance, were to be disposed of through the Foreign Economic Administration; airfields could not be declared "surplus" without the approval of the Department of State; contracts for disposal were subject to final approval by various agencies.

No reasonable person expects that, when wars are finished, their costs can be accurately estimated, or that materials built for war and not used can be exactly accounted for or usefully returned to the civilian economy. Who can say what was the cost of the Battle of Waterloo? Who, then, could cast up a balance sheet for the American

operations in the Persian Corridor? No one will ever know what it cost, though the British and Americans poured a hundred million dollars into construction of fixed installations, though the books show that more than forty millions of dollars were paid to American soldiers from 1 January 1943 to 30 June 1945.[19] If it is impossible to determine costs, then it is equally impossible to determine losses, and, because the entire expense was a part of the war effort, losses can with equal logic be set down as part of the price of getting some millions of tons of war supplies through to the USSR in time to be useful against the Germans. Misunderstanding of war property disposal results from supposing that the United States had been running a shop, keeping an orderly inventory, and accounting to stockholders for the use made of their investment in the shop. But shopkeeping and waging war are not comparable. Nevertheless the end of war imposes the obligation not to waste what is still usable. The difficulty is to interpret action taken in any given area, where, for instance, local authorities may have made what they regarded as the most eminently satisfactory disposal arrangements only to have them upset by higher authority; or where local authorities, sensing improper conditions attaching to local offers to buy, may have been required by higher authority, applying world-wide policies, to go ahead anyhow.

In the Persian Corridor, the disposal of property no longer needed by the United States or impracticable to ship home was a job of complexity and delicacy—complex because of the variety of properties to be disposed of, delicate because a visitor who during the course of his visit has built some elaborate and expensive gadgets into his host's house is not in an advantageous bargaining position in offering to sell them to the host (who did not ask for them in the first place and had little or no use for some of them in the second). The first command agency established to deal with the matter was the Property Disposal Branch of the Fiscal Division.[20] It was at about this time that General Connolly, relieved as Commanding General, PGC, was returned to Washington to become deputy commissioner of the joint Army-Navy Liquidation Commission established to co-ordinate and consolidate disposal of properties. The Property Disposal Branch, which came under the direction of Colonel Stetson, Director of the Fiscal Division, was charged with "formulating policies, supervising disposal operations and maintaining necessary liaison with other

[19] HOTI, Pt. I, Ch. 10, History of the Fiscal Division, Hq, PGC, by Victor H. Pentlarge, Jr. PGF.
[20] GO 84, Hq, PGC, 15 Dec 44.

agencies in matters pertaining to the disposition of fixed and movable property made surplus through the reduction of operations within this command." [21] Establishment of the Property Disposal Branch followed a War Department request to the theater to examine the possibility of disposing property to the Iranian Government. It formalized the concern, already shown in the command, that the British and American forces would pursue parallel policies toward the Iranian Government in the matter of property disposal and that in the settlement of property matters between them, especially in cases of joint Anglo-American ownership or joint capital investment, common principles of cost and other accounting could be agreed upon.[22]

As the job grew greater, both actually and prospectively, the Property Disposal Branch was detached from the Fiscal Division on 23 February 1945 and set up directly under the chief of staff as the PGC Liquidation Commission, with Colonel Stetson at its head. The command had already been notified by Washington that, by one of those shifts of policy and realignments of responsibilities and redefinitions of categories which kept property disposal activities round the world in a turmoil for years, the responsibility of the Foreign Economic Administration for disposal of surplus Army and Navy properties, except aircraft and items peculiar to aircraft, would be taken over by the Army-Navy Liquidation Commission.[23] Until April the PGC Liquidation Commission continued to gather data, co-ordinate local policies, and act as the bargaining agency in dealings with possible local purchasers. But in April the War Department authorized the liquidation commissioner to act for the Army-Navy Liquidation Commission, and the PGC commission was therefore dissolved and replaced by a field office of the Army-Navy commission, headed by Colonel Stetson.[24] This office was to dispose of surplus property other than salvage, which remained the responsibility of the PGC. In December 1945, when General Connolly came on from Washington to speed the close-out, he brought along a group of experts, including Col. Hans Ottzenn of the Transportation Corps, Lt. Col. James W. Totten of OPD, and representatives of the United Nations Relief and Rehabilitation Administration, the Air Forces, and Transcontinental and Western Airways.[25]

Surpluses fell roughly into three categories, each calling for different methods of settlement or disposal. The largest of these included fixed installations, real estate, and leases. From the outset of American

[21] History cited n. 19.
[22] Ltr, Booth to Brig Jackson, PAI Force, 3 Nov 44. Abstract PGF 251–C.
[23] Rpts, Ex Off to CofS, to CofS, 14 Jan 45. PGF 251–C.
[24] GO 49, Hq, PGC, 24 Apr 45.
[25] (1) Rpts, Ex Off to CofS, to CofS, 11 Apr 45. PGF 251–C. History cited n. 1(3).

operations the British had handled the acquisition of real estate for the United States and were reimbursed through the machinery of reverse lend-lease or reciprocal aid. Toward the end of 1943 the British had desired to terminate these leases and leave to the American command their renegotiation directly with the Iranian Government or the individual owners of the properties affected.[26] But early in 1944 the American command requested PAI Force that, in view of the fact that the United States enjoyed no treaty arrangements with Iran governing the presence of American forces in the country, the British should "continue to hold under present arrangements and in their name, all Iranian Government property now used by the U.S. Army." PGC would continue, "as in the past, to reimburse the British Government for expense incurred in its behalf." This was agreed to by the British command on 15 February.[27] In consequence, after the declaration of completion of the American command's mission, its Engineering Branch became the agency whereby leases were terminated, troops allocated for caretaking and stand-by maintenance, and reports prepared relating to fixed assets, costs, and inventories. The British handled the conclusion of arrangements by which the United States had occupied buildings on Iranian land or buildings or land used rent free (as was the site of Amirabad, for example) under grants made to the British within the terms of the Tri-Partite Treaty.[28]

A second category of surpluses, and one most difficult to settle to everyone's satisfaction, was that of equipment held under lend-lease. It was not always possible to reach agreement as to adjustments of property rights or values within this category and, in the case of motor vehicles originally obtained from the United States under lend-lease by the United Kingdom Commercial Corporation, some heat was generated before a solution was reached. During the first half of 1945 a tug of war took place over possession of the fleet of trucks operated by UKCC. At one time it was to revert to the Foreign Economic Administration, at another to the British Army, and in March 1945 the War Department gave firm instructions that 567 vehicles were to be repossessed by the United States. A report sent to Washington from the American command in July stated that more than 2,900 American-made vehicles of all types were lend-leased to UKCC which used them in its operations in western Iran between 25 April 1942 and 30 September 1944. It is impossible to discover from the files how many of

[26] Hist Rpt, Cons Br, Opns Div, 15 Dec 43–15 Feb 44. PGF 127–M.
[27] (1) Ltr, Col McGlone to Persian Area Hirings Office, 4 Feb 44. AG 601.53, Hq PGC. (2) Ltr, GHQ, PAI Force to Hq, PGC, 15 Feb 44. Abstract 251–C.
[28] Correspondence during May 1945 between British and American headquarters. 323.361 Powers and Duties, SL 9008.

these vehicles were physically returned to the keeping of the U.S. Army and how many were credited to U. S. account under lend-lease bookkeeping. The impression is that not many returned to physical possession of the Americans.[29] In matters less troublesome than motor vehicles proved to be, the British and Americans got together on agreed tables of costs for fixed installations in which there was joint interest and these were figured in the final lend-lease settlement reached after the war on a global basis.

The third category of surpluses consisted of all property, fixed or movable, in which the United States enjoyed an incontestably sole interest and which had been declared by all the requisite authorities as eligible for sale or disposal overseas. Negotiations with the Iranian authorities were channeled through Colonel Stetson and Wallace Murray, United States Ambassador at Tehran, and resulted in on-the-spot agreements which, by early November, covered nearly everything in this category that was disposable. Plans were modified when Iranian matters were mingled with global Anglo-American lend-lease settlements and the results were not always pleasing to some who had reached advantageous local settlements.[30]

From the point of view of a shopkeeper's report to stockholders, the return received for property disposed of in Iran was highly disappointing. Fixed installations, camps, and buildings which had cost thirty million dollars went for less than three millions. The highway, which was the largest single expense and which could not be rolled up and taken away if not sold, was not sold. Its cost was written off to the service it performed in aiding Russia. The Iranian Government paid over ten million dollars for equipment used by the MRS on the ISR. The United Nations Relief and Rehabilitation Administration paid about six million dollars for movable property valued at about eight millions—boxcars, flatcars, and gondolas, oil-burning locomotives, and about two hundred motor vehicles, all shipped to China. A syndicate of Iranian merchants contracted to pay two and a half million dollars and a sum in rials approximating another four and a half millions for other property. All told, fixed and movable property roughly costing over $62,000,000 was disposed of for about $26,000,000.[31]

It is doubtful whether, under the circumstances, a much better bargain could have been struck. Soon after the end of the war numerous

[29] See documents, especially dated 27 May and 11 July 1945. AG 095 (UKCC), Hq PGC.
[30] (1) Memo, 5 Nov 45. 092 (Iranian), SL 8978. (2) Rpt cited n. 12(3). (3) Intervs with Col Stetson, Tehran, 3, 4 Aug 45.
[31] History cited n. 1(3).

stories circulated freely in the United States of waste and callousness in the disposal of government property in faraway places. Food was left to rot upon inaccessible islands; property in short supply in one part of the world went begging in another; and returned soldiers vividly described frantic villagers held back forcibly from piles of blazing army blankets which could be neither sold because of one set of regulations nor given away to shivering natives because of others. In the Persian Corridor no such incidents took place; and although there were heavy bookkeeping losses, there was no well-established instance of wanton waste.

Comparative Score

In the world-wide effort to deliver war supplies to Soviet Russia, how does the record of the Persian Corridor compare with that of the other routes from the Western Hemisphere? There were five routes: the Soviet Arctic, the Black Sea, the north Russian, the Persian Gulf, and the Soviet Far East.

The least important route, tonnage wise, was that which led from American Pacific ports to Siberian ports on the Arctic Ocean. Because the Arctic ports were ice free only during the summer months, sailings were restricted to those periods. The main military significance of the route was that aviation fuel was transported over it for an air ferry route across Siberia which, because of Soviet opposition, never materialized. Total tonnage was 452,393 long tons.[32]

Next in tonnage accomplishment was the Black Sea route, the last to be inaugurated. It was made possible by clearing the Axis from the Mediterranean and the Black Sea ports of Odessa, Constanta, and Novorossiysk. In 1944 the Andimeshk truck assembly plant and a number of PGC portal cranes were transferred to the USSR for installation at these ports. First ships arrived in January 1945. During the five months of operation of the route 680,723 long tons were delivered.

British convoys first sailed to the north Russian port of Murmansk in August 1941. Archangel served as an alternative port. This was the shortest route from American ports to the USSR, 4,500 miles, and required twenty-one days' running time and five weeks' convoy time. Inland clearance distance by rail from the ports to the battle front and industrial centers was satisfactorily short. During the last three months of 1941 and the first four months of 1942 the rate of shipments

[32] Table 1 and Chart 12.

to north Russian ports was greater than by any other route then in use from the Western Hemisphere to Soviet ports; but the increasing severity of Axis attacks upon shipping in northern waters reduced its use drastically until July 1944, by which time an improvement in its safety reopened it to year-round activity. It did not again become a main artery of Soviet supply, for by that time it had been rivaled by the Soviet Far East and Persian Gulf routes. Its total of 3,964,231 long tons was nearly equal to that of the Persian Gulf.

Longest in mileage and ship round-trip time, the Persian Gulf route was nevertheless desirable because of its relative safety, its all-year usefulness, and its accessibility to Soviet territory if other routes should be denied. The difficulties of providing and operating adequate port and inland clearance facilities were substantial handicaps in operation of the Gulf route; but so long as other routes were threatened either by military denial or, in the case of the Far Eastern route, by a sudden change in Japan's attitude toward its use, the Persian Gulf remained a necessity. In receiving 4,159,117 long tons of Soviet-aid cargo from the Western Hemisphere, the Gulf was excelled only by the Far Eastern route.

Almost half, or 47 percent, of Russian-aid supplies from the Western Hemisphere reached the Soviet Union via a sea lane which extended from American Pacific ports around to the north of Honshu to eastern Siberian ports. The total tonnage via this route came to 8,243,397 long tons; but, because of the peculiar situation by which Japan winked at the traffic to her ally's enemy, only supplies classified as nonmilitary were carried.

The significance of the Persian Gulf route is measured by its tonnage accomplishment and its fulfillment of strategic necessity. Its handicaps were less serious than those which at one time or another afflicted the other routes; its advantages more solid and continuous. Development of the Persian Gulf line of communications to the USSR was clearly basic to global planning.

Operations closed, as they opened, at the ports. Khorramshahr, entrance for aid-to-Russia cargoes, served also as exit for the men and machines who had worked them. The tide of traffic turned about. Soldiers and baggage, once again packed aboard ship, headed for the open sea—the high-point men for home, the others for new assignment in Africa or Europe. Behind them, the once clamant wharves, the now empty storage yards, the roads no longer writhing with traffic, the hot shining rails, stilled after grinding and shrilling day and night under the weight of the long trains—these commenced imperceptibly to settle

back into the decay that comes so naturally to the region.[33] In a few years it would be as though the Americans had never worked at Khorramshahr, as if all that effort were a desert mirage.

Only one thing will convert that effort into a mirage: neglect of its memory. It was real enough, for its own time, and for the future. This is the record of its reality.

[33] Iran's postwar seven-year plan for economic improvement included development of Khorramshahr. *The New York Times,* September 24, 1950.

PART THREE

IRAN: THE FOURTH PARTNER

CHAPTER XX

The U.S. Army and Aid to Iran

Through the months that stretched between the day British and Soviet troops entered Iran in 1941 and the day the last Russian soldier departed into his own country in 1946, it would have been a remote and cloistered Iranian indeed who could have remained unaware of the Allied armies or unaffected by their activities. The tenseness, the urgency, the unsleeping bustle and unresting energy that it took to transport supplies by the millions of tons across desert and mountain could not fail to affect a population so suddenly exposed to them. In the role of fourth partner in the Corridor operations, thrust upon Iran by the exigencies of war, that nation perforce faced a situation beyond its control. Although its sovereignty was reaffirmed by the Tri-Partite Treaty, the normal exercise of sovereignty was so circumscribed by the demands of the war as to be virtually suspended for the duration. As the essentially passive partner, Iran contributed in proportion to its acquiescence in Allied purposes.

The difficulty of Iran's position cannot be overemphasized. In this book the focus is upon the Allied operations. Iran is seen only through the small end of the telescope, diminutive and incidental. The thousands of Iranian workmen who manned Allied projects do not appear as part of an economic inflation accelerated by the expenditure of vast sums of Allied money. Rations of tea, bread, and sugar figure in the story as parts of an Allied labor problem; food riots, for instance, are briefly glimpsed. Miles-long motor convoys roll through Iranian towns toward Russia; but no notice is taken that their route is marked with traffic signs in two foreign languages, or patrolled by foreign military

police who do their best to provide safety but who cannot always prevent the deaths of heedless peasants, like distracted chickens, under the rolling wheels. Encampments rise to house the foreign troops, often on land leased or granted by the government of Iran. The story does not emphasize that these are exclusively administered by the foreign powers concerned; nor is the muffled booming heard that marked, day after day, the detonation of antipersonnel mines set off by native prowlers attempting the barriers enclosing the foreigners' stores of goods and food. Pilferage and banditry, menaces to the movement of supplies through lonely country, appear frequently enough in the story; but the search and seizure, the entering of native huts by foreign troops—so often rewarded by recovery of plunder not hauled 12,000 miles to be bootlegged in the Iranian bazaars—are not the story's main concern.

Yet these acts and their implications bulked large in the Iranians' lives. Their economy was distorted, their *amour-propre* disturbed. The period of the occupation-which-was-officially-not-an-occupation, despite the protection of the occupying powers, exacerbated the essential fact of Iran's existence: weakness—internal weakness, both economic and political—and helplessness in external affairs. During this period the United States turned up on the spot as auxiliary of one of the occupying forces. As a nonoccupying power, the United States was less encumbered than Britain or the USSR in helping Iran to help itself and proceeded, upon Iranian invitation, to do so through the second Millspaugh economic mission and the military advisory missions arranged for in 1942. But as the American service forces, come to Iran to move Russian-aid supplies, expanded until they were the most numerous of the Allied forces in the Corridor, the feelings of the populace, already disposed to resent the ancient rivals, Britain and Russia, became more and more susceptible to the manipulations of those who chose to point to the Americans, and the swarm of American troops, as the source of Iran's wartime discomfiture.[1] This delicate situation and the growing feeling in American quarters that not only the success of Allied operations in the Corridor but considerations of longer range and wider scope called for further strengthening of Iran are subordinated in this book to the U.S. Army's story. As American policy evolved after 1942 certain responsibilities were assigned to the War Department which made the U.S. Army an instrument for aiding Iran to combat its internal and

[1] General Booth, Commanding General, PGC, replying to a letter from Ambassador Leland B. Morris who called his attention to charges of this sort in the Iranian press, pointed out the high employment resulting from Army operations, the avoidance of competitive bidding for items in short supply in the local market, the high degree of self-sufficiency of the American forces, and cash payment for goods in plentiful supply. Ltr, Booth to Morris, 25 Feb 45. Abstract PGF 261.

external weaknesses. General Connolly's directive was broadened to enable him to give Iran assistance of an economic nature, additional to his primary mission in aid of the Soviet Union; and the military advisory missions, despite obstacles and discouragements, were continued throughout the war and after as tokens of American concern for Iranian independence.

The Question of Status[2]

So long as the American representation in the Corridor consisted of not more than a few hundred officers and men of the U.S. Army and the civilians engaged in construction and assembly projects, no question arose as to the legal status of the Americans in Iran. Their auxiliary character and small numbers, as well as the fact that their tasks, of a technical and advisory nature, were nominated by the British, made it possible to consider them as if they were in effect subcontractors to the British forces. When, however, the first 5,000 service troops came ashore at Khorramshahr without any previous notification to the government of Iran,[3] inquiries were promptly directed by Iran to the American Minister at Tehran, Louis Dreyfus, and to the Soviet Union as to certain questions raised by the presence on Iranian soil of large numbers of American soldiers. The United States was informed that the arrival of its troops was regarded as an infringement of Iranian sovereignty and was pressed to regularize their status by adhering to the Tri-Partite Treaty as a means of securing formal permission for their presence and of defining the conditions under which they were to remain. An inquiry which Iran put on 12 December 1942 to the Soviet Government was not without its ironic aspects, considering that the Americans had come to Iran in order to facilitate the movement of supplies to the USSR. Doubtless it bespoke Iran's reluctance to offend the powerful neighbor then in occupation of its northern provinces. Iran wished to know whether the Soviet Union objected to United States participation in the operations of the Allied forces in the Corridor.

[2] (1) Memo by Gen Connolly, atchd Ltr, Connolly to Dreyfus, 19 Jul 43. 336.01 International Agreements, SL 9012. (2) Note, Chargé d'Affaires, USSR Embassy, Washington, to Secy State, handed to Loy Henderson, 27 Jul 43. Div of Near Eastern Affairs, Dept State 711.91/106 PS/FP. (3) U.S. Note to USSR, 16 Jun 43. Same file. (4) Memo, Dept State for WD, 5 Aug 43. OPD 336 Russia (24).

[3] R&A 1206, Conflicts and Agreements of Interest of the United Nations in the Near East, Office of Strategic Services, Research and Analysis Br, 10 Jan 44, p. 31. A request to the Iranian Prime Minister in October 1942 by Colonel Shingler for extraterritorial rights for American troops (which was refused) did not constitute formal notice of American plans. Interv with Gen Connolly, Pentagon, 18 Aug 50.

Iran's inquiries to the United States and to the USSR set off a train of notes, telegrams, drafts, and counterdrafts that stretched on, in the leisurely fashion of diplomacy, into 1945. The correspondence between the foreign offices of Iran and the United States came to exactly nothing; that between the United States and the USSR produced the gestures the situation called for. Although the two exchanges were related to one another they can best be considered separately. Before the Soviet Government could acquiesce in the presence of American troops in Iran it desired to satisfy itself that American participation in Corridor operations did not infringe or diminish any rights enjoyed by the Soviet Union under the Tri-Partite Treaty. In response to a Soviet inquiry as to American intentions, Minister Dreyfus informed Andrei Smirnov, Soviet Ambassador at Tehran, that U.S. military units were in Iran only to support the British military forces which still exercised "full control over transport lines in the south of Iran," and "bore responsibility for their safety." This explanation failed to satisfy the USSR. A note was dispatched from the Soviet Embassy at Washington to the Secretary of State on 11 May 43 drawing his attention to "a certain lack of clarity" in the Dreyfus memorandum. The Russians cited the fact that, in the negotiations which were proceeding between the United States and Iran to regularize the presence of American troops in Iran, the Americans had presented a draft agreement under which Iran would grant to the United States the same rights over communications as were enjoyed under the Tri-Partite Treaty by the British and the Russians.[4]

The United States tried again, explaining to the USSR on 16 June 1943 that American troops went to Iran at British request; that their task "under general British guidance" was to maintain control over transport facilities in Iran in order to increase deliveries of supplies to the USSR; and that they were not in Iran to support the British "in any military sense." The Soviet reply of 27 July asserted that general British guidance indicated that the American forces were "part of the British Iranian-Iraq military district." It stated that the USSR would inform Iran that there was no Soviet objection to the presence of American troops in Iran providing no Soviet rights were altered thereby. In consultations between the State and War Departments which followed receipt of this note the Department of State took the position that any attempt to set the Russians right on the details of the

[4] Note, Chargé d'Affaires, USSR Embassy, Washington, to Secy State, 11 May 43, referring to Memo, Dreyfus for Smirnov, 3 Apr 43. Div of Near Eastern Affairs, Dept State 711.91/99 PS/HWL.

co-operative working arrangements in force between the British and Americans in Iran would be "quibbling" and might delay formal Soviet acquiescence. In the War Department an OPD paper suggested that it would be useful to point out in any future correspondence with the USSR that "military control of the area within which our troops are operating is exercised by the British. American troops form an independent command, located within, but not a part of the 'British Iran-Iraq military district.' " OPD suggested that the Russians should address their inquiries about security matters to the British, whose responsibilities in that field were exclusively exercised by them under direction of the Combined Chiefs of Staff. As to general policy and American responsibility for transport, the OPD paper stated:

> Decisions of the Combined Chiefs of Staff do not indicate that the British are responsible for the question of general policy concerning the operation of supply routes, or that they retain general responsibility for the dispatch of supplies to the Soviet Union by the Persian Route. On the other hand, while the Combined Chiefs of Staff do not specifically assign responsibility for general policy, they do assign definitely responsibility for the dispatch of supplies to Russia to the United States.[5]

There the matter rested. Fortunately for the success of the Russian-aid program, no hint of that fastidious regard for the legal niceties at the diplomatic level, which kept the Russian notes flowing for more than half of 1943, seeped down to the level of operations to dilute the full strength there of Russian zeal for American supplies. Nor did it affect the regularity and vehemence with which Soviet officials pressed the American command to exert ever greater effort and to provide more and more tonnage for the Russians.

While the USSR was satisfying itself that the American forces were not in Iran to disturb Soviet rights under the Tri-Partite Treaty, the government of Iran launched into a long exchange of views with the government of the United States. The discussions covered two kinds of proposed agreement to regularize the presence of American troops in Iran and fell into two distinct phases. The first phase, initiated by Iran, passed into the second following the signing by the three Allied Powers of the Declaration of Tehran. One of the two agreements discussed covered the whole subject of American status in Iran. The other was restricted to exemption of U.S. Army personnel from the criminal jurisdiction of Iranian courts. Ideas shifted from time to time as to whether there should be separate agreements, one master agreement,

[5] Memo by Col Johnson, 13 Aug 43. OPD 210.684 Iran (13 Aug 43).

or a series of similar but separate bilateral agreements between Iran and each of the three powers in the Corridor.[6]

Having been requested in December by General Andrews, Commanding General, USAFIME, to secure for the Americans a status regarding their forces similar to that of the British and Russians, Minister Dreyfus on 18 January 1943 presented to the Iranian Foreign Minister the views of the United States on an agreement to exempt American troops from Iranian criminal jurisdiction.[7] After many months during which no agreement was reached, General Connolly on 19 July suggested to Dreyfus the incorporation, in the pending general agreement on status, of provisions to include in a legal immunities section civilians accompanying the U.S. forces. He further proposed that the exemption to be granted to soldiers and civilians be extended to civil as well as criminal matters. In December Connolly wrote Dreyfus that, in order to obtain uniformity of treatment, "It would be much more practical if the matter of criminal jurisdiction could be worked out jointly with the other Allied Forces in Iran." Connolly expressed the view that, until the question of the status of American troops on Iranian soil was determined, the subsidiary question of criminal jurisdiction over American troops should not be pursued. Accordingly, he requested Dreyfus to withdraw his note to the Iranian Foreign Minister of 18 January 1943. Early in January 1944 General Marshall expressed to General Connolly his doubt of the efficacy of an agreement which included the other Allied nations. To this Connolly replied that talks between Dreyfus and the Iranian Foreign Minister had ceased, and that British, American, and Soviet authorities would first agree upon uniform terms regarding criminal jurisdiction of their troops

[6] (1) Interv with Col Milford F. Henkel, JAG, PGC, Amirabad, 3 Aug 45, for this and other background material in this section. (2) Documents alluded to or drawn upon for this section include: (a) Those primarily relating to court jurisdiction over troops: Ltr, Gen Andrews to Dreyfus, 16 Dec 42, Folder American Diplomats in M/E, CG/USAFIME, AG File, Hq AMET; Note 341, Dreyfus to Iranian Foreign Minister, 18 Jan 43, Treaty File, JAG File, Hq PGC; Ltr, Connolly to Dreyfus, 6 Dec 43, Treaty File, JAG File, Hq PGC, another copy 092.2 Treaties and Agreements, SL 8978; Ltr, CofS, PGSC, to Dreyfus, 30 Mar 43, 336 Foreign, International Affairs and Relations, SL 9012; Rad AMPSC 2189, Marshall to Connolly, 10 Jan 44, Rad AGWAR 156, Connolly to Marshall, 12 Jan 44, 092.2 International Treaties and Agreements, SL 8978. (b) Correspondence and drafts: U.S. proposed drafts, undated, but earliest proposal for an executive agreement, first revision of 24 Feb 43, second revision of 25 Aug 43, Cases 55, 64, Sec II, OPD 210.684 Iran; new draft treaty submitted to Secy State, 21 Apr 44, Treaty File, JAG File, Hq PGC. (c) Correspondence on a comprehensive treaty or agreement: Ltrs, Dreyfus to Connolly, 7, 18 Jun 43, Connolly's reply, 19 Jun 43, 336.01 International Agreements, SL 9012; Rad AMSPC 1041, Marshall to Connolly, 7 Jul 43, 336.01 International Agreements, SL 9012; Memo and Ltr cited n. 2(1).

[7] It may not have been known to General Andrews that no separate formal understandings existed between the two Allied forces and Iran on exemptions and legal jurisdiction of their troops. These were tried by their own military courts under the general provisions of international law.

and would then seek to obtain bilateral agreements with Iran in conformity with those terms. Whatever conversations followed, no formal agreement on the subject was reached between Iran and the United States.

As has been stated, Iran early pressed the United States to regularize the presence of its troops on Iranian soil by adhering to the Tri-Partite Treaty. The Department of State preferred to proceed upon the basis of an executive agreement rather than a treaty and early submitted a draft which included the grant to the U.S. forces of the right to "use, maintain, guard and control" any of the means of communication within Iran, including railways, roads, rivers, airdromes, ports, pipelines, and telephone, telegraph, and wireless installations wherever advantageous for the prosecution of the war effort. Article V of the draft stipulated that when an act by U.S. forces affected the Tri-Partite Treaty nothing should be undertaken until "after consultation and agreement with the appropriate Iranian, British and Soviet authorities."

To Dreyfus' request for comment on an Iranian counterdraft, Connolly replied in June 1943 that "the concessions to be made by the United States . . . are so far-reaching" as to require careful study. In July Connolly furnished his comments to Dreyfus, a copy of which, at Marshall's request, was forwarded to Washington by courier. Connolly noted that, in spite of "our indeterminate legal position," operations were being satisfactorily carried on with a minimum of misunderstanding with the three other partners. On the asumption that "our interest in this area is of temporary duration," and noting that the Iranian counterdraft went beyond provisions of the Tri-Partite Treaty, he advised that no concessions should be made greater than those applying to Britain and the USSR in that treaty. Connolly suggested that agreements by the United States with the British and the Russians should precede an agreement with Iran, and inquired whether the proposed grant to the American forces of rights over communications had received the prior consent of the signatories to the Tri-Partite Treaty. Certain proposed provisions seemed to Connolly inadvisable. One, obligating the United States to defend Iran from aggression, he deemed unwise on the grounds that this obligation was undertaken by the British and Russians and that the American troops constituted a noncombatant force. Another he questioned required the American command to consult the Iranian Government before fixing the location of troops or installations. Connolly counseled the inclusion of a clause similar to provisions of the Tri-Partite Treaty governing the transfer, after the war, to Iran by the Allied forces of buildings and other im-

provements. A new American draft of 25 August affirmed American respect for the territorial integrity and sovereignty of Iran and promised the withdrawal of the armed forces of the United States from Iran "not later than six months" after the end of hostilities, or earlier if a peace treaty should be concluded earlier. But, although exchange of views between the War and State Departments and between the two governments continued, no agreement was reached.

What was lacking was a formula to reconcile the independent command status of the American forces with the auxiliary nature of their functions. From the auxiliary angle there were obstacles to the Americans' assuming obligations and privileges equivalent to those belonging to the signatories to the Tri-Partite Treaty; but from the angle of independent command there was no inconsistency in a direct Irano-American understanding. Maj. Gen. Patrick J. Hurley, who was in Iran during 1943 as the President's ambassador-at-large, felt that the slow progress toward a treaty to recognize "the presence of American troops as an American operation" was chargeable to sabotage by what he regarded as "imperialist" sympathizers in the Department of State. He so informed the President.[8] General Hurley believed that the moral advantages of an understanding with Iran outweighed the difficulties encountered in attempting to equalize the status of United States troops in Iran with that of the British and Soviet forces. As General Connolly's comments to Minister Dreyfus show, the commander of the American forces, having primary regard to the smooth functioning of the American tasks in the Corridor, preferred the existing working arrangement.

Although the negotiations took the normal course of diplomatic maneuvering, they suggest that agreement at any time in 1943 would have been premature. For one thing, as Connolly pointed out, American operations and relations were proceeding satisfactorily without any agreement; but the main factor was that long-range American policy toward Iran had not crystallized. Connolly had observed in July that his views were based upon the assumption of temporary American interest in the area, an interest limited to the time necessary to complete the Russian supply mission. General Hurley wished to see Iran's hand strengthened and believed direct treaty relations with the United States governing the presence of American troops in Iran would contribute to that end. He felt that opposition to a treaty implied a desire to leave the position of the British and Russians in Iran unaltered.

[8] Ltr, Hurley to Roosevelt, 21 Dec 43. Copy furnished by General Hurley. The President requested Hurley's permission to delete Hurley's views on the contradictions between imperialism and the Atlantic Charter from this letter before circulating it. Interv with Gen Hurley, Washington, 30 Mar 50.

But the Department of State was also moving toward the objective of redressing the balance in Iran. Under date of 23 January 1943 the Secretary of State approved a policy memorandum for the guidance of his officers which, noting that the British had "recently" proposed that the Allies declare themselves as having power to modify the Iranian cabinet at will, stated that "nowhere else in the Middle East is there to be found so clear-cut a conflict of interests between two of the United Nations, so ancient a tradition of rivalry," as that existing in Iran between the USSR and Great Britain. Referring to the advisory missions to the Iranian Army and Gendarmerie, the memorandum observed that by such means the United States could build up Iran "to the point at which it will stand in need of neither British nor Russian assistance to maintain order in its own house." Since keeping the peace was as important as winning the war, the United States should support the peace in Iran with goods, advice, and services.[9] Here was the early formulation of a long-range policy which sought the salvation of Iran not by offering it an alliance against other powers but by encouraging it to look out for itself. This was the principle upon which were based the tasks of technical advice and material aid which were subsequently assigned to the War Department. Consistent with it were the recommendations forwarded to President Roosevelt by General Hurley the following May that Iran be assured that the United States insists that the principles of the Atlantic Charter apply to Iran, that Iran be permitted to join the United Nations in a declaration of war against the Axis, and that the American Legation be raised to the status of an embassy.[10]

When the leaders of the Allied Powers gathered at Tehran on 28 November 1943, it was made known through Prime Minister Ali Soheyli that the government of Iran desired an Allied declaration respecting its sovereignty. Welcoming this Iranian initiative, President Roosevelt saw in such a declaration an opportunity to lay at rest the problem of the legal status of American troops. His signature, affixed to the Declaration of Tehran on 1 December, provided the same moral support by the United States of Iran's integrity as would the signature

[9] (1) Memo, American Policy in Iran, by Div of Near Eastern Affairs, prepared by John D. Jernegan, approved by Secy State, 23 Jan 43. Case 57, Sec II, OPD 210.684 Iran. (2) Commenting on this paper Minister Dreyfus on 14 April 1943 noted that the Iranians themselves were an obstacle to the achievement of American aims on their behalf because of corruption, selfishness, antiforeignism and lack of social consciousness, but that there was a basic "germ of goodness in them which should be protected and nourished." Memo atchd to memo cited in (1).

[10] Ltr, Hurley to Roosevelt, 13 May 43. Copy furnished by General Hurley. The first suggestion was made implicit in the Declaration of Tehran; the second was made effective in September 1943 with Iran's declaration of war on Germany; the third was implemented when the U.S. Legation became an embassy on 9 February 1944.

on a treaty regulating the status of American troops; and this American assurance was given without stirring up complications with the Tri-Partite powers. The text of the declaration follows:[11]

Dec. 1, 1943

DECLARATION OF THE THREE POWERS REGARDING IRAN

The President of the United States, the Premier of the U.S.S.R., and the Prime Minister of the United Kingdom, having consulted with each other and with the Prime Minister of Iran, desire to declare the mutual agreement of their three Governments regarding their relations with Iran.

The Governments of the United States, the U.S.S.R., and the United Kingdom recognize the assistance which Iran has given in the prosecution of the war against the common enemy, particularly by facilitating the transportation of supplies from overseas to the Soviet Union.

The Three Governments realize that the war has caused special economic difficulties for Iran, and they are agreed that they will continue to make available to the Government of Iran such economic assistance as may be possible, having regard to the heavy demands made upon them by their world-wide military operations and to the world-wide shortage of transport, raw materials, and supplies for civilian consumption.

With respect to the post-war period, the Governments of the United States, the U.S.S.R., and the United Kingdom are in accord with the Government of Iran that any economic problems confronting Iran at the close of hostilities should receive full consideration, along with those of other members of the United Nations, by conferences or international agencies held or created to deal with international economic matters.

The Governments of the United States, the U.S.S.R., and the United Kingdom are at one with the Government of Iran in their desire for the maintenance of the independence, sovereignty and territorial integrity of Iran. They count upon the participation of Iran, together with all other peace-loving nations, in the establishment of international peace, security and prosperity after the war, in accordance with the principles of the Atlantic Charter, to which all four Governments have subscribed.

(Signed) WINSTON S. CHURCHILL
J. STALIN
FRANKLIN D. ROOSEVELT

The declaration accomplished a number of useful purposes, not the least of which was the recognition by the signatories of the need to strengthen Iran's economy. It also introduced the second phase in the attempt to define the status of American troops in Iran. The declaration having reassured Iran as to the powers' respect for its sovereignty, that government thenceforth showed a lessened interest in

[11] The text given here is from the photostatic copy of the draft of 30 November 1943 taken from White House files. Supplied by the Department of State. See Frontispiece.

reaching an accord with the United States on a matter in which Iran had once felt its sovereignty infringed. On the other hand, the United States, having obtained a three-power declaration of friendly intentions toward Iran, felt less inhibited in seeking an agreement with Iran on troop status. But the passage of time was to fit such an agreement into a larger design of international relations.

On 2 December, the day after the signature of the declaration, President Roosevelt, about to depart from the Tehran airport, outlined to General Hurley "a tentative basis for American policy in Iran which might be used as a pattern for our relations with all less favored associate nations." [12] He requested Hurley to send him a report on steps required to strengthen the Iranian economy as a means of stabilizing the country. In response Hurley advanced suggestions for assisting Iran to develop its resources for the benefit of its people and called for the furnishing of American advisers to be paid by Iran and to operate under provisions of Iranian law. By applying the principles of the Atlantic Charter, Hurley urged, Iran could be encouraged to develop a "pattern of self-government and free enterprise." In transmitting Hurley's letter to the Secretary of State, Roosevelt wrote: "I was rather thrilled with the idea of using Iran as an example of what we could do by an unselfish American policy." [13] The larger design was beginning to take shape.[14]

It was sketched out some time later in an informal policy paper forwarded to the American Embassy at Tehran by the Under Secretary of State.

> The President and the Department [Stettinius said] have considered Iran as something of a testing ground for the Atlantic Charter and for the good faith of the United Nations. . . . There are important reasons why our present heightened interests in Iran should be extended into the postwar period. . . . America's

[12] Ltr cited n. 8.

[13] Memo, Roosevelt for Hull, 12 Jan 44. Case 28, Sec 1–A, OPD 384 Middle East, HRS DRB AGO. Roosevelt wrote Hurley in the same sense on 25 March 1944. Copy furnished by General Hurley. The President's letters were noncommittal on Hurley's specific proposals.

[14] While in Tehran the President and Harry Hopkins had consulted with Dr. Millspaugh about assistance to Iran. In a letter to Hopkins, written at Hopkins' request, Millspaugh outlined a 20-year program of American aid in accordance with "the proposition that you and the President apparently had in mind," namely, "that Iran, because of its situation, its problems, and its friendly feeling toward the United States, is (or can be made) something in the nature of a clinic—an experiment station—for the President's post-war policies—his aim to develop and stabilize backward areas; that the present American effort in Iran is actually a means of implementing those policies, a means of helping nations to help themselves, with negligible cost and risk to the United States; and that a similar effort might well be made in other regions." Ltr, Millspaugh to Hopkins, 11 Jan 44. Copy furnished by Grace Murphy, secretary to Robert E. Sherwood. At Hopkins' request Connolly also drew up a detailed commentary on U.S. relations with Iran, "American Foreign Policy Toward Iran," forwarded by letter, Connolly to Hopkins, 26 February 1944. Copies of both furnished by Mr. Sherwood.

position in Iran is not intended to lapse again in any way to that of relative unimportance. . . . The impression should be avoided at all costs that we intend to stand at the side of Iran as a political buffer to restrain our Allies, the British and Russians, with regard to Iran.

Instead, there was to be an active policy of strengthening Iran and of protecting American interest against any discrimination. "Every effort will be made to obtain British and Russian collaboration. At the same time no implication of the use of armed force to maintain Iran's independence will be given." [15] An Iran sufficiently strong and healthy to discourage foreign intervention was the objective. To this international consideration was added the protection and furtherance of American interests in sharing Iran's commerce and resources, not overlooking Iran's strategic location on the international air routes.

Meanwhile, during the spring preceding the dispatch of this policy statement, a new American draft agreement on the status of troops had been prepared which fared no better than its predecessors. Very late in the day Iran proposed to legalize, by unilateral declaration of the Majlis, the presence of American troops; but this proved objectionable as opening the way to the imposition by Iran of duties upon articles imported for the personal use of the American forces and to possible denial of the right of the Americans to sell or dispose of fixed or movable properties in Iran at the end of the war. A unilateral declaration by the Iranian Majlis would deprive the Americans of a chance to negotiate such questions.[16]

In the end no treaty or agreement was signed, nor were efforts of the Americans in the summer of 1944 to persuade the Russians and British to work out a joint agreement with Iran on the presence of Allied troops, immunities, and exemptions successful. The American command went about its business with nothing more substantial than a gentleman's agreement; but this proved, because of good faith on both sides, to be substantial enough. It was fortified by the American assumption that, though there was no written understanding, the American status was fixed by the status of the British. Furthermore, it was assumed that the existence of leases and business contracts, including the written agreement by which the United States occupied, rent free, Iranian government land at Amirabad, furnished adequate sanctions and implied Iranian consent to the unilaterally asserted American position. Beginning with American declaration of exclusive jurisdiction over its area at Khorramshahr as a military district, the Americans'

[15] Rad 462, Stettinius to American Embassy, Tehran, 31 Jul 44. State Dept Cable Book, Near East, Iran.

[16] See Ltr, U.S. Ambassador to Iran Morris to Gen Booth, 27 Jan 45, and Booth's reply, 8 Feb 45. 092.2 (Iran.–American) Re: Presence of U.S. Troops in Iran, SL 8978.

assumption of jurisdiction over their own people was extended in ever widening circles. American troops who committed criminal offenses were tried by American authorities under the general provisions of international law. American military jurisdiction over American civilians attached to War Department agencies was continuously exercised. The order of the War Shipping Administration in 1942, placing merchant seamen under military jurisdiction while in port, not only strengthened the power of the American command to keep cargoes moving despite labor agitation or mutiny but emphasized the authority and responsibility of the Americans for their own people in Iran. The Iranian Government did not question the right of the American command to set up its own postal system, nor did it present any bills for customs duties or claims for taxes.[17] In the end, although there was no formal understanding as to the removal of American military personnel, this, too, was carried out informally and well in advance of the date promised by the British and Russians in the Tri-Partite Treaty. In the thorny matter of status the experiment in co-operation was once again vindicated.

Broadening the Directive

The services which the U.S. Army was able to render to the Iranian economy during the war period, while useful and numerous, were not in themselves either so vast or so significant as to justify more than passing mention in a general account of the U.S. Army in the Persian Corridor. Of many acts of temporary or purely local assistance no more record was kept than is kept by a neighbor who lends the good wife next door half a pound of sugar, or her man a lawn mower. Other services of which record survives were performed only after an amount of high-level consultation and policy-weighing altogether disproportionate to their material worth. The events which led to the broadening of General Connolly's directive to include the rendering of economic assistance to Iran are therefore more important than the consequences of the broadening itself. These events must be considered as one aspect of a regional, not a local, program. Although tensions both local and personal were generated before Connolly's directive was altered to authorize economic assistance, the determination of policy, while a matter of concern to the Departments of both State and War, was ultimately guided by the President in accordance with regional purposes and policies jointly promulgated by the British and American Governments. This much is said lest the case of the twenty-seven men, which

[17] Interv cited n. 6(1).

will appear in the following pages, should appear to be overstressed. The assignment of soldiers under General Connolly's command to perform certain services of a strictly nonmilitary nature for the government of Iran illustrates the larger problems and policies involved. It is these, and not the actual assignment of the twenty-seven men, which are important.

The material needs of Iran during the war years became the concern of those two Allies, the British and the Americans, who recognized the relevance of Iran's economic plight to the success of the war effort. It was also relevant to the general regional problem of the economy of the Middle East as a whole. With the usual genius of the human race for doing things the hard way, responsibility for aiding Iran became the concern not of an all-wise and all-powerful authority but of a multiplicity of agencies—British and American, civilian and military, severally and in combination. On the British side an early step in channeling economic matters through a central authority was the establishment at Cairo of an Intendant-General to co-ordinate all supply and transport problems in the Middle East. In April 1941 the Intendant-General set up the Middle East Supply Center (MESC) as a clearinghouse for civilian supply for the entire region. The Intendant-Generalcy gave way to the office of Minister of State, to which Richard Casey was appointed. With his subsequent membership in the British War Cabinet, the line of administrative authority for MESC ran through him straight to the Ministry of War Transport at London. The connection with London reflected MESC's primary object: efficient regulation and control—as a war measure—of shipping and commerce among the states of the Middle East. The purposes which motivated such controls were military: to eliminate nonessential shipping and trade; and to avoid the political and military hazards which would arise from populations made discontented or hostile by hunger, unemployment, and other end products of disorganized economies. It has been stated of MESC that its object was primarily military, its methods economic, and its accomplishments often political.[18]

The dispatch of the North African and Iranian Missions to the Middle East in 1941 to render lend-lease aid to the British and other friendly forces brought the United States into the picture; while the

[18] (1) Page 13 of document cited n. 3. (2) For the early history of MESC, see *Department of State Bulletin* VIII (1943) 76 (16 Jan 43). (3) For accounts of its organization and work, see Foreign Economic Administration publication ME–7, The Middle East Supply Center, by Special Areas Br, Middle East Div, May 44; Frederick Winant, "The Combined Middle East Supply Program," *Department of State Bulletin* X (1944) 199 (26 Feb 44); Winant, with John P. Dawson, "The Middle East Supply Program," *Foreign Commerce Weekly* XV (1944) 3 (1 Apr 44); and John A. Calhoun, "Iran in 1943," p. 8, *Foreign Commerce Weekly* XV (1944) 3 (1 Apr 44).

entrance of the United States into the war put lend-lease at the service of civilian as well as military needs. The adherence of the United States, upon British invitation, to the MESC followed in the spring of 1942; but the participation of the United States in a comprehensive economic program for the Middle East was complicated by the fact that the Americans, so newly come upon the scene, possessed no single economic authority similar to that exercised by Minister of State Casey. Economic, political-diplomatic, and military agencies—all with legitimate interests in economic matters—included the War Department, with its responsibility for military allocations under lend-lease, and its implementing missions, later merged into USAFIME; the Department of State, with primary responsibility for political matters through its ministers at Cairo, Tehran, and the other Middle Eastern capitals; the Lend-Lease Administration and the Board of Economic Warfare, later merged into the Foreign Economic Administration, whose policies and functions were closely integrated with those of the State Department; the Navy; the Treasury; and the War Shipping Administration. In Iran there were also the Anglo-American Combined Supplies Committee at Tehran, the Millspaugh economic mission, and the military missions to the Iranian Army and Gendarmerie.

The administration of lend-lease matters had from the beginnings in March 1941 provided for the agencies concerned, American and foreign, a nightmare of procedural complexities. Lend-lease entered the Middle East through War Department agencies; but even from the beginning, when the War Department's primacy in determination of quotas and allocations for military purposes was strongest, it was apparent that lend-lease involved problems not primarily military. Of these the most touchy ones were determination of the ultimate receiver of particular lend-lease goods and services; the definition of the end use to which these were to be put; the attempt to see to it that no substitutions were made either in end user or in end use; and, most difficult problem of all, the procedure of allocation which involved not only the method of setting quotas but the determination of who should set them. War Department agencies in the Middle East were inclined to test every question that arose in the crucible of immediate war purposes and military objectives and programs. Lend-lease and the Department of State extended the testing area to that embraced by the larger regional purposes of MESC: the maintenance of the civilian economy. Within all three groups were some who accepted and others who strongly resisted the power, which carried over from early lend-lease conditions, by which the British, who were the chief beneficiaries, could, in effect, dole out American aid from the British quota, or, by virtue of

established British controls in the Middle East, could insist on the British right to determine quotas for the region. The desire of certain Middle Eastern nations to deal directly with the United States and not through the British emphasized even more deeply that lend-lease wore many aspects and required for its functioning the balancing of many interests.[19]

Accordingly, when the United States adhered to MESC both the State and War Departments were represented in it.[20] But when Frederick Winant, State Department liaison officer for the Lend-Lease Administration, was soon after authorized "to represent the office of Lend-Lease Administration in the Near East Area served by the MESC," the multiplicity of interests involved may be noted in the wording of his formal instructions. "In so doing," wrote Stettinius, then Lend-Lease Administrator, "you will consult with this office in connection with policy matters and will act in close collaboration with the local U.S. Army, Navy, and State Department authorities, and the local representatives of other U.S. agencies wherever their interests may be involved." [21] In connection with Winant's appointment, and the accompanying appointment of Philip C. Kidd to Iran, the War Department in August 1942 notified General Maxwell—by then, as Commanding General, USAFIME, the head of the successors to the original American lend-lease missions—that Winant and Kidd would act as lend-lease advisers to Maxwell and Shingler, but that all lend-lease requests would re-

[19] Although General Hurley, protesting that "the least we should demand is that we be permitted to do our own giving," advised President Roosevelt as late as December 1943 that distribution of United States lend-lease goods in the Middle East ought to be by American agencies, and although the President replied 25 March 1944, "You are right that the distribution of Lend-Lease supplies throughout the Middle East should be taken over by our own people and I have let the Secretary of State know my views in this regard," such steps as were taken amounted only to modification and regulation of the basic conditions. To the end, lend-lease distribution in the Middle East was never wholly under American control. Ltr cited n. 8, and reply, President to Hurley, 25 Mar 44. Copy furnished by General Hurley.

[20] General Maxwell, Commanding General, North African Mission, for the War Department, and J. E. Jacobs, Counselor of Legation, for the American Minister, on behalf of the Department of State, were at the first MESC session (11–14 May 1942) attended by Americans. Press Release, Maxwell Papers. The question of lend-lease representation at Cairo can be traced through the Hopkins Papers, especially Memorandum, Stettinius for Hopkins, 9 October 1941, suggesting attaching a lend-lease representative "to each of the missions in Egypt and Iran," MS Index to Hopkins Papers, Volume II, Book VII, Middle East Politics and Requirements, Item 11(2); Radio, Hopkins to Alexander C. Kirk, American Minister at Cairo, Lt. Col. Edwin W. Piburn, pre-mission lend-lease advance agent in Egypt, and General Maxwell, 8 December 1941, indicating relationship of Piburn as temporary lend-lease representative to the North African Mission, Volume II, Part VII, Lend-Lease Operations in Middle East (6), Item 57; and Ltr, Asst Secy State Dean Acheson to Stettinius, 6 Mar 42, and Memo, Thomas McCabe, Lend-Lease Administration, for Hopkins, 7 Mar 42, sub: Lend-Lease Administration Representative in the Middle East, Vol. II, Pt. VII, Item 75.

[21] Ltr, Stettinius to Winant, 9 Jun 42. Seen at Office of Historian of Foreign Economic Administration.

quire Maxwell's approval.[22] Such instructions could have reduced the collaboration of Winant to compliance, or Maxwell's approval to a formality. To avoid such a dilemma called not only for the good will and co-operation of Maxwell and Winant, which both gave, but often for the even more difficult reconciliation of points of view toward lend-lease that did not always coincide because of the differing approaches of War and State.[23]

Some months later, in January 1943, the Lend-Lease Administrator advised the Assistant Secretary of War that, in view of the fact that Winant was the ranking representative over all other lend-lease representatives in the Middle East, the Lend-Lease Administration desired to revoke all authority previously conferred on Maxwell as a representative of lend-lease. In reply the War Department, declining the proposal, pointed out that both Winant and Maxwell had been designated lend-lease representatives, and concluded:

> In the absence of a definite relationship between your representative and the CG of American forces in the area, such as has been established for instance in Australia and in North Africa, the War Department must be of the view that the proposal to relieve General Maxwell of his Lend-Lease activities is not in the best interest of our war effort.[24]

The return to the United States in mid-1943 of both Winant and Kidd temporarily unbalanced the joint responsibility of State and War Department agencies in the administration of Middle Eastern lend-lease affairs and exposed the need for a centralized American economic authority, primarily to participate in the work of MESC, and also to co-ordinate lend-lease activities.[25] All agencies concerned with economic matters in the Middle East except the military were subsequently combined into an American economic mission, and James M. Landis, Dean of the Harvard Law School and Director of the wartime Office of Civilian Defense, was made its director and named principal American civilian representative to the MESC. In defining his duties and appointing him to the personal rank of minister, the Secretary of

[22] Rad 1491, Somervell to AMSEG, 16 Aug 42. OPD Cable Book, North African Mission, Vol. III.

[23] Intervs with Winant, Washington, 27 Jul 44 and 26 Apr 45; and with Maxwell, Washington, 12 Mar 46. Background for this chapter was also obtained through: Interv cited n. 8; Interv with Col Kidd, G–5 AMET, Cairo, 6 Jul 45; Interv with Dreyfus, Washington, 14 Apr 49; Intervs with James M. Landis, Cambridge, 8 May 45 and 22 Mar 46; and Interv with Gordon P. Merriam, Chief, Near East Div, at Dept State, 6 Apr 45.

[24] Ltr, Stettinius to McCloy, 2 Jan 43; and Ltr, McCloy to Stettinius, 11 Jan 43. AG 400.3295 (1–9–43) (1).

[25] Kidd felt that as civilian lend-lease representative for Iran he had incurred the displeasure of Minister of State Casey by opposing British efforts, through MESC, to establish quotas for all of Iran, including the Soviet zone, without consulting the Russians. Upon his return to Washington he was commissioned by the Army and sent back to the Middle East to become Maxwell's director of lend-lease affairs at American command headquarters, Cairo.

State stipulated that all matters involving political considerations would require consultation under the guidance of the American chief of mission in each country concerned.[26] One result, besides the benefits of centralization of American economic authority, was that administrative responsibility for the MESC now devolved for the British upon the Minister of State (later the Minister Resident) and the Ministry of War Transport and for the Americans upon the American Economic Mission in the Middle East and Mr. Landis. Joint Anglo-American committees at Cairo, London, and Washington co-ordinated questions of policy where civilian and military interests required it. American influence in the MESC grew steadily stronger henceforth.[27]

Another result of the Landis appointment was the stimulus it afforded to the program of American economic aid for Iran; but before the Army was brought formally into the program two more mountains, in addition to those already mentioned in connection with the Middle East program as a whole, had to be moved. The name of the one was Procedure; of the other, Policy. Under the first heading came such considerations as the submission of requisitions for lend-lease articles for Iran's needs. Such requests came from a variety of Iranian governmental sources and were made to various American agencies. It was necessary also to determine a final authority in the field for screening requests, after which ultimate decisions rested with higher authority in Washington acting in conformity with over-all plans and policies for the region. The mountain Procedure therefore closely adjoined the mountain Policy; for the fact that the Persian Gulf Service Command (and its successor, the PGC) was on the spot with seemingly inexhaustible stocks of vehicles, equipment, and goods of all sorts made it the object of requests to divert its resources to Iranian needs. But these requests could not be granted without impeding the command's primary mission of aid to Russia. Without questioning Iran's need Connolly was convinced of his inability under his instructions to respond favorably to a fraction of the demands for help. He was nevertheless drawn into the program of economic aid.

At the turn of the year 1942–43, a serious food shortage, which resulted from seizure of grain and livestock by USSR occupation forces in their zone of Iran, was intensified by local hoarding and profiteering. The situation produced an agreement, signed on 4 December 1942 by American, British, and Iranian authorities, by which the Americans and the British undertook to make up food deficiencies by importation

[26] Ltr, Hull to Landis, 17 Sep 43. Original seen at Dean Landis' office in Cambridge.

[27] Casey wrote Landis, 28 December 1943, in praise of "your work and the spirit which has animated it here in the Middle East, and perhaps together we have no need to be ashamed of our record here in this respect." Letter seen at Landis' office.

of 30,000 tons of wheat and 24,000 tons of barley during the ensuing year. During 1943 the PGSC unloaded and delivered to Iranian customhouses civilian goods arriving at the ports and arranged for the movement of imported grain within the Corridor, thus taking an active part in solution of an emergency situation. Other actions by the Soviet authorities in their zone created deficiencies in the Iranian economy of an emergency nature. The output of the Iranian state munitions factory was diverted to the USSR, as was that of Iranian canning factories, copper mines, and military shoe factory. As lend-lease imports to fill these and other needs increased, the PGSC Gulf District established in August 1943 at Khorramshahr a storage dump and camp for guards for Iranian military supplies.[28]

The requisition procedure met with some differences in interpretation. In June 1943 the War and State Departments and the Joint Chiefs of Staff decided that henceforth all independent Near Eastern countries, among them Iran, might request lend-lease aid directly from the United States and need not put their requests through the British; but no understanding was reached between War and State as to how the governments were to submit their applications. It "might be possible," a mesage from Washington stated in September, for the commanding general of PGSC to receive applications and pass them to Washington with his recommendations. Requests made through other American agencies, such as the American Minister or the American missions to the Iranian Army and Gendarmerie, would go to Washington, whence they would be submitted by the War Department to Connolly for comment.[29]

The policy and procedure to effect it were embodied in a paper adopted by the Munitions Assignments Board in Washington in September 1943. "In accordance with its announced policy," the paper read, "the United States Government will receive requests direct for munitions of war from all governments eligible for Lend-Lease aid. . . ." [30] Applications were to go to the Munitions Assignments Board at Washington, which would then obtain the views of the military commanders in the area involved, inform United Kingdom rep-

[28] (1) In the winter of 1941–42, 93,000 tons of wheat had been imported by the British, some of it from American sources. Groseclose, *Introduction to Iran,* pp. 175, 181, 185–86. (2) Rad AGWAR 705, Connolly to Marshall, 23 Feb 44. Case 28, Sec 1–A, OPD 384 Middle East, HRS DRB AGO. (3) See File 400.3295 Lend-Lease, Iran, SL 9021; and Ltr, Connolly to Ridley, 3 Aug 43, 451.2 Trucks for Iranian Army, SL 9028. The dump was moved in December to Andimeshk. Connolly loaded and delivered stores to the dump; Ridley unloaded them there.

[29] Rad AMPSC 902, Marshall to Brereton and Connolly, 15 Jun 43; Rad AMPSC 1545, Marshall to Connolly, info Royce, 27 Sep 43. 400.3295 Lend-Lease, Iran, SL 9021.

[30] Excepted governments were Turkey and members of the British Empire and Commonwealth. MBW 69/1, 13 Sep 43. MBW, Bk. IV, ASF Intn Div Files, HRS DRB AGO.

resentatives, and receive and examine their views. This was the American position. The British position recognized "the right of any nation to apply for munitions direct to Washington, London, or any Dominion"; considered that when the claimant nation "is situated within an area of British strategic or security responsibilty" its requests, "whenever possible," should have prior approval of the British commander-in-chief of that area before being considered at Washington; and requested that "whenever possible" no commitments be made by the Munitions Assignments Board at Washington until the views of the British Chiefs of Staff had been obtained.[31]

The two approaches to aiding the independent countries of the Middle East led, toward the end of 1943, to a challenge by the British [32] of the procedure being followed by General Ridley and Colonel Schwarzkopf in making direct requisition to Washington for lend-lease articles needed by the Iranian Army or Gendarmerie. Although the American lists had received the approval of the British military attaché at Tehran, the British position was that, since Iran was in an area of British strategic and security responsibility, the War Office at London was concerned in such matters as the size, equipment, and training of the Iranian forces. The British suggested that these matters should be handled by agreement between the chief of the American military mission concerned and the Commander-in-Chief, PAI Force. General Ridley took the position that his contract with Iran expressly forbade him to tender any advice based upon other considerations than the good of the Iranian Army, and that the proposed arrangement, if carried out, would render Ridley's position political and thus forfeit the confidence of the Iranian authorities and jeopardize the purpose of his mission. Ridley noted that if the Americans and the British were to plan to "speak with one voice," as the British commander of PAI Force had urged, such agreement would have to be negotiated at the diplomatic level. This view was upheld at the War Department the following April 1944, and what began as a procedural matter ended in the realm of policy with American insistence on the Iranian Government's right to determine its own policies and to effectuate them by direct appeal to the fountainhead of lend-lease.[33]

[31] Incl "B," 19 Jul 43, atchd to MBW 69/1, cited n. 30.

[32] Lt. Gen. G. N. Macready of the British Army Staff, Washington, on behalf of Lt. Gen. Arthur H. Smith, Commander-in-Chief, PAI Force. For radios, memoranda, minutes, correspondence, and reports bearing on the protest and its sequel, see Mission Report File, U.S. Military Mission with the Iranian Army, War Office, Tehran, 17 January, 27 March, 10 and 13 April 1944.

[33] Supplies and equipment purchased in the United States under lend-lease for ultimate use by the Iranian Gendarmerie were transferred to the Iranian Ministry of the Interior through the facilities of the PGSC and PGC. Colonel Schwarzkopf's Gendarmerie Mission

While this weaning of Iran from British tutelage was being attempted through Anglo-American adjustments, the question of General Connolly's authority to render economic aid to Iran was being threshed out within the American official family. Two factors put Connolly in a pivotal position: the possession by his command of articles suitable for use in aid of Iran; and the fact that Washington asked for his views on requests for aid which came via the American Legation and the Millspaugh, Ridley, and Schwarzkopf missions. Many of the demands on Iran's behalf were clearly for nonmilitary purposes, like a request for the loan of equipment to dig irrigation ditches and wells. This type of assistance, strongly supported by Minister Dreyfus and the President's ambassador-at-large, General Hurley, was usually denied by Connolly as lying outside his primary mission.[34]

In the matter of building up the Iranian Gendarmerie with American supplies, Colonel Schwarzkopf experienced difficulty in converting General Connolly (and the War Department) to the project. Requests for supplies, approved by the Department of State, by the British military attaché at Tehran, and by Philip Kidd, civilian head of lend-lease in Iran, often foundered upon the rock of War Department nonconcurrence.[35] It was the view of the Department of State that the requested equipment was essential to civil well-being in Iran, in accordance with the general purposes of MESC, which had their roots, as has been noted, in military necessity. Moreover, mid-1943 found conditions in Iran, in the opinion of the commanding general of USAFIME, highly alarming. General Brereton reported to Washington in August, as follows: "Employees are likely to revolt against the Iranian Government. The British can discover no group upon which to found plans for internal security. It is asserted that confidence in American advisers is decreasing and a state of chaos developing." [36] Whether or not Connolly shared Brereton's alarm, he did not abandon his basic assumption that the strengthening of Iran's economy lay beyond his primary mission to aid Russia. In exasperation Minister

facilitated receipting and invoicing, and payments were arranged between the Foreign Economic Administration and the Iranian Ministry of Finance. Cases 81, 100, Sec IV, OPD 210.684 Iran.

[34] (1) See correspondence between Connolly and Dreyfus, 13 July–4 November 1943. 092 International Affairs and Relations, SL 8978. (2) Memo of conversation, John McCloy, Wallace Murray, and George Allen, 29 Jan 44, sub: Broadening Directives of Gen Connolly. Div of Communications and Records, Dept State 861.24/1773 PS/RGB.

[35] Not until 14 June 1945, through an amendment to Schwarzkopf's Letter of Instructions following a strong recommendation by the Department of State of 5 June 1945, did the War Department put the Iranian Gendarmerie on the same footing as the Iranian Army in supply matters. See Memo and amended Ltr of Instructions to Schwarzkopf. Case 100, Sec IV, OPD 210.684 Iran.

[36] Rad AMSME 7615, Gen Brereton to Gen Strong, G–2, 26 Aug 43. 371.2 (Apr 42–1 Nov 44) Hq AMET.

Dreyfus in a message to Secretary Hull denounced this attitude and castigated Connolly and his fiscal director, Colonel Stetson, for what he saw as their indifference to Iranian problems.[37]

But to Connolly the Iranian problem wore one aspect, and to Dreyfus another. In the two men the differing approaches of the War and State Departments to the problem of Iran were personified and brought face to face. As spokesmen for their departments' policies, they clashed, as the policies each was bound to pursue clashed. Even after the assignment of Minister Dreyfus to another post, following the Tehran Conference, removed the mounting personal tension between Dreyfus and Connolly, the War and State Departments still lacked a harmonious meshing of their differing means for attaining the same general ends on behalf of the Iranian problem.

The appointment of Landis in September to be American director of economic operations in the Middle East helped to weight the scales in favor of the views of the State Department. In a diagnosis of Iran's troubles, prepared in November for Harry Hopkins to take to the Tehran Conference, Landis ranked foremost the lack of food. He found other consumer goods in sufficient supply, but the means of distribution (transport) disrupted. Iran's third fundamental lack was system, or what Americans liked to call know-how.[38] Despite the encouragement to administrative reform supplied by the Millspaugh economic mission the machinery of Iran's economy was still dangerously inefficient.

The story now reaches the case of the twenty-seven men.[39] As a means of attacking Iran's three lacks, Landis requested Connolly to furnish seventeen officers and ten men to assist in solving problems connected with the transport of cereal and sugar beets for civilian needs and fuel and oil for the Iranian transport system. The request was referred to Washington to the headquarters of the Army Service Forces, whence General Somervell on 6 December 1943 directed an inquiry to Harry Hopkins at Cairo to ascertain from the President (who was in Egypt on his way home from the Tehran Conference) whether he desired the Army to furnish that sort of assistance to a State Department

[37] Rad 837, Dreyfus to Hull, 13 Aug 43. Dept of State, VII-4-C, Iran—Foreign Advisers—U.S. Gendarmerie Mission, Div of Near Eastern Affairs.

[38] Memo on Consumer Goods in Iran, undated, forwarded under cover of Ltr, Landis to Hopkins, 26 Nov 43. Copy from Hopkins Papers supplied by Robert E. Sherwood.

[39] (1) Rad, Somervell to Hopkins, 6 Dec 43; and Memo, Somervell for Handy, 7 Dec 43. Hqs, ASF, Theaters of Opns, PGC (13) 1942–44, HRS DRB AGO. (2) Memo, Handy, ACofS, OPD, for CofS, 12 Feb 44, sub: Assistance to Iran by PGC. Case 28, Sec 1–A, OPD 384 Middle East, HRS DRB AGO. This file contains all documents alluded to in text except where otherwise noted. (3) Rads, 17, 20, 22, 24 Feb 44, and Ltr, 31 Mar 44, by Marshall, Royce, Kirk, and Connolly. 334 Minister Landis Mission, SL 9011.

mission. Somervell stressed the view that the Army would not consider such assistance a precedent for the future. An affirmative answer having been received the next day, Somervell ordered Connolly to furnish the desired Army personnel.

The President's approval was followed by two moves to assure that the Army's assistance could be relied upon in other cases than that of the twenty-seven men. Wallace Murray, Director of the Office of Near Eastern and African Affairs of the Department of State, requested the Commanding General, Army Service Forces, to broaden Connolly's instructions to authorize the furnishing of equipment and forces in aid of Iran; and Landis, at Hopkins' suggestion, sought for and obtained from the President a letter containing the following passage:

> Your work, under the directives you have received from the Department of State and the Foreign Economic Administration, is primarily concerned with the conduct of economic activities relating to the war. In that work you will, of course, put first the strengthening in every way of the warm and co-operative relations with our Allies, upon which our success in the war, and thereafter, so largely depend. On occasion you may require the assistance of other branches of the United States Government, now active in the Middle East, to make your endeavors in the economic field effective. Within this area of operations you are authorized to show this letter to such officials of the United States in order that the aid they may reasonably give you may be forthcoming within the limits of their staffs and in so far as is consistent with political and military policies.[40]

The Murray proposal was examined by the State and War Departments for several weeks, General Connolly's views were obtained, and War made clear to State its concern to safeguard its primary mission lest its resources be dissipated. War urged that Connolly's aim should be to help Iran help itself and not have "the American Army do the work which Iran needs done." Granting Connolly the authority requested by State was not to be interpreted as sponsoring activities in finance, agriculture, and health. The War Department cautioned against rendering aid in such a way as to arouse misunderstanding in Iran, instancing a case in which the British, using trucks with British Army markings, assisted in collecting the Iranian harvest, only to incur the suspicion of the Iranian public that they were diverting the harvest to their own uses. Acting in accordance with Connolly's recommendation, the War Department on 12 February 1944 amended Connolly's Letter of Instructions by granting him discretionary authority to render for short periods such aid as had been requested by the Department of

[40] (1) Ltr, Roosevelt to Landis, 6 Mar 44. Copy supplied by Mr. Landis. (2) Copy of Landis' proposed draft showing changes from the final text supplied from the Hopkins Papers by Mr. Sherwood along with a letter, Landis to Hopkins, 3 February 1944, and memorandum, Hopkins for President, 11 February 1944.

State. The kinds of aid covered included furnishing technical advice and lending equipment and personnel, providing no interference with Connolly's primary mission ensued. Connolly later asked that, to avoid inviting a flood of requests whose denial might lead to ill feeling, public announcement of the new directive be withheld.[41]

In accordance with his broadened authority, Connolly made the twenty-seven men available to Landis who recommended their assignment to the Iranian Road Transport Department, under the direction of Floyd F. Shields, transport adviser in the Millspaugh mission. Plans were made to use them in a thoroughgoing reorganization of Iranian road transport calculated to require a year's time. Applauded by the Department of State, this assignment of American Army personnel was regarded within the War Department as based upon an erroneous concept of aid to Iran. An OPD memorandum suggested that the Iranians, instead of training their own people, hoped to keep the twenty-seven men indefinitely. The Chief of Staff on 31 March notified the Department of State that they should be replaced by Iranian civilian or military personnel by 26 August 1944, and for this reason Connolly's recommendation that they be detached from the PGC and organized as a special mission was not approved. The request was made without knowledge of Marshall's intention to put a time limit on the men's availability.[42]

The difference in attitude between State and War was not now over the desirability of the Army's lending aid in the economic program but over extent and method. In the determination of these the Army's voice in military lend-lease and in the apportionment of its personnel and equipment was fairly matched by the Department of State's voice at the diplomatic level. A stalemate was avoided by the day-to-day balancing of the two prerogatives and responsibilities and by a further refinement of the procedures by which requests for aid were screened. On 23 February 1944 Connolly reported to Marshall on the extent of aid already rendered or planned for and gave his estimate of the probable sources of further requests.[43] In addition to citing the services rendered in 1943 in handling grain importations for the civilian economy, Connolly stated that he was considering using empty Motor Transport Service trucks on the southward return run to haul 1,500 tons of Iranian Government-owned wheat from Hamadan to Dorud. Further assistance in transport had been furnished through the supply

[41] Rad cited n. 28(2).

[42] (1) Ltr, Murray to McCloy, Asst Secy War, 26 Feb 44. Case 28, Sec 1-A, OPD 384 Middle East, HRS DRB AGO. (2) OPD Note for Record, 26 Feb 44. Same file. (3) Interv with Gen Connolly, Pentagon, 22 Aug 50.

[43] Rad cited n. 28(2).

in 1943 on memorandum receipt of 200 motor vehicles for an indefinite period and the assembly by Connolly's plants of 360 trucks shipped to the Ridley mission under lend-lease.[44] Most requests for assistance, Connolly reported, had come from the Millspaugh mission and it was anticipated that this source and the Shah, rather than the Ridley and Schwarzkopf missions, would provide most future requests. Contacts were being maintained with Millspaugh, Ridley, Schwarzkopf, the American Embassy at Tehran, and L. Stephen Timmerman, American adviser to the civilian police.

In reply to this report the War Department sent Connolly a long message on the procedures being adopted for handling the diverse requests for aid expected to follow the broadening of the directive. By direction of the Department of State the American Embassy was to screen all requests. Although Connolly's operations had priority over those of the U.S. missions to the Iranian Army and Gendarmerie, Connolly was to give these agencies all possible help, in such a way as to reflect credit upon them as instruments of the American policy of aiding Iran. General Ridley's opinion was to be sought in cases where projects could be carried out in whole or in part by the Iranian Army or Gendarmerie, but Connolly was to have the last word on participation by PGC. The message closed with a declaration of policy. "We do not want American soldiers to undertake any work that can be done by Iranian civilians or soldiers. Assignment of American troops to execute any requests would be the best way of meeting the situation, but this method would not be in conformance with the principle of aiding the Iranians to aid themselves, and would deter the development of Iranian abilities." [45]

Projects and requisitions for Iran approved by Connolly were nevertheless subject to overriding diplomatic policy and, in the case of the road transport project including the twenty-seven men, to the vicissitudes of Iranian politics. The President's policy of aiding the Iranians to help themselves required a corollary insistence that aid be entrusted only to competent agencies, capable of putting it to effective use. In accordance with this principle the American Embassy at Tehran approved lend-lease supply of military goods for the Iranian Army and Gendarmerie because the Ridley and Schwarzkopf missions were able to direct their use effectively. On the other hand, by the end of June

[44] On Connolly's inability to furnish Millspaugh transport vehicles because he was "not authorized to comply with requests for articles of civilian end use at any time," see Ltrs, Millspaugh to Connolly, 4 Apr 44, and Connolly to Millspaugh, 17 Apr 44. 451.1 Passenger Automobiles, SL 9028.

[45] Rad AMPSC 2614, War Dept to Connolly, 1 Mar 44. 323.361 Powers and Duties, SL 9008.

1944, the Millspaugh mission had encountered such severe opposition to its operations as to evoke a threat from the Iranian Prime Minister and Majlis to repeal the sweeping economic powers of its director as Administrator General of Finance. Moreover, the issuance of orders to return the twenty-seven American officers and men to active status with the PGC had rendered the tenure of office of Floyd Shields, to whose direction they were assigned, so precarious that the American Embassy directed the suspension of delivery of road transport vehicles, tires, and spares "until it is clear that their use will be controlled by a reliable organization." In a matter of days the threat passed and the embassy asked Connolly to release the articles. This proved, however, only the lull before the storm, for by the following January 1945 official announcement was made of the withdrawal of all economic power from Millspaugh.[46]

The departure of the Millspaugh mission left only the War Department agencies—the Persian Gulf Command and the military advisory missions—to implement the President's policy toward Iran as formulated by the Department of State.

[46] (1) Ltr, Richard Ford, Chargé d'Affaires ad interim, to Connolly, 30 Jun 44. 334 Minister Landis Mission, SL 9011. (2) Ltr, Ford to Connolly, 3 Jul 44. Same file. (3) Rad, Col Thomas E. Mahoney, Ridley's QM, to OPD, 11 Jan 45. 334 U.S. Military Mission with the Iranian Army, SL 9011.

CHAPTER XXI

The Military Advisory Missions

For the United States—a newcomer to Middle Eastern affairs, invited to the Persian Corridor to undertake a war-born enterprise in aid of its British and Soviet Allies—the strengthening of Iran developed aspects and problems only dimly foreseen when, in March 1942, Iran was declared eligible for lend-lease aid. The program to strengthen Iran had two objectives: first, to ensure immediately local conditions under which the Russian-aid program could succeed; second, eventually to enable Iran to be master in its own house. The two objectives, which might have been complementary, were often rendered mutually contradictory by the peculiar circumstance of Iran's situation during the war years, while at the same time the ability of the United States to render effective aid to Iran was complicated by American regard for the rights enjoyed under the Tri-Partite Treaty by the occupying powers. American efforts in Iran's behalf were therefore cautious, perhaps even haphazard. Some of the reasons have been explored in Chapters IX and XX. Only slowly did it become apparent that the political, economic, and military health of Iran, essential to the success of Russian-aid operations, was a matter of life or death for Iran itself; that, in fact, the second objective overshadowed the first; that the problem of Iran was monolithic.[1]

Although this realization was reflected in the clarification and firming of American policy respecting Iran which occurred after the Tehran Conference, one basic consideration precluded adoption of comprehensive measures for shoring up Iran's weakness. This was the matter of controls. The imposition upon a sovereign state of all-embracing controls sufficient to ensure needed reforms in its government, economy, and military establishment would inevitably substitute a semicolonial status for the independence which those reforms were

[1] Background for this chapter was obtained through interviews with: Gen Ridley, Pentagon, 19 Dec 44, War Office, Tehran, 24 Jul 45, and Pentagon, 7 Feb 47; Col Schwarzkopf, Tehran, 3 Aug 45; Col Boone, Tehran, 30 Jul 45; Col Mahoney and Maj Conly, Tehran, on several occasions in Jul and Aug 45; Col Charles G. Dodge of G-3 and Lt Col Victor B. Shemwell, Pentagon, 10 May 50; Louis Dreyfus, Washington, 14 Apr 49; and Wallace Murray, Tehran, 30 Jul 45.

designed to buttress. Reform may be assisted from without but it must be adopted and supported from within. In the case of the Millspaugh economic mission, for example, the comprehensive powers granted to Millspaugh by Iran ultimately proved unworkable under existing circumstances. Thus ended that phase of American economic aid. American assistance to Iran's military establishment, on the other hand, did not, during the war and the five years following V-J Day, involve such sweeping grants of authority to foreign advisers. Partly for this reason the American advisory missions to the Iranian Army and Gendarmerie survived into the postwar period as evidence of American support of the sovereignty of Iran. The full story of the missions and the evaluation of their work must remain for the historian of the future unhampered by closeness to the event and considerations of international policy. The value set upon the missions in the early postwar period was evidenced when President Truman told the Congress on 1 June 1950, "That Iran remains an independent country in spite of continuous Soviet pressure is due in part to the strong support of the United States."

The Contracts

The security forces of Iran consisted of local police under centralized control from Tehran; the Imperial Iranian Gendarmerie, under the Minister of Interior, which served as a national constabulary for internal security; and the Army, formally under the Minister of War, but whose control was subject to fluctuations as such state officers as the Shah, the Chief of Staff, the War Minister, or the Prime Minister gained temporary ascendancy over it. During the greater part of its existence the Gendarmerie had been the poor relation of the Army, subsisting on the scraps that fell from the budget table and generally unhonored. In accepting Iran's invitation to provide technical advice for the Gendarmerie and reorganization of the supply services of the Army, the United States had declined the alternative suggestion that it establish a large mission to train and reorganize the Iranian Army as a whole. Even the less ambitious alternative which was undertaken bristled with difficulties inherent in two organizations seething with political complications. General Ridley, therefore, in undertaking to reorganize the Iranian Army supply services, accepted neither an offered post under the Shah nor one under the War Minister. Colonel Schwarzkopf began his service as head of the Gendarmerie Mission under the direction of the American Minister at Tehran, Louis Dreyfus.

Early in 1943, after Schwarzkopf had spent some months sizing up the situation and formulating recommendations in an informal capac-

ity, negotiations were begun for a contract between the United States and Iran to formalize his status. While these were in the preliminary stages, the talks were widened, upon the recommendations of General Ridley and General Hurley, to include a contract for the Army Mission. It was thought that a contractual relationship would provide the authority necessary to enforce reforms and achieve results. After prolonged exchange of views between the governments and among officials of the Departments of State and War, agreed terms, having been authorized by an act of the Iranian Majlis on 21 October 1943, were signed at Tehran by Minister Dreyfus and Mohammad Sa'ed, Iranian Foreign Minister: that for the Army Mission on 3 November, effective as of 22 March 1943, and that for the Gendarmerie Mission on 27 November, effective as of 2 October 1942.[2]

General Ridley, who was continuously under War Department control, had been provided in September 1942 with a Letter of Instructions. The authorization of the missions by the Iranian Majlis enabled Colonel Schwarzkopf to receive analogous status and he was therefore given a Letter of Instructions, relieved from his assignment to the American Minister, and returned to the supervision of the War Department.[3] The letter defined Schwarzkopf's primary mission as the improvement of the efficiency of the Gendarmerie, "thus facilitating Russian supply." It exempted the Gendarmerie Mission from the command of the commanding generals of USAFIME and PGSC, and made it also independent of the Army Mission, but enjoined it to co-operate with those agencies. A provision which never came into force was that if "the British, who are responsible for the security of the communications in southern Iran," should employ the Gendarmerie to maintain that security, then Colonel Schwarzkopf, in his capacity as an officer of the Gendarmerie, would come under British command. The letter also cautioned Schwarzkopf against becoming involved in matters of a purely diplomatic nature, a caution also carried in Ridley's Letter of Instructions, arising from the experience of his predecessor, General Greely.

The contracts for the Army and Gendarmerie Missions provided in

[2] (1) Copies of the Army contract in Case 59, Sec II, and Case 71, Sec III–A, OPD 210.684 Iran, HRS DRB AGO. These files contain also drafts, memoranda, and other papers relating to the negotiations. (2) Copies of the Gendarmerie contract in VII–4–C, Iran—Foreign Advisers—U.S. Gendarmerie Mission, Div of Near Eastern Affairs, Dept State, and in MID 370.093 Iran 6 Jan 44 (26 Oct 42). Also published in Department of State Executive Agreements Series 361, Publication 2084.

[3] (1) Memo for Dir, OPD, 21 Oct 43, sub: Clarification of Status of the Schwarzkopf Mission. Case 67, Sec II, OPD 210.684 Iran, HRS DRB AGO. (2) Ltr of Instructions, Gen McNarney, DCofS, to Col Schwarzkopf, 23 Oct 43. Same file. (3) Rad 574, Dept State to Dreyfus, 11 Nov 43. VII–4–C, Iran—Foreign Advisers—U.S. Gendarmerie Mission, Div of Near Eastern Affairs, Dept State.

detail for functional and administrative matters. The American officer-members of the missions were to serve in the Iranian Ministries of War and Interior respectively, through their chiefs of mission, and were to outrank all Iranian officers of their rank. The government of Iran was to bear the expenses of the missions, including salaries for the American members of the missions in addition to their American Army salaries. Appointment of American members to the missions was to receive Iranian as well as American approval. The chief of the Army Mission was to be appointed Military Adviser by the Iranian War Minister through an Imperial General Order and to receive broad powers, including access to "any and all records, correspondence and plans relating to the administration of the Army needed by him," as well as the power to investigate, summon, and question "any member of the Army" in "matters which in his opinion will assist him" in his duties. He was also empowered to recommend to the Shah removals, promotions, and demotions of Iranian Army officers. Under the Gendarmerie contract, the Minister of Interior was to appoint the chief of the mission as his adviser in charge of Gendarmerie affairs, a provision which carried with it the attributes of command.

Two stipulations common to the contracts, though somewhat differently worded in each, safeguarded the sovereign integrity of Iran: American members of the missions were perpetually bound not to divulge any secret or confidential matters of which they would become cognizant; and the government of Iran was empowered to cancel the contracts of any individual members of the missions who were duly and competently proved to be guilty of interference in the political affairs of the country or of violation of the laws of the land. A third provision, common to both contracts, stipulated that Iran would not employ any foreign personnel in or for the Army or Gendarmerie during the life of the contracts without approval of the respective missions.

The Work of the Missions

In the first months of his duty, in the fall of 1942, Colonel Schwarzkopf visited the Gendarmerie posts to familiarize himself with problems, including that of employing Gendarmerie personnel in the patrolling and guarding of the railway. He reported his findings to the Minister of Interior and presented to the Prime Minister a plan for the reorganization of the Gendarmerie.[4] By August 1944 he had estab-

[4] (1) Rpt, Schwarzkopf to Minister of Interior, 31 Oct 42. VII–4–C, Iran—Foreign Advisers—U.S. Gendarmerie Mission, Div of Near Eastern Affairs, Dept State. (2) Rpt to Prime Minister, 22 Feb 43. Same file.

lished training schools for sergeants, motorcycle riders, and truck drivers, and had planned six others. He had arranged to obtain from the United States a radio engineer to install over the next two years a communications system for the dispersed posts. This was a modest installment of his plan, but he had found the work of his mission beset with conditions of intrigue and inefficiency marked by a succession of eleven ministers of interior during the two years after his arrival.[5] In 1945, faced with the possibility that the United States would withdraw the mission, Iranian officials indicated acceptance of nine demands embodying longfelt needs for the Gendarmerie. These included a status independent of Army interference, a separate and adequate budget, pensions, establishment of an élite corps, genuine government support of the mission's efforts, and elimination of graft, red tape, and delay in accomplishing reforms.[6] Although the spirit was willing to translate these demands into action, the flesh proved weak, and at the end of the war period many of the reforms were yet to be accomplished.

The achievements of the mission up to that time were nevertheless far from negligible, the most striking being the improvement of the condition of the ranks and the creation among them of an *esprit de corps* which became notably apparent in the political crisis of 1946 following departure of the Allied forces from Iran. Starting with human material handicapped by illiteracy and opium addiction, Colonel Schwarzkopf was in time able to report progress against ills long associated with abuse of office. The Gendarmerie rank and file moved steadily toward a better sense of discipline and a respect for businesslike, honest, and efficient procedures.[7]

The Army Mission was no less plagued than was the Gendarmerie Mission by a lack of continuity in War Ministers and Chiefs of Staff, by budgetary inadequacies, and a host of problems, political and human, that sprang from Iran's essential weakness. Change and improvement in the Gendarmerie had been impeded by the organization's virtual friendlessness, its status as poor relation of the powerfully intrenched Army; but the privileged position of the Army was an equally effective impediment to its change and improvement.

General Ridley's job was to improve the efficiency of the Army without becoming involved in Iranian political matters. Swimming was

[5] Ltr, Schwarzkopf to U.S. Ambassador, Tehran, 16 Aug 44. VII–4–C, Iran—Foreign Advisers—U.S. Gendarmerie Mission, Div of Near Eastern Affairs, Dept State. Another copy Case 71, Sec III–A, OPD 210.684 Iran, HRS DRB AGO.

[6] (1) Ltr, Schwarzkopf to Col Alfred D. Starbird, OPD, 18 Aug 45. Case 103, Sec IV, OPD 210.684 Iran, HRS DRB AGO. (2) Rads 756 and 775, Murray to Dept State, 24 and 27 Sep 45. VII–4–C, Iran—Foreign Advisers—U.S. Gendarmerie Mission, Div of Near Eastern Affairs, Dept State.

[7] Rpt by Schwarzkopf, undated. MID 370.093 Iran 6 Jan 44 (26 Oct 42).

permitted, provided he hung his clothes on a hickory limb but did not go near the water. In reviewing his mission's accomplishment to the end of the war period, Ridley recalled his early diagnosis of the Army's situation in 1942, an analysis which had much in common with Minister Landis' economic prescription the next year for food, adequate transport, and an efficient system of doing things. Ridley found upon his arrival that the inflation had rendered officer salaries, and the budget generally, inadequate; that of serious equipment shortages, those in transport were drastic; that the organization and functioning of the supply and auxiliary departments were unsatisfactory; but that for all tasks likely to be imposed upon the Army during the war period, 1942 tactical methods and training were in general sufficient. In a report submitted in 1942, at the request of the Shah, to the Minister of War, Ridley specified four necessities as basic to Army reorganization: limiting total strength to 88,000; retaining only the best officers; providing a reasonable scale of pay; and providing adequate motor transport.[8] Though promptly approved by the Shah and published to the Army, few of these recommendations had been carried out five months later; but reports from December 1943 forward reveal considerable positive accomplishment along the recommended lines, reflecting changes of personnel in the government of Iran which provided high-level support for reform.

Much attention was devoted to reorganization of the supply and auxiliary branches of the Army—those to which, except by specific Iranian request, Ridley's mission was to confine its attentions. After something more than a year of operation the mission had set up a depot system of supply with centralized responsibility for procurement, distribution, and troop payment. The new depot system supplanted one in which, with the exception of clothing and individual soldier equipment

[8] (1) Memo, Work and Accomplishment of the American Military Mission with the Iranian Army, enclosed with Progress Rpt, Ridley to OPD, 11 Sep 45. Case 82 (4), Sec IV, OPD 210.684 Iran, HRS DRB AGO. (2) Rpt, Ridley to Minister of War, 6 Dec 42, sub: Basis of Reorganization of the Army. Case 53, Sec II, same file. (3) Other reports offering basic survey and review: Preliminary Rpt, Ridley to Chief, OPD, 10 Dec 42, Case 53, Sec II, same file; Review forwarded under Ltr, Ridley to U.S. Ambassador, Tehran, 26 Mar 44, Mission Rpts File, Mission Hq, War Office, Tehran; Rpt, The Military Mission with the Iranian Army: An Estimate of Its Accomplishments and Its Future Value, forwarded under Ltr, Ridley to OPD, 31 May 44, Case 71, Sec III-A, OPD 210.684 Iran, HRS DRB AGO. (4) Detailed accounts of the mission, drawn upon in this chapter, are the following letters and progress reports from Ridley to OPD: 17 Mar, 8 May 43, Mission Rpts File, Mission Hq, War Office, Tehran; 14 Jun 43, Case 76, Sec II, OPD 319.1 Middle East, HRS DRB AGO; 24 Jul, 11 Sep, 23 Nov 43, Cases 87, 92, and 107, respectively, Sec III-A, same file; 30 Dec 43, Case 71, Sec II, same file, another copy Case 71, Sec III-A, OPD 210.684 Iran, HRS DRB AGO; 15 Feb 44, same file; 7 May, 9 Aug 44, Cases 77, 80, respectively, Sec III, same file; 30 Oct 44, Case 82, Sec IV, same file; 8 Nov 44, Mission Rpts File, Mission Hq, War Office, Tehran; 21 Mar, 1 Jun 45, Cases 82, 82 (3), respectively, Sec IV, OPD 210.684 Iran, HRS DRB AGO.

centrally procured and distributed, everything, including troop payment, had been locally administered through each regiment. Too much opportunity was offered for inefficiency, irregularities, graft, and injustice. The revised system substituted, along with centralization, adequate financial accounting, standardization of procurement, and reorganization of the Offices of the Quartermaster General and the Chief of Finance. A factory to produce shoes and clothing was established and from time to time training schools in administration, engineering, medicine, finance, and quartermaster problems were operated. In 1943–44 the entire Army was inoculated against typhus with vaccine from the United States, the first time such a step had ever been taken. Malaria control was instituted experimentally at an Army post under technical instruction supplied by the Persian Gulf Command.

Ridley reported in May 1944 no progress in administrative reform in two fields—recruitment and the administration of justice—where "the inherent conditions are such that there is no hope of improvement under any further plans the Mission can devise." He took no hand in the unsavory recruiting department of the Army, where exemption of those who could buy themselves off, faking medical examinations, and enlistment of unfit persons were among "widespread practices that seem impossible to correct until the whole law-enforcement policy and moral sense of the country are radically revised." The Justice Department of the Army also seemed to Ridley to offer no hope of accomplishing results.

By the middle of 1944 an impasse in the Majlis over the size of the Army threatened to cut off budget appropriations. In this question Ridley, who had recommended an army of from eighty-eight to ninety thousand, found himself on middle ground between the Shah, who desired an army of 108,000, and Dr. Millspaugh, whose budgetary appropriations, in Ridley's belief, would have had the effect of cutting the Army in half by reducing its field force to only 30,000, a figure only slightly larger than that of the Gendarmerie when Schwarzkopf took over. Millspaugh stated that he felt a large army would be unnecessary in Iran if the tribes were justly treated and the Gendarmerie made adequate to police the country. In fact, subject to those two rather fundamental *if*'s, Millspaugh preferred no army at all.[9] The head of the American economic mission insisted upon a budget which would take from the Army and give to agricultural and social projects. Ridley's figure was strongly supported by the British Ambassador as providing an army sufficient for Iran's defense and security. Millspaugh's figure prevailed while his financial powers survived; but his insistence

[9] See Millspaugh, *Americans in Persia*, especially pp. 104–05, 114–15.

upon a small army hastened his downfall, after which a strength basis was reached somewhere between the figures supported by Ridley and the Shah.[10]

Lack of motor transport for the Army was no less serious than Schwarzkopf had found it to be for the Gendarmerie, or Landis for the Iranian economy as a whole. General Greely in July 1942 had informed General Marshall that, starting with a few trucks, he could reorganize the Army into an efficient force. Ridley found the Army "practically immobile," with almost no vehicles, equipment, or drivers. By the end of May 1944 he was able to report the establishment of a motor transport organization with regular operating schedules; the institution of repair and maintenance shops at Tehran, Isfahan, and Kermanshah; the arrival from the United States of 600 trucks procured on lend-lease requisition from the War Department; the establishment of schools for training drivers and mechanics; and the reorganization of the Army's Transport Department—all of which was noted as "an outstanding accomplishment of the Mission, of great value to the Iranian Army." But only a year later Ridley reported that the program in transport had "suffered greatly" through frequent changes in the head of the Transport Department.[11] Any accomplishment represented not only achievement of parts of the plan for the Army but also a victory, if only temporary, over internal conditions.

Priorities and Policy

There were also important external conditions which affected the program of strengthening Iran, and specifically its Army and Gendarmerie. Some of these, incidentally involving the two missions as parts of the general program and as agencies affected by lend-lease procedures followed by the American and British commands in the Corridor, have been touched upon in the previous chapter. But the question of lend-lease supplies for the Iranian Army and Gendarmerie required also the determination of the respective importance of the two missions as instruments of a developing policy toward Iran. In this matter, although the Department of State moved well ahead of the War Department, it eventually succeeded in persuading the War

[10] Rad 881, Richard Ford, U.S. Chargé d'Affaires ad interim at Tehran, to Dept State, 14 Mar 44. VII-4-B, Iran—Foreign Advisers—U.S. Military Mission, 1942, Near East Div, Dept State.

[11] (1) Rpt, Estimate of Accomplishments, cited n. 8(3). (2) Progress Rpt, 1 Jun 45, cited n. 8(4). (3) From the United States came 200 Studebaker 5-ton and 400 Ford 1½-ton trucks, some of which were assembled by Iranian Army personnel under Ridley's supervision at PGC plants.

Department to place Iran's military lend-lease needs on a par with those of other beneficiary countries. Meanwhile, until June 1945, when the War Department took its last step in that direction, caution marked its attitude, and slowness and tediousness the provision of supplies for the Iranian Army and Gendarmerie. The result was often embarrassment for Ridley and Schwarzkopf and mingled feelings on the part of the Iranians, puzzled to reconcile American protestations of friendship with the modest fruits which came trickling from the cornucopia of lend-lease. And this situation was bound to continue so long as the War Department entertained doubts as to the effective use by the Iranian services of American grants-in-aid.

Even before he left Washington General Ridley was alert to the psychological aspects of gift bearing. He expressed his apprehension lest the Iranians, denied their request for a large training mission and disappointed in their hopes of obtaining bountiful supplies for their Army, might react unfavorably to Ridley's mission. He urged the War Department to encourage the Iranians by promptly delivering to the Iranian Army some two hundred much-needed trucks asked for by General Greely and already in Iran, though on lend-lease consignment to the British and Russians.[12] Trucks were eventually provided; but in July 1943 Connolly was still having to explain to Ridley that the Russian-aid program could not be interrupted at the truck assembly plants even to accommodate the relatively small number of vehicles he asked for. In August, as the TAP's adjusted their schedules, General Scott notified Ridley that he could sandwich some fifty Iranian Army assemblies into the Russian-aid assemblies every twelve days.[13]

July brought encouraging word that 400 trucks allotted by lend-lease for use in the Iranian harvest were at sea; but Ridley reported that he had heard nothing about other items on a heavy list of requisitions which, after checking with the British military attaché, the American Embassy, and the Millspaugh mission, he had sent to Washington the previous March. The news from Washington about the list was interesting. The list (with the exception of items, like Palm Beach cloth, not carried in the regular U.S. Army procurement program) had been approved by the War Department and sent on to the Munitions Assignments Board, which had the last word. OPD heard that 100,000 pairs of shoes had been dispatched overseas (a further requisition was disapproved). But in July the Deputy Chief of Staff ruled that the Army

[12] Memo, Ridley for Handy, 13 Oct 42. Case 47, Sec I, OPD 210.684 Iran, HRS DRB AGO.

[13] (1) Ltr, Scott to Ridley, 13 Jul 43. 334 Maj Gen Ridley's Mission to Iranian Government, SL 9011. (2) Ltr, Scott to Ridley, 2 Aug 43. 451.2 Trucks (for Iranian Army), SL 9028.

Service Forces might not recommend filling any requisitions beyond those on Ridley's initial March list unless the articles requested were clearly surplus and not needed in the American war effort.[14]

If Ridley experienced troubles in obtaining items he felt needful for the Army, Schwarzkopf found the going even tougher in behalf of the friendless Gendarmerie. Soon after Minister Dreyfus—exasperated by Connolly's inability to find, within his interpretation of his instructions, the means of assisting in the missions' programs—had protested to Secretary of State Hull, Colonel Schwarzkopf went to Washington and personally outlined the problem to harried officials there to whom Iran was a vague spot on the map and the problem of preserving its sovereignty through grants of trucks and shoes not at all a realistic one. But when, in October 1943, Schwarzkopf's Letter of Instructions was issued to him by the Deputy Chief of Staff it embodied the same principle that had been established the previous July for Ridley's requisitions:

> If it appears that supplies or equipment not available in Iran are needed, you may make recommendations to the War Department giving full reasons for the need, being careful to give no undue hopes or expectations to the Iranian Government. No U.S. supplies will be provided unless they are clearly surplus and not needed in the war effort.

Within these limitations supplies went forward under lend-lease for the Army and Gendarmerie Missions. By August 1944 Schwarzkopf could report that, of 1,200 motor vehicles ordered for the Gendarmerie, 297 were in Iran and 450 more had been approved in Washington. He had also obtained, among miscellaneous items, 23,000 pairs of shoes and 150,000 yards of woolen cloth which was made into uniforms at the rate of 300 a day, in time to smarten up the Gendarmerie for a review on the Shah's birthday in November. By the end of 1944 the Gendarmerie had received lend-lease supplies to the value of $962,-981.02, and the Army to the value of $2,382,474.17. In view of the fact that the annual cost to the Iranian Government of the Army Mission alone was estimated at more than $123,000, the lend-lease grants were not exactly reckless. Caution was still the word.[15]

[14] Memo, OPD, 9 Feb 45, referring to Gen McNarney's ruling of 15 Jul 43. Case 100, Sec IV, OPD 210.684 Iran, HRS DRB AGO. See also Rad WAR 50023, Somervell to Booth, for Ridley from Shingler (then at Munitions Assignments Board), 9 Mar 45. 334 U.S. Military Mission with the Iranian Army, SL 9011.

[15] (1) Ltr cited n. 5. (2) Ltr, Schwarzkopf to Col Frederic H. Chaffee, OPD, 2 Oct 44. Case 71, Sec III-A, OPD 210.684 Iran, HRS DRB AGO. This says 25,000 pairs of shoes. (3) Ltr, Supply Div, GHQ, PGC, to Harold B. Hoskins, Chief Representative, Foreign Economic Administration, Tehran, 2 Jan 45. 400.3296 (Iranian), SL 9020. No later figure is available for the Gendarmerie, but on the analogy of the Army Mission, which reported as of 11 September 1945 "more than $2,600,000 worth of equipment and supplies," it is likely that the additional year added little to the 1944 total. (4) Rpt, Estimate of Accomplishments, cited n. 8(3).

Too much so to please the Department of State. For some time the War Department, discouraged by the obstacles within Iran to the reform programs of its advisory missions, had been considering withdrawing them. The Department of State, on the other hand, preferred them to continue, and coupled with the question of their continuance the matter of supply. On 25 October 1944 Stettinius, then Acting Secretary of State, wrote as follows to the Secretary of War:

> A primary consideration in this government's stated policy toward Iran is a desire to strengthen that country so that it may maintain internal security to avoid dissensions and weaknesses which breed foreign intervention and aggression. A most practical way to implement this policy is to strengthen Iran's security forces.[16]

In December, after General Ridley had journeyed to Washington and had conferred with officials of the War and State Departments, the Secretary of State wrote as follows to the Secretary of War:

> The Secretary of State presents his compliments to the Honorable the Secretary of War and has the honor to refer to Mr. Stettinius' letter of October 25, 1944, setting forth the urgent political reasons for the continuance of the American Military Mission to the Iranian Army.
>
> At a meeting held at the State Department on December 18, 1944, between officials of the War and State Departments and attended by Major General Ridley, the political and other reasons for the continuance of the military mission beyond the date already set for its termination, March 1, 1945, were reviewed. General Ridley made it clear that the mission could not attain the objective desired by the Department of State in consonance with the United States policy toward that country, unless high priority could be given by the Joint Chiefs of Staff for the shipment to Iran of certain essential military supplies.
>
> The Department desires to urge that high priority be given to the shipment of these military supplies for the Iranian Army. It is realized that the War Department is being pressed to supply arms not only for urgent war needs but also for the use of postwar armies. It is considered, however, that the Iranian case differs in several essential respects from that of many other countries. American policy in Iran is based specifically on the Declaration on Iran, signed at Tehran on December 1, 1943, by President Roosevelt, Prime Minister Churchill and Marshal Stalin. This Declaration recognized the sacrifices made by Iran in the interests of the war effort and pledged Allied assistance to Iran both during and after the war. A prominent implementation of this policy has been the American adviser program, under which this military mission has so successfully carried out its duties. Protection and advancement of our interests in Iran require that we give the military mission the tools with which to work. Furnishing the Iranian Army with essential supplies is in line with the Department's basic policy toward Iran, which envisages strengthening the Iranian security forces to the point where they can maintain order after the withdrawal of Allied forces. The United States can contribute substantially to world security by assisting to create a strong Iran, free from internal weakness which

[16] Ltr, Stettinius to Stimson, 25 Oct 44. Case 71, Sec III–A, OPD 210.684 Iran, HRS DRB AGO.

invites foreign intervention or aggression. To carry out this policy requires strong and well-equipped security forces.

Iran is perhaps the most prominent area of the world where inter-Allied friction might arise. Such friction would grow out of the chaos and disorder in Iran which would result from a weak Iranian Army. It is in our interests to prevent this from happening.

For these reasons it is urgently recommended that the American military mission to the Iranian Army be continued for an indefinite period beyond March 1, 1945, and that a sufficiently high priority rating be given to General Ridley's request for military supplies to enable him to continue his mission in Iran with reasonable assurance of success.[17]

To the formulations of American policy toward Iran since January 1943 this statement was a forceful addition. The Secretary of War soon after, citing the "cogent reasons" in the Secretary of State's letter, and recognizing "that the protection and advancement of our interests in Iran will require the strengthening of the Iranian security forces so that order may be maintained in this area, where world security might be threatened, after the withdrawal of Allied troops," consented to "present to the Joint Chiefs of Staff for their consideration the request for a priority for these military supplies." [18] An OPD memorandum which followed in February recommended that "Iran be placed in the same category as other United Nations," because of "the changed United States policy toward Iran"; but there had been no change. That the fuller formulation of policy struck the War Department as a new policy may possibly throw a small beam of light on its reluctance hitherto to back the missions' programs with adequate material encouragement. Even when it finally moved, the War Department first placed only the Iranian Army on a par with the armies of the other United Nations. It took a further appeal from the Department of State, pointing out that the Gendarmerie was "of equivalent importance with the Iranian Army," to bring about in June the amendment of Schwarzkopf's Letter of Instructions which recognized that fact in so far as supply under lend-lease was concerned.[19]

But the improvement in priorities came too late to prevent the psychological repercussions that accompanied shortages and prolonged

[17] Ltr, Secy State to Secy War, 21 Dec 44. ME 891.20 Mission/11-2844, Near East Div, Dept State; quoted in Intn Div, ASF, Lend-Lease Documentary Supplement, Vol. VIII, 1 Aug–31 Dec 44.

[18] Ltr, Stimson to Secy State, 27 Dec 44. Intn Div, ASF, Lend-Lease Documentary Supplement, Vol. VIII, 1 Aug–31 Dec 44. See also Rad 24, Stettinius to AMEMBASSY, Tehran, 17 Jan 45. VII–4–B, Foreign Advisers—U.S. Military Mission 1942, Near East Div, Dept State.

[19] (1) Memo and Rad cited n. 14. (2) Ltr, Harold B. Minor, Actg Chief, Div of Near Eastern Affairs, Dept State, to Col Dan Gilmer, OPD, 5 Jun 45; Memo, OPD for CG, ASF, 8 Jun 45, sub: Equipment for the Iranian Gendarmerie; Ltr, DCofS to Schwarzkopf, 14 Jun 45, deleting par. 4–a of Ltr of Instructions. Case 100, Sec IV, OPD 210.684 Iran, HRS DRB AGO.

delays in the arrival of items ordered more than two years previously.[20] And much hard feeling was engendered in Iran by the consequences of the sudden stoppage of lend-lease after V-J Day.[21] The programs of the advisory missions thus had little opportunity to benefit from the liberalization of priorities before V-J Day cut off their source of supplies. But by that time Iran's mounting crisis was forcing new American decisions in the making of which supply was the least of worries.

The Question of Continuing the Missions

With the crisis over Azerbaijan in 1946, Iran dramatically fulfilled President Roosevelt's expectation that it might serve as a testing ground for the Atlantic Charter and the good faith of the United Nations. The two American military missions were still in the service of the Iranian Government. They were not there because the War Department felt the Iranian Government had given them adequate support at all times, or because of continuing military necessity for them. That the two missions survived several strong impulses of the War Department to abolish them was due to political factors which outweighed the military in the question of continuance, just as it had done when the two missions were originally established.

The contract of the Army Mission (not signed until November 1943, but effective as of March 1943) provided that the mission would continue through the war or period of war emergency; that it could be extended thereafter by mutual agreement; and that it could be terminated at any time by either party on three months' notice. The Gendarmerie Mission's contract (not signed until November 1943, but effective as of October 1942) provided for a two-year term, with extension thereafter by agreement. General Ridley cautioned in March 1943 that improving the efficiency of the Iranian Army "to make it an effective security agency to facilitate Russian supply" was likely to prove a long task. By July he reported pessimistically that low Army morale, outlying tribes in constant revolt, and a weak and corrupt central

[20] Progress Rpt, 1 Jun 45, cited n. 8(4).

[21] (1) Materials for the Iranian Army, already landed, were thrown into the custody of PGC by the stoppage of lend-lease. Included were quantities of cloth for uniforms and Army feeling ran high because the Gendarmerie had already received cloth. The difficulty was solved, somewhat awkwardly, by having PGC declare the cloth surplus and sell it to Iran through the Army-Navy Liquidation Commission. Progress Rpt cited n. 8(1). (2) The President's similar action after V-E Day, which contributed to the rapid deterioration in Soviet-American relations, was later regretted by him. Interview with the President by Arthur Krock, *The New York Times*, February 15, 1950. Stalin told Hopkins at Moscow on 27 May 1945 that it made it impossible for the Russians to "make a suitable expression of gratitude to the United States for the Lend-Lease assistance during the war. . . ." Sherwood, *Roosevelt and Hopkins*, p. 888.

government posed heavy obstacles to a thoroughgoing reorganization. The situation, he said, was "worse than it has ever been since my arrival here." Noting that "a strong man, backed by the highest authority, could possibly change all this in a year," Ridley nevertheless felt that there were two criteria for continuing the mission: reasonable expectation of progress in reform and support of the mission by the high command. Providing that the obstructions which came from lower levels did not reduce the effectiveness of the mission's work "to the point of futility," Ridley was willing to go ahead. It is noteworthy that this view was expressed months before the negotiations, then pending, culminated in the signing of the contracts for the two missions.

In December it was decided to increase the authorized strength of the Army Mission by nine officers as a compromise between the War Department's desire not to increase the mission at all and Iran's desire to add thirty officers.[22] In the following spring of 1944, after some months of operation under the contract, Ridley again raised the question of continuance of his mission. On 31 May he stated that "all practicable major plans and investigations that can now be foreseen will have been completed and put into operation under guidance of the Mission by November 1, 1944," and suggested, if agreeable to the Iranians, withdrawal of the mission after that date. The recommendation was based upon such considerations as the removal of the threat of German invasion, Iran's declaration of war against the Axis, and the presence of British and Soviet troops in Iran which, together with the Iranian Army in its present state of training and equipment, would provide, he felt, adequate power to deal with problems of internal security. The War Department notified the Department of State that in its opinion "There exists no military necessity for this mission," but requested the views of State.[23] The Department of State consulted the Iranian Government and reported that the Iranians wished the mission to continue indefinitely. State and War agreed upon a compromise which would positively end the mission on 1 March 1945.[24] When this decision was made known to the Iranians, the Shah and the Minister of War urged extension of the closing date to 1 November 1945 or, preferably, to 1 March 1946. State feared that "the withdrawal of the Mission at this time when the Iranian Army is about to meet its

[22] Progress Rpt, 30 Dec 43, cited n. 8(4). The maximum actual (not authorized) strength of the Army Mission during the war period was about twenty-five officers and men; of the Gendarmerie Mission, about twenty-two officers and men.

[23] Ltr, Secy War to Secy State, 23 Jun 44. Case 71, Sec III-A, OPD 210.684 Iran, HRS DRB AGO.

[24] Ltr, Hull to Stimson, 14 Aug 44, and reply, Robert A. Lovett, Actg Secy War to Secy State, 18 Aug 44. Case 71, Sec III-A, OPD 210.684 Iran, HRS DRB AGO.

crucial test in view of the imminent withdrawal of foreign armies from the country might have unfortunate political and psychological repercussions." Ridley suggested on 8 November 1945 that, in view of the fact that his mission was not the sole key to Iran's troubles and if it was retained after 1 March 1945, its strength be reduced by the nine officers added previously at Iranian request. The question was settled after the conferences in Washington which Ridley attended in December. The mission was to continue indefinitely after 1 March 1945 subject to the contractual right to terminate it at three months' notice.[25]

In the summer of 1944 Iran expressed a desire to continue the Gendarmerie Mission for one year to 2 October 1945. Colonel Schwarzkopf told the American Ambassador at Tehran that plans for reorganization of the Gendarmerie were then complete and that if the mission were to carry on further it should do so only to create a really effective security organization, and that this decision should be taken not as a temporary expedient but "only if the interest of America is deep and lasting in Iran." A thoroughgoing reorganization might take from five to ten years. "In the post-war period," Schwarzkopf wrote, "security in Iran bears importance directly comparable to American interests in Iran." [26] The same question had been raised a year earlier by General Connolly in connection with the broadening of his directive to permit him to give economic assistance to Iran. It was now answered for the Gendarmerie Mission by the decision, taken in August, to renew the contract for one year. This step, anticipating by some months the decision not to terminate the Army Mission, gave additional reality to the increasingly forceful expressions of State Department policy toward Iran which were issued during 1944.

In due course the question of a second renewal of the Gendarmerie Mission contract arose with the passage by the Iranian Council of Ministers of a decree authorizing its extension for one more year, or until 2 October 1946. As many seemingly insurmountable local obstacles had raised doubts as to the wisdom of continuing the mission and as during the negotiations the Iranians showed reluctance to commit themselves to American demands for reform, the Acting Secretary of State, Dean Acheson, instructed Ambassador Murray that, if the desired assurances were not given and, after trial, transformed into effective action satisfactory to him and to Colonel Schwarzkopf, Murray was authorized to terminate the mission. Acheson added that the

[25] (1) Ltr cited n. 16. The letter praised Ridley's work as contributing to good international relations. (2) Ltr cited n. 18. (3) Progress Rpt, 21 Mar 45, cited n. 8(4).

[26] (1) Ltr cited n. 5. (2) Rad 630, U.S. Ambassador to Dept State, 18 Aug 44. Case 71, Sec III-A, OPD 210.684 Iran, HRS DRB AGO. (3) Note for record, 17 Oct 44. Case 78, Sec III, OPD 210.684 Iran, HRS DRB AGO.

department regretted the necessity of such a course of action at the time, but that it would be "futile and undignified" to continue with "little hope of positive accomplishment or reflection of credit" on the United States. The suggestion of futility echoed that made in July 1943 by General Ridley and underlined the difficulty of helping the Iranians to help themselves through a purely advisory program. The assurances were duly offered and the mission's contract renewed for one year.[27]

At about the same time it was decided once more not to abandon the Army Mission. Ridley had reopened the question on 1 June 1945 and added in a July report that it was now a question whether the Iranian Army, without American guidance, could preserve order in the country. In his progress report of 11 September he touched once again upon the question of continuing the mission:

> Enclosed is a statement on the work of the Mission to date. Perusal of this statement will show that the primary work of the Mission under the contract is practically finished. Future work will consist only in helping them, so far as they will permit, in routine administration and operation under the plans already made for them. Due to lack of money, and to the inherent lack of business and administrative ability, laziness, dishonesty, or general low quality of a large part of the personnel available for the work, the execution of the plans is generally mediocre, and in spots unsatisfactory and discouraging although there are some bright spots.
>
> From a technical viewpoint I see little value in keeping the Mission here. However the Iranian Minister of War has told me that he wants the Mission to remain in some form, and I understand that our own State Department also wants it to remain as a matter of public policy.

The decision, in which the War Department concurred, was that the mission would be terminated at the end of the war or a period of declared national emergency unless renewed by further agreement.[28] In December the Department of State publicly declared that "existing arrangements do not project the functions of the missions [Army and Gendarmerie] into the normal peace-time era." [29]

But, as the normal peacetime era was slow in returning to the world, both missions were extended from time to time by mutual agreement. At the end of 1950 they were still on the job at Tehran after some

[27] (1) Rad 553, Ambassador Murray to Dept State, 28 Jul 45. VII–4–C, Iran—Foreign Advisers—U.S. Gendarmerie Mission, Div of Near Eastern Affairs, Dept State. (2) Rad 756 cited in n. 6(2). (3) Rad 558, Acheson to Murray, 26 Sep 45. VII–4–C, Iran—Foreign Advisers—U.S. Gendarmerie Mission, Div of Near Eastern Affairs, Dept State. Acheson's message had the concurrence of the War Department on the recommendation of General Connolly, then at OPD. (4) Rad 775 cited n. 6(2). (5) Ltr, Schwarzkopf to Starbird, OPD, 2 Oct 45, VII–4–C, Iran—Foreign Advisers—U.S. Gendarmerie Mission, Div of Near Eastern Affairs, Dept State.

[28] Dispatch 99, Dept State to U.S. Embassy, Tehran, 21 Sep 45, Mission Rpts File, Mission Hq, War Office, Tehran.

[29] Ltr, Dept State to Representative Karl E. Mundt, 7 Dec 45. VII–4–C, Iran—Foreign Advisers—U.S. Gendarmerie Mission, Div of Near Eastern Affairs, Dept State.

changes in personnel and contractual provisions.[30] Both were capable of extension a year at a time by an exchange of notes. A new Army Mission contract, signed at Tehran on 6 October 1947 by Ambassador George V. Allen and Mahmud Jam, Iranian Minister of War, replaced the 1943 contract.[31] In 1948 a revision prohibited the chief of the mission from giving Iran any advice on tactical or strategic plans or operations against an enemy of Iran. Under the original contract and Ridley's Letter of Instructions, such advice was permitted, if sought by Iran, and given after consultation with the War Department. In 1948 also the Gendarmerie Mission contract was amended to supplant the command functions of the chief of the mission by advisory functions only.

In 1949 an experimental redistribution of Gendarmerie strength was made by the Iranian Government with a view to reaching a policy decision on the ultimate duties of the Gendarmerie and its relationship to the Army. The desire in certain quarters of Iranian officialdom to subordinate the Gendarmerie to the Army or even to extinguish the Gendarmerie altogether was a hot potato of Iranian politics sedulously avoided by American advisers. Yet the poor-relation status of the Gendarmerie doubtless influenced thinking at certain desks in the American War Department where it was feared to take sides even indirectly in the controversy by making supplies available. This opinion may have been a factor in the delay until June 1945 in putting the Gendarmerie's supply through lend-lease on a basis comparable to that of the Army. For its part, the Department of State's championship of the equal importance of the Gendarmerie and the Army merely recognized that conditions during the Allied occupation placed the internal security functions of the two forces on the same basis for the duration of the war; and this position was maintained without prejudice to the relative merits of the internal squabble over the two services in Iran. Although the War Department acceded to the Department of State's predominant voice in setting policy on supply and the continuation of the missions, there were those in the War Department who persisted, even after V-J Day, in viewing the Gendarmerie Mission as of less importance than the Army Mission in the whole program of strengthening Iran.

[30] In 1946 Ridley was succeeded by Maj. Gen. Robert W. Grow who was replaced a year later by Maj. Gen. Vernon Evans. In 1948 Schwarzkopf was succeeded by Col. James R. Pierce. In the five postwar years the strength of the Gendarmerie Mission remained about the same, that is, under twenty officers and men, while the Army Mission was increased by some twenty enlisted men in 1949 to perform service and maintenance of the articles made available to Iran from U.S. surplus stocks after the war.

[31] The 1947 contract was published in the Department of State's Treaties and Other International Acts, Series 1666; reprinted in Treaties and International Acts, Series 1924.

Illustration may be furnished, as a postscript to the story of the missions, by reference to the decoration and promotion which came to Colonel Schwarzkopf after the end of the war. On 19 November 1944 General Connolly recommended to The Adjutant General a Legion of Merit for Schwarzkopf; but the reason he gave, that Schwarzkopf had co-operated with the PGC by furnishing gendarmes to accompany raiding parties of military police "to confiscate and repossess stolen United States property," was not considered by a decorations board which met on 5 December 1944 as indicating exceptionally meritorious conduct in the performance of outstanding service.[32] The next year, by a letter to The Adjutant General, Col. Alfred D. Starbird, Chief, European Section, Theater Group, OPD, recommended Schwarzkopf for the Distinguished Service Medal; but this, too, was disapproved by an awards board on 13 November. It considered the Gendarmerie Mission "much lower in degree of importance and responsibility" than the Army Mission. It should be noted that General Booth and General Ridley had both received the Distinguished Service Medal, and that in the previous June the War Department had liberalized its supply policy for the Gendarmerie on assurances that the Department of State considered the two Iranian services as of equal importance. The awards board forthwith recommended Schwarzkopf for a Legion of Merit, noting his "great responsibility" for the 21,000 officers and men of the Gendarmerie.

This decision was protested by Lt. Gen. John E. Hull, Assistant Chief of Staff, OPD, who went with his written protest of 28 November directly to General Handy, Deputy Chief of Staff. He obtained a setting aside of the Legion of Merit award and approval of a Distinguished Service Medal by explaining that Schwarzkopf's position was independent of any other command; that he exercised command; and that "under his careful direction the Gendarmerie, while being completely modernized, performed the potentially dangerous task of maintaining order in Iran in spite of the presence of many dissatisfied elements there, and without arousing the antagonism of the British or the Russians in a country which still is a center of international friction." The medal was approved on 4 December by a board which thriftily adopted the citation already proposed by them for the Legion of Merit.[33]

Away back in February 1943 Minister Dreyfus had recommended Schwarzkopf's promotion to brigadier general both as a reward for good work and as an aid to his mission's work in a country where the prestige value of rank was high. General Connolly also recommended

[32] Abstracts of documents quoted are in PGF 261.
[33] Award published in GO 119, WD, 17 Dec 45. Medal presented at Tehran, 20 Jan 46.

promotion. For more than three years Schwarzkopf remained a colonel. Then in June 1946, Ambassador Allen, whose arrival at Tehran in April marked new emphasis on American support for Iran, sent a message to the Secretary of State, coupling a recommendation for Schwarzkopf's promotion with the role then being played by the Gendarmerie. He said, in part:

> There persists, in spite of Soviet troop withdrawal, real danger of Iran becoming newest puppet of Soviet Union. Overthrow of government by leftist elements is easily possible, and without effective security forces, the numerous Soviet stooges and ruthless adventurers now in Iran could easily make it successful. There would probably result a totalitarian state dominated entirely by Moscow. International rivalry would be immediately intensified on the Persian Gulf, with several vital matters at stake, for example, entire Middle East oil resources. Iranian Gendarmerie constitutes important deterrent to governmental overthrow. This organization, by its promptness last month in establishing security in Caspian area as Soviet troops evacuated, deserves large degree of credit in preventing rebellion there similar to Azerbaijan uprising.[34]

The recommendation was communicated by Acting Secretary of State Acheson to Robert Patterson, Secretary of War. Acheson reminded Patterson that for three years the Department of State had "communicated to the War Department its approval of the work being done by Colonel Schwarzkopf, and has expressed its hope that the head of the Mission could be given general officer status." Ambassador Allen had pointed out that Schwarzkopf was handicapped in his contacts by being a colonel. Acheson concluded that, "since the events taking place in Iran are of very real significance in the general context of our foreign relations, and since the Gendarmerie Mission is playing a major role in these events, the Department hopes that the War Department will find it possible to comply with Ambassador Allen's suggestion." [35] Because of an inflexible policy of reducing the number of general officers, the first reaction in the War Department was to refuse the promotion, and a letter to that effect was drafted for the signature of the Secretary of War. But OPD's successor, Plans and Operations Division, recommended to the Chief of Staff, General Eisenhower, that an exception be made. The Secretary of War then asked the President to nominate Schwarzkopf to the Senate to be brigadier general, temporary grade. The nomination was made forthwith and duly approved by the Senate.[36]

[34] Rad 799, Allen to Secy State, 4 Jun 46. Abstract PGF 261.
[35] Ltr, Acheson to Patterson, 21 Jun 46. Abstract PGF 261.
[36] Published in SO 158, WD, 18 Jul 46, with rank from 12 Jul 46. See also Memo, Eisenhower for Secy War, 9 Jul 46; and Memo, Secy War for President, 9 Jul 46. Abstracts PGF 261.

In a sense, this tardy recognition of the value of the Gendarmerie Mission marked a further step in the evolution of American policy as expressed through the two advisory missions. Ridley and Schwarzkopf had struggled against heavy odds in Iran to achieve aims limited by the caution of both War and State. Those departments had sought to evaluate their effectiveness: War, from the point of view of technical accomplishment, first in aiding the supply task in the Corridor, later in providing a measure of internal security in a disorganized state; State, from the point of view of the moral and political force which the missions could exert simply by existing, no matter how technically frustrated or futile. But, even as the conviction became intensified that the missions were instruments not only for the prosecution of a local objective but also of wider foreign policy, their technical helplessness as purely advisory agencies continued to constrict their effectiveness as moral or political factors. It was a dilemma whose resolution the war years delayed. After 1945, developments offered hints of how the dilemma could be resolved; but they had not resolved it by the end of 1950.

They did answer one question, posed in the first chapter of this book: Had America come to the madhouse of Middle Eastern politics as visitor, doctor, or inmate? In undertaking to strengthen Iran the United States became a doctor, one who may only prescribe and hope for the best.

Appendix A

TABLE 1—CARGO SHIPPED FROM THE WESTERN HEMISPHERE TO THE USSR BY ROUTE OF DELIVERY, 22 JUNE 1941–20 SEPTEMBER 1945 [a]

[Long Tons]

Year and Month [b]	All Routes	Persian Gulf		Soviet Far East		North Russia		Black Sea		Soviet Arctic	
		Tons	Percent of Total	Tons	Percent of Total	Tons	Percent of Total	Tons	Percent of Total	Tons	Percent of Total
Total	17,499,861	4,159,117	23.8	8,243,397	47.1	3,964,231	22.7	680,723	3.9	452,393	2.5
1941	360,778	13,502	3.7	193,299	53.6	153,977	42.7	0	0.0	0	0.0
June	2,988	0	0.0	2,988	100.0	0	0.0	0	0.0	0	0.0
July	27,567	0	0.0	27,567	100.0	0	0.0	0	0.0	0	0.0
August	97,483	0	0.0	93,113	95.5	4,370	4.5	0	0.0	0	0.0
September	38,161	0	0.0	27,629	72.4	10,532	27.6	0	0.0	0	0.0
October	65,513	0	0.0	17,161	26.2	48,352	73.8	0	0.0	0	0.0
November	57,604	2,972	5.2	13,559	23.5	41,073	71.3	0	0.0	0	0.0
December	71,462	10,530	14.7	11,282	15.8	49,650	69.5	0	0.0	0	0.0
1942	2,453,097	705,259	28.8	734,020	29.9	949,711	38.7	0	0.0	64,107	2.6
January	88,597	34	(c)	26,047	29.4	62,516	70.6	0	0.0	0	0.0
February	92,670	5,282	5.7	22,206	24.0	65,182	70.3	0	0.0	0	0.0
March	213,999	17,754	8.3	25,555	11.9	170,690	79.8	0	0.0	0	0.0
April	441,968	21,173	4.8	38,441	8.7	382,354	86.5	0	0.0	0	0.0

See footnotes at end of table.

TABLE 1—CARGO SHIPPED FROM THE WESTERN HEMISPHERE TO THE USSR BY ROUTE OF DELIVERY, 22 JUNE 1941–20 SEPTEMBER 1945 [a]—Continued

Year and Month [b]	All Routes	Persian Gulf		Soviet Far East		North Russia		Black Sea		Soviet Arctic	
		Tons	Percent of Total	Tons	Percent of Total	Tons	Percent of Total	Tons	Percent of Total	Tons	Percent of Total
May	194,747	86,978	44.7	33,035	17.0	74,734	38.3	0	0.0	0	0.0
June	193,695	91,012	47.0	30,288	15.6	54,720	28.3	0	0.0	17,675	9.1
July	183,362	62,492	34.1	63,313	34.5	13,351	7.3	0	0.0	44,206	24.1
August	215,453	65,598	30.4	78,616	36.5	69,013	32.0	0	0.0	2,226	1.1
September	179,430	72,057	40.2	79,604	44.4	27,769	15.4	0	0.0	0	0.0
October	229,331	121,272	52.9	108,059	47.1	0	0.0	0	0.0	0	0.0
November	176,911	70,430	39.8	106,481	60.2	0	0.0	0	0.0	0	0.0
December	242,934	91,177	37.5	122,375	50.4	29,382	12.1	0	0.0	0	0.0
1943	4,794,545	1,606,979	33.5	2,388,577	49.8	681,043	14.2	0	0.0	117,946	2.5
January	258,055	86,836	33.7	97,671	37.8	73,548	28.5	0	0.0	0	0.0
February	342,055	40,071	11.8	129,004	37.7	172,980	50.5	0	0.0	0	0.0
March	263,209	131,277	49.9	122,646	46.6	9,286	3.5	0	0.0	0	0.0
April	337,572	143,808	42.6	193,764	57.4	0	0.0	0	0.0	0	0.0
May	349,259	121,002	34.6	216,380	62.0	0	0.0	0	0.0	11,877	3.4
June	275,622	28,786	10.4	230,183	83.5	0	0.0	0	0.0	16,653	6.1
July	336,094	126,184	37.5	152,215	45.3	0	0.0	0	0.0	57,695	17.2
August	469,961	177,153	37.7	261,087	55.6	0	0.0	0	0.0	31,721	6.7
September	511,365	197,886	38.7	313,479	61.3	0	0.0	0	0.0	0	0.0
October	439,655	192,744	43.8	180,872	41.1	66,039	15.1	0	0.0	0	0.0
November	568,620	194,775	34.2	228,964	40.3	144,881	25.5	0	0.0	0	0.0
December	643,078	166,457	25.9	262,312	40.8	214,309	33.3	0	0.0	0	0.0

1944	6,217,622	1,788,864	28.8	2,848,181	45.8	1,452,775	23.4	0	0.0	127,802	2.0
January	599,239	201,713	33.7	176,170	29.4	221,356	36.9	0	0.0	0	0.0
February	341,158	114,161	33.5	100,017	29.3	126,980	37.2	0	0.0	0	0.0
March	351,751	150,500	42.8	91,299	26.0	109,952	31.2	0	0.0	0	0.0
April	408,870	274,791	67.2	134,079	32.8	0	0.0	0	0.0	0	0.0
May	553,376	289,070	52.2	264,306	47.8	0	0.0	0	0.0	0	0.0
June	522,556	187,349	35.9	307,224	58.8	0	0.0	0	0.0	27,983	5.3
July	624,578	127,393	20.4	275,761	44.2	155,760	24.9	0	0.0	65,664	10.5
August	561,533	36,437	6.5	308,614	55.0	185,562	33.0	0	0.0	30,920	5.5
September	579,860	87,861	15.2	298,208	51.4	190,556	32.9	0	0.0	3,235	0.5
October	545,414	156,228	28.6	309,441	56.8	79,745	14.6	0	0.0	0	0.0
November	564,628	95,864	17.0	313,916	55.6	154,848	27.4	0	0.0	0	0.0
December	564,659	67,497	12.0	269,146	47.7	228,016	40.3	0	0.0	0	0.0
1945	3,673,819	44,513	1.2	2,079,320	56.6	726,725	19.8	680,723	18.5	142,538	3.9
January	405,762	31,454	7.8	194,914	48.0	118,869	29.3	60,525	14.9	0	0.0
February	450,588	4,497	1.0	181,741	40.3	153,278	34.0	111,072	24.7	0	0.0
March	487,030	4,409	0.9	161,786	33.2	148,731	30.5	172,104	35.4	0	0.0
April	540,278	1,232	0.2	193,709	35.9	167,180	30.9	178,157	33.0	0	0.0
May	768,295	2,921	0.4	518,212	67.4	138,667	18.1	108,495	14.1	0	0.0
June	329,191	0	0.0	275,018	83.5	0	0.0	21,638	6.6	32,535	9.9
July	408,554	0	0.0	313,360	76.7	0	0.0	1,268	0.3	93,926	23.0
August	234,606	0	0.0	200,369	85.4	0	0.0	18,160	7.7	16,077	6.9
September	49,515	0	0.0	40,211	81.2	0	0.0	9,304	18.8	0	0.0

[a] Represents total shipments from the Western Hemisphere, principally leand-lease supplies, including goods for Canadian and British accounts. Includes approximately 488,000 tons lost en route, principally in 1942. Does not include some 555,000 long tons of petroleum products originating at British refineries in Abadan, Iran, replaced by allocations from U.S. supplies for British use. Does not include quantities of supplies originally shipped to U.S. Army Air Force Eastern Command shuttle bases in the Ukraine or supplies shipped for U.S. Army use in the Persian Corridor.

[b] Represents date of departure from Western Hemisphere ports.

[c] Less than 0.05 percent.

Source: U.S. State Department, work sheets used in compiling Report on War Aid Furnished by the United States to the USSR, November 28, 1945.

TABLE 2—CARGO SHIPPED FROM THE WESTERN HEMISPHERE TO PERSIAN GULF PORTS FOR THE USSR, BY TYPE, NOVEMBER 1941–MAY 1945 [a]

[Long Tons]

Year and Month [b]	Number of Vessels [c]	Total Shipments	United States Shipments										British and Canadian Shipments
			All Types	Aircraft	Combat Vehicles	Trucks [d]	Other Vehicles [e]	Guns and Ammunition [f]	Food	Metals and Metal Products	Petroleum Products [g]	Other [h]	
Total..	646	4,159,117	4,073,978	39,645	70,407	873,846	70,178	144,361	995,368	1,248,517	45,068	586,588	85,139
1941.....	12	13,502	11,327	377	0	10,138	0	0	0	443	39	330	2,175
Nov.....	1	2,972	1,398	34	0	851	0	0	0	443	0	70	1,574
Dec.....	11	10,530	9,929	343	0	9,287	0	0	0	0	39	260	601
1942.....	140	705,259	685,500	11,207	20,045	143,927	0	44,214	84,108	339,889	1,566	40,544	19,759
Jan.....	1	34	34	34	0	0	0	0	0	0	0	0	0
Feb.....	14	5,282	5,282	1,185	0	2,253	0	0	1,517	0	0	327	0
Mar.....	12	17,754	15,264	1,437	0	8,493	0	4	4,335	663	0	332	2,490
Apr.....	6	21,173	21,173	85	0	9,474	0	1	3,077	8,373	0	163	0
May.....	13	86,978	85,050	639	1,625	10,624	0	714	12,362	52,493	0	6,593	1,928
Jun.....	13	91,012	87,362	960	2,618	12,975	0	785	10,522	50,185	0	9,317	3,650
Jul.....	15	62,492	61,772	517	2,780	4,154	0	1,494	3,333	43,795	0	5,699	720
Aug.....	16	65,598	63,734	1,444	2,406	5,247	0	4,188	2,301	43,366	0	4,782	1,864
Sep.....	10	72,057	69,619	550	3,180	13,752	0	5,614	7,622	36,038	0	2,863	2,438
Oct.....	15	121,272	117,927	2,517	4,008	26,078	0	15,918	11,761	52,732	464	4,449	3,345
Nov.....	10	70,430	69,179	842	1,181	25,839	0	6,110	5,865	27,195	146	2,001	1,251
Dec.....	15	91,177	89,104	997	2,247	25,038	0	9,386	21,413	25,049	956	4,018	2,073
1943.....	241	1,606,979	1,563,600	16,713	10,523	308,526	41,447	36,222	423,660	412,946	26,449	287,114	43,379
Jan.....	16	86,836	77,646	378	463	18,811	2,007	7,627	17,741	22,960	46	7,613	9,190
Feb.....	7	40,071	37,429	256	8	8,639	1,009	1,819	8,111	13,139	96	4,352	2,642
Mar.....	20	131,277	128,533	1,885	43	31,771	1,713	3,342	39,707	32,177	[i]	17,895	2,744
Apr.....	21	143,808	140,591	2,267	656	29,785	4,200	0	38,697	38,874	1,615	24,497	3,217
May.....	19	121,002	119,038	1,925	222	26,119	2,655	0	28,639	34,014	3,769	21,695	1,964
Jun.....	7	28,786	28,786	25	[i]	6,404	0	105	10,141	9,889	802	1,420	0
Jul.....	21	126,184	123,801	2,594	217	23,975	2,000	3,103	33,789	33,040	4,895	20,188	2,383

Aug.....	26	177,153	167,442	2,110	654	19,801	3,405	3,850	40,508	43,662	7,607	45,845	9,711
Sep.....	29	197,886	196,436	2,862	4,074	38,534	4,600	4,423	38,158	52,885	6,632	44,268	1,450
Oct.....	28	192,744	188,530	796	1,973	40,244	6,016	5,660	43,998	53,476	580	35,787	4,214
Nov.....	26	194,775	189,410	823	440	34,560	6,677	3,814	61,803	42,676	407	38,210	5,365
Dec.....	21	166,457	165,958	792	1,773	29,883	7,165	2,479	62,368	36,154	0	25,344	499
1944.....	240	1,788,864	1,770,282	11,348	39,839	394,829	28,479	63,418	478,591	482,661	14,226	256,891	18,582
Jan.....	26	201,713	200,530	1,174	3,541	34,689	8,193	4,131	79,195	35,767	238	33,602	1,183
Feb.....	16	114,161	113,872	1,175	3,751	16,631	3,295	3,997	40,762	22,535	759	20,967	289
Mar.....	22	150,500	150,243	2,403	1,899	27,962	2,981	4,152	62,750	26,134	688	21,274	257
Apr.....	35	274,791	273,462	2,034	7,551	49,897	5,818	4,640	76,529	58,452	2,710	65,831	1,329
May.....	36	289,070	288,465	2,501	6,683	61,179	2,606	15,118	64,374	90,415	742	44,847	605
Jun.....	26	187,349	186,218	1,151	4,035	50,840	1,443	5,302	32,432	66,043	3,029	21,943	1,131
Jul.....	20	127,393	123,340	859	5,810	25,698	1,124	4,756	30,131	31,422	1,507	22,033	4,053
Aug.....	5	36,437	36,437	50	782	15,781	328	0	3,862	13,953	49	1,632	[i]
Sep.....	11	87,861	87,637	0	1,906	26,942	666	5,507	15,463	32,849	817	3,487	224
Oct.....	21	156,228	150,202	1	3,074	37,796	634	9,673	40,645	46,003	1,326	11,050	6,026
Nov.....	13	95,864	93,901	0	807	26,684	947	5,103	17,559	34,994	1,443	6,364	1,963
Dec.....	9	67,497	65,975	0	0	20,730	444	1,039	14,889	24,094	918	3,861	1,522
1945.....	13	44,513	43,269	0	0	16,426	252	507	9,009	12,578	2,788	1,709	1,244
Jan.....	6	31,454	30,667	0	0	11,923	87	507	5,940	10,496	695	1,019	787
Feb.....	2	4,497	4,497	0	0	2,670	130	0	552	1,071	0	74	0
Mar.....	2	4,409	3,952	0	0	1,400	0	0	203	256	2,093	0	457
Apr.....	1	1,232	1,232	0	0	0	0	0	971	0	0	261	0
May.....	2	2,921	2,921	0	0	433	35	0	1,343	755	0	355	0

[a] Represents total quantities shipped from Western Hemisphere ports during the months indicated. Includes quantities lost or diverted en route. Does not include quantities originally shipped to U.S. Army Air Force Eastern Command shuttle bases in the Ukraine or supplies shipped for U.S. Army use in the Persian Corridor.

[b] Represents date of departure from Western Hemisphere ports.

[c] Includes 105 vessels whose cargo included a minor portion consigned to USSR.

[d] Includes jeeps and trailers.

[e] Consists chiefly of motorcycles and tractors.

[f] Includes explosives.

[g] Does not include some 555,000 tons of petroleum products, originating at British refineries in Abadan, Iran, and replaced by allocation from U.S. supplies for British use.

[h] Includes communication and railroad equipment, textiles, rubber products, and other miscellaneous materials and products.

[i] Less than 0.5 ton.

Source: U.S. State Department, work sheets used in compiling Report on War Aid Furnished by the United States to the USSR, November 28, 1945.

TABLE 3—CARGO DISCHARGED AT AMERICAN-OPERATED PORTS IN THE PERSIAN GULF, JANUARY 1943–MAY 1945 [a]

[Long Tons]

Year and Month	Total Discharged	Consignee		Port of Discharge	
		USSR	Other	Khorramshahr	Bandar Shahpur
Total	3,900,815	(b)	(b)	2,804,918	1,095,897
1943	1,673,568	(b)	(b)	1,190,483	483,085
January	67,238	(b)	(b)	41,421	25,817
February	88,339	(b)	(b)	63,113	25,226
March	110,958	(b)	(b)	81,437	29,521
April	117,621	117,621	0	90,976	26,645
May	111,372	106,109	5,263	80,111	31,261
June	120,930	113,759	7,171	86,852	34,078
July	152,684	138,226	14,458	108,259	44,425
August	157,388	111,408	45,980	111,107	46,281
September	143,838	95,480	48,358	110,803	33,035
October	154,034	139,689	14,345	109,199	44,835
November	222,224	203,949	18,275	151,719	70,505
December	226,942	213,051	13,891	155,486	71,456
1944	2,005,727	1,884,845	120,882	1,394,114	611,613
January	208,854	195,863	12,991	136,756	72,098
February	147,009	147,009	0	105,011	41,998
March	213,534	204,400	9,134	136,573	76,961
April	71,358	60,048	11,310	50,519	20,839
May	185,896	185,896	0	122,115	63,781
June	203,548	193,620	9,928	140,296	63,252
July	287,917	273,575	14,342	192,761	95,156
August	183,817	177,503	6,314	124,004	59,813
September	129,416	114,474	14,942	92,220	37,196
October	74,468	59,009	15,459	68,370	6,098
November	143,747	132,869	10,878	105,202	38,545
December	156,163	140,579	15,584	120,287	35,876

See footnotes at end of table.

TABLE 3—CARGO DISCHARGED AT AMERICAN-OPERATED PORTS IN THE PERSIAN GULF, JANUARY 1943–MAY 1945 [a]—Continued

Year and Month	Total Discharged	Consignee		Port of Discharge	
		USSR	Other	Khorramshahr	Bandar Shahpur
1945	221,520	198,824	22,696	220,321	1,199
January	98,618	95,577	3,041	97,419	1,199
February	71,869	65,122	6,747	71,869	0
March	30,216	30,216	0	30,216	0
April	8,141	247	7,894	8,141	0
May	12,676	7,662	5,014	12,676	0

[a] Does not include 234,992 long tons landed at Cheybassi, Iran, which were initially discharged elsewhere. Monthly landings at Cheybassi during the period of American operation were as follows:

1943			1944		
Jul 16,700	Oct 17,051		Jan 17,058	Apr 15,941	Jul 17,237
Aug 19,731	Nov 17,935		Feb 11,769	May 13,446	Aug 18,554
Sep 17,111	Dec 19,840		Mar 12,211	Jun 18,602	Sep 1,806

[b] Data not available.

Source: Headquarters, Persian Gulf Command, U.S. Army, Office of the ACofS for Operations, Movements Branch, Complete Summary of Port and Transportation Agencies Performance of PGC Operations Through 31 May 1945, 5 July 1945, p. 6, supplemented by monthly reports of operations at respective ports.

TABLE 4—SUPPLIES DELIVERED TO THE USSR THROUGH THE PERSIAN CORRIDOR, BY TYPE OF TRANSPORT, 1942–1945 [a]

[Long Tons]

Year and Month	Total	Railway	Assembled Trucks and Cargo	Motor Transport Service	Assembled Aircraft	British Agencies [b]
Total.....	5,149,376	2,989,079	1,235,088	408,460	36,018	480,731
1942.....	353,114	165,655	70,415	0	4,940	112,104
1943.....	1,793,932	894,767	479,591	189,736	19,728	210,110
January.....	51,285	[c] 23,981	6,672	0	[d] 842	19,790
February.....	68,808	[c] 33,585	18,871	135	[d] 516	15,701
March.....	75,605	[c] 28,181	27,988	3,570	[d] 948	14,918
April.....	101,155	44,590	29,284	8,768	[d] 1,727	16,786
May.....	127,572	54,835	41,549	11,002	[d] 1,200	18,986
June.....	147,193	67,729	48,487	11,252	[d] 758	18,967
July.....	178,742	84,414	58,830	17,068	[d] 1,116	17,314
August.....	164,422	72,421	49,188	21,103	[d] 1,558	20,152
September.....	199,293	102,261	55,556	23,335	[d] 1,863	16,278
October.....	217,252	121,947	47,065	26,389	3,264	18,587
November.....	214,587	120,098	41,244	32,729	3,456	17,060
December.....	248,018	140,725	54,857	34,385	2,480	15,571
1944.....	2,555,172	1,594,781	571,800	218,724	11,350	158,517
January.....	257,531	146,685	56,726	32,385	1,002	20,733
February.....	205,305	121,129	53,097	10,365	1,203	19,511
March.....	225,735	125,726	52,632	29,443	1,101	16,833
April.....	144,569	78,966	34,983	12,641	1,594	16,385
May.....	193,332	113,583	44,301	13,616	1,687	20,145
June.....	253,068	140,664	57,050	31,745	1,665	21,944
July.....	282,097	164,834	61,728	36,727	1,166	17,642
August.....	275,137	164,253	62,036	32,794	768	15,286
September.....	238,136	170,100	49,461	8,187	754	9,634
October.....	145,395	109,698	30,002	5,196	95	404
November.....	151,894	112,218	33,736	5,625	315	0
December.....	182,973	146,925	36,048	0	0	0

See footnotes at end of table.

TABLE 4—SUPPLIES DELIVERED TO THE USSR THROUGH THE PERSIAN CORRIDOR, BY TYPE OF TRANSPORT, 1942–1945 [a]—Continued

Year and Month	Total	Railway	Assembled Trucks and Cargo	Motor Transport Service	Assembled Aircraft	British Agencies [b]
1945.....	447,158	333,876	113,282	0	[e]	[e]
January.....	142,309	105,706	36,603	0	0	0
February.....	137,630	86,902	50,728	0	[e]	[e]
March.....	84,583	63,656	20,927	0	0	0
April.....	51,333	46,309	5,024	0	0	0
May.....	31,303	31,303	0	0	[e]	[e]

[a] Figures shown include some data for British operations. The total of 5,149,376 long tons delivered includes 165,655 tons delivered by the British during their operation of the Iranian State Railway in 1942 and 480,731 tons delivered by the United Kingdom Commercial Corporation and other British agencies throughout the entire period. The remaining 4,502,990 tons were delivered chiefly by the U.S. Army but include unknown British tonnages in 1942 figures for assembled trucks and aircraft, as well as the British share of rail deliveries during the period of joint operation (January–March 1943); which reduce the U.S. share to 4,417,243. See Ch. I, n. 4.

[b] Represents tonnages carried by the United Kingdom Commercial Corporation and British military agencies, chiefly via the Khanaqin Lift. Data are unofficial and may be incomplete; official British data are not available.

[c] Railway operated jointly by U.S. and British agencies.

[d] Partly estimated. The 10,528 tons reported for the period January–September 1943 was prorated by month, based on quantities, types, and weights of planes delivered each month (basic weight of planes delivered to the American command by air and cased weight of planes delivered by water).

[e] Data not available for 8 aircraft delivered to USSR in 1945 (see Tables 10 and 11).

Source: Headquarters, Persian Gulf Command, U.S. Army, Office of the ACofS for Operations, Movements Branch, Complete Summary of Port and Transportation Agencies Performance of PGC Operations Through 31 May 1945, 5 July 1945, p. 2.

TABLE 5—FREIGHT HAULED BY RAIL NORTH OF ANDIMESHK, IRAN, AUGUST 1942–MAY 1945 [a]

[Long Tons]

Year and Month	Total	USSR Supplies	U. S. Army Eastern Command	Internal Traffic			
				Total	Civil Supplies [b]	Oil [c]	Other [d]
Total	[e] 4,701,244	[e] 2,989,079	8,513	1,703,652	271,460	1,155,041	277,151
1942 (five months)	[e] 293,042	[e] 165,655	0	127,387	17,878	80,793	28,716
August	35,770	12,440	0	23,330	0	13,880	9,450
September	48,022	23,807	0	24,215	3,148	16,307	4,760
October	50,987	23,074	0	27,913	3,850	20,028	4,035
November	46,466	20,450	0	26,016	5,081	15,278	5,657
December	48,648	22,735	0	25,913	5,799	15,300	4,814
1943	1,419,105	894,767	0	524,338	65,110	364,375	94,853
January	52,285	23,981	0	28,304	3,975	18,925	5,404
February	64,204	33,585	0	30,619	4,723	18,983	6,913
March	65,522	28,181	0	37,341	5,568	25,123	6,650
April	87,784	44,590	0	43,194	6,568	27,609	9,017
May	98,353	54,835	0	43,518	7,532	31,597	4,389
June	108,779	67,729	0	41,050	3,103	31,949	5,998
July	119,480	84,414	0	35,066	3,700	22,061	9,305
August	111,251	72,421	0	38,830	3,820	26,290	8,720
September	150,751	102,261	0	48,490	5,670	32,235	10,585
October	175,818	121,947	0	53,871	4,534	37,808	11,529
November	185,623	120,098	0	65,525	9,547	46,148	9,830
December	199,255	140,725	0	58,530	6,370	45,647	6,513

1944	2,375,116	1,594,781	8,513	771,822	124,068	533,963	113,791
January	222,866	146,685	0	76,181	9,212	54,270	12,699
February	189,882	121,129	0	68,753	10,943	51,496	6,314
March	191,490	125,726	0	65,764	9,465	49,223	7,076
April	145,718	78,966	0	66,752	10,205	47,911	8,636
May	174,935	113,583	0	61,352	13,914	39,961	7,477
June	205,342	140,664	1,230	63,448	8,211	43,047	12,190
July	233,132	164,834	6,547	61,751	6,701	45,175	9,875
August	225,817	164,253	678	60,886	8,864	42,671	9,351
September	225,527	170,100	58	55,369	7,826	40,599	6,944
October	175,739	109,698	0	66,041	14,297	40,652	11,092
November	172,235	112,218	0	60,017	10,520	37,240	12,257
December	212,433	146,925	0	65,508	13,910	41,718	9,880
1945 (five months)	613,981	333,876	0	280,105	64,404	175,910	39,791
January	182,286	105,706	0	76,580	18,243	49,339	8,998
February	149,671	86,902	0	62,769	14,824	40,668	7,277
March	111,529	63,656	0	47,873	7,761	30,301	9,811
April	99,979	46,309	0	53,670	14,716	30,349	8,605
May	70,516	31,303	0	39,213	8,860	25,253	5,100

[a] Represents tonnages delivered during the months indicated. Does not include passenger hauls.

[b] Includes Persian civilian supplies and wheat from Sultanabad, Iran. Does not include oil.

[c] Includes packed petroleum products and civilian and railway bulk oil.

[d] Includes supplies for transportation stores; U.S., British, and Russian military requirements in Iran; and local requirements of Anglo-Iranian Oil Co., United Kingdom Commercial Corporation, and Polish interests.

[e] Includes 63,149 tons of USSR supplies delivered by rail before August 1942.

Source: Headquarters, Persian Gulf Command, U.S. Army, Office of the ACofS for Operations, Movements Branch, Complete Summary of Port and Transportation Agencies Performance of PGC Operations Through 31 May 1945, 5 July 1945, pp. 18–21.

TABLE 6—FREIGHT HAULED IN THE PERSIAN CORRIDOR BY THE MOTOR TRANSPORT SERVICE, 1943–1944

Year and Month	Truck-miles Operated [b]	Freight Hauled [a] (Long Tons)							
		Total	USSR Supplies			U. S. Army Supplies			
			Lend-lease		Scrap Lumber [c]	Total	Motor Transport Service	Other	
			Tons	Percent of Total				North of Andimeshk	South of Andimeshk [d]
Total	99,967,863	618,946	408,460	66.0	2,953	207,533	18,385	81,227	107,921
1943	47,502,608	301,764	189,736	62.9	0	112,028	11,761	38,339	61,928
January	0	0	0	0.0	0	0	0	0	0
February	0	* 174	* 135	77.6	0	39	0	0	* 39
March	1,034,224	6,290	3,570	56.7	0	2,720	510	137	2,073
April	2,274,495	12,376	8,768	70.8	0	3,608	494	270	2,844
May	2,801,692	17,492	11,002	62.9	0	6,490	956	745	4,789
June	3,496,628	29,085	11,252	38.7	0	17,833	864	3,551	13,418
July	4,383,105	27,837	17,068	61.3	0	10,769	1,229	3,080	6,460
August	5,671,808	32,332	21,103	65.3	0	11,229	1,752	3,025	6,452
September	5,766,699	40,479	23,335	57.6	0	17,144	1,494	9,429	6,221
October	6,642,036	40,264	26,389	65.5	0	13,875	2,121	4,717	7,037
November	7,404,425	43,292	32,729	75.6	0	10,563	1,480	2,662	6,421
December	8,027,496	52,143	34,385	65.9	0	17,758	861	10,723	6,174
1944	52,465,255	317,182	218,724	69.0	2,953	95,505	6,624	42,888	45,993
January	7,397,820	42,679	32,385	75.9	0	10,294	622	4,297	5,375
February	3,116,032	18,725	10,365	55.4	138	8,222	474	3,589	4,159
March	6,222,164	38,657	29,443	76.2	65	9,149	619	5,209	3,321

April	3,545,846	29,784	12,641	42.4	831	16,312	298	5,050	10,964
May	3,297,439	22,579	13,616	60.3	0	8,963	327	4,372	4,264
June	6,646,864	37,113	31,745	85.5	0	5,368	827	2,496	2,045
July	7,718,592	42,197	36,727	87.0	0	5,470	603	2,165	2,702
August	6,921,251	39,624	32,794	82.8	0	6,830	537	2,366	3,927
September	2,285,933	15,649	8,187	52.3	858	6,604	1,095	2,549	2,960
October	2,836,959	15,168	5,196	34.3	1,061	8,911	329	5,538	3,044
November	2,476,355	15,007	5,625	37.5	0	9,382	893	5,257	3,232
December	0	0	0	0.0	0	0	0	0	0

[a] Represents supplies delivered during the months indicated. Does not include 95,023 tons of gravel hauled during the period September 1943–July 1944 for use in MTS construction of hard standing areas.

[b] Represents total miles operated, loaded and empty, except that mileage of maintenance and deadhead vehicles and vehicles engaged in gravel haul is not included.

[c] Represents packing-case lumber delivered to USSR.

[d] Consists chiefly of tonnages hauled by the Third Provisional Truck Company, operating separately from the main MTS fleet.

[e] Represents freight loaded 28 February and reported as February tonnage, although actually it did not leave Andimeshk until 1 March. (Motor Transport Service, Historical Report, 1–31 March 1943, p. 2, PGF 131-C).

Source: Persian Gulf Command, Motor Transport Service, Monthly Statistical Report of Operations for November 1944.

TABLE 7—NUMBER OF VEHICLES ASSEMBLED AT TRUCK ASSEMBLY PLANTS IN THE PERSIAN CORRIDOR, MARCH 1942–APRIL 1945

Assembled for	All Plants			Andimeshk [b] (TAP I)	Khorramshahr [b] (TAP II)	Bushire (TAP III)	Rafadiyah (TAP IV)	Andimeshk Ordnance Depot	Tehran Checkup Station
	Total	Cargo Trucks	Other [a]						
Total	[c] 191,075	172,842	18,233	79,961	88,060	[c] 6,865	[c] 16,161	24	4
USSR	184,112	166,760	17,352	78,627	83,218	6,628	15,611	24	4
U.S. Army	6,364	5,664	700	743	4,834	237	550	0	0
Iran	[c] 390	366	24	382	8	(c)	(c)	0	0
British Army	[c] 199	42	157	199	0	(c)	(c)	0	0
UKCC	[c] 10	10	0	10	0	(c)	(c)	0	0

[a] Consists chiefly of jeeps and weapons carriers.

[b] TAP I (Truck Assembly Plant I) was operated by General Motors Overseas Corporation from 26 March 1942 through 30 June 1943. Records of GMOC show a total output of 20,380 vehicles during this period, compared with 20,081 indicated by U.S. Army records for the same period. TAP II was operated by General Motors Overseas Corporation from 26 January 1943 through 30 June 1943. Records of GMOC show a total output of 9,690 vehicles during this period, compared with 9,670 indicated by U.S. Army records for the same period. The General Motors count includes vehicles still being processed on the last date of contractor operations. U.S. Army figures are based on delivery of completed vehicles.

[c] Does not include assemblies at the British-operated plants at Bushire and Rafadiyah for British or Iranian use. These antedated and also paralleled USSR assembly operations at these plants.

Source: Headquarters, Persian Gulf Command, U.S. Army, Office of the ACofS for Operations, Movements Branch, Complete Summary of Port and Transportation Agencies Performance of PGC Operations Through 31 May 1945, 5 July 1945, p. 24.

TABLE 8—MONTHLY OUTPUT OF ASSEMBLED VEHICLES AT TRUCK ASSEMBLY PLANT II, KHORRAMSHAHR, IRAN, 26 JANUARY 1943-19 APRIL 1945

Year and Month	All Vehicles	USSR Vehicles			U. S. Army Vehicles		
		Total	Cargo Trucks	Other Vehicles	Total	Cargo Trucks	Other Vehicles
Total[a]	88,052	83,218	81,579	1,639	4,834	4,679	155
1943	31,938	28,014	26,479	1,535	3,924	3,884	40
January	33	33	33	0	0	0	0
February	798	798	549	249	0	0	0
March	1,309	1,309	887	422	0	0	0
April	2,261	2,261	1,587	674	0	0	0
May	2,153	2,135	2,112	23	18	18	0
June	3,116	2,657	2,655	2	459	459	0
July	3,117	2,672	2,632	40	445	445	0
August	3,761	2,856	2,819	37	905	887	18
September	4,032	3,299	3,290	9	733	721	12
October	3,761	3,079	3,079	0	682	677	5
November	3,185	2,724	2,719	5	461	456	5
December	4,412	4,191	4,117	74	221	221	0
1944	41,434	40,636	40,532	104	798	775	23
January	3,857	3,676	3,654	22	181	179	2
February	3,935	3,820	3,803	17	115	115	0
March	3,359	3,328	3,302	26	31	31	0
April	2,396	2,326	2,325	1	70	70	0
May	3,400	3,371	3,371	0	29	29	0
June	3,655	3,597	3,597	0	58	50	8
July	3,916	3,842	3,842	0	74	73	1
August	3,861	3,770	3,762	8	91	91	0
September	3,055	3,055	3,025	30	0	0	0
October	2,147	2,094	2,094	0	53	53	0
November	3,102	3,078	3,078	0	24	23	1
December	4,751	4,679	4,679	0	72	61	11
1945	14,680	14,568	14,568	0	112	20	92
January	5,582	5,578	5,578	0	4	0	4
February	6,113	6,061	6,061	0	52	11	41
March	2,430	2,374	2,374	0	56	9	47
April	555	555	555	0	0	0	0

[a] Does not include 8 cargo trucks assembled for the Iranian Government.

Source: Headquarters, Persian Gulf Command, U.S. Army, Office of the ACofS for Operations, Movements Branch, Complete Summary of Port and Transportation Agencies Performance of PGC Operations Through 31 May 1945, 5 July 1945, pp. 25ff.

TABLE 9—MONTHLY OUTPUT OF ASSEMBLED VEHICLES AT TRUCK ASSEMBLY PLANT I, ANDIMESHK, IRAN, MARCH 1942–DECEMBER 1944

Year and Month	All Vehicles	USSR Vehicles			U. S. Army Vehicles		
		Total	Cargo Trucks	Other Vehicles	Total	Cargo Trucks	Other Vehicles
Total [a]	79,370	78,627	63,173	15,454	743	198	545
1942	8,816	8,816	8,239	577	0	0	0
April [b]	322	322	322	0	0	0	0
May	946	946	946	0	0	0	0
June	2,241	2,241	2,241	0	0	0	0
July	1,024	1,024	999	25	0	0	0
August	1,171	1,171	1,070	101	0	0	0
September	598	598	432	166	0	0	0
October	640	640	584	56	0	0	0
November	726	726	660	66	0	0	0
December	844	844	718	126	0	0	0
Undistributed [c]	304	304	267	37	0	0	0
1943	33,661	33,148	24,532	8,616	513	191	322
January	1,165	1,151	916	235	14	0	14
February	1,097	1,018	652	366	79	79	0
March	1,449	1,421	964	457	28	28	0
April	1,617	1,548	975	573	69	69	0
May	1,871	1,856	1,762	94	15	15	0
June	4,066	4,066	3,093	973	0	0	0
July	2,704	2,701	2,015	686	3	0	3
August	3,423	3,396	2,616	780	27	0	27
September	3,478	3,478	3,015	463	0	0	0
October	2,807	2,668	2,006	662	139	0	139
November	3,914	3,867	3,401	466	47	0	47
December	6,070	5,978	3,117	2,861	92	0	92
1944	36,893	36,663	30,402	6,261	230	7	223
January	5,116	5,062	3,205	1,857	54	4	50
February	3,632	3,604	3,454	150	28	0	28
March	2,667	2,638	2,613	25	29	0	29
April	2,525	2,518	2,352	166	7	1	6
May	1,828	1,826	1,812	14	2	0	2
June	3,525	3,525	3,130	395	0	0	0
July	4,407	4,407	3,537	870	0	0	0
August	4,673	4,663	3,644	1,019	10	0	10

See footnotes at end of table.

TABLE 9—MONTHLY OUTPUT OF ASSEMBLED VEHICLES AT TRUCK ASSEMBLY PLANT I, ANDIMESHK, IRAN, MARCH 1942–DECEMBER 1944—Continued

Year and Month	All Vehicles	USSR Vehicles			U. S. Army Vehicles		
		Total	Cargo Trucks	Other Vehicles	Total	Cargo Trucks	Other Vehicles
September	3,843	3,789	2,057	1,732	54	0	54
October	1,548	1,516	1,483	33	32	0	32
November	2,579	2,565	2,565	0	14	2	12
December	550	550	550	0	0	0	0

[a] Does not include 591 vehicles assembled for other agencies, distributed as follows: Iranian Government, 366 cargo trucks and 16 other vehicles; British, 42 cargo trucks and 157 other vehicles; United Kingdom Commercial Corporation, 10 cargo trucks. Monthly distribution for these assemblies is not available.

[b] Includes the first few vehicles assembled at the beginning of operations during the last week in March.

[c] Represents additional vehicles accepted by USSR during 1942 but not included in convoy lists on which other figures were based. The months in which these acceptances took place are not known.

Source: Headquarters Persian Gulf Command, U.S. Army, Office of the ACofS for Operations, Movements Branch Complete Summary of Port and Transportation Agencies Performance of PGC Operations Through 31 May 1945, 5 July 1945, pp. 25ff.

TABLE 10—MONTHLY DELIVERIES OF AIRCRAFT TO THE USSR BY U.S. ARMY IN THE PERSIAN CORRIDOR, 1942–1945 [a]

[Number of Planes]

Month	1942	1943	1944	1945
Total	742	2,446	1,678	8
January	0	102	172	0
February	1	67	133	1
March	5	114	170	0
April	33	214	270	0
May	81	152	158	7
June	128	96	301	0
July	111	141	170	0
August	51	204	101	0
September	56	253	90	0
October	68	395	55	0
November	110	393	37	0
December	98	315	21	0

[a] Includes data for 995 aircraft flown to Abadan, Iran, as well as for 3,879 cased aircraft shipped to Abadan by water and assembled for the USSR. Does not include data for aircraft turned over to the USSR unassembled.

Source: Headquarters, Air Matériel Command, Special One-Time Report of Deliveries of AAF Aircraft to the USSR, August 1947.

TABLE 11—AIRCRAFT DELIVERED TO THE USSR BY U.S. ARMY IN THE PERSIAN CORRIDOR, BY TYPE, 1942–1945 [a]

[Number of Planes]

Type	Total	1942	1943	1944	1945
All types	4,874	742	2,446	1,678	8
A-20, Bomber (Light) [b]	1,269	468	491	309	1
DB-7, Bomber (Light) [c]	151	150	1	0	0
B-25, Bomber (Med.) [d]	124	103	21	0	0
P-39, Fighter	2,030	2	1,159	866	3
P-40, Fighter	1,091	19	755	317	0
P-47, Fighter	188	0	0	184	4
AT-6, Trainer	21	0	19	2	0

[a] Does not include data for aircraft turned over to the USSR unassembled.

[b] Includes 871 A-20's flown to Abadan, Iran.

[c] British designation for A-20 light (fighter) bomber.

[d] All B-25's were flown to Abadan, Iran. Later redesignated as light bomber.

Source: Headquarters, Air Matériel Command, Special One-Time Report of Deliveries of AAF Aircraft to the USSR, August 1947.

TABLE 12—ASSIGNED STRENGTH OF U.S. ARMY FORCES IN THE PERSIAN CORRIDOR,[a] 1943–1945

Month	1943			1944			1945		
	Total	Officers[b]	Enlisted Men	Total	Officers[b]	Enlisted Men	Total	Officers[b]	Enlisted Men
January	10,949	723	10,226	29,445	1,824	27,621	26,082	1,740	24,342
February	12,868	808	12,060	29,691	1,851	27,840	20,883	1,427	19,456
March	18,509	1,132	17,377	29,286	1,956	27,330	18,893	1,229	17,664
April	18,513	1,167	17,346	29,300	1,806	27,494	15,793	1,112	14,681
May	23,208	1,409	21,799	28,853	1,803	27,050	16,063	1,097	14,966
June	25,423	1,703	23,720	28,493	1,756	26,737	13,547	931	12,616
July	27,320	1,748	25,572	28,296	1,767	26,529	9,173	667	8,506
August	28,584	1,811	26,773	28,168	1,732	26,436	6,922	566	6,356
September	28,218	1,812	26,406	27,739	1,698	26,041	[c] 5,740	[c] 453	[c] 5,287
October	29,545	1,839	27,706	27,710	1,786	25,924	5,787	443	5,344
November	29,589	1,846	27,743	26,301	1,693	24,608	4,263	324	3,939
December	28,757	1,836	26,921	26,647	1,718	24,929	([d])	([d])	([d])

[a] Represents assigned strength as of the last day of each month. Attached strength in the area is not included, but generally was less than 2,000 and consisted primarily of ATC personnel. Prior to 1943, U.S. Army personnel in the Persian Corridor amounted only to a few hundred until the first major force arrived in December 1942, raising total assigned strength to 451 officers and 5,456 enlisted men by the end of that month.

[b] Includes warrant officers, nurses, dietitians, and physical therapists.

[c] Data not reported. The total shown was taken from PGSC Report to War Department Budget Officer for House Subcommittee on War Department Appropriations, 5 October 1945, p. 1. Data for officers and enlisted men estimated.

[d] Final evacuation of command troops occurred 30 December 1945.

Source: War Department General Staff, Office of the Adjutant General, Machine Records Branch, Strength of the Army STM-30, for respective months.

TABLE 13—DISTRIBUTION OF U.S. ARMY CIVILIAN EMPLOYEES IN THE PERSIAN CORRIDOR, 1943–1945

[SELECTED DATES]

Nationality and Type of Work	1943		1944		1945
	30 April	31 December	31 August	31 December	31 July
Total	24,285	41,099	35,126	16,460	6,145
American	[a] 317	37	4	0	0
Native	23,968	40,682	34,640	15,949	5,850
Polish	0	380	482	511	295
Assembly Plants, Aircraft	[b]	994	[c] 143	13	0
Assembly Plants, Truck	[b]	5,448	4,308	2,056	[d]
Construction, Highway [e]	796	1,771	1,029	48	54
Construction, Other	14,758	8,039	3,763	1,696	178
Depots (excludes Ordnance)	1,346	3,309	1,909	1,564	1,529
Hospitals	197	419	703	421	64
Motor Transport Service	578	8,722	8,126	224	[f]
Ordnance	3,044	1,293	1,156	1,118	377
Ports	2,055	6,463	7,373	3,879	647
Railway [g]	839	549	465	348	50
Service and Supply [h]	672	4,092	6,151	5,093	3,246

[a] Engaged in road and building construction and in projects for the district engineers, Tehran District.
[b] Data not available; excluded from total.
[c] After 19 July 1944 aircraft assembly was restricted to planes then on hand or en route.
[d] Operations ceased in April 1945.
[e] Includes maintenance workers.
[f] Operations of convoys ended 1 December 1944.
[g] Does not include civilians directly employed by the ISR, numbering some 30,000 at the peak in 1944.
[h] Includes maintenance of buildings and utilities; supply of posts, areas, and operating services; operation of motor pools and laundries; and employees such as clerks, stenographers, houseboys, janitors, and waitresses.

Source: Semimonthly and monthly reports of civilian employees, 15 April 1943–31 July 1945 (adjusted) PGF 151.

TABLE 14—ESTIMATED COSTS OF CONSTRUCTING FIXED INSTALLATIONS IN THE PERSIAN CORRIDOR, 1943–1945 [a]

Type of Construction	Total	United States			British [b]		
		Total	Construction	Lend-lease [c]	Total	Construction	Reciprocal Aid [d]
Total	$98,233,000	$61,828,000	$61,103,000	$725,000	$36,405,000	$31,698,000	$4,707,000
Ports [e]	14,838,000	7,391,000	7,122,000	269,000	7,447,000	5,250,000	2,197,000
Military Railway Service	2,184,000	2,033,000	2,033,000	0	151,000	92,000	59,000
Motor Transport Service	4,619,000	4,334,000	4,334,000	0	285,000	0	285,000
Aid-to-Russia Highways	54,157,000	35,038,000	35,006,000	32,000	19,119,000	18,862,000	257,000
Signal Service	5,977,000	1,848,000	1,847,000	1,000	4,129,000	3,806,000	323,000
Petroleum Operations	841,000	368,000	0	368,000	473,000	473,000	0
Other [f]	15,617,000	10,816,000	10,761,000	55,000	4,801,000	3,215,000	1,586,000

[a] Represents total cumulative costs from the beginning of operations through 31 December 1944.

[b] Costs shown apply only to those installations used by or available to the U.S. Army, including installations in which the U.S. Army had no financial interest. British costs converted to U.S. dollars at the 1945 exchange rate of $4.035 to the pound.

[c] Represents value of U.S. contributions to British construction.

[d] Represents value of British contributions to U.S. construction.

[e] Comprises installations at Bandar Shahpur, Khorramshahr (including Russian Dump), and Cheybassi.

[f] Includes such installations as posts, camps, and stations other than those for MRS; depots; airfields; assembly plants; hospitals; checkup stations.

Source: Joint Report on Construction Cost Data (as of 1 December 1944) adopted by British and American Agencies at Surplus Property Disposal Meeting, Tehran, 14 March 1945, PGF 127.

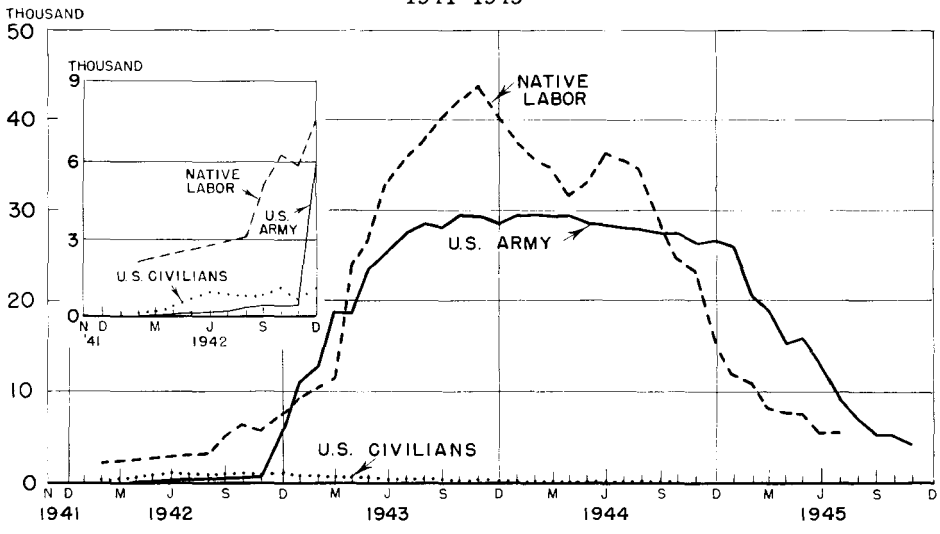
TABLE 15—DRUM PRODUCTION AT BAHREIN, 1944–1945

Month	Quantity	Month	Quantity
Total	318,886	1945	277,579
1944	41,307	January	25,620
		February	41,691
July	54	March	30,779
August	4,511	April	48,949
September	310	May	23,665
October	889	June	42,698
November	15,724	July	64,177
December	19,819		

Source: Persian Gulf Command, Plants Branch, Operations Division, Historical Report for period 1 May 1945–10 August 1945, Inclosure I.

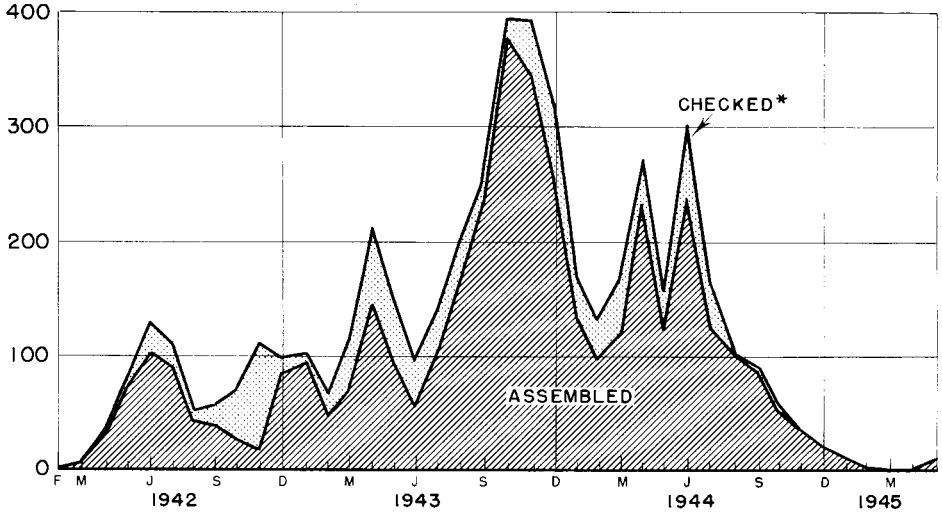
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CHART 2—MANPOWER IN U. S. ARMY OPERATIONS IN THE PERSIAN CORRIDOR, 1941–1945



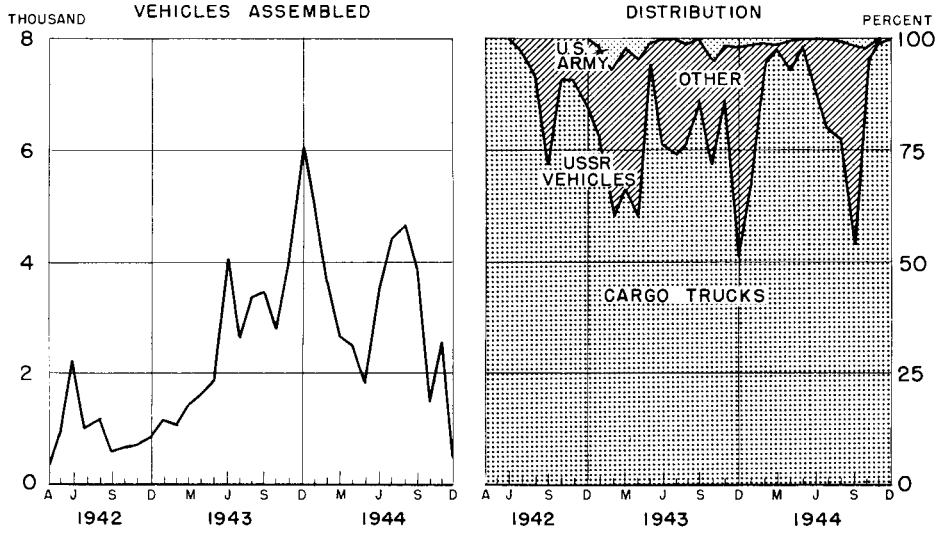
Source: Table 12; PGSC and PGC Semimonthly and Monthly Reports of Civilian Employees, April 1943–July 1945; History of U. S. Military Iranian Mission, 20 March 1943, by 1st Lt. Victor E. Dietze.

CHART 3—AIRCRAFT DELIVERED TO THE USSR AT ABADAN, IRAN, 1942–1945



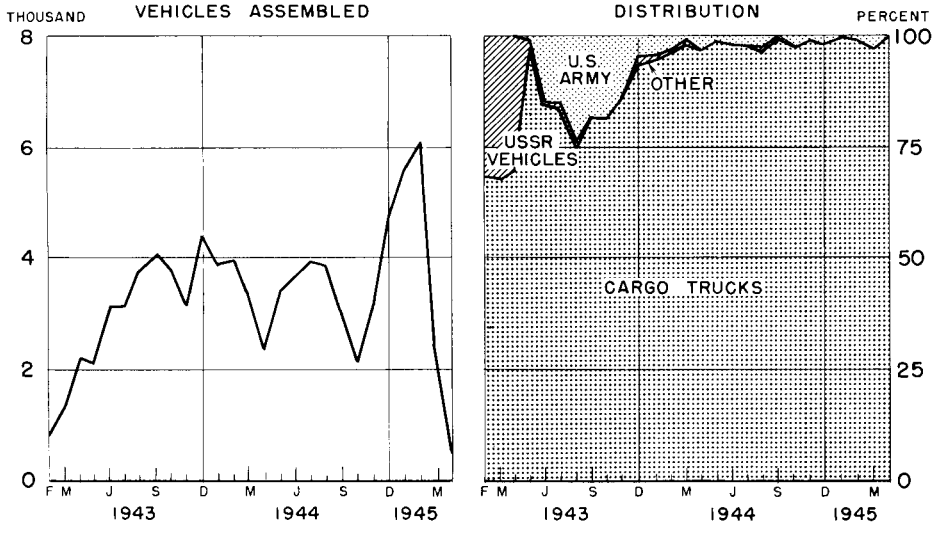
*Represents aircraft flown in: no assembly necessary.
Source: Table 10.

CHART 4—VEHICLES ASSEMBLED AT TRUCK ASSEMBLY PLANT 1, ANDIMESHK, IRAN, 1942–1944



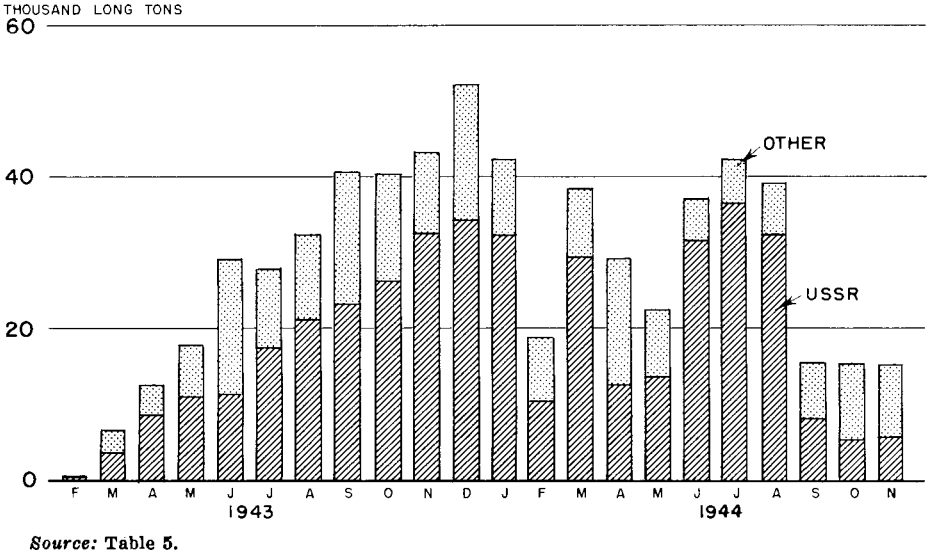
Source: Table 9.

CHART 5—VEHICLES ASSEMBLED AT TRUCK ASSEMBLY PLANT II, KHORRAMSHAHR, IRAN, 1943–1945



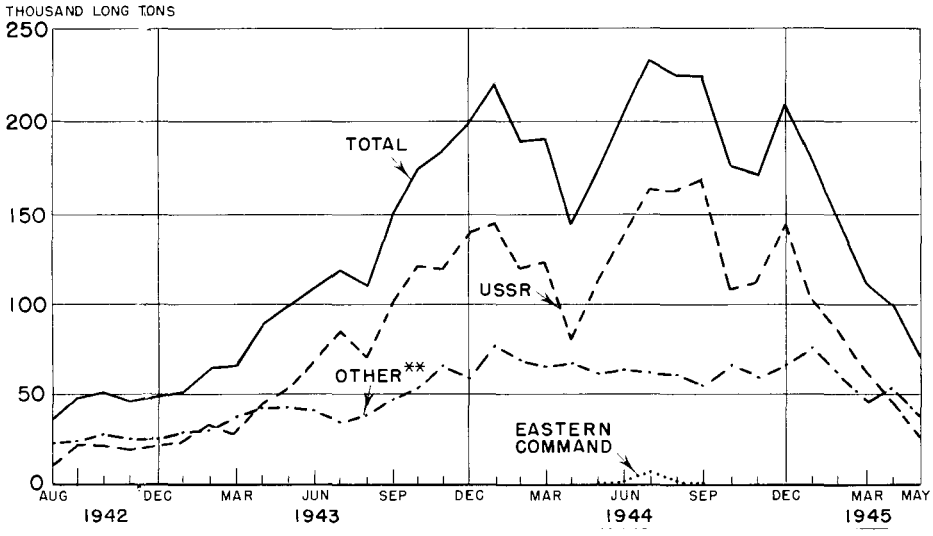
Source: Table 8.

CHART 6—FREIGHT HAULED IN THE PERSIAN CORRIDOR BY THE MOTOR TRANSPORT SERVICE, 1943–1944



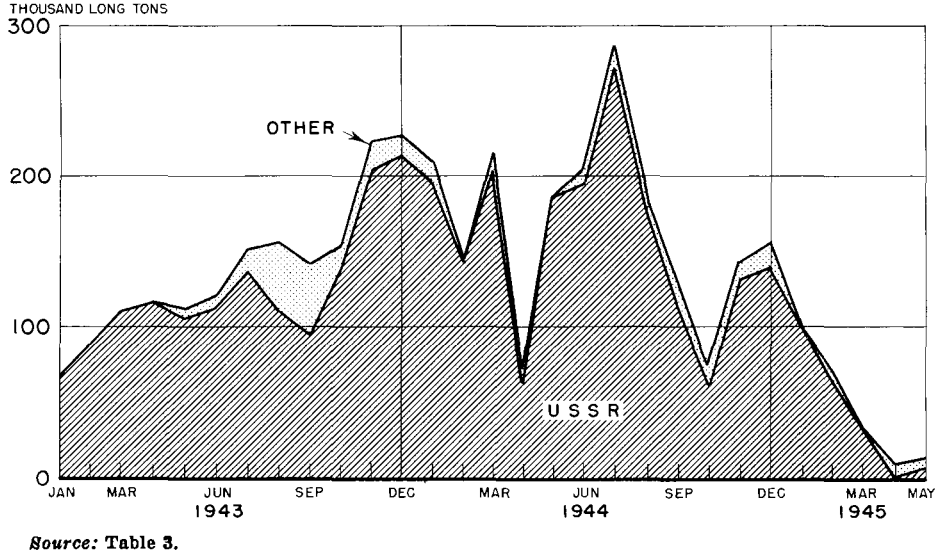
Source: Table 5.

CHART 7—FREIGHT HAULED NORTH OF ANDIMESHK, IRAN, ON IRANIAN STATE RAILWAY, AUGUST 1942–MAY 1945



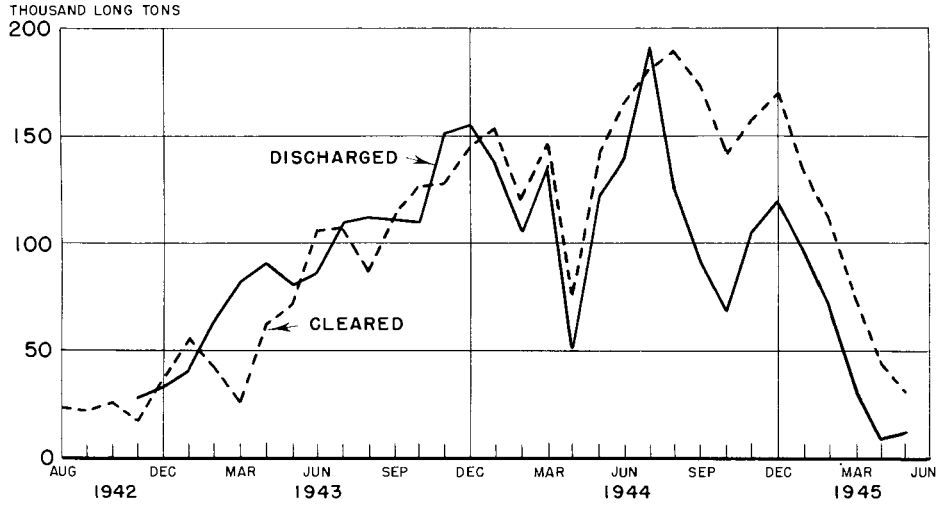
Source: Table 5.

CHART 8—CARGO DISCHARGED AT AMERICAN-OPERATED PORTS IN THE PERSIAN GULF, JANUARY 1943–MAY 1945



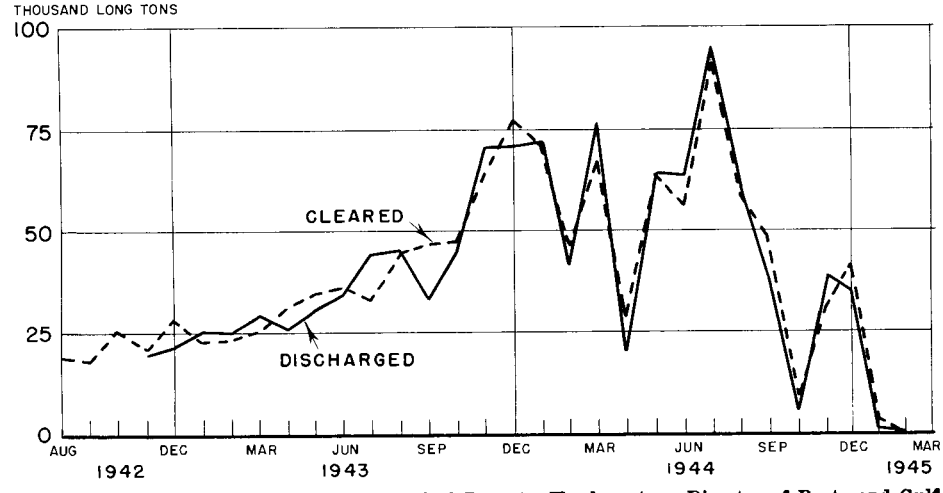
Source: Table 3.

CHART 9—DISCHARGE AND INLAND CLEARANCE OPERATIONS AT KHORRAMSHAHR, IRAN, AUGUST 1942–MAY 1945



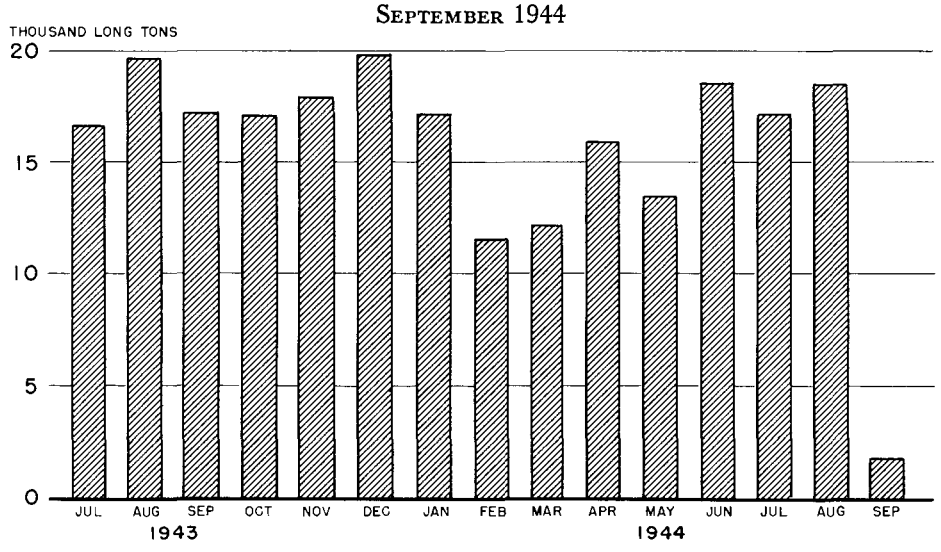
Source: Table 3, supplemented by Historical Reports, Headquarters, Director of Ports and Gulf District, PGC, for respective months.

CHART 10—DISCHARGE AND INLAND CLEARANCE OPERATIONS AT BANDAR SHAHPUR, IRAN, AUGUST 1942–JANUARY 1945



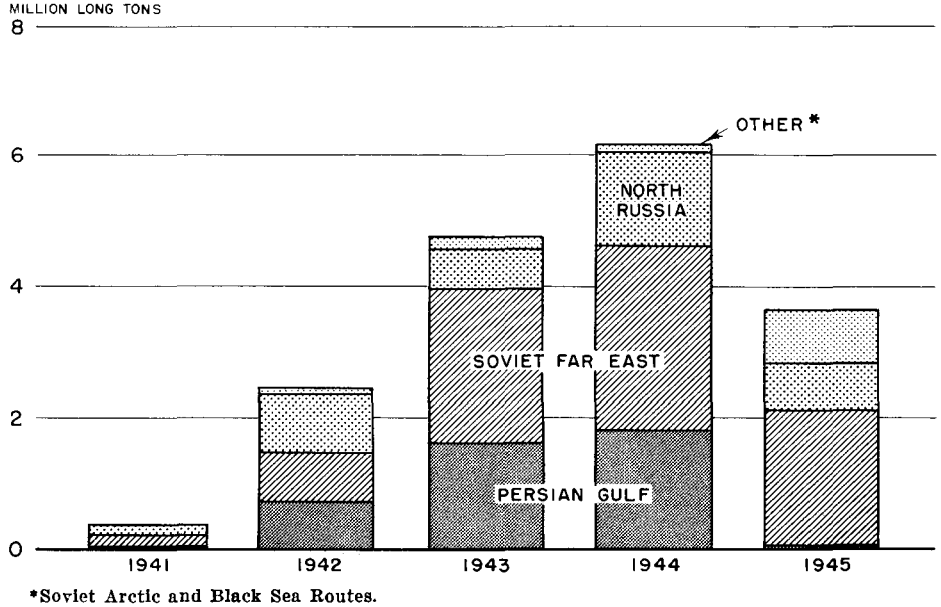
Source: Table 3, supplemented by Historical Reports, Headquarters, Director of Ports and Gulf District, PGC, for respective months. (Clearances for January–April 1944 interpolated; complete data not available.)

CHART 11—USSR CARGO LANDED AT CHEYBASSI, IRAQ, JULY 1943–SEPTEMBER 1944



Source: Study of Port Operations—Cheybassi, Ports Branch Headquarters, PGC, for respective months.

CHART 12—CARGO SHIPPED TO THE USSR FROM THE WESTERN HEMISPHERE, BY ROUTE, 22 JUNE 1941–20 SEPTEMBER 1945



*Soviet Arctic and Black Sea Routes.

Source: Table 1.

Glossary

ACofS	Assistant Chief of Staff
AG	Adjutant general
AGO	Adjutant General's Office
AIOC	Anglo-Iranian Oil Company
AMET	Africa–Middle East Theater
ASF	Army Service Forces
ASF CCF	Army Service Forces, Current Classified Files
ASF NCF	Army Service Forces, Noncurrent Classified Files
ATC	Air Transport Command
BAPCO	Bahrein Petroleum Company
BMC	Compania Constructora Bechtel-McCone
Bn	Battalion
Br	Branch
Bull	Bulletin
CBI	China–Burma–India theater
CCS	Combined Chiefs of Staff
Cedar	Civilian Emergency Defense Aid to Russia
CG	Commanding General
CinC	Commander-in-Chief
Cir	Circular
Civ	Civilian
CO	Commanding Officer
Co	Company
CofEngrs	Chief of Engineers
CofOrd	Chief of Ordnance
CofS	Chief of Staff
CofTrans	Chief of Transportation
Coll	Collections
Comd	Command
Comdr	Commander
Conf	Conference
Cons	Construction
Contl	Control
CSP	Combined Staff Planners
DCofS	Deputy Chief of Staff
Dir	Director

Dist	District
Div	Division
Douglas Files	Foreign Projects File, Storage Files, Douglas Aircraft Company, Santa Monica, California
Engr	Engineer
Engrg	Engineering
Folspen	Foley Bros., Spencer, White and Prentis
G–1	Personnel section of divisional or higher staff
G–2	Intelligence section
G–3	Operations section
G–4	Supply section
GMOC	General Motors Overseas Corporation
GO	General Order
GOC	General Officer Commanding
GS	General Staff
Gulf Dist	Gulf District Headquarters Files, Persian Gulf Command, now filed at the Kansas City Records Center, Adjutant General's Office, Kansas City, Mo.
HOTI	History of the Persian Gulf Command, prepared by Historical Section, Office of Technical Information, Headquarters, Persian Gulf Command
Hq AMET	AG decimal files seen at Headquarters, Africa–Middle East Theater, Cairo, now filed at the Kansas City Records Center
Hq PGC	AG decimal files seen at Headquarters, Persian Gulf Command, Tehran, now filed at the Kansas City Records Center
HRS DRB AGO	Historical Records Section, Departmental Records Branch, Adjutant General's Office
IG	Inspector general
ISR	Iranian State Railway
IWT	Inland Water Transport
JA	Judge advocate
JCS	Joint Chiefs of Staff
MA	Military Attaché
Maxwell Papers	Personal files lent by General Maxwell to the Middle East Section of the Office of the Chief of Military History and returned to him upon his retirement from the Army
ME	Middle East
MEF	Middle East Files; Middle East Forces

MESC	Middle East Supply Center
MID	Military Intelligence Division
Min	Minutes
Mis Br	Missions Branch
MIS MID WD	Military Intelligence Service, Military Intelligence Division, War Department
MRS	Military Railway Service
Mtg	Meeting
MTS	Motor Transport Service
NAD	North Atlantic Division
NADEF	North Atlantic Division Engineer Files, New York
NYODF	New York Ordnance District Files, New York
OCofEngrs	Office of the Chief of Engineers
OCMH	Office of the Chief of Military History
OCofOrd	Office of the Chief of Ordnance
OCSigO	Office of the Chief Signal Officer
OCofTrans	Office of the Chief of Transportation
OPD	Operations Division, War Department General Staff
OpNav	Office of the Chief of Naval Operations
OTI	Office of Technical Information
PAI Force	Persia and Iraq Force
Pers	Personnel
PGC	Persian Gulf Command
PGF	Historical Files, Office of Technical Information, Headquarters, Persian Gulf Command, now at Office of the Chief of Military History
PGSC	Persian Gulf Service Command
QMG	Quartermaster General
RAF	Royal Air Force
Regt	Regiment
S–1	Personnel section of regimental or lower staff
S–2	Intelligence section
S–3	Operations section
S–4	Supply section
Serv	Service
SL	Material formerly filed in Persian Gulf Service Command boxes at St. Louis, now filed at the Kansas City Records Center

SL AMET	AG decimal files from Headquarters, Africa–Middle East Theater, formerly filed in drawers and cabinets at St. Louis, now filed at the Kansas City Records Center
SOS	Services of Supply
SO	Special Order
SWP Office	Head Office, Spencer, White and Prentis, New York
TAG	The Adjutant General
TAP	Truck assembly plant
TUP	Twin-unit pack
UKCC	United Kingdom Commercial Corporation
USAFIME	U.S. Army Forces in the Middle East
WDGS	War Department General Staff
White Office	Head Office, J. G. White Engineering Corporation, New York
WPD	War Plans Division, War Department General Staff
WSA	War Shipping Administration

UNITED STATES ARMY IN WORLD WAR II

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Chart 1—United States Army Forces in the Middle East

① Det 2d Sig Serv Bn remained at Asmara after 28 Feb '46 under direct control of Chief Signal Officer, War Dept

PREPARED BY WARREN D. HALL, JR., FOR HISTORICAL DIVISION, SSUSA

APPROACHES TO THE MIDDLE EAST

RAILROAD
OIL FIELD

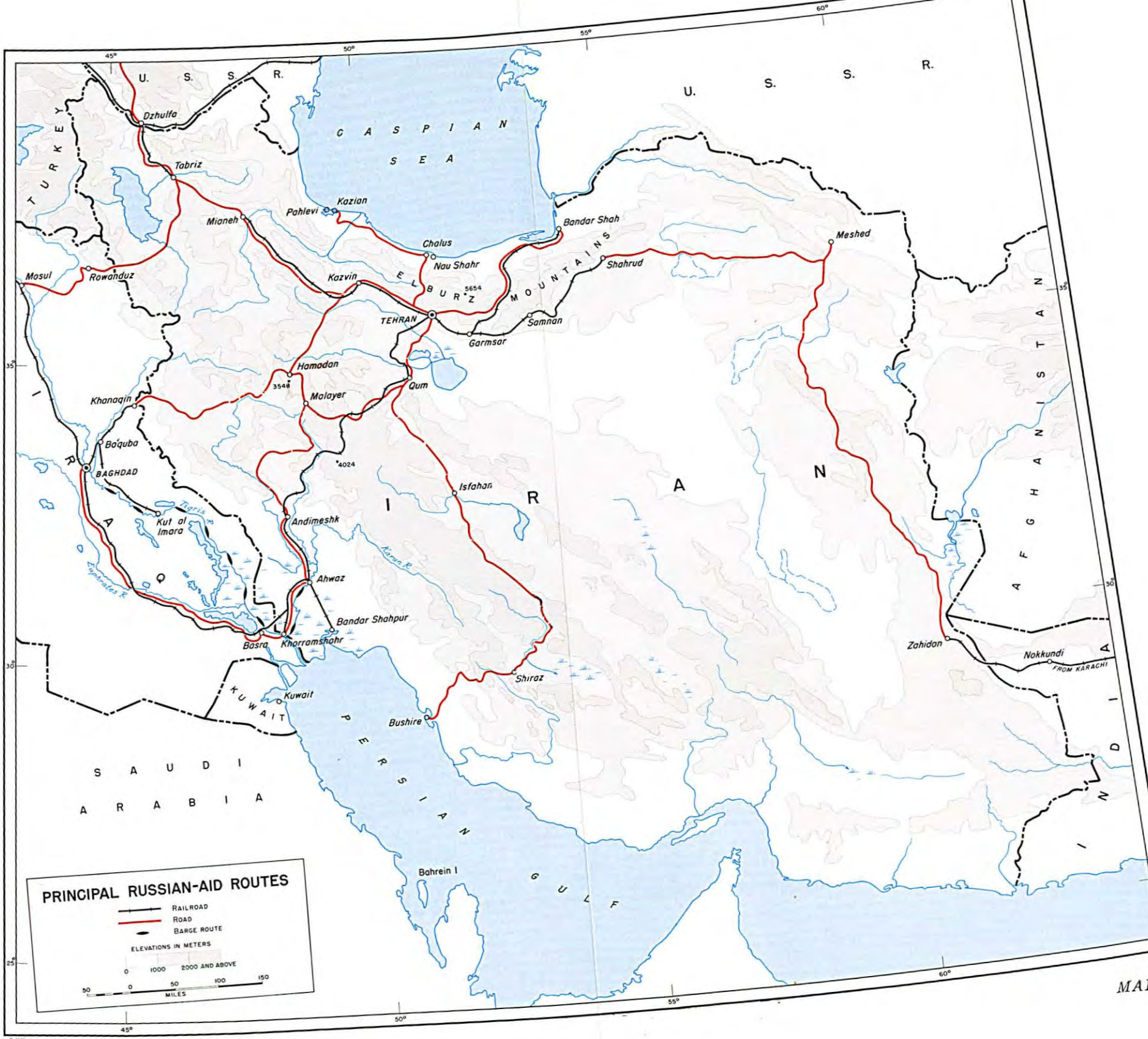
0 200 400 600 800 1000 MILES
45° 30° 15°

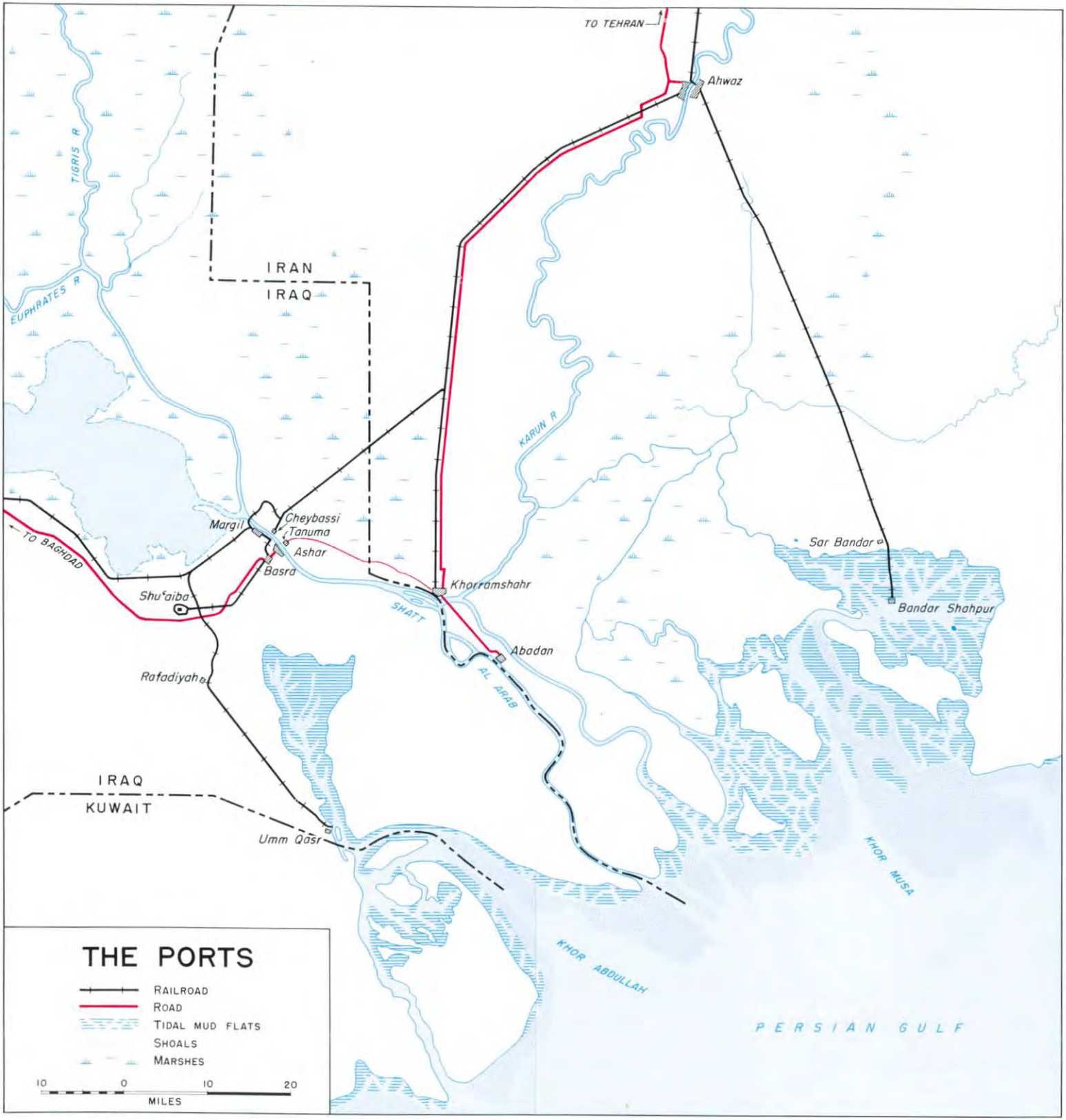
U S S R
Stalingrad
Volga R.
Chapaev
Rostov
SEA OF AZOV
Odessa
Sevastopol
Novorossisk
Maikop
BLACK SEA
CAUCASUS
Grozny
CASPIAN SEA
Baku
Krasnovodsk
Sary-Uzek
I-ning
TURKESTAN
CHINESE SINKIANG
INNER MONGOLIA
POLAND
CZECHOSLOVAKIA
GERMANY
AUSTRIA
HUNGARY
ROMANIA
YUGOSLAVIA
BULGARIA
ITALY
GREECE
Istanbul
TURKEY
Dzhulfa
Tabriz
Ashkhabad
Mianeh
Zenjan
Bandar Shah
Tehran
MALTA
TUNISIA
CRETE
MEDITERRANEAN SEA
Mosul
Kirkuk
Euphrates R.
Tigris R.
Baghdad
IRAN
AFGHANISTAN
Tripoli
SYRIA
LEBANON
Haifa
PALESTINE
TRANS-JORDAN
IRAQ
Bengazi
Tobruk
Halfaya Pass
Mersa Matruh
Alexandria
El Alamein
Cairo
Suez
Ahwaz
Bandar Shahpur
Basra
Persian Gulf
TIBET
NEPAL
BHUTAN
ASSAM
Agra
Karachi
Kunming
LIBYA
EGYPT
SAUDI ARABIA
RED SEA
Nile
BALUCHISTAN
INDIA
Calcutta
Bombay
BURMA
FRENCH INDO-CHINA
THAILAND
ARABIAN SEA
Bay of Bengal
ANGLO-EGYPTIAN SUDAN
Asmara
ERITREA
YEMEN
ADEN
Aden
Gulf of Aden
ETHIOPIA
BRITISH SOMALILAND
ITALIAN SOMALILAND
ANDAMAN ISLANDS
CEYLON
FRENCH EQUATORIAL AFRICA
BELGIAN CONGO
KENYA
INDIAN OCEAN
SUMATRA
MALAYA
Singapore

15° 30° 45° 60° 75° 90° 105°

R.N. Hanson

MAP I


U. S. S. R.
TURKEY
Dzhulfa
Tabriz
CASPIAN SEA
Kazian
Pahlevi
Mianeh
Bandar Shah
Chalus
Nau Shahr
Meshed
Shahrud
Mosul
Rowanduz
Kazvin
ELBURZ 5654
MOUNTAINS
TEHRAN
Samnan
Garmsar
Hamadan
3548
Qum
Malayer
Khanaqin
Ba'quba
BAGHDAD
4024
Isfahan
IRAN
AFGHANISTAN
Tigris R.
Kut al Imara
Andimeshk
Karun R.
Euphrates R.
Ahwaz
Bandar Shahpur
Basra
Khorramshahr
Zahidan
Nokkundi
FROM KARACHI
INDIA
Shiraz
KUWAIT
Kuwait
Bushire
SAUDI ARABIA
PERSIAN GULF
Bahrein I
PRINCIPAL RUSSIAN-AID ROUTES
RAILROAD
ROAD
BARGE ROUTE
ELEVATIONS IN METERS
0 1000 2000 AND ABOVE
50 0 50 100 150
MILES
45°
50°
55°
60°
35°
30°
25°



T Brooks

MAP 5