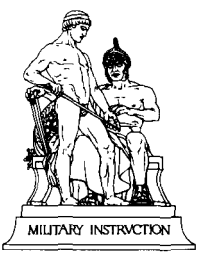


ORDER OF BATTLE OF THE UNITED STATES LAND FORCES IN THE WORLD WAR

Zone of the Interior: Organization and Activities of the War Department

Volume 3, Part 1



CENTER OF MILITARY HISTORY
UNITED STATES ARMY
WASHINGTON, D.C., 1988

Library of Congress Cataloging-in-Publication Data

Order of battle of the United States land forces in the World War.

Reprint. Originally published: Washington: U.S. G.P.O., 1931-1949.

Contents: v. 1. American Expeditionary Forces: General Headquarters, armies, Army Corps, services of supply, and separate forces—v. 2. American Expeditionary Forces: divisions—v. 3. Zone of the interior, pt. 1. Organization and activities of the War Department. pt. 2. Territorial departments, tactical divisions organized in 1918, and posts, camps, and stations. pt. 3. Directory of troops.

Supt. of Docs. no.: D114.2:B32

1. United States. Army—History—World War, 1914-1918. I. Center of Military History.

D570.073 1987 940.4'12'73 87-600306

Facsimile Reprint

An appendix, "Posts, Camps, and Station Index," has been added to Volume 3, Part 2. The index pertains to installations referenced in both Parts 1 and 2.

First Printed 1949—CMH Pub 23-3

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

Foreword

The United States entered "the war to end all wars" seventy years ago, but much may still be learned from a study of that vast military and diplomatic experience. Accordingly, the Center of Military History is now bringing back into print a series of volumes on the World War I period. The facsimile reprint of the *Order of Battle of the United States Land Forces in the World War,* in five volumes, provides a logical introduction to the series. It will be followed shortly by a newly formatted edition of the *United States Army in the World War (1917-1919),* a major collection of documents pertaining to the conflict.

The concise and unique data in the *Order of Battle* is central to any serious examination of the Army's involvement in World War I. The Center's predecessors—the Army War College's Historical Section, and the Special Staff's Historical Division—originally published this work in three volumes. The first two concentrated on the American Expeditionary Forces (AEF). Volume 1 covers the AEF's general headquarters; the American Services of Supply; armies; army corps; and separate forces, including the three French army corps under American command in 1918 as well as American units in North Russia and Siberia. Volume 2 provides outline histories of the AEF's divisions. The essays in these two volumes combine information about the command and composition of units with tables that offer the reader a broad survey of operations in both major and minor theaters and the rear areas. Volume 3, consisting of five chapters organized in two parts, presents an array of useful information on the zone of the interior. Part 1 includes the organization and activities of the War Department, the territorial departments, the divisions that did not deploy overseas, and data about posts, camps, and stations. Part 2 consists of a directory of troops, covering all organizations that made up the Army between 1917 and 1919. Each volume begins with a guide to the use of the material.

In publishing this facsimile reprint, the Center has made some formatting changes to assist the modern reader, but the original text is unchanged. Volumes 1 and 2 are reprinted intact. Volume 3, first published in two parts, is now divided into three, in three separate volumes. For the reader's convenience, a new appendix, "Posts, Camps, and Stations

Index," has been added to the new Part 2. The original Part 2, the directory of troops, is now Part 3. The volume's consecutive pagination remains the same. To all volumes the Center has added its own front matter and, after the half-title page, incorporated relevant pages of the original introductory material (indicated by brackets around original folios).

Any work that attempts to describe such a vast and complex subject inevitably includes errors of both omission and commission. The *Order of Battle* is no exception. No attempt has been made to correct any errors in the work. For those students who wish to pursue these matters, they will find most of the original source material in the custody of the National Archives and Records Administration. What remains of the original manuscript for the volumes is in the custody of the Center and is available for examination.

In increasing numbers, military historians are coming to realize that the Army's experiences in World War I offer students of the profession of arms a vast classroom in which they might study the many facets of their subject. The *Order of Battle* is not a definitive guide, but it is a fine place to begin any in-depth study of that mighty war.

WILLIAM A. STOFFT
Brigadier General, USA
Chief of Military History

Washington, D.C.
7 August 1987

Contents

	Page
GENERAL INTRODUCTION—OUTLINE OF THE ZONE OF THE INTERIOR	1
Extent	1
Exective Branch of the Government	2
Organization	2
Activities	12
Chapter	
I. ORGANIZATION AND ACTIVITIES OF THE WAR DEPARTMENT	13
Introduction	13
War Department	13
War Department General Staff	24
Adjutant General's Department	66
Air Service	92
Chemical Warfare Service	130
Chief of Coast Artillery	145
Construction Division	154
Corps of Engineers	177
Chief of Field Artillery	197
Finance Service	207
Inspector General's Department	220
Bureau of Insular Affairs	228
Judge Advocate General's Department	230
Medical Department	242
Militia Bureau	281
Motor Transport Corps	314
Ordance Department	324
Provost Marshal General's Department	367
Quartermaster Corps and Purchase and Storage Service	409

Chapter *Page*

Real Estate Service 460
Signal Corps 473
Tank Corps 491
Transportation Service, Including Embarkation and Inland Traffic Services 498

II. TERRITORIAL DEPARTMENTS 549
Introduction 549
Northeastern Department 557
Eastern Department 564
Southeastern Department 576
Central Department 589
Southern Department 602
Western Department 614
Panama Canal Department 625
Hawaiian Department 627
Philippine Department 630

III. TACTICAL DIVISIONS ORGANIZED IN 1918 637
Introduction 637
9th Division 641
10th Division 643
11th Division 644
12th Division 646
13th Division 648
14th Division 650
15th Division 651
16th Division 653
17th Division 655
18th Division 656
19th Division 658
20th Division 660
94th Division (Puerto Rican draft) 661
95th Division 662
96th Division 663
97th Division 665
98th Division 666
99th Division 667
100th Division 668
101st Division 669
102d Division 670
15th Cavalry Division 671
1st Division, Philippine National Guard 674

Chapter *Page*

IV. POSTS, CAMPS, AND STATIONS 677
Introduction 677
Departmental Index 682
Northeastern Department 689
Eastern Department 710
Southeastern Department 808
Central Department 859
Southern Department 898
Western Department 935
Panama Canal Department 973
Hawaiian Department 979
Philippine Department 983

V. DIRECTORY OF TROOPS 993
Introduction 993
Unit Index 996
Air Service 1122
Artillery 1129
Cavalry 1270
Chemical Warfare Service 1275
Depot Brigades 1277
Divisions 1310
Engineers 1329
Infantry 1361
Machine Gun Units 1407
Medical Department 1427
Motor Transport Corps 1471
Ordnance Department 1491
Quartermaster Corps 1494
Signal Corps 1527
Tank Corps 1542
Transportation Corps 1548
United States Guards 1566
Veterinary Corps 1571

ABBREVIATIONS 1575
LIST OF SOURCE MATERIAL 1578
CALENDAR 1591

Appendix

Posts, Camps, and Stations Index ..... *follows* 992

Charts

No.		Page
1.	Organization of War Department, Apr. 6, 1917	16–17
2.	Initial Service of Supply	19
3.	Organization of War Department, Sept. 1, 1918	21
4.	Organization of War Department, Sept. 30, 1919	23
5.	Organization of the General Staff	31
6.	Organization of the General Staff, Jan. 11, 1918	33
7.	Organization of the General Staff, Feb. 1918	34
8.	Organization of Executive Division, General Staff	35
9.	Organization of the General Staff, May 1918	38
10.	Functions of Purchase, Storage, and Traffic Division, June 21, 1918	40
11.	Organization of the General Staff, Aug. 1918	41
12.	Organization of the Purchase, Storage, and Traffic Division, June 1919	50
13.	Organization of the General Staff, Aug. 1919	51
14.	Mobilization	55
15.	Organization of Adjutant General's Department, Aug. 1917	69
16.	Organization of Air Division, Signal Corps	96
17.	Organization of Supply Division, Signal Corps	97
18.	Organization of Department of Military Aeronautics, May 1918	99
19.	Organization of Department of Military Aeronautics, Aug. 1918	98
20.	Organization of Supply Section, Department of Military Aeronautics	101
21.	Dual Organization of Spruce Production Division and U.S. Spruce Production Corporation	102
22.	Organization of the Aircraft Production Bureau, Nov. 1918	103
23.	Organization of Air Service, Mar. 1919	104
24.	Diagram Showing Stages of Flying Training	124
25.	Organization of Chemical Warfare Service, Washington Office and Field Force	135
26.	Field Organization Maintained at Projects of Construction Division	159
27.	Organization of Military Railways, Director General's Office, Feb. 1918	180
28.	Organization of Corps of Engineers for Oversea Supply, June 1918	181
29.	Organization of the Office of the Chief of Engineers, Feb. 1919	183
30.	Office of the Chief of Field Artillery	198
31.	Duties of Finance Sections Before Consolidation	208

No. *Page*

32. Finance Department, Purchase, Storage, and Traffic Division, Oct. 16, 1918 209
33. Finance Department, Purchase, Storage, and Traffic Division, Feb. 24, 1919 211
34. Finance Service, War Department 212
35. Organization of Inspector General's Department, Nov. 1918 222
36. Organization of Surgeon General's Office, June 1918 245
37. Organization of Surgeon General's Office, Dec. 1918 246
38. Motor Division, Quartermaster General's Office 316
39. Motor Transport Service, Quartermaster Corps, June 28, 1918 317
40. Office of the Chief of the Motor Transport Corps, Nov. 11, 1918 318
41. Organization of the Ordnance Department, Jan. 1918 328
42. Organization of the Office of the Chief of Ordnance, Aug. 1918 329
43. Organization of the Office of the Chief of Ordnance, Nov. 1918 330
44. Organization of Ordnance Chief's Office, Feb. 1, 1919 332
45. Organization of Zone Supply Office 440
46. Organization of Port Storage Office at a Secondary Port ... 443
47. Organization of Real Estate Service, Apr. 1, 1919 461
48. Organization of Chief Signal Officer's Office, Apr. 6, 1917 .. 474
49. Organization of Chief Signal Officer's Office, Sept. 7, 1918.. 477
50. Organization of Embarkation Service, Dec. 1918..... 502
51. Organization of Port of Embarkation, Hoboken, N.J 515
52. Organization of Port Storage Office 523
53. Organization of Office of Chief of Transportation Service... 541
54. Field Organization of Transportation Service 543
55. Tables of Organization, Series A, Jan. 14, 1918, Table 1—Infantry Division (Combat) 638

Maps

1. Supervisory Districts, Department of Military Aeronautics, Including Supervisory District Headquarters and Bureau of Aircraft Production District Offices 110
2. Motor Transport Corps Districts 320
3. Ordnance Districts 333
4. General Procurement Zones, Quartermaster Corps 416
5. Subsistence Procurement Zones, Quartermaster Corps 418
6. Distribution Zones, Quartermaster Corps 419
7. Territorial Departments and Coast Artillery Districts 552
8. Corps Areas..... 553

No.		Page
9.	Brownsville District ..... *facing*	606
10.	Laredo District ..... *facing*	607
11.	Eagle Pass District ..... *facing*	607
12.	Big Bend District ..... *facing*	608
13.	El Paso District ..... *facing*	608
14.	Arizona District ..... *facing*	609
15.	Southern California District ..... *facing*	616
16.	Northeastern Department	689
17.	Boston and Vicinity	693
18.	Long Island Sound and Vicinity	702
19.	Portland and Portsmouth Harbors	705
20.	Eastern Department ..... *facing*	710
21.	Baltimore and Vicinity	713
22.	Cuba	732
23.	New York City and Vicinity	766
24.	Norfolk and Vicinity	775
25.	Philadelphia and Vicinity	780
26.	Puerto Rico	788
27.	Washington, D.C., and Vicinity	801
28.	Southeastern Department ..... *facing*	808
29.	Atlanta and Vicinity	809
30.	Charleston and Vicinity	816
31.	Central Department	860
32.	Southern Department	899
33.	San Antonio and Vicinity	926
34.	Western Department ..... *facing*	935
35.	Alaska (Western Department) ..... *facing*	936
36.	Clatsop District, Spruce Production Division	939
37.	Coos Bay District, Spruce Production Division	941
38.	Grays Harbor and Willapa Bay District, Spruce Production Division	946
39.	Puget Sound Area	959
40.	Puget Sound District, Spruce Production Division	960
41.	San Diego and Vicinity	963
42.	San Francisco and Vicinity	964
43.	Vancouver District, Spruce Production Division	970
44.	Yaquina Bay District, Spruce Production Division	972
45.	Panama Canal Department	974
46.	Hawaiian Department	980
47.	Philippine Department	984
48.	Manila ..... *facing*	987

Zone of the Interior:
Organization and Activities of the War Department

SCOPE OF THIS VOLUME AND SUGGESTIONS FOR ITS USE

SCOPE

Chapter I, Organization and Activities of the War Department, consists of an introduction and 23 sections representing the main divisions of the Department. The contents of each section have been arranged, as far as practicable, under these general headings: orientation, functions, chiefs, organization and development, personnel, and activities.

Chapter II, Territorial Departments, has an introduction and nine sections, each of which deals with one territorial department. The contents of each section are generally grouped under extent, command, activities, inactive stations, and strength of troops stationed within the department; active posts, camps, and stations are accounted for in Chapter IV.

Chapter III covers the tactical divisions organized in 1918, preceded by an introduction. Each division is described under command, composition, and record of events.

Chapter IV, Posts, Camps, and Stations, includes an introduction; a departmental index to posts, camps, and stations; and nine sections, each section representing the posts, camps and stations within one territorial department arranged in alphabetical order. All large posts or camps are covered in considerable detail under history, description, command status, camp commanders, strength, and troops. Stations of minor importance are treated less extensively.

Chapter V, Directory of Troops, contains an introduction and unit index, followed by a succinct account of practically every Army unit that was at any time stationed in the Zone of the Interior in 1917, 1918, and 1919.

USE

Before attempting to look up any information, consult the table of contents. Having found the subject matter in a certain chapter, read the introduction to that chapter first and then locate the specific item. Take advantage of all cross references.

In Chapter I, all sections appearing in the table of contents, except those dealing with the War Department proper and the War Department General Staff, which head the list, are arranged in alphabetical order. In order to obtain any desired information, determine first the department or bureau under which it will most likely be found, next consult the table of contents under the proper section. In this connection, it should be noted that

Section 3, Adjutant General's Department, contains under Activities information regarding Army strength, battle casualties, decorations, chaplains, officers' training camps and schools, recruiting, prisoners of war, and other items of interest.

Chapters II, III, IV, and V are principally devoted to the description of troops serving in the United States and to the facilities placed at their disposal. In order to determine, for instance, the status of the 71st Inf. during the War, it will be necessary to consult first of all the Directory of Troops, Chapter V. Here, opposite Infantry Regiments, we note page number 1372, the beginning of the detailed description of this category. Following the numerical order of regiments, the 71st Inf. will be found on p. 1384, where it is recorded that the regiment was organized in Aug. 1918 at Camp Meade, Md., was stationed at this camp until demobilized in Feb. 1919, and was a component of the 21st Inf. Brig. On p. 1364, we learn that the 21st Inf. Brig. was part of the 11th Division. Consulting Chapter III, p. 645, the composition of the 21st Inf. Brig. as well as that of the 11th Div. may be ascertained; also the names of the division commanders, chiefs of staff, and brigade commanders may be determined. In addition, the record of events of the 11th Div., appearing on p. 646, will supply general information regarding all the components of the Division.

In order to get acquainted with Camp Meade, Md., the camp occupied by the 71st Inf., consult the Departmental Index of Chapter IV, p. 685, which will disclose that Camp Meade was located in the Eastern Department. Following the alphabetical order of stations within that Department, we find Camp Meade recorded on pp. 745-747; under Divisional Units, p. 746, the activities of the 11th Div., while at this camp, are briefly recorded, which should be read in connection with the information preceding it. As an aid to understanding expressions like 11th Div. (less 17th Inf., 63 Inf., 24th F. A. Brig.), the table appearing on p. 680, entitled Composition of Infantry Divisions, should be consulted.

Second example: In order to determine the unit history of the 4th (II) Aer. Sq. during the War, read introduction to Chapter V, where the meaning of the Roman numeral in parentheses is explained. Next turn to Unit Index, p. 996, for numbered aero squadrons which are shown as beginning on p. 998. The record of the 4th (II) Aer. Sq. will be found on p. 999; accordingly, it was organized in June 1919 at Hazelhurst Field, N. Y., and was transferred to Mitchel Field, N. Y., in Nov. 1919; remaining active throughout that year. Turning to pp. 734 and 759, respectively, we find the aero squadron recorded under Nondivisional

Units at Hazelhurst Field, N. Y., and at Mitchel Field, N.Y. According to information appearing on p. 733, the training of squadrons stationed at the airfields on Long Island, N. Y., was controlled by Headquarters 1st Provisional Wing at Hazelhurst Field.

Third example: The unit history of the 5th Co., C. D. of The Columbia, is to be determined. Turn to Unit Index, p. 996 and note Coast Defense Commands p. 1142. Beginning on this page, all coast defense commands as constituted during and after July 1917 are recorded in alphabetical order, C. D. of The Columbia and the 5th Co. appearing on p. 1149. Accordingly, this company was organized from 5th Co. Oreg. C. A. N. G. at Fort Canby, Wash., in Jan. 1918 and demobilized at the same post in Dec. 1918. In order to ascertain the higher unit, to which the C. D. of The Columbia belonged, we turn to Chapter II, Western Department, p. 616, where it is stated that the C. D. of The Columbia with headquarters at Fort Stevens, Oreg., were part of the North Pacific Coast Artillery District. A description of Fort Canby, Wash., will be found in Chapter IV. Fort Canby was situated in the Western Department, according to p. 682 of the Departmental Index. The alphabetical order of posts, camps, and stations of the Western Department shows Fort Canby on p. 939, where a brief account of the post is given and four companies, including the 5th Co., of the C. D. of The Columbia are recorded.

GENERAL INTRODUCTION
OUTLINE OF THE ZONE OF THE INTERIOR

EXTENT

The Zone of the Interior, in general, comprises that area of the national territory not included in the theater of operations.

EXECUTIVE BRANCH OF THE GOVERNMENT

COMMANDER-IN-CHIEF

Woodrow Wilson, President of the United States

VICE-PRESIDENT

Thomas R. Marshall

THE CABINET

Secretary of State: Robert Lansing
Secretary of the Treasury: William G. McAdoo
Secretary of War: Newton D. Baker
Attorney General: Thomas W. Gregory
Postmaster General: Albert S. Burleson
Secretary of the Navy: Josephus Daniels
Secretary of the Interior: Franklin K. Lane
Secretary of Agriculture: David F. Houston
Secretary of Commerce: William C. Redfield
Secretary of Labor: William B. Wilson

THE WAR CABINET

Chairman of the War Trade Board: Vance C. McCormick
Chairman of the War Industries Board: Bernard M. Baruch
Chairman of the Shipping Board: Edward N. Hurley
Fuel Administrator: Harry A. Garfield
Food Administrator: Herbert Hoover
Director General of Railroads: William G. McAdoo

NOTE

The War Cabinet met on Mar. 20, 1918, and thereafter regularly Wednesdays, at the White House, until the Armistice. It did not take the place of the Cabinet, which met weekly as usual during this period. Its functions were to aid the President of the United States in coordinating the work of the emergency agencies and to enable each administrator, who participated in the meetings, to see how his problems touched those of his colleagues.

MISSION OF THE ZONE OF THE INTERIOR

To exploit and develop the national resources in men and materials required for military purposes and to supply the means required by the commander of the field forces at such times, in such quantities, and such places, and in such manner and form as will assure him the freedom of action necessary for the accomplishment of his task.

ORGANIZATION

The military effort of the Nation was exerted through the War and Navy Departments. The economic effort, involving the coordination of industries and resources, including the control of prices, of food, of electrical power, of labor, of transportation, and of communications, was directed by the President of the United States, with the assistance of the War Cabinet and his regular cabinet officers.

The Navy Department, during the war, functioned through the Office of the Chief of Naval Operations; the Judge Advocate General's office; the Bureaus of Construction and Repair, Medicine and Surgery, Navigation, Ordnance, Steam Engineering, Supplies and Accounts, and Yards and Docks; the Marine Corps Headquarters; and various boards, such as the General Board, the Naval Consulting Board, and the Compensation Board. The Coast Guard functioned as a part of the Navy. The mission of the Navy was to patrol the coast, to convoy merchant shipping, to solve the submarine problem, and to cooperate with the War Department in transporting troops and supplies.

The organization of the War Department is described in a separate chapter. A brief explanation of the emergency agencies, in which the Secretary of War was concerned, is given below.

ORGANIZATION OF CIVIL AGENCIES FOR THE PROSECUTION OF THE WAR

Coordination of Industries and Resources

COUNCIL OF NATIONAL DEFENSE

The Council was composed of the Secretaries of War, Navy, Interior, Agriculture, Commerce, and Labor and functioned with the advice and counsel of an Advisory Commission. It was its duty to coordinate industries and resources for the national security and to create relations that would render possible, in time of need, the immediate concentration and utilization of the resources of the Nation. In a broad sense, the Council was to make available to the Government the best thought and effort of American industrial and professional life

for defense, and specifically for the successful prosecution of the war.

The Council was an administrative laboratory where defense needs were studied and the necessary machinery set up to supply those needs. It established various boards, such as the General Munitions Board and the War Industries Board, and numerous committees and subcommittees, many of which served as nuclei of more permanent organizations. As new agencies were set up, the committees and subcommittees of the Council were dissolved and were immediately reappointed under the new agency or were made cooperative war-service committees for the various industries with which they were concerned. The most important span of life for the Council ended with the emergence of the War Industries Board as a semi-independent body on Mar. 4, 1918, but it continued to function throughout the war period, particularly in matters pertaining to civilian activities and morale and postwar reconstruction.

Advisory Commission, Council of National Defense

The Commission was appointed Oct. 11, 1916, by the President on nomination of the Council, in accordance with the Army Appropriation Act of Aug. 29, 1916. It consisted of seven members heading the following Committees: Transportation and Communication; Munitions, Manufacturing, and Industrial Relations; Supplies; Raw Materials, Minerals, and Metals; Engineering and Education; Labor; and Medicine and Sanitation. By a decision of Feb. 13, 1917, there were created cooperative committees of industry, most of them subordinate to the Chairman of the Committees on Supplies and on Raw Materials, Minerals, and Metals. Immediately following the declaration of war and in the succeeding weeks, these subcommittees were appointed subcommittees of the Commission. They furnished information regarding industrial resources, assisted in accelerating service for the Government, negotiated price agreements, distributed orders, and awarded contracts.

In July 1917, when more than 150 subcommittees had been organized, difficulties in coordination arose. This necessitated a reorganization which gave the newly created War Industries Board an advisory function in coordinating purchases for the Army and Navy. A provision in the Food and Fuel Act of Aug. 10, 1917, regarding contracts with firms in which committeemen were financially interested, brought about large-scale resignations, resulting, however, in nominal change only. The dissolved committees were reestablished either as sections of the

War Industries Board or by the industries themselves as War Service Committees, of which some 400 had been constituted by Nov. 11, 1918. Functions: To advise and aid the Council of National Defense in the execution of its functions of coordinating industries and resources for the national security and welfare and of creating relations that would render possible the immediate concentration and utilization of the resources of the Nation.

General Munitions Board, Council of National Defense

Created by the Council Mar. 31, 1917, the Board was composed of representatives of the War and Navy Departments and of several civilians. It absorbed the Munitions Standards Board, and was superseded by the new War Industries Board in July 1917. Functions: To assure the prompt equipping and arming, with the least possible disruption of normal industrial conditions, of whatsoever forces may be called into the service of the country. This was to be done by coordinating Army and Navy purchases, by assisting the Raw Materials, Minerals, and Metals Committee of the Advisory Commission in the acquisition of raw materials, and by establishing precedence of orders between the War and Navy Departments and between military and civilian needs. The following Committees functioned under the Board: Armored Cars and Motor Trucks; Army Vehicles; Army and Navy Artillery; Army and Navy Projectiles; Clearance; Dies and Gauges; Emergency Construction and Contracts; Fuses and Detonators; Machine Guns; Optical Glass; Priorities; Small Arms and Ammunition; Storage Facilities; and Sulphuric Acid.

Munitions Standards Board, Council of National Defense

The Board was established Mar. 20, 1917, and absorbed by the General Munitions Board about Apr. 9, 1917. Functions: To insure speedy and efficient quantity production of munitions, standardize munition specifications, assist in the survey of cantonment and terminal storage facilities, and improve transportation methods.

WAR INDUSTRIES BOARD

Created by the Council of National Defense on July 28, 1917, as a clearinghouse for Government industrial needs, this agency succeeded the General Munitions Board. The various advisory committees on industries and materials under the Council were reorganized and made subordinate to it. Other units of the Council were also attached to it at various times.

On May 28, 1918, the Board was made a separate agency by Executive order. Its organization was complex and underwent a number of changes, but in general it functioned through the Requirements, Priorities, Conservation, Facilities, Labor, and Planning and Statistics Divisions, the Price Fixing Committee, and numerous commodity sections, the names of which reflected the industries and commodities with which they were concerned. The Board was dissolved July 22, 1919. Functions: To obtain adequate materials for the War Department, the Navy Department, the Shipping Board Emergency Fleet Corporation, and the Railroad Administration; to provide military supplies for the Allies; to provide commodities required by neutrals in exchange for materials essential to the United States; and, in conjunction with the Food, Fuel, and War Labor Administrations, to provide for the country's civilian needs.

Control of Prices

PRICE-FIXING COMMITTEE

This Committee was created to advise upon prices of basic materials, with the exception of food; to advise as to general price policies; to advise, when requested, any executive department concerning a specific contract; and to fix the prices to be paid for materials commandeered by the Government.

Until Mar. 4, 1918, this power was exercised by the President in person, assisted by a price-fixing commissioner. Thereafter the determination of prices was delegated to the Price-Fixing Committee, which functioned with, and yet independently of, the War Industries Board. The Committee was composed of a Chairman, the Chairmen of the War Industries Board, the Federal Trade Commission, and the Tariff Commission, the Fuel Administrator, and representatives of the Army, the Navy, labor and agriculture. The Committee was dissolved on Mar. 1, 1919.

Control of Capital

CAPITAL ISSUES COMMITTEE

Two organizations bore this title. The first, operating on a voluntary basis, was created under the Federal Reserve Board in Jan. 1918. The second Committee was authorized by the War Finance Corporation Act, to investigate, pass upon, and determine whether the sale or offer of sale, after Apr. 5, 1918, of securities with an aggregate par value of $100,000, by any person, firm, corporation, or association was compatible with the national interest.

In actual practice the Committee diverted as many capital issues as possible from peacetime enterprises to others helpful in the prosecution of the war. Inasmuch as no statutory power was provided to enforce decisions, little could have been accomplished without the voluntary cooperation of industries. The Committee ceased to function Dec. 31, 1918.

WAR FINANCES CORPORATION

While the Capital Issues Committee performed the negative function of restricting unnecessary expenditures during the war, the War Finance Corporation performed the positive function of extending aid to industries essential to the effective prosecution of the war, but which, because of the condition of the investment market, found it impossible to obtain funds for required capital outlay.

The Corporation with an authorized capital stock of $500,000,000 could issue bonds in amount equal to six times its paid-in capital. The actual financial assistance it rendered was secondary to its stabilizing effect of restoring confidence at critical times and strategic points.

WAR CREDITS BOARD

The Board was created by the Secretary of War Nov. 20, 1917, under authority of the Act of Oct. 6, 1917, permitting the Secretary of War and the Secretary of the Navy to make 30 percent advance payments to contractors on adequate security. Functions: To make advances of funds to contractors supplying matériel for the War Department. It considered applications, arranged the terms of the advances, and authorized the procuring bureau to advance the amounts approved.

To Dec. 31, 1919, the Board authorized advances by procuring bureaus aggregating $69,000,000. Thereafter it devoted all its attention to liquidating its business.

Control of Foreign Commerce

EXPORTS ADMINISTRATIVE BOARD

The Board was created by an Executive order of Aug. 21, 1917, to administer and execute the laws relating to the licensing of exports. No commodities on the prohibited list could be exported without a license issued by the Board. It was succeeded by the War Trade Board on Oct. 12, 1917.

WAR TRADE BOARD

The Board performed the duties of the former Exports Administrative Board. Its main function was to wage economic war-

fare against the enemy and to conserve shipping and commodities through the licensing of exports and imports and the rationing of supplies to neutrals.

The Board ceased to exist as a separate organization on June 30, 1919, when it was succeeded by the War Trade Board Section of the State Department.

Control of Food

FOOD ADMINISTRATION

Created Aug. 10, 1917, under authority of the Food and Fuel Control Act, the Administration set up branch offices in every State and in Alaska, Hawaii, Puerto Rico, and the District of Columbia. Two corporations, the United States Sugar Equalization Board, Inc., and the Food Administration Grain Corporation, were established to act as agents of the Administration.

Its functions were to provide for the supply, distribution, and conservation of food, to prevent monopolies and hoarding, and to maintain governmental control of foods by means of voluntary agreements and a licensing system.

Following the Armistice, the activities of the Food Administration were gradually terminated, and after Nov. 21, 1919, most of the remaining work was carried on by the Wheat Director. On Aug. 21, 1920, all branches of the Administration still in existence were abolished.

United States Sugar Equalization Board

The Board was established by the Food Administrator on July 11, 1918, to equalize the disparity in price between foreign and domestic sugars and to regulate their distribution by controlled purchases.

After Oct. 15, 1918, the Board cooperated with the War Trade Board in approving licenses for the importation of coffee into the United States. The Board was abolished July 10, 1926.

Food Administration Grain Corporation

The Corporation was established in Aug. 1917. On July 1, 1919, it was reorganized and expanded as the United States Grain Corporation under the direction of a Wheat Director. Liquidation was ordered Aug. 21, 1920, and was completed by Dec. 31, 1927.

Its functions were to regulate the grain trade by buying, selling, and storing grain and cereal products and, in cooperation with the War Trade Board, to control grain exports and imports. In 1918–19, it also handled noncereal commodities for

the Commission for Relief in Belgium, the American Relief Administration, and other European relief organizations.

Control of Fuel

FUEL ADMINISTRATION

Established Aug. 23, 1917, under the Food and Fuel Control Act of Aug. 10, 1917, to exercise supervision over the production, distribution, and conservation of fuel.

The Administration was at first concerned with coal and coke because of the great shortage during the winter of 1917–18. The importance of oil to industrial life and to modern warfare was soon recognized, however, and the Oil Division was created. General standardization of specifications, improved production methods, more efficient transportation, and the advancement of conservation practices were among the contributions of the Administration.

After Nov. 11, 1918, the activities of the Administration came gradually to a close, and it officially terminated July 1, 1919.

Control of Power

POWER SECTION, WAR INDUSTRIES BOARD

The Section was formed about May 1918, to continue the work of an informal committee organized in Dec. 1917, under the Council of National Defense. Its functions were to survey and report on the power situation throughout the country; to make plans for supplying power required for war industries; and to advise the Capital Issues Committee and the War Finance Corporation in regard to requests for assistance involving electrical power projects. It cooperated with the power companies and distributed power in accordance with priorities where there was a shortage.

Control of Labor

SELECTIVE SERVICE LAW

The exemption and deferment features of the Law, including the "work or fight order," exerted an important influence in assuring an adequate supply of labor in war industries. No Government control of labor was attempted until Jan. 1918.

WAR LABOR ADMINISTRATION, LABOR DEPARTMENT

Under this designation, the Secretary of Labor as War Labor Administrator undertook in Jan. 1918 to direct a coordinated program of labor control during the war. The following Services formed part of the Administration: Information and Educa-

tion, Investigation and Inspection, Personnel, Training and Dilution, Women in Industry, and Working Conditions. In addition, the Advisory Council, the Division of Negro Economics, the National War Labor Board, and the War Labor Policies Board were considered to pertain to the Administration. The Labor Administrator exerted his influence mainly through the War Labor Policies Board and through the United States Employment Service, an autonomous unit. Functions: To provide means of administering war labor activities concerned with mediation and conciliation in labor disputes, working conditions of wage earners in war industries, the acquisition and diffusion of information on subjects connected with labor, the employment of women in industry, and the training and dilution of labor.

No appropriations were made for the continuance of the Administration after June 30, 1920.

National War Labor Board, War Labor Administration

Created April 8, 1918, to effect settlements by mediation or conciliation of controversies arising between employers and workers in the fields of production necessary for the effective conduct of the war, or in other industries in which delays or obstructions might affect war production detrimentally. As a supreme court of industry, it could order a plant to be commandeered by the Government and could order the withdrawal of industrial deferment from the laborer.

The Board was dissolved Aug. 12, 1919.

War Labor Policies Board, War Labor Administration

Created May 13, 1918, to harmonize the labor policies of Government agencies and to formulate policies for a unified labor administration involving distribution of labor, wages, hours, and working conditions.

The Board was composed of representatives of the Departments of Labor, War, Navy, and Agriculture; the Shipping Board; the Emergency Fleet Corporation; the Fuel, Food, and Railroad Administrations; and the War Industries Board. It was discontinued in Mar. 1919.

UNITED STATES EMPLOYMENT SERVICE, LABOR DEPARTMENT

Originally an agency of the Bureau of Immigration to direct immigrants, and later nonimmigrants, to likely employment, this Service became an independent unit on Jan. 3, 1918, responsible to the Secretary of Labor, with these functions: To serve, during the war, as the exclusive recruiting agency of

unskilled labor for all industries except farms, railroads, and nonessential industries that could also recruit for themselves; and after the Armistice, to obtain employment for discharged soldiers, sailors, and civilian war workers.

The Service was drastically reduced after the Armistice, and on Oct. 10, 1919, all field offices were either turned over to States and municipalities or abandoned.

WAR INDUSTRIES BOARD

(See p. 4)

The Board exerted indirect control of labor through the issuing of preference lists. Industries thus listed were favored by the Government in supplying labor, raw material, power and transportation.

Control of Transportation

UNITED STATES RAILROAD ADMINISTRATION

Under authority of the Act of Aug. 29, 1916, the President by a proclamation dated Dec. 26, 1917, took control of the railroads of the United States with the object of facilitating the transportation of troops, matériel and equipment. Although these transportation systems actually came "within the possession and control" of the Director General of Railroads on Dec. 28, the Railroad Administration as such was not announced until Feb. 9, 1918. The Administration functioned through a number of divisions to operate railroads and their appurtenances, coastwise steamship lines, inland waterways, and telephone and telegraph companies that were taken over by the Government.

Inland Waterways Division, Railroad Administration

An Inland Water Transportation Committee, Council of National Defense, existed from June 15, 1917, to Feb. 16, 1918, when it was succeeded by the Inland Waterways Committee of the Railroad Administration. This Committee was supplanted Sept. 5, 1918, by the Inland Waterways Division which had jurisdiction over the acquisition, operation, and construction of vessels and other equipment for the Railroad Administration on the New York and New Jersey Canals, the Delaware and Raritan Canal, and the Mississippi and Warrior Waterways. It also finished the work of the Inland Waterways Committee of making investigations concerning internal waterways and of preparing a plan for their additional use in the movement of traffic.

UNITED STATES SHIPPING BOARD

Authorized by the Shipping Act of Sept. 7, 1916, this Board was appointed by the President and organized Jan. 30, 1917. Additional authority was granted it by further legislation and Executive action, making it an important war agency with far-reaching powers. It exercised broad regulatory authority over such matters as shipping rates and practices, the allocation of ships, the recruitment of seamen, and claims for insurance. Its powers to acquire and operate merchant vessels were delegated to the Shipping Board, Emergency Fleet Corporation.

Shipping Board, Emergency Fleet Corporation

Established as a Government corporation on Apr. 16, 1917, it took over many of the functions of the Shipping Board, to which it was responsible and the members of which served as trustees of the Corporation during the war period. Its functions were to attend to the purchase, construction, equipment, lease, charter, maintenance, and operation of merchant vessels in the commerce of the United States.

Control of Communications

TELEGRAPH AND TELEPHONE ADMINISTRATION, POST OFFICE DEPARTMENT

Under Congressional authority granted July 16, 1918, the President took over the telegraph and telephone systems July 22, and directed that their control and operation be vested in the Postmaster General. The Telegraph and Telephone Administration was organized soon thereafter to assure possession and control of the telegraphs and telephones; and to settle claims for compensation. Marine cables were taken over by a Presidential proclamation of Nov. 2, 1918, to be controlled by the Administration. The cables were returned to their owners May 2, 1919; the telegraph and telephone systems were returned July 31, 1919. The Administration ceased to function in 1921.

RADIO COMMUNICATIONS

Radio stations needed for naval communications were taken over by the Navy Department pursuant to Executive order of April 6, 1917. All others were closed.

CENSORSHIP BOARD

The Board was established by Executive order Oct. 12, 1917, to censor communications by mail, cable, radio, telegraph, and telephone passing between the United States and foreign coun-

tries. The object was to prevent transmission of enemy propaganda and to discover information of military value.

Membership included representatives of the Secretary of War, the Secretary of the Navy, the Postmaster General, the War Trade Board, and the Chairman of the Committee on Public Information. The administration of the censorship was exercised by the Post Office Department. The Board was discontinued June 21, 1919.

COMMITTEE ON PUBLIC INFORMATION

Created by Executive order Apr. 14, 1917, with the Secretaries of State, War, and the Navy as members. Its functions were to release news of the Government; to issue educational information that would sustain morale in the United States and in Allied and neutral countries; and to administer the voluntary censorship.

The Committee ceased to function on June 30, 1919.

ACTIVITIES

The mission of the Zone of the Interior was carried into effect under the guidance of the President of the United States as Commander-in-Chief.

Throughout the war, the Zone of the Interior was the scene of mobilizing American manpower and resources on an unprecedented scale. These activities, insofar as the War Department was concerned, are dealt with hereinafter in the following order: War Department proper; territorial departments; tactical divisions organized in 1918; posts, camps, and stations; directory of troops.

CHAPTER I

ORGANIZATION AND ACTIVITIES OF THE WAR DEPARTMENT

INTRODUCTION

The organization and activities of the War Department, at the time of their greatest development during the War, comprised those of the War Department proper, of the War Department General Staff, and of the several subsidiary bureaus, corps, and agencies. These various divisions of the War Department are treated in detail hereinafter in appropriate sections.

In general, the contents of each section have been arranged under these headings: orientation, functions, organization and development, personnel, and activities. In order to enable the reader to orient himself and find the desired information promptly, it is suggested, in the absence of an index, that the comprehensive table of contents be consulted.

SECTION 1

WAR DEPARTMENT

ORIENTATION

The Continental Congress instituted a "Board of War and Ordnance," also known as "War Office," June 13, 1776. Composed of members of Congress and headed by a "Secretary of the Board," this body functioned until 1781 when it was abolished and replaced by a "Secretary of War," who thereafter acted as the executive officer of the Confederation in all that related to the military service.

In the reorganization of the Government under the Constitution, Congress, on Aug. 7, 1789, enacted "that there shall be an executive department, to be denominated the Department of War; and that there shall be a principal officer therein, to be called the Secretary for the Department of War, who shall perform and execute such duties as shall from time to time be enjoined on or intrusted to him by the President of the United States, agreeable to the Constitution, relative to military commissions, or to the land or naval forces, ships, or warlike stores of the United States,

or to such other matters respecting military or naval affairs as the President of the United States shall assign to the said department, * * *."

During the crisis with France in 1798, control of naval forces was taken from the Secretary for the Department of War, and the Navy Department was organized. From this time on, the history of the War Department was one of gradual evolution, interspersed with periods of stagnation.

In 1821, the senior general officer was called to Washington and charged with the command of the Army. This marked the beginning of a system in which a general commanded the Army, handling matters of discipline and training, while the Secretary of War was assumed to be the administrator of the War Department. The General Regulations of 1841 defined the prerogatives of the Commander of the Army and of the Secretary of War as follows: "The Military Establishment is placed under the orders of the Major General commanding in chief in all that regards its discipline and military control. Its fiscal arrangements properly belong to the administrative departments of the staff, and to the Treasury Department; under the direction of the Secretary of War."

As respective spheres of authority were not clearly defined, the system proved unsatisfactory. Remedial action was taken in 1869 when the Secretary of War announced that all orders and instructions relating to military operations emanating from the President or the Secretary of War, were to be issued through the General Commanding the Army.

With the creation of the General Staff in 1903, the structure of the War Department underwent the most important change in its history. This event abolished the General Commanding the Army and put in his place the Chief of Staff, who served as the immediate adviser of the Secretary of War on all matters relating to the Military Establishment and had supervisory and coordinating duties over the troops of the line and of the special staff and supply bureaus.

At outbreak of war, the central organization of the Department comprised the General Staff, the Chief of Coast Artillery, and the following military bureaus: the Offices of The Adjutant General, Inspector General, and Judge Advocate General; the Militia Bureau, the Bureau of Insular Affairs; and the Offices of the Quartermaster General, Chief of Ordnance, Surgeon General, Chief of Engineers, and Chief Signal Officer. The last five agencies, sometimes spoken of as the supply bureaus, were charged with the procurement of supplies for the Army and were

thus the most important agencies of the War Department from the viewpoint of economic mobilization.

FUNCTIONS

As an executive department, under the Secretary of War, the War Department was charged with the control of the Military Establishment of the United States and with certain duties of a nonmilitary nature.

OFFICE OF THE SECRETARY OF WAR

THE SECRETARY OF WAR

Newton D. Baker, Mar. 9, 1916 to Mar. 4, 1921.

Duties

To carry out the policies of the constitutional Commander-in-Chief, the President of the United States; to represent the President and to act in conformity with the President's instructions; to perform as head of the War Department such duties as are required by him by law or may be enjoined upon him by the President, concerning the Army.

To supervise all estimates of appropriations for the expenses of the Department, including the Military Establishment; all purchases of Army supplies; all expenditures for the support, transportation, and maintenance of the Army; and such expenditures of a civil nature as may be placed by Congress under his direction.

To supervise the United States Military Academy at West Point and military education in the Army; the Board of Ordnance and Fortification; the various battlefield commissions; and the publication of the Official Records of the War of the Rebellion.

To have charge of all matters relating to National defense and seacoast fortifications, Army ordnance, river and harbor improvements, the prevention of obstruction to navigation, and the establishment of harbor lines; to act on all plans and locations of bridges authorized by Congress to be constructed over the navigable waters of the United States; and to have charge of the establishment or abandonment of military posts, and of all matters relating to leases, revocable licenses, and all other privileges upon lands under the control of the Department.

To direct the Bureau of Insular Affairs, and to supervise the government, construction, and operation of the Panama Canal and Railroad.

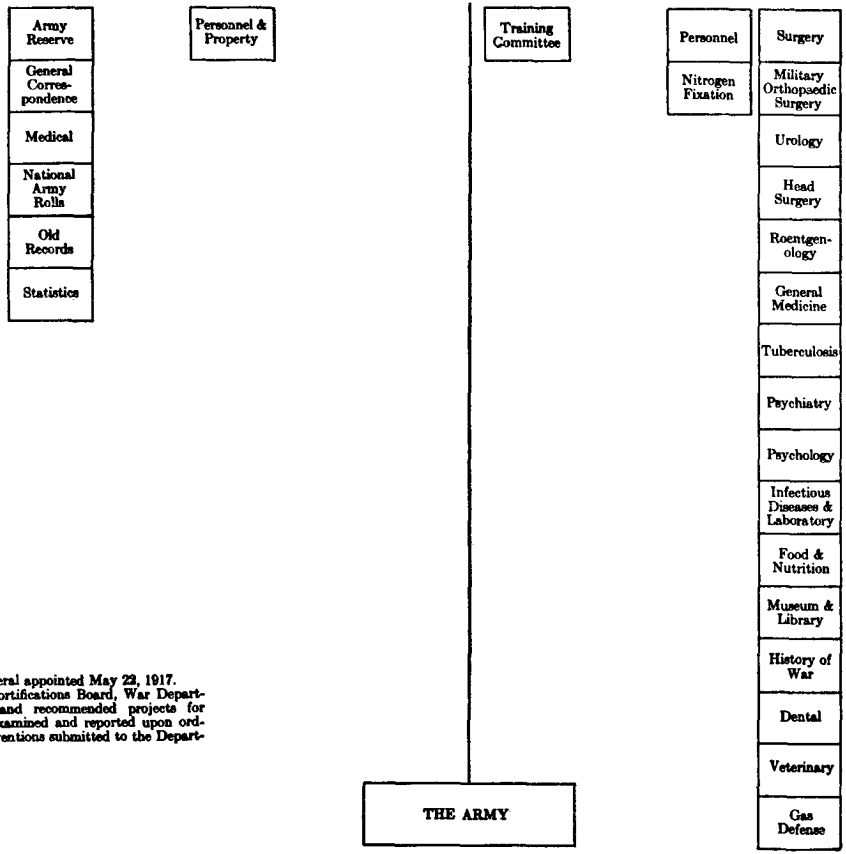
THE ASSISTANT SECRETARY OF WAR

1916		
May	8	William M. Ingraham
1917		
Nov.	11	Benedict Crowell (Director of Munitions from Aug. 28, 1918)
to June		
30, 1920		

Duties

To have general charge of Department administration and, as Director of Munitions, to be responsible for procuring and furnishing the Army in the field with the matériel required for its military operations (except that required for the Air Service, which was handled by the Second Assistant as Director of the Air Service).

Ordnance and Fortifications Board
SECRETARY OF WAR
Assistant Secretary
Chief of Staff
Chief of Coast Artillery
Militia Bureau
Adjutant General
Administration
Archives
Enlisted Men
Recruiting
Mail & Files
Officers
Miscellaneous
Orders & Distribution
10th Street Division
Inspector General
Judge Advocate General
Executive
Military Justice
War Laws
Titles, Accounts, etc.,
Constitution & International Law
Civil Administration
Statutory Construction
General Administration
Provost Marshall General
Executive
Appeals
Statistics
Publications
Finance
Bureau of Insular Affairs
Philippines
Porto Rico
Dominican Receivership
General Staff
Secretary
War Department Section
Operations Committee
Equipment Committee
Miscellaneous Committee
War College Division
Organization & Recruitment Committee
Intelligence Section
Legislation and Regulation Committee
Quartermaster General
Administrative
Personnel
Finance & Accounting
Supplies
Transportation
Remount
Cantonment
Chief of Ordnance
General Office Divisions
Guns
Small Arms
Equipment
Carriage
Supply
Finance
Property
Arsenals
Surgeon General
Administration
Personnel
Finance & Supply
Sanitation
Training Camps
Ambulance Corps
Hospitals
Special Hospitals & Physical Reconstruction
Chief of Engineers
Advisory Boards
Military Branch
Civil Works
General Engineer Depot
Engineering & Purchasing
Depot Department
Business Administration
Public Buildings & Grounds
Military Railways
Chief Signal Officer
Administration
Science & Research
Construction
Equipment
Air
Land
Radio
Photographic
Panama Canal
Panama Railroad



Note: Provost Marshal General appointed May 22, 1917.
The Ordnance and Fortifications Board, War Department, considered and recommended projects for fortifications and examined and reported upon ordnance and other inventions submitted to the Department.

CHART NO. 1.—*ORGANIZATION OF WAR DEPARTMENT*
Apr. 6, 1917

SECOND ASSISTANT SECRETARY OF WAR

(Office established by Act of Congress, Apr. 6, 1918)

1918	
Apr. 11	Edward R. Stettinius
Aug. 28 to Nov. 27	John D. Ryan

Duties

Apr. 11, 1918: To have charge of all questions of purchase and supply for all bureaus of the Department.

Aug. 28, 1918: To act as Director of Air Service and as such to be responsible for procuring and furnishing to the Army in the field the matériel and personnel required for the Air Service, and to that end to exercise such supervision, control, and direction as may be necessary over the Bureau of Aircraft Production and the Bureau of Military Aeronautics.

THIRD ASSISTANT SECRETARY OF WAR

(Office established by Act of Congress Apr. 6, 1918 and repealed June 4, 1920)

1918	
Apr. 19 to June 30, 1919	Frederick P. Keppel

Duties

To direct civilian relations; to be responsible for matters affecting the nonmilitary life of the soldier and to act as the point of contact between the Department and the Commission on Training Camp Activities; to work closely with the Morale Branch of the General Staff; to have charge of correspondence regarding delays in mail, the treatment of sick and wounded, matters relating to passports; and to consider recommendations for clemency made by the Judge Advocate General.

SPECIAL ASSISTANT TO SECRETARY OF WAR

(Appointed by the Secretary of War)

1917	
Oct. 5 to July 1, 1919	Emmett Jay Scott

Duties

To advise the Secretary of War on matters affecting colored soldiers.

ORGANIZATION AND DEVELOPMENT OF WAR DEPARTMENT

INITIAL STRUCTURE

On Apr. 6, 1917, the War Department was organized in conformity with the National Defense Act of June 3, 1916, as shown on chart 1.

The enormous expansion of the Military Establishment and the rapid developments in military science during the war necessitated considerable modification of the prewar organization of the Department and the formation of several new agencies.

SELECTIVE SERVICE

On May 18, 1917, statutory provision was made to raise an army by conscription. Four days later, a Provost Marshal General was appointed and charged with the administration of the Act.

SUPPLY BUREAUS

While it was contemplated that coordination and supervision of the bureaus should be exercised by the Secretary of War through the Chief of Staff, in actual practice the bureau chiefs, true to tradition, went direct to the Secretary of War, as shown on chart.

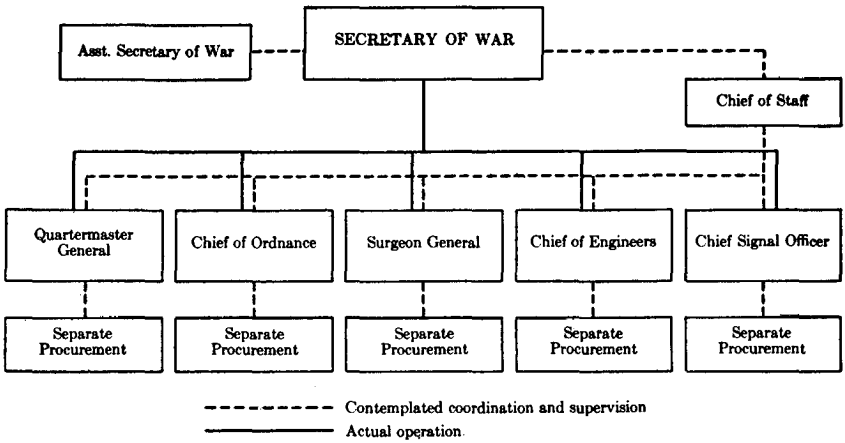


CHART NO. 2.—*INITIAL SERVICE OF SUPPLY*

It was, therefore, recognized early in the war that a better coordination of the functions of the supply bureaus was desirable.

WAR COUNCIL

The first important step toward the accomplishment of better coordination of the work of the supply bureaus was the creation, Dec. 20, 1917, of the War Council with supervisory and coordinating functions.

This body was composed of the Chief of Staff, the Quartermaster General, the Chief of Ordnance, the Chief of Coast Artillery, the Judge Advocate General, and such other general officers as might be designated. The Secretary of War and the Assistant Secretary of War were ex-officio members and presided when present at meetings.

It was the duty of the Council to oversee and coordinate all matters of supply of our field armies and the military relations between the armies in the field and the War Department; to

initiate for consideration plans for the more effective use of the military power of the Nation, and to consider and make recommendations concerning all matters referred to it by the Secretary of War, or in his name by the Chief of Staff. The Council was dissolved July 8, 1918.

FURTHER ORGANIZATIONAL CHANGES

Coordination of the supply bureaus was further advanced by the formation within the General Staff of new services specifically charged with supervision over supplies.

On Dec. 28, 1917, a Director of Storage and Traffic was created to enable the Chief of Staff to exercise effectually his supervisory and coordinating powers in respect to the movement and storage of supplies and the movement of troops. On Jan. 11, 1918, a Director of Purchase was appointed with similar functions regarding procurement of materials. On Feb. 9, 1918, the General Staff was reorganized into five Divisions: Executive, War Plans, Army Operations, Storage and Traffic, and Purchase and Supply, the last two corresponding to the services created Dec. 28, 1917, and Jan. 11, 1918. On Apr. 16, 1918, the Purchase, Storage, and Traffic Division of the General Staff was organized through the consolidation of the Purchase and Supply and the Storage and Traffic Divisions. By Aug. 26, 1918, the organization which finally developed during the war period had crystalized. Four Divisions were created: Military Intelligence, War Plans, Army Operations, and Purchase, Storage, and Traffic, the latter Division maintaining its previous supervisory and coordinating functions in regard to supplies.

Comprehensive changes also took place in the internal organization of the supply bureaus. New agencies charged with the duty of supply were established, and various transfers of functions between bureaus were effected. New supply agencies were instituted as follows: Embarkation Service, Aug. 4, 1917; Construction Division, Mar. 13, 1918; Bureau of Aircraft Production, May 20, 1918; Chemical Warfare Service, June 25, 1918; Inland Traffic Service, Aug. 1, 1918; and Motor Transport Corps, Aug. 15, 1918.

By Sept. 1, 1918, the War Department had assumed the structure shown on chart.

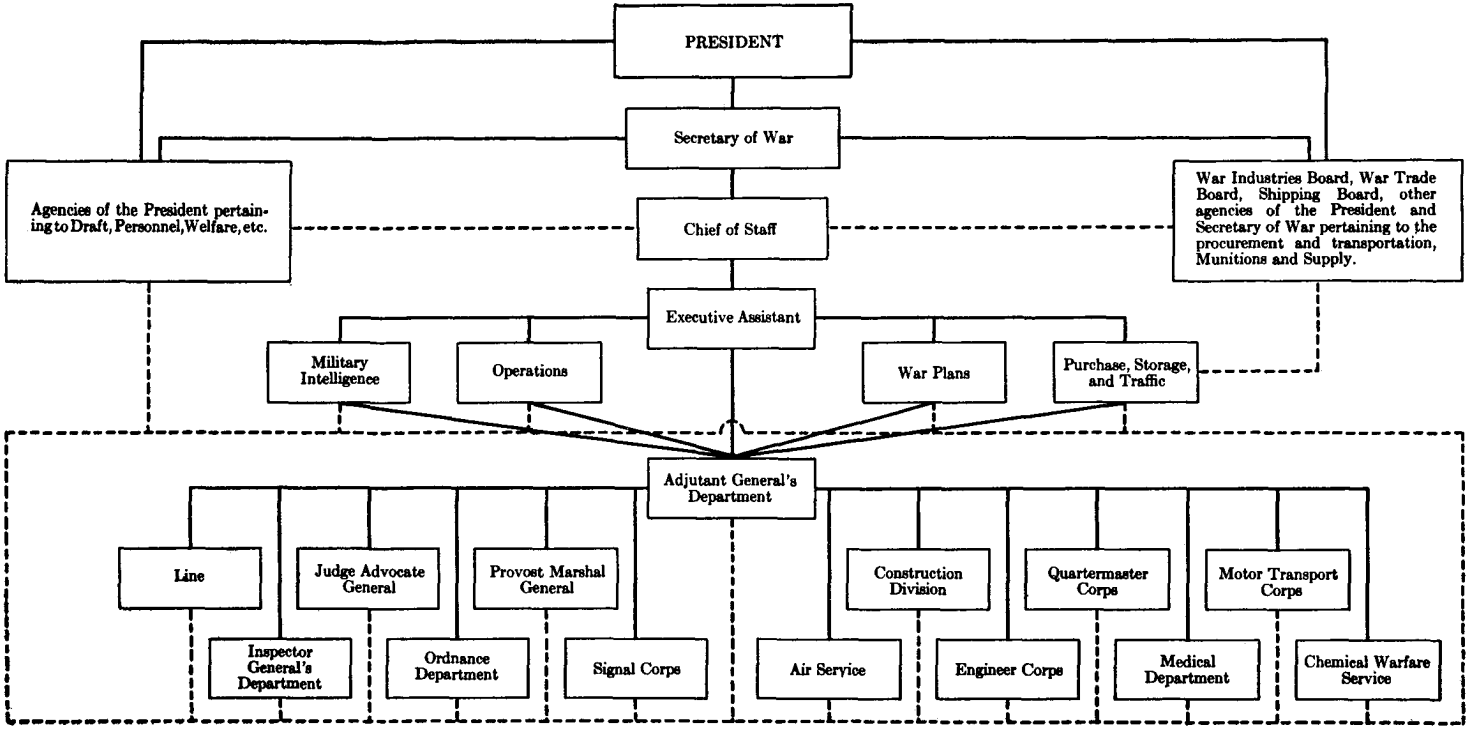


CHART NO. 3.—*ORGANIZATION OF WAR DEPARTMENT*
Sept. 1, 1918

Prior to the Armistice, the Purchase and Storage Service and the Finance Service were organized.

POSTARMISTICE ORGANIZATION

The following important changes further affected the organization of the Department (see chart).

On Mar. 11, 1919, the Embarkation Service and the Inland Traffic Service were consolidated to form the Transportation Service. On Mar. 19, the Bureau of Aircraft Production and the Division of Military Aeronautics, until then operating nominally as an air service under the direction of the Second Assistant Secretary of War, were combined to form the Air Service and to function as one agency. On Apr. 1, 1919, the Real Estate Service was created.

ACTIVITIES

The War Department mobilized the Military Establishment; raised, armed, equipped, and trained the required forces; transported them to the theater of war; and maintained them therein until the conclusion of hostilities. This task involved a gigantic effort on the part of industry, under direction of the Department.

Following the Armistice, the War Department in cooperation with the Navy returned the oversea forces to the United States and demobilized the emergency army. Concurrently, it assisted in the industrial demobilization of the Nation.

This task was accomplished by the coordinated efforts of the Secretary of War's Office; the General Staff; the administrative departments, supply bureaus, and services; the chiefs of branches; and other War Department agencies.

The details of these activities will be found under the appropriate headings.

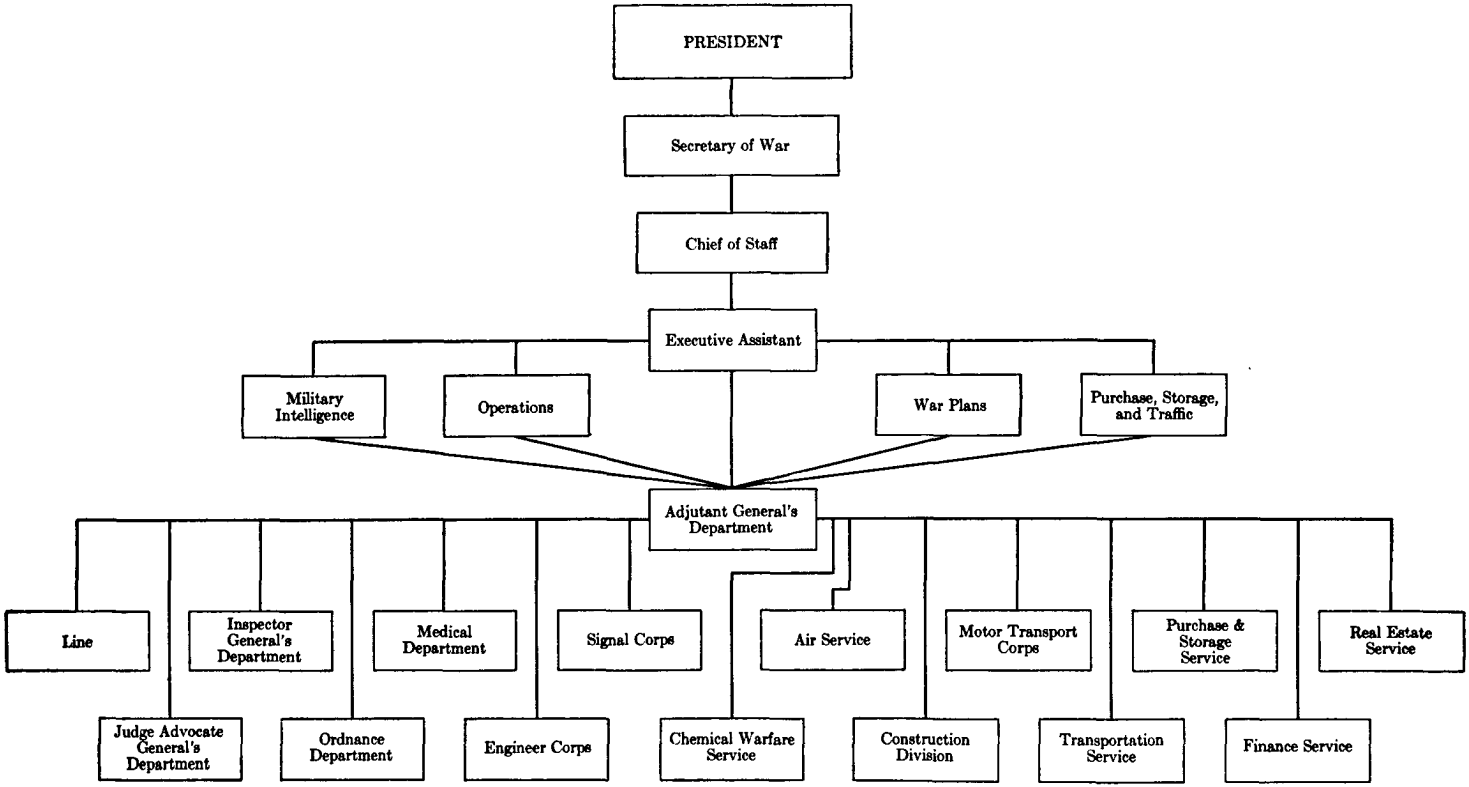


CHART NO. 4.—*ORGANIZATION OF WAR DEPARTMENT*
Sept. 30, 1919

MONEY COST OF WORLD WAR TO THE UNITED STATES
WAR DEPARTMENT ACCOUNT
TO JUNE 30, 1930

	Expenditures fiscal years 1917–21	Receipts fiscal years 1917–21	Assets June 30, 1921 (partly estimated)
Quartermaster Corps:			
Pay of the Army	$ 2,819,195,163.64		
General appropriation (supplies, services, and transportation; barracks and quarters; construction and repair of hospitals; horses for cavalry, artillery, and engineers; inland and port storage and shipping facilities)	6,873,420,115.48		
All other	88,737,158.99		
Medical Department	316,653,619.96		
Signal Service:			
Increase for aviation	519,099,186.83		
All other	445,909,364.65		
Ordnance Department:			
Ordnance stores, supplies, ammunition, equipment, etc.	575,321,328.31		
Armament of fortifications	3,203,479,956.17		
Manufacture of arms, automatic rifles, armored motor cars	469,919,699.99		
All other	189,377,285.21		
Engineer Department:			
Bridges, depots, electrical installations, operations, fire control	633,271,951.84		
National Guard (Militia)	33,822,344.47		
War miscellaneous (military)	115,362,044.92		
Sale of surplus war supplies and surplus property		$536,571,711.38	$294,401,819.54
Due from German Government account of army of occupation (June 30, 1927)		61,313,643.18	158,000,000.00
Transfer of supplies, materials and equipment to other departments without cost		383,688,380.35	
Total	$16,283,569,220.46	$981,573,734.91	$452,401,819.54

Net war cost to June 30, 1930—$14,849,593,666.01.

SECTION 2

WAR DEPARTMENT GENERAL STAFF

ORIENTATION

The experience of the Spanish-American War revealed the following weaknesses in the structure of the War Department:

1. The entire personnel of the War Department was engaged in the routine of Army administration. No subdivision was charged with the preparation of plans for the national defense and for the mobilization of the military forces in time of war.
2. No machinery existed for the coordination of the supply and administrative departments, to the end that plans for the national defense might be made effective and harmony of operation assured.
3. Conflict of authority nullified unity of control.

CREATION OF GENERAL STAFF

The remedy was applied by Act of Congress, Feb. 6, 1903, which abolished the office of the Commanding General of the Army, provided for a military Chief of Staff to the President, and created a General Staff Corps to assist the Chief of Staff. General supervision of the special staff, of troops of the line, and of the supply departments was entrusted to the Chief of Staff, acting under direction of the President or the Secretary of War as his representative.

The organization of the General Staff was influenced by the National Defense Act of June 3, 1916. Accordingly, the following organization and assignment to duty were prescribed July 31, 1916:

Office of the Chief of Staff

PERSONNEL

The Chief of Staff; the Assistant to the Chief of Staff; and these assistants:

An assistant on matters pertaining to mounted services;
an assistant on matters pertaining to infantry and auxiliary foot troops;
an assistant on miscellaneous matters;
a secretary of the General Staff Corps.

Duties of Assistants

To keep the Chief of Staff thoroughly advised, at all times, on matters relating to personnel, stations, movements of troops, arms, training, equipment, etc., necessary for efficiency and preparedness.

War Department General Staff

PERSONNEL

President, Army War College; all officers of the General Staff Corps on duty in Washington not assigned to the Office of the Chief of Staff.

COMMITTEES

Military Operations

Duties

To have charge of matters relating to organization, training, and mobilization of troops; large maneuvers; joint maneuvers of Army and Navy; projects for strategical concentration; coast defense and mobile defense of coast areas; preparation of war plans, including oversea expeditions and combined operations of Army and Navy; transportation; preparation of the details of problems to be worked out by the Army War College in aid of the foregoing.

Military Information

Duties

To have charge of collection, arrangement, and distribution of statistical and geographical information of military importance relating to our own and foreign countries; collection, preparation, and distribution of military maps; supervision of intelligence work in the Army; supervision of military attachés and observers and editing their reports; also to assist in the assignment of work to the personnel of the Army War College to aid in the foregoing.

Military Education

Duties

To study policy and system of troop training, including field service and drill regulations; to draft annual training bulletin; to take charge of the subject of the training and instruction of officers serving with troops and reserve officers; to have general supervision of the courses of instruction at all military schools maintained in the Army for officers or enlisted men, and at schools and colleges having courses of military instruction.

GENERAL STAFF BOARD OF DIRECTION AND REVIEW

Personnel

The Chief of Staff; the Assistant Chief of Staff; the President, Army War College; the Secretary of the General Staff (recorder).

Duties

To outline, in a general way, the work for the entire General Staff Corps; to determine the work to be required of the personnel of the War College and to outline the course; to make recommendation regarding the national policy and necessary legislation and other matters subject to consideration by the General Staff.

ARMY WAR COLLEGE

Personnel

President, Army War College; one General Staff officer (director); such directors, instructors, and students as might be detailed by the Secretary of War from the Army at large.

GENERAL STAFF OFFICERS FOR DUTY WITH TROOPS

General Staff officers were to be detailed for duty with each of the several territorial department headquarters and to the higher tactical units of the Regular Army or National Guard whenever organized. The senior officer of the General Staff Corps assigned was to serve as chief of staff of the command.

EARLY EXPERIENCES

From 1903 to 1917, the General Staff passed through a period of difficulties which had its roots in public prejudice. Many members of Congress were inspired with the fear that the high degree of centralization employed by an effective General Staff might grow into a tyrannical and arbitrary power. This fear was also

entertained by the Press which held up the Great General Staff of Imperial Germany as an abhorrent example. Imbued with distrust toward the new body, Congress limited its members and circumscribed its functions from time to time.

The tradition of the War Department bureaus, still jealous of their old prerogatives, gave cause for further friction. Although the General Staff Law had succeeded in palliating old controversies, differences still existed.

In addition to these formidable obstacles, a lack of understanding of the duties of the General Staff by the Army at large detracted from its usefulness. No clear conception seemed to exist as to the means by which the coordinating duties of the General Staff could be exercised by its members without engaging in actual operations.

As a result of these several influences, the General Staff, at outbreak of war in 1917, had the lowest strength in its history, with coordination mechanism incomplete and with many gaps in its organization.

FUNCTIONS

To prepare plans for the national defense and for the mobilization of the military forces in time of war; to investigate and report upon all questions affecting the efficiency of the Army and its state of preparation for military operations; to render professional aid and assistance to the Secretary of War; and to perform such other military duties not otherwise assigned by law as may be prescribed by the President from time to time.

CHIEFS OF STAFF

1917		
Apr.	6	Maj. Gen. Hugh L. Scott
May	16	Maj. Gen. Tasker H. Bliss (acting)
Aug.	17	Maj. Gen. Hugh L. Scott
Sept.	23	Maj. Gen. Tasker H. Bliss
Oct.	8	Gen. Tasker H. Bliss
Oct.	30	Maj. Gen. John Biddle (acting)
Dec.	17	Gen. Tasker H. Bliss
1918		
Jan.	10	Maj. Gen. John Biddle (acting)
Mar.	4	Maj. Gen. Peyton C. March (acting)
May	25	Gen. Peyton C. March
1919		
Mar.	9	Maj. Gen. Frank McIntyre (acting)
Mar. through June	26 20	Gen. Peyton C. March

DUTIES OF THE CHIEF OF STAFF

(As defined by Army Regulations of 1913)

The Chief of Staff reports to the Secretary of War, acts as his military adviser, receives from him the directions and orders given in behalf of the President, and gives effect thereto in the manner hereinafter provided. For purposes of administration the office of the Chief of Staff will constitute a supervising military bureau of the War Department. * * *

The Chief of Staff is charged as limited and provided by law with the duty of supervising, under the direction of the Secretary of War, all troops of the line, the Adjutant General's, Inspector General's, Judge Advocate General's, Medical, and Ordnance Departments, the Quartermaster Corps, the Corps of Engineers, and the Signal Corps. He performs such other military duties not otherwise assigned by law as may be assigned to him by the President.

The supervisory power vested by statute in the Chief of Staff covers primarily duties pertaining to the command, discipline, training, and recruitment of the Army, military operations, distribution of troops, inspections, armament, fortifications, military education and instruction, and kindred matters, but includes also, in an advisory capacity, such duties connected with fiscal administration and supply as are committed to him by the Secretary of War. * * *

Supervisory power is conferred upon the Chief of Staff over all matters arising in the execution of acts of Congress and executive regulations made in pursuance thereof relating to the militia. * * *

Duties of the Chief of Staff, as redefined Aug. 26, 1918, are stated on p. 42.

ASSISTANTS TO THE CHIEF OF STAFF

1917	
Apr. 6	Brig. Gen. Tasker H. Bliss
May 16	Maj. Gen. Tasker H. Bliss
Sept. 22	Maj. William S. Graves (Executive Assistant)
Nov. 19 to Feb. 8, 1918	Brig. Gen. William S. Graves
1918	
Aug. 26	Brig. Gen. William S. Graves (Executive Assistant)
July 9 to Dec. 31, 1919	Maj. Gen. Frank McIntyre (Executive Assistant)

DUTIES

To aid the Chief of Staff in the discharge of his duties and to serve as a member of the General Staff Board of Direction and Review.

CHIEFS OF SUBDIVISIONS

EXECUTIVE DIVISION

1918	
Feb. 9 to Aug. 25	Brig. Gen. William S. Graves (Executive Assistant to the Chief of Staff)

OPERATIONS DIVISION

1917	
Dec. 12	Brig. Gen. Henry Jervey (Director)
1918	
Oct. 11 through June 20, 1919	Maj. Gen. Henry Jervey (Director)

MILITARY INTELLIGENCE DIVISION

1918	
Aug. 26	Brig. Gen. Marlborough Churchill (Director)
Nov. 22	Col. John M. Dunn (Acting Director)
1919	
Apr. 1 through June 20	Brig. Gen. Marlborough Churchill (Director)

WAR COLLEGE DIVISION

1917	
Apr. 6	Brig. Gen. Joseph E. Kuhn
Aug. 25	Col. P. D. Lochridge (acting)
1918	
Jan. 11 to Feb. 8	Col. Daniel W. Ketcham (acting)

WAR PLANS DIVISION

1918	
Feb. 9	Col. Daniel W. Ketcham (Acting Director)
May 1	Brig. Gen. Lytle Brown (Director)
1919	
June 14 through June 20	Maj. Gen. William G. Haan (Director)

PURCHASE AND SUPPLY DIVISION

1918	
Jan. 14	Col. Palmer E. Pierce
Feb. 8 to Apr. 5	Brig. Gen. Palmer E. Pierce

STORAGE AND TRAFFIC DIVISION

Dec. 28, 1917 to Apr. 15, 1918	Maj. Gen. George W. Goethals

PURCHASE, STORAGE, AND TRAFFIC DIVISION

1918	
Apr. 16	Maj. Gen. George W. Goethals
1919	
Mar. 2 through June 20	Brig. Gen. George W. Burr

ORGANIZATION AND DEVELOPMENT
PERIOD AUG. 6, 1917, TO FEB. 8, 1918

GENERAL

At outbreak of war, the General Staff, organized under the provisions of the Act of June 3, 1916, had an authorized strength of 41 officers, only 19 of whom, by limitation of law, could be stationed in Washington. The task of preparing the plans for creating, mobilizing, organizing, training, equipping, transporting overseas, and of maintaining and supplying the future Army of the United States, thus devolved upon a wholly inadequate number of officers.

The Act of May 12, 1917, increased the General Staff to 91 officers, only half of whom could be placed on duty in Washington. However, all legislative restrictions were removed by the Act of May 18, 1917, which authorized the President "to provide the necessary officers, line and staff," for the forces raised under this act.

WAR COLLEGE DIVISION

On May 3, 1917, a Military Intelligence Section was constituted to take the place of the Military Information Committee (see p. 26).

Military Intelligence Section

Duties

To have charge of the collection, collation, and distribution of military information; to supervise our military attachés abroad in the collection of military information; to supervise Department intelligence officers and intelligence officers with troops in intelligence matters; to consider questions of policy; to supervise the system of military espionage and counterespionage to be established for the duration of the war; to cooperate with the intelligence sections of the general staffs of the various countries at war with Germany; and to prepare military intelligence instructions for our field forces.

On June 16, 1917, the following standing committees were organized:

Organization and Recruitment Committee

Duties

To have cognizance of raising all classes of troops, Regular Army, National Guard, National Army (drafted force), special troops and replacement troops; and of forming and amending organization for existing units and others that may be necessary, including special troops, corps, and armies.

Military Operations Committee

Duties

To have cognizance of all matters relating to war plans for the defense of the United States and oversea possessions from foreign invasion and plans for oversea expeditions to the European theater of war; to consult the Organization and Recruitment Committee if plans involve changes in organization.

Equipment Committee

Duties

To have cognizance of all matters relating to shelter, clothing, subsistence, armament, and other supplies.

Training Committee

Duties

To have cognizance of all matters pertaining to instruction, both theoretical and practical.

Legislation and Regulations Committee

Duties

To handle all questions concerning legislation, changes and interpretation of regulations and orders that do not pertain to the duties of other committees.

WAR DEPARTMENT SECTION

This General Staff section was established during the fall of 1917 when the Equipment and Military Operations Committees were moved from the War College to the State, War, and Navy Building. In addition to these two committees, a Miscellaneous Committee formed part of the War Department Section. At this time the specific duties of these committees were as follows:

Operations Committee

Duties

To arrange, in accordance with prescribed Tables of Organization, for the organization of tactical divisions and other troops by designating and assembling the specific units of which they were to consist; and to make studies relative to tonnage available for shipment of troops and prepare schedules for shipments to France.

Equipment Committee

Duties

To prepare tables of equipment for all units; to supervise the distribution and issue of equipment to troops; to make plans for procurement of supplies; and to maintain close liaison with the supply bureaus and the Council of National Defense.

Miscellaneous Committee

Duties

To have charge of all matters not assigned to other committees.

The organization of the General Staff, at this time, is shown on chart.

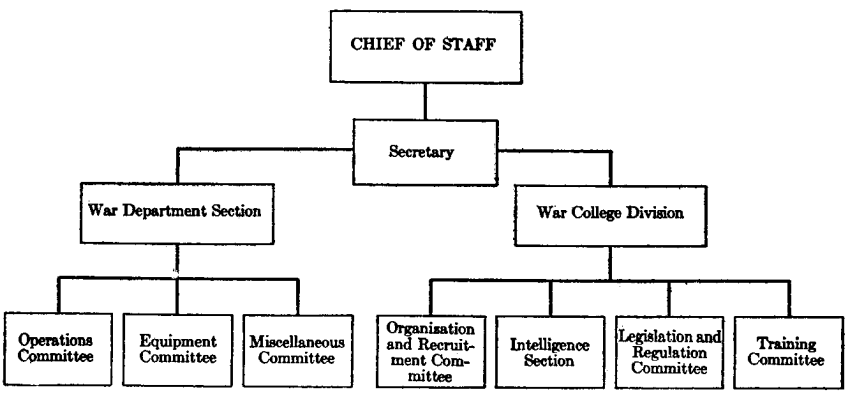


CHART NO. 5.—*ORGANIZATION OF THE GENERAL STAFF*

COORDINATION OF SUPPLY

Prior to, and during the early part of the war, five semi-independent bureaus constituted the supply system of the Army. These were the Quartermaster Corps, the Ordnance Department,

the Medical Department, the Corps of Engineers, and the Signal Corps.

These bureaus had practically no relations in common and were only loosely coordinated with the organization of the line and the staff of the Army. This lack of coordination was accentuated by a decentralization of activities within the bureaus themselves. Each bureau constituted a separate purchasing office with its own system of finance, storage, and distribution. Thus five War Department agencies, in competition with each other, entered the Nation's markets to purchase the vast quantities of supplies needed for the war effort. This unwholesome competition existed among the bureaus and also extended to the other great agencies of the Government and of the Allies, involving manufactured articles, raw materials, industrial facilities, labor, fuel, power, and transportation.

The remedy lay in a single War Department agency for the conduct of all Army supply activities. While statutory authority for this change was pending, several interim services, shaped toward this end, were established in the Office of the Chief of Staff.

Services Established in Office of Chief of Staff

On Aug. 4, 1917, the Embarkation Service was constituted to enable the Chief of Staff to exercise effectively his supervisory and coordinating powers in respect to oversea movements.

On Dec. 28, 1917, the Storage and Traffic Service was created with control over the Embarkation Service, to take charge of and exercise supervision over the transportation of troops and supplies and the storage facilities connected therewith. A Director of Inland Transportation was appointed Jan. 10, 1918.

This was followed, Jan. 11, 1918, by the establishment of the Purchasing Service, to control the acquisition of supplies and munitions for the Army and to coordinate procurement activities. See chart 6.

PERIOD FEB. 9 TO AUG. 25, 1918

On Feb. 9, the Chief of Staff was directed to organize the General Staff into five Divisions: Executive, Operations, War Plans, Purchase and Supply, Storage and Traffic. Each division was to be placed under an assistant chief of staff. Sections and services previously created were superseded by the new organization. Bureau chiefs were instructed to cooperate fully with the heads of the new divisions and to correspond directly with them in regard to all bureau matters.

The completed organization was as shown on chart 7.

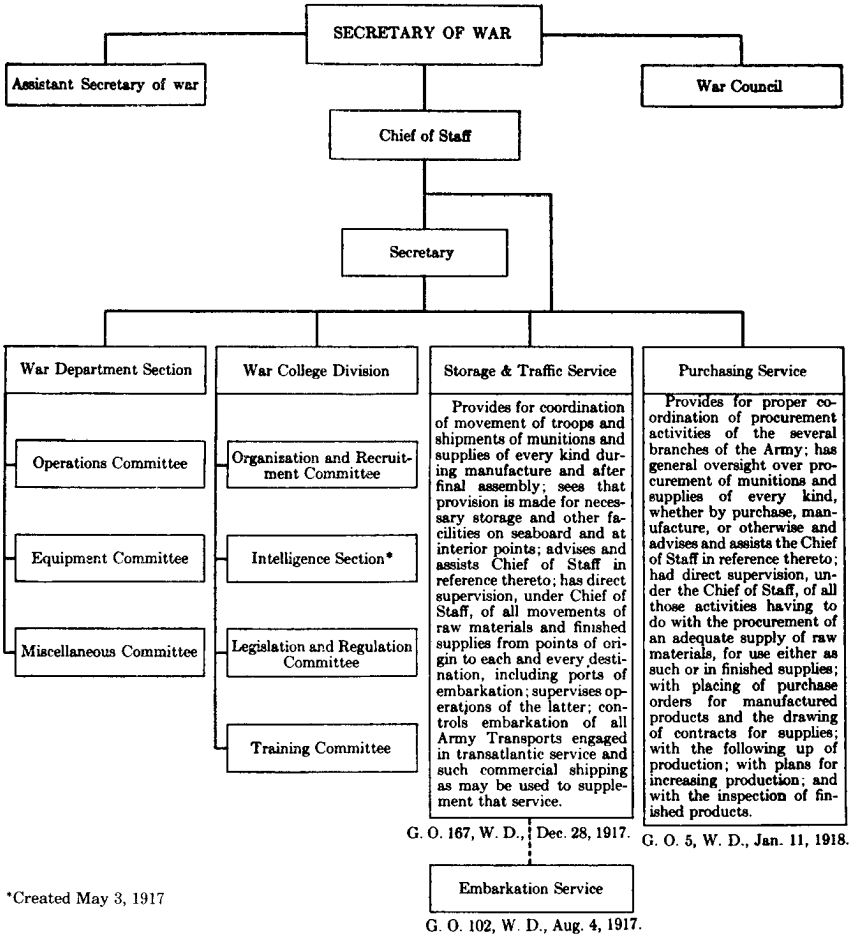


CHART NO. 6.—*ORGANIZATION OF THE GENERAL STAFF*
Jan. 11, 1918

EXECUTIVE DIVISION

The Executive Assistant to the Chief of Staff was to act for the Chief of Staff or the Acting Chief of Staff during their respective absences.

Functions

To supervise the organization, administration, and methods of all divisions of the General Staff and the several bureaus, corps, and other agencies of the War Department, to the end that all such matters might be treated comprehensively and the activities of all such agencies might be coordinated, duplication of work avoided, harmonious action secured, and all unnecessary machinery of organization and administration eliminated; to collect, compile, and maintain all statistical information obtained from the several bureaus, corps, or other agencies of the Military Establishment, both as to troops

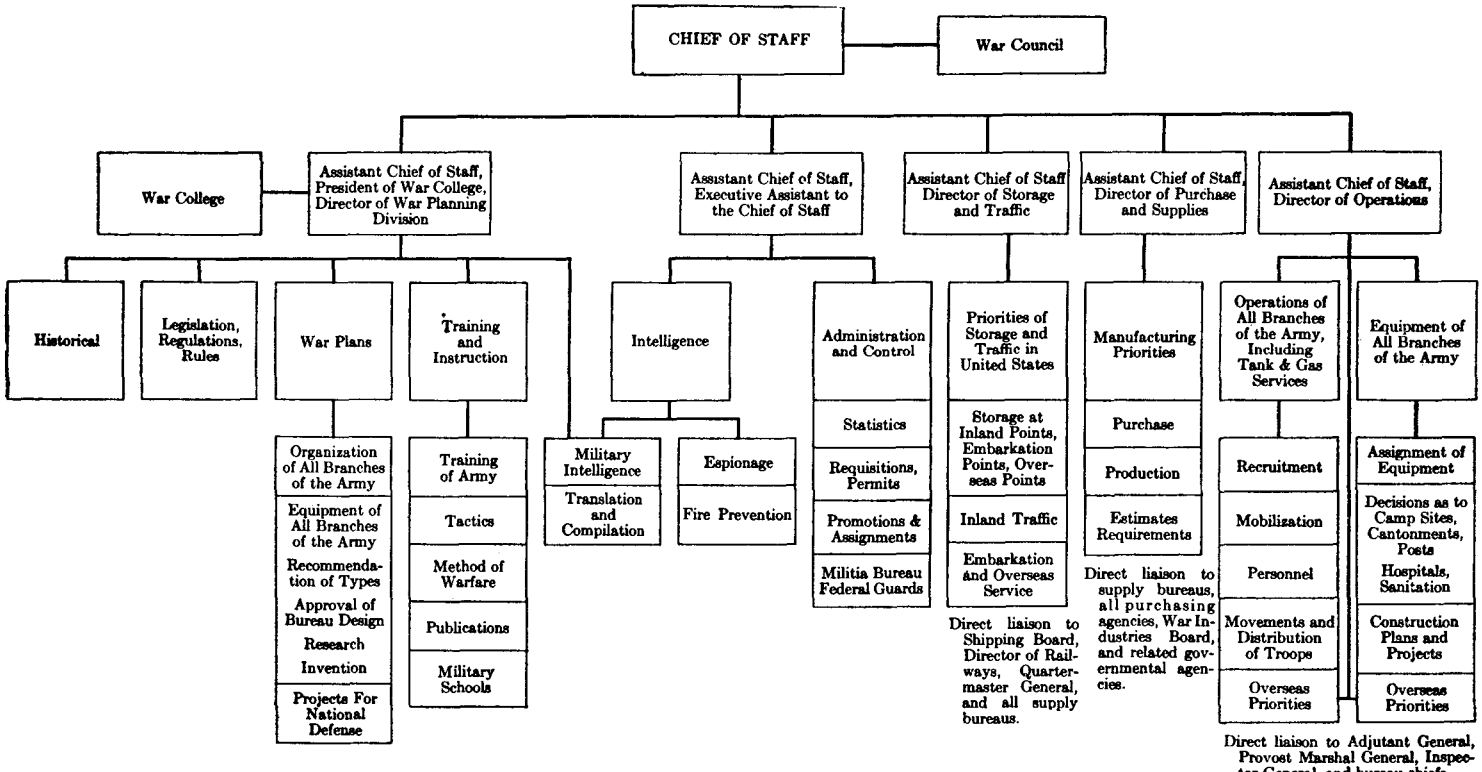


CHART NO. 7.—*ORGANIZATION OF THE GENERAL STAFF*

Feb. 1918

and supplies, as well as all other statistical information obtained from outside sources relating to the war program for transmission to the Secretary of War, the Chief of Staff, the War Council, the General Staff and the several divisions thereof; to supervise military intelligence concerning espionage, counterespionage, fire prevention, and other matters thereto related; to handle all requisitions and permits; to have cognizance of promotions and assignments; and to supervise the Militia Bureau and Federal Guards.

On Apr. 16, a coordinating section was established. With the addition of several other subdivisions, the organization of the Division, Apr. 27, was as shown on chart.

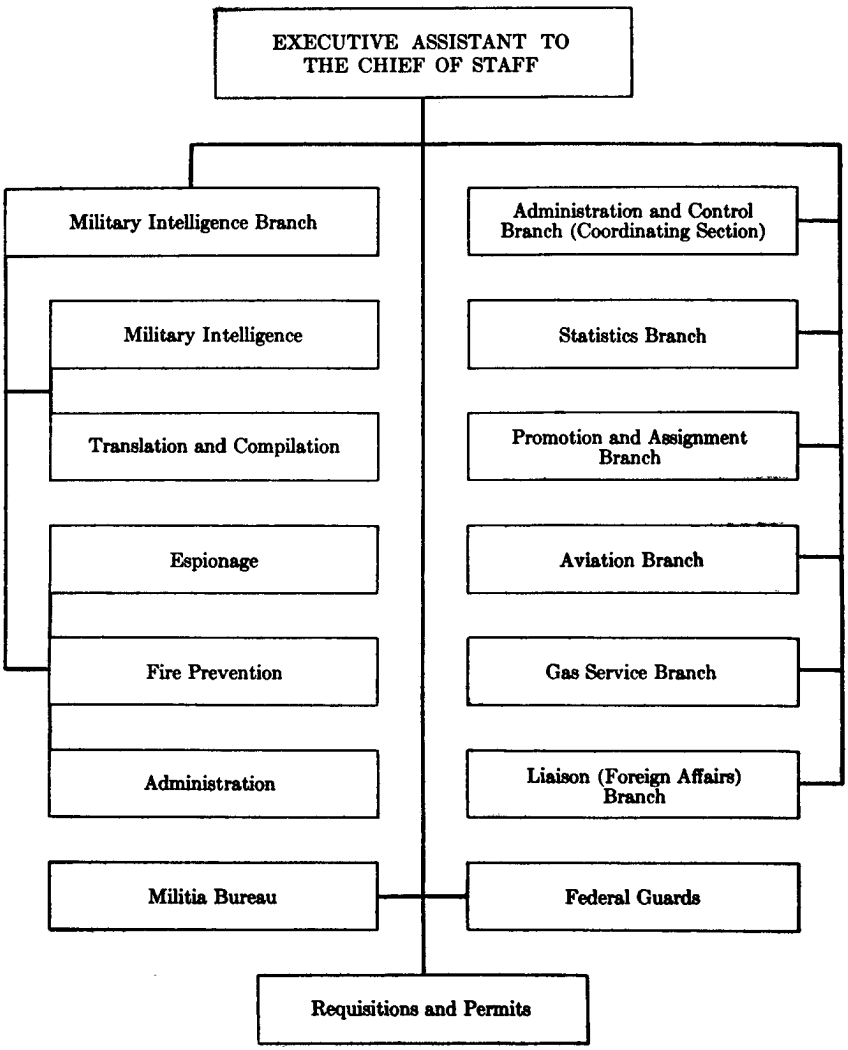


CHART NO. 8.—*ORGANIZATION OF EXECUTIVE DIVISION, GENERAL STAFF*

On Aug. 5, all matters relating to newspaper correspondents with the A. E. F., formerly handled in the Adjutant General's Office, were transferred to the Military Intelligence Branch.

ARMY OPERATIONS DIVISION

The Division was created by consolidation of the Operations and Equipment Committees of the War Department Section, each constituting a branch in the new organization.

Functions

To have cognizance and control of the following: (1) the operation of all branches of the Army, the recruitment and mobilization of the Army, the personnel of troops, the selection of special troops, the movements and distribution of troops, and the determination of all oversea priorities; (2) the assignment of equipment to all branches of the Army and the determination of priorities with respect to such assignments; (3) the supervision and coordination of camp sites, cantonments, army posts, hospitals, sanitation, construction plans and projects as the same relate to all branches of the Army. Direct liaison to be maintained with The Adjutant General, Provost Marshal General, Inspector General, and bureau chiefs.

On Apr. 24, section (2) of the functions was amended as follows:

(2) The study and determination of the types and quantities of equipment for all branches of the Army, the approval of design and types of equipment submitted by the several bureaus or other agencies, not involving changes in organization, regulations concerning the care and disposition of equipment, the assignment of equipment to all branches of the Army, and the determination of priorities with respect to such assignment.

On May 20, the functions of the Army Operations Division were further defined as follows:

To study and determine the types and quantities of equipment and supplies for all branches of the Army and to furnish the several bureaus statements based thereon.

WAR PLANS DIVISION

The Division replaced the War College Division and took over the latter's standing committees as follows: The Legislation and Regulations Committee became the Legislation, Regulations and Rules Branch; the Organization and Recruitment Committee became the War Plans Branch; and the Training Committee formed the Training and Instruction Branch. The Military Intelligence Section was transferred to the Executive Division as Military Intelligence Branch. On Mar. 5, the Historical Branch was established.

Functions

To have cognizance of the following: (1) plans for the organization of all branches of the Army; (2) the study and determination of the types and the quantities of equipment, and the approval of design and types of equipment submitted by the several bureaus, supervision of research and invention

by the several bureaus or other agencies of the Military Establishment in connection with equipment; (3) projects for national defense; (4) training for all branches of the Army, the tactics and methods of warfare to be employed, together with all publications having relation thereto, and the supervision of military schools; (5) the translation and compilation of foreign documents relating to military affairs; (6) the collection, compilation, and maintenance of complete military records; (7) proposed legislation and the preparation of regulations and rules for the Military Establishment.

On Apr. 24, sections (1) and (2) of the functions were amended as follows:

(1) Plans for the organization of all branches of the Army, including the quantities and types of such equipment as affect Tables of Organization; (2) the supervision of research and invention in connection with equipment and war matériel, including the adoption of new types which involve changes in organization.

PURCHASE AND SUPPLY DIVISION

The organization of this Division developed from that of the Purchasing Service. It consisted of four Branches: Manufacturing Priorities; Purchase; Production; Appropriations, Estimates, Requirements, Finance; and the Office of Surveyor General of Supplies, whose function was to supervise and coordinate the procurement of munitions and other supplies for the Army.

Functions

To have cognizance and supervision of the purchase and production of all munitions and other supplies required for the use of the Army; to supervise and direct all purchase, procurement, and production activities of the several bureaus, corps, and other agencies of the War Department, to coordinate and correlate such activities, and to represent the Army in all arrangements for coordinating these War Department activities with those of other Government agencies and with the Allies; to determine purchasing and manufacturing priorities between the War Department agencies in relation to others of the Government; to determine preference to be afforded to contractors for supplies in the matter of fuel, power, raw materials; and to supervise and coordinate all appropriations, estimates, requirements, and other fiscal matters relating to the purchase of munitions and other supplies.

STORAGE AND TRAFFIC DIVISION

This Division replaced the Storage and Traffic Service. It was organized into four Subdivisions: Administration; Storage Control; Inland Transportation; and Embarkation.

Functions

To have cognizance and control of the transportation of all branches of the Army, and of all munitions and other supplies for the Army, both by land and sea, and all storage facilities in connection therewith, including: (1) All movements of troops, as well as of munitions and of supplies of every kind, both raw materials and finished products, during manufacture and after assembly, to points of embarkation, interior points and oversea points, and in and out of all storage. (2) All inland traffic, embarkation service, and oversea service relating to the Army program; the employment

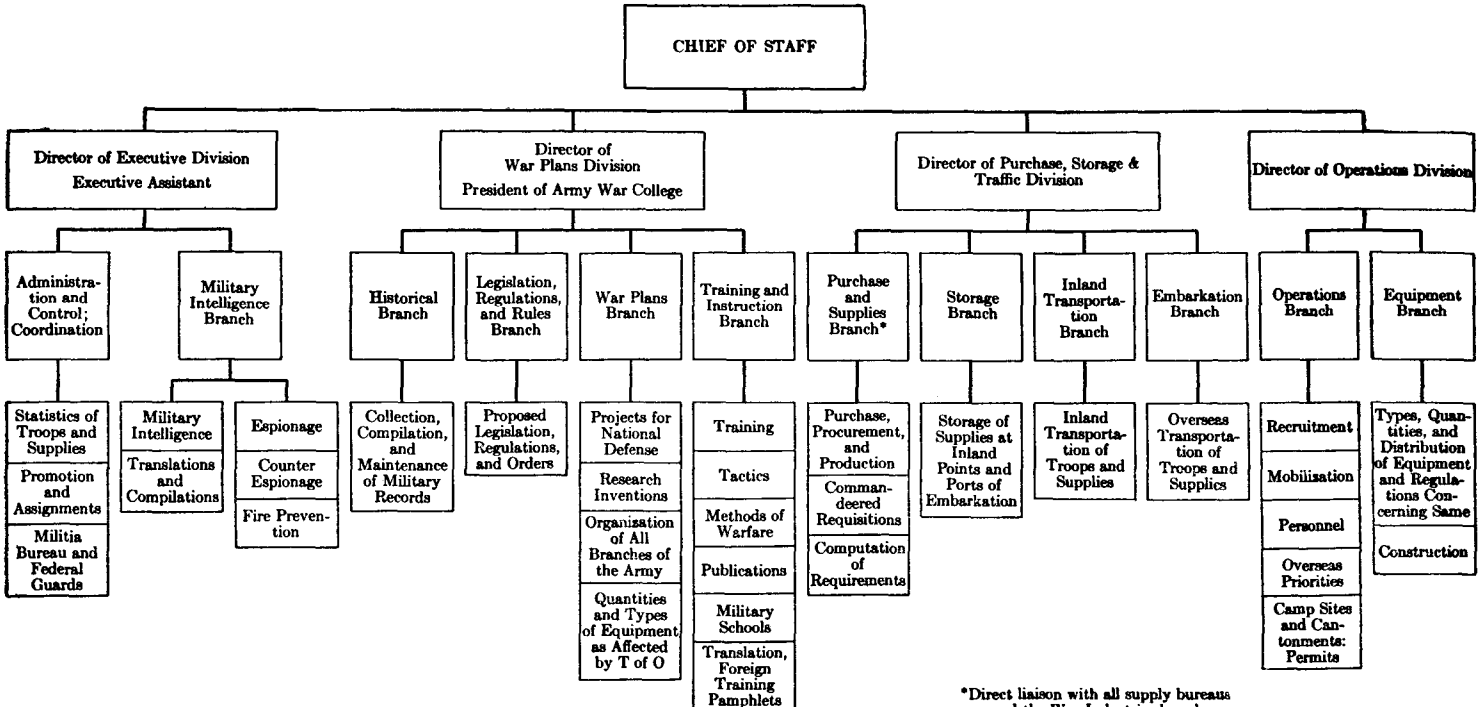


CHART NO. 9.—*ORGANIZATION OF THE GENERAL STAFF*
May 1918

of all Army transports, engaged in the trans-Atlantic service and the necessary commercial shipping to supplement that service; and all arrangements with the Navy Department for convoy service. (3) All storage for munitions and all other supplies of the Army on the seaboard and at interior points.

PURCHASE, STORAGE, AND TRAFFIC DIVISION

On Apr. 16, the Purchase and Supply Division and the Storage and Traffic Division were combined to form the Purchase, Storage, and Traffic Division, while the Office of Surveyor General of Supplies was abolished.

On May 20, the functions of the Division were further defined as follows:

To supervise the computation, by the several supply bureaus, of requirements and rates of production necessary to provide types and quantities of equipment and supplies at the places and within the time determined by the Army Operations Division.

GENERAL STAFF ORGANIZATION MAY 24

As a result of these changes since Feb. 9, the General Staff temporarily assumed the structure shown on chart 9.

CONSOLIDATION OF SUPPLY LEGALIZED

With the passage of the Overman Act, May 20, the President was given a free hand and complete power to readjust the existing framework of Government.

By means of this authority, the War Industries Board was developed into a single coordinating body of Government supply agencies and mobilized industries, and the Purchase, Storage, and Traffic Division of the General Staff was confirmed as a similar supervisory and controlling agency over the supply affairs of the War Department.

Accordingly, supervision and control of supply was exercised, June 21, as shown on chart 10.

PERIOD AUG. 26 TO DEC. 31, 1918

GENERAL STAFF ORGANIZATION AUG. 26

On Aug. 26, the powers and duties of the Chief of Staff were redefined, the Executive Division was abolished and replaced by the Office of the Executive Assistant to the Chief of Staff, the Military Intelligence Division was established, other divisions were slightly altered, and the functions of all General Staff divisions were stated in detail. The organization of the General Staff, at this time, is shown on chart 11.

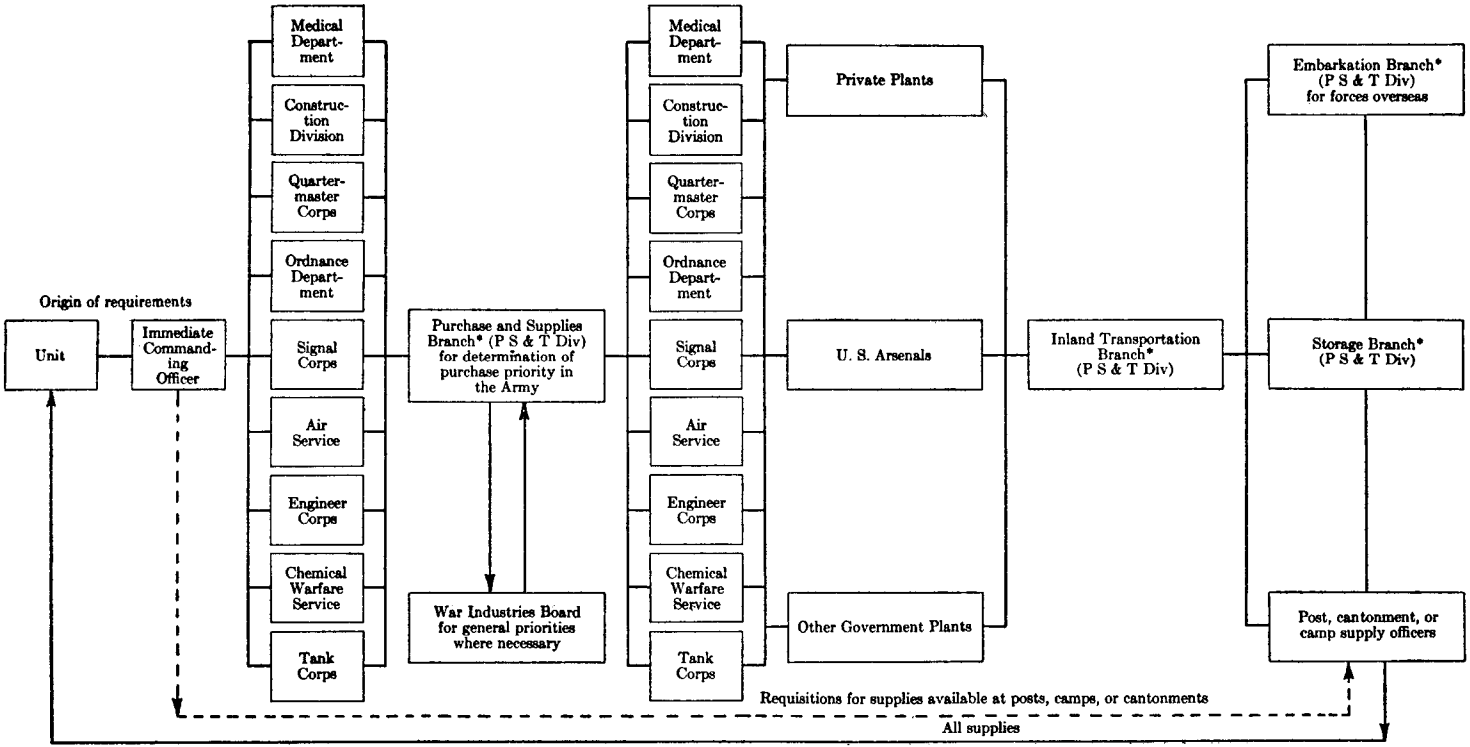
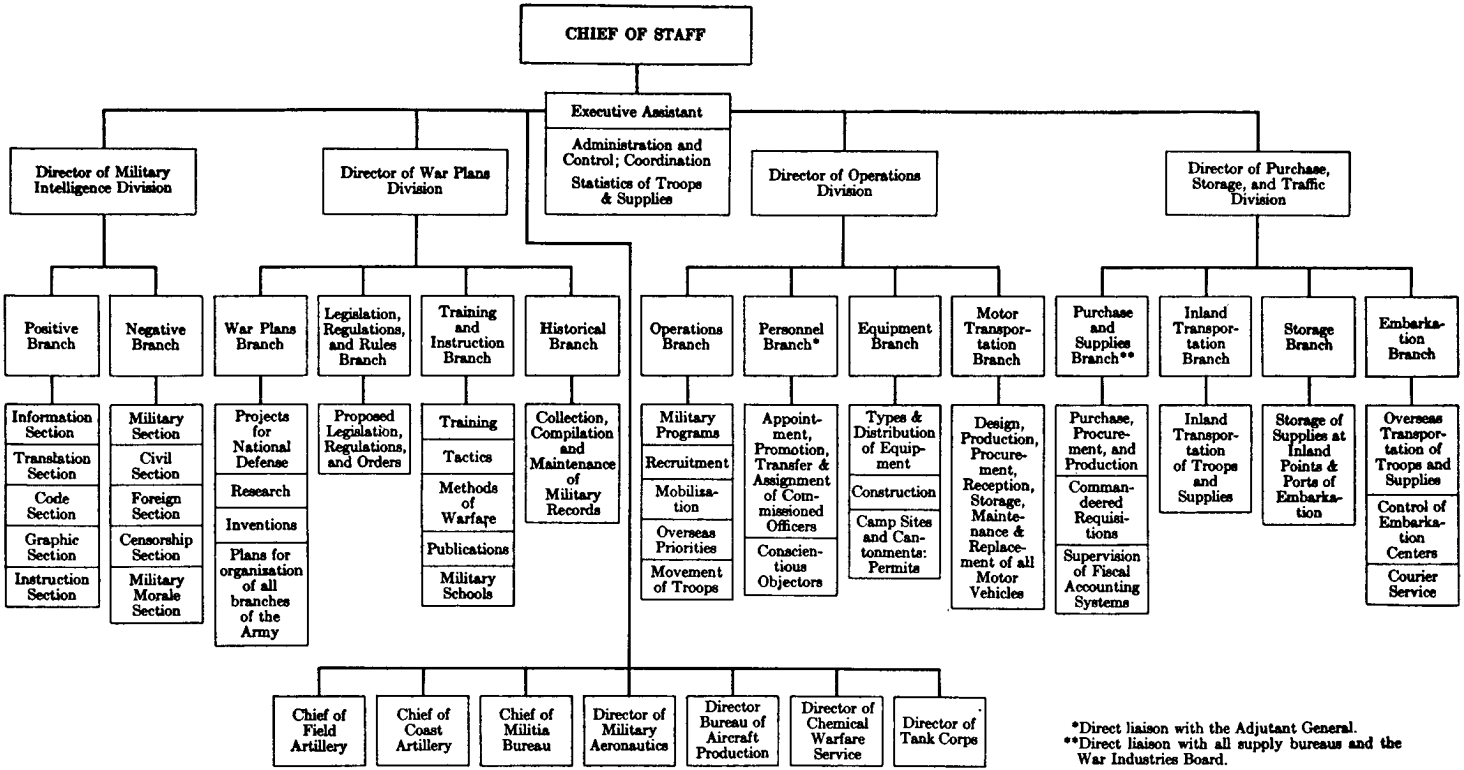


CHART NO. 10.—*FUNCTIONS OF PURCHASE, STORAGE, AND TRAFFIC DIVISION*
June 21, 1918



*Direct liaison with the Adjutant General.
**Direct liaison with all supply bureaus and the War Industries Board.

CHART NO. 11.—*ORGANIZATION OF THE GENERAL STAFF*
Aug. 1918

STATUS OF CHIEF OF STAFF, DIRECTORS OF DIVISIONS, AND BUREAU CHIEFS

Chief of Staff

The Chief of the General Staff is the immediate adviser of the Secretary of War on all matters relating to the Military Establishment, and is charged by the Secretary of War with the planning, development and execution of the Army program. The Chief of Staff, by the Act of May 12, 1917, takes rank and precedence over all officers of the Army, and by virtue of that position and by authority of and in the name of the Secretary of War, he issues such orders as will insure that the policies of the War Department are harmoniously executed by the several corps, bureaus, and other agencies of the Military Establishment, and that the Army program is carried out speedily and efficiently.

The Chief of Staff will attach to the General Staff such personnel, officers and civilians, as may be necessary in order that the work of the General Staff may be efficiently performed.

Directors of Divisions

The director of each division of the General Staff is authorized to issue instructions in the name of the Secretary of War and of the Chief of Staff for carrying out the policies approved by the Secretary of War and the Chief of Staff, within his control.

Chiefs of Bureaus

The chiefs of the several bureaus, corps, and other agencies of the War Department are authorized to communicate directly with the directors of the several divisions of the General Staff or chiefs of branches on matters over which the latter have control.

EXECUTIVE ASSISTANT TO THE CHIEF OF STAFF

Functions

To have charge of the Office of the Chief and to act for him in his temporary absence. To have cognizance and control of the following: (1) organization, administration, and methods of all of the divisions of the General Staff and the several bureaus, corps or other agencies of the War Department, to the end that the activities of all such agencies may be coordinated, duplication of work avoided, harmonious action secured, and unnecessary machinery of organization may be eliminated; (2) the collection for the Secretary of War, the Chief of Staff, and the General Staff of statistical information from the several bureaus, corps or other agencies of the Military Establishment, both as to troops and supplies and from outside sources relating to the war program.

The acquisition of the Morale Branch, Oct. 19, gave the Executive Assistant to the Chief of Staff the additional function of supervising all activities relating to the improvement of the efficiency of the soldier through the betterment of morale. At this time, the Executive Assistant's Office consisted of three Branches: Coordination, Morale, and Statistics; and of two Sections: Cable and Liaison (Foreign Affairs).

OPERATIONS DIVISION (also known as Army Operations Division)

Functions

To have cognizance and control of the following: (1) The recruitment and mobilization of the Army, including the assignment and distribution of the draft; the personnel of the troops; the movement and disposition of troops; the determination of all oversea priorities.

(2) The appointment, promotion, transfer, and assignment of the commissioned personnel of all branches of the Army.

(3) Camp sites, cantonments, Army posts, hospitals, construction, plans, and projects for all branches of the Army except for harbor terminal facilities, including permits to build on military posts or stations, camps or cantonments.

(4) The determination and distribution of all types and quantities of equipment and supplies of all branches of the Army, and regulations concerning the same.

(5) The design, production, procurement, reception, storage, maintenance, and replacement of all motor vehicles.

As finally organized, the Division exercised its functions under (1) through the Operations Branch; under (2), through the Personnel Branch; under (3) and (4), through the Equipment Branch; and under (5), through the Motor Transportation Branch.

MILITARY INTELLIGENCE DIVISION

Functions

To have cognizance and control of military intelligence, both positive and negative, involving the following: (1) to maintain estimates revised daily of the military situation, the economic situation, and of such other matters as the Chief of Staff may direct; (2) to collect, collate, and disseminate military intelligence; (3) to cooperate with the intelligence section of the general staffs of allied countries in connection with military intelligence; (4) to prepare instructions in military intelligence work for the use of our forces; (5) to supervise the training of personnel for intelligence work; (6) to organize, direct, and coordinate the intelligence service; (7) to supervise the duties of military attachés; (8) to communicate direct with department intelligence officers and intelligence officers at posts, camps, and stations, and with commands in the field in matters relating to military intelligence; (9) to obtain, reproduce, and issue maps; (10) to translate foreign documents; (11) to disburse and account for intelligence funds; (12) to cooperate with the Censorship Board and with intelligence agencies of other departments of the Government.

As organized in the summer of 1918, the Division functioned through two Branches: Positive and Negative; and through the Administrative Section.

The Positive Branch consisted of six Sections: Information, Collection, Translation, Graphic, Code and Cipher, Combat Intelligence. The Negative Branch included six Sections: Army, Foreign Influence, News, Travel, Fraud, Military Morale. The Administrative Section functioned through three Subsections: Personnel, Office Management, and Publications.

On Oct. 19, the Military Morale Section was made a separate branch of the General Staff and placed under the supervision of the Executive Assistant to the Chief of Staff.

Field Organization

In addition to the Washington Office, which in the summer of 1918 comprised 173 officers, 23 noncommissioned officers, and 589 clerks, a field organization was maintained with representation in the large cities, the critical factory centers, and each military unit in the Zone of the Interior. Organizations of the A. E. F. were similarly staffed. The duties, in which this specially chosen and instructed personnel engaged, are described under activities, p. 58.

WAR PLANS DIVISION

Functions

To study and submit reports on all matters referred to it by the Chief of Staff, including the following: (1) plans for the organization of all branches of the Army and the preparation of Tables of Organization; (2) research and inventions in equipment and war matériel; (3) projects for national defense; (4) proposed legislation and the preparation of regulations and rules for the Military Establishment.

To have cognizance and control of: (5) training of the Army; the tactics and methods of warfare to be employed, together with all publications having relation thereto; the supervision of military education and special training; the publication of foreign documents relating to military affairs; inspection to insure efficiency and thoroughness in training and instruction throughout the Army; (6) the collection and compilation of complete military records for historical purposes.

The Division continued to carry out its functions as follows:

Those under (1), (2), and (3), through the War Plans Branch; those under (4), through the Legislation, Regulations and Rules Branch; those under (5), through the Training and Instruction Branch; and those under (6), through the Historical Branch.

PURCHASE, STORAGE, AND TRAFFIC DIVISION

After the passage of the Overman Act, May 20, 1918, it had become practicable to put the following principles into effect:

1. Redistribution of existing functions of various bureaus in such a manner as to consolidate important similar or identical functions in the one agency best adapted to handle them.
2. Creation of certain new agencies to handle matter previously attended to by existing bureaus but not logically a part of their functions, and establishment of certain new services found to be necessary as result of developments and experiences of the Army overseas.
3. Reorganization of the General Staff with a view to en-

abling it to coordinate and control all existing War Department agencies and services so as to eliminate wasted effort and direct their activities toward the development and execution of the military program as a whole.

On July 18, a plan was submitted by the Director of Purchase, Storage, and Traffic to the Chief of Staff involving a radical reorganization of the Division to eliminate certain centers of organic unsoundness which had been the cause of the principal mistakes, confusions, and delays under the old system. Reorganization was to be effected gradually so as not to interfere with the continuity of the work.

The plan called for consolidation of procurement of all standard articles of Army supply, except technical articles, in the Purchase, Storage, and Traffic Division. Similarly, the administration of all distribution, including storage, rail and water transportation, and embarkation, was to be centered in the Division.

Under the plan, the functions of the Director of Purchase, Storage, and Traffic, whose powers in the past had been mainly supervisory, were to be "executive and not supervisory." After receiving the Army program from another division of the General Staff, the Director of Purchase, Storage, and Traffic was held responsible for the computation of the requirements to meet that program and for the filling of the requirements. He was to command the supply organization and relieve the Chief of Staff from all detail of and responsibility for supply.

On Aug. 26, this plan was approved, and authority was granted for a number of successive changes, scheduled to be made gradually so as not to disrupt the continuity of supply. Reorganization began immediately, with the structure shown on chart 10, p. 40.

Functions

To have cognizance and control of the following: (1) The supervision and direction of all requirements and the procurement and production activities, including real estate, of the several bureaus, corps, and other agencies of the War Department; the coordination and correlation of the requirements and the procurement and production activities of the several bureaus, corps, and other agencies of the War Department; the maintenance of an estimate of the military resources of the Nation respecting matériel of every description; the representation of the Army in all arrangements for coordinating the requirements, procurement, and production activities in the several bureaus, corps, and other agencies of the War Department, with other agencies of the Government and with the Allies, including replacements of matériel pertaining to the Army with the latter; the determination of purchasing and manufacturing priorities between the several bureaus, corps, and agencies

within the War Department, and in relation to other agencies of the Government; the determination of priorities to be afforded to contractors for supplies in the matter of the shortage of fuel, power, and raw material; the supervision and coordination of all fiscal accounting systems and appropriations, estimates, and requirements and other financial matters relating to the purchase of the munition and all other supplies, the supervision of the computation of the requirements and rates of production necessary to provide types and quantity of equipment, as determined by the Operations Divisions. (Statements of the type and quantities of equipment and supplies for all branches of the Army shall be furnished the several bureaus by the Operations Division. It shall then be the duty of the Supply Bureau, under the supervision of the Director of Purchase, Storage, and Traffic, to compute the requirements and rates of production necessary to provide equipment and supplies, in the quantities, at the places and within the time determined by the Operations Division.)

(2) The storing and warehousing of property for all departments, bureaus, and corps of the Army, both at interior points and at the seaboard, and the operation of all storage facilities provided for the joint use of all bureaus of the Army.

(3) All that pertains to the routing, inland and coastwise, of troops and property of the War Department, by motor, rail or ship, and the conduct of all negotiations with inland carriers with respect to questions affecting such transportation; the movement of all property of the War Department to prevent congestion and to obtain preferential movements thereof; coordination of rail movements required in the handling of supplies destined for shipment overseas with shipments by the Allies.

(4) The transportation of troops and supplies overseas; embarkation and oversea service relating to the Army program, including the employment of all Army transports, harbor floating equipment and new construction in connection therewith, except the construction and control of floating equipment operated by the Corps of Engineers for river, harbor, and fortification work, and the control of the Army mine-planter service; such commercial shipping as may be used to supplement that service, including all arrangements with the Navy Department for convoy service; all primary ports of embarkation, expeditionary ports and concentration camps connected therewith; courier service between the War Department and General Headquarters, A. E. F.

(Direct correspondence between the Director of Purchase, Storage, and Traffic or the Chief of Embarkation and the commanding officers of ports of embarkation is authorized. Copies of all requisitions, requests, and information of every character received from the commanding generals of forces operating overseas, or their subordinates, which bear upon reinforcements or renewals of supplies will be transmitted to the Director of Purchase, Storage, and Traffic.)

The Division continued to carry out its functions as follows: those under (1), through the Purchase and Supplies Branch; those under (2), through the Storage Branch; those under (3), through the Inland Transportation Branch; and those under (4), through the Embarkation Branch.

Supervising Units and Operating Departments

In successive changes the following supervising units were established in the Purchase, Storage, and Traffic Division:

Unit	Date 1918	Purpose
Executive Branch	Sept. 5	To control current reorganization and issue orders.
External Relations Branch	Sept. 5	To maintain liaison with War Industries Board relative to price fixing, clearance, and priorities.
Purchase Branch	Sept. 5	To supervise supply purchasing.
Production Branch	Sept. 5	To supervise production matters.
Inspection Branch	Sept. 5	To supervise inspections of Army supplies.
Research Branch	Nov. 1	To exercise staff supervision over packing service.
Statistics and Requirements Branch	Nov. 7	To be responsible for statistical matters and to coordinate requirements calculations of supply bureaus.
Sales Branch	Dec. 17	To supervise the sale of surplus property.

On Dec. 11, the Production Branch ceased to function.

In addition to the supervising units, the following regular operating departments reported to the Director of Purchase, Storage, and Traffic: Embarkation Service, Inland Traffic Service, Purchase and Storage Service, Facilities Department, Primary Ports of Embarkation, and Finance Department. These departments are described in separate chapters as follows:

Departments	Title of chapter
Embarkation Service	Transportation Service
Inland Traffic Service	Do
Primary Ports of Embarkation	Do
Purchase and Storage Service	Quartermaster Corps and Purchase and Storage Service
Facilities Department	Real Estate Service
Finance Department	Finance Service

CHANGES IN 1919

OFFICE OF EXECUTIVE ASSISTANT TO THE CHIEF OF STAFF

On July 14, the Morale Branch was transferred to the War Plans Division.

OPERATIONS DIVISION

On July 30, the Invention Section of the War Plans Division was transferred to the Operations Division. On Aug. 12, the Motor Transportation Branch was discontinued as a branch of the Division.

MILITARY INTELLIGENCE DIVISION

On Apr. 24, the Geographic Branch was created from the Graphic Section of the Positive Branch, to deal with the policies governing matters relating to maps and mapping and to terrain information prepared in written form.

WAR PLANS DIVISION

The Division acquired the Morale Branch July 14, and lost the Invention Section July 30.

PURCHASE, STORAGE, AND TRAFFIC DIVISION

At the conclusion of hostilities, steps were taken toward discontinuing all operating activities within the Purchase, Storage, and Traffic Division. Operating departments which had of necessity been developed by the Division in the absence of any preexistent organizations of the kind, received specific designations as services. Thereafter, they occupied the same status as all other bureaus and departments of the Army and reported to the Assistant Chief of Staff, Director of Purchase, Storage, and Traffic, on all matters relating to Army supply.

Changes in Supervising Units

On Jan. 24, the Research Branch was absorbed by the Engineering and Standardization Branch which was established on that date. On the following day, the Inspection Branch was abolished. On Feb. 18, the Storage and Issue Branch was established.

On Mar. 13, a new organization was announced in which no reference was made to operating departments. The Administration Branch was constituted to supersede the Executive Branch; the External Relations Branch was absorbed by the Administration Branch, and the following new Branches were created: Personnel, Real Estate, Transportation, Finance and Accounting.

As a result of these changes, the Purchase, Storage, and Traffic Division functioned through ten Branches: Administration, Personnel, Purchase, Statistics and Requirements, Engineering and Standardization, Storage and Issue, Real Estate, Transportation, Finance and Accounting, and Sales. Their functions, at this time, were defined as follows:

ADMINISTRATION BRANCH

To handle all administrative matters relative to correspondence, records, and files; the issuance of orders and regulations; receipt and transmission of cablegrams; and assignment of office space and equipment. To maintain relations and conduct negotiations with representatives of all Government and domestic agencies, as well as foreign governments, in matters pertaining to supply.

PERSONNEL BRANCH

To supervise personnel matters of the commissioned, enlisted, and civilian personnel assigned to duty in the Operating Services under the Director of Purchase, Storage, and Traffic, and to perform all personnel functions for the various Branches of the Division.

PURCHASE BRANCH

To formulate and supervise the execution of the War Department purchasing policy; to study methods of purchase; to provide publicity of War Department requirements, contracts, and awards; to supervise and coordinate all matters involving patents and rights to inventions, including compensation for the use thereof in the Army; to supervise and direct the operations of a Board of Appraisal who will determine just compensation for all property commandeered or requisitioned, and take action on all claims against the Government for damages to property of all kinds; to supervise and direct the operations of a Board of Contract Adjustment who will hear and determine all claims, doubts, or disputes, including all questions of performance or nonperformance which may arise from any contract made by the War Department.

STATISTICS AND REQUIREMENTS BRANCH

To compile and maintain statistical records and studies, including analysis and compilation of requirements of the Army in accordance with the information furnished by the Chief of Staff based on organization and strength of the military forces and the equipment tables prepared by the Operations Division, General Staff; to supervise, coordinate and direct these activities in the various requirements branches of bureaus and operating services.

ENGINEERING AND STANDARDIZATION BRANCH

To have supervisory authority over all research work and standardization of all standard articles of purchase; to direct the accumulation, arrangements, and maintenance by the several bureaus of an exhibit of War Department matériel for procurement and educational purposes; to exercise supervision over the publication of drawings, specifications, and catalogs pertaining to matériel and equipment developed and standardized by the Operations Division of the General Staff; to exercise supervision over all production and inspection methods in the War Department supply activities, and to prepare and issue all Army supply catalogs.

STORAGE AND ISSUE BRANCH

To supervise and coordinate all activities connected with storage, distribution, and issue of supplies and equipment for the Army; to initiate the storage program necessary to the needs of the Army as authorized by Congress.

REAL ESTATE BRANCH

To supervise and coordinate the operating activities conducting the lease, purchase, and disposition of real estate for the Army; to direct the activities of the Board of Valuation and Review.

TRANSPORTATION BRANCH

To supervise and coordinate the activities connected with the Inland Traffic and Embarkation Services and Ports of Embarkation.

FINANCE AND ACCOUNTING BRANCH

To exercise coordinating and supervisory jurisdiction over the Finance and Accounting Service of the Army.

SALES BRANCH

To direct, supervise, and coordinate the activities of the services charged with the sale or disposal of all surplus property of the War Department; to direct the activities of the various Sales Control Boards of the War Department.

Organization June 1919

On May 15, the Real Estate Branch and Finance Branch were discontinued as separate branches and consolidated into the Real Estate and Finance Branch. On June 17, the Purchase, Storage, and Traffic Division was organized as shown on chart.

The new organization was changed Oct. 15, when the Purchase Branch and the Standardization Branch were combined to form the Purchase and Standardization Branch.

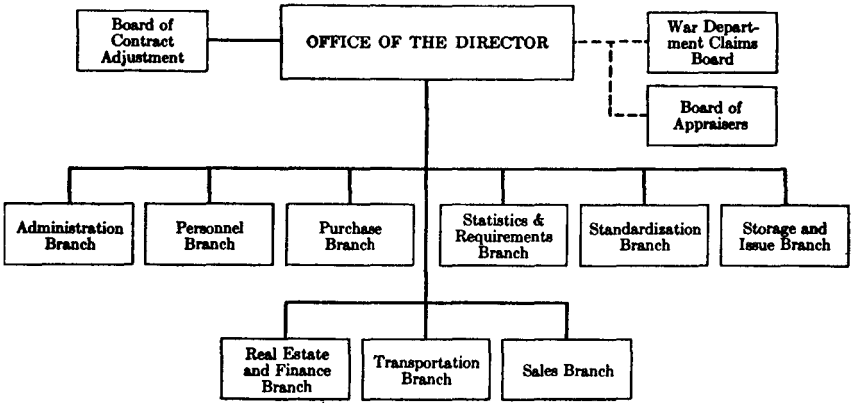


CHART NO. 12.—*ORGANIZATION OF THE PURCHASE, STORAGE, AND TRAFFIC DIVISION*
June 1919

GENERAL STAFF ORGANIZATION AUG. 1919

The changes, which the organization had experienced up to Aug. 12, produced the structure shown on chart 13. The organization of the Purchase, Storage, and Traffic Division, which does not appear in detail on the chart, is outlined on chart 12.

Separate sections are devoted to the description of the Chiefs of Field Artillery, Coast Artillery, and the Militia Bureau, as well as of the Directors of Air Service, Chemical Warfare Service, and Tank Corps.

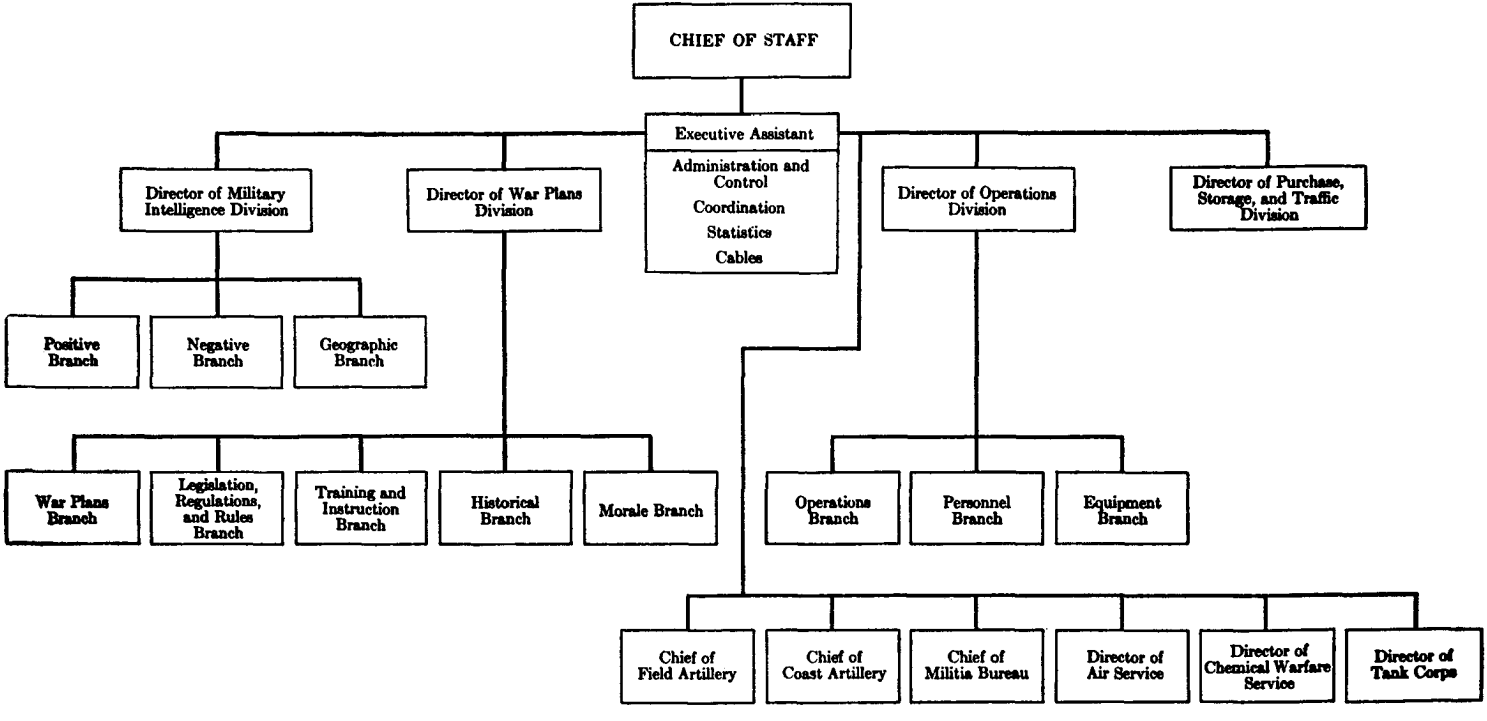


CHART NO. 13—*ORGANIZATION OF THE GENERAL STAFF*
Aug. 1919

PERSONNEL

As stated on p. 29, only 19 officers of the General Staff Corps were allowed to be on duty in Washington at the beginning of the war. This number was increased in May 1917 to 47. After legislative restrictions were removed by the Act of May 18, 1917, the personnel of the General Staff expanded steadily. At the Armistice there were 944 officers on duty with the War Department General Staff, and 128 were attached. Except for four general officers, this personnel had had no prewar experience in general staff work.

By June 30, 1919, this numerical strength had decreased to 253 officers of whom 123 were assigned and 130 attached for the period of emergency only. In addition, 142 officers performed general staff duties although not assigned or attached to the General Staff Corps.

ACTIVITIES

DEVELOPMENT OF ARMY PROGRAM

TENTATIVE PROGRAM

At declaration of war, the Nation was wholly unprepared—industrially, economically, and militarily. Moreover, enemy submarines were taking such a heavy toll of Allied shipping that it was feared shipments of foodstuffs and supplies might be interrupted. In consequence, the greater part of available tonnage was set aside to carry these necessities to the Allies.

Some authorities contended that the United States would be unable to supply a large force overseas and that our main effort should be directed toward creating a large air force.

Based on these considerations, the following tentative program was adopted:

1. To send overseas promptly one tactical division to serve as the nucleus for the organization and training of later contingents and for the resulting effect on the morale of friend and foe.

2. To increase this expeditionary force, if the shipping situation permitted, to a size that would make American participation an effective factor. In a general way it was contemplated to have about 1,000,000 men in France by Dec. 1918.

While these plans and policies were still in the formative stage, the French authorities asked for 4,500 American aviators and a corresponding quantity of matériel to be sent to France within a year. In response to this request and encouraged by popular enthusiasm, the Aviation Section of the Signal Corps undertook a huge program which, for a year, it pursued practically independently. Its failure afforded an early and striking object lesson of

the necessity for a General Staff to formulate the military program and to coordinate the activities of the various agencies concerned.

THIRTY-DIVISION PROGRAM

On July 10, 1917, General Pershing submitted preliminary recommendations which provided for 30 divisions to be shipped to Europe during 1917 and 1918. These proposals were supplemented Oct. 7, 1917, by a service-of-the-rear project and a schedule of priority shipments. Thereafter, other requests for special and additional troops, all of which were approved, caused minor changes in the program.

As approved and accepted, the official military program was divided into six phases. It provided for sending to France, by Dec. 31, 1918, 30 divisions, organized into 5 corps of 6 divisions (4 combat, 1 training, and 1 replacement) each, and the necessary corps troops, army troops, service-of-supply troops, and replacements—a total of 1,372,399 men.

EIGHTY-DIVISION PROGRAM

Early in 1918, it became evident that enemy submarines could not prevent shipments from reaching Europe. At the same time, the military situation was critical. The elimination of Russia as a military factor enabled Germany to move more troops to the western front where it already enjoyed numerical superiority. Furthermore, the enemy possessed the advantage of unity of command, of operating beyond his own borders, and of having at his disposal trained senior and general staff officers developed by 40 years of preparation. However, the failure of submarine warfare and the enormous losses sustained by the Army were beginning to affect the morale of the German people. It was therefore logical to assume that the German High Command would endeavor to achieve an early and decisive victory on the western front, before the military power of the United States could become effective. Since France had been drained of manpower, and Britain had thrown in her last reserves, it became mandatory for the United States to supply as great a force as possible, at the earliest moment, if victory was to be assured.

A new program was therefore submitted and approved July 18, 1918, as follows:

Date	During month ending on date indicated				On date indicated	
	Men to be drafted	Movement overseas			Total in American Expeditionary Forces	Remaining in United States
		Reinforcement troops	Replacement troops	Total troops to be shipped		
1918						
June 30					1,000,000	1,450,000
July 31	345,000	200,000	50,000	250,000	1,235,000	1,545,000
Aug. 31	250,000	200,000	50,000	250,000	1,470,000	1,545,000
Sept. 30	200,000	200,000	50,000	250,000	1,705,000	1,495,000
Oct. 31	155,000	200,000	50,000	250,000	1,945,000	1,400,000
Nov. 30	150,000	185,000	40,000	225,000	2,160,000	1,325,000
Dec. 31	150,000	175,000	25,000	200,000	2,350,000	1,275,000
1919						
Jan. 31	100,000	160,000	15,000	175,000	2,515,000	1,200,000
Feb. 28	200,000	160,000	15,000	175,000	2,675,000	1,225,000
Mar. 31	300,000	200,000	35,000	235,000	2,885,000	1,290,000
Apr. 30	300,000	175,000	75,000	250,000	3,060,000	1,340,000
May 31	300,000	150,000	100,000	250,000	3,210,000	1,390,000
June 30	300,000	150,000	100,000	250,000	3,360,000	1,440,000
Total	2,750,000	2,155,000	605,000	2,760,000		

Actual wastage of manpower, to be made up from replacements, was calculated at 400,000. With 24 divisions in the A. E. F. and 18 divisions in the United States, June 30, 1918, it was contemplated to continue maintaining 18 divisions at home, but to increase the forces abroad to 52 divisions by Dec. 31, 1918, and to 80 by June 30, 1919. This plan, then, really called for the organization of 98 divisions.

Troops were transported to France in accordance with the program until the Armistice. This achievement, exceeding considerably the original 30-division schedule, was brought about by intensified effort on the part of all War Department agencies, and especially by the General Staff.

More troop and cargo ships had to be provided. The Shipping Board made 1,000,000 dead-weight tons available, withdrawn from the trades, and the Emergency Fleet's new vessels aggregating 718,000 tons. However, some 1,200,000 additional tonnage was needed in Aug. 1918; this was supplied by Great Britain.

To carry the program out, new manpower reserves had to be tapped. Accordingly, legislation was obtained extending draft ages from 18 to 45. Other General Staff representations resulted in adoption of the principle of promotion by selection for the entire Army; creation of the United States Army by abolishing all distinctions drawn between Regular Army, National Guard, and National Army organizations and personnel; correction of defects in the bureau system; and the reorganization of the General Staff itself.

As soon as the 80-division plan had been disposed of, the General Staff took up the study of its extension through the 1920 fiscal year. This project provided for 100 divisions in France and 12 divisions in the United States by June 30, 1920, and called for an armed force of 5,500,000. With the signing of the Armistice, the new plan, as well as the 80-division program, was abandoned.

DIRECTION OF WAR EFFORT

OPERATIONS DIVISION

Mobilization

Mobilization of the Army was effected as shown on chart.

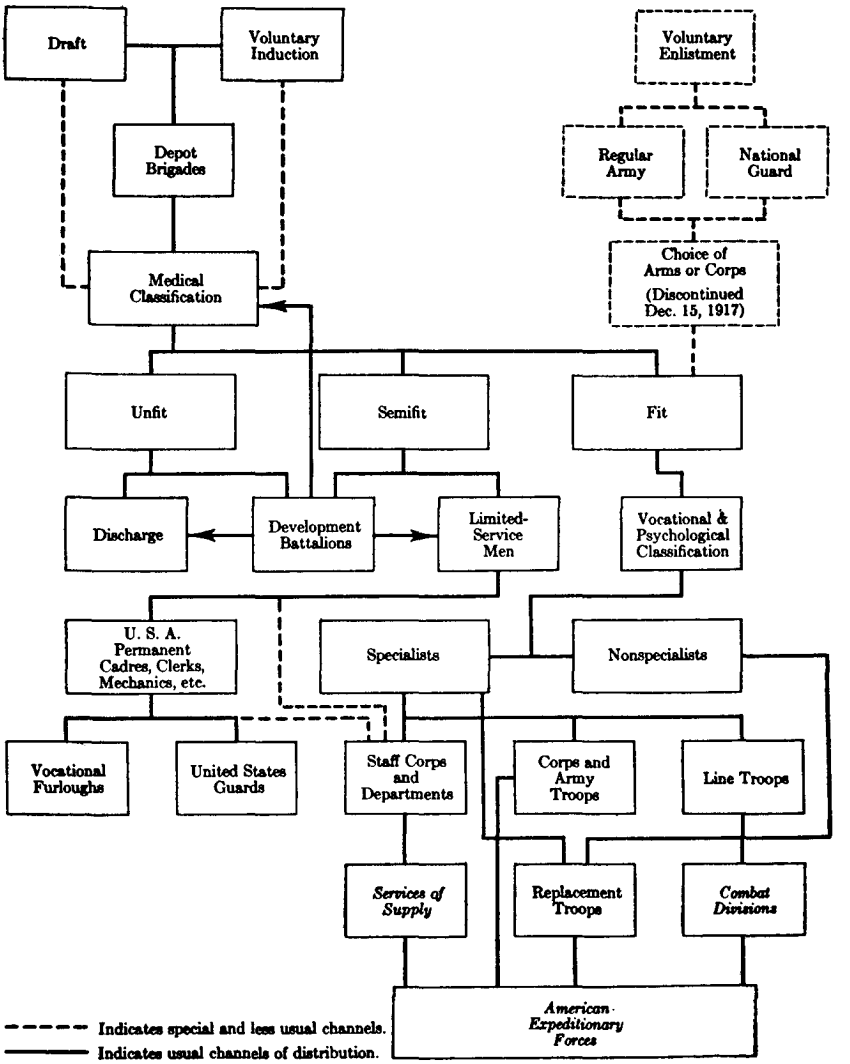


CHART NO. 14—*MOBILIZATION CHART*

In accordance with approved policy, the Operations Division determined when and how many draft registrants would be called; the camps, cantonments, and posts to which men would be sent; the organizations to which they would be assigned; the priority in which organizations would be sent overseas, and the time they would be removed from their camps.

The Division thus coordinated the work of the various corps and arms concerned, of the supply bureaus, Inland Traffic Service and Embarkation Service, in execution of the Army program.

Matériel

At outbreak of war, supervision over design, adoption, standardization, distribution, and issue of equipment was in the main advisory only. The several supply bureaus proceeded independently in these matters until the early part of 1918 when the Division began to exercise a more direct control over the procurement of the equipment required by the A. E. F., especially with regard to priority.

Tables of allowances were prepared, a procurement program for the Ordnance Department was developed, and studies were conducted for the conversion of coast artillery matériel into mobile artillery. The Division also supervised the work of the Motor Transport Corps, as to matériel, and thus coordinated the relations of the Corps with the rest of the Army.

These activities were carried out in conformity with policy established by the War Plans Division.

Construction

While actual construction was the task of the Construction Division of the Army, coordination of the construction effort constituted an important activity of the Operations Division.

Besides supervision extending to the construction of camps, cantonments, posts, and other military stations, the Division was charged with the general supervision of the hospitalization project. The formulation of policy relative to the latter was aided by a mass of statistics supplied by the Council of National Defense.

As the war progressed, the Purchase, Storage, and Traffic Division took over supervision of construction pertaining to harbor facilities and the building and enlargement of numerous plants required for the production of Army supplies.

Commissioned Personnel

Supervision of the procurement, appointment, transfer, and assignment of the commissioned personnel of the Army became part of the Division's activities in Sept. 1918, when commissioned

personnel branches of the several staff corps and departments went out of existence. However, this new task did not extend to the troops composing the A. E. F.

Officers were classified according to ability and suitability for various duties. This was followed, after the Armistice, by an efficiency classification of all Regular officers and, insofar as practicable, of members of the Officers' Reserve Corps.

In order to form a pool of some 40,000 additional officers for filling anticipated requirements, plans were made for a nationwide drive, the results of which were gratifying. After Nov. 11, 1918, all activities concerned with procurement of emergency officers ceased.

Miscellany

The Operations Division cooperated with the Navy Department under the Draft Act; solved problems in connection with the Mexican Border; and supervised the sending of replacements to the Siberian Expeditionary Forces and oversea garrisons in the Philippines, Hawaii, China, Alaska, and the Panama Canal. Moreover, the Division cooperated with the United States Employment Service in securing employment for discharged soldiers; studied questions relating to the Bureau of War Risk Insurance and the Federal Board of Vocational Education; and decided on policy regarding the reenlistment of noncommissioned officers in their grades, and passed on many other matters of similar nature.

MILITARY INTELLIGENCE DIVISION

Information

Military information gathered through its field service enabled the Division to furnish General Headquarters, A. E. F., valuable assistance which increased as the war progressed. Exchange of information with the State, Treasury, Justice, and Post Office Departments, with Naval Intelligence, the National Research Council, and the War Trade and War Industries Boards served to increase the Division's efficacy in this field.

Information collected abroad was disseminated in the form of a "strategic estimate," in which the military, political, economic, and psychological aspects of the situation were treated. This was supplemented by a daily digest from some 38 foreign papers in 10 different languages, and by translations of foreign documents.

Combat Intelligence

In cooperation with the War Plans Division, a comprehensive training project in combat intelligence was initiated and coordinated with similar instruction in the American Expeditionary

Forces. The program had the effect of placing combat intelligence training in the United States on a sound basis.

Codes and Ciphers

The Division, by means of its code and cipher service, guarded secrecy of communication, without which the successful prosecution of the war would have been handicapped. As fully developed, the service covered the entire globe, and maintained uninterrupted confidential communication with all important news centers.

Preventive Measures

Besides the collection and distribution of information designed to advance the military effort by direct methods, the Division adopted certain preventive measures to forestall any enemy subversive activities or influences that might impair military efficiency and morale.

In carrying out this work, the Division studied espionage and propaganda directed against the United States and Associated Powers. To keep the Army immune, some 400 independent military commands in the United States were each required to establish an intelligence unit with the object of discovering and exposing disloyalty and other subversive influences, and to cooperate with the Washington Office. Similar units operated at New York, Philadelphia, St. Louis, St. Paul, New Orleans, and Pittsburgh, and at headquarters of territorial departments and ports of embarkation.

Protection was also extended to our industrial effort through special intelligence offices at Boston, Springfield, New Haven, Bridgeport, New York, Albany, Syracuse, Buffalo, Newark, Philadelphia, Baltimore, Nitro, Atlanta, Nashville, Pittsburgh, Cleveland, Dayton, Indianapolis, Detroit, Chicago, Milwaukee, Minneapolis, Davenport, St. Louis, Fort Worth, San Francisco, and Los Angeles. These centers combated sabotage and subversive influences in war plants.

A censorship service was instituted early in the war. In the examination of publications and communications, it touched every channel of communication, such as telegraph and telephone, radio, photograph, commercial motion pictures, press, foreign language papers, books, and propaganda in general. As a byproduct of this control, much valuable information was obtained in which the War Department was especially interested.

To prevent enemy agents from entering or leaving the country, the Military Intelligence Division investigated all applications for passports.

Another department of the Intelligence Division was charged with the specific duty of discovering fraud and graft in the Army or in connection therewith. This activity yielded a rich harvest and saved the United States more than $2,000,000.

Maps and Monographs

The Division collected maps from practically every part of the world, and filled some of the requirements of the American Expeditionary Forces. In addition, it prepared and published a number of military monographs and handbooks on Siberia, Russia, Poland, and Mexico.

WAR PLANS DIVISION

Planning the Emergency Forces

All departments of the Army and all General Staff subdivisions collaborated in planning the original war program. However, the creation of the War Plans Division provided a central deliberating body to direct such matters as the creation of military units, changes in organization, technical innovations, and anything of sufficient importance to modify the current military program. Thus, all projects received the fullest and most expert consideration without intruding upon the responsibilities of those actually entrusted with mobilizing the Army.

Our prewar Army organization was adapted to the requirements of a force operating on the extensive terrain of the American continent. Its relatively small army corps of about three divisions consisted largely of infantry and cavalry with a proportionately small amount of artillery and the necessary trains. Conditions of European warfare made it necessary to reorganize the entire military establishment. General Pershing recommended a corps organization of six divisions (four combat and two replacement). His plan called for a division of about 28,000 men, to consist of three regiments of field artillery, four regiments of infantry composed of over 3,000 men each, and appropriate auxiliary troops; cavalry was eliminated.

Approval of these recommendations involved a radical reorganization of the Regular Army and the National Guard. In addition, new units had to be created, such as depot brigades, a depot for corps and army troops, labor battalions, replacement depots, and other organizations needed in the United States.

Headquarters of the A. E. F. initiated all Tables of Organization of units intended for oversea service. However, special organizations created for service in the United States conformed to tables prepared in Washington.

Among the accomplishments of the Division or its predecessor, was the formulation of plans to mobilize the Regular Army and National Guard and to create the National Army. The planning of the draft machinery, including the details of the reception at camps of selectees of the first draft—in close collaboration with the Provost Marshal General—formed another aspect of the activities.

In 1918 plans were prepared to organize new services or branches, such as the Inland Traffic Service, Motor Transport Corps, the Tank Corps, and others. Besides, studies and plans were made for the Panama Canal Zone, the Philippines, and the forces on the Mexican Border, in connection with questions arising in these areas. Shortly after the Armistice, the Division concerned itself with plans for a reorganization of the Army, taking advantage of lessons learned in actual operations.

Throughout the war the remote possibility of an invasion of the United States had to be kept in mind and plans made accordingly. This factor had a decided influence on the location of training camps, and on the possible depletion of troops in any strategic area.

Training of the Army

The planning for training was begun by the War College Division, which revised all former methods to achieve coordination of instruction. This activity was later assigned to the War Plans Division, which continued to coordinate and influence the training of all branches and services, including combat divisions, corps and army troops, replacements, etc., of selected personnel for officers, noncommissioned officers and specialists, and of officers already in the service.

While the Division planned and recommended action, the details of instruction remained the concern of the several chiefs of branches and services. Curricula and school methods were controlled directly only in the case of the infantry, which had no chief of branch.

The British and French general staffs provided information concerning the latest development of warfare, which was applied to American methods of instruction. Complete courses of training, devised to cover definite periods of time, were published in the form of training circulars for the information and guidance of all units.

With a view to developing an efficient officers' corps for the emergency Army as rapidly as possible, the system of officers' training camps was inaugurated. This was followed by the establishment of central officers' training schools. Admission to the

training camps was mainly confined to civilian candidates, whereas selections for the central officers' training schools were generally made from men already in the service. For detailed information see pp. 79-88.

This instruction was supplemented in each combat division by specialist schools, which were conducted at all divisional camps, with the assistance of military missions of British and French officers. In addition, each division commander supervised personally courses for the tactical instruction of brigade commanders, staff officers, and regimental field officers. Regimental commanders, in turn, were required to impart similar instruction to their officers, under the supervision of the brigade commander.

For the purpose of insuring uniformity in doctrine and methods of instruction, the foundation of the training plan, advantage was taken of certain central schools, which were already in existence at outbreak of war or were opened at a later date. The principal establishments pertaining to this category were: the Infantry School of Arms, Fort Sill, Okla.; the School of Fire for Field Artillery, Fort Sill, Okla.; the Mounted Service School, Fort Riley, Kans.; coast artillery schools for noncommissioned staff officers and enlisted specialists; aviation schools; balloon schools; the Ordnance School of Application, Sandy Hook, N. J.; the Army Medical School, Washington, D. C.; schools for bakers and cooks; and the School for Provisional Second Lieutenants, Fort Leavenworth, Kans.

Other schools and courses of instruction, established besides those already mentioned, included: the Coast Artillery School, Fort Monroe, Va., with the Brigade School of Artillery Fire at Camp Abraham Eustis, Va.; School for Bandmasters, Fort Jay, N. Y.; United States Army Music Training School, Governors Island, N. Y.; Training School for Chaplains, Camp Taylor, Ky.; schools for horseshoers, teamsters, and packers, at each remount depot; Brigade and Field Officers' School, Fort Sam Houston, Tex.; vocational training schools at various educational institutions; and training schools for instruction of noncommissioned officers, deemed capable of becoming officers, at army posts and camps. The facilities of the Army War College, Washington, D. C., afforded instruction to officers who had been detailed to the General Staff Corps, to staff officers of the National Guard divisions, and to staff officers of the divisions created in 1918.

The training of replacements was given especial attention in 1918. Prior to that year, replacements were taken from depot brigades, untrained drafted men, and from trained new divisions. Inasmuch as this method proved unsatisfactory, it became neces-

sary to establish replacement camps for infantry and other branches. During the summer of 1918, the following replacement training centers were in operation: for infantry replacements—Camp Lee, Va., Camp Gordon, Ga., Camp Pike, Ark., Camp MacArthur, Tex.; for field artillery replacements—Camp Jackson, S. C., Camp Zachary Taylor, Ky.; for engineer replacements—Camp A. A. Humphreys, Va.; for coast artillery replacements—Camp Abraham Eustis, Va.; and for machine-gun replacements—Camp Hancock, Ga.

Field artillery training underwent a change in the spring of 1918, when it was found that divisional cantonments lacked matériel, sufficient and efficient instructors, and adequate training space, with the result that a satisfactory training standard could not be attained. To remedy this condition, four brigade firing centers were established, viz: one each at Camp Doniphan, Okla., Camp Jackson, S. C., Camp McClellan, Ala., and Camp Knox, Ky.

Cavalry training was based on the assumption that large forces of cavalry could not be utilized in France under the conditions of trench warfare. Eight new regiments organized in May and July 1917 were converted into eight field artillery regiments. Late in 1917, opinion as to utilization of cavalry abroad was reversed and the 15th Cavalry Division, comprising nine Regular cavalry regiments, and 15 new regiments of National Army cavalry were organized. The newly-created division was later disbanded and, in August 1918, the 15 regiments were transformed into 30 regiments of field artillery and 15 trench mortar batteries, for absorption by the new combat divisions about to be organized. A training camp for cavalry officer candidates was opened at Fort Bliss, Tex., and a cavalry training school for officer candidates, noncommissioned officers, and specialists was conducted at Leon Springs, Tex.

The War Plans Division, by sending general staff officers to the various divisional camps and other training centers, was able to keep in close touch with the training situation. The Division, aided by representatives of the Inspector General's Department, was therefore in a position to furnish expert advice on the fitness of any unit or organization for oversea service. This enabled the Division to cooperate with the Operations Division in the selection of organizations for shipment overseas and in the assignment of recruits to organizations.

The Committee on Education and Training, created in the War Department in 1918, was controlled by the Division. The Committee was charged with organizing facilities for training technical specialists for the Army, before their assignment to organizations or, in some cases, before entry into service. The system

evolved resulted in the organization of National Army training detachments at colleges, technical schools, and business organizations where appropriate courses were provided.

Legislation, Regulations and Rules

This feature of the Division's activities covered a wide field. It included the drafting of bills for the consideration of Congress; maintaining liaison with the committees of Congress to present correctly the War Department's approved views on proposed legislation; the preparation of amendments, regulations, orders, and circulars; and studies and recommendations concerning matters of international law, often in cooperation with the State Department. Through its legal experts, the Division also advised other branches of the General Staff when consulted by them, and passed upon all rules, regulations, and orders issued and manuals furnished the Army at large.

Historical Activity

In Mar. 1918, the Division began to collect and compile selected war records, with a view to using them in connection with the development of organization and training of the Army

Accordingly, an extensive collection of pertinent records resulted, dealing with our military preparation, mobilization, and economic war effort. To supplement this assembly, representatives of the Division were attached to General Headquarters, A. E. F., to gather and prepare for shipment to the United States records dealing with military operations, the service of supply, and international relations including the Peace Conference.

Besides these records, Signal Corps photographs and motion pictures formed part of the historical collection.

Inventions

From Apr. 1918, consideration of inventions and ideas for inventions of a military nature formed part of the activities of the Division. Inventions, suggestions, or devices of sufficient value to warrant test and development at the expense of the Government were placed before the proper War Department bureaus for further consideration.

From July 1, 1918, to June 30, 1919, some 10,390 suggestions and devices were investigated and rejected; 5,144 were closely examined, and 256 were recommended for final consideration and possible adoption.

PURCHASE, STORAGE, AND TRAFFIC DIVISION

War-time supervision and control of supply required the adoption of a series of expedients to meet emergencies as they arose

from day to day. During the latter part of 1917, the old system proved dangerously inadequate, and a radical change toward unified control was regarded as urgent.

By spring of 1918 the Purchase, Storage, and Traffic Division had come into existence, but not until Aug. 1918 was actual staff control established, and then only gradually. Certain agencies were needed to perform, under unified control, functions common to all bureaus and supply agencies. As no such agencies existed, the Purchase, Storage, and Traffic Division evolved them within its own structure.

The task began with the creation of a single service to handle embarkation, including transport of troops and supplies. Thereafter inland transportation was molded into a uniform system; storage and distribution of supplies were brought under one head; procurement of all supplies was centered in one agency; and, finally, the fiscal affairs of the Army, so closely connected with all supply activities were consolidated and placed under unified control. Thus, without interfering with the continuity of procurement and distribution, a single service was established.

At the time of the Armistice, the Purchase, Storage, and Traffic Division, through its supervisory branches, engaged in the following activities:

It supervised and directed calculations of requirements, procurement and production activities of all War Department agencies, and the coordination of these activities.

It represented the Army in all arrangements for the coordination of these activities with those of other Government agencies and with the Allies.

It maintained an estimate of the military resources of the United States relative to materials.

It determined priorities among agencies of the War Department and in relation to other Government agencies.

It supervised and coordinated financial matters relating to the purchase of supplies.

It controlled the storing and warehousing of property for the Army.

It controlled matters relating to the routing of troops and War Department property.

It controlled the embarkation and transport overseas of troops and supplies.

SUPERVISION OF DEMOBILIZATION

DISCHARGE OF EMERGENCY ARMY

Formulation of a demobilization policy took shape in Oct. 1918.

The plan adopted called for demobilization by military units. These were classified as essential or nonessential, thereby preserving the efficiency of the Army as a whole during the demobilization period. Thereafter, a priority schedule was prepared whereby units could be disbanded in the order in which they became surplus. However, to avert a coal shortage and accelerate transportation of demobilized men, certain industrial workers, such as coal miners, railroad men, and others, were discharged at an early date.

On Nov. 11, the General Staff decided to cancel all draft calls and to discontinue all mobilization activities. All registrants who had reported for duty were returned to their homes, and emergency men whose families were in distress or whose services were urgently needed by business or industry were likewise discharged.

On Nov. 16, 1918, the order in which demobilization was to be effected was specified in general as follows: 71 development battalions representing 98,199 men; all conscientious objectors not undergoing punishment; 30,000 men forming part of the Spruce Production Division; candidates at training schools, except those who decided to qualify for commissions in the Reserve Corps; 30,000 United States Guards, as soon as their services could be spared. Thereafter, railroad troops, depot brigades, replacement camps, and combat divisions were to be demobilized in the order named. To expedite demobilization, 30 demobilization centers were designated.

The Commanding General of the A. E. F. was directed to return units from overseas as soon as they could be spared and transportation provided. As the carrying capacity of transports then available was only about 110,000 men per month, instructions were given to increase the ships in this service.

As a result of this planning, the demobilization of the great majority of all emergency troops was completed in the summer of 1919.

DISPOSAL OF WAR MATÉRIEL

Other problems confronted the General Staff at the conclusion of hostilities, which made it necessary to direct the activities of the supply system immediately into new channels. These matters included the termination or adjustment of contracts, involving millions of dollars; the disposal of vast parcels of real estate, purchased or rented; the settlement of a multitude of claims of various kinds; the liquidation of huge quantities of war stocks and raw materials which had suddenly become surplus; and in-

stant reversal of the machinery of embarkation and ocean transport to provide for the return of troops and equipment. In addition, the problem of the peacetime organization of the Army supply system demanded solution.

In the cancellation of contracts and disposal of surplus property, supply departments were instructed to keep on hand equipment and matériel in sufficient quantities to supply the troops still abroad and a force of 500,000 men for one year. In addition, the initial equipment for one complete army of 1,500,000 men, plus 100 percent, was to be retained. Thus, for the first time, a substantial reserve of military supplies was set aside and placed in storage for future emergency.

SECTION 3

ADJUTANT GENERAL'S DEPARTMENT

ORIENTATION

The origin of the Adjutant General's Department is traceable to the appointment of an adjutant general in the Continental Army in 1775; however, no authority existed for the office between 1783 and 1796. Thereafter, an adjutant general was placed on duty under the immediate orders of the Secretary of War.

In 1813, the Adjutant General's Department was established by law with an "adjutant-and-inspector-general" at its head. In 1821, the office of "adjutant general" was created and that of "adjutant-and-inspector-general" abolished. After further legislative changes, the Department eventually achieved stabilization in 1875, when the Act of Mar. 3 provided for an adjutant general with the rank of brigadier general and for 16 assistant adjutant generals of field grade.

The Act of Apr. 23, 1904, abolished the Adjutant General's Department and replaced it by the Military Secretary's Department, to which the officers of the Adjutant General's Department and of the Record and Pension Office were transferred, thus consolidating these two agencies. The Adjutant General's Office, including The Adjutant General as the new Military Secretary and the Record and Pension Office, constituted the Military Secretary's Office. However, March 2, 1907, legislative action reestablished the Adjutant General's Department and the Adjutant General's Office, superseding the Military Secretary's Department and Office.

FUNCTIONS

The Adjutant General's Department is the department of records, orders, and correspondence of the Army and the Militia.

DUTIES OF THE ADJUTANT GENERAL

MAR. 1918

To record, authenticate, and communicate to troops and individuals in the military service all orders, instructions, and regulations issued by the Secretary of War through the Chief of Staff, or otherwise; to prepare and distribute commissions and military decorations; to compile and issue the Official Army Register and the Army List and Directory; to consolidate the general returns of the Army; to arrange and preserve the reports of officers of the Army detailed to visit encampments of militia; to compile and maintain a list showing the names of officers of the Army on detached service; to manage the recruiting service, and to conduct correspondence concerning the military service generally, including such as pertains to military training camps, rifle practice, the Officers' Reserve Corps, the Reserve Officers' Training Corps, and the Enlisted Reserve Corps.

To have control, under the direction of the Secretary of War, of the United States Disciplinary Barracks and its branches, and of all offenders sent thereto for confinement and detention; to issue and record orders from the War Department remitting or mitigating sentences of general prisoners discharged from the military service, or honorably restoring them to duty.

To have charge, under the Secretary of War, of the military and hospital records of the volunteer armies and the pension and other business of the War Department connected therewith; to publish and distribute War Department regulations, manuals, and miscellaneous documents pertaining to the military service; to publish and distribute the official records of the Union and Confederate Armies; to keep informed regarding personnel qualified for commissions in the Army in time of war or other emergency, by reason of having received military training in civilian educational institutions or elsewhere; and to issue certificates of enlistment in the Enlisted Reserve Corps.

To have charge of the historical records and business of the permanent Military Establishment, including all pension, pay, bounty, and other business pertaining to or based upon the military or medical histories of former officers or enlisted men; to consider applications of soldiers finally charged with desertion and to issue discharge certificates to those entitled to relief under the terms of existing law.

THE ADJUTANT GENERAL

1917		
Apr.	**6**	**Brig. Gen. Henry P. McCain**
Oct.	**8**	**Maj. Gen. Henry P. McCain**
1918		
Aug.	**19**	**Brig. Gen. Peter C. Harris (acting)**
Oct.	**10**	**Maj. Gen. Peter C. Harris**
1919		
Apr.	**11**	**Brig. Gen. James T. Kerr (acting)**
May through June	**28**	**Maj. Gen. Peter C. Harris**

ORGANIZATION AND DEVELOPMENT

THE ADJUTANT GENERAL'S OFFICE

1917

Early in the year, the Office of the Adjutant General functioned through these Divisions: Administrative, Officers, Enlisted Men, Rolls, Recruiting, Miscellaneous, Publications, Correspondence and Examining, Medical and Volunteer Regimental Records, Mail and Records, Officers' Reserve, 10th Street Branch, and Archives.

The archives of the Adjutant General's Office included all military records of the Revolutionary War in the possession of the General Government; the records of all organizations, officers, and enlisted men that had been in the military service of the United States since the Revolutionary War, including those pertaining to the volunteer forces and the National Guard while in the active service of the United States; the records of the movements and operations of troops; the medical and hospital records of the Army; all reports of physical examination of recruits and identification records; the Civil War records of the Provost Marshal General's Bureau; the records of the Bureau of Refugees, Freedmen, and Abandoned Lands; and a considerable collection of the Confederate records, including those pertaining to the legislative, executive, and judicial branches of the Confederate Government.

The administration of line officers' training schools was, from outbreak of war to their discontinuance, under the direct supervision of The Adjutant General, who exercised control through the Appointment Section, Officers' Division. The only feature of the schools exempt from supervision by The Adjutant General was the preparation of the training schedule, which was a function of the Training and Instruction Branch, Army War College. In addition to the administration of the line officers' training schools, the Appointment Section appointed all officers of the Army, both line and staff; and, up to the latter part of June 1918, it was charged with the administration of military training in schools and colleges throughout the United States.

On May 3, the war prison barracks were established under the direction and control of The Adjutant General. The Committee on Classification of Personnel in the Army became a division of the Adjutant General's office Aug. 5; it was charged with furnishing exact information concerning the occupations and abilities of all officers and enlisted men. With these changes, the office set-up was as indicated on chart.

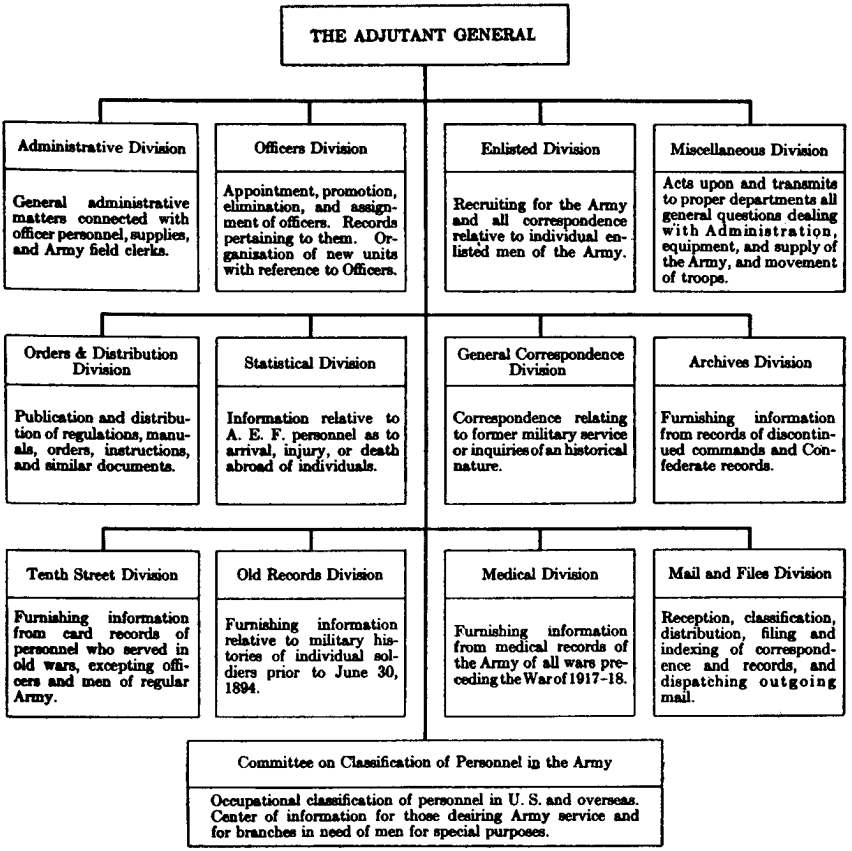


CHART No. 15.—*ORGANIZATION OF ADJUTANT GENERAL'S DEPARTMENT*
Aug. 1917

On Sept. 1, the Division of War Risk Insurance was organized to supervise all army matters connected with the administration of the War Risk Insurance Act.

1918

On June 6, administrative control of the schools for bakers and cooks passed from The Quartermaster General to The Adjutant General of the Army. The commissioned personnel on duty with these schools was transferred from the Quartermaster Corps to the Adjutant General's Department (see p. 429).

On Aug. 5, all matters relative to newspaper correspondents with the A. E. F., handled until then in the Adjutant General's Office, were transferred to the Military Intelligence Branch, Executive Division, General Staff. On Sept. 15, the Statistical

Division was redesignated, with functions unchanged, as the Casualty Division.

On Sept. 18, the Committee on Classification of Personnel in the Army was transferred to the Operations Division, General Staff, where its personnel was absorbed by the Miscellaneous Section of the Commissioned Personnel Branch (see p. 43). After the Armistice, this Section was transferred to the Adjutant General's Office where it became the Classification Division.

On Oct. 19, the Industrial Furlough Section was established in the Adjutant General's Office, to receive, investigate, analyze, approve or disapprove applications for indefinite furloughs to enable enlisted men of the Army to return to industry. It also had charge of the revocation of furloughs or the transfer of furloughed men from one plant to another; and allocated to various Government agencies skilled workmen reported as eligible for furlough by the Committee on Classification of Personnel in the Army. The Section was discontinued Dec. 31.

1919

On Jan. 17, the Examination of Service Records Division was established. Six days later its name was changed to Demobilized Records Division. It received, arranged, and filed individual records pertaining to the personnel of the demobilized Army, and was charged with furnishing information therefrom.

In March, the Adjutant General's Office consisted of the following Divisions: Administrative, Archives, Casualty, Classification, Demobilized Records, Enlisted, Mail and Record, Medical, Miscellaneous Officers, Old Records, Publication, 10th Street, and War Risk Insurance.

On Apr. 24, the Classification Division was transferred to the Officers Division.

On July 1, the Selective Service Records Division was organized to arrange, administer, and furnish information from, the records of the Provost Marshal General's Office, including the selective service records of the State and Territorial headquarters, district boards, medical and legal advisory boards, and local boards; also to examine the records in order to compile final lists of deserters.

ESTABLISHMENTS

Recruiting Service

Ordinarily, officers were detailed on recruiting service from the line for 4 years, or placed on active duty from the retired list. Enlisted men, prior to their assignment to general recruiting duty, were transferred to the General Service, Infantry.

On June 30, 1917, there were 64 main recruiting stations, each with a recruiting officer in charge, and 337 substations. Each main station with its auxiliary stations formed a recruiting district. Additional officers were assigned as assistants in 40 districts. To supplement this organization, temporary stations manned by enlisted men only were frequently opened, for a time, at various points as occasion required.

RECRUIT DEPOTS AND DEPOT POSTS

Applicants accepted at recruiting stations were sent to recruit depots or depot posts for enlistment.

Recruit Depots

The following depots were in operation: Columbus Barracks, Ohio; Jefferson Barracks, Mo.; Fort Logan, Colo.; Fort McDowell, Calif.; Fort Slocum, N. Y.; and Fort Thomas, Ky.

Depot Posts

Depot posts were: Fort Bliss, Tex.; Fort Douglas, Utah; Fort Ethan Allen, Vt.; Fort George Wright, Wash.; Fort Huachuca, Ariz.; Jackson Barracks, La.; Fort Lawton, Wash.; Fort McPherson, Ga.; Fort Oglethorpe, Ga.; Fort Sam Houston, Tex.; Fort Screven, Ga.; U. S. Disciplinary Barracks, Fort Leavenworth, Kans.; Vancouver Barracks, Wash.

United States Disciplinary Barracks

U. S. DISCIPLINARY BARRACKS, FORT LEAVENWORTH, KANS.

Facilities initially provided for 2,000 general prisoners, organized into four disciplinary companies and a band. During the 1918 fiscal year, the erection of temporary buildings increased the detention capacity to 5,000 prisoners.

PACIFIC BRANCH, U. S. DISCIPLINARY BARRACKS, ALCATRAZ, CALIF.

This establishment contained 600 general prisoners, organized into four disciplinary companies and a band.

ATLANTIC BRANCH, U. S. DISCIPLINARY BARRACKS, FORT JAY, N. Y.

The barracks were located in the casemates of Castle Williams and housed 100 general prisoners, constituting one company and a band.

War Prison Barracks

Detention centers were organized as follows: War Prison Barracks No. 1, Fort McPherson, Ga., for prisoners of war (see p. 836); War Prison Barracks No. 2, Fort Oglethorpe, Ga., for enemy aliens (see p. 841); War Prison Barracks No. 3, Fort Douglas, Utah, for enemy aliens (see p. 942); Detention Camp at Hot

Springs, N. C., for enemy aliens (see p. 828); Internment Camp on Taboga Island, Canal Zone, for enemy aliens (see p. 626).

PERSONNEL

Military personnel on duty in the Adjutant General's Office numbered 51 officers Apr. 6, 1917; 74 officers July 31, 1918; 64 officers and 621 enlisted men Nov. 30, 1918; 71 officers and 466 enlisted men Dec. 31, 1918; and 112 officers and 34 enlisted men June 30, 1919.

The civilian personnel which, at the outbreak of war, had numbered 983 increased to 2,259 by June 30, 1918, and to 4,077 by June 30, 1919. Of the latter, 3,842 occupied clerical positions and 235 held subclerical ratings.

ACTIVITIES

CONSOLIDATION OF GENERAL RETURNS

Army Strength

On June 30, 1917, exclusive of 163 officers and 5,570 enlisted men in the Philippine Scouts, the actual strength of the Regular Army was 6,169 officers and 238,455 enlisted men; of the National Guard in Federal service, 3,803 officers and 107,320 men; and of the Reserve Corps, 21,543 officers and 35,000 men.

The distinction drawn between Regular Army, Reserve Corps, National Guard, and National Army was maintained until Aug. 7, 1918. On that date, all the land forces were merged into the United States Army, and the old appellations were dropped.

Returns for later periods showed the approximate strength and distribution of the Army to be as follows:

Date	Overseas		In U. S.		In insular possessions, etc.		Aggregate
	Off.	E.M.	Off.	E.M.	Off.	E.M.	
June 30, 1918	44,107	951,904	70,136	1,285,219	936	27,277	2,379,579
Nov. 11, 1918	82,302	1,898,352	104,155	1,533,344	1,977	53,758	3,673,888

Maximum strength was reached Nov. 11, 1918. Demobilization of emergency personnel began immediately thereafter. On June 28, 1919, the returns showed that approximately 126,281 officers and 2,602,555 enlisted men had been discharged. At this time, 77,966 officers and 758,916 enlisted men were still in the service. By Nov. 1919, a total of 178,097 officers and 3,244,136 enlisted

men had been demobilized, leaving an aggregate strength of approximately 251,655 officers and men. This total was still further reduced until the Army reached a peacetime strength of 15,451 officers and 184,904 enlisted men June 30, 1920.

Battle Casualties

The following table includes casualties of the United States Army, between Apr. 6, 1917, and Nov. 11, 1918, in Europe and Siberia. In accounting for American Forces in Northern Russia, the period of service extends to Aug. 25, 1919, and for troops in Siberia, to Apr. 1, 1920. Casualties incurred in Northern Russia are contained in the figures covering Europe.

[Legend: 1=killed in action; 2=died of wounds; 3=total deaths; 4=wounds not mortal; 5=total]

Grade	American Expeditionary Forces in Europe					American Forces in Siberia				
	1	2	3	4	5	1	2	3	4	5
Officers	1,648	559	2,207	6,904	9,111	1	------	1	4	5
Army nurses	------	------	------	3	3	------	------	------	------	------
Field clerks	------	------	------	1	1	------	------	------	------	------
Enlisted men	35,523	12,375	47,898	186,698	234,596	26	8	34	48	82
Total	37,171	12,934	50,105	193,606	243,711	27	8	35	52	87

Grade	Troops at sea					Aggregate				
	1	2	3	4	5	1	2	3	4	5
Officers	7	------	7	1	8	1,656	559	2,215	6,909	9,124
Army nurses	------	------	------	------	------	------	------	------	3	3
Field clerks	------	------	------	------	------	------	------	------	1	1
Enlisted men	363	------	363	4	367	35,912	12,383	48,295	186,750	235,045
Total	370	------	370	5	375	37,568	12,942	50,510	193,663	244,173

The battle casualties of the American Expeditionary Forces in Europe are shown on following table:

[NOTE. The figures in the column "Wounds" include mortal wounds received by individuals enumerated in the column "Died of Wounds." The 31st, 34th, 38th, 39th, 40th, 84th, 86th, and 87th Divisions were not combat divisions and their units had no battle casualties. The 41st, 76th, 83d, and 85th Divisions were depot or replacement divisions, but some of their units or personnel were in combat]

Unit	Officers			Enlisted men			Totals			
	Killed in action	Died of wounds	Wounds	Killed in action	Died of wounds	Wounds	Killed in action	Died of wounds	Wounds not mortal	Total casualties
1st Division	149	48	617	3,581	1,218	17,973	3,730	1,266	17,324	22,320
2d Division	95	35	360	1,869	684	9,422	1,964	719	9,063	[1] 11,746
3d Division	101	25	451	2,536	739	12,313	2,637	764	12,000	15,401
4th Division	72	31	386	2,088	712	10,274	2,160	743	9,917	12,820
5th Division	66	20	292	1,564	470	7,194	1,630	490	6,996	9,116
6th Division	3	2	15	35	28	333	38	30	318	386
7th Division	7	2	54	197	81	1,451	204	83	1,422	1,709
26th Division	62	26	379	1,525	668	11,698	1,587	694	11,383	13,664
27th Division	61	11	203	1,381	376	6,689	1,442	387	6,505	8,334
28th Division	68	42	371	2,097	667	11,603	2,165	709	11,265	14,139
29th Division	28	6	143	759	260	4,640	787	266	4,517	5,570
30th Division	46	16	235	1,191	388	6,943	1,237	404	6,774	8,415
32d Division	92	40	361	2,158	738	10,650	2,250	778	10,233	13,261
33d Division	27	13	200	664	289	5,973	691	302	5,871	6,864
35th Division	30	16	223	988	264	6,055	1,018	280	5,998	7,296
36th Division	24	2	95	442	123	2,023	466	125	1,993	2,584
37th Division	22	5	160	772	267	4,433	794	272	4,321	5,387
41st Division	1	2	18	58	32	331	59	34	315	408
42d Division	62	30	407	1,996	722	12,218	2,058	752	11,873	14,683
76th Division	-------	-------	1	1	3	24	1	3	22	26
77th Division	69	24	306	1,417	600	8,402	1,486	624	8,084	10,194
78th Division	32	14	205	1,137	347	5,770	1,169	361	5,614	7,144
79th Division	40	16	213	1,111	350	5,510	1,151	366	5,357	6,874
80th Division	43	12	180	837	349	4,969	880	361	4,788	6,029
81st Division	11	2	33	184	51	876	195	53	856	1,104
82d Division	42	16	247	953	402	6,835	995	418	6,664	8,077
83d Division	1	1	13	48	17	262	49	18	257	324
85th Division	4	3	14	119	19	289	123	22	281	426
88th Division	-------	1	4	12	7	62	12	8	58	78
89th Division	36	16	218	944	470	5,893	980	486	5,625	7,091
90th Division	33	17	224	1,058	388	6,234	1,091	405	6,053	7,549
91st Division	40	18	212	1,094	302	4,762	1,134	320	4,654	6,108
92d Division	6	2	60	114	60	1,467	120	62	1,465	1,647
93d Division	24	8	124	443	116	2,943	467	124	2,943	3,534
Total divisional casualties	1,397	522	7,024	35,373	12,207	196,514	36,770	12,729	190,809	240,308
Nondivisional casualties	258	37	444	513	168	2,563	771	205	2,802	3,778
Aggregate total	1,655	559	7,468	35,886	12,375	199,077	37,541	12,934	193,611	244,086

[1] Casualties shown are for Army personnel only. The total losses of Marine Corps units of this division were 11,848, which does not include losses among Navy personnel with Marine Corps.

National Cemeteries

Cemeteries in Europe, upon which more than $1,000,000 had been expended, were maintained in 1923 as follows:

Name of cemetery	Location	Number of acres	Number of interments
Meuse-Argonne	Romagne	130	13,977
Aisne-Marne	Belleau	34	2,240
Suresnes	Paris	7½	1,497
Somme	Bony	13	1,823
Brookwood	England	4½	435
St. Mihiel	Thiaucourt	30	4,141
Oise-Aisne	Serings-et-Nesles	32	6,033
Flanders Field	Belgium	5	365
Total		256	30,511

In the United States, there were 83 national cemeteries of which 31 were listed as first class, 19 as second class, 4 as third class, and 29 as fourth class.

Decorations

AMERICAN

American decorations awarded for service in the World War included the Congressional medal of honor, distinguished-service cross, distinguished-service medal, silver star, and purple heart.

Congressional Medal of Honor

According to statutory enactments, awards of the medal of honor are made to "any person who, while an officer or enlisted man of the Army, shall hereafter, in action involving actual conflict with an enemy, distinguish himself conspicuously by gallantry and intrepidity at the risk of his life above and beyond the call of duty." A total of 90 awards of this decoration was made to officers and enlisted men during the war.

Distinguished-Service Cross

The distinguished-service cross was authorized by the President on Jan. 12, 1918, and by Act of Congress approved July 19, 1918, to be awarded for "extraordinary heroism in connection with military operations against an armed enemy." The awards of the distinguished-service cross and of the oak-leaf cluster totaled 6,042 and 111, respectively, distributed as follows:

Awards to—	Cross	Cluster	Total
American officers and enlisted men	5,873	109	5,982
American civilians	7		7
Members of foreign armies	161	2	163
Unknown, unidentified American soldier	1		1
Total	6,042	111	6,153

Distinguished-Service Medal

Award of the distinguished-service medal was authorized by direction of the President, Jan. 12, 1918, and by act of Congress, approved July 9, 1918, for "exceptionally meritorious and distinguished services, in a position of great responsibility." In all, 1,881 awards were made for World War service to classes of individuals as follows: Commissioned officers of the Army, 1,193; enlisted men of the Army, 2; members of the Army Nurse Corps, 24; officers of the United States Navy, 31; officers of the United States Marine Corps, 11; American civilians (including 10 welfare workers and 1 female civilian employee of the Signal Corps), 69; foreign officers, 526; foreign civilians, 25.

Silver Star

Silver-star citations were made for gallantry in action. By Apr. 7, 1923, a total of 664 citations had been published in War Department general orders, of which 661 mentioned United States Army Officers or enlisted men, one a soldier of the French Army, and two American civilians. In addition, some 40,000 individuals were cited in orders issued by the headquarters of combat organizations normally commanded by a general officer.

Purple Heart

The Order of the Purple Heart, established during the Revolution, was revived Feb. 22, 1932. Eligibility was restricted to individuals wounded in action and to those who held a meritorious service citation certificate. Within 4 months, 6,942 awards, including 379 oak-leaf clusters, had been made for war service. This represented only a fraction of the total number wounded (see p. 74) on the eligible list.

FOREIGN

The Act of July 9, 1918, permitted members of the armed forces serving during the war to accept and wear certain foreign decorations. The last date upon which such decorations could be accepted was July 1, 1922. By this time, the various nations, allied or associated with the United States during the war, had awarded 18,019 decorations to American military personnel, members of welfare organizations, and civilians who had rendered meritorious services to the allied cause, namely: Belgium 782; China 16; Cuba 1; Czechoslovakia 28; France 14,151; Great Britain 1,217; Greece 35; Italy 1,023; Japan 51; Monaco 2; Montenegro 231; Panama 113; Poland 148; Portugal 30; Rumania 53; Russia 85; Serbia 53.

The French Fourragère

The French Government awarded the fourragère or shoulder

cord to 53 American organizations, including four Marine Corps units serving with the Army. Of these, 52 received the fourragère in the colors of the croix de guerre (green and red—for two citations), and one in the colors of the medaille militaire (green and yellow—for six citations).

In addition, 1,816 members or former members of the Army were authorized to wear the fourragère (green and red) as an individual decoration.

SERVICE MEDALS

These medals, formerly known as campaign badges and service badges, are awarded by the War Department to individuals who have served in specified wars, campaigns, and expeditions. Clasps to accompany the medals are awarded for participation in combat. So-called "country clasps" are authorized for those who, during the war, served in France, Italy, Siberia, Russia, and England and are not entitled to battle clasps.

Medals are issued by the Quartermaster Corps upon certification by the Adjutant General's Office. During the 1920 fiscal year, 21,664 such certificates were issued.

During the emergency, the following service medals were authorized:

Mexican Service Medal

For participation in the Vera Cruz Expedition, Apr. 24–Nov. 26, 1914; and in the punitive or other authorized expeditions, Mar. 14, 1916–Feb. 7, 1917; or in certain engagements along the Mexican border.

Mexican Border Service Medal

For service along the Mexican Border in 1916 and 1917 by soldiers of the Regular Army or the National Guard in Federal service, not eligible to receive the Mexican service medal.

Victory Medal

For service in the World War between Apr. 6, 1917, and Nov. 11, 1918, or for service subsequent to Nov. 11, 1918, in Siberia or European Russia.

Retired Personnel

OFFICERS

On June 30, 1918, there were 1,083 officers on the retired list, including Philippine Scouts. Of this number, 412 Regular Army and 47 Philippine Scout officers were on active duty. On June 30, 1919, retired officers numbered 1,070, exclusive of Philippine

Scouts. By this time, the number on active duty had been reduced to 203, of whom 21 were Scout officers.

ENLISTED MEN

On June 30, 1917, the retired enlisted men numbered 4,303. During the 1918 fiscal year, 497 were ordered to active duty increasing the enlisted personnel thus detailed to 648. With 258 subsequently relieved, this category was reduced to 390 at the end of the fiscal year. On June 30, 1918, there were 4,460 enlisted men on the retired list, with 4,632 remaining on June 30, 1919. During that period, 352 were relieved from further active duty, leaving only 66 retired enlisted men on that status at the end of the 1919 fiscal year.

Officers Detailed at Educational Institutions

On June 30, 1916, a total of 95 officers (63 on the active list and 32 on the retired list) were serving as professors of military science and tactics at civil educational institutions. All active officers were relieved from duty at the close of the military course of the academic year 1916–17. Fifteen of the institutions were rated as distinguished colleges and 10 as honor schools.

On June 30, 1918, 113 officers (one on the active list and 112 retired officers) were serving with educational institutions. Annual inspection of these schools resulted again in the naming of 15 as distinguished colleges and 10 as honor schools.

On June 30, 1919, a total of 344 officers (286 active and 58 retired) were serving as professors of military science and tactics. Of the institutions where students had exhibited the greatest degree of military training, 12 were announced as distinguished colleges and 10 as honor schools.

Chaplains

On June 30, 1917, there were 144 chaplains on duty in the Regular Army. Between that date and June 30, 1918, a total of 679 chaplains were appointed: 75 in the Regular Army, 85 in the National Guard, 509 in the National Army, and 10 at large. The latter represented religious sects not recognized in the authorized apportionment of chaplains, viz: Hebrews, Christian Scientists, Latter Day Saints, Salvation Army, and Greek or Russian Catholics; however, the Eastern Church was not represented, because priests of that denomination would not be naturalized and therefore could not be commissioned.

From June 30, 1918, to the Armistice, about 1,357 additional chaplains were commissioned and, on Nov. 11, 1918, as many as 2,230 were on duty with the armed forces. On June 30, 1919,

approximately 1,200 were still in the service with 125 assigned to the Regular Army.

Reports received up to June 30, 1919, showed that five chaplains were killed in action and 21 died of disease or as a result of accident. Twenty-three chaplains received the distinguished-service cross, 16 the croix de guerre, one the Belgian war cross, and 15 were cited for the silver star.

CHAPLAINS' SCHOOL

On Feb. 9, 1918, a school for chaplains was authorized to be conducted at Fort Monroe, Va. A 5-week course was prescribed. In Apr., the school was moved to Camp Zachary Taylor, Ky.

Six classes were held, and a total of 915 chaplains and approved chaplain candidates were graduated (see p. 894).

Army Field Clerks

Army field clerks were held to be officers in the military service, although not commissioned officers. They were entitled by law to the same allowances and benefits, retirement excepted, formerly allowed pay clerks of the Quartermaster Corps.

By June 30, 1918, the authorized quota of 2,920 army field clerks had been appointed. Thereafter additional appointments were authorized by law to make the total 6,341. On Nov. 11, 1918, there were in the service 3,425 field clerks, of whom 1,559 were in France, 27 en route to France, 17 in Siberia, and 1,822 on duty in the United States. On June 30, 1919, a total of 4,161 field clerks was on duty; of these, 1,330 were serving at demobilization centers to handle the clerical work.

Newspaper Correspondents

By June 30, 1918, credentials had been issued to 39 correspondents, and on that date there were 18 accredited correspondents on duty with the American Expeditionary Forces.

The employer of each correspondent was required to give a bond, which might be forfeited if the correspondent committed a breach of regulations.

OFFICERS' TRAINING CAMPS AND SCHOOLS

(arranged in chronological order)

First Series, Officers' Training Camps

(May 15–Aug. 11, 1917)

These camps, sixteen in number, were located at 13 posts, readily accessible to the 16 divisional areas into which the country was divided, for the purpose of insuring, as far as practicable, the

assignment of officers to troops within the same area from which both came. The following camps were established:

Plattsburg Barracks, N. Y.	2	Fort Sheridan, Ill.	2
Madison Barracks, N. Y.	1	Fort Logan H. Roots, Ark.	1
Fort Niagara, N. Y.	1	Fort Snelling, Minn.	1
Fort Myer, Va.	1	Fort Riley, Kans.	1
Fort Oglethorpe, Ga.	1	Leon Springs, Tex.	1
Fort McPherson, Ga.	1	Presidio of San Francisco, Calif.	1
Fort Benjamin Harrison, Ind.	2		

Each camp was organized as a provisional training regiment, consisting of 9 infantry companies, 2 cavalry troops, 3 field artillery batteries, and 1 engineer company. There were admitted 7,957 officers, previously commissioned in the Reserve Corps, and approximately 30,000 selected civilians. Of the number admitted, 27,341 were commissioned upon conclusion of the camps Aug. 11, 1917, as per following table:

Branches of service	Colonels [1]	Lieutenant colonels	Majors	Captains	First lieutenants	Second lieutenants	Totals
Reserve Corps, National Army:							
Infantry	2	1	141	2,274	2,315	8,376	13,109
Cavalry			18	251	258	955	1,482
Field Artillery			25	547	684	2,799	4,055
Coast Artillery Corps			1	170	170	497	838
Engineers			50	419	747	750	1,966
Quartermaster Corps						3,067	3,067
Statistical Service					75	77	152
Ordnance:							
Supply				61	123	121	305
Machine-gun service					80		80
Regular Army:							
Infantry						1,375	1,375
Cavalry						178	178
Field Artillery						510	510
Coast Artillery Corps						224	224
Totals	2	1	235	3,722	4,452	18,929	27,341

[1] Appointed in 1916. Attended training camps and recommended for retention in service.

Second Series, Officers' Training Camps

(Aug. 27–Nov. 27, 1917)

The second series was conducted along the general lines of the first. Again 16 camps were established, located at 9 posts, as shown below:

Plattsburg Barracks, N. Y.	2	Fort Myer, Va.	1
Fort Niagara, N. Y.	1	Fort Benjamin Harrison, Ind.	2
Fort Oglethorpe, Ga.	3	Presidio of San Francisco, Calif.	1
Fort Sheridan, Ill.	3	Fort Snelling, Minn.	1
Leon Springs, Tex.	2		

Approximately 23,000 students entered these camps with quotas

of about 15,700 allotted to the Infantry, 5,400 to the Field Artillery, 1,400 to the Coast Artillery Corps, and 600 to the Cavalry.

The camp closed Nov. 27, 1917, with commissions distributed as follows:

Rank	Infantry	Cavalry	Field Artillery	Coast Artillery Corps	Ordnance	Signal	Total
Majors	44		12		2	1	59
Captains	955		302	159	86	55	1,557
1st lieutenants	4,924		1,444	405	204	519	7,496
2d lieutenants	4,934	93	1,884	437	90	687	8,125
Total	10,857	93	3,642	1,001	382	1,262	17,237

After the termination of the second series of training camps, the Coast Artillery Corps, Corps of Engineers, Quartermaster Corps, Motor Transport Corps, Ordnance Department, Signal Corps, Air Service, Medical Department, and Chemical Warfare Service received authority to conduct separate schools for securing their commissioned personnel.

Officers' Training Camp for Colored Students
(June 18–Oct. 18, 1917)

Inasmuch as no colored candidates were admitted to either the first or second series of camps, a special officers' training school for colored students was established at Fort Des Moines, Iowa. A class of 1,250, selected from enlisted men and civilian applicants, was admitted for a four-month course. Of these, 639 were commissioned on Oct. 18, 1917, in the Infantry, to wit: 106 as captains, 329 as first lieutenants, and 204 as second lieutenants.

First Puerto Rican Officers' Training Camp
(Aug. 27–Nov. 27, 1917)

This camp paralleled the second series in the United States and was held at San Juan, Puerto Rico, to provide means whereby qualified residents of that island could secure commissions. Of a class of 200 students, 180 were commissioned in the Infantry, viz: 27 as captains, 47 as first lieutenants, and 106 as second lieutenants.

Third Series, Officers' Training Schools
(Jan. 5–Apr. 19, 1918)

The third series consisted of 27 schools located as follows:

IN THE UNITED STATES

Camp Wadsworth, S. C., 27th Div. Officers' Training School.
Camp Hancock, Ga., 28th Div. Officers' Training School.

Camp McClellan, Ala., 29th Div. Officers' Training School.
Camp Doniphan, Fort Sill, Okla., 35th Div. Officers' Training School.
Camp Bowie, Tex., 36th Div. Officers' Training School.
Camp Kearny, Calif., 40th Div. Officers' Training School.
Camp Devens, Mass., 76th Div. Officers' Training School.
Camp Upton, N. Y., 77th Div. Officers' Training School.
Camp Dix, N. J., 78th Div. Officers Training School.
Camp Meade, Md., 79th Div. Officers' Training School.
Camp Lee, Va., 80th Div. Officers' Training School.
Camp Jackson, S. C., 81st Div. Officers' Training School.
Camp Gordon, Ga., 82d Div. Officers' Training School.
Camp Sherman, Ohio, 83d Div. Officers' Training School.
Camp Zachary Taylor, Ky., 84th Div. Officers' Training School.
Camp Custer, Mich., 85th Div. Officers' Training School.
Camp Grant, Ill., 86th Div. Officers' Training School.
Camp Pike, Ark., 87th Div. Officers' Training School.
Camp Dodge, Iowa, 88th Div. Officers' Training School.
Camp Funston, Kans., 89th Div. Officers' Training School.
Camp Travis, Tex., 90th Div. Officers' Training School.
Camp Lewis, Wash., 91st Div. Officers' Training School.
Fort Oglethorpe, Ga., Camp Warden McLean, Reserve Officers' Training Camp.
Camp Stanley, Leon Springs, Tex., Reserve Officers' Training Camp.

IN POSSESSIONS

Camp Gaillard, C. Z., Panama Canal Dept. Officers' Training School.
Schofield Barracks, T. H., Hawaiian Dept. Officers' Training School.
Fort William McKinley, P. I., Philippine Dept. Officers' Training School.

A total of 18,348 students attended. Approximately 90 percent were selected from enlisted personnel in organized divisions and nondivisional organizations; the Coast Artillery Corps and the various staff corps excepted. The remaining 10 percent came from men in civil life who had received military training at recognized educational institutions. All candidates entered these schools with the understanding that upon graduation they would be carried on an eligible list, pending the occurrence of vacancies in the grade of second lieutenant.

When the third series closed on Apr. 19, 1918, the eligible list carried the names of 11,659 graduates to be appointed at some future date as second lieutenants in branches as follows: 8,165 in the Infantry, 3,347 in the Field Artillery, and 147 in the Cavalry. On May 29, 1918, orders were issued to commission all of these officer candidates and to assign them to duty.

Second Puerto Rican Officers' Training Camp

(Feb. 1—May 15, 1918)

This camp was located at Camp Las Casas, Puerto Rico; 401 students were admitted. On May 27, 1918, 248 were commissioned

in the Infantry—13 as captains, 52 as first lieutenants, and 183 as second lieutenants.

Fourth Series, Officers' Training Schools
(May 15—Sept. 1, 1918)

The following schools, 26 in number, were established:

IN THE UNITED STATES

Camp MacArthur, Tex., 7th Div. Officers' Training School.
Camp Fremont, Calif., 8th Div. Officers' Training School.
Fort Bliss, Tex., 15th Cav. Div. Officers' Training School.
Camp McClellan, Ala., 29th Div. Officers' Training School.
Camp Sevier, S. C., 30th Div. Officers' Training School.
Camp Wheeler, Ga., 31st Div. Officers' Training School.
Camp Cody, N. Mex., 34th Div. Officers' Training School.
Camp Bowie, Tex., 36th Div. Officers' Training School.
Camp Sheridan, Ala., 37th Div. Officers' Training School.
Camp Shelby, Miss., 38th Div. Officers' Training School.
Camp Beauregard, La., 39th Div. Officers' Training School.
Camp Kearny, Calif., 40th Div. Officers' Training School.
Camp Devens, Mass., 76th Div. Officers' Training School.
Camp Meade, Md., 79th Div. Officers' Training School; 92d Div. Officers' Training School (F.A.).
Camps Jackson and Sevier, S. C., 81st Div. Officers' Training School.
Camp Sherman, Ohio, 84th Div. Officers' Training School.
Camp Custer, Mich., 85th Div. Officers' Training School.
Camp Grant, Ill., 86th Div. Officers' Training School.
Camp Pike, Ark., 87th Div. Officers' Training School.
Camp Dodge, Iowa, 88th Div. Officers' Training School; 92d Div. Officers' Training School (Inf.).
Camp Funston, Kans., 89th Div. Officers' Training School.
Camp Travis, Tex., 90th Div. Officers' Training School.
Camp Lewis, Wash., 91st Div. Officers' Training School.

IN POSSESSIONS

Schofield Barracks, T. H., Hawaiian Dept. Officers' Training School.
Fort William McKinley, P. I., Philippine Dept. Officers' Training School.

No school was opened in the Panama Canal Department owing to a lack of material; later, the school in the Philippine Department had to be closed. However, qualified individuals from these courses were given an opportunity to attend officers' training schools in the United States.

These schools were primarily organized for the training of qualified enlisted men to become line officers; the quota being 2 percent of the total enlisted strength of the divisions listed above and 2 percent of each organization or class not forming part of a division, except units of the Coast Artillery Corps and of the several staff corps. Certain members of the Reserve Officers' Training Corps and a number of graduates of educational institutions enjoying Government recognition were also admitted.

Inasmuch as there existed an urgent need of line officers for duty in the United States, these divisional officers' training schools were separated from their respective divisions and transferred to replacement troops to prevent their accompanying these major units overseas. In this connection, five central officers' training schools were organized in June 1918 at the permanent replacement camps as follows:

For infantry—at Camp Gordon, Ga., Camp Lee, Va., and Camp Pike, Ark.

For machine-gun training—at Camp Hancock, Ga.

For field artillery—at Camp Zachary Taylor, Ky.

These new schools were destined to absorb most of the students of the fourth series, except those specifically mentioned hereinafter.

The Adjutant General, though responsible for administration in all five of these central training schools, permitted the Chief of Field Artillery to assume charge of certain administrative functions of the Field Artillery school at Camp Zachary Taylor.

Officer candidates from tactical divisions not scheduled for early oversea service were allowed to complete their training at their respective divisional schools, under the supervision of the division commander or the commanding officer of the depot brigade. The following numbers were graduated and commissioned, the great majority in the grade of second lieutenant:

Fort Bliss, Tex., 15th Cav. Div. Officers' Training School, (Cav.)	132
Camp Fremont, Calif., 8th Div. Officers' Training School, (Inf.)[1]	357
Camp Wheeler, Ga., 31st Div. Officers' Training School (Inf.)	180
Camp Cody, N. Mex., 34th Div. Officers' Training School (Inf.)	248
Camp Shelby, Miss., 37th Div. Officers' Training School (Inf.)	173
Camp Sherman, Ohio, 84th Div. Officers' Training School (Inf.)	367
Camp Grant, Ill., 86th Div. Officers' Training School (Inf.)	297
Camp Dodge, Iowa, 88th Div. Officers' Training School (Inf.)	421
Camp Lewis, Wash., 91st Div. Officers' Training School (Inf.)	243
Total number	2,418

[1] Including students transferred from Camp Kearny, Calif.

The officers' training schools, conducted in the possessions, were likewise permitted to retain their student personnel with a view to completing the course. The following numbers were commissioned in the Infantry:

Schofield Barracks, T. H.	108
Fort William McKinley, P. I.	22

TRANSFER OF STUDENT PERSONNEL TO CENTRAL SCHOOLS

During June and July 1918, students of the fourth series were transferred from the divisional camps scheduled to be discon-

tinued to the several central officers' training schools, with a view to completing the 3½-month course there, in numbers as follows:

To Infantry Central Officers' Training School, Camp Gordon, Ga., from—
- Camp McClellan, Ala., 29th Div. Officers' Training School 229
- Camp Sheridan, Ala., 37th Div. Officers' Training School 179
- Camp Funston, Kans., 79th Div. Officers' Training School 39
- Camp Meade, Md., 83d Div. Officers' Training School 281
- Camp Sevier, S. C., 30th and 81st Div. Officers' Training School .. 820

To Infantry Central Officers' Training School, Camp Lee, Va., from—
- Camp Devens, Mass., 76th Div. Officers' Training School 580
- Camp Custer, Mich., 85th Div. Officers' Training School 527

To Infantry Central Officers' Training School, Camp Pike, Ark., from—
- Camp MacArthur, Tex., 32d Div. Officers' Training School 393
- Camp Bowie, Tex., 36th Div. Officers' Training School 228
- Camp Beauregard, La., 39th Div. Officers' Training School 255
- Camp Pike, Ark., 87th Div. Officers' Training School 532
- Camp Dodge, Iowa, 88th Div. (incl. 92d Div.) Officers' Training School 235
- Camp Travis, Tex., 90th Div. Officers' Training School 144

To Machine-Gun Central Officers' Training School, Camp Hancock, Ga.—
- From the various divisional officers' training schools 1,841

To Field Artillery Central Officers' Training School, Camp Zachary Taylor, Ky.—From the various divisional officers' training schools .. 4,210

Third Puerto Rican Officers' Training School

(June 21—Nov. 6, 1918)

The third school was held at Camp Las Casas, P. R., where on Nov. 6, 1918, 278 candidates were graduated and commissioned in the Infantry—23 as first lieutenants and 255 as second lieutenants.

Additional Training Schools for Line Officers

(June 3—Sept. 18, 1918)

On June 3, 1918, there were established Reserve Officers' Training Corps camps, for further practical training of members of the advanced course, Senior Division, and for other selected students of the Reserve Officers' Training Corps, at Fort Sheridan, Ill., Plattsburg Barracks, N. Y., and Presidio of San Francisco, Calif. The total attendance was 6,500 students.

Upon the establishment of the Students' Army Training Corps, the foregoing camps were continued from July 16 to Sept. 18, 1918. Educational institutions which had elected to come under the Students' Army Training Corps system were allowed to send quotas. Upon conclusion of the camps, 3,732 students were commissioned in the grade of second lieutenant, viz.:

Fort Sheridan, Ill.	1,325 (Inf.),	361 (F.A.)
Plattsburg Barracks, N. Y.	1,422 (Inf.),	336 (F.A.)
Presidio of San Francisco, Calif.	227 (Inf.),	61 (F.A.)

Other training schools were conducted at Camp Jackson, S. C., Camp Perry, Ohio, and Camp Hancock, Ga., to which some of the Student Army Training Corps men of the above-mentioned camps were sent. Appointments in the grade of second lieutenant numbered 564, to wit:

Camp Jackson, S. C., (Field Artillery Replacement Depot)_ 175 (F.A.)
Camp Perry, Ohio (Small Arms Firing School)_____ 331 (Inf.)
Camp Hancock, Ga., (Machine-Gun Training Center)_____ 58 (Inf.)

Central Officers' Training Schools

(June 1918—Feb. 1919)

These schools were established for the purpose of abolishing certain unsatisfactory conditions growing out of the old system. Having had the benefit of the experience of all the officers training schools previously conducted, and being governed by new War Department special regulations, the central schools were enabled to operate under one policy with maximum uniformity, coordination, and efficiency. In order to increase the output of infantry officers, two additional central training schools for infantry officers were organized Sept. 15, 1918, one at Camp MacArthur, Tex., and another at Camp Grant, Ill. A third infantry school was scheduled to be opened in Dec. 1918 at Camp Fremont, Calif.; owing to the signing of the Armistice, it never was put in operation.

The Cavalry Central Officers' Training School was established at Camp Stanley, Tex., in Sept. 1918 and remained in operation until Dec.

Upon the organization of the central officers' training schools, the course was set for 4 months so arranged as to admit one class and graduate one each month. However, the need of line officers was so urgent that the policy for a longer course than 3 months proved impracticable. The only class which remained for the full 4 months' training was the one admitted on Sept. 15, 1918. This class was graduated Jan. 15, 1919, and its members were commissioned in the Officers' Reserve Corps.

The central schools were open to (a) enlisted men of the Army, except Coast Artillery Corps, Signal Corps, and labor units; (b) civilians in Class I; and (c) civilians in deferred classifications on grounds other than industry, occupation or employment, including agriculture.

The total number of students admitted and graduated during the existence of the various central schools, is set forth in the following summary:

Summary of the Activities of Central Officers' Training Schools

School	Number of candidates		Remarks
	Admitted	Commissioned	
I. C. O. T. S. at Camp Gordon, Ga.	[a] 7,933	[b] 3,402	a Includes 137 transferred from M. G. C. O. T. S. at Camp Hancock, Ga. b Includes 1,287 commissioned in Officers' Reserve Corps.
I. C. O. T. S. at Camp Grant, Ill.	3,259	[c] 189	c All commissioned in Officers' Reserve Corps (Infantry Section).
I. C. O. T. S. at Camp Lee, Va.	8,401	[d] 2,614	d Includes 1,290 commissioned in Officers' Reserve Corps (Infantry Section).
I. C. O. T. S. at Camp MacArthur, Tex.	4,661	[e] none	e After Nov. 11, 1918, only 307 elected to complete the course; they were transferred to I. C. O. T. S. at Camp Pike, Ark.
I. C. O. T. S. at Camp Pike, Ark.	[f] 8,521	[g] 2,989	f Includes 306 transferred from I. C. O. T. S. at Camp MacArthur, Tex. g Includes 1,167 commissioned in Officers' Reserve Corps (Infantry Section).
	[h] 458	[h] 176	h All colored. Of the 176 commissioned, 52 were appointed in Officers' Reserve Corps (Infantry Section).
M. G. O. T. S. at Camp Hancock, Ga.	5,359	2,414	After Nov. 11, 1918, only 137 elected to complete the course; they were transferred to I. C. O. T. S. at Camp Gordon, Ga.
	[i] 57	[i] 42	i All colored.
F. A. C. O. T. S. at Camp Zachary Taylor, Ky.	16,812	[k] 8,737	k Includes 3,531 commissioned in Officers' Reserve Corps (Field Artillery Section); 89 of the graduates of the Aug. 1918 Class were colored officers.
Cav. C. O. T. S. at Camp Stanley, Tex.	550	None	School established Sept. 1918. Later two sections were organized, viz: Central Officers' Training School for Cavalry, and Cavalry Training School for Enlisted Men. The Adjutant General had jurisdiction only over the officers' section. Length of course, 4 months. After Nov. 11, 1918, a large majority of the candidates elected to take their discharge. Only 99 candidates remained who were discharged or assigned to other organizations.
Total number admitted and commissioned	56,011	[z] 20,563	z Of this number, some 13,000 were appointed between Aug. 26, 1918, and Nov. 11, 1918, for the period of the emergency and in the grade of second lieutenant.

Recapitulation

There were graduated and commissioned from the first, second, third, and fourth series of officers' training camps and schools, and from the central officers' training schools, a total of 80,568 officers, distributed among the branches and services as follows: Infantry—48,968; Field Artillery—20,291; Cavalry—2,032; Corps of Engineers—1,966; Coast Artillery Corps—2,063; Quartermaster Corps—3,067; Ordnance Department—767; Signal Corps—1,262; Statistical Service—152.

PERSONNEL WORK

Issuance of Commissions

Commissions were issued to every officer upon original appointment and upon promotion.

Discharge Records

Up to June 30, 1919, some 4,800,000 records and subsidiary papers of demobilized officers, enlisted men, and organizations had been received in the Adjutant General's Office for file.

Selective Service Records

The records of all draft boards and state headquarters, totaling some 24,000,000 documents and including data on every man registered, were deposited with The Adjutant General.

Personnel Identification System

A fingerprint system of personnel identification had been instituted in 1906 and was continued throughout the war. The taking of photographs, which had been part of the record, was discontinued in 1917. However, at this time, the practice of making fingerprint records of officers was initiated. By June 30, 1919, a total of 4,379,080 fingerprints had been recorded.

During the war period, 989 cases of fraudulent enlistment were discovered with the aid of the system. Identification was also made of 35 bodies recovered after the sinking of the Tuscania.

Industrial Furloughs

The Act of Mar. 16, 1918, authorized the furloughing of enlisted men to engage in specified civil occupations and pursuits. The Industrial Furlough Section classified all skilled workmen in the Army and allocated certain craftsmen to industries engaged in the manufacture of war matériel.

These men were furloughed without pay and allowances for definite or indefinite periods, and safeguards were taken to insure their reporting for work as stipulated. By Nov. 11, 1918, some

73,000 industrial furloughs had been granted. The practice was discontinued after the Armistice, and in Dec. all furloughs were revoked.

RECRUITING

On June 30, 1917, there were 188 officers, 80 of whom were retired, and 2,087 enlisted men on general recruiting duty. A year later, the force consisted of 171 officers and 1,936 men. During this time, 283,886 voluntary enlistments were made.

In Sept. 1918, recruiting officers and depot posts (see p. 71) were discontinued as the restricted field for voluntary enlistment no longer justified their maintenance. However, the recruit depots (see p. 71) were continued in operation for the induction and distribution of draftees. Voluntary or special induction of registrants continued until the Armistice.

Preparations were made to reopen recruiting stations and depot posts in Feb. 1919, and voluntary enlistments were resumed the following month.

GENERAL PRISONERS

On June 30, 1917, there were 3,073 general prisoners in custody in the United States. During the 1918 fiscal year, 4,490 were committed to confinement, 32 escaped prisoners were recaptured, 2,480 were released at expiration of sentence, 74 escaped, 28 died, 75 were honorably restored to duty, and the unexecuted part of sentence was remitted in 302 cases. Of the 3,996 general prisoners remaining in confinement on June 30, 1918, 119 were on parole from the United States Disciplinary Barracks or its branches.

During the 1919 fiscal year, 5,872 were committed to confinement, 128 escaped prisoners were recaptured, 1,450 were released at expiration of sentence, 384 escaped, 110 died, 1,447 were honorably restored to duty, and the unexecuted part of sentence was remitted in 1,930 cases, leaving 4,675 general prisoners at the close of the fiscal year. Of this number, 61 were in confinement at military posts; 66 at the United States Penitentiary, McNeil Island, Wash.; 146 at the United States Penitentiary, Atlanta, Ga.; 610 at the United States Penitentiary, Leavenworth, Kans.; 2,142 at the United States Disciplinary Barracks, Fort Leavenworth; 460 at the Pacific Branch, United States Disciplinary Barracks, Alcatraz; 1,124 at the Atlantic Branch, United States Disciplinary Barracks, Fort Jay; 34 at the War Prison Barracks, Fort Douglas, Utah; 19 at St. Elizabeth's Hospital, Washington, D. C.; 4 at Mendocino State Hospital, Talmage, Calif.; and 9 were in transit from one place of confinement to another. Of these prisoners, 117 were on parole from the United States Disciplinary Barracks or its branches.

In addition to general prisoners in the United States, there were some 1,100 general prisoners in Europe June 1, 1919.

Vocational Training

Vocational training at the United States Disciplinary Barracks and its branches was inaugurated several years before the war. By 1917, it had been carried to its fullest extent and included training for prisoners in a large number of skilled and semi-skilled vocations. In addition, at Fort Leavenworth, a farm of some 1,500 acres provided instruction for a colony of general prisoners in husbandry.

PRISONERS OF WAR

Bureau of Information

The Bureau maintained an up-to-date record of each prisoner of war and answered all inquiries. It also kept a record of all American prisoners of war in the hands of the enemy.

Statistics

PRISONERS OF WAR HELD IN UNITED STATES

These enemy nationals were alien enemies, received from the Department of Justice for safe-keeping, and former members of the crews of German vessels. Their number and places of custody were as follows:

Barracks	Number of prisoners July 1, 1918	Changes during 1919 F.Y.		Number of prisoners June 30, 1919
		Gains	Losses	
Fort McPherson	1,411	4	69	1,346
Fort Oglethorpe	983	2,649	3,126	506
Fort Douglas	520	272	544	248
Total	2,914	2,925	3,739	2,100

PRISONERS OF WAR HELD OVERSEAS

Prisoners captured in battle were held by the A. E. F. in prisoner-of-war stockades in France. As reported to The Adjutant General, their numbers were: Germans, 48,976; Austro-Hungarians, 737.

AMERICAN PRISONERS OF WAR

On Nov. 11, 1918, there were 248 American officers and 3,302 enlisted men in the hands of the Germans. By Feb. 5, 1919, all had been released. No American prisoner was condemned to death, but one officer and 20 men died while in captivity.

WAR-RISK INSURANCE

Administration of all matters within the Army concerning the War-Risk Insurance Act was a responsibility of the Adjutant General's Office. To acquaint all military personnel of the benefits to which they were entitled and the requirements to be met, a field organization of officers was created by the War-Risk Insurance Division. These officers were assigned to camps, department headquarters, and recruit depots, to supervise a campaign of publicity and instruction. These measures resulted in the application for war-risk insurance by 95 percent of all Army personnel. The average policy was written for more than $8,700.

Immediately after the Armistice, the field organization was increased by detail of additional officers to advise policy holders concerning conversion of their term insurance into permanent policies. This drive resulted, by Sept. 23, 1919, in receipt of 55,000 conversion applications for $177,000,000 coverage, with new applications being received at the rate of 1,000 per day for some time thereafter.

REDUCTION OF ARMY PAPER WORK

Systematic effort to reduce and simplify paper work was made throughout the war. Many forms were changed, others were revised or combined, and new ones were adopted.

On July 1, 1918, the daily reports of changes of duties and status of Army personnel replaced the organization muster rolls. This new practice was supplemented Jan. 1, 1919, by a method intended to assemble, in the Adjutant General's Office, the records of each individual in a single file for ready reference.

CURRENT WORK

The enormous wartime increase in the Army was reflected in the volume of current work handled by the Adjutant General's Office. During the year ending June 30, 1917, only 516,343 pieces of mail were handled; however, 22,962,277 were received during the next fiscal year. In this year, the daily average was 75,286 but the greatest number actually received in any one day was 200,600.

By Nov. 1918, the daily average had increased to 204,408 pieces of mail but it reached its peak of 546,986 in May 1919. Between July 1, 1918, and June 30, 1919, a total of 87,616,242 pieces of mail were received, opened, examined, distributed or disposed of. During the same period, the following printed material was distributed to the Army:

General orders	4,785,640
Bulletins	1,436,070

Extracts from general orders, bulletins, and digest of opinions	1,999,333
Special regulations and changes	2,936,159
Special orders (full copies)	187,800
Special orders (extracts)	1,554,000
Special orders, extracts, bulletins	630,000
Confidential orders	360,500
Blank forms	108,639,800
Books and manuals	7,141,917
Changes, Army Regulations, manuals, etc.	4,866,329
General court-martial orders	4,220,000
Circulars	2,536,003
Index to general orders, bulletins, circulars, etc.	1,482,924
Tables of organization	5,767,451
Army list and directory	40,798
Total	148,584,724

SECTION 4

AIR SERVICE

ORIENTATION

Army interest in aviation began with the purchase by the Signal Corps of an airplane in 1908. Three years later, a flying station was opened at College Park, Md., equipped with five airplanes and three small captive balloons. In 1913, this equipment was moved to San Diego, Cal., to a station which became known as Rockwell Field.

In 1914, the Aviation Section of the Signal Corps was authorized by Congress to operate or supervise the operation of all military aircraft, including balloons and aeroplanes, and to train officers and enlisted men in matters pertaining to military aviation. In 1915, the Aeronautical Division was established in the Office of the Chief Signal Officer entrusted with the supervision of aviation matters.

In Mar. 1916, when the Punitive Expedition entered Mexico, the Army had only one aero squadron with 13 planes in commission. Three months later, the passage of the National Defense Act fixed the personnel of the Aviation Section at 1 colonel, 1 lieutenant colonel, 8 majors, 24 captains, and 114 lieutenants, to be detailed from the Army at large. If sufficient suitable officers could not be found in this manner, the difference was to be supplied by appointments in the grade of aviator, newly created by the law. The Act gave the President authority to organize as many aero squadrons as the necessities of the service demanded, and made provision for a Reserve Corps aviation section.

Hazelhurst Field, Mineola, Long Island, was opened in June 1916 with a capacity of about 50 students. With facilities available at the time, 14 pilots were trained in 1914, 25 in 1915, and 43 in 1916. A third field was established at Essington, Pa., Apr. 1, 1917. At this time, two Regular aero squadrons were in existence, a number of National Guard students were receiving instruction at the flying fields, and 125 civilian candidates for Reserve appointment were in training at the Curtiss airplane factories.

The National Guard contained no aviation units although the 1st Aero Company, New York National Guard, organized in 1916, had received provisional recognition as the 1st Reserve Aero Squadron before it was disbanded in May 1917. A second New York National Guard squadron was in process of organization before outbreak of war, but no Reserve Corps units proper had been created.

FUNCTIONS

of Organizations Representing the Air Service

AERONAUTICAL DIVISION, SIGNAL CORPS

Nov. 4, 1915 to Sept. 30, 1917

To have charge of all matters relating to aviation, including construction, engineering, experiments, training, and personnel.

AIR DIVISION, SIGNAL CORPS

Oct. 1, 1917 to Apr. 23, 1918

To conduct aviation operations and to maintain general supervision over military aircraft; to supervise the training of officers and men in matters relating to military aviation.

DIVISION (DEPARTMENT) OF MILITARY AERONAUTICS [1]

Apr. 24, 1918 to Mar. 18, 1919

To control the operations and maintenance of military aircraft and the training of aviation personnel.

BUREAU OF AIRCRAFT PRODUCTION [1]

Apr. 24, 1918 to Mar. 18, 1919

To exercise control over the production of airplanes, airplane engines, and aircraft equipment for the use of the Army.

DIRECTOR OF MILITARY AERONAUTICS

Duties

May 21, 1918 to Aug. 27, 1918

To have charge of the operation and maintenance of military aircraft, including balloons and airplanes, all appliances pertaining thereto, and signaling apparatus of any kind when installed thereon; and of training officers and enlisted men and candidates for aviation service in matters pertaining to military aeronautics.

[1] Formed part of Signal Corps until May 20, 1918. Thereafter it became a separate unit of the War Department.

DIRECTOR OF AIR SERVICE

Duties

Aug. 28, 1918 to Jan. 28, 1919

To be responsible for procuring and furnishing to the Army in the field the matériel and personnel required for the Air Service and, to that end, to exercise such supervision, control and direction as may be necessary over the Bureau of Aircraft Production and the Division of Military Aeronautics.

Jan. 29, 1919

To carry out the duties of the Chief of the Air Service, as prescribed in Article LXXXI, Army Regulations, 1913 as amended; to exercise, under the direction of the Chief of Staff, full and complete supervision, control, and direction over the Bureau of Aircraft Production and the Division of Military Aeronautics, in all that pertains to administration, supply, instruction, training, and discipline.

ARTICLE LXXXI

The Chief of Air Service will be charged, under direction of the Secretary of War, with the command of the Air Service, both staff and line, and with the management of the Air Service, including the regulation of the duties of officers, agents, and others who may be employed under his direction, excepting such portions as may be specifically detached by order of the Secretary of War.

AIR SERVICE

Executive Order Mar. 19, 1919

Extract—* * * "A Director of Aircraft Production, selected and designated by the Secretary of War, shall hereafter have direct charge, under the Director of Air Service, of the Bureau of Aircraft Production, and he shall perform such duties in connection with the activities, personnel, and properties of said bureau as may from time to time be assigned to him by the said Director of Air Service or as may be prescribed by law.

"All unexpended funds of appropriations heretofore made for the Signal Corps of the Army and already specifically allotted for use in connection with the functions of the Aviation Section of the Signal Corps and specifically placed under the jurisdiction of the Director of Military Aeronautics, as well as all such funds already specifically allotted for use in connection with the functions bestowed upon the Bureau of Aircraft Production and specifically placed under the jurisdiction of the Director of Aircraft Production are hereby transferred to and placed under the jurisdiction of the Director of Air Service for the purpose of meeting the obligations and expenditures authorized by law or Executive Order in the field of activity of the Aviation Section of the Signal Corps and the obligations and expenditures authorized by the Bureau of Aircraft Production." * * *

CHIEFS

1917		
Apr.	**6**	**Lt. Col. John B. Bennet, in charge of Aeronautical Division**
July	**30**	**Capt. Benjamin D. Foulois, in charge of Aeronautical Division**
Sept.	**22**	**Brig. Gen. Benjamin D. Foulois, in charge of Aeronautical Division**
Oct.	**1**	**Brig. Gen. Benjamin D. Foulois, Chief of Air Division**
Nov.	**12**	**Brig. Gen. A. L. Dade, Chief of Air Division**
1918		
Feb.	**28**	**Col. Laurence C. Brown, Chief of Air Division**
May	**21**	**Maj. Gen. William L. Kenly, Director of Military Aeronautics**

1919	
Mar. 11 through June 20	Brig. Gen. William Mitchell, Director of Military Aeronautics, in charge of Training and Operations Group

1918	
May 29	Mr. John D. Ryan, Director of Aircraft Production
Sept. 7	Mr. William C. Potter, acting Director of Aircraft Production
Dec. 24	Lt. Col. James A. Mars, acting Director of Aircraft Production
1919	
Mar. 24 through June 20	Col. James A. Mars, Director of Aircraft Production

1918	
Aug. 28	Mr. John D. Ryan, Director of Air Service
Dec. 28	Maj. Gen. William L. Kenly, acting Director of Air Service
1919	
Jan. 2 through June 20	Maj. Gen. Charles T. Menoher, Director of Air Service

ORGANIZATION AND DEVELOPMENT

AVIATION SECTION, SIGNAL CORPS

1917

WASHINGTON OFFICE

On Apr. 6, the Aeronautical Division was one of three subdivisions of the Office of the Chief Signal Officer. On May 21, the Construction Division was created and charged with the preparation and maintenance of flying fields as one of its duties. Three days later, the Aircraft Engineering Division was also established and, Aug. 2, the Equipment Division, each of which assumed control over certain aviation interests.

In August, a Wood Section was established in the Office of the Chief Signal Officer to place contracts for airplane lumber, the demand for which had exceeded all expectations and created a critical situation.

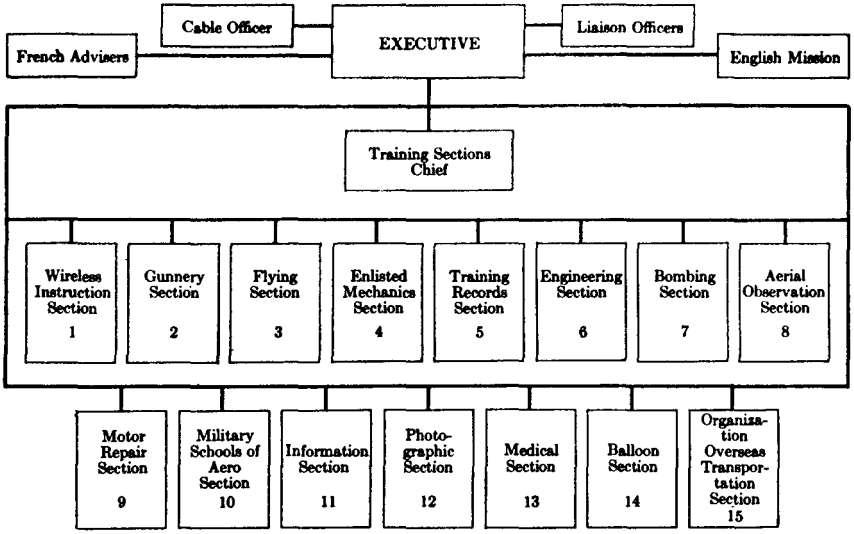
On Oct. 1, the Aeronautical Division was redesignated as the Air Division, with functions limited to operation, training, and personnel. Its organization is shown on chart 16.

On Oct. 22, the Aircraft Engineering Division was replaced by the Science and Research Division. On Nov. 15, the Spruce Production Division was formally established, superseding the Wood Section, to increase the output of timber needed in airplane construction. By this time, aviation matters were the direct concern of five Divisions: Air, Construction, Equipment, Science and Research, and Spruce Production.

1918

On Jan. 14, the Construction Division was reorganized as the Supply Division, Signal Corps; see chart 17.

The newly established Matériel Section, Supply Division, was charged with securing and distributing clothing, equipment, and all ordnance necessary for aviation troops in the United States;



FUNCTION OF SECTIONS

1. To supervise instruction of flying cadets at flying and specialized schools.
2. To supervise schooling of instructors and cadets in gunnery.
3. To train cadets as flying officers.
4. To train enlisted personnel at factories, trades schools, and flying schools in mechanics.
5. To train cadets as adjutants and supply officers and to maintain records of training at flying schools.
6. To train candidates as engineering officers and place them. General supervision of engineering matters at schools.
7. To obtain and train personnel as bombers.
8. To train officers and cadets in aerial observation.
9. To organise motor repair regiments for service abroad.
10. To train candidates at military schools of aeronautics in gunnery, aerial observation, radio, etc. Schools for adjutants, supply and engineering officers.
11. To supply foreign and domestic information to air and other divisions. Censor for signal corps.
12. To train personnel in aerial observation and photography.
13. To supervise medical activities.
14. To train balloon pilots and observers.
15. To organise squadrons and regiments; and to request orders for transportation overseas.

CHART NO. 16—*ORGANIZATION OF AIR DIVISION, SIGNAL CORPS*

with the distribution of all spare planes, spare engines and their parts; with motor transportation; and with all other matériel and supplies necessary in the maintenance of flying fields, flying schools, and concentration camps within the United States. On Mar. 20, a Conservation Section was created to conserve and reclaim all material of every nature, purchased with Signal Corps funds.

In the spring of 1918 it was recognized that the existing system of organization was not functioning efficiently, and that an independent air service would solve the problem. On Apr. 24, a first step was taken by the War Department which rearranged the duties in the Office of the Chief Signal Officer. This action reserved to the Chief Signal Officer the administration of signals and created a Division of Military Aeronautics under Brig. Gen. William L. Kenly as well as a Division of Aircraft Production

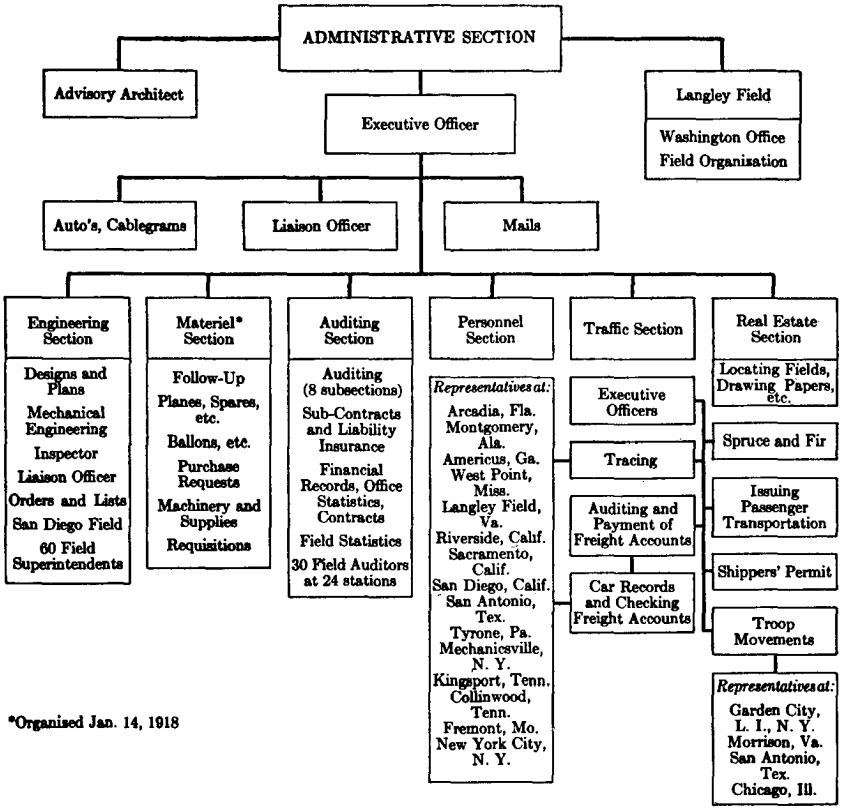


CHART NO. 17—*ORGANIZATION OF SUPPLY DIVISION, SIGNAL CORPS*

under Mr. John D. Ryan. The exact division of functions in the matter of designing and engineering was to be worked out between the two agencies.

AVIATION UNDER SECRETARY OF WAR

1918

On May 27, pursuant to Executive Order of May 20, all aviation activities were formally removed from the control of the Chief Signal Officer and placed directly under the Secretary of War in the form of two independent agencies: the Department of Military Aeronautics and the Bureau of Aircraft Production. Special announcement was made that a chief of air service would not be detailed so long as the Bureau of Aircraft Production was operating as a separate organization; and that the duties assigned to the chief of air service by Army Regulations 1913, not specifically delegated to the Director of Aircraft Production by

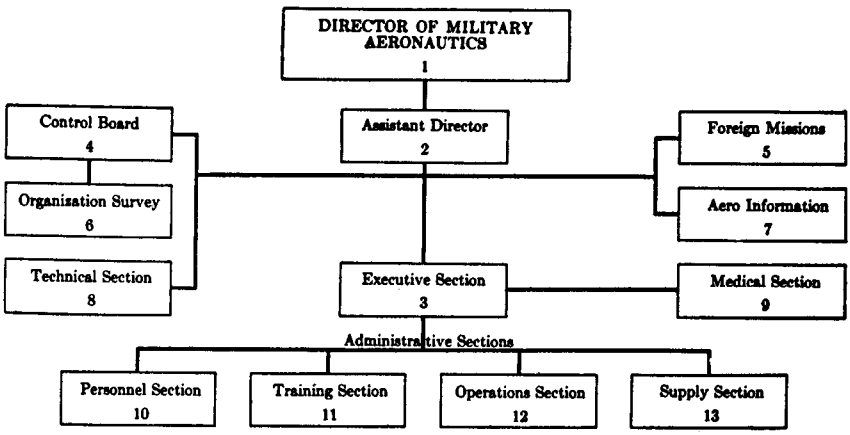
Executive order, would be performed by the Director of Military Aeronautics. However, Aug. 28, the Second Assistant Secretary of War was designated to act as "the Director of the Air Service," with authority to exercise such control over both departments as might be necessary.

The new arrangement apparently did not involve the creation of a new organization to include the Department of Military Aeronautics and the Bureau of Aircraft Production. However, it did mean that the functions of these two units represented the activities of an air service that required some central control.

DEPARTMENT OF MILITARY AERONAUTICS

The initial organization of the new Department is shown on chart 18. The personnel of the Supply Division, Signal Corps, was transferred to the Supply Section of the Department.

On July 27, a second reorganization was approved to conform to the structure shown on chart 19.



FUNCTIONS

1. Directs Department through Assistant Director and Executive.
2. Responsible for efficient administration of Department.
3. Administration of headquarters; promulgates policies and decisions of Control Board; coordinates work of administrative sections.
4. Determines policies, makes organization plans, and acts as clearing house for all matters outside jurisdiction of any one section.
5. Places at disposal of Department the experience gained by Allies in European War to date.
6. Devotes entire time to questions of organization, to improve unification and coordination.
7. Procures, indexes, catalogues, edits, files, and distributes all information pertaining to aeronautics.
8. Passes on such designs of aircraft and its accessories as are submitted to it by Bureau of Aircraft Production.
9. Handles all matters affecting the Medical Department, which relate to development, maintenance, organization, and operation of aeronautical personnel; their Equipment and supplies.
10. Responsible for procurement of personnel records; examines and selects candidates for commissions.
11. Responsible for training of commissioned and enlisted personnel.
12. Operates all commissioned and enlisted personnel after completion of training, including all activities in which the personnel is not undergoing school training, and control of activity or unit not specifically assigned otherwise.
13. Performs usual supply functions, including transportation of personnel and units as directed by the Chief of Operations. Supervises construction, audits, property accounts, and disbursements.

CHART NO. 19—*ORGANIZATION OF DEPARTMENT OF MILITARY AERONAUTICS*
Aug. 1918

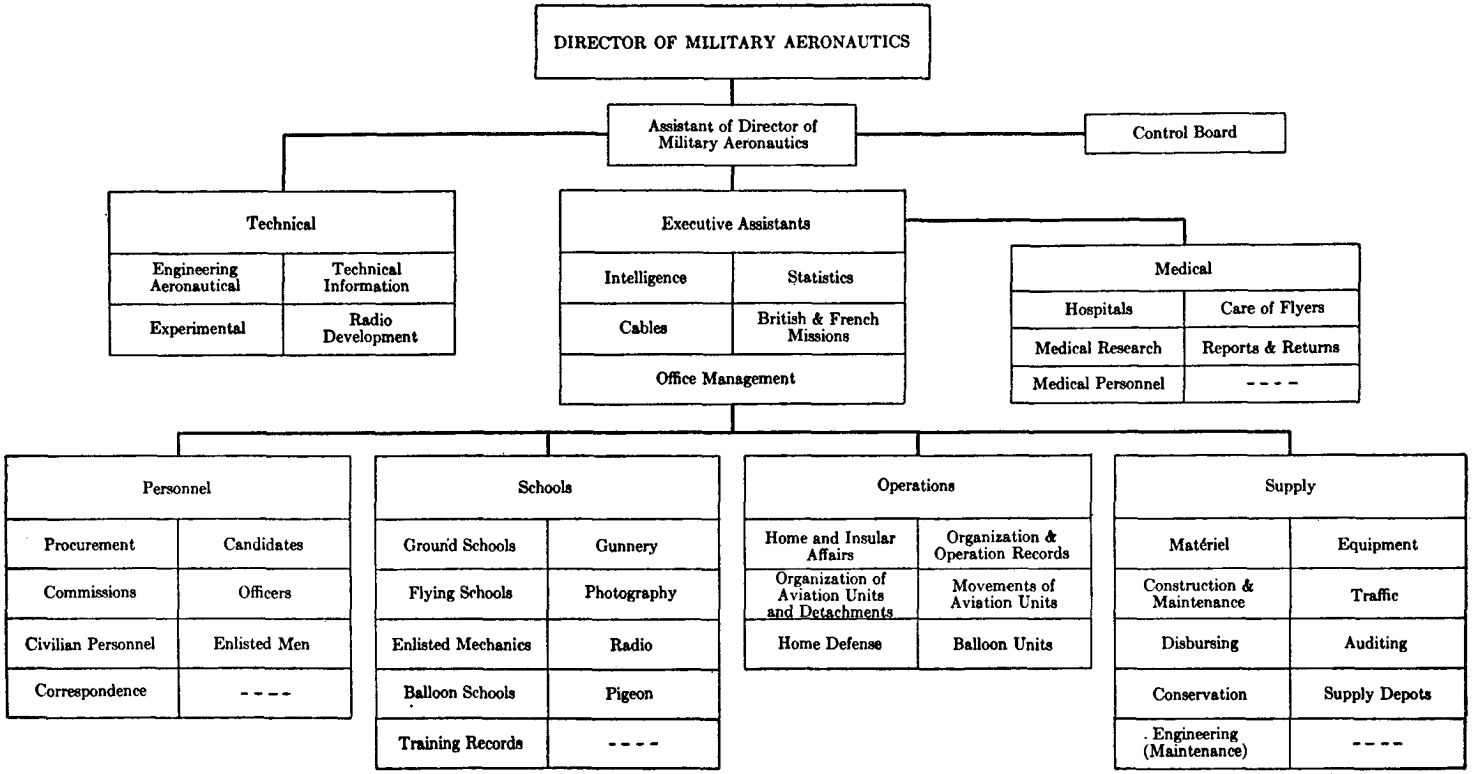


CHART No. 18—*ORGANIZATION OF DEPARTMENT OF MILITARY AERONAUTICS*
May 1918

At this time, the varied duties of the Supply Section were regrouped under three Branches: Traffic and Storage, Engineering, and Finance, as shown on chart 20. The Finance Branch began to operate July 15, 1918, when the finance functions of the Department of Military Aeronautics were taken over from the Bureau of Aircraft Production.

BUREAU OF AIRCRAFT PRODUCTION

Early Organization

At the time of its creation in May 1918, the duties of the Bureau were defined as "an agency which shall exercise full, complete and exclusive jurisdiction and control over the production of airplanes, airplane engines, and aircraft equipment for the use of the Army." It was also provided that the Chairman of the Aircraft Board should also be the Director of Aircraft Production and should have charge of the activities, personnel, and properties of the Bureau. As originally organized, the Bureau consisted of seven main divisions with functions as follows:

Executive Division

To direct the activities of the Bureau.

Engineering Division

To be responsible for the design of new models of airplanes and engines and all accessory equipment, necessary to meet the military requirements.

Production Division

To be responsible for the supervision of production and inspection of all aircraft, including materials and parts therefor, for the investigation and selection of sources of supply, and for the conduct of all relations with contractors, with the exception of production engineering, the execution of contracts, and matters of financial administration.

Procurement Division

To procure all aircraft supplies.

Finance Division

To have charge of the general administration of all financial matters of the Bureau.

Advisory and Consulting Department

To negotiate contracts and other legal matters pertaining to the work of the Bureau of Aircraft Production.

Spruce Production Division

To increase the output of timber used in the manufacture of aircraft. The division was divided into a Military Department, and a Logging and Milling Department.

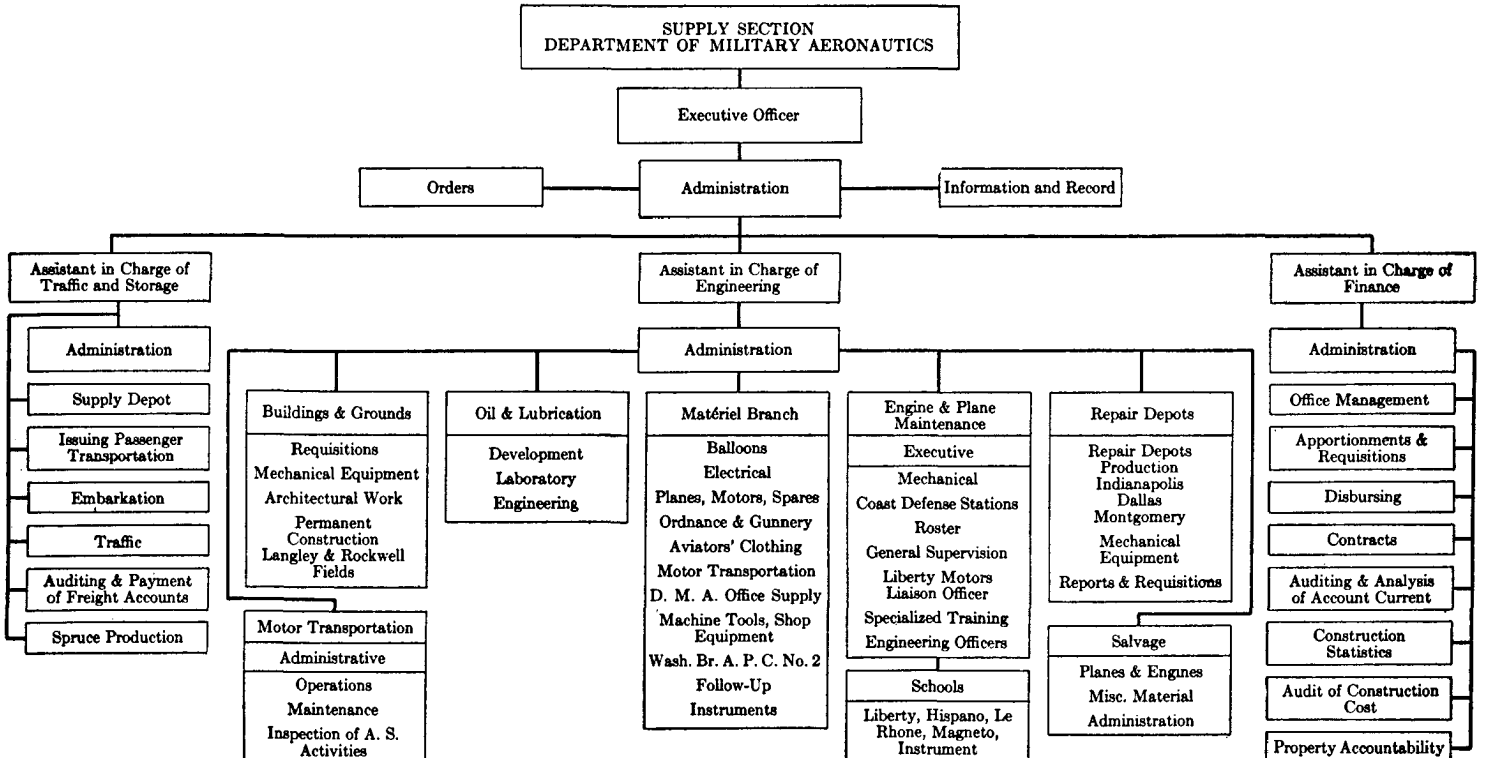


CHART NO. 20—*ORGANIZATION OF SUPPLY SECTION, DEPARTMENT OF MILITARY AERONAUTICS*

By Aug. 1918, a reorganization had taken place reducing the former seven Divisions to six, viz.: Engineering and Production; Purchase, Storage, and Traffic; Finance; Administration; Advisory and Consulting; Spruce Production.

UNITED STATES SPRUCE PRODUCTION CORPORATION

Legislative authority for the creation of a special agency to facilitate the business activities of lumber production and sale of the products to Allied governments and airplane factories in the United States was contained in the Act of July 9, 1918. This agency functioned side by side with the Spruce Production Division, which was responsible for the production of aircraft spruce and fir in the Northwest for the United States Government and the Allies, under the directions of Brig. Gen. Brice P. Disque.

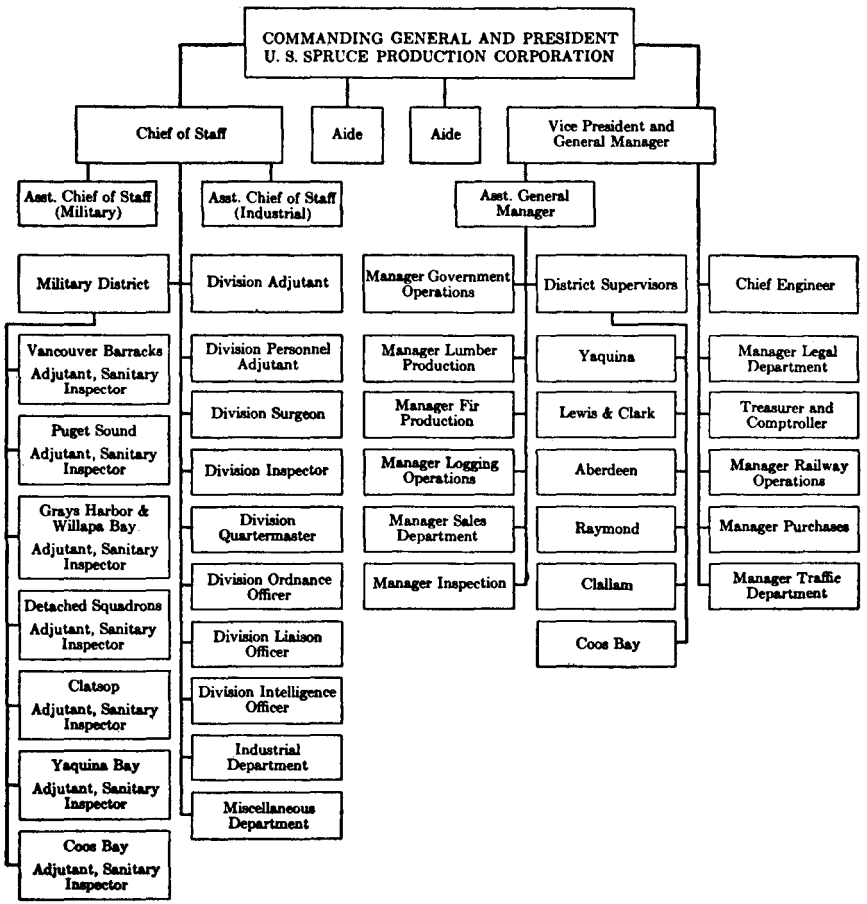
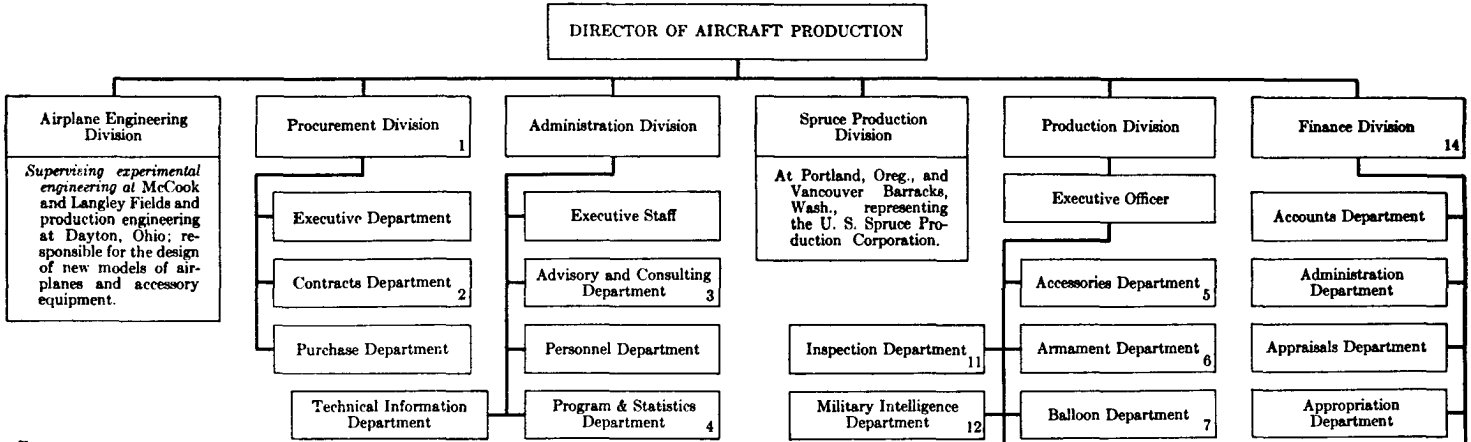


CHART NO. 21—*DUAL ORGANIZATION OF SPRUCE PRODUCTION DIVISION AND U. S. SPRUCE PRODUCTION CORPORATION*



FUNCTIONS

1. To procure all aircraft supplies.
2. To contract for supplies and equipment for the Bureau.
3. To consult and advise on the policies and activities of the Bureau; and to supervise legal affairs other than contracts.
4. To prepare estimates and requirements; to compile reports of progress in air service matériel programs and issue statistics relating thereto.
5. To handle production of all airplane accessories and of photographic, radio, electrical, and optical glass equipment.
6. To procure ordnance matériel for the Bureau.
7. To handle production of balloons and accessories, and equipment for balloon squadrons.
8. To supervise all routine activities of district offices, except production engineering inspection.
9. To handle production of aircraft engines.
10. To have charge of all labor relations except for employees of the Bureau.
11. To be responsible for the inspection of all equipment manufactured for the Bureau, a few articles excepted.
12. To protect all plants manufacturing for the Bureau.
13. To handle purchase of all raw materials and development of plants requiring financing, and all sources of raw materials necessary for plane production except engines.
14. To be responsible for the general administration of all financial matters of the Bureau.

CHART NO. 22—*ORGANIZATION OF THE AIRCRAFT PRODUCTION BUREAU*
Nov. 1918

The United States Spruce Production Corporation was chartered by the State of Washington. Brig. Gen. Disque, in addition to his other duties, was also president of the Corporation, thus assuring close cooperation between the Corporation and the Division until Nov. 1, when the functions and properties of the Spruce Production Division passed to the Corporation. The details of this dual organization—Spruce Production Division and United States Spruce Production Corporation, Portland, Oreg.—in Nov. 1918, are shown on Chart No. 21.

Final Organization

The structure of the Bureau of Aircraft Production, in Nov. 1918, and the functions of some of its subdivisions appear on Chart No. 22. Two Divisions (Spruce Production and Airplane Engineering) were not located in Washington, D. C.

CONSOLIDATION

1919

The need for stricter control over the two War Department agencies was met Jan. 29, when the Director of the Air Service was specifically charged with carrying out the duties of chief of air service, as prescribed in Article LXXXI, Army Regulations 1913. This resulted in more and more eliminating the former

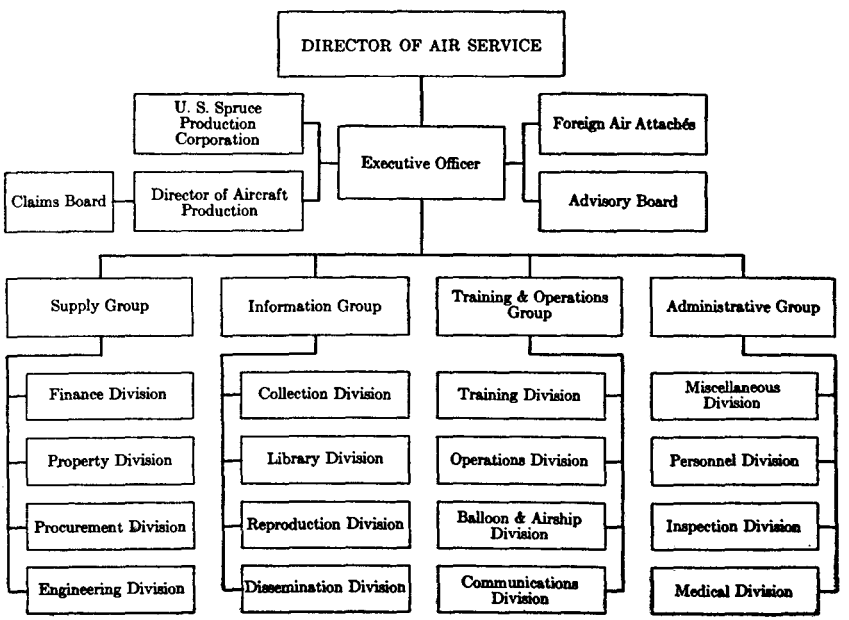


CHART NO. 23—*ORGANIZATION OF AIR SERVICE*
Mar. 1919

independence of the two units constituting the Air Service and in preparing the way for their final merger.

In Feb., the Board of Review, Bureau of Aircraft Production, became part of the Board of Review of the Air Service; and Mar. 10, it was designated as the Air Service Claims Board.

The Executive Order of Mar. 19, published Apr. 18, brought the two Air Service departments completely under the control of the Director of the Air Service. In anticipation of this change an entirely new organization had been announced Mar. 15, which was patterned, as far as practicable, after the structure of the Air Service, A. E. F., as shown on chart 23.

On July 11, legislative authority was granted to continue the wartime organization of the Air Service as an independent branch of the War Department for another year.

1920

On June 4, statutory provision was made for the Air Service as a permanent arm of the Military Establishment.

ADVISORY ORGANIZATIONS

Several technical boards, committees, and councils furthered the development and accomplishments of the Air Service by their investigations, research, and advice. The more important of these organizations were—

NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

This agency was established by The Naval Appropriation Act of March 3, 1915. During the war, the Committee investigated the condition of the aircraft industry; made recommendations to the War and Navy Departments for increasing the quantity production of aircraft; recommended the creation of the Aircraft Production Board; made available to that Board information acquired by the Committee from a census of the production facilities of manufacturers of aircraft and aeronautic engines; and took the initiative in organizing ground schools for aviators. It acted as a clearing house for inventions submitted to the Army and Navy, and as a source of general information for the aircraft industry.

AIRCRAFT PRODUCTION BOARD

The Board was established pursuant to a resolution of the Council of National Defense May 16, 1917. It consisted of four civilian members, the Chief Signal Officer of the War Department, and the Chief of the Construction and Repair Bureau of the Navy Department. It was discontinued Oct. 1, 1917, and its functions were taken over by the Aircraft Board. It considered mat-

ters relating to quantity production of aircraft and cooperated with the Army and Navy in the advancement of their aviation programs.

AIRCRAFT BOARD

This body was created Oct. 1, 1917, and consisted of nine members including the same representatives of the War and Navy Departments as above. It acted in an advisory capacity to the Chief Signal Officer and to the Secretary of the Navy relative to the purchase and production of aircraft, made recommendations as to contracts for aircraft and the distribution of contracts, and served as a clearing house for aeronautical information for the Army and Navy.

JOINT ARMY AND NAVY TECHNICAL AIRCRAFT BOARD

This Board acted in an advisory capacity to the Secretaries of War and of the Navy. Its members were appointed in Apr. and May 1917. No aircraft or any accessory connected therewith that had not first been approved as to type by the Board, was to be supplied to either service for use in the war.

NATIONAL RESEARCH COUNCIL

The Council was originated in 1916 by the National Academy of Sciences. Membership comprised the chiefs of the technical bureaus of the War and Navy Departments, the heads of other Government bureaus engaged in scientific research, and representatives of educational institutions, research foundations, and engineering and industrial research. This body conducted some investigations in aeronautics. The Science and Research Division of the Signal Corps was established upon its recommendation.

WAR INDUSTRIES BOARD

The Board assisted the Aviation Section, Signal Corps, and Air Service by the coordination of all Government needs, adjustment of prices, establishment of priorities with respect to commodities required, solution of industrial problems, and attendance to kindred matters. See p. 4.

FIELD ORGANIZATION AND INSTALLATIONS

ESTABLISHMENTS OF THE DEPARTMENT OF AERONAUTICS

On Apr. 6, 1917, only three flying fields were in operation: Rockwell Field, San Diego, Calif.; Hazelhurst Field, Mineola, Long Island, N. Y.; and Essington, Pa.

These facilities were soon supplemented by a large number of new flying fields, schools, camps, and depots, resulting in the following establishments which were in operation some time during the emergency:

Location or designation	Function
Aberdeen Proving Ground, Aberdeen, Md	Aerial bomb testing station; balloon station.
Akron, Ohio	Airship training and construction station.
Americus, Ga	Aviation general supply depot.
Arcadia Balloon School	*See* Ross field, Arcadia, Calif.
Atlanta, Ga	Ground school for flyers. *See* Georgia School of Technology.
Baker's Field, N. Y	Landing field.
Barron Field, Everman, Tex. (formerly Taliaferro Field No. 2)	Flying field; temporarily primary flying school; pursuit school; temporary storage depot.
Bolling Field, Anacostia, D. C	Flying field; aerial defense of Washington, D. C.
Bragg, Camp, N. C	Balloon station.
Brindley Field, Commack, Long Island, N. Y	Flying field.
Brooks Field, San Antonio, Tex	Flying field; instructors' school.
Buffalo, N. Y	Aviation general supply depot and acceptance park.
Call Field, Wichita Falls, Tex	Flying field; observers' school (advanced flying); reserve military aviators' concentration school; temporary storage depot.
Carlstrom Field, Arcadia, Fla	Flying field; temporarily primary flying school; pursuit school; aerial gunnery school.
Carnegie Institute of Technology, Pittsburgh, Pa	Aviation mechanics' school; radio school.
Carruthers Field, Benbrook, Tex. (formerly Taliaferro Field No. 3)	Flying field; temporarily primary flying school; pursuit school; temporary storage depot.
Chandler Field, Essington, Pa	Flying field; aerial coast defense.
Chanute Field, Rantoul, Ill	Flying field; primary flying school.
Chapman Field, Miami, Fla	Flying field; aerial gunnery school.
Chapman Field, N. Y	*See* Brindley Field.
Columbia University, N. Y., N. Y	Radio school; school of photography.
Columbus, N. Mex	Municipal flying field.
Cornell University, Ithaca, N. Y	Ground school for flyers; school of photography.
Crook, Fort, Nebr	Balloon station.
Dallas, Tex	Aviation repair depot.
Damm Field, Henry J., Babylon, Long Island, N. Y	Flying field.
Dayton, Ohio	Aviation general supply depot and acceptance park.
Detroit, Mich	Aviation general supply depot and acceptance park. *See* Morrow Field.
Dick, Camp, Dallas, Tex	Concentration camp.
Dorr Field, Arcadia, Fla	Flying field; temporarily primary flying school; pursuit school; aerial gunnery school for pursuit graduates.
East Field, Otay, Calif	Flying field; subpost of Rockwell Field.
Eberts Field, Lonoke, Ark	Flying field; primary flying school; temporary storage depot.
Elisabeth, N. J	Aviation general supply depot and acceptance park.
Ellington Field, Houston, Tex	Flying field; armorers' school; bombing school; radio school. *See* San Leon.
Emerson Field, Cp. Jackson, S. C	Flying field, established in connection with field artillery brigade firing center at Cp. Jackson.
Florence Field, Fort Omaha, Nebr	Balloon field. *See* Omaha.
France Field, Fort Randolph, C. Z	Flying field; aerial coast defense.
Garden City, Long Island, N. Y	Aviation general supply depot; concentration camp. *See* Hazelhurst Field.
Georgia School of Technology, Atlanta, Ga	Ground school for flyers; school for aviation supply officers. *See* Atlanta.
Gerstner Field, Lake Charles, La	Flying field; pursuit school; bombing school; radio school; temporary storage depot.
Godman Field, Westpoint, Ky	Flying field, established in connection with field artillery brigade firing center at Cp. Knox.
Greene, Cp., Charlotte, N. C	Aviation concentration camp.
Hazelhurst Field, Mineola, Long Island, N. Y	Flying field; aviation general supply depot; concentration camp. *See* Garden City.
Hiestand Field, Fort Myers, Fla	Subfield of Dorr Field; landing field.
Houston, Tex	Aviation general supply depot.
Indianapolis, Ind	Aviation repair depot.

Location or designation	Function
Kelly Field, San Antonio, Tex	Flying field; primary flying school; ground school for adjutants, supply officers, and engineers; mechanics' school; concentration camp; aviation general supply depot.
Langley Field, Hampton, Va	Flying field and balloon station; school of photography; observers' school; experimental engineering department; aerial coast defense.
Lee Hall, Va	Balloon school.
Little Rock, Ark	Aviation general supply depot.
Los Angeles, Calif	Aviation general supply depot.
Love Field, Dallas, Tex	Flying field; bombing school; reserve military aviators' concentration school; temporary storage depot.
Lufberry Field, Long Island, N. Y	Flying field.
Luke Field, Ford's Island, T. H	Flying field; aerial coast defense.
McAllen, Tex	Border patrol flying field.
McCook Field, Dayton, Ohio	Testing field; experimental station, under Director of Aircraft Production.
March Field, Riverside, Calif	Flying field; primary flying school.
Massachusetts Institute of Technology, Cambridge, Mass	Ground school for flyers; school for aviation engineers.
Mather Field, Sacramento, Calif	Flying field; primary flying school.
Middletown, Pa	Aviation general supply depot.
Mitchel Field, Garden City, Long Island, N. Y	Flying field; temporary storage depot.
Monroe, Fort, Va	Balloon station.
Montgomery, Ala	Aviation repair depot.
Morrison, Cp., Newport News, Va	Aviation general supply depot; concentration camp.
Morrow Field, Detroit, Mich	Before Dec. 17, 1918, known as General Supply Depot and Acceptance Park. Depot and testing field. *See* Detroit.
Newdorp, Staten Island, N. Y	Aerial coast defense.
Ohio State University, Columbus, Ohio	Ground school for flyers; school for aviation adjutants.
Omaha and Crook, Forts, Nebr	Balloon school.
Park Field, Millington, Tenn	Flying field; primary flying school.
Park Place, Houston, Tex	Flying field.
Payne Field, West Point, Miss	Flying field; pursuit school; reserve military aviators concentration school; temporary storage depot.
Penn Field, Austin, Tex	School for radio operators. *See* University of Texas.
Pensacola, Fla	Army dirigible station.
Philippine Department, Manila, P. I	Aerial coast defense.
Pope Field, Cp. Bragg, N. C	Flying field, established in connection with field artillery brigade firing center.
Post Field, Fort Sill, Okla	Flying field and balloon station, established in connection with school of fire for field artillery; balloon school; observers' school; radio school.
Princeton University, Princeton, N. J	Ground school for flyers.
Ream Field, Calif	Flying field. Subpost of Rockwell Field.
Reilly Field, Cp. McClellan, Ala	Flying field, established in connection with field artillery brigade firing center.
Rich Field, Waco, Tex	Flying field; primary flying school; temporary storage depot.
Richmond, Va	Aviation general supply depot; balloon general supply depot.
Rochester, N. Y	School of photography.
Rockwell Field, San Diego, Calif	Flying field; temporarily primary flying school; pursuit school; aerial gunnery school.
Roosevelt Field, Mineola, Long Island, N. Y	Flying field.
Ross Field, Arcadia, Calif	Balloon school.
St. Paul, Minn	Mechanics' school.
Sacramento, Calif	Aviation general supply depot.
Sanderson, Tex	Border patrol flying field.
San Francisco, Calif	Aviation general supply depot.
San Leon, Houston, Tex	Aerial gunnery school for bombing graduates. *See* Ellington Field.
Scott Field, Belleville, Ill	Flying field; primary flying school.
Selfridge Field, Mount Clemens, Mich	Flying field; aerial gunnery school.
Souther Field, Americus, Ga	Flying field; primary flying school.

Location or designation	Function
Taliaferro Field, Hicks, Tex. (formerly Taliaferro Field No. 1)	Flying field; aerial gunnery school; temporary storage depot.
Taliaferro Field No. 2, Everman, Tex	Flying field; redesignated Barron Field May 1, 1918. *See* Barron.
Taliaferro Field No. 3, Benbrook, Tex	Flying field; redesignated Carruthers Field May 1, 1918. *See* Carruthers.
Taylor Field, Montgomery, Ala	Flying field; primary flying school; temporary storage depot.
University of California, Berkeley, Calif	Ground school for flyers. *See* Berkeley; chapter IV.
University of Illinois, Urbana, Ill	Ground school for flyers.
University of Texas, Austin, Tex	Ground school for flyers; radio school.
Vail, Cp. Alfred, Little Silver, N. J	Radio laboratory.
Valentine Field, Labelle, Fla	Temporary flying field; subpost of Carlstrom Field.
Waco, Tex	Concentration camp.
Washington, D. C	Aviation general supply depot.
Wayne, Fort, Mich	Aviation recruit depot; concentration camp.
Wise, Cp. John, San Antonio, Tex	Balloon School.
Wright Field, Wilbur, Dayton, Ohio	Flying field; aviation general supply depot; armorers' school (transferred from Ellington Field); temporary storage depot.

Supervisory Districts

On Sept. 12, 1918, the Director of Military Aeronautics issued instructions for the establishment of five supervisory districts, viz: Northern, Southeastern, Northern Texas, Southern Texas, and Western. By Nov. 12, 1918, the following districts had been established:

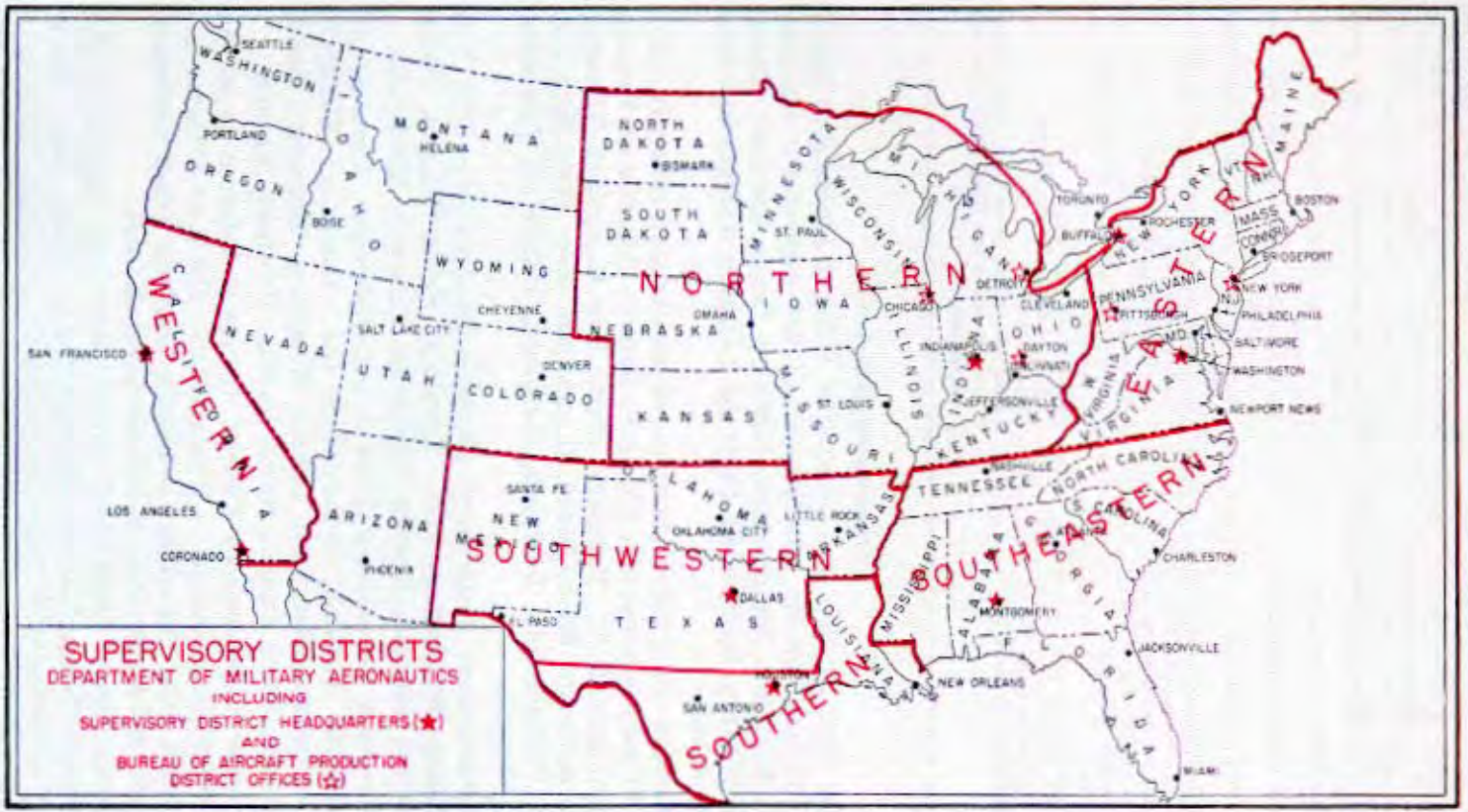
Eastern Supervisory District—Headquarters: Office Director of Military Aeronautics, Executive Section, Supervisors Branch, Washington, D. C. Territory: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, District of Columbia, and Virginia.

Southeastern Supervisory District—Headquarters: 720 Bell Building, Montgomery, Ala. Territory: North Carolina, South Carolina, Georgia, Florida, Tennessee, Alabama, Mississippi.

Northern Supervisory District—Headquarters: Chamber of Commerce Building, Indianapolis, Ind. Territory: Michigan, Ohio, Indiana, Kentucky, Illinois, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas.

Southern Supervisory District (formerly referred to as the Southern Texas District)—Headquarters: 239 West Alabama St., Houston, Tex. Territory: Louisiana, Southern Texas (including Austin and all territory in latitude south thereof).

Southwestern Supervisory District (formerly known as the Northern Texas District)—Headquarters: Dallas, Tex. Territory: Arkansas, Oklahoma, New Mexico, and northern Texas (ex-


SEATTLE
WASHINGTON
PORTLAND
OREGON
BOISE
MONTANA
HELENA
NORTH DAKOTA
BISMARK
SOUTH DAKOTA
WYOMING
CHEYENNE
NEBRASKA
OMAHA
NEVADA
SALT LAKE CITY
UTAH
DENVER
COLORADO
KANSAS
SAN FRANCISCO
LOS ANGELES
CORONADO
ARIZONA
SANTA FE
NEW MEXICO
OKLAHOMA
OKLAHOMA CITY
DALLAS
EL PASO
TEXAS
MINNESOTA
ST. PAUL
IOWA
CHICAGO
ILLINOIS
ST. LOUIS
MISSOURI
LITTLE ROCK
ARKANSAS
WISCONSIN
MICHIGAN
DETROIT
INDIANAPOLIS
INDIANA
OHIO
CLEVELAND
DAYTON
CINCINNATI
KENTUCKY
JEFFERSONVILLE
TORONTO
BUFFALO
ROCHESTER
NEW YORK
PENNSYLVANIA
PITTSBURGH
WEST VIRGINIA
MD.
VIRGINIA
VT.
N.H.
MAINE
MASS.
CONN.
BRIDGEPORT
NEW YORK
N.J.
PHILADELPHIA
BALTIMORE
WASHINGTON
NEWPORT NEWS
NORTH CAROLINA
TENNESSEE
NASHVILLE
SOUTH CAROLINA
CHARLESTON
MISSISSIPPI
ALABAMA
MONTGOMERY
GEORGIA
FLORIDA
JACKSONVILLE
LOUISIANA
NEW ORLEANS
HOUSTON
SAN ANTONIO
MIAMI
WESTERN
SOUTHWESTERN
SOUTHERN
SOUTHEASTERN
EASTERN
NORTHERN
SUPERVISORY DISTRICTS
DEPARTMENT OF MILITARY AERONAUTICS
INCLUDING
SUPERVISORY DISTRICT HEADQUARTERS (★)
AND
BUREAU OF AIRCRAFT PRODUCTION
DISTRICT OFFICES (☆)

MAP No. 1

cluding Austin but including all territory in latitude north thereof).

The Western Supervisory District was not established until later. Headquarters: Southern Trust and Commerce Bank Bldg., Coronado, Calif. Territory: California.

Each district was placed under a district supervisor who, as representative of the Director of Military Aeronautics, was charged with general supervision of all activities of the Department of Military Aeronautics within his district. The district supervisor was especially charged with inspecting each aviation field or station at regular intervals and reporting results to the Washington office.

ESTABLISHMENTS OF THE BUREAU OF AIRCRAFT PRODUCTION

District Offices

Under Equipment Division

Early in July 1917, steps were taken by the Equipment Division of the Signal Corps to organize an Inspection Department for the inspection of practically all Signal Corps purchases, amounting then to about $100,000,000 per month. Inasmuch as the distance of industry from Washington precluded the handling of detail of inspection from the central office, district offices of inspection were established at centers of production, viz: Buffalo, N. Y.; Chicago, Ill.; Dayton, Ohio; Detroit, Mich.; New York, N. Y.; Pittsburgh, Pa.; Portland, Oreg.; and San Francisco, Calif. The Portland office was discontinued on creation of the Spruce Division.

In mid-December 1917, first the Buffalo office of the Inspection Department and, soon thereafter, the other offices were expanded into district offices of the Equipment Division to decentralize authority from Washington. From then on, the authority vested in the district office, aside from matters of finance, included the decision of engineering, production, and inspection questions, and the variation of material and design, for the purpose of expediting production of safe and serviceable equipment. Accordingly, in each of the district offices there were installed two officers in charge with respective duties as follows:

(a) Officer in charge of the Engineering, Production, and Inspection Departments of the Equipment Division, to whom all officers and employees of said departments within the district were subordinate.

(b) Officer in charge of the Finance Department of the Equipment Division, who controlled all officers and employees of said department within the district.

The two officers in charge of district offices were enjoined to so coordinate the functions of the departments under their respective direction as to produce the least possible friction with contractors and at the same time adequately protect the interests of the Government. Cooperation between the several departments was made mandatory, with the proviso that if such cooperation could not be effected locally, a detailed joint report would have to be made to the Chief of the Equipment Division.

Under Production Division

On April 24, 1918, when a Bureau of Aircraft Production and a Division of Military Aeronautics were created in the Office of the Chief Signal Officer, the arrangements within each district office as set forth above continued. By July 1918, district managers of production had been installed in the various offices and a reorganization had been initiated whereby an amalgamation of the representatives of the Finance Division in each district office with the organization of the district manager of production was eventually accomplished. Financial matters and policy, however, continued to be guided by the Finance Division. Although, under the new order, the district manager of production as senior officer was charged with general responsibility for all activities of the district, he continued to exercise direct supervision over district activities of production and controlled production engineering and inspection as well as personnel engaged therein. The District Aircraft Office was the point of contact with manufacturers where problems of engineering and production, or any other question could be discussed or settled.

Other Establishments

The Science and Research Department maintained general laboratories at 7th St. and Bedford Ave., Pittsburgh, Pa.; a science and research laboratory at Langley Field, Hampton, Va.; and a facility at Johns Hopkins University, Baltimore, Md.

The Ordnance and Instrument Department operated a photographic section (experimental laboratory and flying field) at Langley Field, Va.; a flying field at Baker's Field, Rochester, N. Y.; and a research laboratory, at Kodak Park, Rochester, N. Y.

The Airplane Engineering Department had an experimental station at McCook Field, Dayton, Ohio.

McCook Field, Dayton, Ohio; and Langley Field, Hampton, Va., were used as experimental fields by the Bureau of Aircraft Production.

Spruce Production Districts

In the beginning the Division established five military and five production districts in Oregon and Washington as follows:

MILITARY DISTRICTS	PRODUCTION DISTRICTS
1. Vancouver Barracks	1. Yaquina Bay
2. Puget Sound	2. Lewis and Clark
3. Grays Harbor and Willapa Bay	3. Aberdeen
4. Clatsop	4. Raymond
5. Yaquina Bay	5. Clallam

The Coos Bay Military District was added in Oct. 1918.

The military districts contained 234 Army camps. District commanders attended to matters of purely military nature and cooperated with the supervisors of production districts, which corresponded logically but not geographically to the five military districts.

FIELD ORGANIZATION OF AIR SERVICE

MAY 10, 1920

General and Special Service Schools

San Antonio, Tex. (A. S. Mechanics); Langley Field, Va. (Photography); Carlstrom Field, Fla. (Pilot); March Field, Cal. (Pilot); Post Field, Okla. (Observers); Post Field, Okla. (Radio); Wilbur Wright Field, Ohio (Storekeepers).

Balloon Schools

Fort Omaha, Nebr.; Lee Hall, Va.; Brooks Field, Tex.; Ross Field, Calif.

Flying Fields

INACTIVE

Bolling, D. C.; Chapman, Fla.; Rockwell, Calif.

ACTIVE

Carlstrom, Fla.; Kelly, Tex.; Langley, Va.; March, Calif.; Mather, Calif.; Mitchel, Long Island, N. Y.; Post, Okla.

Aerial Coast Defense

France Field, C. Z.; Luke Field, Pearl Harbor, T. H.; Philippine Department, Manila, P. I.; Newdorp, Staten Island, N. Y.; Langley Field, Va.

U. S. Border Patrol Stations

McAllen, Tex.; Laredo, Tex.; Marfa, Tex.; Eagle Pass, Tex.; Sanderson, Tex.; Douglas, Ariz.; Calexico, Calif.

Ordnance Proving Ground

Aberdeen Proving Ground, Aberdeen, Md.

Artillery Firing Centers

Godman Field, Camp Knox, Ky.; Pope Field, Camp Bragg, N. C.

Balloon Fields

Fort Omaha, Nebr.; Lee Hall, Va.; Ross Field, Calif.

Temporary Storage Depots

At the following fields: Barron, Tex.; Chanute, Ill.; Dorr, Fla.; Ellington, Tex.; Gerstner, La.; Eberts, Ark.; Chapman, Fla.; Hazelhurst, Long Island, N. Y.; Love, Tex.; Morrison, Va.; Park, Tenn.; Rich, Tex.; Taliaferro, Tex.; Selfridge, Mich.; Taylor, Ala.

Repair Depots

Dallas, Tex.; Montgomery, Ala.; Speedway, Indianapolis, Ind.

General Supply Depots

Americus, Ga.; Fairfield, Ohio; Houston, Tex.; Little Rock, Ark.; Los Angeles, Cal.; Middletown, Pa.; Richmond, Va.; San Antonio, Tex.; Washington, D. C.

Aviation General Supply and Repair Depots

Rockwell Field, Calif.; Curtiss Elmwood Plant, Buffalo, N. Y.

Plants

U. S. Fabric Inspection Depot, Saylesville, N. Y.; U. S. Aeronautical Engine Plant, Long Island City, N. Y.; Goodyear Tire & Rubber Co., Akron, Ohio (balloons).

District Offices

PERMANENT

New York City, Starr and Borden Aves., Long Island City; Chicago, Ill., 230 East Ohio St.

TEMPORARY [1]

Buffalo, N. Y., 2050 Elmwood Ave.; Detroit, Mich., Springwells; Dayton, Ohio, First and Cordova Sts.; Chicago, Ill., 230 East Ohio St.; New York City, 461 Eighth Ave.; Boston, Mass., 99 Chauncey St.

Air Service Experimental Plant

McCook Field, Dayton, Ohio.

PERSONNEL

AVIATION SECTION, SIGNAL CORPS

On Apr. 1, 1917, the Section had a strength of 52 officers, 1,100 enlisted men, and 210 civilian employees. Regular officer personnel

[1] Pending disposal of war surplus matériel.

was detailed from the Army at large. Only 35 of the officers so detailed were rated as flying officers; and only five officers had received technical training as construction engineers. No individuals, either in the Army or among American aeroengineers in civil life, were acquainted with wartime manufacturing methods.

At about this time, the following units were in existence or in process of organization:

Unit	Ordered organized	Station
1st Aero Squadron	Fully organized	Columbus, N. Mex.
2d Aero Squadron	Apr. 16, 1917	Fort Mills, P. I.
3d Aero Squadron	Fully organized	Kelly Field, San Antonio, Tex.
4th Aero Squadron	Apr. 16, 1917	Fort Sam Houston, Tex.
5th Aero Squadron	Apr. 16, 1917	Kelly Field, San Antonio, Tex.
6th Aero Squadron	Apr. 16, 1917	Fort Kamehameha, T. H.
7th Aero Squadron	Apr. 16, 1917	Canal Zone.

Ninety-two Regular Army officers had been rated by July 1, 1917, as trained for aviation duty, while 54 civilians had qualified for commissions as flying officers. The Act of July 24, 1917, gave the President authority to increase the Aviation Section, Signal Corps, to any size he found necessary. Thereafter, the number of qualified aviators who might be commissioned as second lieutenants was unlimited.

As a consequence, a great expansion of personnel set in. On May 31, 1918, when all aviation activities had been removed from the control of the Chief Signal Officer, 16,084 officers, 147,932 enlisted men, and 9,838 civilians were transferred to the new air service organization as represented by the Department of Military Aeronautics and the Bureau of Aircraft Production.

BUREAU OF AIRCRAFT PRODUCTION

On June 30, 1918, the personnel of the Bureau exclusive of Spruce Production Division numbered 613 officers and 5,175 civilians, of whom 319 officers and 1,999 civilians were stationed in Washington, D. C. At this time, and prior to Aug. 1, 1918, the enlisted personnel required by the Bureau was furnished by the Department of Military Aeronautics. The Spruce Production personnel, June 30, 1918, consisted of 538 officers, 17,697 enlisted men, and 70 civilians.

By Nov. 11, 1918, the Bureau had reached a strength of 1,898 officers and 30,622 enlisted men, of whom 1,222 and 27,661, respectively, were in the Spruce Production Division. The latter, while at its maximum strength, also employed some 125,000 civilian loggers and lumbermen.

Spruce Production Units

These organizations were engaged in lumbering operations on the Pacific Coast to provide the material needed for airplane construction. The first squadrons were organized in Nov. 1917, and, at the Armistice, 111 squadrons were in existence.

DEPARTMENT OF AERONAUTICS AND OVERSEA FORCES

During midsummer 1918, the authorized strength was 10,597 officers (1 major general, 1 brigadier general, 29 colonels, 77 lieutenant colonels, 353 majors, 1,439 captains, 3,691 first lieutenants, 5,006 second lieutenants) and 125,667 enlisted men. In addition to this general authorization, 731 first lieutenants and 4,518 second lieutenants had been commissioned as flyers.

On July 26, 1918, the actual strength and the disposition of personnel and units was as follows:

Personnel

	Officers			Enlisted men
	Fly	Nonfly	Total	
Total in U. S. assigned to units	187	1,162	1,349	54,059
Total in U. S. unassigned	4,477	3,861	8,338	18,634
Total in U. S.	4,664	5,023	9,687	72,693
Total sent overseas assigned to units	504	1,009	1,513	50,205
Total sent overseas unassigned	2,230	1,425	3,655	2,339
Total overseas	2,734	2,434	5,168	52,544
Aggregate in U. S. and overseas [1]	7,398	7,457	14,855	125,237

[1] In the aggregate figures are included 111 officers and 6,114 enlisted men assigned to balloon companies.

Units

Type	In U. S.	Overseas	Total
Service squadrons	203	143	346
Construction squadrons	11	38	49
Supply squadrons	30	21	51
Repair squadrons	34	25	59
Motor mechanic regiments	1	3	4
Balloon companies	34	20	54
Construction companies	27	10	37
Photographic sections	7	5	12
Repair squadrons, depot	6		6
Total number of units	353	265	618

At the Armistice, the Department numbered 10,460 officers and 72,933 enlisted men, while the oversea Air Service had a corresponding strength of 6,831 and 74,594.

RECAPITULATION OF ARMISTICE STRENGTH

	Officers	Enlisted men
Bureau of Aircraft Production	1,898	30,622
Department of Aeronautics	10,460	72,933
Oversea forces	6,831	74,594
Total	19,189	178,149

ACTIVITIES

SUPPLY

AIRCRAFT PRODUCTION

During 1916, American manufacturing plants produced about 800 airplanes, mostly for training purposes, for foreign governments. In July 1917, a $640,000,000 appropriation for airplane construction called for the manufacture of 22,000 planes. Including necessary spare parts, the program provided for an equivalent of 40,000 planes to be produced within 12 months.

Existing airplane plants were divided between the Army and Navy by the Aircraft Production Board. The following concerns were allotted to the Army:

Curtiss Aeroplane and Motor Corporation, Buffalo, N. Y. (jointly with the Navy);
Standard Aircraft Corporation, Elizabeth, N. J.;
Thomas-Morse Aircraft Corporation, Ithaca, N. Y.;
Wright-Martin Aircraft Corporation, Los Angeles, Calif.;
Sturtevant Aeroplane Company, Boston, Mass.

The production program exceeded the combined potential output of these factories. New corporations, under Government encouragement, supplied the deficiency. They were:

Dayton-Wright Airplane Corporation, Dayton, Ohio;
A firm sponsored by the Fisher Body Company, Detroit, Mich.;
Springfield Aircraft Corporation, Springfield, Mass.; and several airplane plants in California.

Spare Parts

For a considerable time, the manufacture of spare parts was insufficient to supply the training fields. This was occasioned by several factors but chiefly by a lack of manufacturing experience

and faulty blueprints. The following firms were the principal producers of spare parts:

The Metz Co., Waltham, Mass.;
Sturtevant Aeroplane Co., Jamaica Plains, Mass.;
Wilson Body Co., Bay City, Mich.;
West Virginia Aircraft Corporation, Wheeling, W. Va.;
The Rubay Co., Cleveland, Ohio;
Engel Aircraft Co., Niles, Ohio;
Hayes-Ionia Co., Grand Rapids, Mich.

The Liberty Engine

The "Liberty Engine" was the chief American contribution to the wartime advance in aviation. American automobile plants readily adapted themselves to the manufacture of this motor. Pilot models of the 8-cylinder motor (U. S. 8, Army type) and of the 12-cylinder (U. S. 12, Army type) were delivered July 1, 1917, and Aug. 5, 1917, respectively.

Instruments

An entirely new industry was fostered to supply instruments. About 20 new items were in production by June 30, 1918.

Summary of Production

The principal items of aviation matériel and equipment produced during the war were as follows:

Articles	Freighted from factories			
	Up to May 25, 1918	Up to June 30, 1918	During fiscal year 1919	Total
Service planes:				
Observation and day bombing:				
De H-4	155	529	4,109	4,638
De H-4 without engines			204	204
USD-9A			8	8
Bristol Fighter	11	24		24
Night bombing:				
Handley-Page			107	107
Bombers			4	4
Martin—Corps d'armée			6	6
Monoplane, pursuit:				
Procured from England but equipped in U. S. A			56	56
SE-5, built in U. S. A			1	1
Biplane, pursuit:				
LUSAC—11 (Lepere)			25	25
USB-1			1	1
Bristol Fighter			3	3
Service engines:				
U. S. 8, Army type			15	15
U. S. 12, Army type	628	1,615	13,523	15,138
U. S. 12, Navy type	482	775	4,565	5,340
Bugatti			40	40
Hispano, 180 H. P			1,619	1,619
Hispano, 300 H. P	2	2	498	500

Articles	Freighted from factories			
	Up to May 25, 1918	Up to June 30, 1918	During fiscal year 1919	Total
Training planes:				
Elementary training:				
JN4–D	2,837	2,972	1,120	4,092
SJ–1	1,600	1,600	----	1,600
Advanced Training:				
JN4–HG and JN6–HG2	83	321	196	517
JN4–H, training	402	402	----	402
JN6–HG1	----	----	560	560
JN4–HB and JN6–HB	16	100	152	252
JN6–H, observation	----	----	107	107
JN6–H, pursuit	----	----	126	126
S4–B	100	100	----	100
S4–C	30	73	424	497
Penguin	36	50	250	300
VE–7	----	----	10	10
E–1	----	----	128	128
Training engines:				
Elementary training engines:				
OX–5	4,340	5,474	4,026	9,500
A7a	2,054	2,178	72	2,250
Advanced training engines:				
Hispano, 150 H. P	1,685	2,188	1,443	3,631
Gnome, 100 H. P	[1] 177	[1] 209	71	280
Le Rhone, 80 H. P	7	68	2,432	2,500
Lawrence, 28 H. P	65	114	337	451
Propellers:				
Training	14,761	19,948	13,429	33,377
Combat	176	1,373	6,327	7,700
Handley-Page laminations	----	----	1,660	1,660
Raw materials:				
Mahogany, Central American, Mexican, and African, 1,000 ft	2,219	3,257	6,727	9,984
Walnut, American black, do	853	1,123	3,526	4,649
Spruce, do	17,355	26,260	48,674	74,934
Oak, quartered, white, do	261	281	27	308
Birch, do	561	633	30	663
Cherry, do	----	338	280	618
Fir, do	5,926	8,346	49,206	57,552
Ash, do	----	----	164	164
Cedar, do	----	----	4,513	4,513
Linen fabric, 1,000 yds	2,548	2,863	324	3,187
Balloon fabric, do	----	----	7,888	7,888
Airplane fabric, do	----	----	7,538	7,538
Cotton, do	1,876	2,948	----	2,948
Cotton tape, do	2,096	2,359	4,980	7,339
Acetate dope, 1,000 gals	108	234	442	676
Nitrate dope, do	----	----	86	86
Machine guns:				
Lewis	6,081	10,370	29,929	40,299
Vickers (ground)	7,005	8,245	3,663	11,908
Vickers (aircraft)	8	56	5,944	6,000
Marlin	20,744	22,353	15,646	37,999
Browning	----	----	2,349	2,349
Bombs:				
Incendiary:				
Mark I	1	207	112	319
Mark II	2	8	----	8

Articles	Freighted from factories			
	Up to May 25, 1918	Up to June 30, 1918	During fiscal year 1919	Total
High-capacity demolition:				
Mark I	----------	70	15,594	15,664
Mark II	102	299	----------	299
Mark III	----------	432	22,759	23,191
Mark IV	----------	----------	25	25
Barlow, heavy	12	12	1	13
Dummy bomb, Mark I	8,662	10,008	171,356	181,364
Mark II-A	----------	----------	24,098	24,098
Photographic equipment:				
Observation cameras	491	665	386	1,051
Camera guns	347	358	1,241	1,599
Hangars:				
Steel, 66 by 100 feet	36	258	477	735
Steel, 66 by 140 feet	202	234	181	415
Steel, 100 by 100 feet	----------	90	228	318
Canvas	1,736	2,160	340	2,500
Balloons:				
Kite, type R	124	180	730	910
Balloon essentials:				
Ferrosilicon, tons	810	954	528	1,482
Caustic soda, do	661	713	234	947
Hydrogen cylinders, do	63,350	66,000	104,300	170,300
Cable, 1,000 ft	1,007	1,120	1,385	2,505
Winches, do	21	23	158	181
Balloon equipment, units	95	95	----------	95

[1] Includes 46 from the Navy.

In addition to airplanes of American make, arrangements were made with the French for the construction of 5,000 airplanes and extra parts for 8,500 engines to be assembled overseas for the American Expeditionary Forces. By Nov. 11, 1918, a total of 4,881 planes had been delivered. This supply was supplemented by deliveries from England and Italy, which furnished 258 and 59 planes, respectively.

It was estimated that American air strength on the front, Nov. 11, 1918, was 860 planes, while France had 3,000, Great Britain 2,100, and Italy 600 in service.

American aviation participating in battle, by squadrons, was reported as follows: Apr. 30, 3; May 31, 12; June 30, 13; July 31, 14; Aug. 31, 26; Sept. 30, 32; Oct. 31, 43; Nov. 11, 45. The complement of planes per squadron was from 15 to 25.

By Nov. 29, 1918, a total of 5,327 service engines had been turned over to various airplane plants, 5,030 sent to the A. E. F., 3,746 delivered to the Navy, 1,090 furnished to the several Allies, and 941 shipped to training fields.

Raw Materials

In exchange for airplanes furnished the A. E. F., sufficient quantities of spruce, fir, and cedar to construct 16,000 aircraft were sent to the French. Other materials furnished the Allies included enough mahogany and walnut for 40,000 propellers, 4,000 tons of aluminum to complete thousands of planes, "dope" for painting airplane wings, and miscellaneous aircraft materials and supplies.

SPRUCE PRODUCTION

Only perfect, straight-grained wood was suitable for the framework of an airplane. While spruce was considered the only acceptable American lumber at first, it was later determined that fir was suitable for many parts and that white oak might be substituted for walnut and mahogany in propellers. Although Washington and Oregon supplied most of the lumber, some quantities came from Alaska and California.

By Oct. 1917, a monthly production of 10,000,000 ft. was required; but only about 3,000,000 ft. of mediocre grades could be obtained. This deficiency led to the establishment of the Spruce Production Division to meet the transportation and labor supply problems.

The Division promptly supplemented civilian labor by its spruce squadrons, which were organized principally from drafted men of logging and sawmill experience. The forests were opened up by construction of many miles of logging roads and by 13 railroads, aggregating 130 miles of track.

The following shipments of aircraft lumber were made:

Month	Feet	Month	Feet
1917		April	13,583,165
September	952,663	May	11,864,722
October	726,460	June	9,000,134
November	2,887,623	July	13,776,251
December	3,206,981	August	18,861,506
		September	16,682,639
1918		October	22,145,823
January	4,595,430	To Nov. 11, 1918	7,427,928
February	7,320,244		
March	9,977,392	Total	143,008,961

Of these shipments the United States received 52,345,319 feet; England, 41,437,047 feet; France, 34,595,701 feet; Italy, 14,630,894 feet. The State of Washington furnished 88,471,594 feet; Oregon 53,718,591 feet; California 229,540 feet; and Alaska 589,236 feet. Of the total about 56 percent was spruce, 42 percent fir, and 2 percent cedar.

CASTOR OIL

It was recognized early in the war that great quantities of castor oil would be needed for lubrication. Consequently, some 100,000 acres were planted in castor beans. Castor oil was imported from the West Indies and other foreign parts.

Balloon Production

The type adopted for observation was a kite balloon invented by Captain Caquot of the French Army. The gas bag, made of rubberized cotton cloth, was 93 feet long and had a capacity of 37,500 cubic feet of hydrogen gas. Carrying two observers, it was capable of ascent to 5,000 feet in good weather.

The following production was achieved:

Items	Produced to—		Shipped to ports	Shipped to camps, etc.
	Nov. 11, 1918	Mar. 1, 1919		
Observation balloons	676	944	481	463
Supply balloons (nurse)	129	129	6	123
Miscellaneous balloons:				
Target	6	6		6
Spherical	10	12		12
Propaganda	215	215		215
Parachutes	256	458	4	448
Windlasses	50	128		124
Cables (1,000 ft.)	1,222	1,606	486	1,120

A wartime discovery was made whereby helium, a noninflammable gas, could be produced in the United States cheaply and at the rate of 50,000 cubic feet per day. Use of this gas to replace hydrogen would have revolutionized lighter-than-air navigation as to safety and other potentialities. However, no helium was actually used in combat. On Nov. 11, 1918, the first shipment was at the docks awaiting transport overseas.

Research

Large-scale production of aircraft and of the many delicate instruments and other equipment required became possible only after research and experimentation had shown the way. Laboratory facilities were provided by the Bureau of Mines and Government stations at the Bureau of Standards, Washington, D. C.; Camp Alfred Vail, Little Silver, N. J. (including the laboratory of the National Advisory Committee for Aeronautics at Little Silver); the Forests Products Laboratory, Madison, Wis.; the Pittsburgh General Laboratory; Langley Field, Hampton, Va.; McCook Field, Dayton, Ohio; and many commercial laboratories.

Outstanding accomplishments included the improvement of all air-wireless equipment; development of vacuum tubes; investigation of "coil aerials"; the substitution of cotton for linen fabrics for airplanes; and the finding of a mineral substitute for castor oil, satisfactory in many engines.

Extensive tests were made of airplane materials, such as spars and struts, including investigations having as object the replacement of wood by metal. Balloon fabrics and gases were also made the subjects of study. Many aeronautical engines and practically all air instruments were tested. Aerodynamic investigations were conducted with the aid of the wind tunnel at the Bureau of Standards. Assistance was given in determining aerial armament, and contribution was made toward the development of airplane "dope" and varnishes.

TRAINING

HEAVIER-THAN-AIR

Officers

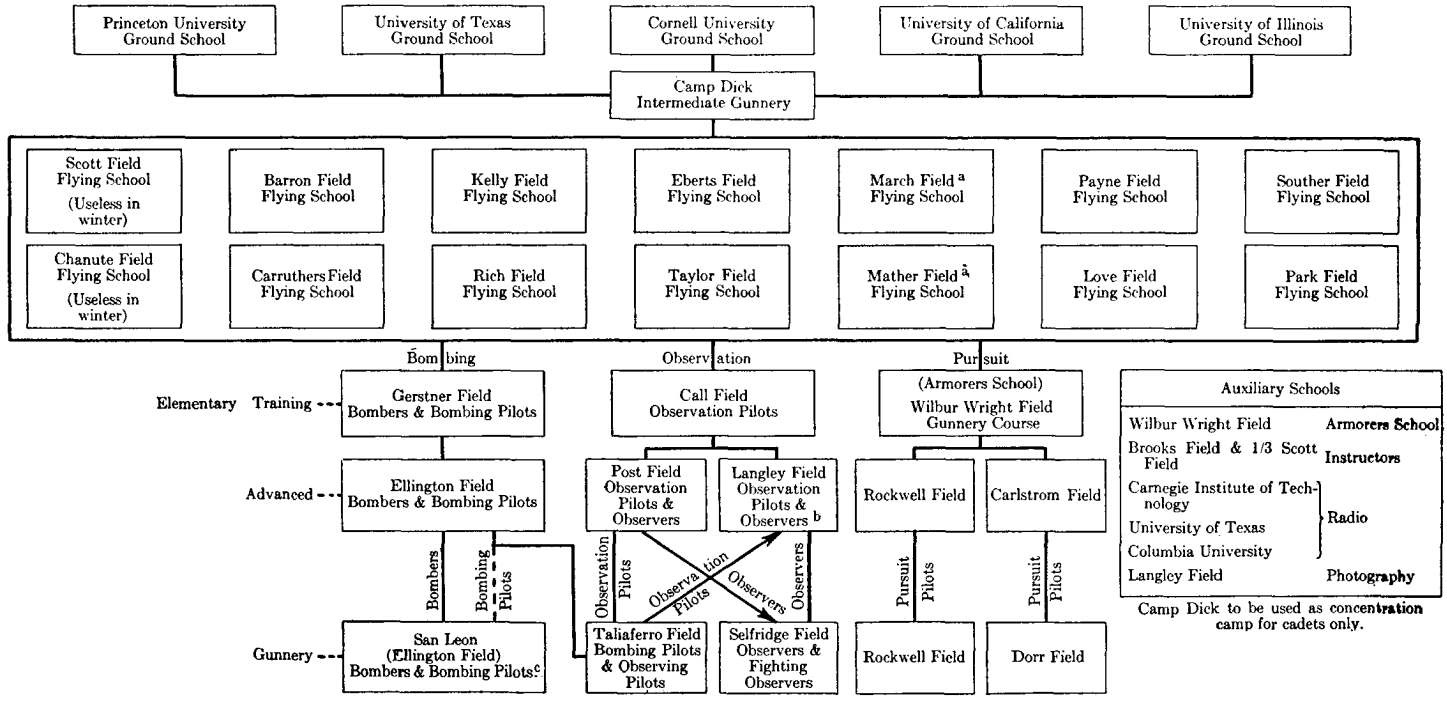
Applicants for training as aviators were given rigid examinations by volunteer medical boards throughout the country. Candidates passing this test were sent to ground schools as cadets. Originally this course covered 2 months, but after Mar. 1, 1919, it was lengthened to 3 months.

Ground-school graduates were next sent to flying fields for an 8-week course in primary flying, which included practical instruction in airplanes, motors, telegraphy, map and photographic interpretation, and ground gunnery.

Primary flying graduates were rated as reserve military aviators and commissioned as second lieutenants. Thereafter, they were classified as bombers, army corps pilots, pursuit pilots, or as instructors and sent to advanced schools for training in formation flying, aerial machine gunnery, bombing, and night flying. For detailed information see chart 24.

During the first year, 38,777 applicants were examined by the medical boards and 18,004 rejected. By June 30, 1918, a total of 11,539 cadets had been graduated from ground schools and 3,129 discharged for failure to meet requirements. At the same time, 4,980 cadets had graduated as reserve military aviators and received commissions as second lieutenants, while some 400 students had been disqualified at the primary training fields. At the advanced schools in the United States the graduates totaled 110 bombers, 85 bombing pilots, 464 observers, 389 observer pilots, and 131 pursuit pilots.

Meantime, training was in progress in Europe. The British had agreed to train and equip 10 flying squadrons; American personnel



[a] Graduates of March and Mather who are chosen for Pursuit go direct to Pursuit Schools. Do not go through the Armorers School.

[b] Observation Pilots chosen from Call Field to be sent to Langley Field, go first to Taliaferro Field for their Aerial Gunnery.

[c] Will go to San Leon and not Taliaferro Field if additional facilities are approved for San Leon.

CHART No. 24—*DIAGRAM SHOWING STAGES OF FLYING TRAINING*

was sent to Canada for courses in aerial gunnery, in exchange for facilities furnished the Royal Flying Corps of Canada at Fort Worth, Tex., for winter training. In addition, cadets were sent to France and Italy. However, the results obtained from these arrangements were not wholly satisfactory, due to a scarcity of training planes. Of some 2,500 cadets sent abroad early in 1917, as many as 700 remained idle for periods of 3 to 5 months.

From July 1, 1918, to Feb. 1, 1919, when the last school of military aeronautics in the United States was closed, 5,761 cadets completed ground-school training. A total of 5,669 aviators received primary flying instruction; 1,067 finished advanced training as army corps pilots, 583 as pursuit pilots, 533 as instructors, and 385 as bombing pilots.

Enlisted Men

It was necessary to train a large body of mechanics to supply the ground force required to keep planes and engines in prime condition. Instruction in ignition, magneto, propeller, welding, instruments, sail-making, cabinet work, copper work, machine guns, and motors, was initially given small detachments of students sent to various factories. About 2,000 men graduated from 17 courses at 34 schools of this type.

In Nov. 1917, a school for enlisted mechanics was opened at Kelly Field, San Antonio, Tex., which graduated a total of 3,640 men. On Mar. 3, 1918, an additional school was started at Dunwoody Institute, Minneapolis, Minn. At the same time, supplementary courses were arranged for at Carnegie Institute; Pratt Institute; and David Rankin, Jr., School of Mechanical Trades, St. Louis, Mo. All of these courses were finally concentrated under one management in a central school at St. Paul, Minn., where 46 houses and a large office building were taken over by the Government for that purpose; total number of men graduated: 14,013. In addition, many enlisted men were sent to France and England for factory training, some of whom returned to the United States as instructors.

An armorers' school was established at Ellington Field, Houston, Tex., in Jan. 1918 to instruct men in the care and maintenance of machine guns. Later, this school was moved to Wilbur Wright Field, where officers and enlisted men underwent training. Commissioned graduates served as instructors for student fliers in aerial armament.

Unit Training

While in the United States, no air unit was assigned or attached for training to a larger tactical organization of all arms. Organ-

ization and training was therefore carried on as a separate matter, apart from the rest of the Army, at concentration camps and flying fields.

Concentration camps served as rendezvous points where recruits were processed and given some elementary instruction in provisional organizations prior to being assigned to squadrons at flying fields for further training. Assignment was made according to individual fitness to fill existing vacancies.

The home project, in mid-summer 1918, called for 30 school units of 825 enlisted men each and for an additional force of 40 service, 22 repair, and 18 supply squadrons, as a reserve in the United States from which to draw oversea replacements.

With the establishment in the summer of 1918 of the First Provisional Wing, also referred to as First Reserve Wing, at Mineola, Long Island, N. Y., an agency was created which controlled the advanced training at the following Long Island air stations: Brindley Field, Henry J. Damm Field, Hazelhurst Field, Lufberry Field, Mitchel Field, and Roosevelt Field. Wing Headquarters was charged, under the direction of the Operations Division of the Air Service, with organizing and shipping abroad units for service in France. Its principal duty, in this connection, was to supervise the training of squadrons for service overseas and to develop teamwork in advanced flying. In order to accomplish this mission, unit cadres were filled up with graduate flyers and enlisted men drawn from outside sources and kept in constant training in the advanced stages of aviation until their departure for overseas.

LIGHTER-THAN-AIR

Officers

Instruction of officers in balloon service began at Fort Omaha, Nebr., in Mar. 1917. As climatic conditions rendered this station unsuitable for winter training, a second school was opened at Camp John Wise, San Antonio, Tex., in Jan. 1918. A small school was also established at Post Field, Fort Sill, Okla., and an additional school at Ross Field, Arcadia, Calif., in June 1918. One month later the school at Lee Hall, Va., close to the artillery training center at Camp Eustis, was started for the training of observers.

Candidates were selected by examining boards and sent to a balloon school for a 5-week course in military training. This was followed by an elementary air course of 4 weeks, which included theoretical and practical field or laboratory study of the balloon and of topography, meteorology, perspective, telephony, and physics. Successful students were designated as candidates for

balloon observers or balloon maneuvering officers. Observer candidates were given an 8-week course, including observation of infantry combat as supported by artillery and auxiliary arms, balloon orientation, photography, and interpretation of photographs. Graduates were rated as "aerial observers (balloon)" and commissioned. Candidates for maneuvering officers took a 4-week ground and air course and upon graduation were commissioned second lieutenants.

Enlisted Men

The enlisted personnel was selected at concentration camps and sent to various schools for special training as mechanical engineers, riggers, telephone repairmen, welders, radio mechanics, and draftsmen.

Units

Balloon organizations were charged with critical and essential work. The observation balloon directed artillery fire by means of telephonic communication and also acted as an aerial sentinel.

To afford unit training along these lines, one company each was maintained at the artillery firing centers of Fort Sill, Okla.; Camp Knox, Ky.; Camp McClellan, Ala.; and Camp Jackson, S. C. The companies passing through the Army Balloon School, Lee Hall, Va., engaged in combined training with contingents of the artillery training center at Camp Eustis, Va.

The first program called for 69 balloon companies. This project was increased to 200 companies in Aug. 1918, 45 of which were to be school units and 22 were set aside for seacoast work. Actually, on Nov. 11, 1918, only 100 companies were organized, of which 23 were in the A. E. F. and 10 awaiting transportation at ports of embarkation.

A balloon company consisted of 1 captain, 3 first lieutenants, 4 second lieutenants, 174 enlisted men, and 1 balloon.

FLIGHT SURGEONS

A flight surgeon was detailed at each active aviation field who was in full charge of every matter connected with the physical condition and care of the flier. Constant association enabled the surgeon to determine when any man was not in proper condition for flight. These medical officers took flying training and certain individuals actually became licensed pilots.

TRAINING FATALITIES

The largest factor of flying fatalities during training resulted from "stalls." Air service deaths, excluding battle injuries, from Apr. 1, 1917, to Dec. 31, 1919, totaled 621, of whom 387 were officers.

Fatalities in the United States amounted to 378, including 212 officers; in Europe, to 235 of whom 171 were officers; and to 4 officers and 4 enlisted men in the insular possessions.

DEMOBILIZATION

PERSONNEL

Officers

Between Nov. 11, 1918, and June 30, 1919, the commissioned strength of the Air Service decreased from 19,189 officers to 5,575, and to 1,168 by June 30, 1920. Of the latter figure, 155 held Regular and 1,013 temporary commissions.

During the 1920 fiscal year, the Air Service reserve officers, inactive, increased from 1,301 fliers and 1,138 nonfliers, to 5,046 fliers and 2,293 nonfliers.

Enlisted Men

The enlisted strength fell from 178,149, Nov. 11, 1918, to 26,948, June 30, 1919, and to 8,428, June 30, 1920.

Units

At the beginning of Jan. 1919, the following units were in existence: 185 aero squadrons; 44 aero construction squadrons; 114 aero supply squadrons; 11 aero replacement squadrons; 150 squadrons, spruce production; 86 balloon companies; 6 balloon group headquarters; 3 balloon wing companies; 15 construction companies; 4 mechanics regiments (15 companies); and 55 photo sections. In addition, there were 155 "lettered" aero squadrons on duty at air fields as follows:

Barron Field	5	Gerstner Field	8	Post Field	7
Brooks Field	6	Kelly Field	10	Rich Field	3
Call Field	5	Langley Field	3	Rockwell Field	8
Carlstrom Field	6	Love Field	4	Scott Field	4
Carruthers Field	5	March Field	5	Selfridge Field	5
Chanute Field	5	Mather Field	5	Souther Field	4
Dorr Field	5	McCook Field	2	Taliaferro Field	6
Eberts Field	5	Park Field	5	Taylor Field	4
Ellington Field	17	Payne Field	4	Wilbur Wright Field	9

Of these units the following were still overseas at this time: 110 aero squadrons; 27 aero construction squadrons; 32 aero supply squadrons; 10 aero replacement squadrons; 37 balloon companies; 6 balloon group headquarters; 3 balloon wing companies; 5 construction companies; 15 mechanics companies; and 23 photo sections.

By Nov. 22, 1919, all Air Service units had been demobilized except the following: 22 aero squadrons; 1 aero construction

squadron; 1 aero replacement squadron (still in France and redesignated "Hq. American Aviation Detachment"); 32 balloon companies; 15 photo sections; 7 lettered flights; and a number of school and supply detachments.

MATÉRIEL

Salvage and Sales

The Sales and Salvage Section, Department of Military Aeronautics, was charged with disposal of surplus matériel which had cost some $89,550,000.

By June 30, 1919, cash receipts for matériel actually sold aggregated $3,504,585, while matériel transferred to other War Department bureaus was valued at about $275,000.

The Material Disposal Section, Bureau of Aircraft Production, was charged with disposal of surplus property, originally valued at $50,748,611. By June 30, 1919, cash receipts for goods actually sold were $1,544,377, and materials taken by contractors in settlement of claims amounted to $3,319,439.

FISCAL YEAR 1920

The Board of Contract Review, Department of Military Aeronautics, and the Board of Review, Bureau of Aircraft Production, were originally established to consider claims arising out of contract terminations. The boards were succeeded by the Air Service Claims Board.

From July 1, 1919, to June 30, 1920, the Claims Board approved settlement of 659 formal and 170 informal contracts, as well as 5,694 claims of subcontractors for the growing of castor beans.

The aggregate of claims presented was $413,151,925.94. The total awards, to the end of the fiscal year, were $93,367,472.29.

LIQUIDATION OF SPRUCE PRODUCTION

The liquidation of the affairs of the United States Spruce Production Corporation to June 30, 1920, netted the following:

Sale of equipment, machinery and supplies, costing originally $7,936,223.53	$4,615,185.80
Sale of 38,705,907 feet of commercial lumber	753,618.20
Sale of logs	1,195,628.33

In addition, an offer had been received of $2,000,000 for property, representing 59 percent of its cost; and of $400,000 for a railway, representing 32 percent of its original value.

Settlement of Claims

Fifty claims, totaling $6,955,595.85 were considered, of which 28 were disallowed and 21 settled for $338,796.86.

By June 30, 1920, the greater part of the Corporation's accounts, payable and receivable, had been settled, while cash on hand and in banks amounted to $13,193,448.54.

RESERVE STOCKS

Large quantities of aviation equipment were sent to depots for storage, including approximately 25,000 tons of matériel returned from overseas. More than 15,000 airplane engines were on hand, 13,000 of which had been stored in the Aviation General Supply Depot, Little Rock, Ark., by the end of the 1920 fiscal year.

SECTION 5

CHEMICAL WARFARE SERVICE

ORIENTATION

No parent organization of the Chemical Warfare Service existed at outbreak of war.

FUNCTIONS

To develop, produce, and test articles of gas offense and defense; to organize and train all gas troops; and to train the entire Army in gas defense.

CHIEFS

1918
June 28 through June 20 1919 — Maj. Gen. William L. Sibert, Director

ORGANIZATION AND DEVELOPMENT

GENESIS

CIVIL AGENCIES

The Bureau of Mines, Interior Department, organized a War Gas Investigations Division with its own funds during the 1917 fiscal year. Thereafter, this Division continued in operation under appropriations made for the Army and Navy but allocated to the Bureau of Mines. Its function was to study the use of noxious gases in warfare. It operated through the following subdivisions: Chemical Research (Defense); Chemical Research (Offense); Dispersoid; Gas-Mask Research; Manufacturing Development (Defense); Manufacturing Development (Offense); Mechanical Research; Pathological Research; Pharmacological Research; Physiological Research; Pyrotechnic Research; Therapeutic Research; and Toxicological Research.

On May 4, 1918, at request of the Army, the Gas-Mask Research activities were transferred to the Surgeon General's Office. In

Sept. 1918, an Experiment Station was established at American University, Washington, D. C.

This research was supplemented by that of other laboratories with the assistance of a large number of chemists. On June 25, 1918, all civil research work was transferred, by Executive order, to the Experiment Station, American University. The personnel of the Station was transferred to the War Department to become an important component of the newly established Chemical Warfare Service.

EARLY ARMY ORGANIZATIONS

On Aug. 31, 1917, the Gas Defense Division of the Surgeon General's Office was organized with the following Sections: Field Supply, Overseas Repair, and Training.

At about the same time, the Ordnance Department was notified that it would be charged with the purchase or the manufacture of toxic gases and with providing the necessary facilities for the production of gas shells. Accordingly, a shell-filling and chemical plant was established at Aberdeen Proving Ground, later known as Edgewood Arsenal (see p. 727).

On Sept. 3, 1917, a Gas Service, A. E. F., was organized. It was provided that the Corps of Engineers would furnish the personnel needed for offensive gas work and the Medical Corps for defensive gas activities. Matériel was to be procured through the Engineer Corps and the Ordnance and Medical Departments.

On Oct. 15, 1917, an Engineer gas and flame regiment was authorized to be mobilized at the American University. During the following month, the Gas Defense Division of the Surgeon General's Office was directed to establish and operate a plant for the manufacture of gas masks.

GAS SERVICE OF THE ARMY

On Oct. 16, 1917, instructions were issued for the appointment of an officer of Engineers, not above the rank of colonel, as Director of Gas Service. The Director was to report to the Chief of Staff to coordinate the various bureaus and laboratories employed in connection with the Gas Service of the Army. On Nov. 1, 1917, a Chemical Service Section, National Army, was created with a personnel of 47 officers and 95 enlisted men.

On Feb. 27, 1918, training in gas-defense methods, until then under the Medical Department, was assigned to the Chief of Engineers.

The post of Director of Gas Service was held successively by Col. Charles L. Potter; Mr. Arthur Hudson Marks; Lieut. Col. W. H. Walker (acting); Lieut. Col. M. T. Bogart (acting); and Maj. Gen. William L. Sibert.

CHEMICAL WARFARE SERVICE

1918

On June 28, the Chemical Warfare Service was established for the duration of the war and 6 months thereafter. It combined all the activities theretofore included in gas offense and defense under one bureau of the War Department. As constituted, the new Service was charged with the work of research, development, proving, and manufacture of poison gases, gas defense appliances, and the filling of gas shell; also with organizing and training all gas troops, the training of the entire Army in methods of gas defense, and cooperation with the Artillery in the tactical use of chemical shell.

Accordingly, the Experiment Station at the American University, the Service Section of the National Army, the part of the Ordnance Department engaged in the manufacture of gases, and the portion of the Medical Department responsible for the production of gas defense apliances were consolidated. On July 13, the Gas-Defense Training Section of the Medical Corps and the gas and flame troops of the Engineer Corps were transferred to the Chemical Warfare Service.

THE WASHINGTON OFFICE

The Chemical Warfare Service did not acquire its status as a separate bureau of the War Department until some time after July 1. The central organization of the Service was represented by the Administrative Bureau in Washington. This office, operating under the immediate charge of the Director of the Service, supervised and controlled the six Divisions in the field: Overseas, Research, Development, Proving, Gas Defense Production, and Gas Offense Production.

The original Administrative Bureau functioned through the following Branches: Records, Personnel, Finance, Auditing, Transportation, Property Inspection, New Projects, Training, and Information. However, the expansion of various field organization activities soon necessitated corresponding increases in the supervisory functions of the Bureau. This was brought about by a reorganization in which the Bureau was renamed Division and the latter assumed control of the administration, coordination, and supervision of all Chemical Warfare Service activities. At the Armistice, the Administrative Division exercised control through these Sections: Office Administration, Personnel, Training, Requirements and Progress, Procurement, Transportation, Relations, Medical, Ordnance, Finance, Contracts and Patents, and Confidential Information. Their functions were as follows:

Office Administrative Section

To have charge of files and clerical personnel, receipt and distribution of mails, collection and transmission of papers between various sections of the office, and office disbursements.

Personnel Section

To have charge of all matters pertaining to procurement and assignment of commissioned, enlisted, and civilian personnel; to cooperate with the Relations Section in the allotment of chemists to industries, universities, and Government departments.

Training Section

To administer the Training Division, the organization of gas troops for oversea service, and the establishment of a Chemical Warfare Service training camp.

Requirements and Progress Section

To handle all matters relating to the requirements of the Army pertaining to Chemical Warfare Service matériel and its storage; to report on consumption and wastage.

Procurement Section

To have charge of procurement and transportation of matériel.

Transportation Section

To exercise general supervision over the transportation of personnel and matériel, with responsibility for expediting shipments.

Relations Section

To have charge of relations with universities, with industries, with the office of the Director of Purchase, Storage, and Traffic, and with the War Industries Board, including its committee.

Medical Section

To have charge of the research work in the medical field pertaining to protective devices, to war gases, and to other toxic substances, including prophylactic and curative measures in connection with experimentation, production, and handling; to inspect gas plants with the object of assuring the safety of employees.

Ordnance Section

To maintain liaison with the Ordnance Department in connection with problems arising in the design, development, and production of all Chemical Warfare Service appliances and matériel.

Finance Section

To have charge of estimates, appropriations and allotments, and of the administrative audit of all disbursing accounts and of property.

Contracts and Patents Section

To handle all matters pertaining to contracts and patents; to negotiate, adjust, settle, and advise on contractual matters; and to give legal advice on questions involving procurements, sales, finance, and general administration.

Confidential Information Section

To classify, index and file all technical reports and confidential information concerning the Service.

Salvage and Sales Section

(Organized after the Armistice)

To have charge of matters connected with the sale of all matériel, buildings, and land no longer required for future use.

1919

On July 11, legislative authority was granted for the continuation of the Chemical Warfare Service until June 30, 1920. On Nov. 28, the peacetime activities of the Service were defined as follows: Maintenance of a competent body of chemical-warfare specialists with facilities for continuous research and experimentation; maintenance of records; means for close affiliation with civilian agencies for chemical research and with chemical industries capable of being promptly converted for the production of wartime matériel; maintenance of such existing Government plants as may be decided necessary; continuous training of the Army in chemical warfare; maintenance of supply of chemical-warfare matériel sufficient to meet initial requirements for war.

1920

On June 4, the Chemical Warfare Service was established as an organic part of the Army.

The organization of the Chemical Warfare Service as of Nov. 11, 1918, in Washington and in the field, is shown on chart 25.

FIELD ORGANIZATION

Operation Divisions

The original six divisions were—

OVERSEAS (EUROPEAN) DIVISION

Created Sept. 3, 1917, as the Gas Service, A. E. F.; enlarged and designated the Overseas or European Division with the establishment of the Chemical Warfare Service June 28, 1918. It operated through Offensive, Defensive, Technical, Intelligence, and Production and Supply Divisions, and several auxiliary administrative offices.

Functions

To carry out all phases of gas-warfare activities in connection with the A. E. F. in France.

RESEARCH DIVISION

Established June 25, 1918, when research work on war gases, the Experiment Station at the American University in Washington, D. C., and the personnel of the Station were transferred to

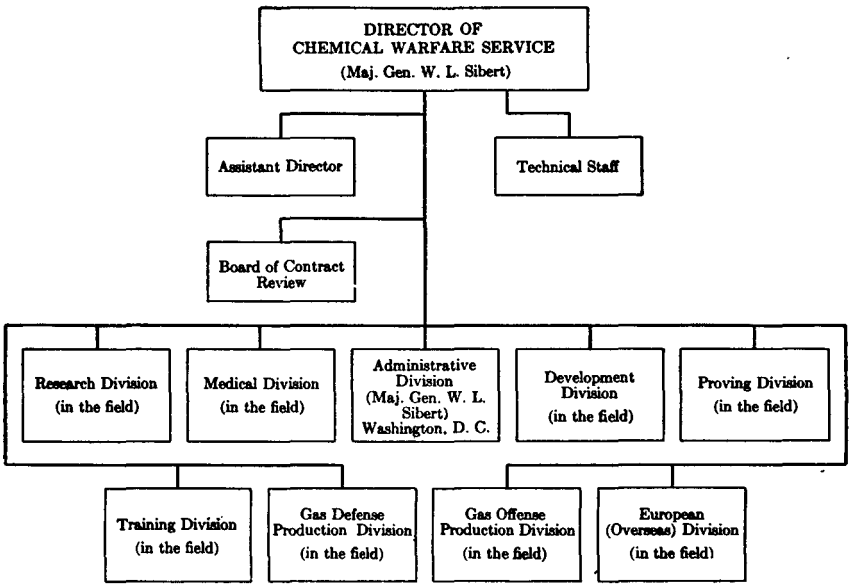


CHART NO. 25—*ORGANIZATION OF CHEMICAL WARFARE SERVICE, WASHINGTON OFFICE AND FIELD FORCE*

the Chemical Warfare Service. The Division directed activities at the Experiment Station, the Bureau of Standards, and the Geophysical Laboratory, Washington, D. C.; at Ohio State University; at Johns Hopkins University, Baltimore, Md.; at the National Carbon Company, Cleveland, Ohio; and at the Corning Glass Works, Corning, N. Y.

Functions

To conduct investigations relating to gas masks, protective clothing, and ointments; methods of decontaminating trenches and dugouts; toxic chemical substances; smoke screens; signal lights, and hand grenades.

DEVELOPMENT DIVISION

Formed at Cleveland, Ohio, July 13, 1918, the Division directed activities at National Carbon Company and Nela Park plants, Cleveland, Ohio; at Erie Street Gas Works, Toledo, Ohio; at Astoria Light, Heat and Power Company, Astoria, Long Island; at Dow Chemical Co., Midland, Mich.; at United States Automatic Company, Amherst, Ohio; at Corning Glass Works, Corning, N. Y.; and at National Lamp Works of the General Electric Company, Cleveland, Ohio.

The Division operated through these Sections: Defense, Offense, Midland, Willoughby (Ohio), and Special Investigation.

Functions

To receive the results of the various experiments made by the Research Division and to develop the principles learned in the research stage into manufacturing processes.

PROVING DIVISION

The Division conducted its work at Lakehurst Proving Ground, Lakehurst, N. J. The testing field's facilities consisted of an artillery range, laboratories, meteorological station, and gas-testing equipment.

Functions

To make field tests of all gas-defense or gas-offense matériel manufactured under the control of the Development Division.

GAS-DEFENSE PRODUCTION DIVISION

Established June 28, 1918, to take over the work of the Gas-Defense Division of the Surgeon General's Office. The Division operated the gas-defense plant at Long Island City founded under the supervision of the Surgeon General in Nov. 1917; a carbon plant at Astoria, L. I.; a large gas-mask assembly plant at Philadelphia, Pa.; and correlated activities of more than 600 factories from Boston, Mass., to San Francisco, Cal., incidental to supplying products needed in the manufacture of gas-defense equipment. Other products included protective clothing, protective ointments, dugout blankets, and purifying apparatus.

Functions

To produce gas masks and other defensive appliances.

GAS-OFFENSE PRODUCTION DIVISION

Originated in 1917 under the Chief of Ordnance and transformed into a separate organization known as Edgewood Arsenal, May 4, 1918. Transferred to the Chemical Warfare Service July 13, 1918. The Division operated the plants on the Edgewood Arsenal reservation and controlled the following projects:

Location of plants	Project
Niagara Falls, N. Y.	Manufacture of phosgene.[1]
Midland, Mich.	Sinking a series of brine wells to secure bromine.[1]
Charleston, W. Va.	Manufacture of sulphur chloride.[1]
Bound Brook, N. J.	Manufacture of phosgene.[1]
Buffalo, N. Y.	Manufacture of mustard gas.[1]
Stamford, Conn.	Manufacture of chlorpicrin.[2]
Hastings-on-Hudson, N. Y.	Manufacture of mustard gas.[2]
Kingsport, Tenn.	Manufacture of brombenzylcyanide.[2]
Croyland, Pa.	Manufacture of diphenylchlorarsine.[2]

[1]Privately operated.
[2]Operated by Edgewood Arsenal.

Functions

To produce and test articles of gas offense.

Subsequent to the constitution of these divisions, two more were organized as part of the Chemical Warfare Service—

MEDICAL DIVISION

Established to perform functions transferred from the Surgeon General's Office June 28, 1918. The Division operated through the following Sections: Chronic Research, Madison, Wis.; Lung Edema, Physiology, Pathology, Yale, New Haven, Conn.; Pharmacological Research, American University, Washington, D. C.; Pathology, American University, Washington, D. C.; Physiology, Gas Mask and Respiratory, Lakeside Hospital, Cleveland, Ohio. A Clinical Research Section was in process of organization by Nov. 11, 1918, providing for experimental clinical use of gas cases at factories and plants in the United States.

Laboratories were established at Princeton, Chicago University, Cleveland, Marine Biological Laboratory, Woods Hole, and Ann Arbor.

Functions

To specialize in the treatment of gas injuries; to instruct officers in these methods; to establish a protective service in gas factories consisting of medical, mechanical, and disciplinary features; and to develop and improve gas-defense articles.

TRAINING DIVISION

Originated in 1917 under the Surgeon General; transferred to the Office of the Chief of Engineers early in 1918. The Division became a part of the Chemical Warfare Service shortly after its organization and operated the following training facilities successively:

Gas-Defense School, conducted in connection with the School of Musketry at Fort Sill, Okla., during the summer and fall of 1917.

Army Gas School, conducted at Camp A. A. Humphreys, Va., under the supervision of the Chief of Engineers (see p. 738).

The Training Camp for Chemical Warfare officers and the Army Gas School for division gas officers at Camp Kendrick, Lakehurst, N. J. (see p. 740).

Functions

To select and train all chemical warfare personnel for field duty with troops. To organize gas troops and supervise all gas training of troops in the United States.

PERSONNEL

OFFICERS

During 1917, the commissioned personnel authorized for the Gas Service was 233.

The Chemical Warfare Service obtained authorization for 2,361 officers, July 13 and for 4,066, Oct. 30, 1918. The number of officers actually in the Service at about these dates was—

Division	Aug. 1, 1918	Oct. 31, 1918
Administration	32	69
Training	63	318
Research	89	243
Medical	6	24
Development	9	47
Proving	19	34
Gas-Defense Production	172	265
Gas-Offense Production	150	329
Total	540	1,329

On Nov. 11, 1918, the number of officers on duty was 1,680, of whom 630 were serving overseas. By June 30, 1919, the commissioned strength had been reduced to 328.

ENLISTED MEN

The authorized strength in 1917 was 1,294. This was increased July 13, 1918, to 20,343 and Oct. 30, 1918, to 44,615. The actual strength by divisions was as follows:

Division	Aug. 1, 1918	Oct. 31, 1918
Administration	52	109
Training	3	214
Research	794	1,068
Medical	35	93
Development	104	819
Proving	284	627
Gas-Defense Production	1,270	2,067
Gas-Offense Production	4,339	6,884
Total	6,881	11,881

On Nov. 11, 1918, 18,838 enlisted men were in the Service and 2,800 of them were overseas. By June 30, 1919, all but 261 had been demobilized.

CHEMISTS

Under the direction of the Personnel Section, Administration Division, a census was taken of the chemists, both military and civilian. Some 16,000 Americans responded. The Section also controlled chemists entering the Army. These men were transferred to military or civilian chemical work according to their qualifications. Prior to Nov. 1, 1918, a total of 3,814 chemists, who had been reported to the Chemical Warfare Service as such, were disposed of as follows:

Proved (on investigation) not to be chemists	641
Ordered to remain with organization for chemical duty	318
Unavailable for transfer from organizations for military reasons, etc.	430
Furloughed to essential industries	107
Furloughed to universities as teachers	53
Transfer requested to Chemical Warfare Service	1,726
Transfer requested to Ordnance Department	333
Transfer requested to Medical Department	24
Transfer requested to Quartermaster Corps	6
Transfer requested to Air Service	12
Held for investigation of qualifications	164

UNITS

The 30th Engineers (gas and flame) was authorized Oct. 15, 1917. The regiment was mobilized at Fort Myer, Va., its first detachment sailing for France Dec. 23, 1917. Its last contingent left for the A. E. F. June 30, 1918. On Apr. 12, 1918, the 473d Engineers (gas training service) was organized at Washington, D. C. and various camps. These two units were transferred to the Chemical Warfare Service in July and Sept. 1918, respectively. The 30th Engineers became the 1st Gas Regiment July 13, 1918.

The strength of a gas regiment was fixed at 201 officers and 4,791 enlisted men, organized into 6 battalions of 3 companies each. A battalion had a strength of 32 officers and 792 enlisted men. Three gas regiments were authorized. However, on Nov. 11, only 2 battalions, mobilized at Camp Sherman, Ohio, were ready for oversea service. These units were required to complete the organization of the 1st Gas Regiment, of which only 7 companies had actually seen combat service.

ACTIVITIES

SUPPLY

GAS-DEFENSE PRODUCTION

The following data show cumulative production and oversea shipments of gas-defense articles:

Items	July 1, 1918	Production Nov. 11, 1918	Total	Shipped Overseas	
				July 1, 1918	Nov. 11, 1918
Respirators	1,719,424	5,276,515	5,692,499	1,196,787	3,938,808
Extra canisters	507,663	3,144,485	3,189,357	484,236	1,805,076
Horse masks	154,094	366,529	377,881	101,250	351,270
Bleaching powder (tons)	1,484	3,677	3,677	586	1,867
Extra anti-dimming (tubes)		2,855,776	2,855,776		2,855,776
Sag paste (tons)	20	1,136	1,246		915
Dugout blanket oil (gallons)		95,000	95,000		5,000
Protective suits		500	2,450		
Protective gloves (pairs)		1,773	1,773		
Dugout blankets		159,127	191,338		36,221
Warning devices		33,202	45,906		19,620
Trench fans	11,343	29,977	50,549	9,600	27,690

The total production of respirators embraced 5,131,999 masks of mouthpiece type, 533,609 of the Tissot type, and 26,891 of other patterns, manufactured at an approximate cost of $7.00 per unit. Of these, 667,263 were graded as training-camp masks, 391,414 being used for training purposes in the United States.

Postarmistice shipments included 271,778 respirators for the A. E. F. and 74,976 for troops in Siberia. Of the gas masks shipped to France some 1,430,000 were found defective. This necessitated the establishment of a plant at Chateauroux in which approximately 1,250,000 units were modified.

The canister of the American gas mask contained a special carbon (charcoal), derived from coconut shells, nut shells, and fruit pits. Coconut shells were procured from the Philippines, the East Indies, and Central America. Large quantities of nut shells and fruit pits were obtained as a result of a Nation-wide publicity campaign.

GAS-OFFENSE PRODUCTION

Output of Toxic Agents

(Short tons)

1918	Liquid chlorine [1]	Gaseous chlorine [2]	Chlorpicrin	Phosgene	Mustard oil	Brombenzylcyanide	White phosphorus	Tin tetrachloride	Titanium tetrachloride
January			10						
February			27				34		
March	40		59				74	38	
April	176		33	15			59	116	
May	378		130	18			70	51	50
June	546		263	23	6		60	95	
July	512		499	100	21		80	112	27
August	243		646	314	36		162	94	53
September	438	191	564	327	144		125	96	26
October	242	649	445	664	361		265	75	25
November	148	264	100	155	143	5	77	18	
Total	2,723	1,104	2,776	1,616	711	5	1,006	695	181
Amount shipped overseas	1,488		1,903	420	190		171	106	
Total monthly producing capacity, Nov. 1, 1918	895	1,500	1,500	1,050	900	90	100	91	30
Estimated capacity, Jan. 1, 1919	1,100	2,250	1,500	1,650	4,000	90	100	91	30

[1] Procured from commercial agencies.
[2] Manufactured at Edgewood.

Chlorine, chlorpicrin, and phosgene were lethal agents; mustard gas, in sufficient amounts, was also fatal. The latter took effect by burning the lungs, eyes, and skin; and if contaminated food was eaten it even attacked the intestines.

Bromine gases such as brombenzylcyanide were not lethal, but irritated the eye membranes. The Midland, Mich., plant, from its 17 brine wells, supplied sufficient bromine to meet the needs of all tear-gas production.

After Jan. 20, 1918, Edgewood Arsenal had more toxic and smoke materials available than could be used in shell filling or delivery to the Allies.

Filling of Projectiles

Production and oversea shipments were as follows:

1918	75-mm. shell			Grenades		Livens drums	Incendiary drop bombs	
	Chlorpicrin	Phosgene	Mustard oil	White phosphorus	Tin tetrachloride	Phosgene	Mark I	Mark II
July	62,866			8,696	1,639			
August	125,951			170,160	56,763	1,738	350	
September	110,358	1,988	75,529	51,421	127,319	6,355		1,998
October	109,704	12	79,272	110,928	147,669	12,026	184	100
November	15,892	9	224	98,948	30,386	5,570	8	6
Total	424,771	2,009	155,025	440,153	363,776	25,689	542	2,104
Total number shipped overseas	300,000		150,000	224,984	175,080	18,600		

Projectiles to be filled were supplied by the Ordnance Department. Up to Nov. 1, 1918, 91,908 empty 4.7-in. shell, 368,852 empty 155-mm. shell, 30,300 empty 8-in. shell, and 1,541 Stokes mortar bombs had been received. However, these empties could not be filled because of the lack of loaded boosters.

Actual filling of shells was far below monthly capacities which, at date of Armistice, were as follows:

	Rounds		*Rounds*
75-mm. shell	2,400,000	Gas grenades	750,000
4.7-in. shell	450,000	Smoke grenades	480,000
155-mm. shell	540,000	Livens drums	30,000
6-in. shell	180,000		

Safety Measures in Factories

Despite the institution of safety measures at the various plants for the protection of labor, the number of injuries brought on by toxic agents was considerable. The following table shows the cases of this kind at Edgewood Arsenal:

1918

Toxic agent	June	July	August	September	October	November	December	Total
Mustard gas	14	41	190	153	227	47	2	674
Stannic chloride		3	8	15	21	3		50
Phosgene			3	7	22	17	1	50
Chlorpicrin		14	18	9	3			44
Bleach chlorine		2	39	2	1			44
Liquid chlorine		1	3	2	7	5		18
Sulphur chlorine			2	1	6			9
Phosphorus		2	7	5	1			15
Caustic soda			3		3	4		10
Sulphuric acid			4	3	1			8
Picric acid			2					2
Carbon monoxide					1			1
Total	14	63	279	197	293	76	3	925

RESEARCH ACTIVITIES

Demustardization methods were worked out, and front-line equipment was developed and provided.

At end of hostilities, nearly every research problem of importance had been mastered and solutions published in a series of 51 monographs. All known gas-warfare substances had been put into use successfully. In addition, several new agents were discovered which were not used. However, the results of this research work were preserved.

TRAINING

Early in the war, the Medical Department conducted a gas-defense course at Fort Sill. The first students were medical officers who were prepared for assignment to the various camps and divisions in the United States as gas officers. A later class was composed of 45 chemists, commissioned in the Sanitary Corps and assigned to the Field Training Section, Gas Defense Service. Soon thereafter it was decided that gas officers should belong to the Line. The personnel of the Field Training Section was therefore transferred to the Corps of Engineers.

From Apr. 1918, division gas officers were selected from the Engineers. Graduates of the Engineer Officers' Training Camp received instruction at the Army Gas School, Camp A. A. Humphreys, Va., to supply the necessary gas officers. Training was hampered by an imperative call from the A. E. F. which deprived

the school of 18 instructors. On July 1, 1918, in anticipation of the transfer of all gas activities to the Chemical Warfare Service, the personnel undergoing gas training was assigned to the 473d Engineers (gas training service).

Late in Oct. 1918, all students were sent from Camp A. A. Humphreys to Camp Kendrick, when the Army Gas School opened at that place. However, through courtesy of the Corps of Engineers, all Chemical Warfare Service officers, newly commissioned from civil life, continued to attend the Engineer Officers' Training School for initial military training.

At date of Armistice, 90 infantry and artillery officers and 166 officers of the Chemical Warfare Service were taking the course at the Army Gas School; 53 enlisted men were attending the Officers' Training School (Training Camp) at Camp Kendrick; 49 gas officers of the Chemical Warfare Service were on duty in various camps in the United States, and 20 were en route for oversea service.

At about this time, Camp Kendrick was being enlarged for the reception of gas troops which had been authorized but not yet organized. Two fully organized battalions of the 1st Gas Regiment were stationed at Camp Sherman, Ohio, ready to leave for overseas.

DEMOBILIZATION

PERSONNEL

On Oct. 14, 1919, the strength of the Chemical Warfare Service was fixed at 124 officers and 1,348 enlisted men or at about 7 percent of the Armistice strength.

MATERIEL AND PROPERTY

During the demobilization period, the Chemical Warfare Service was concerned with salvage and sale of matériel, settlement of contracts, and placing the plants at Edgewood Arsenal and at Lakehurst Proving Ground on a peacetime basis.

Salvage and Sales

This activity was conducted under the control of the Salvage and Sales Section, Administrative Division. During the 1920 fiscal year, matériel and plants, representing an expenditure of $7,472,801 were sold, or transferred on interbureau requisitions.

The more important items of matériel sold included—

Items	Pounds	Items	Pounds
Chloride of lime	5,400,000	Sulphuric acid	356,000
Sulphur chloride	3,900,000	Carbon bisulphide	100,000
Sag paste	3,000,000	Crude turpentine	16,000
Stannic chloride	917,000	Grain alcohol	30,000
Phosgene	800,000	Gas masks, obsolete type (number)	6,775
Nitric acid	554,000		

For the most part, matériel and plants were disposed of at public auction. Prices received ranged from 200 percent of cost to 7.5 percent, and averaged 27 percent. The plants affected were the properties at Stamford, Conn.; Bound Brook, N. J.; Niagara Falls, N. Y.; Buffalo, N. Y.; Hastings-on-Hudson, N. Y.; Kingsport, Tenn.; and Belle, W. Va.

Settlement of Contracts

These settlements were made by the Contract and Patent Section, Administrative Division. The accomplishment included—

Formal Contracts

Number of contracts settled	*1,214*
Total amount in dollars of original contracts	$10,444,035.02
Total amount of uncompleted portion	6,464,464.77
Total amount paid in adjustment	287,354.14
Total net savings to the Government	6,177,110.63

Informal Contracts

Number of claims or informal contracts settled	*57*
Total amount in dollars of original claim	$ 9,050,609.78
Total amount of the uncompleted portion	7,069,142.58
Total amount paid in adjustment	875,526.71
Total net saving to the Government	6,193,615.87

Patents

The policy governing patents was as follows: A patentable process worked out by the Chemical Warfare Service, which it was not necessary to keep secret, was usually patented in the name of the individual or individuals who had carried out the work, so that they might benefit from all uses of the discovery by parties other than the United States Government.

Prior to 1920, 13 patents had been obtained for inventors, and 50 applications were pending in the Patent Office for inventors formerly connected with the Chemical Warfare Service. In addition, the United States had purchased patent rights outright from other inventors.

Reserve Stocks

War stocks accumulated and stored at Edgewood Arsenal during the demobilization period embraced the following:

WAR GASES

Phosgene, 400 tons; chlorpicrin, 406 tons; mustard gas, 200 tons; brombenzylcyanide, 4½ tons; and NC (chlorpicrin and stannic chloride), 325 tons; also 760 tons of smoke-producing matériel.

OFFENSE EQUIPMENT

Some 51,400 Livens projectors; 88 Stokes mortars with all necessary and incidental equipment; approximately 2,000,000 empty shell of various caliber for gas and smoke; over 700,000 filled hand grenades; miscellaneous empty containers ready for filling.

DEFENSE RESERVE

About 2,343,000 respirators; 1,000 tons of prepared charcoal for use in canisters; a number of protective suits; quantities of protective ointment; alarm devices; and various other items.

SECTION 6

CHIEF OF COAST ARTILLERY

ORIENTATION

A Chief of Artillery was provided for by statute in 1901. At that time, the Artillery Corps consisted of two branches—the Coast Artillery and the Field Artillery.

By legislation enacted in 1907, the Chief of Artillery ceased to exercise supervision over the Field Artillery and began to function as the Chief of Coast Artillery only. A further provision of the 1907 law made the Chief of Coast Artillery an additional member of the General Staff Corps.

FUNCTIONS

At Outbreak of War

To keep the Chief of Staff advised and informed as to the efficiency of the personnel and matériel of the Coast Artillery, and make such recommendations in reference thereto as will promote efficiency; to advise the chiefs of War Department bureaus of all matters relating to coast artillery matériel or personnel which the experience and observation of the Coast Artillery show to be of practical importance; to submit recommendations as to the instruction of coast artillery officers and men; to issue directly to coast artillery officers bulletins and circulars of information on current coast artillery matters of a purely technical character which do not involve matters of command, discipline, or administration; to submit recommendations as to examinations for appointment and transfer of officers to the coast artillery arm and for promotion therein, and as to their assignment to special duty and to coast artillery organizations and stations.

Besides being charged with these duties, the Chief of Coast Artillery was a member of the Board of Ordnance and Fortification.

As Defined Aug. 26, 1918

To keep the Chief of Staff advised and informed with respect to the business under his charge, including the efficiency of the personnel and matériel of the coast artillery service; to be responsible that adequate measures are

taken to prepare for oversea service the coast artillery organizations called for by the military program and to make recommendations to the Chief of Staff regarding matters affecting the Coast Artillery; to exercise, in accordance with the general policies prescribed by the Chief of Staff, direct supervision over the training of all coast artillery units; to correspond directly with training-camp commanders; and to consult and correspond directly with bureau chiefs and heads of departments.

CHIEFS

1917		
Apr.	6	Maj. Gen. Erasmus M. Weaver
Dec.	20	Brig. Gen. John D. Barrette (acting)
1918		
May	19	Col. William A. Hase (acting)
June	20	Maj. Gen. Frank W. Coe
1919		
Mar.	11	Brig. Gen. George A. Nugent (acting)
Apr. through June	7 20	Maj. Gen. Frank W. Coe

ORGANIZATION AND DEVELOPMENT

WASHINGTON OFFICE ORGANIZATION

The Office of the Chief of Coast Artillery was organized to deal with all matters pertaining to coast artillery personnel, matériel, organization, and training.

In his control over the training of units for oversea service, the Chief of Coast Artillery was authorized to communicate directly with district commanders and to supervise their actions in all that related to such units.

COAST ARTILLERY ORGANIZATION AND ESTABLISHMENTS

Coast Artillery Districts

Coast fortifications were grouped for inspection and general supervision into administrative units designated as coast artillery districts. The commanding officer of a coast artillery district bore the same relation to the department commander as a brigade commander of mobile troops stationed within the department. All questions involving administration in the expenditure of funds, all matters pertaining to barracks and quarters, provision and issuance of supplies, and all questions of discipline involving commissioned officers were handled by department commanders.

On May 1, 1917, the coast artillery troops serving within the continental limits of the United States were organized into coast artillery districts as follows:

NORTH ATLANTIC COAST ARTILLERY DISTRICT

Formed part of the Northeastern Department and included the coast defenses of Portland, Portsmouth, Boston, New Bedford, and Narragansett Bay, with headquarters at Boston, Mass.

MIDDLE ATLANTIC COAST ARTILLERY DISTRICT

Formed part of the Eastern Department and included the coast defenses of Long Island Sound, Eastern New York, Southern New York, Sandy Hook, The Delaware, Baltimore, The Potomac, and Chesapeake Bay, with headquarters at Fort Totten, N. Y.

SOUTH ATLANTIC COAST ARTILLERY DISTRICT

Formed part of the Southeastern Department and included the coast defenses of The Cape Fear, Charleston, Savannah, Tampa, Key West, Pensacola, Mobile, New Orleans, and Galveston, with headquarters at Charleston, S. C.

NORTH PACIFIC COAST ARTILLERY DISTRICT

Formed part of the Western Department and included the coast defenses of Puget Sound and The Columbia, with headquarters at Seattle, Wash.

SOUTH PACIFIC COAST ARTILLERY DISTRICT

Formed part of the Western Department and included the coast defenses of San Diego, Los Angeles, and San Francisco, with headquarters at Fort Miley, Cal.

Outside the continental limits of the United States there were the following organizations:

CANAL ZONE COAST ARTILLERY DISTRICT

Formed part of the Panama Canal Department and included the coast defenses of Cristobal and Balboa, with headquarters at Ancon, C. Z.

INDEPENDENT COAST DEFENSES

Coast defenses of Oahu with headquarters at Ft. Kamehameha formed part of the Hawaiian Department.

Coast defenses of Manila and Subic Bays, with headquarters at Ft. Mills, formed part of the Philippine Department.

Training Facilities

Civilian training camps were established in 1917 at Fort Monroe, Va., and Fort Winfield Scott, Calif. During the same year, training courses for enlisted specialists were opened at Fort Monroe; Fort Winfield Scott; Fort Grant, Canal Zone; Fort Kamehameha, Hawaii; and Fort Mills, P. I.

The Coast Artillery School, Fort Monroe, Va., was inaugurated Sept. 8, 1918, to include all courses of instruction for officers and enlisted men at that station, other than the garrison and post schools. The Coast Artillery Training Center, organized at this time with headquarters at Fort Monroe, Va., consisted of three parts, viz: the Coast Artillery Concentration and Training Camp at Camp Eustis, Va.; the Coast Defenses of Chesapeake Bay; and the Coast Artillery School.

PERSONNEL

At outbreak of war, the Coast Artillery had 881 officers and an authorized strength of 21,423 enlisted men. On May 14, 1917, the enlisted strength was fixed at 30,009 men, which represented the maximum number under the National Defense Act of 1916.

On Oct. 15, 1917, the assignment of enlisted personnel to coast-defense commands, mine planters, and cable ships was as follows:

Coast defenses	Number	Coast defenses	Number
North Atlantic C. A. District:		Brought forward	15,546
Boston	1,617	Pensacola	540
Narragansett Bay	1,188	Savannah	540
New Bedford	219	Tampa	326
Portland	1,725	The Cape Fear	326
Portsmouth	326		
		South Pacific C. A. District:	
Middle Atlantic C. A. District:		Los Angeles	432
Baltimore	540	San Diego	326
Chesapeake Bay	1,400	San Francisco	2,157
Eastern New York	969		
Long Island Sound	1,617	North Pacific C. A. District:	
Sandy Hook	756	Puget Sound	1,725
Southern New York	1,620	The Columbia	432
The Delaware	864		
The Potomac	648	Canal Zone C. A. District:	
		Cristobal and Balboa	2,268
South Atlantic C. A. District:			
Charleston	540	Hawaiian Department:	
Galveston	326	Oahu	1,512
Key West	219		
Mobile	540	Philippine Department:	
New Orleans	432	Manila and Subic Bays	2,262
	15,546	Vessels:	
		8 mine planters and 1 cable ship	135
		Total	28,527

To supply experienced senior officers for newly organized heavy regiments of the Field Artillery, 50 coast artillery officers were detailed to that arm in 1917 for the duration of the war.

Following federalization of National Guard units in Aug. 1917, there were absorbed into the Coast Artillery 17 headquarters units, 12 bands, and 186 National Guard companies, some 21,000 men in all.

On Nov. 2, 1917, authority was granted to increase the enlisted strength by 14,500 for oversea replacements. Thereafter, minor additions in personnel were made to furnish men for antiaircraft batteries and other purposes. On Sept. 7, 1918, the strength of coast defense units at home was set at 2,857 officers and 69,977 enlisted men.

In general, oversea units were recruited from coast-defense personnel obtained by voluntary enlistment and from the draft. A total of 47,386 inducted men were sent to coast artillery posts.

On Nov. 11, 1918, the total strength of the Coast Artillery Corps was 147,274 of which 1,736 officers and 68,648 men were assigned to coast-defense duty, and 3,518 officers and 3,372 men were in the A. E. F. or in units organized for oversea service.

ACTIVITIES

THE COAST ARTILLERY PROJECT

As the German fleet was held closely to its fortified base by Allied sea power, it was assumed that American coast cities would not be subjected to attack by enemy capital ships. The only attacks to be anticipated might be made by submarines or raiders mounting guns of small caliber. It was, therefore, considered practicable to utilize coast artillery personnel assigned to major-caliber guns for service overseas. Likewise, without incurring undue risk, it was regarded as feasible to dismount a number of major and intermediate-caliber guns, actually emplaced in coast fortifications, and to mount them on railway or heavy-truck carriages for use overseas in the field.

The project also called for maintenance of war-strength garrisons at coast-defense posts within the United States to man the coast armament and to train replacements for oversea coast artillery units. It was not planned to require coast artillery garrisons in the Canal Zone, Hawaiian Islands, and the Philippines to furnish oversea drafts.

ORGANIZATION AND TRAINING

The organization and training of all mobile heavy artillery for oversea service was assigned to the Coast Artillery. This category included all howitzers and mortars above 6-in. caliber; all 5-in. guns and upward, organized as army artillery; and all trench mortar and antiaircraft units assigned as corps or army troops.

In the fall of 1917, the immediate task confronting the Chief of Coast Artillery was to procure, organize, and train the necessary personnel to carry out the following projects: (1) to maintain the instruction and training of a complete manning body for the home coast defenses; (2) to train, insofar as practicable, personnel for oversea replacements.

During the training year ending June 30, 1918, the coast defenses were utilized for purposes of organization and preliminary instruction of oversea units. By Oct. 1918, the following units had been constituted for oversea service:

48 Heavy artillery regiments
13 Brigade headquarters
7 Trench mortar battalions
1 Trench mortar battery
2 Artillery parks
20 Separate antiaircraft batteries
9 Antiaircraft battalions
1 Division ammunition train
11 Ammunition trains

Organization and distribution of units, drawn from the Coast Artillery Corps, U. S. Army, Coast Artillery National Guard, and Coast Artillery National Army quotas, were as follows:

Units Serving Overseas

(Nov. 11, 1918)

34 Heavy artillery regiments
11 Brigade headquarters
7 Trench mortar battalions
2 Trench mortar batteries
1 Artillery park
1 Army artillery headquarters and headquarters battery
20 Separate antiaircraft batteries
7 Antiaircraft battalions
5 Ammunition trains

Units Remaining in U. S.

MOBILE ORGANIZATIONS

(Nov. 11, 1918)

23 Heavy artillery regiments
5 Brigade headquarters
2 Trench mortar battalions
1 Artillery park
15 Antiaircraft artillery sectors
7 Ammunition trains

COAST DEFENSE ORGANIZATIONS

(Jan. 11, 1919)

Coast defenses	Station	Companies
Balboa	Fort Grant (Hq.)	7th
	Fort Amador	1st–6th, 8th–11th
Baltimore	Fort Howard (Hq.)	1st, 3d, 4th, 6th, 7th
Boston	Fort Warren (Hq.)	4th, 7th
	Fort Andrews	6th, 8th, 13th, 15th
	Fort Banks	2d, 14th
	Fort Revere	1st, 5th
	Fort Standish	3d
	Fort Strong	9th–12th
The Cape Fear	Fort Caswell	1st–4th
Charleston	Fort Moultrie (Hq.)	1st–5th
Chesapeake Bay	Fort Monroe (Hq.)	1st, 3d–7th, 9th, 11th
	Fort Story	2d, 10th
	Fort Wool	12th
	Fisherman's Island	8th, 13th
The Columbia	Fort Stevens (Hq.)	1st–3d
	Fort Columbia	4th
Cristobal	Fort DeLesseps (Hq.)	6th
	Fort Randolph	7th–10th
	Fort Sherman	1st–5th
The Delaware	Fort DuPont	1st, 2d, 6th, 8th
	Fort Delaware	3d
	Fort Mott	5th, 11th
	Cape May	4th
Eastern New York	Fort Totten (Hq.)	1st–9th
Galveston	Fort Crockett (Hq.)	1st–3d
Key West	Key West Bks. (Hq.)	1st, 2d

Coast defenses	Station	Companies
Long Island Sound	Fort H. G. Wright (Hq.)	1st–7th, 14th
	Fort Michie	15th
	Fort Terry	8th–13th
Los Angeles	Fort MacArthur (Hq.)	2d, 3d, 7th, 8th
Manila and Subic Bays	Fort Mills (Hq.)	1st–6th, 8th, 10th, 11th, 14th–17th, 19th–21st
	Fort Drum	18th
	Fort Hughes	9th
	Fort Wint	7th
Mobile	Fort Morgan	1st, 2d, 4th
	Fort Gaines	3d
Narragansett Bay	Fort Adams (Hq.)	1st–3d, 5th, 6th
	Fort Getty	24th
	Fort Greble	4th, 7th, 8th
	Fort Kearny	25th
	Fort Wetherill	23d
New Bedford	Fort Rodman (Hq.)	1st, 2d
New Orleans	New Orleans (Hq.)	
	Fort St. Philip	4th
	Jackson Bks	1st–3d
Oahu	Fort Kamehameha (Hq.)	1st–3d, 5th
	Fort Armstrong	4th, 6th–8th
	Fort DeRussy	9th, 10th
	Fort Ruger	11th–14th
Pensacola	Fort Barrancas (Hq.)	2d, 3d, 5th, 17th, 20th
	Fort Pickens	1st, 4th
Portland	Fort Williams (Hq.)	1st–5th, 17th
	Fort Baldwin	13th
	Fort Levett	9th
	Fort McKinley	10th–12th, 14th–16th
	Fort Preble	6th–8th
Portsmouth	Fort Constitution (Hq.)	1st–4th
The Potomac	Fort Washington (Hq.)	2d–6th, 8th
	Fort Hunt	1st
Puget Sound	Fort Worden (Hq.)	1st–8th, 17th
	Fort Casey	9th–12th, 18th
	Fort Flagler	13th–15th
	Fort Ward	16th
San Diego	Fort Rosecrans (Hq.)	1st–3d
Sandy Hook	Fort Hancock (Hq.)	1st–7th
San Francisco	Fort Winfield Scott (Hq.)	1st–6th, 8th, 43d, 44th, 46th–48th, 51st
	Fort Baker	11th, 12th, 45th
	Fort Barry	10th, 15th, 16th, 50th
	Fort Funston	9th
	Fort Miley	18th–20th, 49th
San Juan	San Juan (Hq.)	1st
Savannah	Fort Screven (Hq.)	1st–3d
Southern New York	Fort Hamilton (Hq.)	3d, 9th–14th, 19th, 30th
	Fort Tilden	21st
	Fort Wadsworth	2d, 5th–8th
Tampa	Fort Dade (Hq.)	1st–3d

Coast defense posts were utilized for the preliminary instruction of recruits and for purposes of organization of regiments and other contingents for oversea service.

Final training of these units was given at Camp Eustis, Va. Facilities were provided here for firing on stationary land targets, under battle conditions, and for aerial observation from captive balloons.

Training of Officers

The officers of the Coast Artillery Militia were brought into the service of the United States by the draft of Aug. 5, 1917. At about the same time, additional appointments were made from coast artillery non-commissioned officers.

Civilian training camps for instruction of Reserve Corps officers, held in 1917, provided a grounding in the principles of gunnery which enabled many newly-commissioned officers of first-rate ability to become competent artillerists after a further course of instruction overseas.

After candidates from the second series of camps were graduated, a new policy was adopted according to which officer appointments were reserved for enlisted men. Candidates were selected by boards in each coast defense command and sent to the training camp conducted at Fort Monroe, Va., in Jan. 1918. Officers with experience abroad were used as instructors at this camp.

Training of Enlisted Specialists

During the training year ending June 30, 1918, the specialist schools for enlisted men organized at the Fort Monroe Center of Instruction graduated 810 electrical, 315 artillery, 720 radio, and 675 clerical specialists as well as 10,080 chauffeurs.

MATÉRIEL

At the time of the Armistice, the heavy artillery regmients were armed with 155-mm., 8-in., 9.2-in., and 240-mm. howitzers as well as with 155-mm. guns. The railway artillery employed 19-cm., 24-cm., 32-cm., 34-cm., and 40-cm. weapons. U. S. naval railway batteries turned over to the A. E. F., had 14-in. naval guns.

Many of these weapons were supplied by the French and British. For instance, the French Government before the Armistice furnished the A. E. F. 747 howitzers (155-mm.) and 226 Filloux-guns (155-mm.). The British delivered 141 howitzers (8-in.) and 40 howitzers (9.2-in.).

During the war a number of guns of various caliber were removed from seacoast defenses for conversion into mobile artillery and for other purposes. The following were involved:

Type	Number withdrawn	Number ordered—	
		Remounted in fortifications	Placed on railway mounts
12-in. mortars	100		91
12-in. guns	14		[1] 14
10-in. guns	70	37	[1] 33
8-in. guns	56	6	47
6-in. guns	97	20	
5-in. guns	34	4	
4.7-in. guns	8	8	
3-in. guns	6	6	

[1] 15 railway mounts for 12-in. guns and 36 for 10-in. guns were actually available or under construction. In addition, railway mounts were provided for 6 naval guns (14-in.), 1 Model E gun (14-in.), and 1 howitzer (16-in.).

Railway Artillery

SEVEN-INCH GUNS

The Navy turned over 12 guns of this caliber. With a 360-degree traverse pedestal mount on railway carriage, these guns were intended for use in the United States only. Their mobility allowed quick concentration at seacoast points in need of defense.

EIGHT-INCH GUNS

These guns, taken from the seacoast fortifications, were provided with a barbette mount affording a 360-degree traverse. The first mount was completed in May 1918. By the Armistice, 24 complete units had been turned out, including ammunition cars for standard-gauge track, shell cars for narrow-gauge track, transportation cars, tools, spare parts, and other necessary appurtenances. Three of these complete units reached France before Nov. 11.

Antiaircraft Artillery

The weapon in use was the 75-mm. gun, which was mounted on a 1½-ton truck. Twenty-six of this type were shipped overseas and 52 were furnished by the French. The French matériel was provided with improvised mounts.

To meet the need of a more powerful antiaircraft cannon, a 3-in. high-powered gun was designed and mounted on a four-wheel trailer. However, only one gun of this type was delivered before the Armistice.

DEMOBILIZATION

Personnel

Emergency personnel was discharged as soon after the Armistice as practicable. By Oct. 31, 1919, the strength of the Coast Artillery had been reduced to 1,250 permanent officers, 270 temporary officers, and 13,019 enlisted men.

MOBILE UNITS

Of the organizations returned from France, one brigade of railway artillery and two brigades of tractor-drawn artillery, all skeletonized, were continued on active status as follows:

30th Brigade (railway artillery) at Camp Eustis, Va.:
42d, 43d, 52d, and 53d Regiments.

31st Brigade (tractor-drawn artillery) at Camp Lewis, Wash.:
55th and 57th Regiments (155-mm. G. P. F. guns).
59th Regiment (8-in. howitzers).

39th Brigade (tractor-drawn artillery) at Camp Jackson, S. C.:
44th and 51st Regiments (8-in. howitzers).
56th Regiment (155-mm. G. P. F. guns).

Training

Following the Armistice, all training was temporarily interrupted by demobilization. Thereafter, the training was placed under the supervision of district and brigade commanders to carry on as well as local conditions would permit.

The activities of the Coast Artillery School, during this period, were confined to special courses, all regular courses for officers having been suspended for the time being.

Matériel

Including some 6,000 field guns, brought back by the A. E. F., there were on hand in 1919 about 10,000 artillery units. Of the heavy calibers, the War Department held in reserve 2,171 howitzers (155-mm.) and 993 guns (155-mm.).

As a result of measures taken regarding the production of railway artillery, the defense of the Atlantic seaboard was changed from fixed guns in emplacements to a system of powerful guns mounted on railway cars. These weapons are capable of being moved on the regular railroad tracks, supplemented by new tracks laid by the Coast Artillery Corps, to any point in need of defense.

SECTION 7

CONSTRUCTION DIVISION

ORIENTATION

Until May 1917, the Quartermaster General controlled all Army construction through the Construction and Repair Division of his office. Thereafter all emergency construction was handled by

the newly created Cantonment Division, Quartermaster Corps. In Mar. 1918, the Construction Division of the Army was established to succeed the Cantonment Division.

As the functions of these organizations were similar, they are treated as one continuing agency.

FUNCTIONS

To have charge of all matters in connection with the construction work of the Army in the United States, the Hawaiian Islands, Puerto Rico, and the Canal Zone, including surveying and other necessary preliminary work on sites selected; preparation of plans; procuring, inspecting, and expediting of materials; actual work of construction; placing equipment of all sorts; construction of roads, wharves, sewer systems, and water systems; rentals and leases;[1] maintenance of all construction projects and the operation of public utilities on such projects. Also in charge of the allotment of funds to cover the expenditures incident to these activities.[1]

CHIEFS

1917			
May	19	Col. Isaac W. Littell	In charge of Cantonment Division, Quartermaster Corps.
Oct.	9	Brig. Gen. Isaac W. Littell	
1918			
Feb.	18	Lt. Col. Richard C. Marshall, Jr.	In charge of Cantonment Division until Mar. 12, 1918; thereafter in charge of Construction Division.
Mar.	20	Col. Richard C. Marshall, Jr.	
July through June	9 20	Brig. Gen. Richard C. Marshall, Jr.	

ORGANIZATION AND DEVELOPMENT

CANTONMENT DIVISION, QUARTERMASTER CORPS

1917

On May 19, the Cantonment Division, Quartermaster Corps, was established to undertake construction of National Army cantonments and National Guard camps that had been authorized. A nucleus of personnel was taken from the Construction and Repair Division, which continued in charge of construction and repair work at permanent posts and stations for the time being.

On May 24, the Cantonment Division began to function. Actual construction of National Army cantonments began in June, and of National Guard camps, in July. At this time, the office organization of the Division consisted of four Branches: Engineer, Material, Construction, and Accounting.

By Oct. 5, initial construction of the cantonments was completed, in the main. On this date all emergency building construction was placed under the Cantonment Division, including munitions plants, proving grounds, aviation fields, port terminals, and interior depots.

[1] Functions pertaining to rentals and leases and those pertaining to finance were later assumed by the Real Estate Service and the Finance Department, respectively.

Prior to this date, a Contracts Branch had been organized in the Office. An Administrative Branch was next formed. On Oct. 10, the Construction and Repair Division, Quartermaster Corps, was absorbed by the Cantonment Division to become its Maintenance and Repair Branch.

1918

On Feb. 9, the Cantonment Division, Quartermaster Corps, was placed under the Chief of Staff, to function as part of the Operations Division (see pp. 36, 56).

CONSTRUCTION DIVISION, WAR DEPARTMENT

On Mar. 13, the Cantonment Division was removed from the Office of the Quartermaster General and established as a separate organization of the War Department, known as Construction Division of the Army.

At that time its office organization was as follows with functions as indicated:

Administrative Branch

To establish and prescribe fundamental standards and policies for the general administrative work of the Construction Division.

Engineering Branch

To have charge of the preparation of plans and specifications for cantonment and other emergency construction, including plans and specifications of buildings, water and sewer systems, roads, walks, wharves, drainage, heating, lighting, power, plumbing, railroads, docks, and other elements entering into this construction; to prepare estimates of cost for construction work; and to prepare bills of material entering into construction work.

Contracts Branch

To exercise general supervision over all documents in the nature of contracts and leases in connection with the work of the Division; to determine what matters should be submitted to the Judge Advocate General for opinion; and to handle all matters relating to surety bonds, fire insurance, workmen's compensation, and employers' liability insurance.

Materials Branch, later known as Procurement Division

To supervise the procurement, inspection, expediting, and delivery of materials mobilized through the Division for use in construction work at hand; to cooperate with the various committees and organizations formed to stabilize prices and keep in touch with the entire market throughout the country for the procurement of materials and articles required in construction work; and to confer with officials of the Railroad Administration and other transportation officials and organizations with a view to obtaining rolling equipment for the rapid movement of material and expediting the movement of cars.

Construction Branch, later known as Building Division

To supervise the construction of the following: National Army cantonments, National Guard camps, miscellaneous cantonments, and hospital and

quartermaster repair shops; storage and traffic facilities, terminals, lighters, and warehouses; ordnance depots and ordnance manufacturing and proving plants; Signal Corps plants and depots, housing, and miscellaneous projects; and Coast Artillery and interior Army posts.

Accounting Branch

To have charge of accounting, legal matters, and general administration. This branch acted in an advisory capacity for the Government accounting forces on construction projects, sent out traveling accountants, and assembled cost data and financial statistics relative to jobs.

Maintenance and Repair Branch

To direct maintenance and repair work at permanent and temporary Army posts and camps, and at other military stations in need of service, carrying out plans prepared by the Engineering Branch and by itself; to correspond directly with local officers in charge of maintenance work; and to allot funds in connection with its activities.

Organization of the Office underwent little change until Nov., when the Materials Branch was changed into the Procurement Division and the Construction Branch into the Building Division.

On Dec. 13, the Board of Sales of the Construction Division was established to supervise and coordinate sales policies. Four days later, a Material and Equipment Unit was set up in the Procurement Division, which was the operating agency of the Board of Sales and had jurisdiction over sale, transfer, or other disposition of all surplus material and equipment.

1920

Under the Act of June 4, the Construction Division of the Army was abolished and its functions returned to the Quartermaster Corps July 15.

FIELD ORGANIZATION

The officers in charge of the construction functions of the Building Division in Washington had general control and supervision over the actual construction forces in the field.

Contact with the officers in the field was maintained through the supervising constructing quartermasters and the administrative officers of the six building sections, namely:

SECTION A—Southern camps and quartermaster shops;

SECTION B—Northern camps and general hospitals;

SECTION C—Storage and terminals;

SECTION D—Ordnance depots and proving plants;

SECTION E—Signal Corps, aeronautics, housing and unclassified;

SECTION F—Remount Service and Coast Artillery posts, exclusive of large hospitals.

The duties of the Supervising Constructing Quartermaster were twofold:

When in Washington, he and his assistants represented and acted for the Constructing Quartermaster of the projects to which he was assigned. For each project he secured and transmitted to the interested Constructing Quartermaster the general requirements, all information as to policies, fundamental standards and general instructions. He kept in close touch with each project and the progress made thereon, and specified dates of delivery of all material mobilized by Washington. He also made sure that all other requirements for projects under his supervision were met.

When visiting a project, he acted through channels for the Chief of the Construction Division in inspecting the work to see that authorized standards, progress, and other requirements were complied with; also that the Constructing Quartermaster for each of the projects to which he was assigned had the benefit of experience that had accumulated on each of the other similar projects under his charge.

The field organization at each project generally conformed to the structure outlined on chart 26.

PERSONNEL

At inception, the Cantonment Division, Office of the Quartermaster General, numbered little more than 100, including officers and clerical force. Its subsequent growth and that of the Construction Division was as follows:

COMMISSIONED OFFICERS

Date	In Washington	In the field	Total
July 1, 1918	275	466	741
Nov. 11, 1918	415	1,014	1,429
June 30, 1919	215	499	714

ENLISTED MEN

July 1, 1918		2,500	2,500
Nov. 11, 1918	1	12,959	12,960
June 30, 1919	1	1,625	1,626

CIVILIAN OFFICE FORCE

June 30, 1918	1,280		1,280
Nov. 11, 1918	2,412	12,443	14,855
June 30, 1919	1,159	21,343	22,502

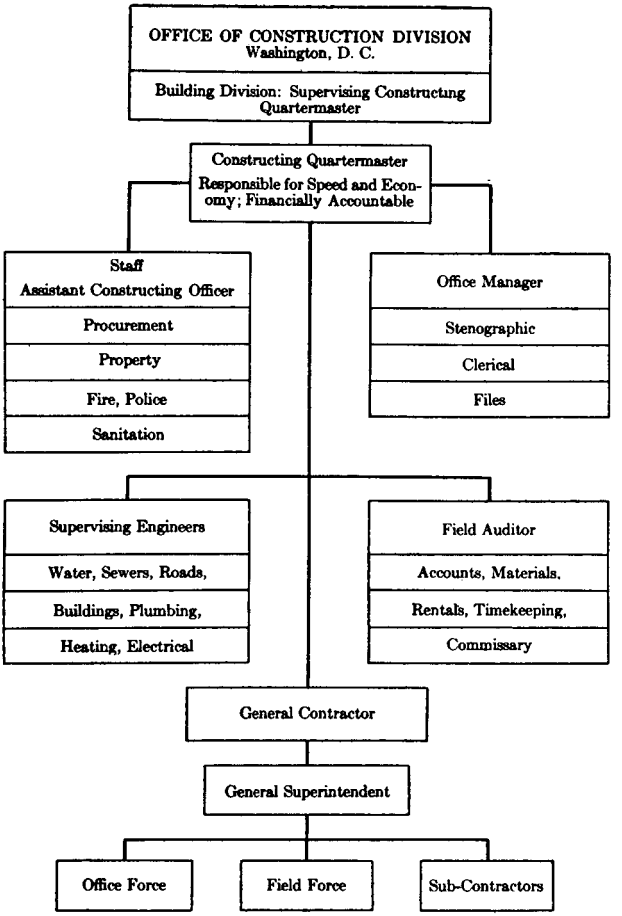


CHART NO. 26.—*FIELD ORGANIZATION MAINTAINED AT PROJECTS OF CONSTRUCTION DIVISION*

In addition to the civilian office force employed by the Division, Nov. 11, 1918, contractors' forces on that date numbered about 427,000.

The personnel of the Construction Division, at the time of its consolidation with the Quartermaster Corps in 1920, consisted of 50 officers on duty in Washington and 176 in the field; 15,597 civilians, of whom 608 were in Washington; and about 2,500 enlisted men.

ACTIVITIES

1917

Facilities for housing about 124,000 officers and men at Army stations existed Apr. 6, 1917. Before the end of the year, the

Cantonment Division had provided additional shelter for about 1,500,000 men. This construction involved road-building, electric-light and power installations, water supply, sewerage, refrigeration and heating plants, fire-prevention installations and apparatus for at least 32 cantonments and camps, as well as the actual housing.

Apart from these projects, important construction work was accomplished at four ports of embarkation, 22 special camps, 30 supply depots and terminals, 49 base hospitals, and numerous ordnance, air service and other stations.

1918

Construction continued on bases, depots, munitions plants, proving grounds, and a great variety of other projects, including work for the Navy and Treasury Departments. From July 1 to Nov. 11, construction was in progress at 442 localities. By the end of the year, with supplementary temporary construction at permanent posts, shelter for 1,736,000 men had been provided. In all, the Construction Division handled projects involving commitments of $1,100,000,000.

1919

After the Armistice, certain projects were ordered completed, certain others to be completed on a reduced basis, and still others to be abandoned. On June 30, the status of construction was as indicated below:

LIST OF PROJECTS OF THE CONSTRUCTION DIVISION OF THE ARMY

EXPLANATORY NOTE

[a.]=Construction supervised by Construction Division.
[b.]=Certain construction ordered abandoned.
[c.]=Construction ordered totally abandoned.
[d.]=Cost includes other than Construction Division allotments.

Designation of Project	Amount	Remarks
INFANTRY		
Camps:		
Bartlett, Mass. N. G., Westfield, Mass	$2,000.00	
Galveston, Inf. post, Galveston, Tex	2,021.55	
Leon Springs, Training Camp, Tex		Included in Camp Stanley, Tex.
Madison Barracks, N. Y	2,708.00	
Robinson, Sparta, Wis	363,500.00	
Stanley, Leon Springs, Tex	1,350,000.00	
Schools:		
Camp Benning, Columbus, Ga	5,315,000.00	Cost includes $1,558,000 value of materials transferred from other projects
Camp Perry, Port Clinton, Ohio	20,000.00	(see p. 896)
FIELD ARTILLERY		
Camps:		
Bragg, Fayetteville, N. C	11,000,000.00	(b.) Includes cost of land.
Knox, Stithton, Ky	19,350,000.00	(b.) Includes cost of land.
North Camp Jackson, Columbia, S. C	3,400,000.00	(c.)

Designation of Project	Amount	Remarks
COAST ARTILLERY		
Camps:		
Abraham Eustis, Lee Hall, Va	12,160,000.00	(b.) Includes cost of land.
Coast Defense Posts:		
Coast Defenses of Baltimore:	180,000.00	
Fort Armistead		
Fort Carroll		
Fort Howard		
Fort Smallwood		
Coast Defenses of Boston:	350,000.00	(b.)
Fort Andrews		
Fort Banks		
Fort Heath		
Fort Revere		
Fort Warren		
Fort Standish		
Fort Strong		
Coast Defenses of The Cape Fear:	650,000.00	
Fort Caswell		
Coast Defenses of Charleston:	346,000.00	
Fort Moultrie		
Fort Sumter		
Coast Defenses of Chesapeake Bay:	2,850,000.00	
Fort Monroe		
Fort Wool		
Fort Story		
Coast Defenses of The Columbia:	480,000.00	
Fort Canby		
Fort Columbia		
Fort Stevens		
Coast Defenses of The Delaware:	370,000.00	(b.)
Fort Delaware		
Fort Du Pont		
Fort Mott		
Cape May		
Cape Henlopen		
Coast Defenses of Galveston:	268,000.00	(b.)
Fort Crockett		
Fort San Jacinto		
Fort Travis		
Coast Defenses of Key West, Fla.:	171,000.00	
Key West Barracks		
Fort Taylor		
Coast Defenses of Long Island Sound:	730,000.00	(b.)
Fort Mansfield		
Fort Michie		
Fort H. G. Wright		
Fort Terry		
Fort Tyler		
Coast Defenses of Los Angeles, Calif.:	607,000.00	
Fort MacArthur		
Coast Defenses of Mobile, Ala.:	78,000.00	(b.)
Fort Gaines		
Fort Morgan		
Coast Defenses of Narragansett Bay:	603,000.00	
Fort Adams		
Fort Getty		
Fort Greble		
Fort Kearny		
Fort Wetherill		
Sacheust Neck		
Coast Defenses of New Orleans:	120,000.00	
Fort St. Philip		
Jackson Barracks		

Designation of Project	Amount	Remarks
Coast Defenses of New York:	1,903,250.00	(b.)
Fort Hamilton		
Fort Hancock		
Fort Schuyler		
Fort Wadsworth		
Fort Tilden		
Fort Totten		
Coast Defenses of Pensacola, Fla.:	471,045.00	(b.)
Fort Barrancas		
Fort McRee		
Fort Pickens		
Cooper Battery		
Worth Battery		
Coast Defenses of Portland, Maine:	358,000.00	(b.)
Fort Baldwin		
Fort Levett		
Fort Lyon		
Fort McKinley		
Fort Williams		
Fort Popham		
Fort Preble		
Coast Defenses of Portsmouth, N. H.:	125,000.00	(b.)
Fort Foster		
Fort McClary		
Fort Constitution		
Fort Stark		
Coast Defenses of The Potomac:	125,000.00	
Fort Hunt		
Fort Washington		
Coast Defenses of Puget Sound, Wash.:	484,000.00	(b.)
Fort Casey		
Fort Flagler		
Fort Lawton		
Fort Middlepoint		
Fort Ward		
Fort Whitman		
Fort Worden		
Coast Defenses of San Diego, Calif.:	310,000.00	(b.)
Fort Pio Pico		
Fort Rosecrans		
Coast Defenses of San Francisco, Calif.:	340,000.00	(b.)
Fort Baker		
Fort Barry		
Fort Mason		
Fort Miley		
Fort Winfield Scott		
Fort Funston		
Coast Defenses of Savannah, Ga.:	157,000.00	(b.)
Fort Fremont		
Fort Screven		
Coast Defenses of Tampa, Fla.:	173,000.00	
Fort Dade		
Fort De Soto		
CORPS OF ENGINEERS		
Camps:		
Belvoir, Belvoir, Va	308,613.06	
Forrest—included in Ft. Oglethorpe, Ga		
Glenburnie, Glenburnie, Md	125.00	
Humphreys, A. A., Accotink, Va	13,140,000.00	(b.) Includes cost of land.
Laurel, Laurel, Md	7,000.00	

Designation of Project	Amount	Remarks
SIGNAL CORPS		
Camps:		
Benjamin Franklin, Camp Meade, Md		Included in cantonment.
Depots:		
San Antonio, Tex	3,500.00	
Fort Wood, Bedloes Island, N. Y	380,000.00	
Warehouses:		
Fort Sam Houston, San Antonio, Tex	350,000.00	(a.)
TANK CORPS		
Camps:		
Colt, Gettysburg, Pa	414,300.00	
Polk, Raleigh, N. C	905,000.00	(c.)
Polk, Temporary Tk. Sch., Raleigh, N. C		
Manufacturing Plants:		
Holt Manufacturing Co., Peoria, Ill	591,062.48	(c.)
AIR SERVICE		
Camps:		
Dick, Dallas, Tex	6,000.00	(a.)
John Wise, San Antonio, Tex	95,275.00	(a, c.)
Morrison, Newport News, Va	69,800.00	(a, b.)
Vail, Camp Alfred, Little Silver, N. J	385,208.67	(b.)
Depots:		
Air Service, Morrison, Va	96,400.00	(a, b.)
Aircraft Production, Detroit, Mich	60,000.00	
Aviation General Repair, Dallas, Tex	128,940.00	(a, b.)
Aviation General Repair, Indianapolis, Ind	108,000.00	(a, b.)
Aviation General Repair, Richmond, Va		Included in Aviation General Supply Depot.
Aviation General Supply, Dayton, Ohio	42,100.00	(a.)
Aviation General Supply, Fairfield, Ohio	19,135.00	
	99,000.00	(a.)
Aviation General Supply, Middletown, Pa	1,222,900.00	
	24,000.00	(a.)
Aviation General Supply, Philadelphia, Pa	5,700.00	(a.)
Aviation General Supply, Richmond, Va	19,000.00	
	100,000.00	(a, b.)
Aviation General Supply, San Antonio, Tex	34,000.00	
	42,100.00	(a, b.)
Aviation General Storage, Detroit, Mich	26,000.00	
Balloon General Supply, Richmond, Va	60,100.00	(a)
	12,500.00	
Flying Fields:		
Barron Field, Fort Worth, Tex	74,598.00	(a)
Bolling Field, Washington, D. C	290,000.00	
Brindley Field, Commack, L. I., N. Y	141,290.00	(a, c.)
Brooks Field, San Antonio, Tex	27,500.00	(a, b.)
Call Field, Wichita Falls, Tex	78,298.00	(a, c.)
Carlstrom Field, Arcadia, Fla	257,259.00	(a, b.)
Carruthers Field, Fort Worth, Tex	155,098.00	(a.)
Chandler Field, Essington, Pa	11,940.00	(a.)
Chanute Field, Rantoul, Ill	38,618.00	(a, b.)
Chapman Field, Miami, Fla	928,700.00	
Dorr Field, Arcadia, Fla	330,000.00	(a, b.)
Eberts Field, Lonoke, Ark	92,940.00	(a.)
Ellington Field, Houston, Tex	269,980.00	(a.)
Emerson Field, Columbia, S. C	3,000.00	
Florence Field, Fort Omaha, Neb	91,150.00	(a.)
	290,000.00	
Gerstner Field, Lake Charles, La	317,773.00	(a.)
	2,850.00	
Haselhurst Field, Mineola, L. I., N. Y	913,951.00	(a, b.)
Henry J. Damm Field, Babylon, L. I., N. Y	127,355.00	(a, c.)

Designation of Project	Amount	Remarks
Kelly Field No. 1, San Antonio, Tex	348,402.00	(a, b.)
Kelly Field No. 2, San Antonio, Tex		
Langley Field, Hampton, Va	160,535.00	(a, b.)
	540,000.00	
Love Field, Dallas, Tex	57,698.00	(a.)
Lufberry Field, Mineola, L. I., N. Y	19,904.00	(a, c.)
McCook Field, Dayton, Ohio	45,800.00	(a.)
March Field, Alessandro, Calif	858,600.00	(a, b.)
Mather Field, Mills Sta., Sacramento, Calif	901,000.00	(a, b.)
Mitchel Field, Mineola, L. I., N. Y	24,123.00	(a.)
Park Field, Millington, Tenn		Constructed by Signal Corps.
Payne Field, West Point, Miss	891,340.00	(a.)
Post Field, Fort Sill, Okla	69,352.00	(a.)
Rich Field, Waco, Tex		Constructed by Signal Corps.
Rockwell Field, San Diego, Calif	460,654.00	(a.)
Roosevelt Field, Mineola, L. I., N. Y	66,265.00	(a.)
Ross Field, Arcadia, Calif	514,000.00	
	4,000.00	(a.)
Scott Field, Belleville, Ill	44,780.00	(a, b.)
Selfridge Field, Mt. Clemens, Mich	102,040.00	(a, b.)
	40,126.00	
Souther Field, Americus, Ga	1,347,480.00	(a, b.)
Taliaferro Field, Fort Worth, Tex	135,098.00	(a.)
Taylor Field, Pike Road, Ala		Constructed by Signal Corps.
Wilbur Wright Field, Dayton, Ohio	187,623.00	(a, b.)
Testing Fields:		
No. 1, Dayton, Ohio	635,000.00	(a, b.)
No. 2, Buffalo, N. Y	445,000.00	
No. 3, Detroit, Mich	210,000.00	
No. 4, Elizabeth, N. J	115,000.00	(c.)
Gas Plants:		
No. 1, Fort Worth, Tex	113,300.00	
No. 2, Fort Worth, Tex		
No. 3, Petrolia, Tex	170,000.00	
Miscellaneous:		
Balloon Hangar, Johns Hopkins U., Balto., Md	32,000.00	(a.)
Barracks, 104–6 W. 14 Str., New York City, N. Y	18,500.00	
Ford Building, Detroit, Mich	29,000.00	
Schools:		
Aerial Gunnery, Miami, Fla		Included in Chapman Field.
Aerial Observer, Fort Sill, Okla	38,000.00	(a.)
Aerial Observer, Langley Field, Va		Included in Langley Field.
Aerial Photography, Rochester, N. Y	35,000.00	(a, c.)
Air Service, U. of Tex., Austin, Tex	55,000.00	(a, b.)
Aviation Mechanics, Kelly Field, Tex	209,310.00	(a.)
Aviation Mechanics, St. Paul, Minn	245,000.00	(c.)
Bakers (Camp No. 1), Kelly Field, Tex	55,000.00	
Balloon Observer, Arcadia, Calif		Included in Ross Field, Arcadia, Calif.
Balloon Observer, Lee Hall, Va	884,700.00	Includes cost of land.
Balloon Observer, Ft. Omaha, Neb		Included in Florence Field, Ft. Omaha, Neb.
Shops:		
Engine and Plane Repair, Montgomery, Ala	770,240.00	
Warehouses:		
Aviation General, Kelly Field, Tex	220,000.00	
Aviation General, Little Rock, Ark	985,000.00	
CHEMICAL WARFARE SERVICE		
Camps:		
Kendrick, Lakehurst, N. J	622,419.79	(c.)
Leach, American Univ., Washington, D. C	123,415.64	(c.)
Willoughby, Willoughby, Ohio	233,600.00	(b.)

Designation of Project	Amount	Remarks
Experiment Stations:		
Nela Park, Cleveland, Ohio		Constructed by Ordnance Department.
American University, Washington, D. C	343,001.74	(c.)
Gas Plants:		
Hastings, Hastings-on-Hudson, N. Y	520,000.00	(a.)
Kingsport, Kingsport, Tenn	488,366.74	
National Aniline & Chem. Co., Buffalo, N Y	556,000.00	(a, c.)
U. S. Chemical Plant No. 4, Saltville, Va	2,313,031.35	
Gas-Defense Plants:		
Long Island City, L. I., N. Y	68,155.39	(c.)
ORDNANCE DEPARTMENT		
Arsenals:		
Augusta, Augusta, Ga	32,000.00	
Benicia, Benicia, Calif	20,000.00	
Edgewood, Md	110,000.00	(a.)
	24,972,000.00	(a.) Transferred to Chem. Warfare Serv., July 13, 1918.
	208,000.00	
Frankford, Philadelphia, Pa	1,057,128.35	
New York, New York City, N Y	33,000.00	(a.)
Picatinny, Dover, N. J	385,000.00	(a, b.)
Raritan, Metuchen, N. J	13,300,000.00	(a, b.)
Rock Island, Rock Island, Ill	224,000.00	(a.)
San Antonio, San Antonio, Tex	165,000.00	(a.)
Springfield, Springfield, Mass	328,158.00	(a, b.)
	113,900.00	
Watertown, Watertown, Mass	380,000.00	(a.)
Watervliet, Watervliet, N. Y	1,180,000.00	(a.)
Bag-Loading Plants:		
Richmond, Seven Pines, Va	6,118,300.00	
Tullytown, Tullytown, Pa	6,064,313.43	
Woodbury, Woodbury, N. J	4,588,501.36	
Bomb Plants:		
Marlin-Rockwell, Delaware City, Del	2,067,406.88	(c.)
Cartridge Plants:		
Peters Cartridge, Cincinnati, Ohio	221,144.43	(c.)
Western Cartridge, East Alton, Ill	335,253.31	(c.)
Depots:		
Animal Quarantine, Baltimore, Md	101,300.00	
Augusta Arsenal, Augusta, Ga	241,750.00	
Charleston, Ordnance, Charleston, S. C		(b.) Included in Charleston Q. M.'s Ord. Terminal.
Curtis Bay Gen. Sup., Curtis Bay, Md	7,170,300.00	(b.)
Delaware Gen. Sup., Pedricktown, N. J	4,900,000.00	Includes cost of land.
Middletown, Middletown, Pa	1,298,700.00	(b.)
Ordnance Warehouse, S. Bethlehem, Pa	22,610.00	
Pig Point, Gen. Sup., Pig Point, Va	3,296,700.00	(b.)
Raritan River, Gen. Sup., Metuchen, N. J		Included in Raritan Arsenal.
Sandy Hook, Sandy Hook, N. J	862,838.83	
Springfield Ordnance, Springfield, Mass		Included in Joint Depot.
Tuckahoe, Tuckahoe, N. J	1,400.00	(a.)
	750.00	
Explosive Plants:		
Tetryl Plant, Senter, Mich	185,235.00	(c.)
T. N. T. Plant, Giant, Calif	287,451.00	(c.)
U. S. Explosive Plant, Nashville, Tenn	63,750,000.00	(a.)
	1,264,727.78	
U. S. Explosive Plant "C" Nitro, Charleston, W. Va	63,610,000.00	
Housing, Temporary:		
American Brake, Shoe and F'd'y. Co., Erie, Pa	472,500.00	
Bethlehem Steel Co., Bethlehem, Pa	487,900.00	
Semet-Solvay Co., Grand Rapids, Mich		Included in Picric Acid Plant.
Temporary Housing, Newport News, Va	833,552.57	

Designation of Project	Amount	Remarks
Incendiary Plants:		
Phosphorous Plant, Fairmont, W. Va	121,000.00	
Hero Manufacturing Plant, Philadelphia, Pa	150,000.00	(c.)
Manufacturing Plants:		
Locomobile Plant, Bridgeport, Conn	241,500.00	(c.)
Saxon Motor Co., Detroit, Mich	40,000.00	
Miscellaneous:		
Michigan Copper and Brass Co., Detroit, Mich		No construction work performed.
National Cash Register Co., Dayton, Ohio	248,409.70	(c.)
New Britain Mach. Co., New Britain, Conn	181,500.00	
Neville Island Gun Plant, Pittsburgh, Pa	48,000.00	(a.)
Nitrate Plants:		
Air Nitrate Plant No. 1, Sheffield, Ala	13,000,000.00	
Air Nitrate Plant No. 2, Muscle Shoals	65,000,000.00	(a.)
Air Nitrate Plant No. 3, Toledo, Ohio	5,761,785.39	(c.)
Air Nitrate Plant No. 4, Cincinnati, Ohio	6,107,463.02	(c.)
Picric Acid Plants:		
Butterworth Judson Corp., Brunswick, Ga	8,223,255.00	(c.)
Everly M. Davis Corp., Little Rock, Ark	6,912,000.00	(c.)
Semet-Solvay Co., Grand Rapids, Mich	3,120,239.13	(c.)
Proving Grounds:		
Aberdeen, Aberdeen, Md	525,000.00	
	15,475,000.00	(a.)
Clear Springs, Clear Springs, Md	117,718.00	(c.)
Erie-Camp Perry, Port Clinton, Ohio	4,959,000.00	(b.)
Elizabethport, N. J	152,916.00	(c.)
Lakehurst, N. J		Included in Camp Kendrick, C. W. Service.
Savanna, Ill	646,755.00	
Saybrook, Conn	59,077.00	
Scituate, Mass	1,645,200.00	(c.)
Whiting (Preliminary Investigation), N. J	1,000.00	(c.)
Schools:		
Mobile Ordnance, Kenosha, Wis	36,048.40	
Mobile Ordnance, Clintonville, Wis	11,600.00	
Mobile Ordnance, Peoria, Ill	34,500.00	
Ordnance, St. Louis, Mo	1,650.00	(c.)
Shell-Loading Plants:		
Bethlehem Loading Co., Mays Landing, N. J		(c.) No construction work performed.
Bethlehem Loading Co., New Castle, Del		(c.) No construction work performed.
Gillespie Loading Co., Morgan, N. J		Rebuilt by Ordnance Dept., assisted by Construction Division.
Shell Manufacturing Plants:		
Laclede Gas Light Co.:		
(a) Broadway Plant, St. Louis, Mo	369,563.88	(c.)
(b) Manchester Plant, St. Louis, Mo	536,288.86	(c.)
Milton Manufacturing Co., Milton, Pa	350,000.00	(c.)
Sulphuric Acid Plants:		
Sulphuric Acid, Emporium, Pa	182,345.42	(c.)
Sulphuric Acid, Grand Rapids, Mich	9,560.43	(c.)
Sulphuric Acid, Mt. Union, Pa	360,978.84	(c.)
Toluol Recovery Plants:		
Toluol Recovery, Cambridge, Mass		(c.) Constructed by Ordnance Department.
Toluol Recovery, Everett, Mass		Constructed by Ordnance Department.
Toluol Recovery, Lynn, Mass		(c.) Constructed by Ordnance Department.
Toxic Acid Plant:		
Toxic Acid, Croyland, Pa	342,533.69	(c.)
Water Gas Plant:		
Midvale Steel & Ord. Co., Eddystone Rifle Plant, Chester, Pa		(c.) No construction work performed.

Designation of Project	Amount	Remarks
MEDICAL DEPARTMENT		
Camps:		
Camp Crane, Allentown, Pa	156,600.00	(c.)
Camp Summerall, Tobyhanna, Pa	1,900.00	
Camp Greenleaf, Ga		Included in Ft. Oglethorpe, Ga.
Fort Riley, Kans		Included in Departmental Hospital.
Veterinary Corps:		
Camp Lee, Training, Petersburg, Va		Included in Camp Lee (p. 172).
Medical Depots:		
Medical Supply, New York City, N. Y	14,500.00	
Medical Supply, Washington, D. C	3,000.00	
General Hospitals:		
No. 1, Williamsbridge, N. Y	462,703.00	
No. 2, Fort McHenry, Baltimore, Md	2,147,632.00	
No. 3, Colonia, N. J	2,374,613.00	
No. 4, Fort Porter, N. Y	10,700.00	
No. 5, Fort Ontario, N. Y	375,000.00	
No. 6, Fort McPherson, Ga		Included in construction at Ft. McPherson, Ga.
No. 7, Roland Park, Baltimore, Md	300,848.00	
No. 8, Otisville, N. Y	1,650,723.00	(b.)
No. 9, Lakewood, N. J	188,349.74	
No. 10, Boston, Mass	96,192.02	(c.)
No. 11, Cape May, N. J	41,682.55	
No. 12, Biltmore, N. C	28,148.38	(c.)
No. 13, Dansville, N. Y		Included in Operation and Repair Division report.
No. 14, Fort Oglethorpe, Ga		Included in Fort Oglethorpe, Ga.
No. 15, Corpus Christi, Tex		(b.) Included in Operation and Repair Division report.
No. 16, New Haven, Conn	353,138.87	
No. 17, Markleton, Pa	109,034.02	(c.)
No. 18, Waynesville, N. C	69,137.59	(c.)
No. 19, Azalea, N. C	2,732,232.02	(b.)
No. 20, Whipple Barracks, Ariz	1,610,000.00	(b.)
No. 21, Denver, Colo	3,202,940.00	
No. 22, Philadelphia, Pa	65,656.92	
No. 23, Hot Springs, N. C	103,200.00	(c.)
No. 24, Parkview Station, Pittsburgh, Pa	205,982.46	(b.)
No. 25, Fort Benjamin Harrison, Ind		Included in Fort Harrison, Ind.
No. 26, Fort Des Moines, Iowa	240,000.00	
No. 27, Fort Douglas, Utah	699,218.47	(b.)
No. 28, Fort Sheridan, Ill	3,050,000.00	
No. 29, Fort Snelling, Minn	497,000.00	(b.)
No. 30, Plattsburg Barracks, N. Y	225,000.00	
No. 31, Carlisle, Pa	190,000.00	
No. 32, Cooper Monatah, Chicago, Ill	108,156.62	(c.)
No. 33, Ft. Logan H. Roots, Ark	12,000.00	
No. 34, East Norfolk State Hosp., Norfolk, Mass	36,334.18	(c.)
No. 35, West Baden Hosp., West Baden, Ind	123,714.00	
No. 36, Ford Hospital, Detroit, Mich	91,344.00	
No. 37, Madison Barracks, Sacketts Harbor, N. Y	105,000.00	
No. 38, East View, N. Y	109,483.00	(c.)
No. 39, Long Beach, Long Island, N. Y	24,889.27	(c.)
No. 40, St. Louis, Mo	129,500.00	
Fort Bayard, N. Mex	673,000.00	
Letterman, San Francisco, Calif	115,000.00	
Walter Reed, Washington, D. C	1,428,887.00	
Army and Navy, Hot Springs, Ark		No construction work performed.
Departmental Hospitals:		
Fort Sam Houston, Tex		Included in Fort Sam Houston.
Fort Riley, Kans	830,000.00	(b.)

Designation of Project	Amount	Remarks
Debarkation Hospitals:		
No. 1, Ellis Island, N. Y	23,500.00	
No. 2, Rose Bank, Fox Hills, N. Y	2,645,000.00	
No. 3, Greenhut Building, New York City, N. Y	283,730.00	
No. 3, Cluett Building	36,100.00	
No. 5, Grand Central Palace, New York City, N. Y	177,829.53	(c.)
No. 51, Hampton, Va	212,695.32	
No. 52, Richmond, Va	52,268.89	
Embarkation Hospitals:		
Camp Alexander, Newport News, Va		Included in Embarkation Camp Stuart.
Camp Hill, Newport News, Va		
Camp Stuart, Newport News, Va		
Camp Mills, Garden City, L. I., N. Y		Included in Embarkation Camp Mills.
Camp Merritt, Dumont, N. J		Included in Embarkation Camp Merritt.
Miscellaneous Hospitals:		
Baptist Bible Inst., New Orleans, La		(c.) No construction work performed.
Boston City, Western Dept. West Roxbury, Mass		(c.) See Boston General Hospital No. 10
Commonwealth Armory, Boston, Mass		(c.) See Boston General Hospital No. 10
State School for Deaf, Columbus, Ohio	400.00	(c.)
East Side High School, Cincinnati, Ohio	1,062.00	(c.)
Exposition Park, Rochester, N. Y	11,682.00	(c.)
Field Museum, Chicago, Ill	92,395.00	(c.)
Ford Building, Milwaukee, Wis		
Badger St. Sales, Milwaukee, Wis	6,365.00	
Brachman Bldg., Milwaukee, Wis		
Woodstock Apt., Milwaukee, Wis		
Ford Hospital, Des Moines, Iowa	1,542.00	
Galloway Hospital, Nashville, Tenn		(c.) No construction work performed.
Lawrenceville, Convalescent, N. J	47,500.00	
Richman Bros. Bldg., Cleveland, Ohio		(c.) No construction work performed.
Sea View, Staten Island, N. Y		(c.) No construction work performed.
Miscellaneous:		
Motor Convoy Serv., Influenza, Detroit, Mich	5,000.00	
Rifle Range Infirmary, Sandusky, Ohio		Canceled.
Infirmary, Middletown, Ohio		Canceled.
Schools:		
Army Medical School, Washington, D. C	5,600.00	
Quarantine Stations:		
Virginia Station, Cape Charles, Va	225,000.00	Funds allotted by U. S. Treasury.
Reedy Island, Del	89,846.00	Funds allotted by U. S. Treasury.
Savannah, Ga	94,573.00	Funds allotted by U. S. Treasury.
QUARTERMASTER CORPS		
Camps:		
Johnston, Jacksonville, Fla	6,100,000.00	(c.)
Meigs, Washington, D. C	625,000.00	
Army Supply Bases:		
Boston—see Terminals, Mass		Included in Boston Terminal.
Brooklyn, N. Y	32,500,000.00	Includes cost of land.
New Orleans, La	12,000,000.00	Includes cost of land. Project not complete.
Norfolk, see Terminals, Va		Included in Norfolk Terminal.
Depots and Warehouses:		
Expeditionary:		
Baltimore, Md	1,807,300.00	(b.)
Governors Island, N. Y	1,780,000.00	
Hoboken, N. J	880,000.00	(b.)
Philadelphia, Pa	939,000.00	
General:		
Atlanta, Ga	176,000.00	(b.)
Boston, Mass	11,300.00	
Boston Temporary Warehouse, Mass	1,263,000.00	
Baltimore Depot Warehouse, Md	1,807,300.00	(b.)

Designation of Project	Amount	Remarks
Bush Terminal Warehouse, Brooklyn, N. Y.	640,000.00	
Cold Storage Warehouse, Chicago, Ill.	3,277,500.00	Includes cost of land.
El Paso Supply Depot, El Paso, Tex.	35,415.00	
Omaha Q. M. Depot No. 24, Omaha, Neb.	250.00	Included in Fort Omaha, Neb.
Permanent Depot Warehouse, Chicago, Ill.	3,050,000.00	Includes cost of land.
Philadelphia, Pa.	3,060,000.00	
Springfield—Joint Q. M. and Ord., Mass.	76,513.88	
Interior Storage:		
Chicago, Ill.	765,000.00	
Columbus, Ohio.	5,270,600.00	Includes cost of land.
Jeffersonville, Ind.	1,009,388.41	(b.)
New Cumberland, Pa.	4,528,300.00	Includes cost of land.
Pittsburgh, Pa.	666,000.00	(b.)
Schenectady, N. Y.	4,765,000.00	Includes cost of land.
St. Louis, Mo.	1,344,695.43	
Miscellaneous:		
Clothing Storehouse, Washington, D. C.		No construction work performed.
Hq. N. E. Department, Boston, Mass.	195,000.00	
O'Neil Adams Bldg., New York City, N. Y.	2,000.00	
No. 45 Broadway, New York City, N. Y.	40,000.00	
Terminals:		
Boston, Mass.	26,000,000.00	Includes cost of land.
Charleston Q. M. and Ord. Terminal, S. C.	10,850,000.00	(b.)
	5,200,000.00	(b.)
Philadelphia, Pa.	13,500,000.00	
Port Newark, Newark, N. J.	16,075,711.62	Includes cost of land.
Norfolk, Va.	28,754,396.00	Includes cost of land.
PURCHASE, STORAGE, AND TRAFFIC DIVISION, G. S.		
Embarkation:		
Camps:		
Alexander (Colored), Newport News, Va.		Included in Camp Stuart.
Hill, Newport News, Va.		Included in Camp Stuart.
Merritt, Dumont, N. J.	11,450,000.00	
Mills, Garden City, L. I., N. Y.	11,200,000.00	(b.)
Stuart, Newport News, Va.	14,600,823.25	
Animal Depots:		
Charleston, S. C.	795,000.00	
Newport News, Va.	388,246.42	(c.)
MOTOR TRANSPORT CORPS		
Camps:		
Holabird, M. R. S. U. No. 306, Baltimore, Md.	5,330,000.00	(b.) Includes cost of land.
Jesup, M. R. S. U. No. 305, Atlanta, Ga.	1,237,252.50	(b.) Includes cost of land.
Normoyle, M. R. S. U. No. 304, San Antonio, Tex.	1,799,000.00	Includes cost of land.
Philadelphia Bks., Philadelphia, Pa.	20,600.00	
GENERAL CAMPS		
Mexican Border Project:	3,794,000.00	Including amounts shown opposite districts.
Big Bend District, Tex.: 8 stations	45,000.00	
Brownsville District, Tex.: 10 stations	34,108.82	
California District, Calif.: 4 stations	2,700.00	
Columbus District, N. Mex.: 1 station	1,360.00	
Del Rio District, Tex.: 4 stations	388,648.54	(b.)
Douglas Patrol District, Ariz.-N. Mex.: 2 stations	191,263.67	
Eagle Pass District, Tex.: 2 stations	3,200.00	(b.)
El Paso District, Tex.:	465,250.65	
Laredo District, Tex.: 9 stations	60,729.01	
Rio Grande District, Tex.: 5 stations	16,000.00	
Sierra Blanca District: 4 stations	1,000.00	
Tenth Cavalry District, Ariz.: 6 stations	190,000.00	

Designation of Project	Amount	Remarkss
Guard Detachment Housing:		
Barracks, Niagara Falls, N. Y		No construction work performed.
Barracks, Norfolk, Va	259,000.00	
Hawthorne Race Track, Chicago, Ill	190,000.00	
Lambert's Point, Newport News, Va		Included in temporary housing.
New York Dry Dock Co., New York City, N. Y	270.00	
N. Y. Gas-Defense Plant, Astoria, L. I., N. Y	275,000.00	(c.)
Barracks, Washington, D. C	491,000.00	
Provost, New York City, N. Y	68,000.00	
Sales Commissary, Washington, D. C	13,900.00	
Seattle Constr. Co., Seattle, Wash	1,500.00	
DISCIPLINARY BARRACKS		
Alcatraz, Pacific Br., Alcatraz I., Calif	24,010.07	
Jay, Ft., Atlantic Br., Governors Island	2,100.00	
Leavenworth, Ft. Leavenworth, Kans	282,956.00	
PERMANENT ARMY POSTS		
Interior:		
Apache, Ft., Ariz	1,396.70	See Mexican Border Project also.
Bayard, M. C. Hosp., N. Mex		Included in Ft. Bayard Gen. Hospital.
Benjamin Harrison, Ft., Indianapolis, Ind	2,737,000.00	(b.)
Brady, Ft., Mich	1,400.00	(b.)
Clark, Ft. Dist., Tex	436,214.14	See Mexican Border Project also.
Crook, Ft., Neb	24,000.00	
D. A. Russell, Ft., Wyo	415.00	(b.)
Des Moines, Ft., Iowa		Included in General Hospital No. 26.
Douglas, Ft., Utah		(b.) Included in General Hospital No. 27.
Ethan Allen, Ft., Vt	7,400.00	
Huachuca, Ft., 10th Cav. Dist., Ariz		Included in 10th Cav. District, Mex. Border.
Jay, Ft., N. Y	230,000.00	
Leavenworth, Kans	611,660.49	(b.)
Logan H. Roots, Ft., Ark		Included in General Hospital No. 33.
Lincoln, Ft., N. Dak		No construction work performed.
McIntosh, Ft., Laredo Dist., Tex		Included in Laredo District, Mex. Border.
McPherson, Fort, Ga	900,000.00	
McKenzie, Ft., Wyo		No construction work performed.
Madison Barracks, N. Y	2,708.00	
Missoula, Ft., Mont		No construction work performed.
Myer, Ft., Va	110,774.00	(b.)
Niagara, Ft., N. Y	40,780.18	
Omaha, Ft., Nebr	9,750.00	
Oglethorpe, Ft., Ga	5,500,000.00	(b.)
Ontario, Ft., N. Y	87,000.00	
Plattsburg Barracks, N. Y		Included in General Hospital No. 30.
Porter, Ft., N. Y		Included in General Hospital No. 4.
Presidio of San Francisco, Calif	68,000.00	
Riley, Ft., Kans	10,000.00	
Ringgold, Tex		Included in Rio Grande Distr., Mex. Border.
Sam Houston, Ft., Tex	630,000.00	(b.)
Sheridan, Ft., Ill		Included in General Hospital No. 28.
Sill, Ft., Okla	1,562,000.00	
Snelling, Ft., Minn		No construction work performed.
Thomas, Ft., Ky	17,500.00	(b.)
Vancouver Barracks, Wash	318,000.00	
War College, D. C	133,500.00	
Washington Barracks, D. C	43,300.00	
Wayne, Ft., Mich		No construction work performed.
West Point, N. Y		No construction work performed.
Whipple Barracks, Ariz		Included in General Hospital No. 20.

Designation of Project	Amount	Remarks
Recruit Depots:		
Columbus Barracks, Ohio	44,000.00	(b.)
Jefferson Barracks, Mo	590,000.00	(b.)
Fort Logan, Colo	2,000.00	(b.)
Fort McDowell, Calif	154,240.00	(b.)
Fort Slocum, N. Y	71,500.00	(b.)
Remount Depots:		
Front Royal, Va	4,200.00	
Fort Keogh, Mont	64,000.00	
Fort Reno, Okla	7,823.29	
War Prisons:		
Douglas, Utah		Included in General Hospital No. 27.
McPherson, No. 1, Ga		Included in General Hospital No. 6.
Oglethorpe, No. 2, Ga		Included in Ft. Oglethorpe, Ga.
MISCELLANEOUS PROJECTS AND ACTIVITIES		
Palm City Garrison, Calif		No construction work performed.
Corpus Christi Garrison, Tex		No construction work performed.
Kingsville Garrison, Tex		No construction work performed.
Penitas Garrison, Tex		No construction work performed.
Pharr Garrison, Tex		No construction work performed.
Symmington, Chicago Plant, Ill	460,000.00	
Delousing Equipment, purchase and installations	38,650.00	
Female phone operators' buildings at various cantonments		No costs available.
Navy Rifle Range, Caldwell, N. J		Included in Operation and Repair Div Report.
South Amboy Motor Storage, N. J	90,000.00	
MISCELLANEOUS PROJECTS		
Barracks:		
Bureau of Standards, Washington, D. C	80,800.00	
Bush Terminal, Brooklyn, N. Y		Included in Bush Terminal Warehouse (p. 169).
General:		
Construction Division, Record Storage Bldg., Baltimore, Md	50,200.00	
Cots, Purchase of (Schuylkill Arsenal)	550,076.40	
Columbia University, New York City, N. Y	3,950.00	
Construction Division, Pay of Civilian Employees, Washington, D. C	2,687,550.92	
Dry Cleaning Plant, West Hoboken, N. J	4,200.00	
East Potomac Park, Washington, D. C	53,000.00	
Ford Building, Washington, D. C	40,000.00	
Garage, 24th and M Sts., N. W., Washington, D. C	20,599.00	
Heat Treating Plant, Cribben Sexton Co., Chicago, Ill		(c.) Constructed by Ordnance Department.
Mt. Wilson Solar Observatory, Pasadena, Calif		Constructed by Ordnance Department.
Office Bldgs., Washington, D. C	2,375,000.00	
Telephone Bldgs., Washington, D. C	130,000.00	
U. S. Construction Lumber Dept., Gilmerton, Va	530,000.00	
U. S. Food Admin. Bldg. No. 2, Washington, D. C		Materials mobilized by Construction Div.
Q. M. Depot, Washington, D. C	67,577.67	
Lighters:		
Arsenal, Raritan River, N. J		Included in Raritan Arsenal (p. 165).
Ordnance Depot, Curtis Bay, Md		Included in Curtis Bay Ord. Depot (p. 165).
Ordnance, Pig Point, Va	100,000.00	
Terminal, Port Newark, N. J		Included in Port Newark Terminal (p. 169).

Designation of Project	Amount	Remarks
Roads:		
Alexandria—Camp Humphreys, Va	375,000.00	
Fayetteville—Camp Bragg, N. C		Included in Camp Bragg (p 160).
Ft. Monroe—Langley Field—Newport News, Va	495,000.00	
Naval Base No. 2—Camp Morrison, Va	1,280,000.00	
Navy Yard—Portsmouth—Norfolk—Naval Base, Sewells Point—Ocean View	435,000.00	
Water and Electric Power:		
Big Bethel Water Development, Hampton, Va	1,029,000.00	(a.)
Duquesne Light Co., Pittsburgh, Pa	1,445,000.00	(a.)
Electric Power, Charleston, S. C	350,000.00	
Harwoods Mill Water Development, Orianna, Va	1,175,000.00	
Lorain County Elec. Co., Lorain, O	1,250,000.00	(a.)
Norfolk Water Supply, Norfolk, Va	275,000.00	
Water Development, Charleston, S. C	450,000.00	
Water Development, Portsmouth, Va	2,200,000.00	
Water Development, Pump Sta., Hampton Roads, Va	320,516.18	
West Pa. Power Co., Springdale, Pa	2,000,000.00	(a.)
	409,000.00	
Skiffs Creek Water Development, Lee Hall, Va	264,086.00	Costs include $51,000.00 received from old Dominion Land Co.
Limited Service Camps:		
Syracuse, N. Y	280,000.00	(c.)
CANTONMENTS		
Custer, Battle Creek, Mich	12,964,300.00	(b, d.)
Devens, Ayer, Mass	11,889,800.00	(b, d.)
Dodge, Des Moines, Iowa	9,943,500.00	(b, d.)
Dix, Wrightstown, N. J	12,687,600.00	(b, d.)
Funston, Ft. Riley, Kans	11,293,100.00	(d.)
Gordon, Atlanta, Ga	11,217,800.00	(b, d.)
Grant, Rockford, Ill	14,268,000.00	(b, d.)
Jackson, Columbia, S. C	12,298,100.00	(b, d.)
Lee, Petersburg, Va	18,639,300.00	(b, d.)
Lewis, American Lake, Wash	8,809,800.00	(b, d.)
Meade, Admiral, Md	18,192,400.00	(b, d.)
Pike, Little Rock, Ark	13,083,700.00	(b, d.)
Sherman, Chillicothe, Ohio	12,826,000.00	(b, d.)
Taylor, Louisville, Ky	8,439,500.00	(b, d.)
Travis, San Antonio, Tex	8,384,100.00	(b, d.)
Upton, Yaphank, L. I., N. Y	14,949,200.00	(b, d.)
TENT CAMPS, NATIONAL GUARD		
Beauregard, Alexandria, La	5,408,200.00	(c, d.) Ordered salvaged.
Bowie, Fort Worth, Tex	3,777,400.00	(c, d.) Ordered salvaged.
Cody, Deming, N. Mex	4,210,000.00	(c.) Ordered salvaged.
Doniphan, Fort Sill, Okla	2,913,300.00	(c, d.) Ordered salvaged.
Fremont, Palo Alto, Calif	2,546,600.00	(d.) Ordered salvaged.
Greene, Charlotte, N. C	4,797,800.00	(c, d.) Ordered salvaged.
Hancock, Augusta, Ga	4,636,900.00	(c, d.) Ordered salvaged.
Kearny, Linda Vista, Calif	4,253,700.00	(c, d.) Ordered salvaged.
Logan, Houston, Tex	3,969,200.00	(c, d.) Ordered salvaged.
MacArthur, Waco, Tex	4,604,100.00	(c, d.) Ordered salvaged.
McClellan, Anniston, Ala	6,788,600.00	(c, d.) Ordered salvaged.
Sevier, Greeneville, S. C	6,250,500.00	(b, d.) Ordered salvaged.
Shelby, Hattiesburg, Miss	5,563,200.00	(c, d.) Ordered salvaged.
Sheridan, Montgomery, Ala	3,578,400.00	(c, d.) Ordered salvaged.
Wadsworth, Spartanburg, S. C	5,257,700.00	(c, d.) Ordered salvaged.
Wheeler, Macon, Ga	4,087,800.00	(c, d.) Ordered salvaged.

Designation of Project	Amount	Remarks
CANTONMENT SITES		
Acquisition of	9,500,000.00	
Freightage, N. A. cantonments	4,899,825.51	
HAWAIIAN ISLANDS		
Coast Defenses of Oahu:	225,000.00	Including amounts shown opposite Fts Armstrong and Shafter.
Fort Armstrong	820.75	
Fort Kamehameha	13,000.00	
Fort Shafter	321.75	
Fort Ruger	100.00	
Ford's Island, Landing Field, Hawaii	35,000.00	
	37,500.00	(a, b.)
Hawaii Arsenal	9,800.00	(a.)
Hawaiian Ordnance Depot, Honolulu	223,680.00	(a.)
Schofield Barracks, Hawaii	1,494,313.21	
CANAL ZONE		
Ancon	500.00	
Empire Garrison		No construction work performed.
France Field	50,400.00	(a.)
Gaillard Garrison		No construction work performed.
Manzanillo Bay, Ancon	37,000.00	
Miraflores		No construction work performed.
Otis, Camp	110,000.00	
Quarry Heights Garrison		No construction work performed.
Sherman, Fort		No construction work performed.
ALASKA		
Davis, Fort		No construction work performed.
Gibbon, Fort	25,000.00	
Liscum, Fort	8,000.00	
Salcha	2,700.00	
Seward, Fort William H	2,500.00	
St. Michael, Fort	2,000.00	
PUERTO RICO		
Las Casas, Camp, San Juan	2,015,000.00	(c.)
PHILIPPINE ISLANDS		
Manila Arsenal	12,000.00	(a.)
FRANCE		
Meat Storage and Ice Making Plants Nos. 2, 3, and 4	4,064,145.00	Designed and materials mobilized by Construction Division.
Motor Transport Repair Shop Material		Materials mobilized by Construction Division.

CONSTRUCTION, FISCAL YEAR 1920

During this period, projects were underway at 138 military stations in the United States and its possessions. On June 30, 1920, this construction amounted to $42,625,423.

DEMOBILIZATION

On Dec. 23, 1918, the Construction Division was charged with the salvaging of camps. Methods differed according to circumstances and included sale by public auction; by sealed proposals; by transfer of Government-owned improvements as compensation for damage claims; by sale of buildings piecemeal or by area as

they stood; by sale of buildings at one time and of equipment and fittings at another. In certain cases, buildings were moved to other locations where they were needed. Some camps were dismantled and the material was distributed for reconstruction work at Mexican Border points.

Meantime, the Operations Division, General Staff (see p. 55), had organized a Construction Demobilization Committee which, by Dec. 31, had indicated the action to be taken on practically all properties constructed for war uses. The Committee recommended the completion of 28 projects; the purchase of 14 cantonment sites, rather than payment of rental and damage claims thereon; the suspension of work on 107 projects; and the abandonment of 483. Fulfillment of these recommendations saved the Government $121,000,000.

Disposal of Establishments

Among the establishments which were ordered completed on a reduced basis were—

The Infantry School, Camp Benning, Columbus, Ga.
The Artillery Firing Center, Camp Bragg, Fayetteville, N. C.
The Artillery Firing Center, Camp Knox, West Point, Ky.
The Signal Corps Center, Camp Vail, Little Silver, N. J.

CANTONMENTS

Of the 16 cantonments, Camps Lewis and Funston were constructed on permanent military reservations. The others were located either entirely or in part on leased land. On Mar. 20, 1918, authority was granted the Construction Division to acquire these properties. By Nov. 1, 1919, purchase had progressed as follows:

Camp	Authorized for purchase		Purchased up to Nov. 1, 1919	
	Acreage	Total price	Acreage	Paid
Custer	8,731.14	$675,000	3,970.75	$305,597.89
Devens	4,844.82	210,000	4,141.13	178,847.11
Dix	7,857.75	700,000	2,952.90	400,158.87
Dodge	2,182.50	750,000	954.57	255,402.25
Gordon	2,736.00	750,000	2,404.66	521,745.09
Grant	3,854.15	900,000	2,785.25	674,973.46
Jackson	21,881.07	500,000	12,679.63	312,570.14
Lee	7,350.23	900,000	4,996.67	681,230.87
Meade	7,470.78	700,000	5,992.59	448,250.25
Pike	2,639.78	210,000	2,455.63	140,849.17
Sherman	4,685.93	1,150,000	3,814.30	891,215.65
Taylor	2,047.68	1,150,000	1,894.25	1,084,391.50
Travis	726.23	260,000	726.23	241,095.25
Upton	6,245.73	200,000	174.71	20,000.00

During the 1920 fiscal year purchase of the sites of the above 14 National Army cantonments was carried to practical completion.

Other camps were disposed of as follows:

MISCELLANEOUS CAMPS

Name	Location	Purpose	Action taken
Humphreys	Accotink, Va	Engineer school	Real estate purchased.
Holabird	Baltimore, Md	Motor transport school	Do.
Jesup	Atlanta, Ga	do	Completed and retained.
Normoyle	San Antonio, Tex	do	Do.
Eustis	Mulberry Island, Va	Coast Artillery school	Do.
Polk	Raleigh, N. C	Tank school	Abandoned and sold.
Colt	Gettysburg, Pa	do	Do.
North Camp Jackson	Columbia, S. C	Artillery firing center	Do.
Kendrick	Lakehurst, N. J	Chemical warfare school	Do.
Johnston	Jacksonville, Fla	Quartermaster school	Retained for future use.
Crane	Allentown, Pa	Medical school	Abandoned and sold.
Syracuse	Syracuse, N. Y	Recruit camp	Do.
Forrest	Chickamauga Park, Ga	Engineer camp	Do.
Leach	Washington, D. C	do	Do.
Mills	Garden City, N. Y	Embarkation camp	Abandoned; to be sold.
Stuart	Newport News, Va	do	Do.
Hill	do	do	Do.
Alexander	do	do	Do.
Merritt	Englewood, N. J	do	Do.

AVIATION FIELDS

Recommendation was made to retain these Government-owned aviation fields: Rockwell Field, San Diego, Calif.; Langley Field, Hampton, Va.; Post Field, Fort Sill, Okla.; and Kelly Field No. 1, San Antonio, Tex.

On Mar. 3, approval was granted for the purchase of these additional fields: March Field, Riverside, Calif.; Mather Field, Sacramento, Calif.; Carlstrom and Dorr Fields, Arcadia, Fla.; Ellington Field, Houston, Tex.; Kelly Field No. 2, San Antonio, Tex.; Park Field, Memphis, Tenn.; Souther Field, Americus, Ga.; Selfridge Field, Mount Clemens, Mich.; Chanute Field, Rantoul, Ill.; and Scott Field, Belleville, Ill. Later, Mitchel Field, Long Island, N. Y., and Chapman Field, Miami, Fla. were added.

Abandonment was ordered of Gerstner Field, La.; McCook Field, Ohio; and Camp John Wise, Tex. The following were to be held temporarily for storage purposes: Wilbur Wright Field, Dayton, Ohio; Taylor Field, Montgomery, Ala.; Payne Field, West Point, Miss.; Eberts Field, Little Rock, Ark.; Call Field, Wichita Falls, Tex.; Rich Field, Waco, Tex.; Love Field, Dallas Tex.; Barron and Carruthers Fields, Fort Worth, Tex.; Hazelhurst Field, Long Island, N. Y.; and Bolling Field, Anacostia, D. C.

BALLOON FIELDS

Establishments at Lee Hall, Va., and at Forts Crook and Omaha, Nebr., on Government-owned land were retained. Purchase of Ross Field, Arcadia, Calif., and Brooks Field, San Antonio, Tex., was authorized.

TRANSFER OF HOSPITALS

Besides the hospitals mentioned on p. 472, in which the Construction Division was also interested, the following establishments were turned over to the Public Health Service during the 1920 fiscal year:

Name	Location	Capacity
General Hospital No. 2	Fort McHenry, Md	900
General Hospital No. 10	Boston, Mass	907
General Hospital No. 12	Biltmore, N. C	500
General Hospital No. 16	New Haven, Conn	500
General Hospital No. 20	Whipple Barracks, Ariz	400
General Hospital No. 24	Parkview, Pa	1,248
General Hospital No. 32	Chicago, Ill	541
Fort Bayard General Hospital	Fort Bayard, N. Mex	800
Polyclinic Embarkation No. 4	New York, N. Y	340
Army Supply Base	Norfolk, Va	128

SALVAGE OPERATIONS

Fiscal Year 1919

Beginning Jan. 31, 1919, the sales policy of the Construction Division conformed to the regulations issued by the Director of Sales, Purchase, Storage, and Traffic Division, General Staff (see p. 65).

By June 30, 5,178 sales had been made totaling $1,496,993. However, the great majority of surplus material was transferred from places where it lay idle to places where it could be used for Army requirements. On June 30, a total of 5,435 authorizations to transfer material and equipment between projects had been issued. The invoice value of material thus transferred was $10,086,150.

Fiscal Year 1920

During this period, 1,646 sales were made in salvaging camps and disposing of surplus materials, from which $3,171,641 was realized.

In selling camps, the following property was excluded: telephone and telegraph systems, fire-fighting apparatus and equipment, refrigerators, refrigerating machinery, incinerator plants, laundry equipment, construction equipment, small tools, tents, rolling stock, live stock, stores, ranges, range boilers, bake ovens, and supplies and surplus material or equipment not installed and in place in the buildings.

SECTION 8

CORPS OF ENGINEERS

ORIENTATION

Engineer troops were raised in the early days of the Revolution, but a Corps of Engineers was not established by the Continental Congress until Mar. 11, 1779. This Corps was disbanded in Nov. 1783.

A Corps of Artillerists and Engineers was authorized by Act of Congress May 9, 1794, and a separate Corps of Engineers, Mar. 16, 1802. Several changes in status ensued before the headquarters of the "'Engineer Department" was moved in 1818 to Washington, D. C., where the Office of the Chief of Engineers has remained ever since.

FUNCTIONS

CORPS OF ENGINEERS

To reconnoiter, survey for military purposes, and prepare maps of the United States, its possessions, and any theatre of operations; to lay out camps; to select sites and form plans and estimates for military defenses; to construct and repair fortifications and their accessories; to install electric power plants and electric power cable connected with seacoast batteries; to plan and superintend defensive or offensive works of troops in the field; to examine routes of communications for supplies and for military movements; to construct and repair military roads, railroads, and bridges; to carry out military demolitions; to have charge, within a theater of operations, of the location, design, and construction of wharves, piers, landings, storehouses, hospitals, and other structures of general interest, and of the construction, maintenance, and repair of roads, ferries, bridges, and incidental structures, and of the construction, maintenance, and operation of railroads under military control, including the construction and operation of armored trains; to execute river and harbor improvements assigned to the Corps; and to perform such other duties as the President or Congress may order.

CHIEF OF ENGINEERS

To be responsible for the engineering work of the War Department, exclusive of those duties entrusted to separate organizations (such as the Construction Division); to procure and supervise the operations of engineering personnel and to procure engineering materials; and to advise the Chief of Staff and the Secretary of War on engineering matters.

CHIEFS

1917		
Apr.	6	Brig. Gen. William M. Black
Oct.	8	Maj. Gen. William M. Black
1918		
Feb.	28	Brig. Gen. E. Eveleth Winslow (acting)
Apr.	17	Maj. Gen. William M. Black
through		
June	20,	
1919		

ORGANIZATION AND DEVELOPMENT

OFFICE OF THE CHIEF OF ENGINEERS

1917

At declaration of war, the office was organized into four Sections: Military, River and Harbor, Miscellaneous Civil, and Accounts and Contracts. In addition there was the Office of the Chief Clerk. In April the General Engineer Depot was established with functions as follows:

GENERAL ENGINEER DEPOT

To take charge of the procurement, production, transportation, storage, and oversea shipment of engineer matériel. It operated through these Departments: Business Administration, Depot, and Engineering and Purchasing, with functions as follows:

Business Administration Department

To have charge of the general clerical force; financial operations; legal and contract administration; and reports and statistics.

Depot Department

To control the receipt, storage, and issue of all engineer materials for military use, at home and abroad.

Engineering and Purchasing Department

To have charge of the development, design, purchase, and production of engineer matériel, equipment, and supplies for troops, for engineer operations in the field, and for seacoast fortifications.

On May 23, the office was reorganized and two branches were established, besides the General Engineer Depot, with functions and subdivisions as follows:

CIVIL WORKS BRANCH

To coordinate the civil activities of the Office of the Chief of Engineers.

The branch operated through four Divisions: Accounts and Contracts, Mail and Record, Miscellaneous Civil, and River and Harbor.

MILITARY BRANCH

To coordinate the military activities of the Office of the Chief of Engineers.

The branch operated through four divisions: Administrative, Personnel, Equipment and Construction, and Record.

The Personnel Division handled applications for commissions in the Corps of Engineers and in the Engineer Officers' Reserve Corps, and all matters relating to commissioned personnel.

The Equipment and Construction Division supervised the procurement of enlisted men and the training of engineer troops, engineer military operations in connection with seacoast fortifications and military mapping, the preparation of tables of organization, and the procurement of military engineer equipment and supplies.

On July 15, the Railroad Division, later known as the Railway Division, was organized to supervise, under the direction of the Director General of Military Railways, the procurement of materials for use by the American Expeditionary Forces.

On Sept. 15, the Military Branch was reorganized in six Divisions: Administrative, Drafting, Equipment and Construction, Railroad, Record, and Personnel. The new Drafting Division was in charge of the drafting work for the office.

During October, the conduct of this branch was placed under two general officers. One supervised matters relating to enlisted men, the Enlisted Reserve Corps, and the organization and assignment of engineer units; the other concerned himself with fortifications, military roads, commissioned personnel, engineer equipment, the Engineer School, and engineer officers training camps (Regular, Reserve, and National Guard).

Prior to the end of 1917, the following temporary Sections were established in the Branch: Camouflage, Electrical and Mechanical, Forestry, General Construction, Mining and Quarrying, Sound and Flash Ranging, Surveying and Printing, and Water Supply. These units were charged with the study of their respective specialties and with the task of training and providing personnel for this work for the American Expeditionary Forces.

DIRECTOR GENERAL OF MILITARY RAILWAYS

On July 17, a Director General of Railways was appointed by the Secretary of War, to be responsible to the Chief of Engineers and to direct the operations of the Railroad Division. His special duties were as follows:

To procure personnel, materials and supplies for Army railroad operations in France.

The title was subsequently changed to "Director General of Military Railways." The Director's office functioned through two Divisions: Personnel and Material. The supply organization of the office, outside of the purchase of motive power, rolling stock, and maintenance-of-way material for the military railways overseas, was the General Engineer Depot, which disbursed all funds and placed all formal orders and contracts.

1918

On Jan. 14, the Military Branch, Office of the Chief of Engineers, functioned through eight Divisions: Administrative, Drafting, Equipment and Construction, Organization, Personnel, Railroad, Record, and Special Service.

The functions of the newly created divisions were as follows:

Organization Division

To have charge of the organization, training, and equipment of engineer units; recruiting for special engineer regiments, engineer enlisted reserve corps, and replacement troops for divisional engineer regiments; and transfer of enlisted men between, to, and from, engineer units.

Special Service Division

To handle all matters affecting the Corps of Engineers in connection with: War Industries Board; Clearance Committee; Priorities Committee; Food and Fuel Administration; transportation, inland and overseas; allied commissions and all similar matters.

By Feb. 7, the organization of the Office of the Director General of Military Railways had assumed the following structure:

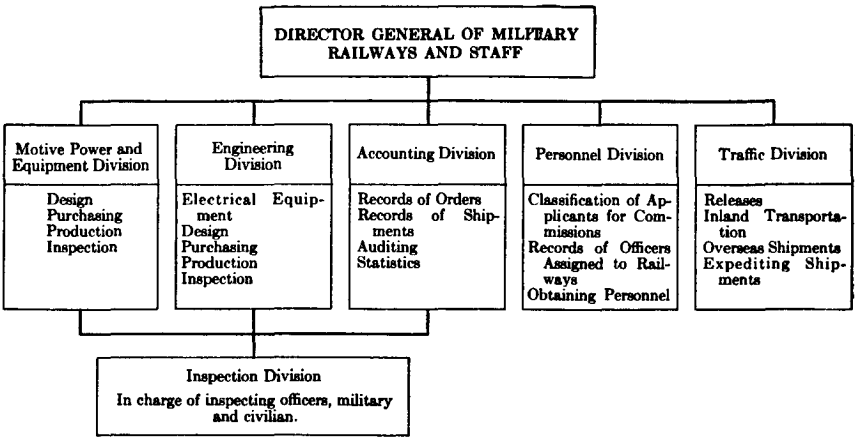


CHART NO. 27.—*ORGANIZATION OF MILITARY RAILWAYS, DIRECTOR GENERAL'S OFFICE*
Feb. 1918

At this time, in addition to negotiating purchase of railway materials and equipment and of port equipment for the A.E.F., the Director General of Railways also procured like articles for home use of the War Department and other governmental departments. However, the General Engineer Depot continued to place all formal orders and contracts when negotiations were completed and to make all payments.

On Feb. 16, the Record Division of the Military Branch was abolished and its files transferred to the Administrative Division.

During the spring, arrangements were made to subordinate the General Engineer Depot to the Director General of Military Railways, and June 1, the depot was formally placed under the Office of the Director General by order of the Chief of Engineers. On June 21, the organization for furnishing engineer equipment and materials to the A. E. F. was as follows:

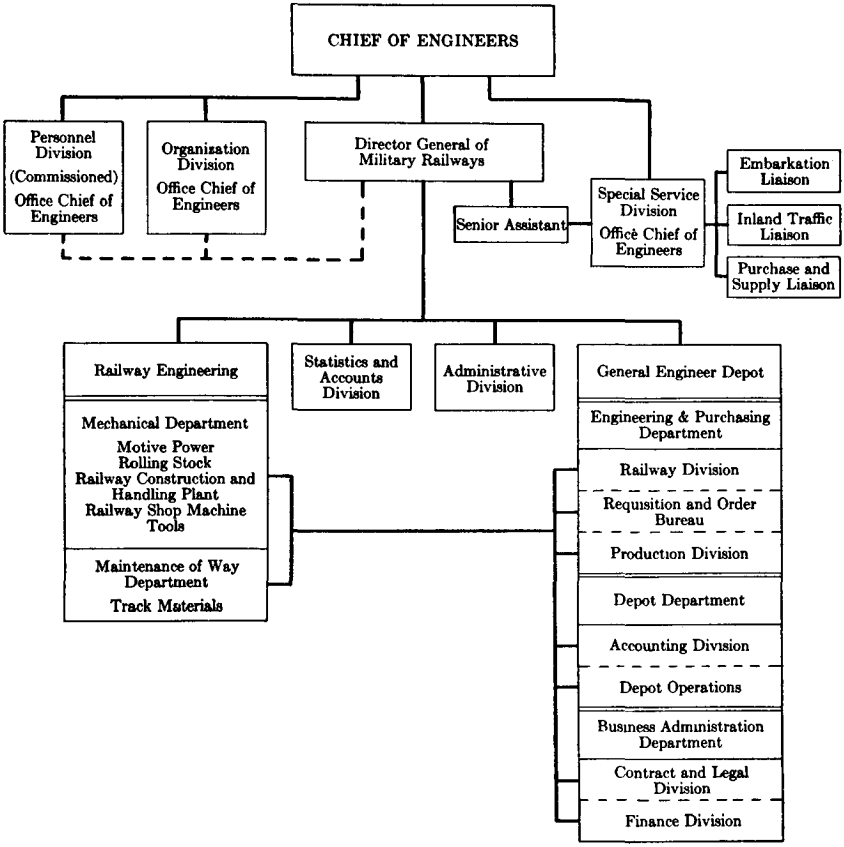


CHART NO. 28.—*ORGANIZATION OF CORPS OF ENGINEERS FOR OVERSEA SUPPLY*
June 1918

OTHER OFFICE CHANGES

On July 8, the Equipment and Construction Division, Military Branch, was discontinued and in lieu thereof two new divisions were created with functions as follows:

Equipment and Operations Division

To supervise the procurement of enlisted men and the training of engineer troops, and to supervise engineer military operations in connection with projects other than fortifications and mapping.

Fortification and Mapping Division

To supervise the procurement of enlisted men and the training of engineer troops and engineer military operations in connection with seacoast fortifications and military mapping.

On Sept. 6, the Enlisted Personnel Section was taken from the Equipment and Operations Division and transformed into a division of the Military Branch with functions as follows:

Enlisted Personnel Division

To handle matters pertaining to enlisted personnel.

The General Engineer Depot operated under the Director of Military Railways until Nov. 1, when purchasing (other than a comparatively few items left to the Corps of Engineers) and storage were transferred to the Director of Purchase and Storage. Similarly, finance functions were taken over by the Director of Finance. Thereafter, the General Engineer Depot became the Technical Engineer Design and Procurement Division of the Office of the Director General of Military Railways.

After the Armistice, the following principal changes occurred in the Office of the Chief of Engineers: (1) the Civil Works and Military Branches were discontinued as major subdivisions; (2) the Organization Division was abolished; (3) the Administrative Division was superseded by a new Office Division; (4) a Finance Division took over the duties of the Accounts and Contracts Division, which was discontinued; (5) the Fortification and Mapping Division was abolished and some of its duties were absorbed by a new Military Construction Division. The functions of the new divisions were as follows:

Office Division

To have charge of the internal administration of the Office of the Chief of Engineers, including records, mailing, index, supplies, disbursements, mechanical reproduction, distribution of documents, and compilation of historical data. It functioned through some 10 sections, including Historical Data Section and Disbursement Section.

Finance Division

To handle all matters pertaining to contracts and money accounts, property accountability, claims, and various other matters.

Military Construction Division

To handle the design and construction of fortifications and military mapping. It functioned through three Sections: Drafting; Fortification, Design, and Construction; and Military Mapping.

1919

After the cessation of hostilities, the activities of the Director General of Military Railways decreased. By Feb. 14, the Office of the Director General, including the Technical Engineer Design and Procurement Division, had been made a part of the Equipment Section, Troop Division, appearing on the chart, which also shows the structure of the Office of the Chief of Engineers at this time.

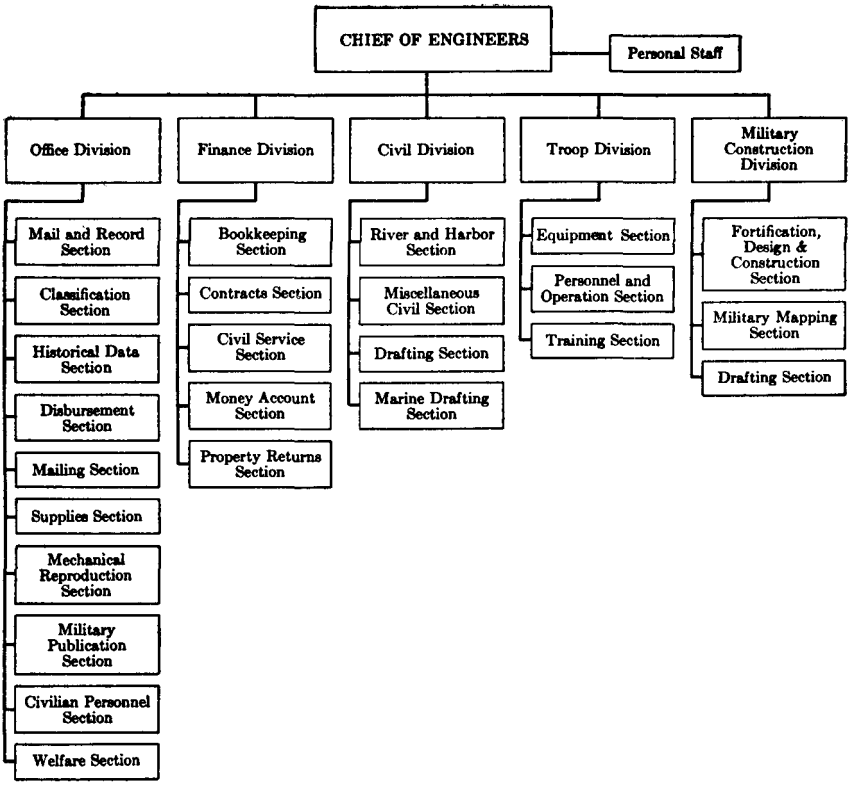


CHART NO. 29.—*ORGANIZATION OF THE OFFICE OF THE CHIEF OF ENGINEERS*
Feb. 1919

In this reorganization, two Divisions (Railway and Special Service) were abolished. However, the functions of seven Divisions—Equipment and Operations, Commissioned Personnel, Enlisted Personnel, Mail and Record, Miscellaneous Civil, River and Harbor, Drafting—were retained in sections with similar designations as part of the Office Division, the Military Construction Division, and the two new divisions whose functions were as follows:

Troop Division

To handle matters pertaining to commissioned and enlisted personnel, and to equipment and training.

Civil Division

To coordinate the civil activities of the Office of the Chief of Engineers. This division performed the duties of the former Civil Works Branch.

FIELD ORGANIZATION AND INSTALLATIONS

SUPPLY ESTABLISHMENTS

The supply functions of the Corps of Engineers were centered

in its General Engineer Depot, until procurement and fiscal functions were removed from the Corps in the fall of 1918.

The Depot Department of the General Engineer Depot supervised all engineer depots and functioned through the following subdivisions:

Accounting Division	Embarkation Depot, New York
Engineering Division	Embarkation Depot, Norfolk
437th Engineer Depot Detachment	Expeditionary Shipping Ports
Interior Depot, Washington, D. C.	Departmental Depots
	Cantonment Sub-Depots

The Accounting Division followed the records of shipment of all engineer material from point of production to its delivery on board ship, or to camp depot, or organization.

The Engineering Division prepared plans and specifications for the construction of engineer depots.

Interior Depot, Washington, D. C.

This depot comprised Storehouses 1, 2, and 3.

Storehouse 1, at Washington Barracks, D. C., was used for storage of searchlight materials and seacoast-fortification matériel.

Storehouse 2, at Eckington Place, Washington, D. C., with about 25,000 sq. ft. of storage space, was used for storage and issue of engineer equipment and matériel.

Storehouse 3, at Fourth and Channing St., NE., Washington, D. C., known as "the Washington Depot" had 81,000 sq. ft. of covered storage space and 5.8 acres of open storage. This depot was used principally for recepit, storage, and issue of engineer unit-accountability equipment distributed to troops throughout the United States.

Embarkation Depot, New York, N. Y.
(New York Engineer Depot)

This depot contained about 73 acres of leased land, with a frontage of 1,800 ft. on the Passaic River. Facilities included: administration building, barracks, 4 warehouses, garage, machine shop, storage shed, 15 miles of railway track, classification yard of 250-car capacity, 1,400 ft. of bulkhead wharf and 4 open piers, each 150 ft. long. It had a covered storage space of approximately 300,000 sq. ft., and 30 acres were used for open storage. The depot operated for the Port of New York, shipping overseas engineer equipment and matériel, all of which were delivered by lighters to shipside.

Embarkation Depot, Norfolk, Va.
(Lamberts Point Engineer Depot)

This depot, located at Lamberts Point, included shipping ter-

minals leased from the Norfolk and Western Railroad and a 66-acre reservation, with a 1,200-man cantonment to accommodate the depot personnel. Of the total area, 34 acres were available for storage including five warehouses with a storage capacity of 310,000 sq. ft., and two covered piers and one open pier totaling 3,200 feet in length. At Portlock, Va., an additional 177 acres were leased, of which 75 acres served as a railroad classification yard with 20 miles of trackage, and as open storage. The depot operated for the Port of Newport News, Va., in the shipment overseas of engineer equipment and matériel.

Expeditionary Shipping Ports

Expeditionary depots or shipping ports were established to handle engineer matériel at the following points: Philadelphia, Pa.; Baltimore, Md.; Mobile, Ala.; Jacksonville, Fla.; and New Orleans, La. They were known as Philadelphia Engineer Depot, Baltimore Engineer Depot, Mobile Engineer Depot, Jacksonville Engineer Depot, and New Orleans Engineer Depot.

Engineer officers, assisted by the necessary military and civilian personnel, supervised the handling of all engineer freight passing through these ports for overseas.

Special shipments, consisting mostly of lumber and railroad ties, were made through the ports of Brunswick, Ga.; Gulfport, Miss.; Mosspoint, Miss.; and Port Arthur, Tex.

Departmental Depots

FORT LEAVENWORTH, KANS.

This depot provided storage for military bridge equipage, tools, stores, and miscellaneous supplies. Facilities included 10,000 sq. ft. of storehouse space, 15,000 sq. ft. shed space, and 5.7 acres open space.

FORT SAM HOUSTON, TEX.

Purchasing agency for all military engineer operations in Southern Department, as well as distributing center for equipment and supplies received from General Engineer Depot.

Available storage: 26,000 sq. ft., storehouse; 61.5 acres, open; 26,000 sq. ft., shed space.

FORT DOUGLAS, UTAH

Established in Aug. 1918, by removal of depot from Vancouver Barracks, Wash. Functioned only for storage, routine repair, and issue.

VANCOUVER BARRACKS, WASH.

Until Aug. 1918, provided storage for military bridge equipment, tools, stores, and miscellaneous supplies.

Available storage: 16,675 sq. ft., storehouse; 8,000 sq. ft.,

shed; 5.3 acres open space.

COROZAL, CANAL ZONE

This depot received, stored, repaired, and issued property pertaining to the mobile army, the Canal Zone coast artillery, and military mapping of the Isthmus of Panama.

HONOLULU, HAWAII

This depot assembled and issued military engineer property for the Hawaiian Department.

MANILA, P. I.

This depot provided storage for ponton equipage and other engineer matériel required for a reserve or for issue in the Philippine Department.

Engineer Subdepots

Subdepots for the receipt, storage, and issue of engineer equipment and supplies to troops in the United States were established in the fall of 1917 as follows:

No.	Camp	No.	Camp	No.	Camp	No.	Camp
405	Devens	414	Custer	424	Sevier	433	Beauregard
406	Upton	415	Grant	425	Wheeler	434	Kearny
407	Dix	416	Pike	426	MacArthur	435	Greene
408	Meade	417	Dodge	427	Logan	470	Fremont
409	Lee	418	Funston	428	Cody	471	Humphreys
410	Jackson	420	Lewis	429	Doniphan	474	Forrest
411	Gordon	421	Wadsworth	430	Bowie	475	Ft. Benjamin Harrison
412	Sherman	422	Hancock	431	Sheridan		
413	Taylor	423	McClellan	432	Shelby		

NOTE.—The depot number, besides identifying the camp, also represented the number of the particular engineer depot detachment serving thereat.

TRAINING FACILITIES

Engineer School, Washington, D. C.

This service school for commissioned personnel was discontinued June 30, 1917, and transferred to Camp A. A. Humphreys in June 1919.

FUNCTIONS

To prepare the junior officers of the Corps of Engineers for the active duties of their arms and Corps; to make researches in such branches of science as relate to the duties of the Corps of Engineers; to disseminate information so obtained; to make such experiments and recommendations and give such instruction as may be necessary for the civil engineering work of the Army.

Engineer Officers' Training Camps

The first series of officers' training camps was held from May to Aug. 1917 in 16 camps at 13 different localities. An engineer company of 150 students was allotted to each camp until June, when engineer training camps were established at Vancouver Barracks, Fort Leavenworth, and near Washington, D. C., and the student engineer companies transferred to them. Engineer

officer candidates attending the second series of camps, Sept.-Nov. 1917, also received training at these stations.

From Jan. to Aug. 1918, all engineer candidates were sent to an officers' training camp at Camp Lee, Va. On Aug. 10, the training cadre was transferred to Camp A. A. Humphreys, Va., where it resumed activity under designation of the Engineer Officers' Training School.

Number of graduates from all camps and schools about 10,000.

Enlisted Men's Establishments

WASHINGTON BARRACKS, D. C.

The trade schools for enlisted men of the Regular engineer troops were suspended about June 30, 1917. Courses were reopened Jan. 1918 in connection with the training of the 1st Engineer Replacement Regiment, stationed at the post, and were continued until June 30, 1919.

The central map reproduction plant, operating at this station, absorbed personnel of the 472d Engineers (Military Mapping).

CAMP A. A. HUMPHREYS, VA.

Trade schools similar to those conducted at Washington Barracks were operated here from May to Dec. 1918.

Construction of an engineer replacement camp, to house 30,000 men, began in Jan. 1918. By spring sufficient quarters were completed to receive the first replacement troops.

FORT BENJAMIN HARRISON, IND.

During the first 8 months of 1918, this post served as a mobilization center and training camp for railway specialists. It was officially taken over by the Engineer Corps July 26, 1918, when 210 officers and 11,656 enlisted men were undergoing training.

CAMP ALEXANDER, VA.

This camp was made available to the Engineer Corps in Sept. 1918, for the organization and training of colored engineer troops.

CAMP FORREST, GA.

Used as engineer replacement camp. See p. 819.

PERSONNEL

OFFICERS

Throughout the war, the Regular officers of the Corps of Engineers were assigned to duty as follows:

Status	Apr. 10, 1917	Oct. 1, 1918	June 30, 1919
On military duty exclusively	185	413	387
Performing both military and nonmilitary duty	24	21	48
On nonmilitary duty exclusively	43	5	26
Unassigned, in hospitals, etc	4	10	9
Totals	256	449	470

Until Aug. 7, 1918, officers were commissioned in the Corps of Engineers (Regular Army), in the Engineer Officers' Reserve Corps, or as engineer officers of the National Guard and National Army. At this time, personnel of the Engineer Officers' Reserve Corps on active duty numbered 7,152; of the National Guard, 605; and of the National Army, 2,958, of whom 1,712 were originally appointed in the National Army and 1,246 acquired by transfers and promotions. As of Aug. 7, all distinction between Regular Army, Reserve, National Guard, and National Army ceased. Thereafter, all officers were considered as commissioned in the United States Army.

The total number of engineer commissions issued, from declaration of war to June 30, 1919, was 13,527, including promotions, and 704 officers originally commissioned in the Corps who later transferred to other branches. The greater part of these consisted of transfers to the Transportation Corps (Railway) which, June 30, 1919, still had 673 officers on active duty.

On Nov. 11, 1918, there were 10,866 engineer officers on the rolls, and 6,838 June 30, 1919.

ENLISTED MEN

On Apr. 6, 1917, there were about 2,228 men serving in engineer units. On Nov. 11, 1918, the approximate total enlisted strength was 284,983 of which 232,935 men were overseas. By June 30, 1919, the total owing to discharges had declined to 97,909, of which 70,031 were still serving overseas.

DEPOT PERSONNEL

At outbreak of war, the personnel of the General Engineer Depot consisted of 1 officer and 26 civilian employees; by Sept. it had increased to 28 officers and 93 civilians; and June 30, 1918, it numbered 127 officers, 517 enlisted men, and 602 civilian employees attached to the General Engineer Depot proper, and 27 officers and 33 civilians attached to the Office of the Director General of Military Railways. In addition, 25 officers, 191 enlisted men, and 2,557 civilians were employed at the port depots.

ENGINEER UNITS

Divisional Units and Corps Troops

At declaration of war, engineer troops consisted of three regiments, one mounted company, and one band. Shortly after July 1, 1917, additional units were organized to make the total seven regiments (numbered from 1 to 7), two mounted battalions (numbered 8 and 9), eight engineer trains (six for infantry and two for cavalry divisions), and one band.

Each of the 17 National Guard divisions, which were organized during the war, had one engineer regiment (sappers) and one engineer train. The regiments and trains were numbered from 101 to 117, both inclusive.

In the National Army, prior to Aug. 7, 1918, nineteen divisional sapper regiments had been organized. In addition, five sapper battalions had been created, one for each of five engineer regiments to be employed as corps troops. The second battalions for these regiments were organized later.

In all, 61 sapper regiments, 2 mounted battalions, and 51 trains (including 2 for cavalry divisions) were organized.

Special Units

Special engineer troops were organized as follows:

For Service Abroad

Number of Organizations	
2	Forestry regiments
3	Forestry battalions
	Light railway:
1	Construction regiment
1	Operating regiment
1	Shop regiment
	Railway:
1	Construction regiment
1	Construction battalion
2	Maintenance of equipment battalions
4	Maintenance of way battalions
1	Operating regiment
1	Shop regiment
1	Transportation battalion
1	Car repair battalion
1	Locomotive repair battalion
	Standard-gage railway:
7	Construction regiments
3	Construction battalions
2	Maintenance of way battalions
5	Operating regiments
14	Operating battalions
1	Operating and maintenance regiment
2	Shop regiments
1	Transportation battalion
1	Camouflage battalion
1	Crane operating battalion
1	Dock construction regiment
3	Dock construction battalions
1	Domestic antiaircraft searchlight operating regiment
1	Dredge operating detachment
2	Electrical and mechanical regiments
2	Electrical and mechanical battalions
1	Gas and flame regiment
4	General construction regiments
11	General construction battalions
1	Highway regiment
1	Inland waterway regiment
1	Mining regiment
1	Ponton park
6	Ponton trains
1	Quarry company
1	Quarry regiment (railway)
6	Road battalions
2	Searchlight regiments
59	Service battalions
1	Sound and flash ranging battalion
1	Supply regiment
2	Supply and shop regiments
1	Surveying and printing regiment
1	Tank service regiment
1	Trades and storekeepers battalion
1	Water supply regiment
2	Water supply battalions
1	All-weather car company
1	Limousine company
2	Motorcycle companies
1	Touring car company
13	Truck companies

For Service in United States

55 Engineer depot detachments
10 Engineer training and replacement regiments
1 Gas defense service battalion
1 Military mapping service regiment

The battalion and regimental strength of these special organizations varied greatly. Normally, the battalions consisted of three companies; however, many had four and some even more. Usually, a regiment was organized into two battalions, but many had more.

Forestry Service

Forestry troops carried on lumbering operations in the forests of France to meet the A. E. F. needs. Between Sept. 1917 and the end of Aug. 1918, five forestry units (10th, 20th, 41st, 42d, and 43d Engineers) were organized in the United States and sent to France. Besides, seven engineer service battalions (503d, 507th, 517th, 519th, 523d, 531st, and 533d—the last six colored) were organized to be sent abroad. In Oct. 1918 most of the forestry units were absorbed by the 20th Engineers which, upon reorganization, comprised 14 battalion headquarters, 28 engineer service companies, and 49 engineer companies, all overseas, together with 15 additional battalion headquarters and 96 engineer companies in process of organization in the United States.

Motor Transport Service

Eighteen engineer motor transport companies (442d to 445th, 448th to 453d, and 456th to 463d), authorized Dec. 7, 1917, were mobilized in Mar., July, and Aug. 1918 and sent overseas. On Sept. 1, 1918, these units were transferred to the Motor Transport Corps.

Gas-Defense Service

Gas and flame troops (30th Engrs.) and gas-defense troops (473d Engrs.), the former organized as part of the Corps of Engineers and the latter acquired from the Sanitary Corps, Medical Department, were transferred to the Chemical Warfare Service in July 1918, and Sept. 1918, respectively.

Tank Service

With the organization of the 65th Engrs., in the winter of 1917, the Tank Service was established as part of the Corps of Engineers, with an authorized maximum strength of 4,644 men. When the Tank Corps was created as an independent organization in May 1918, such tank troops as had been mobilized were transferred to it.

Railway Transportation Corps later known as Transportation Corps

Nine regiments of railway engineers (11th to 19th) were

mobilized during July and Aug. 1917 and sent overseas to serve along the British, French, and American lines of communications. In Oct. 1917, these regiments became the nucleus of a railway transportation service that had been ordered organized. Subsequently, this new Railway Transportation Corps was much enlarged and, in France, became independent of other engineer organizations.

By Nov. 11, 1918, a total of 51 railway units had been organized, containing 69,000 men already serving abroad and an additional 14,000 in the United States awaiting orders.

In addition to these totals, the 301st, 302d, 303d Stevedore Regiments, Quartermaster Corps, (21,318 officers and men) had been transferred to the Transportation Corps during Sept. 1918 in the A. E. F., and the 304th Stevedore Training Regiment at Camp Alexander, Va., had been transferred to the Corps of Engineers.

Thereafter, the Corps of Engineers was charged with the organization and training of new stevedore units and replacements for the Transportation Corps. Requisition for 36 new battalions had been made and two battalions (the 701st and 702d) had actually been sent overseas by Nov. 22, 1918, when the remaining stevedore troops in the United States were ordered demobilized.

Engineer Enlisted Reserve Corps

Specially qualified men had been enrolled as reservists prior to the war. This personnel was called to active duty in the railway regiments organized in 1917. Thereafter, the Enlisted Reserve Corps became inactive. Reserve enlistments were discontinued in 1918 and practically eliminated toward the end of the year, in accordance with a new policy of the War Department.

Special Engineer Enlisted Reserve Corps

In 1917, Selective Service Regulations were modified to permit deserving engineer students in recognized technical institutions to enlist in the Corps and continue their studies. Some 3,000 students were involved. On Aug. 8, 1918, upon the organization of the Students' Army Training Corps, voluntary enlistments in the Special Engineer Enlisted Reserve Corps were discontinued, and, Oct. 3, most of the students were transferred to the Training Corps, while the remainder were otherwise assigned or discharged.

ACTIVITIES

SUPPLY

GENERAL ENGINEER DEPOT

Prior to the war, this depot—then known as the Engineer Depot, Washington Barracks, D. C.—purchased most of the military supplies required by the Corps of Engineers. Its office occupied only 3,500 sq. ft. of floor space in a storehouse at Washington Barracks. In the fiscal year preceding the war its purchases aggregated but $550,000.

New quarters and a vastly expanded force were needed to fulfill its wartime functions. A fortnight after declaration of war, the depot had awarded contracts covering engineer equipment and supplies for an army of 1,000,000 men.

From July 1, 1917, to June 30, 1919, the depot placed orders for supplies and equipment totaling more than $870,000,000.

Embarkation Depot, New York

From Sept. 1, 1917, to Nov. 1, 1918, some 650,000 tons of matériel and equipment were received at this depot, of which about 550,000 tons were shipped to the American Expeditionary Forces.

Embarkation Depot, Norfolk

This depot received about 643,000 tons of engineering matériel and equipment from the beginning of Sept. 1917, to Nov. 1, 1918, and shipped all but some 50,000 tons overseas.

Expeditionary Shipping Ports

While these shipping points were under the control of the Corps of Engineers, some 220,000 tons of equipment and matériel were received and approximately 200,000 tons were shipped to Europe.

Departmental Depots

The Fort Sam Houston Depot acted as a purchasing agency for the troops in the Southern Department. During the 1918 fiscal year, this depot equipped the following units with engineer matériel: 22 regiments of cavalry, 20 regiments of infantry, 16 regiments of field artillery, 13 regiments of engineers, and 4 engineer trains.

From July 1 to Nov. 1, 1918, this depot continued to equip all troops in the Southern Department as well as the Infantry School of Arms and the Field Artillery School of Fire at Fort Sill.

The other departmental depots carried on in a similar manner or attended to their particular routine duties.

OFFICE OF THE DIRECTOR GENERAL OF MILITARY RAILWAYS

The matériel procured under the supervision of the Director General of Military Railways, during the war period, included the following major items:

Standard-gage locomotives	3,750
Locomotives, 60-cm. gage	1,501
Locomotives, 36-in. gage	46
Cars, standard-gage	91,519
Cars, narrow-gage	8,530
Logging cars, 36-in. gage	400
Locomotive cranes, 7½ to 120 tons	823
Gantry cranes	76
Equipment sets for water stations, complete	100
Rails, 60-pound, tons	749,345

In addition, there was purchased the entire equipment for the following:

2 general repair shops for standard-gage railroads.
2 general repair shops for narrow-gage railroads.
1 car erection shop.
36 engine houses, also hand tools and machinery for locomotive and car repairmen in French shops.

Matériel Shipped Overseas

Engineer supplies purchased for military use totaled 4,636,000 tons, of which 4,217,000 tons were earmarked for export. Actual shipments from the mills totaled 1,866,000 tons, of which 1,744,000 were received at ports of embarkation and 1,555,000 shipped to the American Expeditionary Forces. Matériel shipped fell in the following categories:

Category	Tons	Category	Tons
General machinery	45,454	Building materials and supplies	98,671
Iron and steel products	242,226	Liquids	7,067
Hardware and hand tools	26,780	Explosives and accessories	952
Railway rolling stock	343,888	Engineer supplies	52,106
Railway motive power	144,066	Miscellaneous office supplies	2,239
Lumber	39,086	Floating equipment	10,093
Track materials and fastenings	488,793	Material and tools for locomotive and car repair and erection shops	10,047
Automotive transportation, etc	22,127		
Horse-drawn transportation	7,967		

Materials for combat use included 21,000 tons of barbed wire and 85,120 steel shelters.

STATUS OF RAILWAY MATÉRIAL, NOV. 11, 1918

Rolling stock and other railway equipment shipped overseas, en route, or awaiting shipment at the ports included the following:

Items	Number overseas	Number en route or at ports
Standard-gage locomotives	1,408	332
Extra tenders	15	
Locomotives, narrow-gage	406	32
Freight cars, standard-gage	19,271	3,217
Cars, narrow-gage	7,591	329
Cranes, locomotive, 7½–85-ton	120	
Cranes, gantry, 5-ton	33	
Locomotive repair shops, standard-gage	2	
Car erection shop, standard-gage	1	
Engine houses, standard-gage	12	
Locomotive repair shop, narrow-gage	1	
Engine houses, narrow-gage	6	
	Miles overseas	
Fabricated track, 40-cm., with 12-lb. rail	150	
Fabricated track, 60-cm., with 25-lb. rail	490	
Rails, 25-lb., and fasteners	435	
Standard-gage railway track laid in France	957	

Of other engineering equipment procured in the United States, mention must be made of 6,923 trucks, 2,082 portable buildings, 124 portable shop and material trucks, 51 portable pile drivers, 90 electric storage trucks, 6,006 boilers, 700 cranes including those already listed, and 886 hoisting engines. Two-thirds of this equipment was shipped overseas.

FORTIFICATIONS

During the war, the following appropriations were made for the construction and maintenance of fortifications in the United States and insular possessions:

Purpose	United States	Hawaiian Islands	Philippine Islands
Construction of gun and mortar batteries	$5,380,000	$720,000	$395,000
Modernizing older emplacements	139,250		
Fire control at fortifications	3,756,021		
Electric and sound-ranging equipment	1,810,000	20,000	
Searchlights	6,150,000	20,000	33,000
Sites for fortifications	100,000		
Preservation and repair of fortifications	750,000	27,500	70,000
Plans for fortifications and other works of defense	50,000		
Reserve equipment			3,250
Supplies for seacoast defenses	190,000		
Seawalls and embankments	93,000	23,000	
Submarine mines and mine defense structures	910,000	40,000	140,000
Electrical and other supplies		12,500	40,000
Totals	19,328,271	863,000	681,000

RESEARCH

The Corps of Engineers standardized the formula of quality requirements for certain paints and varnishes; of mechanical rubber goods (hose, packing, and sleeves); and of certain items

of hardware. It evolved a standard rating for internal combustion engines; and, in cooperation with the Bureau of Mines, developed a cheaper explosive to replace TNT in engineering operations and improved the devices for electrical detonation.

At the end of war, experiments were under way to develop a process which would hasten the setting of concrete. Plans were also being made to inaugurate production within the United States of photographic colors and tone chemicals formerly secured only in Germany.

TRAINING

OFFICERS AND CANDIDATES

The first series of engineer officers' training camps was attended by 745 student officers and 1,410 candidates; the second, by 1,500 student officers; the third (at Camp Lee, Va.), by 1,500 students, of whom about 750 were Reserve officers and the remainder candidates; the fourth by about 1,200 students, consisting of Reserve officers, candidates from the ranks, and honor graduates of various technical schools. About 4,900 students entered the Engineer Officers' Training School at Camp Humphreys.

ENLISTED MEN

Sufficient personnel with the requisite mechanical or technical skill to make the operation of engineer specialty units effective could only be obtained by giving selected enlisted men instruction in various trades. Accordingly, approximately 8,384 students were enrolled in the following courses: operation and construction of standard-gage and light railways; ponton-bridge work; carpentry; masonry; motor and animal transportation; highway construction and maintenance; surveying; lithography; map reproduction; photography; sound and flash ranging; forestry; electrical trades; searchlight operation; oxyacetylene welding; machine-shop work; rigging; blacksmithing; plumbing; drafting and stenography.

REPLACEMENTS

Automatic replacements for oversea troops began in May 1918 and continued until the Armistice. Training in replacement units was started at Washington Barracks in Mar. 1918 and was later transferred to Camp A. A. Humphreys. Five engineer regiments were organized by July 1, and five more by Nov. 1918.

DEMOBILIZATION

PERSONNEL

Of the 10,886 engineer officers in the service Nov. 11, 1918, about 4,048 had been discharged by June 30, 1919. On Nov. 1,

1919, only 378 emergency officers remained, 100 of whom were undergoing physical reconstruction. Two months later, this category had been reduced to 149 temporary officers. In addition, there were 409 Regular officers in the Corps of Engineers.

Demobilization of enlisted personnel, numbering 292,306 Nov. 11, 1918, was practically completed by Oct. 31, 1919.

Of the 93 engineer regiments, 88 separate engineer battalions, and 314 separate engineer companies or detachments extant Nov. 11, 1918, only 8 regiments, 2 separate battalions, and 11 separate detachments were in service in March 1920.

MATÉRIEL

At date of Armistice, approximately 197,000 tons of matériel, valued at $31,000,000, were stored at or near the ports awaiting shipment to France. This matériel comprised the following:

294 cranes; 20 pile drivers; 2,168 locomotives, standard-gage; 618 locomotives, narrow-gage, 60-cm.; 73,179 railway cars, standard-gage; 3,818 railway cars, narrow-gage, 60-cm.; 617,915 tons of rail; and 240,000 tons of lumber; 17,000 tons of building material; 6,000 tons of engineer supplies; and 482 tons of floating equipment.

The principal orders placed with manufacturing concerns Nov. 11, 1918, totaled $365,361,387 and called for the production of—

294 cranes; 20 pile drivers; 2,168 locomotives, standard-gage; 618 locomotives, narrow-gage, 60-cm.; 73,179 railway cars, standard-gage; 3,818 railway cars, narrow-gage, 60-cm.; 617,915 tons of rail; and 240,000 tons of miscellaneous engineer supplies.

In addition to these items, special types of mobile engineer equipment were in production as follows:

124 special portable shops mounted on motor trucks; 26 portable pile-drivers; 3,106 special limbered tool wagons for engineers attached to combat units; ponton bridge equipment including 1,248 pontons, 1,710 ponton wagons, 210 tool wagons; 90 automobile searchlight trucks, 60-in.; 177 automobile searchlight trucks, 36-in.; and 300 heavy sectional steel bridges for spans from 35 to 90 ft.

SETTLEMENT OF CLAIMS

The Engineer Claims Board took cognizance of 171 claims, approximating $238,245,189 in value. By May 15, 1920, 168 of these claims representing $235,453,305 had been adjusted. In the settlement, matériel to the extent of $16,964,304 was accepted, while delivery of $218,498,410 worth of supplies and equipment was cancelled, for which $1,853,180 was paid in cancellation charges.

DISPOSAL OF PROPERTY

Up to May 1920, the Engineer Board of Sales Control disposed of $110,260,320 worth of equipment and supplies, averaging a return of more than 84 percent on original costs.

Purchases were made by individuals, commercial organizations

and municipalities in the United States and by foreign governments, including France, Belgium, Poland, and Yugoslavia. France alone bought 438 consolidated locomotives and 19,860 freight cars, amounting to $66,000,000.

Of the matériel remaining, engineer equipment was stored at various depots as a war reserve stock and the balance was transferred to other governmental agencies.

SECTION 9

CHIEF OF FIELD ARTILLERY

ORIENTATION

The initial appointment of a Chief of Field Artillery was made Feb. 10, 1918, under the wartime powers of the President.

Prior to this date, the mobilization of the Field Artillery had been under the direct supervision of the General Staff, through the senior field artillery officer of that body who headed the Field Artillery Section. However, the instruction and training of the Field Artillery had been under the direction of the Training Section of the General Staff.

While these developments were taking place in the United States, Brig. Gen. Ernest Hinds performed the duties of Chief of Artillery in the A. E. F., although not formally appointed until Apr. 29, 1918.

FUNCTIONS

As Defined Aug. 26, 1918

To keep the Chief of Staff advised and informed with respect to field artillery matters, including the efficiency of the personnel and matériel; to take adequate measures for the preparation for oversea service of the field artillery organizations called for by the military program; to make recommendations to the Chief of Staff regarding matters affecting the Field Artillery; to exercise, in accordance with the general policies prescribed by the Chief of Staff, direct supervision over the training of all field artillery units; to correspond directly with training-camp commanders; and to consult and correspond directly with bureau chiefs and heads of departments.

CHIEFS

1918		
Feb.	10	Brig. Gen. William J. Snow
July	9	Maj. Gen. William J. Snow
1919		
Jan.	22	Brig. Gen. Edward H. De Armond (acting)
Feb.	1	Maj. Gen. William J. Snow
Apr.	7	Brig. Gen. Edward H. De Armond (acting)
May	23	Maj. Gen. William J. Snow
June through June	17 20	Brig. Gen. Edward H. De Armond (acting)

ORGANIZATION AND DEVELOPMENT

WASHINGTON OFFICE ORGANIZATION

1918

All matters reaching, or originating in, the War Department which required action or recommendation by the Chief of Field Artillery, were referred to him. This included reports of inspectors or other officers affecting the efficiency of field artillery officers.

On Aug. 26, the organization of the Office of the Chief of Field Artillery was announced as shown on chart.

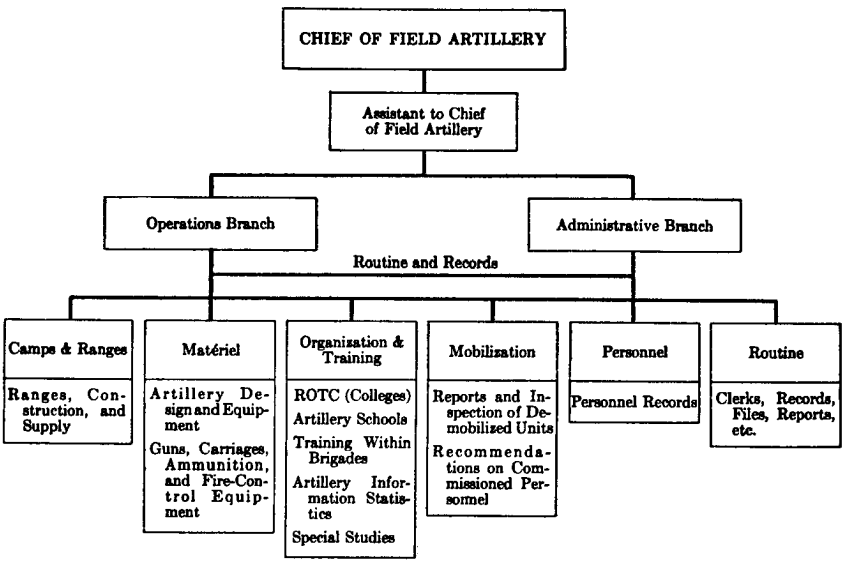


CHART NO. 30.—*OFFICE OF THE CHIEF OF FIELD ARTILLERY*

1920

On June 4, the office of Chief of Field Artillery was made permanent by statute.

FIELD ESTABLISHMENTS

School of Fire for Field Artillery, Fort Sill, Okla.

This institution was established in 1911. During the concentration of U. S. troops on the Mexican border the school was closed. It was reopened in July 1917 and ordered reorganized 2 months later. Reorganization included enlargement of facilities to accommodate 1,200 students, a school detachment of 250 men, and 150 instructors. Construction of barracks and quarters was started immediately, and 2,000 acres of additional land were leased (see p. 929).

Field Artillery Central Officers' Training School, Camp Zachary Taylor, Ky.

This school was organized for field artillery officer candidates and was opened June 15, 1918, with 160 instructors and 3,800 students (see pp. 85, 87, 894).

Field Artillery Brigade Firing Centers

Centers of instruction were established to train field artillery organizations, in brigade units, along lines followed in France. In May 1918, the following centers were opened:

Fort Sill, Okla.; target range of 52,000 acres (see pp. 204, 929).

Camp Jackson, S. C.; target range of 50,000 acres (see pp. 204, 829).

Camp Knox, Ky.; target range of 40,000 acres (see pp. 204, 878).

Camp McClellan, Ala.; target range of 16,000 acres (see pp. 204, 834).

In addition to the training of organizations, schools for commissioned and enlisted specialists were conducted.

Field Artillery Replacement Depots

During the summer of 1917, three replacement battalions of Field Artillery were organized and sent to France. Thereafter replacements were obtained by drafts from regiments in the United States. As this interfered with training, a replacement depot was opened at Camp Jackson, S. C., Apr. 22, 1918, and another at Camp Zachary Taylor, Ky., June 25.

As finally organized, the capacity at Camp Jackson was 36,000 and at Camp Taylor, 24,000 (see pp. 829, 894).

PERSONNEL

OFFICE OF THE CHIEF OF FIELD ARTILLERY

Upon organization the office personnel consisted of six officers including the Chief, with the necessary clerical assistants. By the end of 1918 the officers on duty numbered 18.

FIELD ARTILLERY FORCES

Officers

Of the 408 officers in the Field Artillery at outbreak of war only 275 had more than 1 year's service. At date of Armistice there were 17,529 field artillery officers, of whom 9,062 were overseas.

Enlisted Men

Enlisted men of the Field Artillery totaled 8,253 Apr. 6, 1917, and 323,992 Nov. 11, 1918, of whom 209,189 were overseas. Of this total 37,957 men were originally enlisted in the Cavalry. In addition, some 77,000 enlisted men of the Coast Artillery were serving in mobile coast artillery regiments.

Troops in the United States

Field artillery personnel in the United States, Nov. 11, 1918, numbered 123,260 officers and enlisted men including 50,511 troops in tactical divisions, 57,039 in detached units, and 15,710 in the Central Officers' Training School.

ACTIVITIES

ORGANIZATION

The General Staff plan of Sept. 11, 1917, never completely carried out, contemplated an army of five corps (30 divisions) in Europe in time for an offensive in 1918, and a total of three armies, consisting of 15 corps (90 divisions), in 1919. To further this plan, 42 divisions were to be raised at once, rendering it necessary to organize the same number of field artillery brigades for the divisions alone and to make provision for necessary corps and army artillery.

The Field Artillery Project

A divisional field artillery brigade was to consist of 1 brigade headquarters, 2 regiments of 3-in. or 75-mm. guns, 1 regiment of 6-in. or 155-mm. howitzers; and 1 trench-mortar battery. Although the ammunition train was actually a part of the divisional trains, it was organized and trained by the Field Artillery and for all practical purposes was a component of the brigade.

In addition to the original 42 divisional artillery brigades, constituted 1917, the Chief of Field Artillery was authorized to organize 19 brigades during 1918, viz: six July 5, ten (from National Army cavalry regiments) July 31, and three Aug. 30.

The Coast Artillery Corps organized 16 brigades of mobile artillery to serve as corps and army troops (see pp. 149, 150).

At declaration of war, there were nine field artillery regiments in the Regular Army, three of which had been in existence less than a year. By Nov. 11, 1918, not counting the 16 mobile coast artillery brigades, 11 trench-mortar battalions, 68 ammunition trains, and corps and army parks, there had been organized 61 divisional field artillery brigades and many training and replacement units.

REGULAR ARMY UNITS

In May and June 1917, 12 additional Regular Army field artillery regiments, authorized under the National Defense Act of 1916, were organized by taking cadres of trained personnel from the old regiments. In addition, eight newly organized cavalry regiments, authorized by the same act, were converted into Field Artillery. The greater part of these regiments consisted of war-

time recruits, and their cadres lacked field artillery experience. A total of 29 regular regiments were thus organized.

Five of these regiments were designated for miscellaneous duties as separate units. The remaining 24 were organized into eight divisional field artillery brigades.

NATIONAL GUARD UNITS

National Guard field artillery and cavalry units furnished the nucleus from which 51 regiments were organized and assigned to 17 divisional field artillery brigades.

A total strength of 3,247 officers and 79,917 enlisted men was called for by these brigades which, on departure overseas, averaged 90 percent of Tables of Organization requirements. However, on the basis of previous training, only 541 officers and 12,975 enlisted men could be considered National Guard artillerymen. To remedy this deficiency, some officers of the Regular Army and Reserve Corps were assigned, and personnel with prior service on the Mexican border was transferred from other branches of the National Guard. Remaining vacancies were filled by volunteers, without previous military training.

NATIONAL ARMY UNITS

The first National Army field artillery regiments were each provided, for organization and training, with a cadre of one colonel, one field officer, and one captain from the Regular Army; and with four temporary captains, appointed from selected enlisted men of the Regular Army, to take charge of the administrative work. Graduates of reserve officers' training camps and of the Central Officers' Training School filled the remaining vacancies.

The enlisted personnel came almost entirely from the draft.

On this basis, a total of 36 National Army field artillery brigades was organized, numbered from 9 to 24, 151 to 167, and 170 to 172.

TRAINING

Early Methods

The heaviest initial handicap to training was the shortage of officers who could be classified as trained artillerymen. To supplement the 275 professionals with more than 1 year's service in the army, 50 senior officers were detailed from the Coast Artillery, and 55 were transferred from other sources.

With the establishment at Saumur, France, of a Field Artillery School of Instruction in Sept. 1917, the A. E. F. was prepared to give final training also to second lieutenants commissioned in the United States from officers' training camps. Accordingly, in Dec.

1917 and Jan. 1918, some 677 field artillery lieutenants reported at Saumur to receive this instruction.

Hardly less serious was the scarcity of matériel, which necessitated the improvisation of equipment for training everywhere. At outbreak of war only 930 artillery pieces were available comprising the following calibers:

2.95-in. mountain guns and howitzers	107
3-in. guns	574
3.8-in. guns and howitzers	40
4.7-in. guns	55
4.7-in. howitzers	112
6-in. howitzers	42

These factors affected the initial training of field artillery units unfavorably, and several brigades departed for France with training incomplete.

As no provision for replacements existed, it became necessary to transfer partially trained men to National Guard brigades from National Army units, thereby disrupting their organization. This complicated matters still further and, by Jan. 1918, conditions had reached a point where drastic action was in order (see p. 224).

Training under Supervision of Chief of Field Artillery

Following the appointment of a Chief of Field Artillery in Feb. 1918, remedial projects were immediately initiated. These measures included, in addition to the establishment of replacement depots at Camps Jackson and Zachary Taylor, organization of the Field Artillery Officers' Training School, and the organization of brigade firing centers (see p. 199), the following:

Reorganization and enlargement of the School of Fire at Fort Sill.

Establishment of a system of training and coordination, through inspector-instructors, who both inspected and helped in the training of brigades.

Establishment of schools for the instruction of specialists and for the training of motor mechanics and chauffeurs.

Redistribution of matériel along equitable and efficient lines.

Arrangement whereby brigades required to wait for admission to a firing center would receive special supervised instruction at their cantonments or camps.

Coordination of training in the United States with that in France.

Coordination of artillery matériel production.

On June 26, 1918, the Chief of Field Artillery was granted authority to exercise direct control of training through brigade commanders; to choose the points where new field artillery brigades were to be organized; and to select brigades to join divisions for oversea service or otherwise, in accordance with their fitness.

To coordinate field artillery training in the United States with training overseas, provision was made to return certain officers

and enlisted men from the A. E. F. to the United States. In response to a request made in July 1918, 15 lieutenant colonels, 21 majors, 50 captains, 200 first lieutenants, and 300 second lieutenants were furnished to build up the commissioned personnel in the newly organized brigades and to act as instructors. In Oct., a new policy fixed a monthly quota of 570 experienced officers to be returned to the United States, in exchange for 700 second lieutenants. At the Armistice, the first replacement quota of lieutenants was ready to go overseas.

SCHOOL OF FIRE FOR FIELD ARTILLERY, FORT SILL, OKLA.

Instructors returned from overseas service, assisted by a number of French officers assigned for the purpose, coordinated instruction with that given in the service schools in France. On Nov. 11, 1918, the staff and instructors at the school numbered 247, field artillery students 1,554, and air service cadets 419.

A 12-week course was instituted, with a new class of 100 student officers entering each week. On Apr. 15, 1918, the weekly intake was increased to 120 and, just before the Armistice, to 200, while the length of the course was reduced to 10 weeks.

In addition, a 7-week course in aerial observation was established, with classes of 15 to 20 entering each week, which were later enlarged.

Between Oct. 1, 1917, and Apr. 4, 1919, 54 classes were graduated. During the same period 6,211 students reported. Of this number, 374 qualified as instructors in addition to 2,843 other graduates; 515 completed the course but failed to graduate; and 2,481 were discharged or relieved for other causes.

The aerial observers' course was instituted Aug. 25, 1918, and discontinued Feb. 7, 1919, during which time 715 air service cadets reported and 515 graduated.

FIELD ARTILLERY CENTRAL OFFICERS' TRAINING SCHOOL, CAMP ZACHARY TAYLOR, KY.

From June 24, 1918, when instruction began, to Nov. 11, 1918, a total of 18,253 officer candidates was admitted. Of these, 11,080 were enlisted men, 2,233 came from Student's Army Training Corps units, and 4,940 from civil life. Up to Nov. 13, 1918, 5,214 graduates were commissioned second lieutenants of Field Artillery, United States Army; thereafter up to Feb. 1, 1919, 3,251 candidates were graduated and commissioned as second lieutenants, first lieutenants, captains, or majors, in the Field Artillery Reserve Corps, according to the age limit applicable in each case as provided for by the National Defense Act.

FIELD ARTILLERY BRIGADE FIRING CENTERS

The instruction of a field artillery brigade, including the trench-mortar battery and ammunition train, covered 3 months. This training was divided into 5 progressive phases consisting of (1) preliminary work and specialist instruction, (2) firing by battery, (3) battalion firing exercises, (4) regimental problems, and (5) brigade problems.

Matériel available for light regiments consisted of one battery of 75-mm French guns and a full complement of 3-in. pieces. Heavy regiments were generally provided with 4.7 and 6-in. howitzers. In addition, one platoon each day manned the two 155-mm. howitzers in use on the range.

By Nov. 11, 1918, the firing centers had accomplished the following results:

Firing centers	Ultimate brigade capacity	Brigades trained and sent to France	Brigades in training Nov. 11, 1918	Reference
Camp Knox, Ky	6	1	2	p. 878
Camp Jackson, S. C	4	1	2	p. 829
Fort Sill, Okla	2	3	2	p. 928
Camp McClellan, Ala	2	1	2	p. 834
Total	14	6	8	

At this time, new construction was in progress at Camps Knox and Jackson to increase the capacity of these centers as indicated above. Besides, 120,000 acres had been acquired at Camp Bragg, Fayetteville, N. C., for a six-brigade firing center to replace the one at Camp McClellan.

REPLACEMENT DEPOTS

Preliminary instruction in field artillery work was given at these depots (see p. 199). Selected recruits were also instructed in the following specialties: auto mechanic, chauffeur, motorcyclist, truck driver, tractor driver, battery mechanic, machine gunner, horseshoer, stable sergeant, saddler, cobbler, carpenter, painter, wagoner, bugler, clerk, bandsman, topographical draftsman, mess sergeant, baker, cook, tailor, radio man, and telephonist.

Upon arrival at a depot, recruits were classified according to individual qualifications and assigned to a light or heavy training regiment or to the specialists' brigade. Although the plan contemplated a 72-day training period, no class ever completed more than 48 days, owing to the urgent demand for replacements.

Camp Jackson, S. C.

The replacement depot at Camp Jackson received 6,724 officers, 2,561 officer candidates, and 56,109 enlisted men from May 1 to Dec. 7, 1918. During this period, 5,054 officers, 2,561 officer candidates, and 34,018 enlisted men were transferred. Of this total 4,831 officers and 29,104 enlisted men were sent overseas.

Camp Zachary Taylor, Ky.

The depot at Camp Taylor received 1,401 officers and 17,126 enlisted men from June 25 to Dec. 7, 1918. Of this number, 24 officers and 3,000 enlisted men were sent overseas and 533 officers and 2,834 men were transferred to new organizations in the United States.

MATÉRIEL

A summary of mobile field artillery matériel manufactured durnig the emergency appears on pp. 352-354.

American Field Artillery in France was equipped with 1,828 75-mm. guns, furnished by the French, and with 143 American pieces. No 155-mm. howitzers of American manufacture reached the A. E. F., but the French supplied 747 howitzers of this caliber.

The Chief of Field Artillery was charged with the coordination of production and with the following up of matériel deliveries to the troops. On Apr. 1, 1919, the cumulative figures of mobile artillery production were reported as follows:

Type	Number	Type	Number
75-mm. guns	1,281	155-mm. howitzers	521
3-in. guns	33	8-in. howitzers	213
4.7-in. guns	395	9.2-in. howitzers	1
155-mm. guns	334		

By Dec. 31, 1919, the total of 75-mm. guns produced in the United States had reached 2,071.

DEMOBILIZATION

Personnel

Discharge of emergency personnel began soon after the Armistice. By June 30, 1919, the total strength of the Field Artillery had declined to 25,519 and by Nov. 30, 1919, to 7,366.

On June 30, 1919, only the Regular officers and 1,469 emergency officers remained on duty. A year later, officer personnel consisted of 749 Regular and 496 emergency officers. At that time, the field artillery personnel of the Officers' Reserve Corps on an inactive

status numbered 7,936, representing about 33 percent of the 23,500 former emergency officers who had received wartime training.

UNITS

Upon completion of demobilization only 29 regiments of Regular Field Artillery were retained. These were the original nine regiments (numbered 1 to 9), the 12 additional regiments (numbered 10 to 21) organized during the war under the National Defense Act, and the eight converted cavalry regiments (numbered 76 to 83), mentioned on pp. 200, 201.

Training

Two large wartime reservations, at Camps Bragg and Knox, were retained as permanent posts, with cantonments for six brigades at each under construction. Both projects were completed on a reduced basis and used to house Regular regiments for which no prewar accommodations existed.

As a result of postwar reorganization, the Field Artillery Basic School was placed at Camp Knox and the Advanced Tactical Course for senior officers at Camp Bragg.

The School of Fire for Field Artillery at Fort Sill was reduced in scope and limited to a battery officers' course of 1 year. In Dec. 1919, a division of enlisted specialists was added to this school.

The Field Artillery Basic School at Camp Zachary Taylor was discontinued Aug. 1, 1919, but instruction was resumed Oct. 6, 1919, with a much smaller class. In 1920, when the sale of Camp Zachary Taylor was ordered, this school was transferred to Camp Knox.

TRAINING SUPERVISION

Direct control of the training of Field Artillery remained under the Chief until Dec. 19, 1919. Thereafter, this responsibility reverted to department and division commanders, the Chief of Field Artillery retaining supervision over schools and the regiments designated as school troops only.

Matériel

After the Armistice, ordnance contracts were closed out as economically as possible to the Government, resulting in the accumulation of a large quantity of artillery matériel in storage. Although

this equipment was somewhat out of balance as to caliber and type, it nevertheless provided an important reserve.

SECTION 10

FINANCE SERVICE

ORIENTATION

No centralized agency existed at outbreak of war to handle the finances of the War Department. The Quartermaster Corps, the Medical Department, the Corps of Engineers, the Ordnance Department, and the Signal Corps submitted their estimates to Congress individually, as prepared by their own finance sections and approved by the Secretary of War. Appropriations were voted for each supply bureau; all funds were disbursed and accounted for by five separate finance systems. The Quartermaster Corps, owing to its general supply functions and because it disbursed the pay of the Army, controlled the greater part of all appropriations.

The Finance Service had its origin in the Finance Department, an operating agency of the Purchase, Storage, and Traffic Division, General Staff.

FUNCTIONS

(From Aug. 18, 1919)

To be responsible for, and have authority over, the finances of the military establishment including disbursement of funds and classification and compilation of all estimates of appropriations to be submitted by the War Department; administrative examination and recording of money accounts; auditing of property accounts; and such other duties as may be required in connection with expenditure and accounting for War Department funds.

DIRECTOR OF FINANCE

1918 Oct. 11 through June 20, 1920	Brig. Gen. Herbert M. Lord

ORGANIZATION AND DEVELOPMENT

FINANCE DEPARTMENT, PURCHASE, STORAGE, AND TRAFFIC DIVISION

1918

On Aug. 27, the Accounts Department, Purchase, Storage, and Traffic Division, General Staff, was established to create an operating organization which eventually would assume the duties of the finance sections of the various supply bureaus. At this time,

these sections were operating independently as follows:

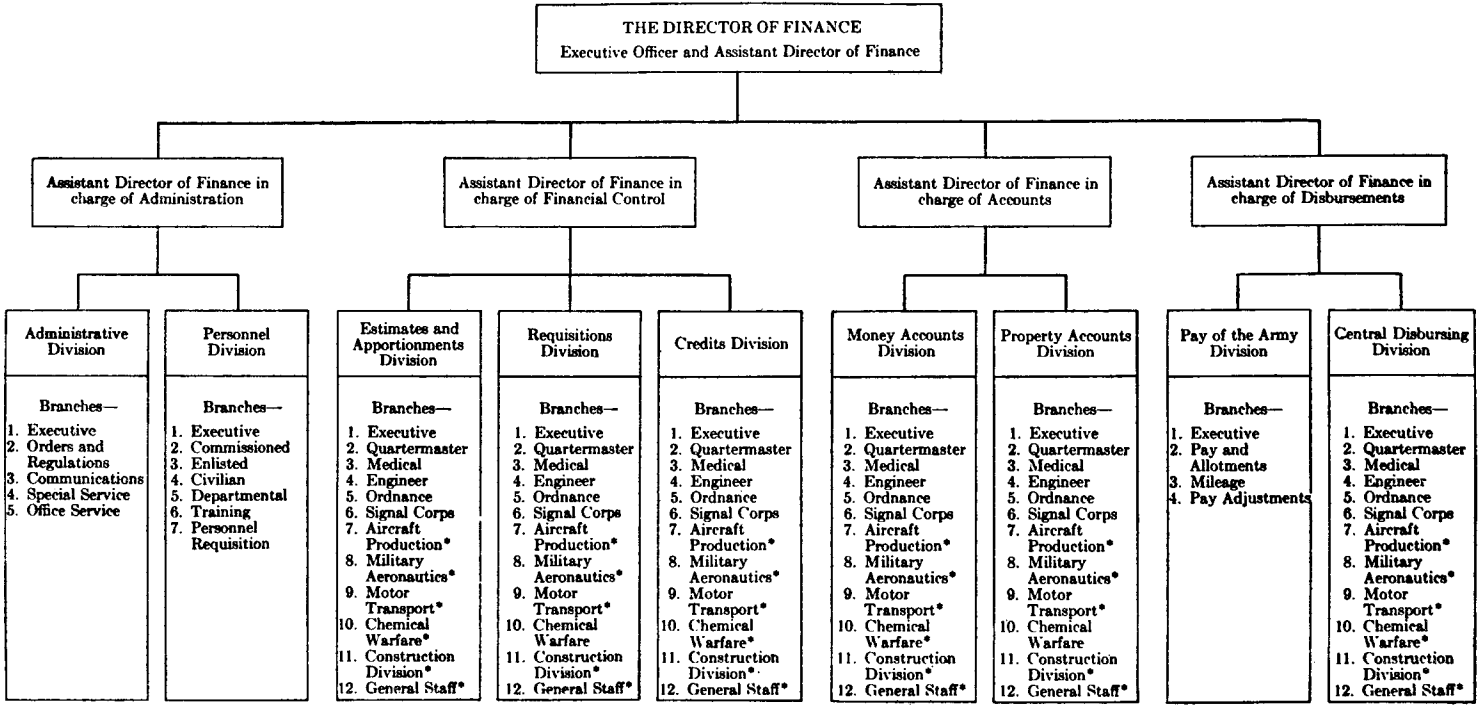
Activities	Finance Section of									
Note. ▨ Denotes the Particular Activities in Which Each Finance Section Was Engaged	Construction Division		Engineer Corps		Medical Department		Ordnance Department		Quartermaster Corps	Signal Corps
Bookkeeping	▨		▨		▨		▨		▨	▨
Audit	▨		▨		▨		▨		▨	▨
Administration	▨				▨		▨		▨	▨
Contracts			▨		▨		▨			▨
Property			▨				▨		▨	▨
Disbursing Officer					▨		▨			▨
Field Disbursing Officers							▨		▨	▨
Cost Accounting	▨						▨			▨
Payrolls							▨			▨
Pay									▨	
Mileage									▨	
Purchase					▨					▨
Production	▨									▨
Claims	▨								▨	
Estimates									▨	
Supply			▨							
Inspection										▨
Legal										▨

CHART NO. 31.—*DUTIES OF FINANCE SECTIONS BEFORE CONSOLIDATION*

The functions of the Accounts Department were limited to supervision and coordination of all accounting systems and appropriations and other financial matters relating to the purchase of supplies. Limitation of authority hampered the Department's usefulness and made a reorganization necessary.

On Oct. 11, the Office of the Director of Finance was established; it absorbed the Accounts Department under the name of Finance Department, Purchase, Storage, and Traffic Division, General Staff.

To consolidate all financial activities of the War Department in his office, the Director of Finance was given authority over and made responsible for the activities, personnel, and equipment of the several finance and accounts divisions, branches and offices of the General Staff, and of the supply corps of the Army. He was also directed to assume authority over and responsibility for the finances of the several corps, departments and other separate ac-



*These branches never functioned.

CHART No. 32.—*FINANCE DEPARTMENT, PURCHASE, STORAGE, AND TRAFFIC DIVISION*
Oct. 16, 1918

tivities of the Army, including the accounting for funds and property. This embraced preparation of estimates, disbursements, money accounts, property accounts, finance reports, and pay and mileage of the Army.

On Oct. 16, the Finance Department was ordered organized as shown on chart 32.

On Oct. 21, the office of the Assistant to the Acting Quartermaster General in charge of Finance, the Finance and Accounts Division, and the Central Disbursing Division (see pp. 413, 414) were transferred to the Finance Department. These offices, continuing to operate for all practical purposes as before but under a new name, served as the framework of the new organization. Consolidation continued as the finance and accounting activities of the other bureaus were absorbed by the Finance Department.

1919

By Feb. 24, the Finance Department had adopted the structure depicted on chart 33.

On Mar. 14, coordination of purchase and financial control was completed by inauguration of a procurement procedure which made all supplies and services chargeable to funds under control of the Director of Finance.

FINANCE SERVICE, WAR DEPARTMENT

On Apr. 9, 1919, the creation of the Finance Service as an independent operating bureau of the War Department was announced, to supersede the Finance Department, Purchase, Storage, and Traffic Division, General Staff. Its organization is shown on chart 34.

The functions of the various divisions of the Finance Service were as follows:

Administrative Division

To be responsible for policies; for the preparation and distribution of orders and regulations and their interpretation; for receiving and distributing correspondence; for matters pertaining to personnel; and for making decisions to settle disputed financial questions.

Field Operations Division

To control methods of administration and personnel of finance offices in the field; to investigate the activities of such offices; and to make recommendations concerning the revision of blank forms used in connection with disbursements under the control of the Director of Finance.

Estimates and Apportionment Division

To keep records pertaining to all financial estimates and apportionments of appropriations; to correct and revise the estimates furnished to the Director of Finance by the other bureaus of the War Department; and to apportion appropriations, allot them to the various distributing and disbursing officers, and furnish information concerning the allotments to the Funding Division.

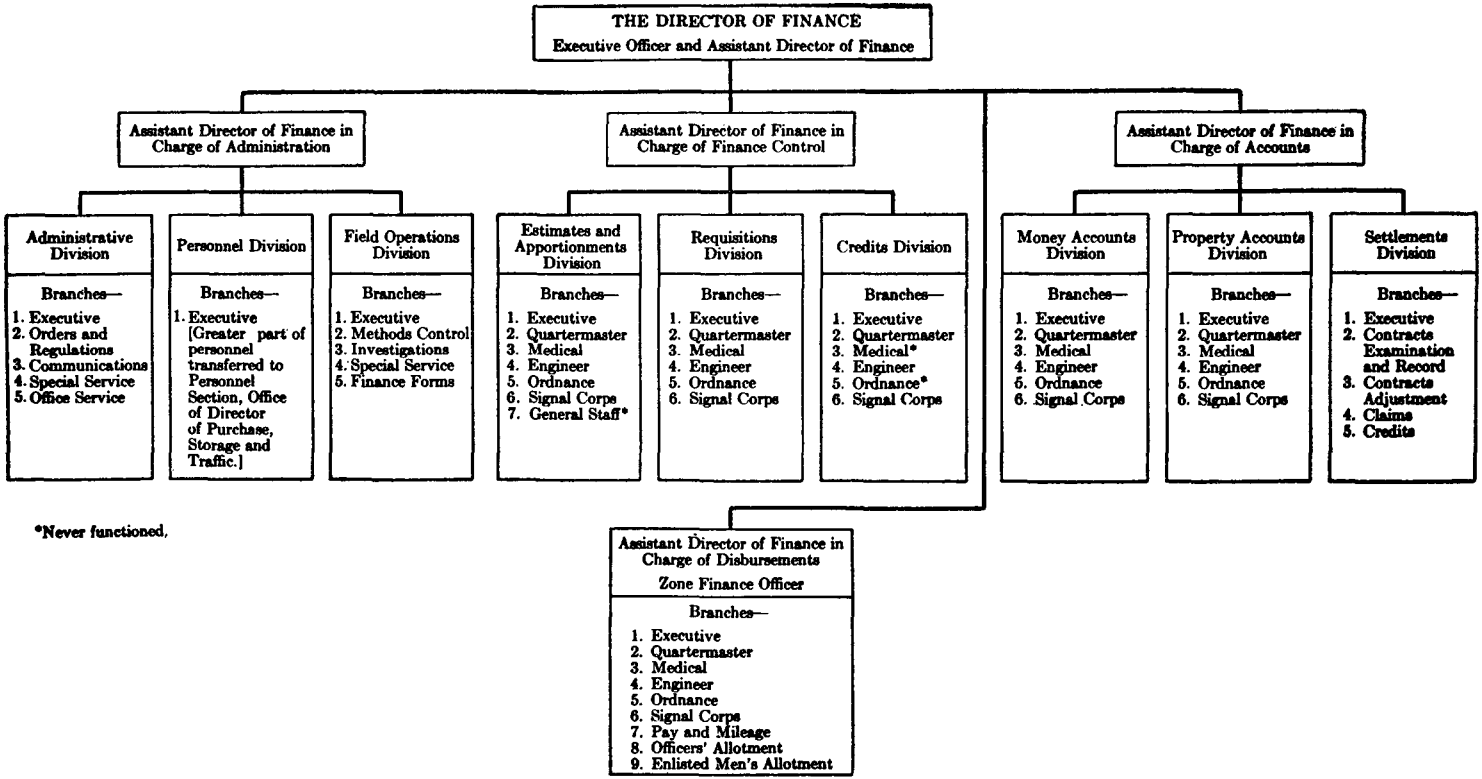


CHART No. 33—*FINANCE DEPARTMENT, PURCHASE, STORAGE, AND TRAFFIC DIVISION*
Feb. 24, 1919

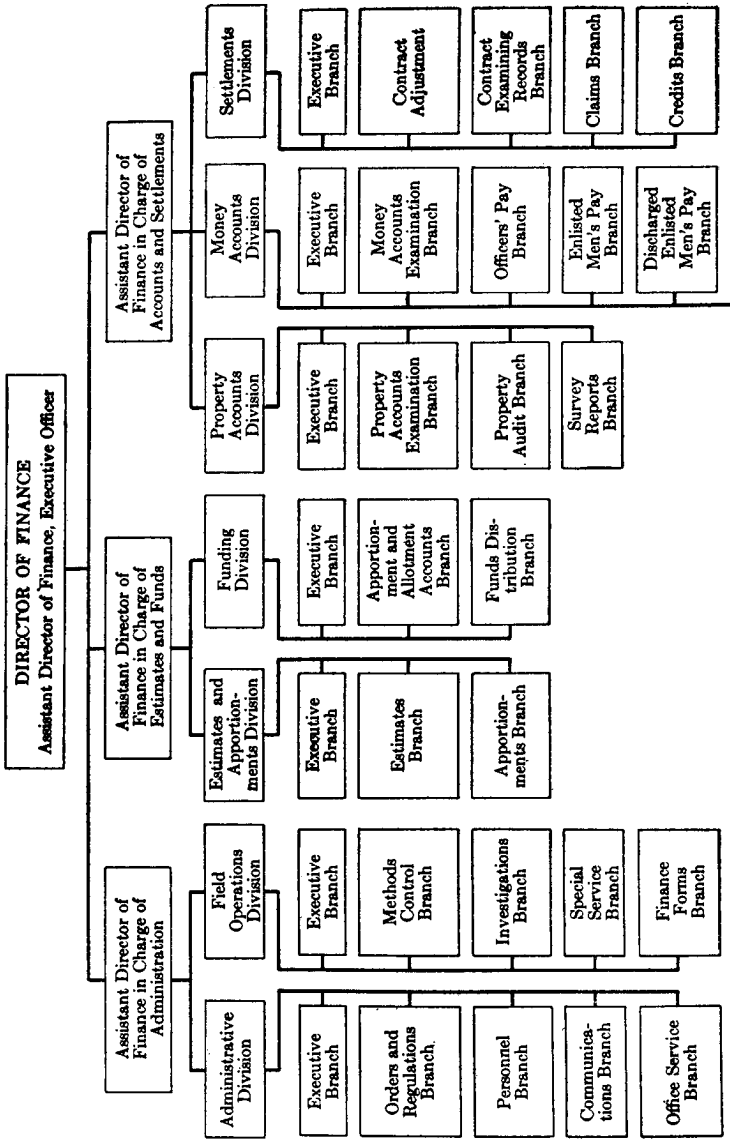


CHART NO. 34.—*FINANCE SERVICE, WAR DEPARTMENT*
April 9, 1919

Funding Division

To supervise the distribution of funds and allotments to disbursing officers.

Property Accounts Division

To audit property returns under the old system; to maintain district property offices; to carry accountability for ordnance property at manufacturing plants; to install the new system of property accounting and audit records under it; and to audit contracts for war supplies.

Money Accounts Division

To receive and examine money accounts and to transmit them to the Auditor for the War Department; and to handle correspondence relative to disbursements, including cases involving officers' and enlisted men's pay and the pay of discharged soldiers.

Settlements Division

To expedite payments of contracts and awards; to examine contracts and insure that they have been executed in conformity with law; to prepare claims for property lost, damaged, or destroyed in the military service; and to maintain correct lists of firms bidding on War Department contracts.

Under the new system, all War Department appropriations were carried on the books of the Director of Finance and apportioned to the respective services in accordance with the instructions of the Secretary of War. When funds had been assigned to a service, allotments and expenditures therefrom were made only at the request of that service. These expenditures were made for specific purposes under the supervision of the Director of Finance, who shared responsibility with the operating service that disbursements were made in accordance with law. The Secretary of War was thus enabled, through the Director of Finance, to exercise complete control over the appropriations of his Department.

1920

The Finance Service continued without further major change in its status until July 1, when the Service was absorbed, under the Act of June 4, by the newly-created Finance Department, headed by the Chief of Finance.

FIELD ORGANIZATION

Finance Department, Purchase, Storage, and Traffic Division, Oct. 28, 1918-Apr. 8, 1919

1918

On Oct. 28, the Director of Purchase and Storage established certain zones for supply operations (see p. 439) and appointed a zone supply officer in each to represent him. Concurrently, the Director of Finance was required to designate a zone finance officer for each zone as his representative.

Consolidation and absorption of the various finance units pertaining to the several supply bureaus and corps were effected between Dec. 2, 1918, and Mar. 12, 1919, zone finance officers taking charge in each zone as follows:

FINANCE ZONE 1

Office at Boston, Mass.: Organized from Finance and Accounts Division, Quartermaster Corps, Boston; Finance Division, Boston

Ordnance District Office; Finance Division, Wool Purchasing Office, Boston; and Office of Disbursing Officer, General Hospital No. 10, Boston.

FINANCE ZONE 2

Office at New York, N. Y.: Organized from Finance and Accounts Division, Quartermaster Corps, New York City; Disbursing Office, Medical Corps, New York City; Disbursing Office, Signal Corps, New York City; Disbursing Office, Engineer Depot, Kearny, N. J.; Finance and Accounts Division and Disbursing Office, Port of New York; Disbursing Office, New York Ordnance District, New York City.

FINANCE ZONE 3

Office at Philadelphia, Pa.: Organized from Finance and Accounts Division, Quartermaster Corps, Philadelphia; Finance Division, Signal Corps, Philadelphia; Finance Branch, Medical Supply Depot, Philadelphia; Finance Office, Engineer Depot, Philadelphia; Finance and Accounts Division, Port Storage Office, Philadelphia; and Finance Division, Philadelphia District Ordnance Office.

FINANCE ZONE 4

Office at Baltimore, Md.: Organized from Finance and Accounts Division, Quartermaster Corps, Baltimore; Finance Division, Expeditionary Depot, Baltimore; Finance Division, Curtis Bay Ordnance Depot, South Baltimore; Finance and Disbursing Section, Chemical Warfare Service, Edgewood Arsenal, located in Baltimore; Office of Disbursing Officer, District Motor Transport Office, Camp Holabird, Md.

FINANCE ZONE 5

Office at Atlanta, Ga.: Organized from Finance and Accounts Division, Quartermaster Corps, Atlanta; Finance Division, Medical General Supply Depot, Atlanta; Finance Division, Signal Corps, General Supply Depot, and Signal Corps Radio Supply Depot, Atlanta.

FINANCE ZONE 6

Office at Jeffersonville, Ind.

FINANCE ZONE 7

Office at Chicago, Ill.: Organized from Finance and Accounts Division, Quartermaster Corps, Chicago; Finance Branch, Medical Supply Depot, Chicago; Finance Division, Chicago District Ordnance Office; Finance Branch, Detroit District Ordnance Office, Detroit, Mich.

FINANCE ZONE 8

Office at St. Louis, Mo.: Organized from Finance and Accounts Division, Quartermaster Corps, St. Louis; Finance Division of St. Louis District Ordnance Office; Office of Disbursing Officer, Medical Supply Depot, St. Louis.

FINANCE ZONE 9

Office at New Orleans, La.

FINANCE ZONE 10

Office at San Antonio, Tex.: Organized from Finance and Accounts Division, Depot Quartermaster's Office, Fort Sam Houston, Tex.; Finance Branch, Medical Supply Depot, San Antonio, Tex.; Finance Branch, General Supply Ordnance Depot, San Antonio, Tex.; Finance Branch, Signal Corps General Supply Depot, San Antonio, Tex.; Finance Branch, Engineer Depot, San Antonio, Tex.

FINANCE ZONE 11

Office at Omaha, Neb.

FINANCE ZONE 12

Office at El Paso, Tex.

FINANCE ZONE 13

Office at San Francisco, Calif.

FINANCE ZONE 14

Office at Manila, P. I.

ZONE FINANCE OFFICE, WASHINGTON, D. C.

On Jan. 1, 1919, a zone finance office was established at Washington, which took over the functions of both the Central Disbursing Division and the Pay of the Army Division, Office of the Director of Finance.

STATUS OF ZONE FINANCE OFFICERS

All zone finance officers reported to the Director of Finance on technical matters but were under the general supervision of their respective zone supply officers.

CAMP FINANCE OFFICERS

On Dec. 3, provision was made for a camp finance officer at each camp or cantonment to represent the Director of Finance under the general supervision of the Camp Supply Officer. The Camp Finance Officer was charged with such finance administration including disbursements, money and property accountability within each camp as the Director of Finance might authorize.

ZONE PROPERTY AUDITING OFFICES

On Dec. 20, zone property auditing offices were established, and officers were assigned as acting zone property auditors for each finance zone. The Zone Property Auditor was under the direct control of the Director of Finance, but formed with his personnel a component of the zone finance office with respect to office space, military administration, and travel orders.

1919

PORT FINANCE OFFICERS

On Jan. 13, provision was made for a port finance officer on the staff of each commanding general of primary ports of embarkation and debarkation. The Port Finance Officer made payment of officers and troops at the ports, hospitals, and camps of these commands.

Finance Service from Apr. 9, 1919

On June 5, the War Department defined the status of finance officers in the field. Zone and deputy zone finance officers were placed under the immediate jurisdiction of the Director of Finance. Finance officers of tactical divisions, posts, forts, and other stations while under control of commanding officers thereof, corresponded directly with the Director of Finance, who defined their duties in finance matters and determined the necessity for appointing disbursing officers at any post, station or other place. Zone property auditors were under the direct and exclusive control of the Director of Finance. Personnel attached to finance offices was transferred to duty with the Finance Service under the Director of Finance.

On August 6, finance zones were redrawn to coincide with territorial departments, but all stations exempted from control of department commanders came under zone authority in finance matters.

DEPARTMENT FINANCE OFFICERS

On Aug. 18, the field organization was rounded out by the establishment of department finance offices, each department commander appointing his own finance officer. The Department Finance Officer was responsible for the administration of all finance matters pertaining to stations and personnel under the control of the Department Commander. Zone finance officers were made available for this duty, without, however, yielding control of their fundamental functions to the Department Commander.

On Dec. 19, the War Department directed that the same officer would be designated as the Department Finance Officer and as the

Zone Finance Officer within each territorial department, thus concentrating in one office all financial matters of each area.

DEPUTY ZONE FINANCE OFFICES

To handle Army finance activities in commercial centers, deputy zone finance offices were established in Boston, Philadelphia (with auxiliary stations in Middletown and Pittsburgh), Baltimore, Norfolk, New York, New Orleans, Atlanta, El Paso, Fort Sam Houston, St. Louis, Jeffersonville, Omaha, Chicago, Seattle, Los Angeles, Portland, Ore., and San Francisco.

These offices were also used to centralize agent officers' accounts of stations located in the vicinity.

PERSONNEL

ORIGINAL ASSIGNMENT

Towards the end of Oct. 1918, the several supply corps reported to the Director of Finance that the following personnel would be transferred to his office:

Corps	Commissioned	Enlisted	Civilian
Finance and Accounts Div., Quartermaster Corps	47	10	611
Central Disbursing Div., Quartermaster Corps	84	25	2,438
Engineer Corps	2	39	65
Ordnance Department	19	7	282
Medical Department	3	25	140
Signals Corps	7	4	73
Aircraft Production	62	64	313
Military Aeronautics	7	14	39
Motor Transport Corps	0	0	0
Chemical Warfare Service	10	18	35
Construction Division	15	0	133
General Staff	3	25	1
Totals	259	231	4,130

Subsequent changes resulted in the strengths below.

OFFICERS

On June 30, 1919, approximately 550 officers, taken from the various staff corps, were in the Finance Service. Of this number, 114 were on duty in the office of the Director of Finance and 71 in the office of the Zone Finance Officer, Washington, D. C.

On June 30, 1920, this force numbered 223 officers, of whom 43 were on duty in the office of the Director of Finance and 19 in the office of the Zone Finance Officer, Washington, D. C.

On July 1, 1919, there were 405 accountable disbursing officers in the Army. By June 30, 1920, this number had been reduced to 277 officers, including 31 military attachés.

CIVILIAN EMPLOYEES

The force on duty in the Finance Service was distributed as follows:

Place of employment	June 30, 1919	June 30, 1920
In the office of the Director of Finance	2,100	516
In the office of the Zone Finance Officer, Washington	4,700	1,224
In the various finance zones	2,700	1,227
Totals	9,500	2,967

ACTIVITIES

PAYMENT OF TROOPS

The pay of the Army for the 1919 fiscal year was $211,126,684. Troop payments were expedited by means of agent officers designated by the commanding officers of the various posts and camps.

PROPERTY AUDITING

Property auditors visited in their zones the various depots, posts, camps and stations, and other agencies, at regular intervals, for the purpose of audit. From July 1, 1919, to June 30, 1920, 19,041 accounts were audited of which 17,823 accounts were cleared. In addition 2,399 contracts were audited on which the War Department had furnished material to be fabricated by the contractor. As a result, approximately $2,500,000 was found due the United States by contractors.

Further audits of transactions involving defective and rejected materials yielded collections which amounted to $10,566,487. Up to June 30, 1920, the total found due the United States by contractors was $13,982,257.

ADVANCES AND RECOUPMENTS

No advances were made to contractors through the War Credits Board (see p. 6) during the 1920 fiscal year. However, recoupments were made on previous advances in the amount of $60,469,817, and interest of $3,812,263 was collected.

PAYMENTS UNDER TERMINATED CONTRACTS AND AWARDS

During the 1919 fiscal year, payments on cancellation agreements amounted to $215,422,350. During the subsequent fiscal year these payments totaled $230,764,330, itemized as follows:

Number of contracts and awards paid	6,487
Amount paid for settlement	$225,205,392
Amount paid for supplies	5,558,938
Total	230,764,330

SUBSISTENCE RETURNS

On June 30, 1919, there were 1,013 returns on hand. In the next fiscal year, 1,655 were received and 2,644 were examined.

PROPERTY RETURNS

Rendering of returns to the chiefs of bureaus ended on Dec. 31, 1918, for the United States, and Mar. 31, 1919, for the Philippines, Hawaii, Puerto Rico, Alaska and the Canal Zone.

On June 30, 1919, there were 5,215 returns on hand. During the following fiscal year, 18,612 were received; 23,221 were examined and settled; and 443 were suspended. Included in these were remaining returns of the Quartermaster, Engineer, and Signal Corps; the Ordnance and Medical Departments; and the Air Service.

REPORTS OF SURVEY

On June 30, 1919, there were 2,900 reports on hand; in the next fiscal year, 64,450 were received. By June 30, 1920, 65,575 had been examined and accepted, 1,509 suspended, and 1,775 remained unexamined.

TRANSPORTATION

From July 1, 1919, to June 30, 1920, $193,970,724 was expended for the transportation of the Army and its supplies.

Due to an increase of travel-pay for discharged enlisted men from 3½ cents to 5 cents per mile, 157,211 claims had accrued from Nov. 11, 1918. By June 30, 1920, $2,942,830 had been paid on these accounts.

ADVANCES TO UNITED STATES RAILROAD ADMINISTRATION

From July 1, 1918, to June 30, 1920, $175,000,000 was advanced to the Administration (see p. 10) to cover sums due carriers for services, for which vouchers had not yet been passed.

BONUS PAYMENTS

By June 30, 1920, 1,649,159 bonus claims, aggregating $98,949,540, had been paid to individuals separated from active military service from Apr. 6, 1917, to Feb. 26, 1919.

PURCHASE OF LIBERTY BONDS

The allotment system of the Army was used in the purchase of bonds by officers and enlisted men. By June 30, 1920, 1,088,124 bonds valued at $54,406,200 had been delivered in this manner, and 220,360 allotments were still on file with an estimated value of $15,234,450.

CLAIMS OF DISCHARGED ENLISTED MEN

On July 1, 1919, 57,976 claims were on file. During the following 12 months 130,366 were received, and by June 30, 1920, 146,466 cases had been closed.

MISCELLANEOUS MATTERS

Other activities included the handling of proceeds from auction sales; transactions concerning officers' money accounts and soldiers' deposits; and allotments of pay, by officers, by enlisted men, and for converted insurance.

EXPENDITURES BY APPROPRIATIONS FOR THE ACCOUNT OF THE FISCAL YEAR 1920

During the period July 1, 1919, to June 30, 1920, expenditures were made as summarized below:

Quartermaster Corps	$1,372,738,499.81
Ordnance Department	132,864,670.04
Air Service	20,269,523.11
Engineer Corps	52,059,020.84
Medical Department	16,925,782.74
Signal Corps	7,109,674.54
Chemical Warfare	139,685.54
Total	1,602,106,856.62

SECTION 11

INSPECTOR GENERAL'S DEPARTMENT

ORIENTATION

An inspection service was inaugurated in the Continental Army to promote discipline and to terminate certain existing abuses. It functioned through The Inspector General of the Army and assistant inspectors assigned to divisions and brigades.

In the early United States Army, this system remained essentially the same until 1874 when the Inspector General's Department was established by statute.

FUNCTIONS

To inspect, as prescribed by law and by Army regulations and existing orders, various phases of military activity, such as the organized combat divisions; coast artillery; aviation fields; mobilization and other camps; garrisoned and ungarrisoned posts and stations; general and base hospitals; remount depots; transport service; cable boats, mine planters, and harbor boats; ports of embarkation; service schools; military arsenals and depots; armories; disciplinary barracks; recruit depots and recruiting stations; staff officers at department headquarters; instruction and training; discipline; equipment; clothing; food and its preparation; supply and administration; public and semipublic funds; and the efficiency and fitness of officers of all grades.

In addition, to inspect the United States Military Academy; military prisoners in the United States Penitentiary, Leavenworth, Kans.; the Soldiers' Home, District of Columbia, and the headquarters and 10 branches of the National Home for Disabled Volunteer Soldiers; and the National Guard as required by the Act of June 3, 1916.

To conduct the survey of business methods, War Department activities; and to audit the report of the receipts and expenditures of the American Red Cross.

To make such special investigations as may be ordered.

THE INSPECTOR GENERAL

1917		
Apr.	6	Brig. Gen. John L. Chamberlain
Oct.	9	Maj. Gen. John L. Chamberlain
1918		
July	6	Brig. Gen. William T. Wood (acting)
Sept.	20	Maj. Gen. John L. Chamberlain
through		
June	20,	
1919		

ORGANIZATION AND DEVELOPMENT

THE INSPECTOR GENERAL'S OFFICE

1917

At outbreak of war, the office was small, and subdivisions were unnecessary.

In conformity with statute, the War Department had assumed responsibility for auditing the funds of the American National Red Cross, and, Apr. 16, delegated the duty to the Inspector General's Department. This and many other tasks arising from the war soon made expansion imperative.

1918

In the spring, the office was reorganized into six subdivisions as follows: Executive Office, Administration, Inspections Division, Money Accounts Division, Record Division, and Audit of Red Cross Account.

In addition to the functions of the various subdivisions indicated by their designations, administration handled reports of investigation, and the Inspections Division passed on reports of inspection, changes in Army Regulations, and revision of blank forms. The Executive Office was charged with the inspection of the U. S. Military Academy; the service schools, garrisoned posts and commands; camps of maneuver and instruction; unserviceable property; money accounts of all disbursing officers of the Army; National Home for Disabled Volunteer Soldiers; National Guard, etc. In addition, it audited the accounts of the American Red Cross, and made special investigations as ordered.

Later in the year the Administration Subdivision was abolished, and the Investigations Division was organized to take over the handling of reports of investigations. It also attended to individual complaints referred to the Office.

Before the Armistice, the Record Division also disappeared to be replaced by the Miscellaneous Division, which was concerned with administration, personnel, records, and training. A new Field

Inspections and Investigations Subdivision superseded the functions of the Executive Office; and the Survey of Business Methods, War Department Activities, was added. The Washington organization, as thus completed, and the ramifications of the Inspector General's Department throughout the Army are shown on the chart.

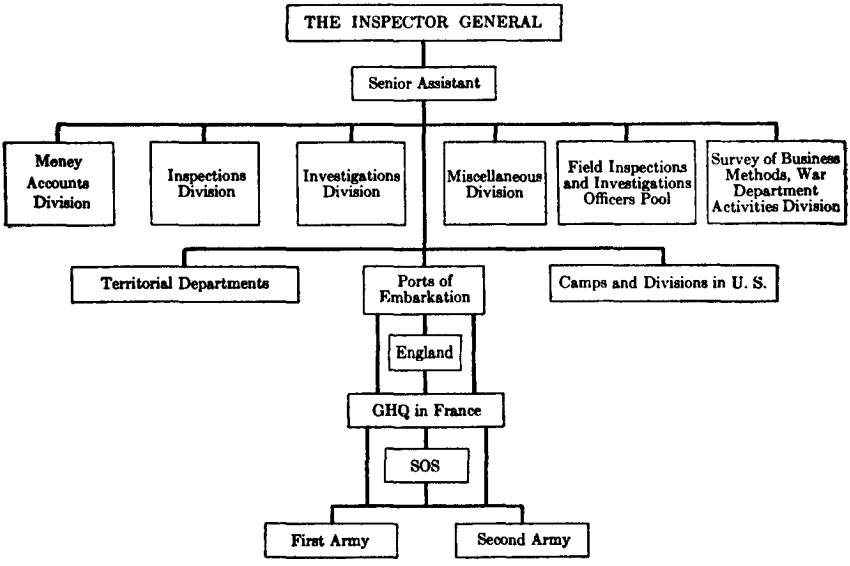


CHART No. 35.—*ORGANIZATION OF INSPECTOR GENERAL'S DEPARTMENT*
Nov. 1918

1919

In the summer of 1919, the subdivisions of the office were reduced to four with functions as follows:

Inspections Division

Periodic inspections of activities assigned to the office of the Inspector General for inspection. Special inspections and review of reports of inspection.

Investigations Division

Special investigations and examination and review of reports of investigation.

Miscellaneous and Personnel Division

Administration of the Record and File Section and of the Personnel Section.

Money Accounts Division

Inspections of disbursing officers' accounts; investigation of claims and other special investigations involving money accounts; inspection of unserviceable property.

PERSONNEL

The Inspector General was the only officer permanently commissioned in the Inspector General's Department. All other offi-

cers, authorized by law, were drawn from the Regular Army, National Guard, and National Army for temporary detail.

Distribution of officers was as follows:

Date	On duty in Washington office	Field Force	Total
Apr. 1, 1917	4	19	23
June 30, 1919	35	181	216

On June 30, 1917, there were 39 officers on duty in the Department; a year later, 180; and at the Armistice, 215.

Whenever practicable, newly-detailed officers were ordered to Washington to familiarize themselves with their duties. Thereafter, they were sent out to troops in the United States and overseas, to ports of embarkation, and headquarters of territorial departments to serve on the staffs of commanding generals.

ACTIVITIES

Every phase of the military effort was covered during the war by the Inspector General's Department in carrying out its functions as defined on p. 220.

In addition to routine inspections of tactical divisions and of the large camps by local representatives of the Department, officers from the Washington office were sent out to make special inspections of the same organizations.

Thus, division inspections were made on 77 occasions; and special reports were made on conditions existing in artillery brigades, depot brigades, development battalions, camps and cantonments, and flying fields. The training, discipline and administration of Army personnel; the condition of clothing, arms and equipment, transportation, food and its preparation, funds, and paperwork; as well as the disposal of unserviceable property, were also the subject of detailed reports. Besides, the handling of prisoners of war and the work of welfare societies were given critical attention.

Representatives of the Inspector General's Department reported conditions as they found them. Irregularities and deficiencies were, as soon as possible, brought to the attention of the authorities whose duty it was to institute corrective or remedial action.

With the aid of these reports and opinions expressed by inspectors, the Inspector General came to a general finding of conditions prevailing in the Army during the War, the principal subjects of which have been set forth below.

FINDINGS

ORGANIZATIONS

Tactical Divisions

The inspection of 57 divisions yielded the following conclusions:

	Excellent	Very good	Good	Fair	Poor	Total inspections
Training	1	16	21	20	13	71
Sanitation	12	17	18	8	13	68
Health	7	16	29	7	1	60
Discipline	5	15	26	11	13	70
Care of Animals	6	13	5	4	9	37
Commissioned personnel	15	15	13	11	9	63
Enlisted personnel	20	16	12	4	6	58
Clothing and equipment			31			31

Field artillery units did not at first make as rapid progress in training as the other divisional organizations, which was attributable mainly to lack of equipment and trained technical instructors. Accordingly, deplorable conditions prevailed in artillery brigades during Nov. and Dec. 1917; but conditions rapidly improved after Jan. 1918.

Depot Brigades

Originally organized as part of tactical divisions, these brigades were later made independent units and placed under the authority of their respective camp commanders, for the purpose of furnishing replacements. Many officers who were not considered fit for combat service were assigned to duty with depot brigades. This practice had the effect of injuring the morale of the enlisted men who labored under the impression that if they were assigned to depot brigades they would not be sent overseas.

These organizations were generally well administered.

Development Battalions

These battalions were organized in Mar. 1918 to train men whose aptitude for learning was below average. Considering the scarcity of training personnel, everything was accomplished that could have been expected. Administration, discipline, and training systems differed in the several camps.

Camps and Cantonments

The large camps and cantonments in the United States were generally well administered.

Flying Fields

During the first year of the war, many irregularities were reported, and many deaths from accidents occurred. This was at-

tributed to the sudden inauguration of a huge aviation program, under conditions where both matériel and trained personnel were inadequate.

Care of Animals and Transportation

The system of handling the enormous number of animals required by the expansion of the military establishment was the best ever devised in the Army.

Remount depots, established in or near the large mobilization camps, furnished riding and draft animals as well as trained horseshoers and farriers to the several tactical divisions. The depots, as a rule, were well administered, although their location in many instances on low, undrained sites was a great disadvantage. The veterinary service suffered from the inexperience of its new officers, and the care given public animals was never entirely satisfactory.

Tactical divisions and other units in the United States, during the first year of the war, were not furnished with sufficient animal-drawn transportation to meet Tables-of-Organization requirements. While a marked improvement in this respect was made thereafter, the care of this transportation was never wholly satisfactory.

PERSONNEL

Field Officers

Inspectors were given special instructions to note the manner in which officers above the grade of captain performed their duties. Reports were made accordingly whenever tactical divisions were inspected. This resulted in the promotion of certain officers for marked efficiency and in the relief of a large number of officers unfavorably reported on.

New Officers

Emergency commissioned personnel was drawn from civilian material. Under the conditions that obtained, training could not have progressed more rapidly. However, all that was accomplished only demonstrated that it takes more than 3 or even 6 months to develop an efficient officer.

Enlisted Men

The wartime enlisted personnel was superb, unsurpassed by any foreign army or by any army previously raised in the United States. Moreover, the experience of war has shown that, granted sufficient trained officers and noncommissioned officers as instructors and the necessary equipment, the enlisted man can be trained for combat in 6 months.

TRAINING

Training for defensive warfare was stressed in the camps until Jan. 1918, when the system was changed to put greater emphasis on offensive action. The primary object was to produce a disciplined soldier who could shoot a rifle accurately and handle a bayonet efficiently before receiving instruction in the details of trench warfare. The soundness of this system and of the methods pursued at the United States Military Academy and the Army Service Schools was justified by the results achieved.

Officer candidates from civil life underwent intensive instruction in 3-month courses at officers' training camps. Under the circumstances, this was the best system that could be improvised to develop subalterns quickly out of large numbers of men devoid of previous military experience. While the results were gratifying, they still fell short of the ideal. Handling men in camp, barracks, and the field can only be learned by experience. The lack of this requisite was felt time and again in the mobilization camps.

Training of the several divisions, mobilized in 1917, suffered initially from lack of arms and equipment and later by loss of large detachments of enlisted men taken to provide oversea replacements. The epidemic of measles in the fall of 1917 and influenza in 1918 also retarded progress.

DISCIPLINE

The remarkably fine spirit displayed by officers and enlisted men prompted them to bear without complaint every hardship in preparing themselves for field service. Consequently, discipline throughout the Army was generally satisfactory up to the signing of the Armistice. When the incentive of active service disappeared, a relaxation of discipline became noticeable among the troops.

Observance of military courtesies, especially rendering the hand salute, seemed to be distasteful to the emergency personnel. There was also a general disregard by officers and enlisted men of the regulations governing the wearing of the uniform.

Conscientious Objectors

A small minority of this group was sincere in its belief and willing to perform any duty except that which required them to kill a human being. However, the great majority consisted of slackers who were disloyal and claimed reasons of conscience only to evade military service. It was this type that caused the War Department considerable annoyance.

ADMINISTRATION

Clothing, Arms, and Equipment

Great shortages of clothing and equipment existed during the

first year of the war; besides, the quality of clothing issued was not wholly satisfactory. Thereafter these conditions were materially improved.

The Inspector General recommended changes in the uniform coat from standing to roll-collar type and substitution of cloth insignia for the metal kind. Improvement of the overseas cap was suggested by providing a visor and sides which could be pulled down over the ears, for protection, in cold weather.

Arms and equipment were generally satisfactory and, by the end of the war, surpassed those in use by any foreign army. The model 1917 rifle, known as the Enfield, proved a satisfactory weapon, but could not compete as to accuracy with the Springfield rifle. The Browning automatic rifle and machine gun, at the time of the Armistice, had no superiors of their class anywhere.

Funds

Considering the inexperience of the majority of officers involved, comparatively few cases of irregularity in handling public moneys were reported. Fifteen instances of embezzlement among disbursing officers in the United States were discovered throughout the war, with practically no loss to the Government.

Motor Vehicles

Frequent violation of orders forbidding use of Government motor cars on unofficial business were noted, as well as many other irregularities in the handling of motor transportation. Many reports were also made of motor vehicles rendered unserviceable by inexperienced drivers or by a lack of spare parts.

Paper Work

One inspector on duty at the headquarters of a territorial department reported that, within his area, the company records were in a deplorable state, and that personnel adjutants, without exception, had ignored instructions regarding the preparation of morning reports. This condition was attributed to the inexperience of personnel and to the difficulty of finding the various regulations dealing with the subject.

To remedy this state of affairs, it was suggested that paperwork instruction be given in garrison schools, and that all regulations bearing on administration be published in one document.

Food

The army ration gave entire satisfaction. Practically no complaints were reported regarding the food or its preparation. The general excellence of the messes was attributed to the instruction which kitchen personnel had received at bakers and cooks schools.

Sick and Wounded

Considering the insufficiency of medical personnel, uncompleted hospitals, and lack of medical supplies, the care of sick and wounded was satisfactory on the whole. Exceptions were noted during the epidemics of 1917 and 1918 when hospitals were overcrowded. The assistance of the Red Cross at these times, no doubt, saved many lives.

Post Exchanges

Numerous irregularities in the management of post exchanges were noted. These resulted from laxity in enforcing regulations on the part of all officers directly or indirectly responsible.

The Inspector General's Office was of the opinion that a concession system, properly enforced, would have solved the problem, at least insofar as the exchanges at the large camps and cantonments were concerned.

Unserviceable Property

On June 30, 1917, the Inspector General recommended that a salvage system be adopted for the disposal of unserviceable property. On Jan. 29, 1918, such a system was actually established. Although some camp and cantonment commanders failed to give this new method proper support and supervision, enormous savings to the Government were achieved nevertheless.

PRISONERS OF WAR

With one exception, war-prison barracks were administered satisfactorily. The exception noted resulted from a lack of firmness in handling prisoners and lax discipline in guard companies.

WELFARE SOCIETIES

These societies, such as the Red Cross, Young Men's Christian Association, Jewish Welfare, Knights of Columbus, and the Salvation Army, contributed greatly to the comfort and contentment of the men in camps and cantonments.

SECTION 12

BUREAU OF INSULAR AFFAIRS

ORIENTATION

A Division of Customs and Insular Affairs was established in the Office of the Secretary of War, Dec. 13, 1898, following the acquisition of oversea possessions by the United States. On Dec. 10, 1900, this Division was designated the Bureau of Insular Affairs.

Before the war, the Bureau supervised and maintained liaison

with insular civil governments as follows: in Cuba, from 1898 to 1902 and from 1906 to 1909; in Puerto Rico, from 1898 to 1900 and from 1909 to 1917; and in the Philippines from 1898 to 1917. It also supervised the Dominican Customs Receivership from 1905 to 1907, during which period it controlled the collection of customs revenues and, in some respects, acted as the agent of the Receivership in the United States.

From 1914 to 1917, while the United States observed neutrality, the Bureau attended to diplomatic problems created by belligerent shipping through Philippine and Puerto Rican ports. It also intervened on behalf of destitute Americans and Filipinos stranded in Europe.

FUNCTIONS

To exercise supervision, under the immediate direction of the Secretary of War, over all matters pertaining to civil government in the island possessions of the United States subject to the jurisdiction of the War Department; to serve as a repository of the civil records of the Government of Occupation in Cuba (Jan. 1, 1899 to May 20, 1902); and to have cognizance of matters pertaining to the Provisional Government of Cuba (Sept. 29, 1906, to Jan. 28, 1909).

CHIEFS

1917		
Apr.	6	Brig. Gen. Frank McIntyre
Oct.	9	Maj. Gen. Frank McIntyre
1918		
July	9	Col. Charles S. Walcutt (acting)
to	Dec.	
31,	1919	

PERSONNEL

Notwithstanding an increase in the work of the Bureau during the war, no addition was made to the office force.

ACTIVITIES

REPORT ON THE PHILIPPINES

The principal officers of the Philippine Government during the war were:

Governor General: Francis Burton Harrison, appointed Sept. 2, 1913.
Vice Governor:
Henderson S. Martin, resigned June 28, 1917;
Charles E. Yeater, appointed June 29, 1917.
Auditor: Clifford H. French, appointed Aug. 29, 1916.
Deputy Auditor: Irving B. Dexter, appointed Aug. 29, 1916.
Chief Justice of Supreme Court: Cayetano S. Arellano, appointed June 15, 1901.

By the Act of Aug. 26, 1916, an elective senate was created to replace the Philippine Commission as the upper house of the legislature. On Oct. 16, 1916, the new legislature met in its first session, and the Philippine Commission ceased to exist.

REPORT ON PUERTO RICO

On June 30, 1917, the executive departments in Puerto Rico were filled as follows:

Appointments By the President

Governor, Arthur Yager; Attorney General, Howard L. Kern; Commissioner of Education, Paul G. Miller.

Appointments By the Governor

Treasurer, José E. Benedicto; Commissioner of the Interior, vacancy; Commissioner of Agriculture and Labor, Manuel Camuñas; Commissioner of Health, Alejandro Ruiz Soler. Guillermo Esteves became Commissioner of the Interior Feb. 18, 1918.

These six heads of departments collectively formed the Executive Council.

The Chief Justice of the Supreme Court was José C. Hernández.

On Mar. 2, 1917, the President approved the new organic law for Puerto Rico. The first election under the new statute was held July 16, when members of the senate and house of representatives were elected to serve until Jan. 1, 1921.

DOMINICAN CUSTOMS RECEIVERSHIP

Customs were administered by officials appointed by the United States Government. Customs collections for the year 1917 amounted to $5,329,826.90, an increase of $1,312,413.86 over the amount collected during the previous year.

Military Government

Continued disturbed political conditions in the Dominican Republic led on Nov. 29, 1916, to the establishment of a military government by the United States. This government was under the direction and control of the Navy Department.

OTHER ACTIVITIES

The Bureau had extensive relations with the War Trade Board, the War Industries Board, the Alien Property Custodian, and the War Finance Corporation on matters affecting the Philippine Islands and Puerto Rico, and supervised the registration of aliens in these islands.

SECTION 13

JUDGE ADVOCATE GENERAL'S DEPARTMENT

ORIENTATION

The first Judge Advocate of the Army was appointed in 1775, following the adoption of a military code by the Continental Congress. Subsequent to the organization of the Military Establish-

ment under the Constitution, judge advocates were detailed from the line until 1797 when one was provided for by law. Several changes, breaking the continuity of the post, occurred thereafter but in 1849 the Judge Advocate of the Army was reestablished by Congressional action.

In 1862, the Department of The Judge Advocate General was created by statute, which authorized the appointment of a judge advocate general and of a judge advocate for each army in the field. The Department has enjoyed continuous existence since, although between 1864 and 1884 it was known as the Bureau of Military Justice.

FUNCTIONS OF THE JUDGE ADVOCATE GENERAL

GENERAL

To act as the official legal adviser of the Secretary of War, the Chief of Staff, the various bureaus of the War Department, and the entire Military Establishment; to advise concerning the legal correctness of military administration, disciplinary action, and matters affecting the rights and mutual relationship of the personnel of the Army; and to advise the Secretary of War and the Commander in Chief upon legal questions arising in the course of military administration and as to whether military trials and other proceedings were lawfully conducted.

SPECIFIC

To receive, review, and cause to be recorded the proceedings of all courts-martial, courts of inquiry, and military commissions; to report upon applications for clemency, parole, pardon, restoration to the colors, remission of citizenship rights, and reenlistment of general prisoners and dishonorably discharged soldiers; to furnish the Secretary of War information and advice relating to lands under the control of the War Department, as well as reports and opinions upon legal questions arising under the laws, regulations, and customs pertaining to the Army, and upon miscellaneous questions arising under civil law; to examine and prepare legal papers relating to the construction of bridges, dams or other work over or in navigable waters; to draft bonds and to examine those given to the United States by disbursing officers, colleges, rifle clubs, and others; to examine, revise, and draft charges and specifications against officers and soldiers; to draft and examine deeds, contracts, licenses, leases and other legal papers relating to matters under the War Department; and to be the custodian of the records of all general courts-martial, courts of inquiry, and military commissions, and of all papers relating to the title of lands under the control of the War Department, except the Washington Aqueduct and the public buildings and grounds in the District of Columbia.

THE JUDGE ADVOCATE GENERAL

1917		
Apr.	**6**	**Brig. Gen. Enoch H. Crowder**
Aug.	**11**	**Brig. Gen. Samuel T. Ansell (acting)**
1918		
Apr.	**22**	**Colonel James J. Mayes (acting)**
July	**15**	**Brig. Gen. Samuel T. Ansell (acting)**
1919		
Mar.	**18**	**Brig. Gen. Edward A. Kreger (acting)**
through		
June	**20**	

ORGANIZATION AND DEVELOPMENT

THE JUDGE ADVOCATE GENERAL'S OFFICE

To cope with the volume and variety of work caused by the many legal aspects of military expansion, the office was originally organized into 10 Divisions: Executive; Accounts, Claims, Contracts, and Fiscal Affairs; Civil Administration; Constitutional and International Law; General Administration; Military Justice; Personnel and Property; Reservation and Titles; Statutory Construction and Legislative Draft; and War Laws and Library. Their functions were defined as follows:

Executive Division

To keep in touch with the several divisions, attend to all routine matters, and to be responsible for the efficient administration of the Office.

Accounts, Claims, Contracts, and Fiscal Affairs Division

To handle questions arising in connection with the making and execution of contracts for military supplies; to handle the many questions coming before the office arising out of contract, tort, and the exercise of authority conferred by emergency legislation for the acquisition of supplies and real property; and to deal with problems relative to the pay of the Army and the expenditures of appropriations in general and with questions concerning property responsibility.

Civil Administration Division

To consider legal questions submitted by the Bureau of Insular Affairs and questions arising under the civil administration of the War Department (including those pertaining to river and harbor administration), except those assigned to the Constitutional and International Law Division; and to prepare and argue certain insular cases involving the interests of the Government or of the insular possessions.

Constitutional and International Law Division

To give opinions on the constitutionality of statutes, proclamations, and orders relating to citizenship, naturalization, prisoners of war, the rights and duties of the forces abroad, the interpretation of treaties, and kindred subjects.

General Administration Division

To write opinions on questions not falling within the scope of the work assigned to other divisions. These included questions of military status, appointment, rank, promotion, and assignment, and questions pertaining to command, the wearing of uniforms, badges, and ribbons, and many other subjects of a general character.

Military Justice Division

To pass upon, in an advisory capacity, questions arising in the administration of justice by general courts-martial, courts of inquiry, and military commissions.

Personnel and Property Division

To have charge of the funds, records, supplies, property, and clerical force of the office; to handle estimates, requisitions, and allotments; to supervise and coordinate the clerical work; and to conduct the routine of the bureau.

Reservations and Titles Division

To consider questions of title and jurisdiction arising in connection with the lands held by the Government for military purposes, and to prepare leases and licenses and other instruments affecting these lands. During the war period, its functions also included the examination of abstracts and the approval of the title to lands acquired under suspensions of the statutory provisions requiring approval by the Attorney General of all titles to lands acquired by the United States.

Statutory Construction and Legislative Draft Division

To study legislation directly or indirectly affecting the War Department or the Army; to draft bills relating to the military establishment for introduction in Congress; and to keep the several bureaus of the department informed as to legislation affecting them.

War Laws and Library Division

To prepare the monthly Digest of Opinions of the Judge Advocate General and to furnish advance information of a similar character to judge advocates in the field in weekly mimeograph bulletins; to prepare for publication collections of the military laws of the United States and collections of laws of the various States, Territories, and insular possessions, affecting the military establishment; and to maintain these digests, opinions, and collections in library form.

In the second half of 1918, the increase in the business of the Executive Division necessitated apportioning some of its work to two new divisions, Bond and Personnel, with the following functions:

Bond Division

To pass upon the legality of bonds sent to the War Department for approval and acceptance and to determine the sufficiency of the surety or sureties. These included contract bonds, official bonds, bonds of rifle clubs, and bonds of educational institutions for ordnance and ordnance stores furnished for the use of units of the Reserve Officers' Training Corps.

Personnel Division

To consider all questions pertaining to the appointment, promotion, detail, and assignment of officers of, or detailed to, the department; and to keep their records as well as those of enlisted men on duty.

At about the same time, the Admiralty and Maritime Division was established with functions as follows:

Admiralty and Maritime Division

To handle questions and claims arising in the War Department with reference to vessels or vessel property.

This office structure continued without important changes until about the end of the 1919 fiscal year, when the following organization of the Office of the Judge Advocate General was adopted:

DIVISION I—MILITARY JUSTICE

Board of Review No. 1

Section 1—Capital, Dismissal, and Penitentiary Cases

Section 2—Disciplinary Barracks Cases

Section 3—Retained-in-Service Cases
Section 4—Clemency and Restoration
Section 5—Miscellaneous Matters

DIVISION II—ADMINISTRATIVE LAW
Board of Review No. 2

Section 6—Contracts and Claims
Section 7—Military Affairs
Section 8—Statutory Construction and Legislative Drafting
Section 9—Reservations and Titles
Section 10—Civil Affairs
Section 11—Admiralty and Maritime Affairs

DIVISION III—EXECUTIVE

Section 12—Personnel, Records, Property, and Bonds
Section 13—Statistics
Section 14—Library and Publications

The functions of the various new sections, mostly successors of former divisions, are indicated by their names. The duties of the several boards and committees, in operation at that time are described below:

BOARD OF REVIEW NO. 1

To examine, modify, and revise written reviews of general court-martial records and all other opinions prepared by the various sections or officers of the Military Justice Division; to prepare, in certain cases, such reviews and opinions itself; and to act generally in an advisory capacity to the Judge Advocate General in matters relating to the administration of military justice.

BOARD OF REVIEW NO. 2

To review and coordinate the work of the various sections of the Administrative Law Division in such a manner as to insure a consistent and harmonious body of opinions. To review opinions and reports of all kinds except those pertaining to the Military Justice Division.

SPECIAL CLEMENCY BOARD

Created in Feb. 1919, to consider, from the standpoint of clemency, the more serious cases involving confinement in disciplinary barracks and penitentiaries; to consider the less serious cases unless handled by the Clemency and Restoration Section; and to consider the cases of all general prisoners convicted during the war and still in confinement with a view to reducing wartime punishment to peacetime standards.

ALIEN MILITARY CLAIMS COMMITTEE

To consider indemnity claims of aliens drafted into the Army, and to prepare correspondence with the State Department relating thereto.

The Committee succeeded the Constitutional and International Law Division Apr. 3, 1919, and became part of the Civil Affairs Section, to which were referred all questions of constitutional and international law.

FIELD ORGANIZATION

General Court-Martial Jurisdictions

Under the provisions of the 8th Article of War, the President of the United States, the commanding officer of a territorial division or department, the Superintendent of the Military Academy, the commanding officer of an army, an army corps, a division, or a separate brigade, and, when empowered by the President, the commanding officer of any district or of any force or body of troops may appoint general courts-martial.

Accordingly, general court-martial jurisdiction was exercised, during the war and in 1919, by the commanding officers of the following establishments and organizations:

TERRITORIAL DEPARTMENTS

Central, Eastern, Northeastern, Southern, Southeastern, Western, Hawaiian, Panama Canal, and Philippine; also China Expedition.

PROVISIONAL DIVISIONS

1st, 2d, and 3d Prov. Inf. Divs.; 1st Prov. Cav. Div. (May and June, 1917).

INFANTRY DIVISIONS

1st, 2d, 3d, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 26th, 27th, 28th, 29th, 30th, 31st, 32d, 33d, 34th, 35th, 36th, 37th, 38th, 39th, 40th, 41st, 42d, 76th, 77th, 78th, 79th, 80th, 81st, 82d, 83d, 84th, 85th, 86th, 87th, 88th, 89th, 90th, 91st, and 92d Divs.

CAMPS

Beauregard; Bowie; Bragg; Cody; Custer; Devens; Dix; Dodge; Doniphan; Forrest; Fremont; Funston; Gordon; Grant; Greene; Hancock; Humphreys, A. A., Engineer, transport, and replacement camp; Jackson; Johnston; Kearny; Las Casas, P. R.; Lee; Lewis; Logan; MacArthur; McClellan; Meade; Pike; Sevier; Shelby; Sheridan; Sherman; Syracuse, recruit; Taylor; Travis; Upton; Wadsworth; and Wheeler.

MISCELLANEOUS ESTABLISHMENTS

Port of Embarkation Hoboken; Port of Embarkation Newport News; Disciplinary Barracks Fort Leavenworth; Disciplinary Barracks Alcatraz; United States Military Academy; Recruit Depot Fort McDowell; Provisional Depot, Corps and Army Troops; Coast Artillery Training Center Fort Monroe; Fort Oglethorpe; and Fort Sill.

OVERSEA ESTABLISHMENTS AND ORGANIZATIONS

Headquarters, American Expeditionary Forces; Headquarters,

Services of Supply; Base Section No. 1; Base Section No. 2; Base Section No. 3; Base Section No. 4; Base Section No. 5; Advance Section; Intermediate Section.

American Ambulance Service; American Embarkation Center.

American Expeditionary Forces, Siberia; American Expeditionary Forces, Murman Coast.

District of Paris; Depot Division, I Army Corps; 1st Replacement Depot, St. Aignan.

Depot Divisions—1st (41st Div.); 4th; 6th.

Field Armies—First; Second; Third.

Army Corps—I, II, III, IV, V, VI, VII, VIII, and IX.

Artillery Contingents—Army Arty., First Army; First Army Railway Arty. Reserve; 31st Hv. Arty. Brig.; 53d F. A. Brig.; and the following separate brigades, C. A. C.—32d, 33d, 35th, 36th, 37th.

Assignment of Judge Advocates in the Field

As a matter of general policy, officers of the Judge Advocate General's Department were assigned by The Adjutant General, upon recommendation of The Judge Advocate General, to serve on the administrative staff of commanding officers exercising general court-martial jurisdiction, and, in special cases, to other work, as for instance, duty in the Provost Marshal General's office.

Judge advocates assigned to headquarters with court-martial jurisdiction, though directly responsible to their commanding officers, were required to perform their duties under the general direction of The Judge Advocate General. In routine matters, correspondence between The Judge Advocate General and the judge advocates in the field was direct.

An exception to the foregoing was the establishment of the branch office of the Acting Judge Advocate General overseas at General Headquarters, American Expeditionary Forces, which began to function Mar. 7, 1918. This office was an intermediate link between The Judge Advocate General and the various commanders overseas authorized to appoint general courts-martial. It examined and reviewed the records of trial of all general courts-martial in which a sentence of death, dismissal, or dishonorable discharge was imposed, and also the records of trial of all military commissions originating in the American Expeditionary Forces. Upon discovery of any defect, the record was returned to the proper commanding officer and, upon completion, was sent to The Judge Advocate General of the Army for permanent file. By this method the execution of military sentences was accomplished with as little delay as possible.

PERSONNEL

OFFICERS

The Act of June 3, 1916, authorized a total of 32 regular officers for the Judge Advocate General's Department and a Judge Advocate General's Section of the Officers' Reserve Corps. In the course of mobilization, 47 Reserve officers were assigned to active duty.

The officers' strength of the department, during the emergency, was as follows:

Date	Grade				Regular force	Attached force	Total
	Major General	Brigadier General	Field	Company			
June 30, 1917	----------	1	31	----------	32	[1]18	32 [1]18
June 30, 1918	1	3	185	----------	[2]	[2]	189
June 30, 1919	1	2	256	114	320	53	373
June 30, 1920	1	----------	121	48	123	47	170

[1] Reserve officers.
[2] No record available.

The creation of a Provost Marshal General and the appointment of The Judge Advocate General to this post, temporarily in addition to his other duties, made necessary the detail of four Regular and 16 Reserve officers of the Department to the Office of the Provost Marshal General, May 22, 1917.

OFFICE FORCE

The force on duty in the Office of The Judge Advocate General was as follows:

Date	Officers	Enlisted men	Civilian employees
June 30, 1917	5	----------	43
July 31, 1918	43	----------	[1]91
June 30, 1919	167	2	129
June 30, 1920	81	5	78

[1] As of July 1, 1918.

On Mar. 22, 1918, a separate enlisted personnel was authorized of men especially trained in the work of the Department. By Oct. 31, 1918, an enlisted force of 34 had been detailed to duty in the office of The Judge Advocate General, and Dec. 31 it numbered 61. Owing to the presence of these men, the 129 clerical positions open to civilian employees were not completely filled until 4 months after the Armistice.

ACTIVITIES

CIVIL AND MISCELLANEOUS WORK OF WASHINGTON OFFICE

The scope of this work is illustrated by the following summary of opinions rendered on questions submitted for consideration during the 1917 fiscal year:

Questions involving appropriations	84
Examination of bonds	3,189
To secure issues of Government property to rifle clubs under the Act of April 27, 1914	401
To secure issues of Government property to schools under the Act of April 27, 1914	90
To secure issues of Government property to universities and colleges having courses in military training	36
Of officers of the Quartermaster Corps	331
Regular Army	279
Officers' Reserve Corps	1,372
National Army	283
Of Quartermaster agents	5
Of disbursing officers of the Militia	56
To secure the performance of contracts	324
Indemnity bonds	11
Deputy disbursing officer, Rock Island Arsenal, Ill.	1
Claims against the Government	34
Clemency to general prisoners	1,794
Contracts	90
Detached service	22
Discharge	74
Eight-hour law	57
Enlistment	67
Gratuities to disabled or deceased officers and soldiers	76
Home Guards	4
Instruments relating to Government property	173
Leases	99
Revocable licenses	74
Parole of general prisoners	175
Proposed legislation	55
Loans and sales of Government property	13
The Militia	261
Navigable waters	32
Pay and allowances	150
Permits for work in navigable waters	337
For wharves and similar structures, dredging, etc., under authority of Section 10 of the Act of Mar. 3, 1899	101
For bridges across waterways the navigable portions of which lie wholly within a single State, under authority of Section 9 of said Act	165
For bridges across navigable waters of the United States, under the general bridge Act of Mar. 23, 1906, and special acts	50
Notices to alter bridges which have become unreasonable obstructions to navigation, under authority of Section 18 of the Act of Mar. 3, 1899	14

For deposits of material in navigable waters, under authority of Section 13 of the Act of Mar. 3, 1899	1
For structures in navigable waters of Puerto Rico, under authority of the Act of June 11, 1906	6
Prisoners of war	15
Private debts of persons in the military service	8
Government reservations	189
Retirement	36
Question concerning taxation	7
Reenlistment of discharged general prisoners	5
Restoration of general prisoners	458
Restoration of citizenship	95
Selective draft (Act May 18, 1917)	19
Transfer of general prisoners	137
Volunteers	5
Transportation	40
Miscellaneous opinions and reports	2,529
Total	10,230

RELATIONS TO OTHER BUREAUS

Legal advice was furnished informally and expeditiously whenever necessary. Relatively unimportant questions were submitted in person or by telephone. Opinions were given with the understanding that they were subject to modification or reversal upon formal submission by the bureau or department concerned.

MILITARY JUSTICE

The judge advocate on the staff of a commander exercising general court-martial jurisdiction supervised disciplinary action in the first instance. The Office of The Judge Advocate General acted as the court of last resort to which all general court-martial records were referred for examination and revision (see p. 232).

Statistical Data

TRIALS BY GENERAL COURT-MARTIAL

From Apr. 6, 1917, to June 30, 1918, trials involved 642 officers, 24 cadets, 11,595 enlisted men, and 96 general prisoners.

The 642 officers were charged with a total of 1,235 offenses, resulting in 895 convictions and 340 acquittals. Of the officers found guilty, 257 were sentenced to dismissal. However, only 214 of these sentences were approved; 19 were disapproved; one was remitted, three were suspended, 19 were mitigated, and in two cases confirmation was withheld. Of the charges made against officers, 146 were for absence without leave, 219 for drunkenness, 250 for conduct unbecoming an officer and a gentleman, and the rest for varied offenses.

Of enlisted men tried, 5,644 were sentenced to dishonorable discharge; 2,936 sentences were disapproved and 2,708 approved.

The total number of confinements imposed and executed was 8,626, of which 4,430 sentences were served at posts, 3,609 at disciplinary barracks, and 587 in penitentiaries. Forfeitures imposed by sentences of general court-martial numbered 9,628; of these 8,964 were executed. Of the offenses charged, 3,946 involved disobedience or failure to obey orders, 3,358 desertion, 2,927 absence without leave, 1,888 larceny, 1,850 derelictions by sentinels or guards, 834 assault, and 774 drunkenness.

Between July 1, 1918, and June 30, 1919, a total of 1,948 officers, 14,230 enlisted men, 283 general prisoners, 3 cadets, and 83 others serving with the Army were tried by general court-martial resulting in convictions as follows: officers 1,482; enlisted men 12,381; general prisoners 250; cadets 3; and others 68.

Over one-third of the charges preferred against officers involved drunkenness, absence without leave, or conduct unbecoming an officer and a gentleman. Sentences carrying dismissal numbered 647; of these 367 were approved, 115 disapproved, 2 remitted, 40 suspended, and 83 mitigated. At the end of the period, 40 cases were still awaiting final action.

About one-half of the offenses charged against enlisted men included desertion, absence without leave, disobedience or failure to obey orders, larceny, sleeping on post, and other offenses by sentinels. The total number of charges involving desertion was 4,353, approved convictions resulting therefrom, 1,864. Sentences carrying dishonorable discharge numbered 8,187; of these 5,798 were disapproved, remitted or suspended. Confinement was imposed in 12,273 cases and ordered executed in 11,016; the confinement in the remaining cases was either disapproved or remitted. Sentences in 12,352 cases included forfeiture of pay; of these 1,150 were disapproved and 3,460 mitigated.

Death Sentences

From Apr. 6, 1917, to June 30, 1919, the death penalty was adjudged in 145 cases for the following offenses, either alone or in conjunction with other offenses: assault with intent to rape or kill, 5; desertion, 23; disobedience of orders, 25; misbehavior before the enemy, 11; murder, 53; sleeping on post, 4; being a spy, 1; rape, 20; rape and murder, 3. In 35 cases the sentence was executed—25 in the United States and 10 in France—for the following offenses: murder, 2; murder and mutiny, 19; rape, 11; rape and murder, 3. Nineteen sentences were either remitted or disapproved; 59 were mitigated to dishonorable discharge and confinement ranging from two years to life. The remaining 32 cases were carried over to the 1920 fiscal year with final action as follows: twelve were disapproved, 19 were mitigated to dishonorable

discharge and confinement ranging from 5 years to life, and one was awaiting final action at end of period. In none of these cases was capital sentence carried into execution.

Delays in Court-Martial Trials

The average delay increased from 52.34 days in the 1918 fiscal year to an average of 59.61 days in 1919. An average of 40.6 days' delay occurred between original confinement and trial, and of 19.01 days between trial and final action by the reviewing authority.

TRIALS BY SPECIAL COURT-MARTIAL

Between July 1, 1917, and June 30, 1918, trials resulted in convictions as follows: enlisted men, 13,275; general prisoners, 19; and other persons subject to military law, 35. Acquittals were reported in the cases of 1,440 enlisted men and one other person. Incomplete tables for the 1919 fiscal year listed 21,282 convictions for enlisted men, 25 for general prisoners, and 97 for other persons.

TRIALS BY SUMMARY COURT-MARTIAL

During the 1918 fiscal year, there were convicted 202,085 enlisted men, 88 general prisoners, and 10 other persons subject to military law. During the following year, according to incomplete reports, the number of convictions included those of 197,536 enlisted men, 49 general prisoners, and 54 other persons.

OPERATION OF SPECIAL CLEMENCY BOARD

The Board and the Clemency and Restoration Section of the Military Justice Division (see p. 234), between Feb. and June 30, 1919, reviewed more than 5,400 cases and, as a result, reduced the average term of confinement by about 75 percent. In 1,636 cases considered the entire unexecuted portion of the sentence of confinement was remitted, while in 4,724 cases clemency in one form or another was recommended. This action did not imply that the sentences had been too severe when imposed. However, changed conditions made it advisable to relax somewhat the rigor of punishment that had obtained while hostilities were in progress.

CONSCIENTIOUS OBJECTORS

Only 504 persons were tried by court-martial for offenses growing out of "conscientious objection." Of this total, one case was acquitted and 53 cases were disapproved, three by the reviewing authority and 50 upon recommendation of The Judge Advocate General.

SECTION 14

MEDICAL DEPARTMENT

ORIENTATION

The origin of the Medical Department dates from the Siege of Boston, in 1775. The medical organization of the Continental Army, which bore little resemblance to the present structure, was disbanded in 1783. While provision was made for regimental surgeons from 1789 through the War of 1812, the Act of 1818 is generally considered as establishing the Medical Department as it functioned up to the Civil War. This enactment created the post of Surgeon General with direct authority over medical officers, thereby increasing the responsibility of the medical staff with respect to accountability for public property and the collection and preservation of medical records.

During the Civil War, there was established for the first time an ambulance-corps and a field-hospital system. This was followed by the organization of a hospital corps in 1887 to supplant the practice of detailing cooks and nurses from the line and employing civilian personnel. During the Spanish-American War regimental medical detachments were authorized.

The Act of Feb. 2, 1901, increased the Medical Department and created the Nurse Corps, but diminished the proportion of medical officers to Army strength. In the same year, a dental service was instituted when employment of contract dental surgeons was authorized. In 1908, a reorganization of the Medical Department restored the former proportion of officers, created the Medical Reserve Corps, and provided for a more adequate field equipment. By 1910, the evacuation system, until then still below standard, had been completed from battalion aid station at the front to base hospital at the rear.

In 1911, the Dental Corps was created and attached to the Medical Department. The number of dental surgeons with rank of first lieutenant was fixed at one per thousand enlisted men of the Army.

The National Defense Act of 1916 defined the Medical Department as consisting of the Surgeon General, Medical Corps, Medical Reserve Corps, Dental Corps, Veterinary Corps (including an enlisted force), Nurse Corps, and contract surgeons. The Medical Corps consisted of commissioned medical officers with an authorized strength of seven to every thousand enlisted men of the Regular Army. The Dental Corps comprised commissioned dental surgeons in proportion of one to each thousand enlisted men of the line, in rank of first lieutenant, captain, and major. Legislative

authority also was granted for the organization of the Dental Reserve Corps. The Act further provided that the Medical Department should absorb the Hospital Corps, with an authorized strength of five per cent of the enlisted strength of the Army.

FUNCTIONS

MEDICAL DEPARTMENT

To investigate the sanitary conditions of the Army and make recommendations in reference thereto; to advise with reference to the location of permanent camps and posts; to adopt systems of water supply and purification, and the disposal of waste; to care for the sick and wounded; to make physical examination of officers and enlisted men; to manage and control the enlisted force of the Medical Department and of the Army Nurse Corps; to furnish all medical and hospital supplies; and to protect the health and preserve the efficiency of the animals of the Army.

SURGEON GENERAL

In addition to the foregoing functions, others were inherent, by law or custom, in the Surgeon General as head of a War Department bureau, namely:

To advise the Secretary of War and the Chief of Staff upon matters relating to the health, sanitation, and physical fitness of the Army; to handle the administration of the medical service in all its branches, as well as the supervision of the expenditures of the Medical Department appropriations; and to administer the general hospitals, hospital ships, trains, and medical supply depots. The function of administering the supply depots was transferred to the Purchase, Storage, and Traffic Division Nov. 15, 1918.

CHIEFS

1917		
Apr.	6	Maj. Gen. William C. Gorgas, Surgeon General
1918		
Sept.	2	Brig. Gen. Charles Richard, Acting Surgeon General
Oct.	30	Maj. Gen. Merritte W. Ireland, Surgeon General
through		
June	20,	
1919		

ORGANIZATION AND DEVELOPMENT

SURGEON GENERAL'S OFFICE

1917

ORIGINAL DIVISIONS

On Apr. 6, the office functioned through five subdivisions. As the war progressed, these divisions underwent a considerable expansion with duties as follows:

Division of Sanitation

Matters relating to the health of troops and the sanitation of all Army stations, transports, and military trains; physical examination and selection of recruits and registrants and physical examination prior to discharge; direction of medico-military activities at all stations insofar as they related to the functions of the Office of the Surgeon General.

Supply Division later known as Finance and Supply Division

All matters relating to finances of the Medical Department; all matters pertaining to medical supplies.

Record, Correspondence, and Examining Division

Administrative matters; examination of accounts until consolidated with sections of Supply Division; construction and repair of general and post hospitals; supervision of civilian employees; management of hospital funds.

Museum and Library Division

Administration of the Army Medical Museum and the Library of the Surgeon General's Office.

Personnel Division

Procurement, classification, assignment, promotion, and discharge of Medical Department personnel; appointment to the Medical Reserve Corps of officers discharged from active duty.

EXPANSION

On May 4, the development and production of gas masks was made a function of the Medical Department (see Division of Gas Defense on chart 36). In May, the Division of Medical Department Training (Training Camps) was established. During June, the Divisions of Internal Medicine, Infectious Diseases and Laboratories, and General Surgery were added.

During the second half of the year these divisions were created: in July, the Hospital Division, the Division of Surgery of the Head, and the Division of Neurology and Psychiatry; in Aug., the Division of Military Orthopedic Surgery, the Division of Special Hospitals and Physical Reconstruction, and the Division of Gas Defense; in Sept., the Division of Food and Nutrition. During the same period veterinary supplies were taken over from the Quartermaster Corps, and the Sanitary Corps was also created.

1918

Expansion continued with the establishment of the Division of Psychology in Jan.; the Air Service Division in May; the Veterinary Division in June; the Overseas Hospital Division and the Division of Roentgenology in July.

About this time, the organization of the Office of the Surgeon General reached its maximum development as shown on chart 36.

Thereafter, certain functions of the Surgeon General's Office were transferred as follows:

Gas-Defense Service to Chemical Warfare Service (see p. 132) in July; procurement, assembly, issue, and maintenance of motor ambulances and motorcycles to the Motor Transport Corps in Aug.; procurement and distribution of supplies, finance and accounting to the Director of Purchase, Storage, and Traffic, Nov. 15. However, procurement of artificial limbs and of minor articles of similar special nature was retained by the Surgeon General, who thereafter acted in an advisory capacity only with reference to the procurement of all other medical supplies.

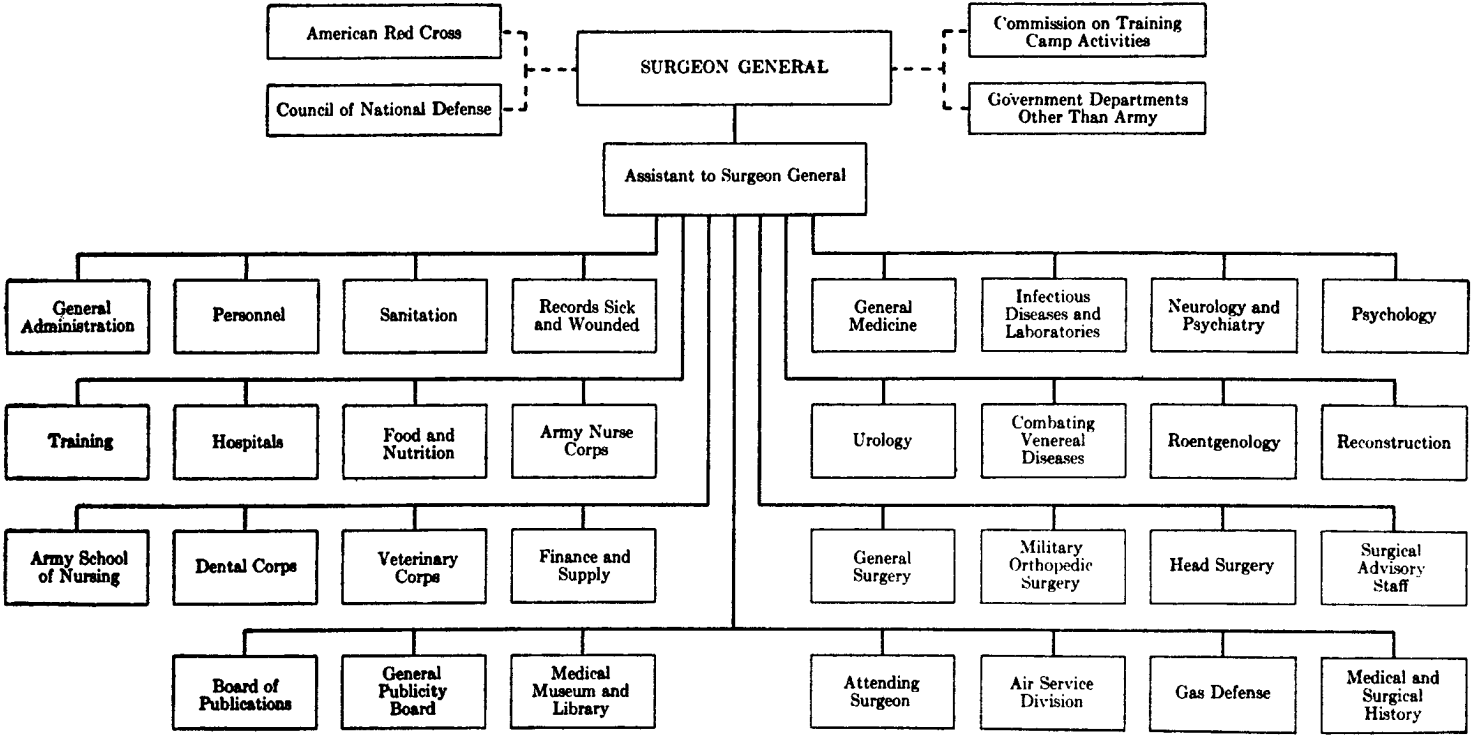


CHART NO. 36.—*ORGANIZATION OF SURGEON GENERAL'S OFFICE*
June 1918

REORGANIZATION

Postarmistice changes produced the structure shown on chart.

This drastic simplification was accomplished by making the Divisions of Military Orthopedics and Head Surgery, including Neurosurgery, Urology, and Roentgenology, subsections of the Division of Surgery; the Division of Training Camps a section of the Division of Sanitation; and the Army Medical Museum and the Epidemiology Section of the Division of Infectious Diseases and Laboratories part of the Laboratory Division. In general, the divisions that had been discontinued became sections of permanent divisions, their personnel and functions continuing under the new status as heretofore.

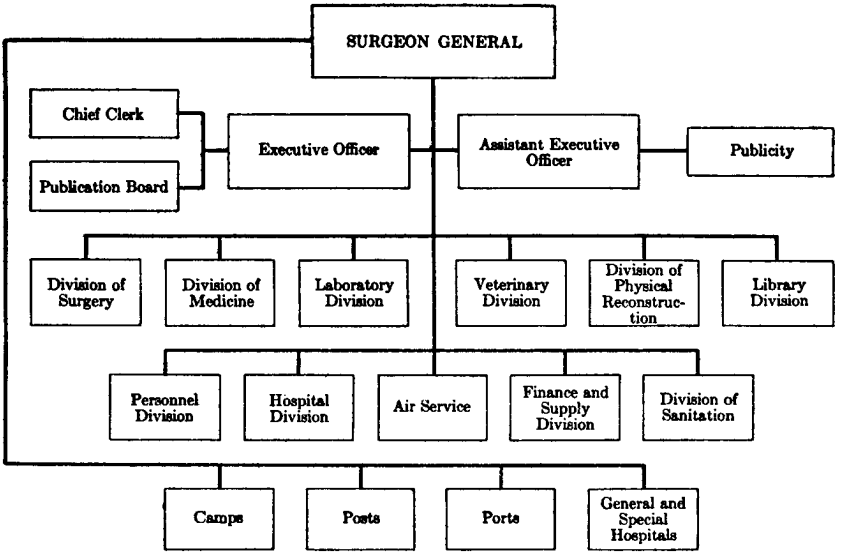


CHART NO. 37.—*ORGANIZATION OF SURGEON GENERAL'S OFFICE*
Dec. 1918

1919

On Mar. 14, the Air Service Division was discontinued, and by Apr. 15, a new Administrative Division had been established, resulting in the following organization:

Administrative Division

Functioned through these Sections: Chief Clerk; Circulation and Mimeograph; Hospital Fund and Pay Rolls; Information; Mail, Record, and File; Medical Department at Large Personnel; Publicity; and Stock Room.

Hospital Division

Functions: To handle the program of hospitalization for the Army in the United States, and to organize and administer overseas units, such as base hospitals, evacuation hospitals, ambulance companies, and hospital ships.

Finance and Supply Division

Functions: To have charge of matters pertaining to medical supplies and of disbursements in an advisory capacity only. Operated through these Sections: Claims; Vouchers and Allotment of Funds; Journal and Reprint; Artificial Limbs and Trusses.

Personnel Division

Functioned through these Sections: Commissioned; Dental; Enlisted; Army Nurse Corps; Army School of Nursing; Army Dietitians.

Sanitation Division

Functioned through these Sections: Administrative; Inspection; Medical Records of Sick and Wounded; Current Vital Statistics; Sanitary Engineering; Food and Nutrition; and Miscellaneous. Functions unchanged (see p. 243).

Library Division

Functioned through these Sections: Library; Medical and Surgical History of War. Army Museum activities (see p. 244) were merged with those of Division of Laboratories.

Division of Laboratories

Functioned through these Sections: Laboratories and Infectious Diseases; Epidemiology; Combating Venereal Diseases; Army Medical Museum. The Division made scientific studies of disease among troops in the United States and submitted recommendations on control of these diseases.

Surgery Division

Functions: To provide trained surgical personnel for the military service, standardize surgery and surgical equipment, inspect the surgical staffs of hospitals, maintain and increase surgical efficiency in hospitals, and investigate special surgical problems.

Medicine Division

Functions: To direct and supervise the professional medical work in the base and general hospitals; to institute methods to insure care and accuracy in the diagnosis of pulmonary conditions; to conduct neuro-psychiatric examinations; to provide a general intelligence classification in the Army; and to be responsible for the selection, training and assigment of personnel.

Physical Reconstruction Division

Functions: To apply complete medical and surgical treatment to disabled soldiers before their discharge from the Army in order to restore them to a maximum functional condition, both mentally and physically.

Veterinary Division

Functions: To handle all matters pertaining to the administration of the Veterinary Corps.

On June 30, the Division of Physical Reconstruction was abolished. On Nov. 24, the Dental Section of the Personnel Division became the Dental Division. On Dec. 4, the Medical and Surgical History of War Section of the Library Division was established as the Historical Division.

FIELD ORGANIZATION

Medical Department organization in the Zone of the Interior consisted of military hospitals, medical supply depots, training camps, schools, and auxiliary establishments.

MILITARY HOSPITALS

The hospitalization program was under the control of the Hospital Division (see p. 246).

At outbreak of war, the Medical Department operated four general hospitals, seven base hospitals and 131 post hospitals with a total bed capacity of 9,530.

Expansion to meet wartime requirements began at once. By the Armistice, there were in the United States 92 large hospitals with a combined bed capacity of 120,916, classified as general hospitals, camp base hospitals, and miscellaneous hospitals (including embarkation and debarkation facilities).

Other hospital facilities included camp hospitals, post hospitals, aviation hospitals, hospital trains, hospital ships, and mobile units.

General Hospitals

General hospitals were under the exclusive control of the Surgeon General, except in matters pertaining to the administration of military justice. They were equipped for the care and treatment of all injuries and diseases. However, their primary wartime purpose was to afford care and treatment to patients from overseas.

Number of hospitals available	39
Standard bed capacity	24,156
Additional capacity by new construction or by lease of buildings	14,629

Camp Base Hospitals

In type, these hospitals were patterned after the Letterman General Hospital at San Francisco and were more highly specialized than was possible of attainment in the smaller units. They operated as camp units but independently, as to internal administration, of the control of camp surgeons who, however, exercised supervisory control over sanitary conditions.

Number of hospitals available	36
Standard bed capacity	51,665
Additional capacity by new construction or by lease of buildings	3,388

Miscellaneous Hospitals

Of this type, 13 were under the Surgeon, Port of Embarkation, Hoboken; one under the Surgeon, Port of Embarkation, Newport News; and three were classified as department base hospitals.

Number of hospitals available	17
Standard bed capacity	16,322
Additional capacity by new construction or by lease of buildings	8,703

Camp Hospitals

This classification originally included hospitals at 38 camps and stations other than those at which camp base hospitals were established. During 1919, the following camp base hospitals, while continuing to perform the same class of work, were redesignated as camp hospitals, thus increasing this category to 65: Camps Bowie, Cody, Custer, Devens, Dix, Dodge, Eustis, Fremont, Gordon, Grant, Hancock, A. A. Humphreys, Jackson, Joseph E. Johnston, Kearny, Lee, Lewis, MacArthur, McClellan, Meade, Pike, Shelby, Sherman, Zachary Taylor, Travis, Upton, and Edgewood Arsenal.

The designation camp hospital referred to a partially immobilized unit, organized and equipped for use in camps where the care of sick would otherwise result in the immobilization of field hospitals or other sanitary formations pertaining to organizations.

Post Hospitals

These hospitals were provided primarily for the peacetime use of post garrisons. During the war, hospitals at the larger posts and recruit depots were operated along the lines of full-sized war hospitals, but the management at the smaller posts remained essentially unchanged. A total of 163 post hospitals were in operation in the United States and its possessions; and one in Tientsin, China, for American troops stationed there.

Aviation Hospitals

Located at aviation stations, these hospitals were primarily used for the care of sick and injured aviation personnel. A total of 93 establishments of this type, mostly small and detached from other training camps, was operated, in a manner similar to the smaller post hospitals.

Hospital Trains

Hospital railway trains were used for evacuating and distributing the sick and wounded from ports of debarkation to hospitals in the interior. At outbreak of war, the Medical Department had but one train, leased on a per diem basis with accommodations for 225 patients and a personnel of 31. In June 1918, four trains were in operation. On June 30, 1919, the rail equipment under the Hospital Division included the following:

Designation	Composition and capacity	Station	Remarks
Hospital trains			
Train No 1	Each train was made up of the following cars: One kitchen and personnel car; two tourist cars; two bed cars; one baggage and stores car; one officers' car. Capacity of each train: 141 patients plus personnel.	Port of Embarkation, Hoboken, N. J.	
Train No 2		Port of Embarkation, Hoboken, N. J.	
Train No. 3		Port of Embarkation, Newport News, Va.	Baggage car and officers' car stationed at Hoboken. Transferred to Hoboken July 6, 1919.
Train No. 4		Port of Embarkation, Hoboken, N. J.	
Unit cars			
Cars 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10.	Each car furnished hot meals for 250 patients.	Port of Embarkation, Newport News, Va.	These cars were converted parlor cars, arranged with kitchen, baggage and storage space and quarters for personnel. By using one unit car and 6 or 7 Pullmans, a hospital train could be quickly made up.
Cars 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20.		Port of Embarkation, Hoboken, N. J.	
Leased cars			
3 Pullman cars (private), 5 hotel cars, 2 kitchen cars.	----------	Port of Embarkation, Hoboken, N. J.	These leased cars were arranged with large kitchens and were used in a manner similar to the unit cars.
2 Pullman cars (private), 1 hotel car, 7 kitchen cars.	----------	Port of Embarkation, Newport News, Va.	

Hospital Ships

The Army had no hospital ships. Before the Armistice, 43 naval transports were used to return sick and wounded Army personnel to the United States. After the Armistice, 10 trans-Atlantic liners taken over in German harbors were converted into hospital ships for U. S. Army use.

MEDICAL SUPPLY DEPOTS

On Apr. 6, 1917, the functions of depots included procurement, storage, and issue of supplies; shipping; finance; and returns and records connected therewith. Payment was made by depot supply officers after delivery of goods. All disbursing accounts were audited in the Surgeon General's Office. Supplies were issued from depots on requisition from medical officers in command of hospitals or from post surgeons.

At outbreak of war, there were six medical supply depots in operation. Soon thereafter, additional depots, as well as supplementary port and camp depots were established, as follows:

Designation	Available storage space, in square feet	Remarks
SUPPLY DEPOTS		
Medical Supply Depot, Atlanta, Ga	146,000	May 24, 1917, establishment of depot authorized. Distributed supplies to troops stationed in North Carolina, South Carolina, Georgia, Florida, Alabama, and Tennessee.
Medical Supply Depot, Chicago, Ill	177,000	May 24, 1917, establishment of depot authorized. Distributed supplies to the States of Montana, Wyoming, North Dakota, South Dakota, Michigan, Minnesota, Iowa, Wisconsin, Indiana, Ohio, and Kentucky.
Medical Supply Depot, El Paso, Tex		Established in 1916 for supply of troops mobilised on Mexican Border. Abandoned in summer of 1917, its functions being taken over by Medical Supply Depot, San Antonio, Tex.
Medical Supply Depot, Louisville, Ky	45,000	May 24, 1917, establishment of depot authorized. Operations began in July 1917. Activities restricted to handling motor ambulances, motorcycles, spare parts, trailers, and miscellaneous spare parts for all such equipment for all stations in the United States. Aug. 31, 1918, transferred to Motor Transport Corps.
Medical Supply Depot, New York City, N. Y.	185,000	In operation at beginning of war. Used as procurement depot for post supplies.
Medical Supply Depot, Philadelphia, Pa	192,000	May 24, 1917, establishment of depot authorized. Supplied the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, New Jersey, Maryland, Delaware, and Virginia.
Medical Supply Depot, St. Louis, Mo	347,000	In operation at beginning of war. Used for procurement of veterinary supplies and for the assembling of veterinary field units. Distributing point for post and field supplies to troops stationed in Oklahoma, Colorado, Kansas, Missouri, Arkansas, Louisiana, and Mississippi.
Medical Supply Depot, San Antonio, Tex	48,000	In operation at beginning of war Distributed supplies to troops stationed in Texas, New Mexico, and Arizona.
Medical Supply Depot, San Francisco, Calif	112,000	In operation at beginning of war. Distributing point for the states west of the Rocky Mountains, including Idaho, Nevada, and Utah.
Medical Supply Depot, Washington, D. C	270,000	In operation at beginning of war. Used for procurement of field supplies and for assembling of field units.
PORT DEPOTS		
Port Medical Supply Depot, New York, N. Y. (Port of Embarkation, Hoboken, N. J.)	80,000	July 1917, established on Pier 45, North River, for shipping medical supplies to A. E. F. in France. Assembling of medical and hospital supplies for oversea shipment began in same month In 1918, depot activities were extended to Bush Terminal, Brooklyn; 45 Broadway, New York City; and Port Newark Terminal, N. J., causing increase in personnel and floor space.
Port Medical Supply Depot, Newport News, Va	50,000	July 13, 1917, port medical supply officer arrived. Depot used for shipment of field medical equipment and supplies, including motor ambulances, to A. E. F. in France.

Designation	Available storage space, in square feet	Remarks
Other Medical Supply Depots:		
Port of Boston, Mass	50,000	Not extensively used for oversea shipments.
Port of Charleston, S. C	100,000	No considerable quantity of supplies ever shipped from this port.
Port of Philadelphia, Pa		Embarkation depot for medical supplies at Pier 38.
Port of Baltimore, Md		Officer of Medical Department assigned to duty at each embarkation depot to look after the medical property passing through these ports.
Port of New Orleans, La		
CAMP DEPOTS		
Camp Medical Supply Depots at all the large training and embarkation camps		Generally three buildings of camp base hospital were provided for storehouses to take care of the reserve of medical property intended for the hospital and the camp.

In Jan. 1918, a centralized purchasing department, superseding the procurement activities of the several medical supply depots, was organized in Washington, D. C. and designated as General Purchasing Office, Medical Department, U. S. Army. On Nov. 15, 1918, the supply functions of the Medical Department were transferred to the Office of the Director of Purchase and Storage, and finance functions to the Director of Finance.

TRAINING CAMPS AND SCHOOLS

Facilities were created for the training of officers and enlisted men. These included medical officers' training camps, special schools, special professional schools in military and nonmilitary institutions, and miscellaneous schools (for description see pp. 269-275).

AUXILIARY ESTABLISHMENTS

Two organizations of official standing contributed materially to Medical Department accomplishments: the United States Army Ambulance Service and the American National Red Cross.

United States Army Ambulance Service

Before it had been determined to send American troops to Europe, an appeal by Marshal Joffre to the Congress resulted in the creation of the United States Ambulance Service, which had the unique distinction of being the only organization ever assembled by the Government as part of a foreign army.

The personnel was obtained by voluntary enlistment at a special recruiting office in Philadelphia and by canvass of certain educational centers. Some 40 universities and colleges each furnished one or more sections of 55 men, all of which were sent to Camp Crane, Pa., for training (see p. 271). In addition, a large

number of men transferred from American Red Cross ambulance companies.

By direction of the President, this organization was subsequently incorporated in the Medical Department, with an authorized maximum strength of 214 officers and 169 ambulance sections.

American National Red Cross

By Act of 1912, it was permissible for the Medical Department to utilize voluntary aid of the American National Red Cross to supplement the resources and to assist the personnel of the Department. During the war, Red Cross participation was primarily centered in oversea activities; however, in the United States it assisted by organizing certain hospitals, hospital units, and ambulance companies to be absorbed in the Regular medical service.

BASE HOSPITALS

According to plans evolved when war became imminent, the Red Cross organized 50 base hospitals, each with a bed capacity of 1,000. Of these Base Hospitals Nos. 2, 4, 5, 10, 12, and 21, along with 116 medical officers, were attached to the British Army.

HOSPITAL UNITS

A total of 19 units was organized to join hospitals in France or camp hospitals in England.

AMBULANCE COMPANIES

Upon declaration of war, 46 ambulance companies were organized by the Red Cross. On muster into the Army, these units were generally assigned to divisional sanitary trains as motor ambulance companies, with appropriate change of designation.

PERSONNEL

The military personnel of the Medical Department consisted of officers, female nurses, and enlisted men. Distribution to the various activities of the Army was made by orders issued through the Adjutant General, based on recommendations of the Surgeon General, who was responsible for the procurement of an adequate and suitable force to carry on prescribed duties.

OFFICERS

The commissioned personnel comprised officers of the Medical Corps; Medical Reserve Corps; Medical Corps, National Guard; Medical Corps, National Army; Dental Corps; Dental Reserve Corps; Dental Corps, National Guard; Veterinary Corps; Veterinary Reserve Corps; Veterinary Corps, National Guard; Veterinary Corps, National Army; Sanitary Corps, National Army; and Ambulance Service.

MEDICAL CORPS

During the first year of the war, the Corps included the Medical Corps of the Regular Army, Medical Officers' Reserve Corps, and medical officers of the National Guard and National Army.

The Medical Corps of the Regular Army consisted of commissioned medical officers.

The Medical Officers' Reserve Corps, established June 3, 1917, and successor of the old Medical Reserve Corps, obtained most of its officers from the latter and from officers newly commissioned and assigned to active duty.

The Medical Corps, National Guard, included the officers holding commissions in State organizations that were mobilized under Federal control.

The Medical Corps, National Army, was made up of those officers of the Regular Corps or Reserve Corps, who were commissioned to vacancies in the National Army.

On Aug. 7, 1918, the Regular Medical Corps, the Medical Reserve Corps, the Medical Corps of the National Guard, and the Medical Corps of the National Army were consolidated to form the Medical Corps, United States Army.

DENTAL CORPS

From Apr. 6, 1917, to Aug. 6, 1918, the Corps comprised the Dental Corps, Regular Army; the Dental Reserve Corps; and the Dental Corps, National Guard.

The Regular Dental Corps consisted of officers commissioned as dental surgeons.

The Dental Reserve Corps was made up of officers commissioned in that Corps, created by the National Defense Act of June 3, 1916.

The Dental Corps, National Guard, was composed of dental surgeons commissioned for duty in the various State organizations, mobilized under Federal control.

On Aug. 7, 1918, all components were consolidated to form the Dental Corps, United States Army.

VETERINARY CORPS

The Corps was established by statute in 1916 as part of the Medical Department. It comprised the veterinarians and assistant veterinarians of the Army.

From 1899 to 1916, the Army veterinary service was rendered by veterinarians assigned to Cavalry and Field Artillery regiments and those employed under contract by the Quartermaster Corps. While a limited number of veterinarians were employed on meat inspection, there seems to have been no specific authority for such a service.

SANITARY CORPS

Created by statute May 18, 1917, the Corps had an authorized strength of 2,900 officers and 3,945 enlisted men.

Commissioned officers were recruited from sanitary engineers, psychologists, chemists, laboratory technicians, office experts, adjutants, epidemiologists, mess officers, and from persons who possessed other knowledge of special advantage to the Medical Department.

CONTRACT SURGEONS

The long-standing authority of the Surgeon General to appoint contract surgeons (civilian physicians employed under contract) to supplement the Medical Corps, largely fell into disuse with the creation of the Medical Reserve Corps in 1908. At outbreak of war only a few contract surgeons were on the rolls; however, the number was greatly increased as the war progressed.

FEMALE NURSES

ARMY NURSE CORPS

In July 1918, the Nurse Corps (see p. 242) was reorganized and its designation changed to Army Nurse Corps. Provision was made for one superintendent and for as many chief nurses, nurses, and reserve nurses as might be prescribed. Assistant superintendents for oversea service and one director and assistant directors of the American Red Cross Nursing Service were also authorized.

AMERICAN RED CROSS NURSING SERVICE

Shortly after war was declared, the Regular Nurse Corps was augmented by the assignment to active service of reserve nurses. Existing regulations provided that the enrolled nurses of the American Red Cross Nursing Service should constitute the reserve of the Nurse Corps, and that in time of war they might, with their consent, be placed on active duty. As the war progressed, the Nursing Service was called upon to furnish large numbers of nurses to meet the rapidly increasing needs of the Army.

ENLISTED MEN

The enlisted personnel of the Medical Department also included that of the Sanitary Corps, Veterinary Corps, Ambulance Service, and Medical Enlisted Reserve Corps. However, prior to June 23, 1917, there was no distinction made between enlisted men assigned to duty with units or detachments for the performance of essential Medical Department functions and those assigned to dental or veterinary work.

UNITED STATES ARMY AMBULANCE SERVICE

On June 23, 1917, the first subdivision of the enlisted force of the Medical Department was made by the creation of the United States Army Ambulance Service. The enlisted strength of this Service was raised and maintained by voluntary enlistment and by the draft.

SANITARY CORPS

In the organization of the Sanitary Corps, June 30, 1917, provision was made for an enlisted force in addition to the officer personnel, mentioned on page 255.

VETERINARY CORPS

On Oct. 4, 1917, an enlisted force was specifically authorized for this corps at the rate of 16 enlisted men for each 400 animals in the service.

MEDICAL ENLISTED RESERVE CORPS

This Corps consisted of medical students at recognized institutions who were enlisted as reservists and allowed to continue their studies, subject to call for active duty at any time their services were required. In Nov. 1917, this privilege was extended to hospital internes, dentists, dental students, veterinarians, and veterinary students of draft age, and to first-year students in the above categories. Premedical students were excluded.

In Aug. 1918, enlistments were discontinued at time of creation of the Students' Army Training Corps (see p. 556). Steps were taken during Oct. 1918 to transfer personnel of the Medical Enlisted Reserve Corps to this new organization which provided for the education of all students, including medical, dental, and veterinary. The changes which occurred in the Medical Enlisted Reserve Corps between Sept. 4, 1917, and Dec. 10, 1918, were as follows:

Status at time of enlistment	Number enlisted	Discharges			Called to active duty as privates	Transferred to Students' Army Training Corps	Remaining inactive as of Dec. 10, 1918
		To accept commissions in—		All other causes			
		Army	Navy				
Medical students	8,757	31	252	40	533	3,863	4,038
Internes	382	241	31	18	37	----	55
Dental students	5,827	----	4	38	1,789	2,247	1,749
Dentists	1,079	3	6	19	891	----	160
Veterinary students	1,064	----	----	6	424	181	453
Veterinarians	332	----	----	15	265	----	52
Total	17,441	275	293	136	3,939	6,291	6,507

SUMMARY

The strength of the Medical Department during the emergency was as follows:

	Apr. 6, 1917			July 1, 1918			Nov. 15–30, 1918 (peak strength)			June 30, 1919		
	Regular	Temporary	Total	Regular	Temporary	Total	Regular	Temporary	Total	Regular	Temporary	Total
Medical Department:												
Commissioned	491	342	833	867	20,096	20,963	989	29,602	30,591	948	11,783	12,731
Enlisted			6,619			[1] 154,556			[1] 264,181			[1] 98,396
Dental Corps: Commissioned	86		86	211	2,746	2,957	229	4,391	4,620	220	1,999	2,219
Sanitary Corps: Commissioned					1,389	1,389		2,919	2,919		1,817	1,817
Veterinary Corps:												
Commissioned	62		62	118	1,429	1,547	115	1,887	2,002	112	905	1,017
Enlisted				97	11,543	11,640			17,160			
U. S. Ambulance Service: Commissioned					168	168		209	209		111	111
							Oct. 30, 1918					
Contract Surgeons		181	181		120	120		[2] 939	[2] 939		42	42
Army Nurse Corps	233	170	403	2,000	10,186	12,186	3,524	17,956	21,480	2,084	7,532	9,616
Civilian Employees			450			9,238			10,695			5,820

[1] Including enlisted Sanitary Corps. [2] Of these 55 were women.

Of the above the following served overseas, while personnel was at its maximum strength: Officers, 13,161 Medical Corps, 1,802 Dental Corps, 877 Veterinary Corps, 1,181 Sanitary Corps, 22 Ambulance Service, 8 contract surgeons; total, 17,051. Enlisted, 140,986.

MEDICAL DEPARTMENT UNITS

MOBILE UNITS

The following units were organized:

Categories	Number			
	Organized	Sent overseas—		Remaining in United States
		Before July 1, 1918	After July 1, 1918	
Ambulance companies	14	0	0	14
Ambulance sections	150	103	31	16
Army sanitary trains	2	[1] 1	[1] 4	1
Base hospitals	179	46	92	41
Convalescent camps	14	2	10	2
Convalescent depots, sections	5	1	1	3
Corps sanitary trains	1	0	0	1
Division sanitary trains	56	19	22	15
Evacuation ambulance companies	81	12	64	5
Evacuation hospitals	61	8	21	22
Field hospitals	13	0	0	13
Hospital trains	37	0	30	7
Hospital units (Am. Red Cross)	22	18	0	4
Medical supply depots	9	5	4	0
Mobile hospitals	23	1	17	5
Mobile surgical units	9	4	5	0
Sanitary squads	108	42	44	22
Stationary laboratories	6	2	3	1
Special units:				
Anaesthetic units	1	0	1	0
Aviation medical units	1	0	1	0
Aviation ophthalmo-otological units	1	0	1	0
Central optical units	1	0	1	0
Medical classifying units	1	0	1	0
M. D. repair shop units	1	0	1	0
Medical research boards	1	0	1	0
Mobile operating units	1	0	1	0
Museum units	1	0	1	0
Neuropsychiatric units	2	0	2	0
Neurosurgical units	1	0	1	0
Ophthalmological units	1	0	1	0
Otolaryngological units	1	0	1	0
Rodentological units	1	0	1	0
Roentgenological units	1	0	1	0
Surgical groups	9	1	8	0
Army mobile veterinary hospitals	3	0	2	1
Base veterinary hospitals	3	1	1	1
Corps mobile veterinary hospitals	9	1	5	3
S. O. S. veterinary hospitals	25	6	15	4

[1] Section.

In addition to above, 56 medical replacement units (approximately 17,500 men) and 4 veterinary replacement units (50 officers and 795 enlisted) were sent overseas.

Division Sanitary Formation

Detachments for the several divisional combat units, referred to as "medical attached," and divisional sanitary train personnel were provided for as follows:

Organization	Lieutenant colonel	Major	Captain	Hospital sergeant	Sergeant first-class	Sergeant	Corporal	Private first-class or privates	Wagoner	Cook	Farrier	Horseshoer	Mechanic	Saddler
Division Surgeon's Office	1	2		1	2	2	2	4						
Regiment (Infantry)		1	6		1	4		43						
Machine-gun battalion, 2 companies (Infantry)			1		1	1		4						
Machine-gun battalion, 4 companies (Infantry)			1		1	1		12						
Field Artillery, regiment; 2 battalions, motorized		1	2		1	2		16						
Field Artillery, regiment; 2 battalions, horse-drawn		1	2		1	2		20						
Field Artillery, regiment; 3 battalions		1	3		1	3		29						
Field Artillery, trench mortar battery						1		3						
Regiment Engineers		1	2		1	2		24						
Field battalion, Signal Corps			1		1	1		12						
Train headquarters and military police, Infantry Division			1		1	1		4						
Ammunition train, Infantry Division		1	2		1	3		25						
Supply train, Infantry Division			1		1	1		8						
Sanitary squads			[1] 1		1	1	2	22						
SANITARY TRAIN														
Headquarters, sanitary train	1		([2])		1	4		8	1					
Headquarters, ambulance company section		1				1		3	1	1				
Ambulance company, animal-drawn			5		2	11	6	108	18	3	1	2	1	1
Ambulance company, motorized			5		2	11	6	83	16	3			1	
Headquarters, field hospital section		1				1		4		1				
Field hospital, animal-drawn		1	5		3	6	3	56	8	2	1	1	1	1
Field hospital, motorized		1	5		3	6	3	55	13	2			1	
Camp infirmary						1			1					
Divisional medical supply unit			[1] 1		1	1		6						

[1] Sanitary Corps.

[2] 1 captain and 2 first lieutenants of the S. C. and Q. M. C., respectively.

NOTE: An ambulance company section of a sanitary train contained two motor and two animal-drawn companies.
A field hospital section comprised three motor and one animal-drawn companies.

FIXED UNITS

Fixed units included all medical establishments in the United States, with their operating personnel. They consisted of hospitals, supply installations, schools, and training centers. Further information concerning these organizations is given under Hospitalization (p. 262) and Training (p. 269).

ACTIVITIES

SANITATION

The sanitary work of the Medical Department was directed by the Sanitation Division, Surgeon General's Office (see pp. 243 and 247).

SANITARY INSPECTION SERVICE

This Service extended to all stations, within the continental limits of the United States, under direct control of the War Department. Included therein were the National Guard camps and National Army cantonments, the many special camps (such as Quartermaster, Engineer, Medical Department, Tank Corps, etc.), embarkation camps, aviation fields, balloon schools, technical schools, recruit depots, ordnance depots and arsenals, ordnance proving grounds, chemical plants, remount stations, quartermaster depots, aviation depots, Army supply bases, prison camps, disciplinary barracks, Students' Army Training Corps units, and general hospitals. At all of the camps and other stations the inspections included the base or other station hospitals.

During sanitary inspections stress was laid on matters largely professional or technical in character, such as details of camp sanitation; general administration of hospitals, hospital trains, and hospital ships; nursing and professional care of the sick; competency of medical officers, including qualifications of specialists; handling of infectious diseases; prevention of venereal disease; management of quarantine and detention camps; examination of food handlers; extra-cantonment health activities; quality and use of medical supplies; character and adequacy of hospital construction; management of bacteriological laboratories and X-ray laboratories; special diets; instruction of sanitary trains; mosquito and fly eradication; delousing procedures; water purification and sewage disposal; physical examination for entry into service and prior to demobilization; development battalions and convalescent centers; physical reconstruction; and vocational education.

During 1917, the Surgeon General's Office largely confined its attention to the new camps and cantonments. Throughout the winter, epidemics of measles, meningitis, and pneumonia in the

overcrowded camps rendered constant checks on sanitary conditions necessary. In Sept. and Oct. 1918, the influenza epidemic threw a great strain on the Inspection Service.

The limited experience of the administrative staffs of newly opened general hospitals made frequent inspections advisable. Throughout the war, the methods and accuracy of physical examinations given prior to induction of individuals into the service received close attention, as did the supervision of medical boards charged with the examination of officers and enlisted men prior to discharge.

PHYSICAL EXAMINATIONS

On Induction

For the first year of the war, registrants for enlistment received a preliminary examination upon arrival in camp, followed by another made by various expert examiners in specialties, such as psychiatry, orthopedics, cardiovascular diseases, tuberculosis, and others. In April 1918, these two examinations were combined. An insight into results obtained may be had from the following table:

Camp	Sept., Oct., and Nov., 1918			Sept., Oct., and Nov., 1917		
	Number examined	Rejected		Number examined	Rejected	
		Number	Percent		Number	Percent
Custer	9,234	1,935	20.95	17,487	1,660	9.49
Devens	5,694	692	12.15	36,082	4,281	11.87
Dix	8,429	1,448	17.18	19,804	1,573	7.97
Dodge	14,964	1,251	8.35	20,505	690	3.36
Gordon	12,504	2,126	17.00	19,935	1,556	7.80
Grant	18,770	2,337	12.45	26,658	1,148	4.30
Lee	23,879	4,208	17.62	36,938	920	2.49
Lewis	12,485	1,628	13.04	46,313	5,095	11.00
Meade	5,060	528	10.43	35,971	2,245	6.24
Pike	17,462	1,198	6.86	24,389	1,819	7.46
Sherman	1,967	205	10.42	9,850	1,012	10.27
Taylor	8,658	1,138	13.14	27,903	2,143	7.68
Travis	8,692	685	7.88	32,746	993	3.03
Upton	485	74	15.26	31,423	2,318	7.38
Total	148,283	19,453	13.12	387,004	27,453	7.10

On Demobilization

Over 4,000,000 men were discharged at all military stations, but the work was principally conducted at 33 demobilization centers. While from the Armistice to Dec. 31, 1919, 3,350,000 individuals were actually examined, available records cover only

3,154,676 cases. Of this number, 2,936,780, or 93.7 percent, were discharged without record of disability, or with disability rating less than 10 percent; 166,689, or 5.3 percent, were reported to the Bureau of War Risk Insurance as having disability rating of more than 10 percent; 24,293, or 0.7 percent were held in service on account of communicable diseases, mostly venereal; 4,368 men, or 0.1 percent, were held until they attained a maximum degree of improvement; and 2,391, or 0.07 percent, were retained in the Army for other causes.

Routine Examinations

Physical examinations governing the examination of candidates for commission were the same as for enlistment in the Regular Army, except for fliers for whom the requirements were especially high. Available records do not show the percentage of officer candidates rejected for physical causes.

An annual physical examination of all officers in active service was required.

All personnel of every command ordered overseas were given a thorough physical examination to determine their fitness for field service. Those found physically unfit were transferred to development battalions or elsewhere.

Physical examinations to detect venereal diseases were held periodically.

PSYCHOLOGICAL EXAMINATIONS

These examinations were given to aid in segregation and elimination of the mentally incompetent; to assist in selecting competent men for responsible positions; and to classify men according to their mental capacity.

The psychological service was eventually organized in 35 training camps. Between Sept. 1917 and Jan. 31, 1919, 42,238 officers and 1,684,728 enlisted men were examined.

SANITARY ENGINEERING SERVICE

Under the general supervision of camp surgeons, sanitary engineer officers were charged with drainage and mosquito control. Vigorous action in this field resulted in the practical elimination of malaria at more than 70 stations where the disease would otherwise have been prevalent. Sanitary engineers also devised an improved type of incinerator and made many other improvements in methods of handling camp wastes.

HOSPITALIZATION

The major hospital activities within the United States involved the operation of the following establishments:

Designation	Location	Maximum bed capacity	Period of operation	Peak load of patients					Detailed description
				Month	Number	Assigned medical			
						Off.	E.M.	Nurses	
GENERAL HOSPITALS									
Army and Navy General Hospital	Hot Springs, Ark	266	Apr. 1917–Dec. 1919	June 1919	384	11	87	10	See p. 808.
General Hospital	Fort Bayard, N. Mex	1,000	do	Dec. 1918	1,746	31	604	86	See p. 900.
Letterman General Hospital	Presidio of San Francisco, Calif	1,716	do	Aug. 1919	2,751	59	514	104	See p. 958.
Walter Reed General Hospital	Takoma Park, D. C	1,900	do	Oct. 1918	3,860	107	919	130	See p. 805.
General Hospital No. 1 (Columbia War Hospital)	Williamsbridge, N. Y. C	1,360	July 1917–Oct. 1919	do	2,189	59	431	145	See p. 772.
General Hospital No. 2	Fort McHenry, Md	2,700	Oct. 1917–Dec. 1919	July 1919	3,765	88	730	187	See p. 744.
General Hospital No. 3	Colonia, N. J	1,550	May 1918–Oct. 1919	Dec. 1918	2,420	63	624	85	See p. 772.
General Hospital No. 4	Fort Porter, N. Y	250	Nov. 1917–Oct. 1919	do	548	12	168	34	See p. 717.
General Hospital No. 5	Fort Ontario, N. Y	1,023	Nov. 1917–Aug. 1919	June 1919	1,822	38	715	61	See p. 778.
General Hospital No. 6	Fort McPherson, Ga	2,865	Dec. 1917–Dec. 1919	do	3,970	62	894	170	See p. 836.
General Hospital No. 7	Roland Park, Md	300	Dec. 1918–Dec. 1919	Mar. 1919	227	9	91	10	See p. 714.
General Hospital No. 8	Otisville, N. Y	1,000	May 1918–Dec. 1919	July 1919	1,010	33	257	79	See p. 778.
General Hospital No. 9	Lakewood, N. J	1,000	Feb. 1918–May 1919	Mar. 1919	1,498	68	423	78	See p. 740.
General Hospital No. 10	Boston, Mass	700	Oct. 1918–June 1919	Apr. 1919	1,163	47	468	69	See p. 694.
General Hospital No. 11	Cape May, N. J	710	Feb. 1918–Aug. 1919	Dec. 1918	1,185	35	249	51	See p. 718.
General Hospital No. 12	Biltmore, N. C	451	Apr. 1918–Aug. 1919	Apr. 1919	576	32	203	43	See p. 813.
General Hospital No. 13	Dansville, N. Y	300	Mar. 1918–Mar. 1919	Feb. 1919	273	15	166	25	See p. 722.
General Hospital No. 14	Fort Oglethorpe, Ga	2,000	Mar. 1918–June 1919	Oct. 1918	6,413	124	886	193	See p. 841.
General Hospital No. 15	Corpus Christi, Tex	215	Apr. 1918–May 1919	July 1918	373	10	115	12	See p. 907.
General Hospital No. 16	New Haven, Conn	500	Mar. 1918–Aug. 1919	Oct. 1918	686	74	308	56	See p. 701.
General Hospital No. 17	Markleton, Pa	200	Mar. 1918–Mar. 1919	Nov. 1918	306	10	75	20	See p. 744.
General Hospital No. 18	Waynesville, N. C	600	Apr. 1918–Mar. 1919	do	709	25	243	58	See p. 857.
General Hospital No. 19	Oteen (Azalea), N. C	1,300	Sept. 1918–Dec. 1919	Feb. 1919	1,499	53	586	108	See p. 842.
General Hospital No. 20	Whipple Barracks, Ariz	400	June 1918–Dec. 1919	Aug. 1919	461	23	164	44	See p. 934.
General Hospital No. 21 [1]	Denver, Colo	1,609	Sept. 1918–Dec. 1919	June 1919	1,867	59	527	119	See p. 868.
General Hospital No. 22	Philadelphia, Pa	450	Feb. 1919–June 1919	Apr. 1919	613	27	227	43	See p. 781.
General Hospital No. 23	Hot Springs, N. C	425	Aug. 1918–Mar. 1919	Feb. 1919	122	2	126	25	See p. 828.
General Hospital No. 24	Park View, Pa	700	July 1918–July 1919	June 1919	856	44	339	66	See p. 778.
General Hospital No. 25	Fort Benjamin Harrison, Ind	1,027	Sept. 1918–Aug. 1919	Oct. 1918	3,036	37	150	50	See p. 876.

See footnotes at end of table.

Designation	Location	Maximum bed capacity	Period of operation	Peak load of patients					Detailed description
				Month	Number	Assigned medical			
						Off.	E.M.	Nurses	
GENERAL HOSPITALS—continued									
General Hospital No. 26	Fort Des Moines, Iowa	1,500	Sept. 1918–Oct. 1919	Dec. 1918	1,829	77	662	111	See p. 868.
General Hospital No. 27	Fort Douglas, Utah	499	Sept. 1918–Sept. 1919	June 1919	677	23	177	44	See p. 941.
General Hospital No. 28	Fort Sheridan, Ill	4,800	Sept. 1918–Dec. 1919	do	4,987	157	998	332	See p. 890.
General Hospital No. 29	Fort Snelling, Minn	1,275	Sept. 1918–Aug. 1919	Oct. 1918	1,726	21	443	49	See p. 892.
General Hospital No. 30	Plattsburg Barracks, N. Y	870	Sept. 1918–Oct. 1919	July 1919	1,373	54	409	111	See p. 783.
General Hospital No. 31	Carlisle, Pa	900	Sept. 1918–Dec. 1919	do	1,305	31	367	58	See p. 718.
General Hospital No. 32	Chicago, Ill	500	Dec. 1918–June 1919	Apr. 1919	774	34	232	89	See p. 862.
General Hospital No. 33	Fort Logan H. Roots, Ark	784	Oct. 1918–Jan. 1919	Nov. 1918	480	31	342	49	See p. 846.
General Hospital No. 34	East Norfolk, Mass	340	Nov. 1918–June 1919	Jan. 1919	348	15	206	33	See p. 698.
General Hospital No. 35	West Baden, Ind	800	Oct. 1918–Apr. 1919	Mar. 1919	557	26	274	33	See p. 897.
General Hospital No. 36	Detroit, Mich	1,000	Nov. 1918–July 1919	June 1919	1,033	40	484	76	See p. 869.
General Hospital No. 37	Madison Barracks, N. Y	300	Nov. 1918–Mar. 1919	Feb. 1919	246	12	220	15	See p. 786.
General Hospital No. 38	East View, N. Y	750	Dec. 1918–July 1919	May 1919	1,133	30	363	64	See p. 727.
General Hospital No. 39 [2]	Long Beach, N. Y	500	Oct. 1918–Mar. 1919	Feb. 1919	576	26	313	44	See p. 769.
General Hospital No. 40 [3]	St. Louis, Mo	550	Mar. 1919–June 1919	May 1919	356	32	204	43	See p. 887.
General Hospital No. 41 [3]	Fox Hills, Staten Island, N. Y	1,912	June 1918–Dec. 1919	Feb. 1919	666	38	514	65	See p. 769.
General Hospital No. 42 [4]	Spartanburg, S. C	1,630	Oct. 1917–Sept. 1919	Oct. 1918	4,393	53	587	134	See p. 855.
General Hospital No. 43 [5]	Hampton, Va	1,350	Nov. 1918–Mar. 1920	June 1919	1,910	42	877	16	See p. 777.
CAMP BASE HOSPITALS									
Beauregard	Alexandria, La	1,440	Sept. 1917–Feb. 1919	Oct. 1918	5,773	94	609	202	See p. 811.
Bowie	Fort Worth, Tex	1,800	Aug. 1917–July 1919	Nov. 1917	5,776	36	299	53	See p. 901.
Cody	Deming, N. Mex	1,265	Sept. 1917–Apr. 1919	Dec. 1917	3,487	66	294	32	See p. 905.
Custer	Battle Creek, Mich	1,858	Sept. 1917–Mar. 1919	Oct. 1918	10,268	107	845	191	See p. 865.
Devens	Ayer, Mass	2,740	Sept. 1917–July 1919	Sept. 1918	12,318	146	940	126	See p. 696.
Dix	Wrightstown, N. J	2,184	Oct. 1917–June 1919	do	7,943	104	650	158	See p. 724.
Dodge	Des Moines, Iowa	2,196	Sept. 1917–July 1919	Oct. 1918	11,626	101	623	324	See p. 871.
Abraham Eustis	Lee Hall, Va	756	Sept. 1918–Mar. 1919	do	2,057	22	408	68	See p. 760.
Fremont	Palo Alto, Calif	1,567	Jan. 1918–Mar. 1919	do	4,063	59	366	105	See p. 943.
Funston (see Base Hospital, Fort Riley, Kans.)	Junction City, Kans	3,068	Sept. 1917–June 1919	do	11,645	89	959	259	See p. 884.

Gordon	Chamblee, Ga	2,201	Dec. 1917–June 1918	May 1918	4,601	70	358	161	See p. 821.
Grant	Rockford, Ill	2,558	Sept. 1917–July 1919	Oct. 1918	7,774	96	846	211	See p. 873.
Greene	Charlotte, N. C	1,584	Sept. 1917–Mar. 1919	do	4,256	66	453	94	See p. 823.
Hancock	Augusta, Ga	2,572	Oct. 1917–Mar. 1919	do	8,116	68	542	107	See p. 826.
A. A. Humphreys	Accotink, Va	778	June 1918–Feb. 1919	do	2,956	39	393	68	See p. 737.
Jackson	Columbia, S. C	5,660	Oct. 1917–July 1919	do	10,614	148	1,138	317	See p. 829.
Joseph E. Johnston	Jacksonville, Fla	983	Dec. 1917–Feb. 1919	do	4,135	50	405	98	See p. 832.
Kearny	San Diego, Calif	1,950	Sept. 1917–Mar. 1919	do	4,085	67	733	112	See p. 945.
Lee	Petersburg, Va	2,140	Aug. 1917–July 1919	do	6,772	140	985	298	See p. 741.
Lewis	American Lake, Wash	2,200	July 1917–July 1919	do	6,620	52	909	358	See p. 951.
Logan	Houston, Texas	1,515	Sept. 1917–Mar. 1919	Apr. 1918	3,770	54	514	102	See p. 919.
MacArthur	Waco, Texas	2,933	do	Oct. 1918	5,149	59	878	135	See p. 921.
McClellan	Anniston, Ala	3,642	Aug. 1917–June 1919	do	7,404	78	392	89	See p. 834.
Meade	Admiral, Md	1,930	Sept. 1917–June 1919	do	7,034	89	721	221	See p. 745.
Pike	Little Rock, Ark	2,740	do	do	7,980	109	910	243	See p. 843.
Sevier	Greenville, S. C	1,498	Sept. 1917–Apr. 1919	do	6,772	66	692	142	See p. 848.
Shelby	Hattiesburg, Miss	1,944	Sept. 1917–June 1919	Aug. 1918	3,723	79	483	131	See p. 850.
Sheridan	Montgomery, Ala	2,056	Aug. 1917–May 1919	Oct. 1918	5,923	31	426	38	See p. 852.
Sherman	Chillicothe, Ohio	2,274	Sept. 1917–July 1919	do	9,736	94	701	184	See p. 890.
Fort Sill (Camp Doniphan)	Oklahoma	1,234	Oct. 1917–June 1918	Mar. 1918	2,873	60	448	78	See p. 928.
Zachary Taylor	Louisville, Ky	5,125	Sept. 1917–July 1919	Oct. 1918	15,633	144	1,648	230	See p. 894.
Travis	San Antonio, Tex	4,382	Oct. 1917–Mar. 1919	do	13,390	75	697	154	See p. 931.
Upton	Yaphank, Long Island, N. Y	2,406	Sept. 1917–July 1919	Sept. 1918	4,194	105	843	158	See p. 796.
Wadsworth	Spartanburg, S. C	1,692	Oct. 1917–Oct. 1919	Oct. 1918	4,393	53	587	134	See p. 855.
Wheeler	Macon, Ga	1,300	Sept. 1917–Mar. 1919	Jan. 1918	4,697	63	276	75	See p. 858.
MISCELLANEOUS HOSPITALS									
Under Surgeon, Port of Embarkation, Hoboken, N. J:									
General Hospital No. 1	Williamsbridge, N. Y[6]								See p. 772.
Base Hospital, Camp Merritt	Dumont, N. J	3,500	Dec. 1918–Dec. 1919	June 1919	7,101	58	890	165	See p. 771.
Base Hospital, Camp A. L. Mills	Garden City, N. Y	2,000	Apr. 1918–Sept. 1919	Oct. 1918	5,298	60	426	105	See p. 771.
Auxiliary Hospital No. 1	Rockefeller Inst., New York City	45	Aug. 1918–Apr. 1919	Dec. 1918	64				See p. 767.
Embarkation Hospital No. 1	St. Mary's Hospital, Hoboken, N. J	782	July 1918–Oct. 1919	Oct. 1918	1,983	29	222	80	See p. 770.
Embarkation Hospital No. 2	Secaucus, N. J	270	July 1918–Feb. 1919	Jan. 1919	676	20	84		See p. 770.
Embarkation Hospital No. 3	Hoffman Island, N. Y. Harbor	694	July 1918–Dec. 1918	Sept. 1918	749	16	73		See p. 770.
Embarkation Hospital No. 4	Polyclinic Hospital, New York City	450	Nov. 1918–Aug. 1919	May 1919	506	29	173		See p. 770.
Debarkation Hospital No. 1	Ellis Island, N. Y	1,075	Aug. 1918–June 1919	Mar. 1919	1,027	29	363	73	See p. 768.
Debarkation Hospital No. 2	Fox Hills, Staten Island, N. Y.[7]								See p. 769.
Debarkation Hospital No. 3	Greenhut Building, New York City	3,500	Aug. 1918–July 1919	do	1,705	87	877	273	See p. 769.
Debarkation Hospital No. 4	Nassau Hotel, Long Beach, L. I.[8]								See p. 769.
Debarkation Hospital No. 5	Grand Central Palace, New York City	3,500	Dec. 1918–June 1919	Mar. 1919	871	74	749	187	See p. 769.

See footnotes at end of table.

Designation	Location	Maximum bed capacity	Period of operation	Peak load of patients					Detailed description
				Month	Number	Assigned medical			
						Off.	E.M.	Nurses	
MISCELLANEOUS HOSPITALS—continued									
Under Surgeon, Port of Embarkation, Newport News, Va.:									
Base Hospital, Camp Stuart [9]	Newport News, Va	3,564	Nov. 1917–Sept. 1919	Oct. 1918	5,562	124	940	145	See p. 791.
Debarkation Hospital No. 51	Hampton, Va. [10]								See p. 776.
Debarkation Hospital No. 52	Richmond College, Va	1,000	July 1918–Apr. 1919	do	650	36	296	62	See p. 785.
Department base hospitals:									
Base Hospital, Fort Bliss	El Paso, Tex	882	Apr. 1917–Dec. 1919	do	3,255	31	258	45	See p. 910.
Base Hospital, Fort Riley	Junction City, Kans. [11]								See p. 884.
Base Hospital, Fort Sam Houston	San Antonio, Tex	1,655	Apr. 1917–Dec. 1919	Jan. 1918	4,532	61	398	95	See p. 913.

[1] June 25, 1919, designated as permanent Army hospital and later as Fitzsimons General Hospital.

[2] Sept. 19, 1918, designated Debarkation Hospital No. 4; Jan. 1919, opened as General Hospital No. 39.

[3] March 14, 1918, designated U. S. A. General Hospital No. 10; May 10, 1918, designated Base Hospital, Fox Hills, Staten Island; August 2, 1918, designated U. S. Army Debarkation Hospital No. 2; March 1919, changed to General Hospital No. 41.

[4] Oct. 8, 1917, organized as Base Hospital, Camp Wadsworth, Spartanburg, S. C.; March 18, 1919, base hospital designated General Hospital No. 42.

[5] Nov. 23, 1918, organized as Debarkation Hospital No. 51; May 1, 1919, debarkation hospital began to operate as General Hospital No. 43.

[6] See under General Hospitals.

[7] See General Hospital No. 41.

[8] See General Hospital No. 39.

[9] This hospital, also known as U. S. Army Embarkation Hospital, Camp Stuart, functioned after Armistice as debarkation hospital, and throughout its existence as base hospital.

[10] See General Hospital No. 43.

[11] See Camp Base Hospital, Funston.

Camp Hospitals

The total maximum number of patients treated in these hospitals monthly was 37,048; the minimum number 6,916 (see p. 249).

Post Hospitals

Treatment of patients at post hospitals was as follows:

Location	Number	Monthly number of patients treated	
		Maximum	Minimum
United States	127	47,641	3,322
Hawaii	7	2,696	353
Panama Canal Zone	10	3,685	266
Philippine Islands	18	4,313	967
Puerto Rico	1	2,305	8
China	1	301	92
Total	164	60,941	5,008

See also p. 249.

Aviation Hospitals

These hospitals treated 28,372 patients as a maximum monthly number and 799 as a minimum (see p. 249).

Dental Infirmaries

Each large camp and cantonment had a centrally located dental infirmary.

Regimental Infirmaries

In camps and cantonments an infirmary was provided for each regiment. Its purpose was to afford housing for the Medical Department enlisted personnel of the regiment and space for offices, for physical examinations, for out-patient treatment, and a dispensary. While it was not intended that sick be given hospital care here, these infirmaries were extensively used for that purpose in the early period of the camps, when hospital facilities were not quite adequate to cope with the large number of sick among the recruits.

Prophylactic Stations

These facilities were established at troop stations and at accessible points in nearby cities, in connection with other measures taken to prevent contraction of venereal disease.

Comparative Statistics

The scientific advance in disease control over a fifty-year period is indicated by the following table, based on an actual average

strength of approximately 2,121,396 men:

Disease	Number of deaths— During World War, Sept 1, 1917–May 2, 1919—actual	If Civil War death rate had obtained	If Spanish-American War death rate had obtained
Typhoid fever	213	51,133	68,164
Malaria	13	[1] 13,951	11,317
Dysentery	42	[2] 63,898	[2] 6,382
Smallpox	5	9,536	37
Pneumonia	[3] 41,747	[3] 38,962	[3] 6,086
Scarlet fever	167	112	222
Diphtheria	100	1,188	149
Tuberculosis	1,220	9,574	[4] 631
Meningitis	2,137	3,859	4,081
Other diseases	3,768	34,881	15,587
Total for diseases	49,412	227,094	112,656

[1] Includes malaria and remittent and congestive fevers.

[2] Includes dysentery and diarrhea.

[3] Includes deaths listed from measles, influenza, empyema, inflammation of the lungs, and pleurisy, as well as pneumonia.

[4] Rate low due to short period of the war; that the war was during the summer months; and tuberculosis sufferers were discharged as soon as diagnosed.

SUPPLY

PROCUREMENT

Prior to 1914, four-fifths of all surgical instruments and many of the most important medicines, including potassium salts and such drugs as digitalin, salvarsan, and atropin, were imported from Germany. By 1917, American sources of supply had been partially developed, but the requirements of a large American Army were such that they could be satisfied only by the greatest exertions.

The Council of National Defense (see p. 2) assisted in the mobilization of American manufacturers. By maximum effort, the first emergency order in 1917 to equip the 32 base hospitals at the mobilization camps was filled without delay. Thereafter demands continued to increase; they were met by a still greater production effort.

During 1918, to select only a few items at random, orders were placed for 46,000,000 quinine tablets; 172,000,000 aspirin tablets; 835,000 pounds of calomel ointment; 45,000,000 iodine swabs; 10,250,000 tins of foot powder; and 300,000,000 tubes of iodin-potassium. Other items included 12,000,000 individual dressing packets; 795,000 boxes of gauze bandages; 574,400,000 yards of bandage; 10,000,000 first-aid packets; 108,000,000 yards of gauze; 3,814,000 pounds of absorbent cotton; 1,600,000 blankets; 258,000 litters; and over 1,000,000 clinical thermometers.

From July 1 to Nov. 30, 1918, the following supplies and equipment were purchased or ordered:

Medicines, antiseptics, and disinfectants	$19,728,715
Hospital furniture and equipment	8,220,297
Hospital supplies, textiles	69,321,787
Hospital supplies, miscellaneous	1,808,465
Surgical instruments	6,576,238
Surgical dressings	75,762,383
X-ray equipment and supplies	2,466,089
Dental equipment and supplies	4,932,178
Laboratory equipment and supplies	2,301,683
Veterinary equipment and supplies	3,258,119
Motor ambulances and supplies	25,625,000

Purchases made in France comprised primarily bulky and heavy equipment. Procurement overseas was made to save valuable cargo space and not because of a shortage of materials in the United States.

GAS-DEFENSE EQUIPMENT

The Medical Department was charged with the development and production of gas masks and similar appliances early in 1917. A Gas-Defense Service was established soon thereafter with personnel drawn from the Sanitary Corps to take charge of these duties (see p. 131). By Nov. 1917, models had been selected and authority granted to establish a plant for the manufacture of gas equipment in Long Island City, N. Y.

Items of equipment produced up to June 30, 1918, under the Medical Department are enumerated on page 139. Early in July, 1918, all personnel engaged in the production, together with all property, obligations, and funds pertaining thereto, were transferred to the newly created Chemical Warfare Service.

TRAINING

In the early days of the war some phases of training were supervised by the various professional divisions of the Surgeon General's Office. Later, all special medical training was placed under the Training Division (see p. 244). As finally developed, Medical Department training was conducted at medical officers' training camps, division camps and posts, hospitals, special schools, and at various military and nonmilitary professional institutions. The activities of the more important training centers and facilities were as follows:

MEDICAL DEPARTMENT TRAINING CAMPS

Camp Greenleaf, Ga.

In May 1917, establishment was ordered of a training camp for medical officers at Fort Oglethorpe, Chickamauga and Chattanooga National Park, Ga., to be known as Camp Greenleaf. The camp was organized in eight groups:

Medical Officers' Training Group, containing all officers' training companies, special schools for professional instruction, dental schools for officers and enlisted men, veterinary schools for officers and enlisted men.

Sanitary Units Group, embracing field hospitals and ambulance companies.

Detention Group, analogous to detention camp in cantonments.

Motor Group, containing all motor units and motor school.

Noncommissioned Officers' Group, for training noncommissioned officers.

Replacement Group, to form replacement units for oversea service.

Evacuation Group, in which all evacuation hospitals and trains were consolidated.

Hospital Group, in which all base hospital and convalescent camp units were formed.

In July 1918, transfer of 65 medical officers and 322 enlisted men from Fort Riley completed the partial merger of that training camp with Camp Greenleaf (see p. 825).

From June 1, 1917, to Nov. 30, 1918, 6,640 officers and 31,138 enlisted men arrived at, and 4,318 officers and 22,138 men departed from, the camp. During this period 63 base hospitals, 37 evacuation hospitals, 5 field hospitals, 13 hospital trains, 5 ambulance companies, 21 evacuation ambulance companies, 9 convalescent camps, 10 replacement units and numerous detachments were organized.

Fort Riley, Kans.

On May 11, 1917, establishment was ordered of a training camp for medical officers. On June 1, the first student company was organized. From June 1, 1917, to June 1, 1918, 2,094 officers and 9,228 enlisted men arrived at the camp for training. In July 1918, a partial merger with Camp Greenleaf was effected. Thereafter, activities at Fort Riley were confined to the training of officers and enlisted men for front-line units only.

From June 1, 1917, to Feb. 4, 1919, more than 4,500 officers and 25,470 enlisted men reported for training. During this period 12 evacuation hospitals, 11 base hospitals, 4 ambulance companies, 4 field hospitals, nuclei for regimental services and sanitary trains of the 87th, 88th, 89th, 90th and 91st Divisions, several hospital trains, replacement detachments, 12 evacuation ambulance companies, 1 corps sanitary train and 1 army sanitary train were organized.

On Feb. 4, 1919, the Officers' Training Camp was closed (see p. 844).

Fort Benjamin Harrison, Ind.

The camp was opened June 1, 1917. Training included field work and administration, although some instruction in special medical subjects was given. From June 1 to Dec. 2, 1917; 2,141 officers and 4,211 enlisted men passed through the camp. The following units were organized: 4 field hospitals, 4 ambulance companies, 1 evacuation hospital, and regimental sanitary detachments.

On Dec. 2, 1917, the camp was closed (see p. 876).

Fort Des Moines, Iowa

This camp was organized July 26, 1917, for colored medical Reserve officers and enlisted men. A total of 104 medical officers, 12 dental officers, and 948 enlisted men finished the course and joined units.

The camp closed Nov. 13, 1917 (see p. 868).

Camp Crane, Allentown, Pa.

In May 1917, this camp was established on the grounds of the Lehigh County Agricultural Society. It was used initially for the mobilization of recruits for the United States Army Ambulance Service (see p. 252). From the spring of 1918, it was used for the mobilization of Medical Department units of all kinds.

A total of 2,085 officers and 18,225 enlisted men passed through the camp. From July 1917 to Nov. 1918, the following Medical units were sent overseas: 113 ambulance service sections, 16 automatic replacement draft units (250 men each), 9 base hospitals, 1,000 casuals, 2 evacuation hospitals, 27 evacuation ambulance companies, 1 exceptional medical replacement draft unit (241 men), 1 headquarters detachment, 1 hospital detachment, 3 machine-shop truck units, 6 mobile hospitals, 1 mobile operating unit, 1 mobile optical unit, 4 mobile surgical units, 1 oversea gas-defense service unit, 1 replacement hospital A, 1 replacement unit (100 men), 1 replacement unit (300 men), 6 sanitary squads, and 1 X-ray unit.

On Apr. 10, 1919, the camp was closed, and the grounds were returned to owners (see p. 722).

Veterinary Training School, Camp Lee, Va.

The plan for the school, announced Apr. 12, 1918, provided for the training of officers and men of the Veterinary Corps and the organizing of veterinary units. By June 1, training companies had been organized. On July 23, a horseshoers' school was opened. In Sept. 1917, the permanent personnel comprised 24 officers and 93 enlisted men for the training school, and 6 officers and 80 enlisted men for the veterinary hospital.

Officers reporting to the school numbered 441, and enlisted men 8,190. A total of 203 officers and 6,252 men was assigned to units sent overseas, while 238 officers and 1,938 men were disposed of otherwise.

The following veterinary units were organized at the school and sent overseas: 16 veterinary hospitals, 4 veterinary replacement units, 6 corps mobile veterinary hospitals, 2 army mobile veterinary hospitals, and 1 base veterinary hospital.

Units formed and remaining at the school comprised 3 veterinary hospitals and 1 corps mobile veterinary hospital, all serviced by colored enlisted men.

On Feb. 15, 1919, the school was closed (see p. 742).

MEDICAL DEPARTMENT SCHOOLS

Special Schools

ARMY MEDICAL SCHOOL, WASHINGTON, D. C.

Regular courses for officers embraced basic instruction; military surgery; orthopedic surgery; Medical Department administration; military hygiene; military and tropical medicine; bacteriology; pathology and laboratory diagnosis; roentgenology; sanitary chemistry; ophthalmology; sanitary tactics; equitation; French; instruction for transport surgeons. Special instruction covered orthopedic surgery; laboratory instruction; and preparation for foreign service.

Courses for enlisted men included laboratory technique; training as X-ray technicians and manipulators; instruction in orthopedic work.

Other activities were centered in the Department of Vaccine Manufacture; the Department of Research; laboratory work; Wassermann tests; X-ray laboratory work; and manufacture of standard Army splints. Included were also physical examinations and organization of Medical Department units for oversea service.

From Oct. 1, 1916, to Feb. 1, 1919, 355 accepted candidates for the Medical Corps completed the regular course, and 7 student candidates finished courses in orthopedic surgery, of whom 339 were recommended for commissions. A total of 53 Reserve Corps officers took the course in orthopedic surgery. About 250 officers received additional laboratory instruction. Approximately 900 enlisted men were trained as laboratory technicians, of whom 92 were commissioned and 77 recommended for commissions in the Sanitary Corps.

Four mobile laboratories were organized, trained, and sent overseas.

VETERINARY SCHOOL OF MEAT AND DAIRY HYGIENE AND FORAGE INSPECTION, CHICAGO, ILL.

In Aug. 1917, a school for veterinary officers was established at the General Quartermaster Depot. Later in the year, a similar school was opened for enlisted men. Practical instruction was given in packing houses and produce establishments, supplemented by lectures and conferences. By Nov. 11, 1918, 82 veterinary officers and 92 enlisted men had completed instruction at the school.

The importance of this special training is indicated by the record of inspection of more than 750,000 tons of meat and dairy products during the war period.

VETERINARY LABORATORY, PHILADELPHIA, PA.

Established Jan. 1918, at the University of Pennsylvania, the Laboratory conducted research in etiology, prevention and treatment of equine influenza, pneumonia, and strangles.

Several Veterinary Reserve Corps officers, specialists in laboratory procedures, attended the school to acquire uniform technique before being assigned to department laboratories.

ARMY SCHOOL OF NURSING

Establishment of school was approved May 25, 1918, to provide for the rapid expansion of a skilled nursing service. The faculty was located in the Surgeon General's Office, where courses were planned. Actual training was given at various camp base hospitals, each constituting a complete unit with its own staff and equipment.

By Dec. 21, 1918, 5,869 applications had been accepted and 1,578 students were receiving instruction in 32 military hospitals. (See p. 805).

ARMY LABORATORY SCHOOL, YALE UNIVERSITY

Early in the war, a school in laboratory methods was established at Fort Leavenworth, Kans. This school placed 13 mobile laboratories in the field and formed 1 station laboratory. On July 9, 1918, this school was ordered transferred to Yale University because of inadequate facilities at Fort Leavenworth.

From Aug. 1, 1918, to Jan. 1, 1919, when the school was discontinued, 223 Medical Corps and 237 Sanitary Corps officers and 556 enlisted men were in attendance. From this personnel, 10 mobile laboratories and 3 station laboratories were organized for oversea service.

Professional Schools

These schools were organized to train officers in standard methods and appliances with a view to adopting a standard method of treatment of the wounded. Courses were established

under eminent surgeons. Graduates were intended to be used as instructors at medical officers' training camps and base hospitals.

SCHOOLS AT MILITARY INSTITUTIONS

Subject	Location	Course	Attendance	Remarks
Pneumonia	Base Hospital, Camp Jackson, S. C.	1 month	6–7 officers	20 officers received instruction.
Tuberculosis	G. H. No. 16, New Haven, Conn.	6 weeks		257 officers received instruction.
Cardiovascular diseases.	G. H. No. 9, Lakewood, N. J.	2, later 3 weeks.		Instruction included use of polygraph and electrocardiograph.
War wounds treatment.	Aux. Hosp. No. 1, New York, N. Y.	2 weeks		War Demonstration Hospital at Rockefeller Institute for Medical Research.
Bacteriology, serology, medical chemistry.	Aux. Laboratory No. 1, New York, N. Y.	4 weeks		At Rockefeller Institute for Medical Research.

COURSES PROVIDED BY NONMILITARY INSTITUTIONS

Subject	Designation and location of institutions	Remarks
Fractures and war surgery	Bellevue Hospital (2), Cornell University Medical College (1), Roosevelt Hospital (1), of New York, N. Y.	Figures in parentheses represent number of courses.
	Massachusetts General Hospital (1), Boston City Hospital (1), of Boston, Mass.	
	University of Pennsylvania (1), Philadelphia, Pa., Carnegie Building (1), Pittsburgh, Pa.	
	Lakeside Hospital (1), Cleveland, O.	
	Rush Medical College (1), Cook County Hospital (1), Presbyterian Hospital (1), of Chicago, Ill.	
	Charity Hospital (1), New Orleans, La.	
	Stanford University (1), University of California (1), of San Francisco, Calif.	
	Mayo Clinic (1), Rochester, Minn.	
Plastic and oral surgery	Washington University, St. Louis, Mo.	
	University of Pennsylvania, Philadelphia, Pa.	
	Northwestern University, Chicago, Ill.	
Orthopedic surgery	Courses were established at Harvard University and Post-Graduate Hospital, New York; also at Philadelphia, Pa., Oklahoma City, Okla., Chicago, Ill., and Los Angeles, Calif.	
Neurosurgery	University of Pennsylvania, Philadelphia, Pa.	
	Presbyterian Hospital and allied institutions at Chicago, Ill.	
	Neurological Institute in cooperation with various hospitals, New York, N. Y.	
	School of Neurological, Plastic and Oral Surgery, St. Louis, Mo.	
Roentgenology	Central school at Cornell University Medical College, New York, N. Y., with sections in several other cities.	
Urology and dermatology	Columbia University, in conjunction with Vanderbilt Clinic, New York, N. Y.	
	Harvard Medical School, in conjunction with Massachusetts General Hospital and Peter Bent Brigham Hospital, Boston, Mass.	
	Washington University Medical School, with clinics in several hospitals, St. Louis, Mo.	
Neuropsychiatry	Michigan Psychopathic Hospital, Ann Arbor, Mich.; Boston State Hospital; Neurological Institute, New York, N. Y.; Philadelphia General Hospital; Phipps Psychiatric Clinic, Baltimore, Md.	
	Government Hospital for the Insane, Washington, D. C.	
	Manhattan State Hospital, New York, N. Y.	

Miscellaneous Schools

Early in the war, the following schools were established to provide specialist personnel as indicated:

Subject	Designation and location of institutions	Remarks
Gas defense	Central Gas-Defense School, Fort Sill, Okla. Conducted in connection with Infantry School of Arms.	In existence Aug. 20, 1917–Feb. 20, 1918.
	American University, Washington, D. C. Instruction for chemists of field training section of Gas-Defense Service.	Turned over to Chief of Engrs. Feb. 27, 1918.
Supply	Principal schools were located at Newport News, Camp Meade, and Camp Upton; others were conducted at camp medical supply depots, for the training of supply officers, purchasing agents, X-ray technicians, and automobile and accountancy experts of Sanitary Corps.	
Motor maintenance and operation.	Carnegie Institute of Technology, Pittsburgh, Pa. Course for medical officers and enlisted men of Medical Department.	Started in Dec. 1917.
Laboratory technical training.	Courses were given at 13 universities, colleges, and hospitals in cooperation with the medical division of the National Research Council. Object: To train women as laboratory technicians for duty in base hospitals and laboratories.	Some of the classes included men.

VETERINARY ACTIVITIES

All matters pertaining to the administration of the Veterinary Corps were handled by the Veterinary Division, Surgeon General's Office (see p. 247).

ZONE INSPECTORS

In Dec. 1917, the United States was divided into five zones. To each zone an experienced veterinary officer was detailed as zone inspector. He reported on sanitary conditions at all veterinary installations of the War Department in his zone and also cooperated with the Bureau of Animal Industry.

PURCHASING-ZONE VETERINARIANS

The officers supervised the work of horse-purchasing boards. Approximately 306,000 animals were purchased (see p. 450) each one of which had been examined for physical soundness by the veterinary service.

VETERINARY SERVICE AT DEPOTS AND MILITARY STATIONS

Depots

Veterinary participation at the permanent remount stations (see pp. 427 and 551) was principally concerned with the breeding and care of breeding stock and foals.

At the 34 auxiliary remount depots (see p. 428) veterinary duties included the hospitalization of animals and their physical examination and malleinization at receipt and issue of stock.

At animal embarkation depots (see p. 428) the veterinary service followed the same pattern as at auxiliary remount depots with additional duties incident to preparation of animals for embarkation.

Port Veterinary Service

At Newport News, a port veterinary service supervised all veterinary activities, including quarantine of returning animals and of those aboard animal transports. Of some 47,000 animals shipped overseas from the port (see p. 520) only 264 died from natural causes.

At Hoboken, an acting port veterinarian was appointed in Oct. 1918. Of approximately 19,000 animals embarked at this port (see p. 517), 149 died from natural causes.

Camps and Posts

Whenever a combat division was ordered overseas, a camp veterinary service was established at the camp or cantonment to continue the work previously handled by division personnel. This service was retained even when new divisions were formed. The camp veterinarian was on the staff of the camp commander and advised on all veterinary matters. He was also responsible for the inspection of meat and of dairy products used in the camp.

At mounted service stations, the duties of the post veterinary service were assumed by the veterinary detachment assigned to the organization. Veterinary service was maintained at a few other military posts, usually by detail of one officer and a few men.

MEAT AND DAIRY INSPECTION SERVICE

Inspection at Purchasing Points

The ramifications of this service reached into all important packinghouse centers in the country. Headquarters at Chicago, Ill., was opened early in the war.

Personnel on this duty at Chicago reached a maximum strength of 82 officers and 143 enlisted men in Oct. 1918. During the war period, this force inspected 623,994 tons of meat and dairy products for the Army, besides 15,727 tons of meat for the civilian relief work in Europe and 488 tons of fresh frozen beef for the Italian Government.

Inspection at Points of Distribution and Consumption

Interstate shipments of meat products were reinspected at destination for signs of deterioration.

Meat and dairy supplies, procured locally, were inspected upon delivery; this included supervision of dairy herds furnishing milk.

During 1918, the following quantities were reported as having been rejected at time of inspection:

Products	*Tons*
Fresh meat products (beef, veal, mutton, pork, edible organs, etc.)	297.9
Cured meat products (ham, bacon, sausage, etc.)	23.6
Canned meat products (beef, pork, milk, fish, etc.)	19.2
Lard, butter, cheese, etc.	3.1
Miscellaneous meats	17.1
Total rejected	360.9

Laboratory Service

A veterinary laboratory was operated in each territorial department and at the University of Pennsylvania, to assist in the control of communicable diseases. Blood tests for glanders and dourine, tissue examinations, and special investigations were made at the laboratories (see p. 273).

DEMOBILIZATION

PERSONNEL

Reduction of medical personnel to include June 30, 1919, is shown on p. 257. By Jan. 1, 1920, the remaining strength of the Medical Department was as follows:

Officers

Medical Corps	2,153
Dental Corps	364
Veterinary Corps	339
Sanitary Corps	268
U. S. A. Ambulance Service	3
Army Nurse Corps	2,443

Enlisted Men

Medical Department	16,213
Veterinary Corps	990

On Jan. 1, 1920, all emergency enlisted men were ordered discharged.

SUPPLIES

Immediately after the Armistice, steps were taken to stop production of supplies.

Medical Department Contracts Cancelled Between Nov. 11, 1918, and Jan. 1, 1920

Number of purchase orders and contracts on which supplies were cancelled	1,470
Value of supplies on original agreements	$60,033,986.61
Value of supplies accepted	32,257,737.55
Gross value of cancelled supplies	27,776,249.06
Cost of cancellation	2,942,864.77
Net value of cancelled supplies	24,833,384.29

The cost of cancellation was 10.5 per cent of the gross value of cancelled supplies. On Jan. 1, 1920, ten claims still remained to be settled.

Disposal of Surplus Supplies

Disposed of in France	$51,500,000.00
To Italy	150,000.00
Transferred to Public Health Service	5,387,566.52
Allocated to Surplus Property Division	11,055,742.50
Surplus supplies not allocated	6,739,944.66
Surplus to be declared	28,633,986.85
Total money value of surplus property considered	103,467,240.53

RETURN OF OVERSEA PATIENTS

There were 184,421 hospital cases in France at signing of the Armistice. With exception of those who had contracted venereal diseases, evacuation of patients began promptly; most of the venereal cases were left abroad until cured.

Arrivals at ports of debarkation were as follows: Nov. 1918, 5,967; Dec., 11,911; Jan. 1919, 20,847; Feb., 15,086; Mar., 27,199; Apr., 20,612; May, 15,008; June, 10,391; July, 4,739; Aug., 2,175; Sept., 1,305; Oct., 1,726; Nov., 1,623; Dec., 198. Total returned to the United States during period: 138,787.

Hospital facilities at the debarkation ports of New York accommodated 18,000 patients and those of Newport News, 7,500. Patients received at these hospitals were classified promptly and evacuated to interior hospitals for further treatment or discharge.

DEMOBILIZATION HOSPITALS

Patients Undergoing Treatment

On Nov. 11, 1918, there were 153 base hospitals, 66 camp hospitals, and 12 convalescent camps in operation in the American Expeditionary Forces. The combined capacity of these installations was 192,844 beds with expansion possible, in emergency, to 276,347.

At the same date, the Medical Department had 120,916 beds in the United States of which 76,964 were occupied by patients, thus leaving 43,952 available for overseas cases.

Patients with certain diseases were sent to general hospitals which specialized in the treatment of these ailments. Convalescents and patients who did not require specialized treatment, were sent to camp base hospitals in divisional cantonments and camps when no further beds were available in general hospitals. Special instructions regulated the distribution of patients to general and base hospitals. Before resuming civilian status, patients were transferred to a demobilization-camp hospital for discharge.

By Jan. 1, 1920, all cases, except current ones in Germany and Siberia, had been evacuated from overseas. At this time, the following general hospitals were still in operation:

Designation and location	Bed situation		
	Occupied	Vacant	Total
Army and Navy General Hospital, Hot Springs, Ark	147	119	266
General Hospital, Fort Bayard, N. Mex	728	272	1,000
Letterman General Hospital, San Francisco, Calif	1,169	331	1,500
Walter Reed General Hospital, Takoma Park, D. C	1,111	689	1,800
G. H. No. 2, Fort McHenry, Md	1,947	53	2,000
G. H. No. 6, Fort McPherson, Ga	660	640	1,300
G. H. No. 19, Oteen, N. C. (R. R. Sta. Biltmore)	922	378	1,300
G. H. No. 20, Whipple Barracks, Ariz	350	150	500
G. H. No. 21, Denver, Colo	1,107	93	1,200
G. H. No. 28, Fort Sheridan, Ill	2,783	17	2,800
G. H. No. 31, Carlisle, Pa	597	303	900
G. H. No. 41, Fox Hills, S. I., N. Y	1,418	82	1,500
G. H. No. 43, Hampton, Va	359	141	500
Base H., Fort Sam Houston, Tex	700	500	1,200
Total	13,998	3,768	17,766

Oversea patients remaining on Jan. 1, 1920, were cases which had not yet reached maximum state of recovery. Other veterans needing permanent or semipermanent care had meanwhile been discharged from military service and hospitalized by the Public Health Service, to which the following military hospitals were transferred:

G. H. No. 10, Boston, Mass.; G. H. No. 12, Biltmore, N. C.; G. H. No. 13, Dansville, N. Y.; G. H. No. 15, Corpus Christi, Tex.; G. H. No. 16, New Haven, Conn.; G. H. No. 20, Whipple Barracks, Ariz.; G. H. No. 24, Parkview, Pa.; G. H. No. 32, Chicago, Ill.; G. H. No. 34, East Norfolk, Mass.; G. H. No. 40, St. Louis, Mo.; Base H., Camp Beauregard, La.; Base H., Camp Cody, N. Mex.; Base H., Camp Fremont, Calif.; Base H., Camp Hancock, Ga.; Base H., Camp Jos. E. Johnston, Fla.; Base H., Camp Logan, Tex.; Base H., Camp Sevier, S. C.; Base H., Camp Sheridan, Ala.; Emb. H. No. 4, Polyclinic, New York; Nitrate Plant, Perryville, Md.; Norwegian Lutheran and Deaconess Home, Brooklyn, N. Y.; Sewell's Point, Q. M. Terminal H., Newport News, Va. (see p. 263 et seq.).

Physical Reconstruction

On July 31, 1918, plans were announced for the physical reconstruction of disabled soldiers in general hospitals. Workshops, educational buildings, physiotherapy buildings, and equipment were provided.

In Oct. 1918, 829 patients were undergoing reconstruction. By May 1919, this number had increased to 30,096, but declined steadily thereafter to 11,895 during the following 6 months.

Convalescent Centers

Twenty-seven centers were projected at the large camps in

Nov. 1918, to place convalescents undergoing treatment as near their homes as possible and prepare them for discharge by educational training and exercise.

Only 19 centers were actually used. They were discontinued in Apr. 1919, after 47,858 patients had been treated.

Final Physical Examination

Military personnel, whether on duty status or patient, were physically examined by a board of medical specialists prior to discharge. These examinations provided data whereby the Government could determine the validity of disability claims submitted thereafter.

SANITARY MEASURES

Delousing Process

A policy was adopted of delousing all troops abroad and again at ports of debarkation. Moreover, a careful search for lice formed part of the final physical examination.

Segregation of Venereal and Other Contagious Cases

Treatment of contagious and venereal diseases in the A. E. F. involved segregation until cure, except for cases remaining when the hospitals in France were closed. These patients were returned to the United States and given further treatment in hospitals until they could be discharged without endangering the health of civil communities.

DEMOBILIZATION OF VETERINARY CORPS

Discharge of emergency personnel was largely contingent upon the disposal of surplus animals in the American Expeditionary Forces. Out of a total of 243,360 animals on hand, 144,000 had been sold by the end of June 1919. In the United States, some 175,000 horses and mules were disposed of between Jan. and May 1919.

The Veterinary Corps was responsible that no communicable diseases would be transmitted to the animals of the country by reason of these sales. A health certificate was issued for each animal sold, following a thorough physical examination and the application of the mallein test for glanders within 21 days of sale.

Discharge of personnel was greatly accelerated after disposal of the surplus stock. By Nov. 30, 1919, most of the emergency personnel had been discharged. However, detachments at the Chicago central purchasing office continued on duty to insure that the large accumulation of surplus meat products did not deteriorate prior to sale.

SECTION 15

MILITIA BUREAU

ORIENTATION

Prior to 1900, the Militia lacked organization in a modern sense and existed merely as a constitutional instrumentality to preserve the peace locally, or to resist invasion by a foreign foe. The Organized Militia consisted of some 1,600 company organizations, accustomed to recognize the authority of their immediate commanders only. During peacetime, it had no place in the Federal Military Establishment, except that the War Department endeavored to assist in training by allowing Regular Army officers to attend encampments of State troops.

To improve the condition of the Militia, the Congress in 1900 allotted $1,000,000 for the supply of certain articles, and followed it up in 1903 by appropriating $2,000,000 for armament and equipment. In this year, the "Organized Militia of the United States" was established by the Act of Jan. 21, which provided that the organization and discipline of State troops should conform to that prescribed for the Regular Army. To this end, the Secretary of War was authorized to issue to the Militia, at the expense of the National Government, the same arms and supplies as those provided for the Regular Army; to detail Army officers to make stated inspections and to attend State encampments. An annual appropriation of $1,000,000 was provided for Militia purposes and for securing a list of persons qualified for volunteer commissions. As a result of this legislation, the War Department established in the Adjutant General's Office the Division of Militia Affairs to handle matters pertaining to the Organized Militia.

In 1908, a board was created by statute to consist of five officers on the active list of the Organized Militia, for the purpose of consulting with the Secretary of War respecting conditions, status, and needs of the whole body of Organized Militia. This board met from time to time in Washington, where the head of the Division of Militia Affairs usually attended the sessions.

This Division first advocated the organization of National Guard tactical divisions in 1913, under a plan whereby the Militia units of two or more States, usually adjacent, might be combined. In 1914, the scheme contemplated the organization of 12 such divisions. During the next three years, this structure was expanded to 14 divisions. Thereafter, to provide for the maximum personnel authorized by the Act of June 3, 1916, provision was made for 16 National Guard divisions.

The Militia Bureau was established as a War Department

agency July 6, 1916, when it replaced the Division of Militia Affairs, Adjutant General's Department.

FUNCTIONS

GENERAL

To perform administrative duties involving the organization, armament, instruction, equipment, discipline, training, inspection, and payment of the National Guard; its preparation for participation in field exercises and maneuvers of the Regular Army; its mobilization in time of peace; and matters pertaining to the National Guard not in Federal service.

SPECIFIC

To organize, during the war, the United States Guards, National Army, for duty within the United States; to furnish guards for munition supplies, depots, arsenals, manufacturing establishments, and public utilities, when responsibility for safety rested with the Army; to enforce with troops the President's proclamation restricting aliens in their movements; and to cooperate with the governors of States in the use of military personnel to maintain civil order.

CHIEFS

1917		
Apr.	6	Brig. Gen. William A. Mann
Aug.	27	Maj. Gen. William A. Mann
Aug.	30	Col. Jesse McI. Carter (acting)
Nov.	23	Brig. Gen. Jesse McI. Carter (acting)
Nov.	26	Maj. Gen. Jesse McI. Carter
1918		
Aug.	15	Col. John W. Heavey (acting)
Aug.	27	Brig. Gen. John W. Heavey (acting)
1919		
Feb. 7 through June	20	Maj. Gen. Jesse McI. Carter

ORGANIZATION AND DEVELOPMENT

THE WASHINGTON OFFICE

1917

The functions of the Militia Bureau pertained to the National Guard prior to entry into Federal service. Nevertheless, it was found thereafter that many matters arose which required an intimate knowledge of the former status of the National Guard and of the laws and regulations under which it had previously existed. Consequently, all matters which related to the National Guard in Federal service were referred to the Militia Bureau for action.

As it proved impracticable to prepare papers and send them to the Adjutant General's Office for signature, officers of the Adjutant General's Department were assigned to the Bureau. The office personnel was organized in such a manner as to perform expeditiously the work delegated to the Bureau by the War Department in connection with the National Guard in Federal service, including the keeping of records of all Federalized National Guard officers and units.

On Dec. 22, authority was granted for the organization of United States Guards, under the direction of the Chief of the Militia Bureau.

1918

On May 10, all administrative matters pertaining to the National Guard in Federal service were turned over to the Adjutant General's Office.

1919

On Feb. 14, matters pertaining to State forces were turned over to the Militia Bureau by direction of the Secretary of War. This gave the Bureau cognizance of Home Guards (State troops), although they were not National Guard troops as contemplated by the Act of June 3, 1916.

REPRESENTATION IN THE FIELD

Recognition of National Guard Units

The Act of June 3, 1916, provided that no State should maintain troops in time of peace unless their organization, including the composition of all units, conformed to that of the Regular Army. It further provided that the President might prescribe the particular units, as to branch or arm of service, to be maintained in each State, Territory, or the District of Columbia in order to secure a force which, when combined, should form complete higher tactical units. Under the Act, a National Guard organization had to be duly recognized by the Militia Bureau before it was entitled to the rights and benefits as such under the law. Such recognition could only follow inspections which determined that requirements of law and regulations had been met or maintained.

STANDARD REQUIREMENTS

For recognition, the laws governing the National Guard presupposed the following conditions:

Home rendezvous with suitable armories.

A fair degree of permanency of personnel, which was to be drawn from the immediate vicinity where the organization was located.

The probability that the organization would be maintained for a period of years, during which it would be kept alive by reenlistments and acquisition of recruits.

Weekly drills at the armory.

Development of a force, equipped and thoroughly trained and disciplined, which could be called upon for military service in time of emergency.

Department Commanders

All National Guard units within the geographical limits of a

territorial department were under the command of the Department Commander. His duties were prescribed as follows:

To order inspections and take remedial action upon receipt of inspection reports in a manner similar to action applicable to the Regular Army under like circumstances; to supervise and control all armory and field instruction; to control all instructors, commissioned and noncommissioned, assigned to station within the department; and to detail officers within the department for duty as inspector-instructors of National Guard, whether in armories, in the field, or at maneuvers; to see that National Guard units had on hand, at armory, equipment for authorized strength; to refer requisitions, in order to maintain this degree of supply, to property and disbursing officers of States with request to supply from mobilization allowance on hand; to refer requisitions, after approval by the governor, to Federal arsenals and depots whenever a State property and disbursing officer was unable to supply from a State arsenal or depot; to examine and approve pay rolls for armory service and refer such to designated disbursing officers of the Quartermaster Corps for payment; to be responsible for the examination of candidates for appointment and promotion in the National Guard; for the convening of efficiency boards and reference of findings to proper authority; and for the preparation and revision of mobilization plans of National Guard units.

PERSONNEL

On June 30, 1917, there were 12 officers on duty in the Militia Bureau, Washington, D. C.; 1 year later, 10; and 2 years later, 13. To provide the necessary clerical force for the wartime work of the Bureau, 22 clerks were detailed from The Adjutant General's Office.

ACTIVITIES

MOBILIZATION OF THE NATIONAL GUARD IN THE UNITED STATES

Preliminaries

On Apr. 6, 1917, the National Guard consisted of 16 tactical divisions, organized under Tables of Organization furnished the States 3 months before. These tables prescribed 3 brigades of infantry of 3 regiments each, 1 brigade of field artillery of 3 regiments, 1 regiment each of cavalry and engineers, and appropriate auxiliary troops.

Additional units were still needed to bring these divisions up to strength. As a great shortage of auxiliary troops existed, strenuous efforts were made to remedy this deficiency. In May 1917, the Bureau notified each State of the quota of men allotted to it and the additional units to be organized. At that time, the organization of two cavalry divisions was contemplated, in addition to the 16 infantry divisions. The Bureau, therefore, centered its attention on raising these units and upon the creation of a proportionate number of field artillery and coast artillery organizations.

Later on, two more infantry divisions were created. For the most part, these 18 divisions were organized with peacetime personnel and equipment of the National Guard. However, the divisional headquarters and staffs, called for by the new Tables of Organization, had been organized and recognized only in a few States. The incomplete divisions had to be provided with these components from other sources.

Induction of National Guard into Federal Service

Many National Guard troops were needed by the States, until other forces could be found, to guard railroads and perform similar duties in connection with public safety. This consideration, the lack of training camps, and insufficiency of arms and equipment delayed the mobilization of National Guard units somewhat. Nevertheless, two-thirds of the force was in Federal service before Aug. 5, 1917, when the entire National Guard was federalized.

Mobilization for Federal service proceeded as follows:

Division designation [1]		States furnishing troops with dates of induction	Mobilization points
New	Old		
26th	5th	Maine, N. H., Vt., Mass., R. I., Conn.—all July 25, 1917	South Framingham and Westfield, Mass.
27th	6th	N. Y.—July 15, 1917	Cp. Wadsworth, S. C.
28th	7th	Pa.—July 15, 1917	Cp. Hancock, Ga.
29th	8th	N. J., Va., Md., Del., D. C.—all July 25, 1917	Cp. McClellan, Ala.
30th	9th	Tenn., N. C., S. C.—July 25, 1917	Cp. Sevier, S. C.
31st	10th	Ga., Ala., Fla.—Aug. 5, 1917	Cp. Wheeler, Ga.
32d	11th	Mich., Wis.—July 15, 1917	Cp. MacArthur, Tex.
33d	12th	Ill.—July 25, 1917	Cp. Logan, Tex.
34th	13th	Minn., Iowa, Nebr., N. Dak., S. Dak.—July 15, 1917	Cp. Cody, N. Mex.
35th	14th	Mo., Kans.—Aug. 5, 1917	Cp. Doniphan, Okla.
36th	15th	Tex., Okla.—Aug. 5, 1917	Cp. Bowie, Tex.
37th	16th	Ohio—July 15, 1917	Cp. Sheridan, Ala.
38th	17th	Ind., Ky.—Aug. 5, 1917. W. Va.—July 15, 1917	Cp. Shelby, Miss.
39th	18th	La., Miss., Ark.—Aug. 5, 1917	Cp. Beauregard, La.
40th	19th	Calif.—Aug. 5, 1917. Nev.—No troops. Utah, Colo., Ariz., N. Mex.—Aug. 5, 1917.	Cp. Kearny, Calif.
41st	20th	Wash., Oreg., Mont., Idaho, Wyo.—July 25, 1917	Cp. Fremont—Calif. (changed to Cp. Greene, N. C., and later to Cp. Mills, N. Y.).
42d		La., N. Y., Ohio, Ala., Iowa, Ill., Ind., Minn., Pa., Wis., Ga., Md., S. C., Calif., Mo., Va., Kans., Tex., N. C., Mich., N. J., Tenn., Okla., D. C., Nebr., Oreg., Colo.—organization authorized, Aug. 1917.	Cp. Mills, N. Y.
93d (col.)		N. Y., Ill., Ohio, D. C., Conn., Mass., Tenn., Md.—organization authorized, Mar. 1918.	Cp. Stuart, Va.

[1] Old designation was made under National Defense Act of 1916, the new upon federalization in 1917

The total strength of National Guard organizations authorized by law, on Aug. 5, 1917, was 13,093 officers and 419,834 men, as specified below:

	Branch	Officers	Enlisted men
2	division headquarters	48	60
5	division headquarters troops	15	465
36	brigades of infantry	6,192	216,756
35	regiments of infantry	1,960	70,070
2	battalions of infantry	28	1,200
46	companies of infantry	138	6,800
4	machine-gun companies, infantry	16	296
7	regiments of cavalry	413	10,640
20	squadrons of cavalry	280	8,400
6	machine-gun troops	24	546
5	troops of cavalry	15	525
2	brigade headquarters, field artillery	8	30
32	regiments of field artillery	1,504	41,280
4	battalions of field artillery	68	2,280
12	batteries of field artillery	60	2,280
1	regiment of heavy field artillery	51	1,321
5	regiments of engineers	185	5,305
14	battalions of engineers	196	6,986
2	companies of engineers	8	328
10	field signal battalion headquarters	140	160
17	wire companies	51	1,275
17	radio companies	51	1,275
11	outpost companies	55	825
35	ambulance companies	175	5,250
46	field hospitals	276	3,680
4	headquarters and military police	52	1,276
6	ammunition trains	108	4,104
5	supply trains	40	1,620
5	engineer trains	20	830
3	sanitary trains	147	2,634
2	field bakery companies	4	122
17	headquarters, coast artillery	207	581
12	bands, coast artillery	0	360
186	companies, coast artillery	558	20,274

National Guard personnel taken into Federal service totaled 12,115 officers and 366,956 men, falling short of authorized strength by 878 officers and 52,878 enlisted men. Distribution among branches was as follows:

Branch	Officers	Enlisted men
Signal troops	166	3,501
Engineers	355	12,677
Cavalry	623	17,379
Field artillery	1,424	44,248
Infantry	6,969	242,039
Coast artillery	586	18,986
Ambulance companies and field hospital companies	520	10,506
Attached sanitary	972	6,117
Miscellaneous, headquarters, trains, etc	485	11,770
Total	12,100	367,223
Reported by adjutants general of States	12,115	366,956

Reorganization

The conditions of warfare on the western front had rendered the original divisional organization obsolete. New Tables of Organization were therefore published Aug. 8, 1917, which provided for an infantry division with the following components: division headquarters; 1 machine-gun battalion of 4 companies; 2 infantry brigades, each comprising 1 machine-gun battalion and 2 infantry regiments; 1 field artillery brigade of 3 regiments; 1 trench-mortar battery; 1 regiment of engineers; 1 field signal battalion; headquarters and military police; ammunition train; supply train; sanitary train; and engineer train.

This reorganization involved drastic changes in the National Guard structure. Old regiments and other units were consolidated or broken up, thereby in a sense losing their identity and State designation. Surplus field officers were transferred to replacement or army corps troops, and all cavalry organizations were converted into field artillery units.

The various State organizations were absorbed by the new units as follows:

ALABAMA NATIONAL GUARD

Former State units	Reorganized as or assigned to—	Division
1st Regt. Inf.	123d Inf.	31st
2d Regt. Inf.:		
Hq. Co. (less Band)	106th Hq. and M.P.	31st
M. G. Co.	116th M. G. Bn.	31st
Cos. E, F, G, H, I, K, & Sup. Co.	106th Am Tn.	31st
Cos. A, B, C, D, L, & M	106th Sup. Tn.	31st
Band	116th F.A.	31st
4th Regt. Inf.	167th Inf.	42d
1st Regt. Cav.:		
Hq., Hq. Tr., Trs. B, C, E, F, K, & L	117th F. A.	31st
M. G. Tr.	118th M. G. Bn.	31st
Sup. Tr., Trs. A, D, G, H, I	116th F. A.	31st
Tr. M.	106th T. M. Btry.	31st
Co. A, F. Sig. Co.	106th F. Sig. Bn.	31st
Amb. Co. No. 1	106th Sn. Tn.	31st
F. Hosp. Co. No. 1	do	31st

ARKANSAS NATIONAL GUARD

1st Inf.	153d Inf.	39th
2d Inf.:		
M. G. Co.	141st M. G. Bn.	39th
Less M. G. Co.	142d F. A.	39th
3d Inf.:		
3d Bn.	141st M. G. Bn.	39th
Less 3d Bn.	154th Inf.	39th
Am. Tn.:		
Less 257 E.M.	114th Am. Tn.	39th
257 E.M.	114th Sup. Tn.	39th
F. Hosp. Co. No. 1	114th Sn. Tn.	39th
Amb. Co. No. 1	do	39th

ARIZONA NATIONAL GUARD

Former State units	Reorganized as or assigned to—	Division
1st Inf	158th Inf	40th
Less 257 E.M	114th Am. Tn	39th

CALIFORNIA NATIONAL GUARD

2d Inf.:		
Less 2d Bn., Cos. L, M, & Band	159th Inf	40th
2d Bn. & Cos. L & M	160th Inf	40th
Band	315th Cav	
5th Inf	159th Inf	40th
7th Inf	160th Inf	40th
M. G. Tr. Cav	145th M. G Bn	40th
1st Sep. Sq. Cav.:		
Tr. D	Div. Hq. Tr	40th
Sq. Hq. & Trs. A, B, C	145th M. G. Bn	40th
1st Regt. F. A	143d F. A	40th
2d Regt. F. A	144th F. A	40th
1st Sep. Bn. Engrs	117th Engrs	42d
Co. B (wire) Sig. C	115th F. Sig. Bn	40th
Amb. Cos. Nos. 1 & 2	115th Sn. Tn	40th
F. Hosp. Cos. Nos. 1 & 2	do	40th
Coast Artillery:		
1st C. D. C. Calif.:		
Band	Fort Winfield Scott	
1st Co	21st Co., San Francisco	C.D.C.
2d Co	22d Co., San Francisco	C.D.C.
3d Co	23d Co., San Francisco	C.D C.
4th Co	24th Co., San Francisco	C.D.C.
5th Co	5th Co., San Diego	C.D.C.
6th Co	26th Co., San Francisco	C.D.C.
7th Co	27th Co., San Francisco	C.D.C.
8th Co	Btry. B, 65th Regt	C. A.
9th Co	29th Co., San Francisco	C.D.C.
10th Co	30th Co., San Francisco	C.D.C.
11th Co	25th Co., San Francisco	C.D.C.
12th Co	28th Co., San Francisco	C.D.C.
2d C. D. C. Calif.:		
Band	27th C. A. Band	
13th Co	7th Co., San Diego	C.D.C.
14th Co	8th Co., San Diego	C.D.C.
15th Co	5th Co., San Diego	C.D.C.
16th Co	5th Co., Los Angeles	C.D.C.
17th Co	6th Co., Los Angeles	C.D.C.
18th Co	6th Co., San Diego	C.D.C.
19th Co	7th Co., Los Angeles	C.D.C.
20th Co	8th Co., Los Angeles	C.D.C.
21st Co	9th Co., Los Angeles	C.D.C.
22d Co	10th Co., Los Angeles	C.D.C.
23d Co	11th Co., Los Angeles	C.D C.
24th Co	12th Co., Los Angeles	C.D.C.

COLORADO NATIONAL GUARD

1st Inf	157th Inf	40th
2d Inf.:		
Less Band and Cos. A, B, C, D, M.G. Co., & Sup. Co	115th Am. Tn	40th
Sup. Co., Cos. A, B, C, & D	115th Sup. Tn	40th
M. G. Co	115th T. M. Btry	40th
Band	308th Cav	

COLORADO NATIONAL GUARD—Continued

Former State units	Reorganized as or assigned to—	Division
1st Regt. Cav.:		
Less Band & Tr. E	157th Inf	40th
Tr. E	115th Engrs	40th
Band	Cp. Lewis, Wash	
1st Bn. F. A	148th F. A. Hv	41st
1st Bn. Engrs	115th Engrs	40th
Co. B (wire), Sig. C	115th F. Sig. Bn	40th
F. Hosp. Co. No. 1	117th Sn. Tn	42d
1st Engr. Tn	115th Engr. Tn	40th

CONNECTICUT NATIONAL GUARD

st Inf.:		
35 Os. and 1,582 E.M	102d Inf	26th
17 Os. and 38 E.M	58th Pion. Inf	P.D.C.A.Trs.
Band	Cp. Wadsworth	P.D.C.A.Trs.
2d Inf	102d Inf	26th
1st Sq. Cav	101st M. G. Bn	26th
Btry. E, F. A	103d F. A	26th
Btry. F, F. A	do	26th
Amb. Co. No. 1	101st Sn. Tn	26th
F. Hosp. Co. No. 1	do	26th
Co. A, Sig. C	326th F. Sig. Bn	P.D.C.A.Trs.
Sep. Co. Inf. (colored)	372d Inf	93d
Coast Artillery:		
Band	23d C.A. Band, C.D. of Long Island Sound	C.D.C.
1st Co	32d Co., Long Island Sound	C.D.C.
2d Co	33d Co., Long Island Sound	C.D.C.
3d Co	26th Co., Long Island Sound	C.D.C.
4th Co	27th Co., Long Island Sound	C.D.C.
5th Co	34th Co., Long Island Sound	C.D.C.
6th Co	35th Co., Long Island Sound	C.D.C.
7th Co	36th Co., Long Island Sound	C.D.C.
8th Co	28th Co., Long Island Sound	C.D.C.
9th Co	29th Co., Long Island Sound	C.D.C.
10th Co	30th Co., Long Island Sound	C.D.C.
11th Co	37th Co., Long Island Sound	C.D.C.
12th Co	31st Co., Long Island Sound	C.D.C.
13th Co	38th Co., Long Island Sound	C.D.C.

DELAWARE NATIONAL GUARD

1st Regt. Inf	59th Pion. Inf. Army Trs	P.D.C.A.Trs.

DISTRICT OF COLUMBIA NATIONAL GUARD

3d Regt. Inf.:		
Hq. Co. (det. 1 man)	Hq. 81st Inf. Brig	41st
Hq. Co. (det. 2 men)	Hq. 82d Inf. Brig	41st
Hq. Co. (det. 1 man)	Hq. 66th Arty. Brig	41st
M. G. Co	147th M. G Bn	41st
Cos. A, B, C, & D	161st Inf	41st
Cos. E, F, G, & H	162d Inf	41st
Cos. I, K, L, & M	163d Inf	41st
Hq. Co. (det. 64 men)	164th Inf	41st
Sup. Co	116th F. Sig. Bn	41st
1st Sq. Cav	110th F. A	29th
Btrys. A & B, F. A	do	29th

DISTRICT OF COLUMBIA NATIONAL GUARD—Continued

Former State units	Reorganized as or assigned to—	Division
Co B, Sig. Co	104th F. Sig. Bn	29th
1st F. Hosp. Co	117th Sn. Tn	42d
Sep. Bn. Inf. (colored)	372d Inf	93d
Coast Artillery:		
1st Co	Btry. D, 60th C.A. Regt	
2d Co	5th Co., Potomac	C.D.C.

FLORIDA NATIONAL GUARD

1st Regt. Inf.:		
M.G. Co. and 5 Os., 106 E.M	116th M. G. Bn	31st
Balance distributed as follows:		
5 Os., 79 E.M	117th M. G. Bn	31st
2 Os	121st Inf	31st
1 O., 55 E.M	122d Inf	31st
3 Os., 104 E.M	118th M. G. Bn	31st
169 E.M	124th Inf	31st
4 Os., 99 E.M	116th F.A	31st
2 Os., 126 E.M	117th F.A	31st
3 Os., 86 E.M	118th F.A	31st
1 O., 567 E.M	106th Engrs	31st
33 E.M	106th F. Sig. Bn	31st
2d Regt. Inf	124th Inf	31st
F. Hosp. Co. No. 1	106th Sn. Tn	31st
Coast Artillery Corps:		
1st Co	3d Co., Key West	C.D.C.
2d Co	4th Co., Tampa	C.D.C.
3d Co	6th Co., Pensacola	C.D.C.

GEORGIA NATIONAL GUARD

Brig. Hq	Hq. 61st Inf. Brig	31st
1st Inf.:		
Hq., Hq. Co., Sup. Co., Cos. E. H, I, K, L, & M	118th F. A	31st
Cos. C & G	116th M. G. Bn	31st
M.G. Co. & Cos. B & F	117th M. G. Bn	31st
Cos. A & D	118th M. G. Bn	31st
2d Inf.:		
Less Cos. B, C, & F	121st Inf	31st
Cos. B, C, & F	151st M. G. Bn	42d
5th Inf	122d Inf	31st
Sep. Cos. F, H. & I	121st Inf	31st
1st Sq. Cav.:		
Trs. B & K	106th F. Sig. Bn	31st
Trs. F & L, Sq. Hq. & Sup. Det	106th Hq. & M.P	31st
Tr. A, Cav	Div. Hq. Trs	31st
1st Bn. F.A.:		
Btrys. B & C & Bn. Hq	116th F. A	31st
Btry. A	117th F. A	31st
F. Hosp. Co. No. 1	106th Sn. Tn	31st
Co. A, Engrs	106th Engrs	31st
Coast Artillery:		
1st Co	5th Co., Savannah	C.D.C.
2d Co	6th Co., Savannah	C.D.C.
3d Co	7th Co., Savannah	C.D.C.
4th Co	4th Co., Savannah	C.D.C.

HAWAII

Former State units	Reorganized as or assigned to—	Division
1st Regt. Inf	Not drafted	
2d Regt. Inf		
1st Sep. Tr. Cav		
1st Sep. Co. Engrs		
Co. B, Sig. C		

IDAHO NATIONAL GUARD

2d Inf.:		
3d Bn	146th M. G. Bn	41st
M. G. Co	147th M. G. Bn	41st
Hq. Co., Sup. Co., 1st Bn	146th F. A	41st
2d Bn	116th Engrs	41st
Det	116th Sn. Tn	41st
F. Hosp. Co. No. 1	do	41st

ILLINOIS NATIONAL GUARD

1st Inf. Brig. Hq	66th Inf. Brig. Hq	33d
2d Inf. Brig. Hq	65th Inf. Brig. Hq	33d
1st Inf	131st Inf	33d
2d Inf	132d Inf	33d
3d Inf	129th Inf	33d
4th Inf	130th Inf	33d
5th Inf.:		
Hq. Co. less Band	129th Inf	33d
Sup. Co	130th Inf	33d
Co. A	108th Am. Tn	33d
Cos. B & H	108th Hq. & M. P	33d
Cos. C, D, & L	124th M. G. Bn	33d
Cos. E, I, & K	122d M. G. Bn	33d
Cos. F & G & M.G. Co	123d M. G. Bn	33d
Co. M	108th Engr. Tn	33d
Band	304th Cav	
6th Inf.:		
Less M. G. Co	123d F. A	33d
M. G. Co	108th T. M. Btry	33d
7th Inf.:		
M. G. Co	122d M. G. Bn	33d
Cos. A, B, C, D, E, & F	108th Am. Tn	33d
Cos. G, H, I, K, L, & M	108th Sup. Tn	33d
Hq. Co. less Band	132d Inf	33d
Sup. Co	131st Inf	33d
Band	305th Cav	
1st F. A	149th F. A	42d
2d F. A	122d F. A	33d
3d F. A	124th F. A	33d
Co. A, Sig. C	108th F. Sig. Bn	33d
1st Engrs	108th Engrs	33d
F. Hosps. Nos. 1, 2, 3, & 4	108th Sn. Tn	33d
Amb. Co. Nos. 1, 2, 3, & 4		
8th Inf. (colored)	370th Inf	93d

INDIANA NATIONAL GUARD

1st Brig. Hq	76th Inf. Brig. Hq	38th
1st Inf	151st Inf	38th
2d Inf	152d Inf	38th

INDIANA NATIONAL GUARD—Continued

Former State units	Reorganized as or assigned to—	Division
3d Inf.:		
M. G. Co	139th M. G. Bn	38th
1st, 2d, & 3d Bns., Hq. Co. & Sup. Co	137th F. A	38th
4th Inf.:		
M. G. Co., Cos. L & M	139th M. G. Bn	38th
1st & 2d Bns., Cos. I, K, Sup. Co., & Hq. Co	139th F. A	38th
Sq. Cav.:		
Tr. A	151st Inf	38th
Trs. C & D	152d Inf	38th
Tr. B	139th F. A	38th
1st Regt. F. A	150th F. A	42d
1st Sep. Bn. Engrs	113th Engrs	38th
1st Bn. Sig. C	113th F. Sig. Bn	38th
Amb. Cos. Nos. 1, 2, & 3	113th Sn. Tn	38th
F. Hosp. Cos. Nos. 1 & 2	do	38th

IOWA NATIONAL GUARD

Hq. 1st Brig	Hq. 67th Inf. Brig	34th
1st Inf	133d Inf	34th
2d Inf.:		
1st Bn	125th M. G. Bn	34th
2d Bn	126th M. G. Bn	34th
3d Bn	133d Inf	34th
Hq. Co. (less Band), M.G. & Sup. Cos	109th T. M. Btry	34th
Sn. Det	109th Engrs	34th
Band	Cp. Dodge, Iowa	34th
3d Inf	168th Inf	42d
Sep. Co. Inf	133d Inf	34th
1st Sq. Cav.:		
Tr. A	Div. Hq. Tr	34th
Tr. B	125th M. G. Bn	34th
Tr. C	133d Inf	34th
Tr. D	109th Am. Tn	34th
Band	301st Cav	
1st Regt. F. A	126th F. A	34th
1st Sep. Bn. Engrs	109th Engrs	34th
Co. C, Sig. Trs	109th F. Sig. Bn	34th
Am. Tn. Mtz	109th Am. Tn	34th
F. Hosp. Cos. Nos. 1 & 2	109th Sn. Tn	34th
Amb. Cos. Nos. 1 & 2	do	34th

KANSAS NATIONAL GUARD

Hq. 1st Kans. Inf. Brig	Brig. Hq. 70th Inf. Brig	35th
1st Inf.:		
Less Band	137th Inf	35th
Band	110th Engrs	35th
2d Inf	137th Inf	35th
3d Inf	139th Inf	35th
1st Sq. Cav.:		
Tr. A	Div. Hq. Tr	35th
Trs. B, C, & D	110th Hq. & M.P	35th
1st Regt. F. A	130th F. A	35th
1st Sep. Bn. Engrs	110th Engrs	35th
1st Bn. Sig. Trs	110th F. Sig. Bn	35th
1st Am. Tn	117th Am. Tn	42d
Engr. Tn	110th Engr. Tn	35th
F. Hosp. Cos. Nos. 1 & 2	110th Sn. Tn	35th
Amb. Cos. Nos. 1 & 2	do	35th

KENTUCKY NATIONAL GUARD

Former State units	Reorganized as or assigned to—	Division
1st Inf.:		
M. G. Co	138th M. G. Bn	38th
1st & 2d Bns., Hq. & Sup. Cos	138th F. A	38th
Co. L	113th T. M. Btry	38th
Cos. I, K, & M	113th Am. Tn	38th
2d Inf	149th Inf	38th
3d Inf.:		
M. G. Co. & Cos. I & K	138th M. G. Co	38th
Os. of Co. M, Hq. Co. (less Band), Sup. Co., 1st & 2d Bns	149th Inf	38th
Co. L	113th Am. Tn	38th
Co. M (less Os.)	113th Engrs	38th
Band	306th Cav	
Co. B, Sig. C	113th F. Sig. Bn	38th
F. Hosp. Cos. Nos. 1 & 2	113th Sn. Tn	38th
Amb. Co. No. 1	do	38th

LOUISIANA NATIONAL GUARD

1st Inf.:		
Hq., Hq. Co., M. G. Co., Sup. Co., & Cos. A, B, C, D, & F	156th Inf	39th
Two-thirds of E.M., Cos. G, I, & M	154th Inf	39th
One-third of E.M., Cos. G, I, & M	114th Engrs	39th
Cos. H & L	142d M. G. Bn	39th
One-half of E.M., Co. K	114th F. Sig. Bn	39th
One-half of E.M., Co. K	114th Hq. & M.P	39th
1st Sep. Tr	Div. Hq. Tr	42d
2d Sep. Tr	do	39th
1st Regt. F. A.:		
Less 2 Os. and 120 E.M	141st F. A	39th
2 Os. and 120 E.M	114th T. M. Btry	39th
F. Hosp. Co. No. 1	114th Sn. Tn	39th

MAINE NATIONAL GUARD

2d Inf	103d Inf	26th
1st Regt. Hv. F. A.:		
Dets. of —		
3 Os. & 99 E.M., Btry. C		
19 E.M., Btry. A		
19 E.M., Btry. B	101st T. M. Btry	26th
19 E.M., Btry. E		
25 E.M., Btry. F		
100 E.M	101st Engrs	26th
Balance	56th Pion. Inf	P.D.C.A.Trs
Coast Artillery:		
1st Co	17th Co., Portland	C.D.C.
2d Co	22d Co., Portland	C.D.C.
3d Co	24th Co., Portland	C.D.C.
4th Co	29th Co., Portland	C.D.C.
5th Co	18th Co., Portland	C.D.C.
6th Co	23d Co., Portland	C.D.C.
7th Co	19th Co., Portland	C.D.C.
8th Co	20th Co., Portland	C.D.C.
9th Co	25th Co., Portland	C.D.C.
10th Co	21st Co., Portland	C.D.C.
11th Co	26th Co., Portland	C.D.C.
12th Co	28th Co., Portland	C.D.C.
13th Co	27th Co., Portland	C.D.C.

MARYLAND NATIONAL GUARD

Former State units	Reorganized as or assigned to—	Division
Hq. 2d Brig	Hq. 58th Inf. Brig	29th
1st Inf.:		
Less Co. H	115th Inf	29th
Co. H	112th M. G. Bn	29th
4th Inf.:		
Less Band, M.G. Co., and Cos. A, B, D, E, F, H, & I	115th Inf	29th
M. G. Co	112th M. G. Bn	29th
Cos. A, B, D, E, F, H, & I	Distributed throughout	29th
Band	154th Dep. Brig., Cp. Meade	
5th Inf.:		
Less Hq., Sup., and M.G. Cos	115th Inf	29th
Hq. and Sup. Cos	110th F. A	29th
M. G. Co	110th M. G. Bn	29th
Tr. A, Cav	104th Hq. & M.P	29th
Btry. A, F.A	110th F.A	29th
Btry. B, F.A	do	29th
Btry. C, F.A	do	29th
Amb. Co. No. 1	104th Sn. Tn	29th
F. Hosp. No. 1	do	29th
Sep. Co. Inf. (colored)	372d Inf	93d
Coast Artillery:		
1st Co	5th Co., Baltimore	C.D.C.
2d Co.:		
Less 75 E.M	6th Co., Baltimore	C.D.C.
75 E.M	Btry. F 58th C.A	
3d Co	117th T. M. Btry	42d
4th Co	do	42d

MASSACHUSETTS NATIONAL GUARD

Hq. 2d Brig	Hq. 51st Brig	26th
2d Inf	104th Inf	26th
5th Inf.:		
1,400 E.M	101st Inf	26th
Balance	3d Pion. Inf	P.D.C.A.Trs
6th Inf.:		
82 E.M	101st Engr. Tn	26th
175 E.M	101st Inf	26th
100 E.M	102d Inf	26th
12 Os., and 800 E.M	104th Inf	26th
326 E.M	101st Hq. & M.P	26th
Co. L, redesignated Sep. Co. Inf. (colored)		
62 E.M., Co. M	101st Sup. Tn	26th
Balance	4th Pion. Inf	P.D.C.A.Trs
8th Inf.:		
12 Os. 800 E.M. and dets. fr. Cos. F, H, K, & M	104th Inf	26th
5 Os. and 359 E.M	101st Sup. Tn	26th
Dets. fr. Cos. F, H, K, & M	103d Inf	26th
Balance	5th Pion. Inf	P.D.C.A.Trs.
9th Inf	101st Inf	26th
1st Sq. Cav.:		
Trs. A, C, & D	102d M. G. Bn	26th
Tr. B	Div. Hq. Tr	26th
1st Regt. F.A	101st F.A	26th
2d Regt. F.A	102d F.A	26th
1st Regt. Engrs	101st Engrs	26th
Amb. Cos. Nos. 1 & 2	101st Sn. Tn	26th
F. Hosp. Cos. Nos. 1 & 2	do	26th
1st F. Sig. Bn	101st F. Sig. Bn	26th
Sep. Co. Inf. (colored)	372d Inf	93d

MASSACHUSETTS NATIONAL GUARD—Continued

Former State units	Reorganized as or assigned to—	Division
Coast Artillery: (6 Os., and 234 E.M)	101st Am. Tn	26th
Band	20th C.A. Band	
1st Co	16th Co., Boston	C.D.C.
2d Co	17th Co., Boston	C.D.C.
3d Co	18th Co,, Boston	C.D.C.
4th Co	19th Co., Boston	C.D.C.
5th Co	20th Co. Boston	C.D.C.
6th Co	21st Co., Boston	C.D.C.
7th Co	22d Co., Boston	C.D.C.
8th Co	23d Co., Boston	C.D.C.
9th Co	24th Co., Boston	C.D.C.
10th Co	25th Co., Boston	C.D.C.
11th Co	26th Co., Boston	C.D.C.
12th Co	27th Co., Boston	C.D.C.

MICHIGAN NATIONAL GUARD

Hq. 1st Inf. Brig	Hq. 63d Inf. Brig	32d
31st Inf.:		
10 Os. and 223 E.M	120th M. G. Bn	32d
17 Os. and 826 E.M	125th Inf	32d
16 Os. and 704 E.M	126th Inf	32d
4 Os. and 107 E.M	119th F. A	32d
32d Inf.:		
47 Os. and 1,931 E.M	126th Inf	32d
2 E.M	119th F.A	32d
1 O. and 12 E.M	Hq. 63d Inf. Brig	32d
33d Inf.:		
45 Os. and 1,845 E.M	125th Inf	32d
3 Os. and 145 E.M	120th M. G. Bn	32d
1st Sq. Cav.:		
3 E. M	Div. Hq. Tr	32d
1 O. and 3 E.M	Hq. 57th F. A. Brig	32d
14 Os. and 389 E.M	119th F. A	32d
1 O	107th Sn. Tn	32d
1st Bn. F. A.:		
1 O. and 11 E.M	Hq. 57th F. A. Brig	32d
17 Os. and 520 E.M	119th F. A	32d
1st Bn. Engrs.:		
13 Os. and 453 E.M	107th Engrs	32d
5 E.M	107th Engr. Tn	32d
1st Bn. Sig. C.:		
2 Os. and 201 E.M	107th F. Sig. Bn	32d
12 E.M	128th Inf	32d
1st Amb. Co	117th Sn. Tn	42d
2d Amb. Co	107th Sn. Tn	32d
1st F. Hosp	do	32d

MINNESOTA NATIONAL GUARD

Hq. Brig	Brig. Hq , 68th Inf. Brig	34th
1st Inf	135th Inf	34th
2d Inf	136th Inf	34th
3d Inf.:		
Less M. G. Co	125th F. A	34th
M. G. Co	125th M. G. Bn	34th
1st F. A	151st F. A	42d
F. Hosp. Co. No. 1	109th Sn. Tn	34th
Amb. Co. No. 1	do	34th

MISSISSIPPI NATIONAL GUARD

Former State units	Reorganized as or assigned to—	Division
1st Regt. Inf.	155th Inf.	39th
2d Regt. Inf.:		
Hq., Hq. Co. (less Band), Sup. Co. and part of Cos. F & H.	114th Hq. & M.P.	39th
3d Bn., M.G. Co. and Co. G.	140th M. G. Bn.	39th
1st Bn.	154th Inf.	39th
Band and one-half E.M. of Co. E.	114th Engrs.	39th
One-half E.M. of Co. E.	114th F. Sig. Bn.	39th
Dets. Cos. F & H.	155th Inf.	39th
1st Sep. Sq. Cav.:		
Less M. G. Tr.	114th Am. Tn.	39th
M. G. Tr.	140th M. G. Bn.	39th
2d Sep. Sq. Cav.:		
Less 193 E.M.	114th Sup. Tn.	39th
193 E.M.	114th Am. Tn.	39th
1st Regt. F.A.	140th F. A.	39th
Co. A, Engrs.	114th Engrs.	39th
F. Hosp. Co. No. 1	114th Sn. Tn.	39th

MISSOURI NATIONAL GUARD

Hq. 1st Inf. Brig.	Hq. 70th Inf. Brig.	35th
1st Inf.	138th Inf.	35th
2d Inf.:		
1st Bn. & M. G. Co.	128th M. G. Bn.	35th
Sup. & Hq. Cos., less Band	110th T. M. Btry.	35th
2d Bn.	129th M. G. Bn.	35th
3d Bn.	130th M. G. Bn.	35th
Band	311th Cav.	
3d Inf.	140th Inf.	35th
4th Inf.:		
Less Band	139th Inf.	35th
Band	Cp. Custer, Mich.	
5th Inf.:		
Less Band	138th Inf.	35th
Band	Cp. Wadsworth S. C.	P.D.C.A.Trs.
6th Inf.:		
Less Band	140th Inf.	35th
Band	Cp. Pike, Ark.	
Tr. B, Cav.	129th F. A.	35th
1st Regt. F. A.	128th F. A.	35th
2d Regt. F. A.	129th F. A.	35th
Bn. Engrs.	110th Engrs.	35th
Bn. Sig. C.	117th F. Sig. Bn.	42d
Sup. Tn.	110th Sup. Tn.	35th
1st & 2d F. Hosps.	110th Sn. Tn.	35th
1st & 2d Amb. Cos.	do.	35th

MONTANA NATIONAL GUARD

2d Inf.	163d Inf.	41st

NEBRASKA NATIONAL GUARD

4th Inf.:		
Less M. G. Co.	127th F. A.	34th
M. G. Co.	133d Inf.	34th
5th Inf.	134th Inf.	34th

NEBRASKA NATIONAL GUARD—Continued

Former State units	Reorganized as or assigned to—	Division
6th Inf.:		
M. G. Co	126th M. G. Bn	34th
Hq. Co. (less Band), Sup. Co. & 2d Bn	109th Engrs	34th
1st Bn. less Co. D	109th Hq. & M. P	34th
3d Bn. less Co. I	109th Sup. Tn	34th
Co. I	109th Engr. Tn	34th
Co. D	109th Sn. Tn	34th
Band	Cp. Funston, Kans	
Co. B, Sig. C	109th F. Sig. Bn	34th
F. Hosp. Co. No. 1	117th Sn. Tn	42d

NEVADA NATIONAL GUARD
(None organized)

NEW HAMPSHIRE NATIONAL GUARD

1st Inf.:		
1,630 E.M	103d Inf	26th
Balance	First Army Hq. Regt	
M. G. Tr. Cav	103d M. G. Bn	26th
Btry. A, F. A	103d F. A	26th
Co. B, Sig. C	326th F. Sig. Bn	
F. Hosp. Co. No. 1	101st Sn. Tn	26th
Coast Artillery:		
1st Co	9th Co., Portsmouth	C.D.C.
2d Co	6th Co., Portsmouth	C.D.C.
3d Co	7th Co., Portsmouth	C.D.C.
4th Co	8th Co., Portsmouth	C.D.C.

NEW JERSEY NATIONAL GUARD

Div. Hq	Hq. 57th Inf. Brig	29th
1st Inf.:		
Less Co. K	113th Inf	29th
Co. K	104th Engrs	29th
4th Inf.:		
Less part of Sup., Hq., M.G., & L Cos	113th Inf	29th
Hq. Co. (less Band), and part of Sup. Co	Distributed throughout	29th
Band	Cp. Dix, N. J	
M. G. Co	110th M. G. Bn	29th
Co. L	104th Engrs	29th
5th Inf.:		
Less Co. F	114th Inf	29th
Co. F	104th Engrs	29th
2d Inf.:		
Less Band, M.G., G, & L Cos	113th Inf	29th
Band	Distributed throughout	29th
M. G. & L. Cos	111th M. G. Bn	29th
Co. G	104th Engrs	29th
3d Inf.:		
M. G. Co	111th M. G. Bn	29th
Cos. I & L	104th Engrs	29th
Hq., Hq. Co. (less Band), Sup. Co., 1st Bn., 2d Bn., & Cos. K & M	114th Inf	29th
Band	Cp. Upton, N. Y	
1st Sep. Sq. Cav.:		
Hq. Det	Div. Hq. Tr	29th
Trs. A & C	104th Hq. & M.P	29th
Trs. B & D	112th F. A	29th

NEW JERSEY NATIONAL GUARD—Continued

Former State units	Reorganized as or assigned to—	Division
Regt. F.A.:		
Less Btry. F	112th F. A	29th
Btry. F	104th T. M. Btry	29th
1st Bn. Engrs	104th Engrs	29th
1st Bn. Sig. C. (Cos. A & C)	104th F. Sig. Bn	29th
Amb. Co. No. 1	117th Sn. Tn	42d
F. Hosp. Co. No. 1	104th Sn. Tn	29th
Coast Artillery:		
1st Co	11th Co., Delaware	C.D.C.
2d Co	Btry. D 2d T. M. Bn	

NEW MEXICO NATIONAL GUARD

1st Inf.		
3d Bn. & M. G. Co	144th M. G. Bn	40th
1st & 2d Bns	143d M. G. Bn	40th
Hq., Hq. Co. (less Band), & Sup. Co	115th Hq. & M.P	40th
Band	Cp. Taylor, Ky	
Btry. A, F. A	146th F. A	41st

NEW YORK NATIONAL GUARD

Div. Hq	Div. Hq	27th
Div. Hq. Tr	Div. Tr	27th
1st Inf. Brig. Hq	Hq. 53d Inf. Brig	27th
2d Brig. Hq	Hq. 2d Prov. Inf. Brig	P.D.C.A.Trs.
3d Inf. Brig. Hq	Hq. 54th Inf. Brig	27th
4th N. Y. Brig. Hq	Hq. 1st Prov. Inf. Brig	P.D.C.A.Trs.
1st F.A. Brig. Hq	Hq. 52d Arty. Brig	27th
2d Inf	105th Inf	27th
23d Inf	106th Inf	27th
7th Inf	107th Inf	27th
3d Inf	108th Inf	27th
1st Inf.:		
25 Os. and 1,600 E.M	107th Inf	27th
158 E.M	106th F. A	27th
87 E.M	102d Engrs	27th
Balance	1st Pion. Inf	P.D.C.A.Trs.
12th Inf.:		
7 Os. and 142 E.M	105th Inf	27th
6 Os.	106th Inf	27th
5 Os. and 320 E.M	107th Inf	27th
5 Os. and 293 E.M	108th Inf	27th
35 E.M	Hq. 52d Arty. Brig	27th
186 E.M	104th F. A	27th
87 E.M	102d Engrs	27th
9 E.M	102 Hq. & M.P	27th
220 E.M	102d Am. Tn	27th
144 E.M	102d Sup. Tn	27th
Balance	52d Pion. Inf	P.D.C.A.Trs.
14th Inf.:		
23 Os. and 1,292 E.M	106th Inf	27th
158 E.M	105th F. A	27th
87 E. M	102d Engrs	27th
Balance	2d Pion. Inf	P.D.C.A.Trs.
71st Inf.:		
22 Os. and 1,375 E.M	105th Inf	27th
158 E.M	106th F. A	27th
87 E.M	102d Engrs	27th
Balance	54th Pion. Inf	P.D.C.A.Trs.

NEW YORK NATIONAL GUARD—Continued

Former State units	Reorganised as or assigned to—	Division
74th Inf.:		
33 Os. and 1,350 E.M.	108th Inf.	27th
158 E.M.	106th F. A.	27th
87 E.M.	102d Engrs.	27th
Balance	55th Pion. Inf.	P.D.C.A.Trs.
69th Inf.	165th Inf.	42d
10th Inf.	51st Pion. Inf.	P.D.C.A.Trs.
47th Inf.	53d Pion. Inf.	P.D.C.A.Trs.
1st Cav.:		
21 Os. and 706 E.M. (including parts each Hq., Hq. Tr., Sup. Tr., Tr. F, 2 Os. of Tr. K, 1 O. Tr. L; entire M. G. Tr., Trs. A, B, C, D, & M)	104th M. G. Bn.	27th
14 Os. and 549 E.M. (including parts each Hq., Hq. Tr., Sup. Tr., Tr. F, K (less 2 Os.), L (less 1 O.), entire Trs. E, G, & H.	106th M. G. Bn.	27th
9 Os. and 29 E.M. fr. Hq.	102d Am. Tn.	27th
3 Os. and 181 E.M. (including Tr. I)	102d T. M. Btry.	27th
30 E.M.	105th M. G. Bn.	27th
Sq. A Cav.	105th M. G. Bn.	27th
Sep. M. G. Tr.	105th M. G. Bn.	27th
1st F. A.	104th F. A.	27th
2d F. A.	105th F. A.	27th
3d F. A.	106th F. A.	27th
22d Engrs.	102d Engrs.	27th
1st Bn. Sig. C.	102d F. Sig. Bn.	27th
Am. Tn.	102d Am. Tn.	27th
Sup. Tn.	102d Sup. Tn.	27th
Engr. Tn.:		
Less 1 O. and 83 E.M.	102d Engr. Tn.	27th
1 O. and 83 E.M.	102d Engrs.	27th
Sn. Tn.	102d Sn. Tn.	27th
Hq. & M.P.	102d Hq. & M.P.	27th
F. Bkry. Co.	Attached.	27th
15th Inf. (colored)	369th Inf.	93d
Coast Artillery:		
8th C.D.C. Band	24th C.A. Band of	C.D.E.N.Y.
26th Co.	28th Co., S. N. Y.	C.D.C.
27th Co.	Transferred to other organizations.	
28th Co.	do.	
29th Co.	Transferred to other organizations.	
30th Co.:		
Less 54 E.M.	29th Co., S.N.Y.	C.D.C.
54 E.M.	35th Co., S.N.Y.	C.D.C.
32d Co.	Transferred to other organizations.	
33d Co.	30th Co., S.N.Y.	C.D.C.
34th Co.	10th Co., S.N.Y.	C.D.C.
35th Co.:		
Part to	31st Co., S.N.Y.	C.D.C.
Part to	Transferred to other organizations.	
36th Co.	do.	
9th C.D.C. Band	26th C. A. Band of	C. D. Sandy Hook.
13th Co.	13th Co., Sandy Hook.	C.D.C.
14th Co.	14th Co., Sandy Hook.	C.D.C.
15th Co.	15th Co., Sandy Hook.	C.D.C.
16th Co.	16th Co., Sandy Hook.	C.D.C.
17th Co.	17th Co., Sandy Hook.	C.D.C.
18th Co.:		
Less 44 E.M.	18th Co., Sandy Hook.	C.D.C
44 E.M.	57th Regt.	C. A.

NEW YORK NATIONAL GUARD—Continued

Former State units	Reorganized as or assigned to—	Division
19th Co.:		
Less 109 E.M.	19th Co., Sandy Hook	C.D.C.
109 E.M.	Btry. B, 57th Regt.	C. A.
20th Co.	20th Co., Sandy Hook	C.D.C.
21st Co.	21st Co., Sandy Hook	C.D.C.
22d Co.:		
Less part enlisted strength	22d Co., Sandy Hook	C.D.C.
Part enlisted strength	Btry. E, 57th Regt.	C. A.
23d Co.	23d Co., Sandy Hook	C.D.C.
24th Co.:		
Less 114 E.M.	24th Co., Sandy Hook	C.D.C.
114 E.M.	Btrys. B, D, E, & F, 57th Regt.	C. A.
13th C. D. Band	25th C. A. Band of	C.D.S.N.Y.
2d Co.	17th Co., S.N.Y.	C.D.C.
3d Co.	Btry. E, 59th C. A.	
4th Co.	Sup. Co., 59th C. A.	
5th Co.	20th Co., S.N.Y.	C.D.C.
6th Co.	59th Regt. C. A.	
7th Co.	22d Co., S.N.Y.	C.D.C.
8th Co.:		
Less 28 E.M.	23d Co., S.N.Y.	C.D.C.
28 E.M.	40th Co., S.N.Y.	C.D.C.
9th Co.	24th Co., S.N.Y.	C.D.C.
10th Co.	25th Co., S.N.Y.	C.D.C.
11th Co.	26th Co., S.N.Y.	C.D.C.
12th Co.	Btry. F, 59th C. A.	

NORTH CAROLINA NATIONAL GUARD

Brig. Hq.	Hq. 60th Inf. Brig.	30th
1st Inf.:		
Co. A	105th Engr. Tn.	30th
M. G. Co.	113th M. G. Bn.	30th
Cos. B, C, D, Band, Sup. Co., & Sn. Det.	105th Engrs.	30th
Hq. Co. (less Band), 2d & 3d Bns.	Distributed throughout	30th
2d Inf.	119th Inf.	30th
3d Inf.	120th Inf.	30th
1st Sq. Cav.:		
Trs. A & D	105th Hq. & M.P.	30th
Trs. B & C	115th M. G. Bn.	30th
M. G. Tr.	115th M. G. Bn.	30th
1st F. A.	113th F. A.	30th
Cos. A, B, & C, Engrs.	105th Engrs.	30th
Co. A, Sig. C.	105th F. Sig. Bn.	30th
Sup. Tn.	105th Sup. Tn.	30th
Engr. Tn.	117th Engr. Tn.	42d
Amb. Co. No. 1	105th Sn. Tn.	30th
F. Hosp. No. 1	105th Sn. Tn.	30th
Coast Artillery:		
1st Co.	7th Co., Cape Fear	C.D.C.
2d Co.	8th Co., Cape Fear	C.D.C.
3d Co.	3d Co., Cape Fear	C.D.C.
4th Co.	4th Co., Cape Fear	C.D.C.
5th Co.	5th Co., Cape Fear	C.D.C.
6th Co.	6th Co., Cape Fear	C.D.C.

NORTH DAKOTA NATIONAL GUARD

Former State units	Reorganized as or assigned to—	Division
1st Regt. Inf.	164th Inf.	41st
2d Regt. Inf.:		
2 Os. of Hq. Co.	Hq. 81st Inf. Brig.	41st
2 Os.	148th M. G. Bn.	41st
Co. H.	147th M. G. Bn.	41st
Cos. A, B, C, D, & M. G. Co.	164th Inf.	41st
Co. E.	116th T. M. Btry.	41st
Part of Hq. Co.	116th Engrs.	41st
Part of Hq. Co.	116th Hq. & M.P.	41st
Sup. Co.	116th Engr. Tn.	41st
Cos. F, G, I, K, L, & M.	116th Sn. Tn.	41st
F. Hosp. Co. No. 1	109th Sn. Tn.	34th

OHIO NATIONAL GUARD

Div. Hq. Tr.	Div. Hq. Tr.	37th
1st Inf. Brig. Hq.	Hq. 74th Inf. Brig.	37th
2d Inf. Brig. Hq.	Hq. 73d Inf. Brig.	37th
1st Inf.:		
Part of M. G. Co.	Hq. 73d Inf. Brig.	37th
Part of Co. G.	136th M. G. Bn.	37th
Parts of Cos. K, L, & M.	146th Inf.	37th
Parts of Cos. A to K, inclusive.	147th Inf.	37th
Parts of Cos. G to M, inclusive.	148th Inf.	37th
Band.	314th Cav.	
Hq. & Sup. Cos.	Distributed throughout.	37th
2d Inf.:		
Parts of Cos. A, B, C, D, E, & Hq. Co.	145th Inf.	37th
Parts of Cos. A, B, C, D, E, F, G, H, I, K, L, M, & Hq. Co.	146th Inf.	37th
Parts of Cos. A & B.	147th Inf.	37th
Band.	313th Cav.	
M. G. & Sup. Cos.	Distributed throughout.	37th
d Inf.	148th Inf.	37th
3th Inf.	166th Inf.	42d
4th Inf.	145th Inf.	37th
5th Inf.	147th Inf.	37th
6th Inf.:		
7 Parts of Cos. F, G, H, I, & M.	148th Inf.	37th
Part of Co. E.	73d Inf. Brig. Hq.	37th
M. G. Co.	135th M. G. Bn.	37th
Parts of Cos. A, C, D, K, Hq. Co., & Sup. Co.	145th Inf.	37th
Parts of Cos. D, F, H, K, L, & M.	147th Inf.	37th
Parts of Cos. E & H.	134th F. A.	37th
Parts of Cos. B, D, E, G, & M.	135th F. A.	37th
Parts of Cos. F, I, K, L, M, Hq. Co., & Sup. Co.	136th F. A.	37th
Parts of Cos. D, E, F, G, & H.	112th Engrs.	37th
Part of Co. C.	112th F. Sig. Bn.	37th
Part of Co. B.	112th Am. Tn.	37th
Band.	Cp. Grant, Ill.	
8th Inf.	146th Inf.	37th
10th Inf.:		
Cos. I, K, L, & M.	136th M. G. Bn.	37th
Cos. A, B, part of G, & M. G. Co.	135th M. G. Bn.	37th
Co. C & part of Co. G.	112th T. M. Btry.	37th
Hq. Co. (less Band), Sup. Co., & Cos. D, E, F, H, & part of G.	134th M. G. Bn.	37th
Band.	Cp. Sherman, Ohio.	
1st Regt. F. A.:		
Less Band.	134th F. A.	37th
Band.	314th Cav.	

OHIO NATIONAL GUARD—Continued

Former State units	Reorganized as or assigned to—	Division
2d Regt. F. A.:		
Less Band	135th F. A	37th
Band	313th Cav	
3d Regt. F. A	136th F. A	37th
1st Regt. Engrs	112th Engrs	37th
1st Bn. Sig. C	112th F. Sig. Bn	37th
Hq. Trs. & M.P	112th Tn. Hq. & M.P	37th
Am. Tn	112th Am. Tn	37th
Sup. Tn	112th Sup. Tn	37th
Engr. Tn.:		
Part	112th Engrs	37th
Part	112th Engr. Tn	37th
Sn. Tn	112th Sn. Tn	37th
9th Sep. Bn. Inf. (colored)	372d Inf	93d

OKLAHOMA NATIONAL GUARD

1st Inf.:		
Less M. G. Co. and Band	142d Inf	36th
M. G. Co	131st M. G. Bn	36th
Band	303d Cav	
Sq. Cav	111th Am. Tn	36th
1 Bn. Engrs	111th Engrs	36th
Amb. Co. No. 1	117th Sn. Tn	42d
F. Hosp. Co. No. 1	111th Sn. Tn	36th

OREGON NATIONAL GUARD

3d Oreg. Inf	162d Inf	41st
Sep. Sq. Cav	148th F. A	41st
Sep. Bn. Engr	116th Engrs	41st
Btrys. A & B, F. A	147th F. A	41st
F. Hosp. Co. No. 1	117th Sn. Tn	42d
Coast Artillery:		
Band	29th C.A. Band, Ft. Stevens	
1st Co.:		
Less 29 E.M	13th Co., Columbia	C.D.C.
16 E.M	Btry. C, 65th Regt	C.A.
11 E.M	Btry. E, 65th Regt	C.A.
2 E.M	Sup. Co., 65th Regt	C.A.
2d Co.:		
Less 84 E.M	14th Co., Columbia	C.D.C.
82 E.M	Btry. C, 65th Regt	C.A.
2 E.M	Sup. Co., 65th Regt	C.A.
3d Co	15th Co., Columbia	C.D.C.
4th Co	16th Co., Columbia	C.D.C.
5th Co	5th Co., Columbia	C.D.C.
6th Co	6th Co., Columbia	C.D.C.
7th Co	7th Co., Columbia	C.D.C.
8th Co	8th Co., Columbia	C.D.C.
9th Co	9th Co., Columbia	C.D.C.
10th Co	10th Co., Columbia	C.D.C.
11th Co.:		
Less 45 E.M	11th Co., Columbia	C.D.C.
45 E.M	65th Regt	C.A.
12th Co	12th Co., Columbia	C.D.C.

PENNSYLVANIA NATIONAL GUARD

Former State units	Reorganised as or assigned to—	Division
Div. Hq	Div. Hq. Tr	28th
1st Inf. Brig. Hq	Hq. 55th Inf. Brig	28th
1st Inf	109th Inf	28th
10th Inf	110th Inf	28th
18th Inf	111th Inf	28th
16th Inf	112th Inf	28th
2d Inf. Brig. Hq	Hq. 56th Inf. Brig	28th
3d Inf.:		
Less Band	110th Inf	28th
Band	310th Cav	
6th Inf.:		
Less Band	111th Inf	28th
Band	312th Cav	
8th Inf.:		
Less Band	112th Inf	28th
Band	Cp. Wadsworth, S. C	P.D.C.A.Trs.
13th Inf.:		
Less Band	109th Inf	28th
Band	Cp. Wadsworth, S. C	P.D.C.A.Trs.
4th Inf.:		
M. G. Co., Cos. C & D, parts of Sn. Det. & Sup. Co	109th M. G. Bn	28th
2d Bn. & parts of Hq. & Sup. Cos	107th M. G. Bn	28th
3d Bn	149th M. G. Bn	42d
Cos. A & B (142) & Dets. Hq. Co. (less Band), & Sup. Co	108th M. G. Bn	28th
Band	Cp. Jos. E. Johnston	
Det. Hq. Co., Sup. Co., & 9 E.M. fr. Co. B	53d Dep. Brig	
1st Cav.:		
Dets. of Hq. Tr. (less Band), Sup. Tr. & Trs. B, F, I, M, & E	103d Engrs	28th
M. G. Tr	108th M. G. Bn	28th
Det. Tr. I	Div. Hq. Tr	28th
Dets. of Trs. F & H	107th F. A	28th
Trs. A, C. & G & Dets. of Trs D, K, I, L, & M	108th F. A	28th
Dets. of Trs. I, K, & L	109th F. A	28th
Dets. of Trs. B & M	103d T. M. Btry	28th
Band	302d Cav	
Det. Tr. D	Hq. 53d F. A. Brig	28th
F. A. Brig. Hq	Hq. 53d Arty. Brig	28th
1st Regt. F. A	107th F. A	28th
2d Regt. F. A	108th F. A	28th
3d Regt. F. A	109th F. A	28th
1st Engrs.:		
Less 1 O. and 16 E.M	103d Engrs	28th
1 O. and 16 E.M	103d Engr. Tn	28th
1st Bn. Sig. C	103d F. Sig. Bn	28th
Am. Tn	103d Am. Tn	28th
Sup. Tn	103d Sup. Tn	28th
Sn. Tn	103d Sn. Tn	28th
F. Bkry. Co	Attached to	28th
M.P	103d Hq. & M.P	28th

RHODE ISLAND NATIONAL GUARD

1st Sep. Sq. Cav.:		
Less Trs. B & M	103d M. G. Bn	26th
Tr. B	101st Sup. Tn	26th
Tr. M	103d F. A	26th
1st Bn. F. A	103d F. A	26th
Amb. Co. No. 1	101st Sn. Tn	26th
Coast Artillery:		
1st Band		
2d Band		

RHODE ISLAND NATIONAL GUARD—Continued

Former State units	Reorganized as or assigned to—	Division
Coast Artillery—Continued		
1st Co	9th Co., Narragansett Bay	C.D.C.
2d Co	28th Co., Boston	C.D.C.
3d Co	10th Co., Narragansett Bay	C.D.C.
4th Co	13th Co., Narragansett Bay	C.D.C.
5th Co	19th Co., Narragansett Bay	C.D.C.
6th Co	20th Co., Narragansett Bay	C.D.C.
7th Co	21st Co., Narragansett Bay	C.D.C.
8th Co	22d Co., Narragansett Bay	C.D.C.
9th Co	29th Co., Boston	C.D.C.
10th Co	30th Co., Boston	C.D.C.
11th Co	11th Co., Narragansett Bay	C.D.C.
12th Co	12th Co., Narragansett Bay	C.D.C.
13th Co	31st Co., Boston	C.D.C.
14th Co	14th Co., Narragansett Bay	C.D.C.
15th Co	15th Co., Narragansett Bay	C.D.C.
16th Co	16th Co., Narragansett Bay	C.D.C.
17th Co	17th Co., Narragansett Bay	C.D.C.
18th Co	18th Co., Narragansett Bay	C.D.C.
19th Co	3d Co., New Bedford	C.D.C.
20th Co	32d Co., Boston	C.D.C.

SOUTH CAROLINA NATIONAL GUARD

1st Inf	118th Inf	30th
2d Inf.:		
M. G. Co	113th M. G. Bn	30th
Sn. Det., Hq. Co. (less Band)	105th Hq. & M.P	30th
1st & 2d Bns	105th Am. Tn	30th
3d Bn	118th Inf	30th
Sup. Co	105th Sup. Tn	30th
Band	318th F. A	81st (N.A.)
Tr. A Cav	Div. Hq. Tr	30th
1st Bn. Engrs	117th Engrs	42d
F. Hosp. Co. No. 1	105th Sn. Tn	30th
Coast Artillery:		
1s Co	6th Co., Charleston	C.D.C.
2d Co	7th Co., Charleston	C.D.C.
3d Co	8th Co., Charleston	C.D.C.
4th Co	9th Co., Charleston	C.D.C.
5th Co	10th Co., Charleston	C.D.C.

SOUTH DAKOTA NATIONAL GUARD

th Inf.:		
M. G. Co	146th M. G. Bn	41st
Cos. I, K, & L	148th M. G. Bn	41st
1st Bn. Hq. Co., Sup. Co., & Cos. H & M	147th F. A	41st
Cos. E, F, & G	116th Sup. Tn	41st
1 E.M	116th Sn. Tn	41st
1st Regt. Cav.:		
2d Sq. and individual transfers of all Os. and E.M. who could be absorbed.	127th M. G. Bn	34th
Band and surplus Os. and E.M	307th Cav	

TENNESSEE NATIONAL GUARD

Former State units	Reorganized as or assigned to—	Division
1st Inf.:		
Less M. G. Co	115th F. A	30th
M. G. Co	113th M. G. Bn	30th
2d Inf.:		
1st Bn., Hq. Co. (less Band), Sup. Co	119th Inf	30th
Band	120th Inf	30th
M. G. Co	113th M. G. Bn	30th
2d Bn. distributed by individual transfers to	119th Inf	30th
	115th F. A	30th
	120th Inf	30th
	113th M. G. Bn	30th
3d Bn. distributed by individual transfers to	119th Inf	30th
	120th Inf	30th
3d Inf	117th Inf	30th
1st Sq. Cav.:		
Trs. A, B, & C	114th M. G. Bn	30th
Tr. D	105th T. M. Btry	30th
1st Regt. F. A	114th F. A	30th
Amb. Co. No. 1	117th Sn. Tn	42d
F. Hosp. No. 1	105th Sn. Tn	30th
Sep. Co. Inf. (colored)	372d Inf	93d

TEXAS NATIONAL GUARD

Div. Hq. Tr	Div. Hq. Tr	36th
1st Inf. Brig	Hq. 72d Inf. Brig	36th
2d Inf. Brig	Hq. 71st Inf. Brig	36th
2d Inf	141st Inf	36th
3d Inf.:		
Less Co. D, M. G. Co., & Band	143d Inf	36th
M. G. Co	131st M. G. Bn	36th
Co. D	133d M. G. Bn	36th
Band	309th Cav	36th
4th Inf.:		
Less M. G. Co. & Band	144th Inf	36th
M. G. Co	131st M. G. Bn	36th
Band	1st Band, Sig. C. (Kelly Field)	
1st Inf.:		
Less M. G. Co. & Band	141st Inf	36th
M. G. Co	132d M. G. Bn	36th
Band	303d Cav	
5th Inf	143d Inf	36th
6th Inf.:		
Less Co. G	144th Inf	36th
Co. G	133d M. G. Bn	36th
7th Inf	142d Inf	36th
1st Cav.:		
Less Hq. Tr., M. G. Tr., & Trs. E & K	132d F. A	36th
Hq. Tr	Div. Hq. Tr	36th
M. G. Tr	133d M. G. Bn	36th
Det. Tr. E	Hq. 61st Arty. Brig	36th
Det. Tr. E & Tr. K	111th T. M. Btry	36th
1st Regt. F. A	133d F. A	36th
2d Regt. F. A	131st F. A	36th
Bn. Engrs	111th Engrs	36th
Bn. Sig. C	111th F. Sig. Bn	36th
Hq. Tr. & M.P	111th Hq. & M.P	36th
Sup. Tn	117th Sup. Tn	42d
Amb. Cos. Nos. 1 & 2	111th Sn. Tn	36th
F. Hosp. Cos. Nos. 1 & 2	do	36th

TEXAS NATIONAL GUARD—Continued

Former State units	Reorganized as or assigned to—	Division
Coast Artillery:		
1st Co	4th Co., Galveston	C.D.C.
2d Co	5th Co., Galveston	C.D.C.
3d Co	6th Co., Galveston	C.D.C.
4th Co	7th Co., Galveston	C.D.C.
5th Co	8th Co., Galveston	C.D.C.

UTAH NATIONAL GUARD

1st Regt. F. A	145th F. A	40th
F. Hosp. Co. No. 1	115th Sn. Tn	40th

VERMONT NATIONAL GUARD

1st Inf.:		
196 E.M	101st M. G. Bn	26th
3 Os. and 213 E.M	102d M. G. Bn	26th
50 E.M	102d Inf	26th
3 Os. and 229 E.M	103d M. G. Bn	26th
13 Os. and 700 E.M	101st Am. Tn	26th
Balance	57th Pion. Inf	P.D.C.A.Trs.

VIRGINIA NATIONAL GUARD

1st Inf.:		
Less Band & M.G. Co	116th Inf	29th
M. G. Co	110th M. G. Bn	29th
Band	Cp. Lee, Va	
2d Inf	116th Inf	29th
4th Inf.:		
Less Hq. Co., M. G. Co., & Cos. D, I, & M	116th Inf	29th
M. G. Co & Co. D	112th M. G. Bn	29th
Hq. Co. & Cos. I & M	111th F. A	29th
Co. A, Sig. Co.:		
2 Os and 52 E.M	Hq. Co. 54th F. A. Brig	29th
9 E.M	110th F. A	29th
1 O. and 10 E. M	111th F. A	29th
6 E.M	112th F. A	29th
1st F. A	111th F. A	29th
1st Sq. Cav	104th Am. Tn	29th
F. Hosp. Co. No. 1	104th Sn. Tn	29th
Amb. Co. No. 1	do	29th
Coast Artillery:		
1st Co	117th Hq. & M.P	42d
2d Co	117th Hq. & M.P	42d
3d Co	10th Co., Chesapeake Bay	C.D.C.
4th Co	8th Co., Chesapeake Bay	C.D.C.
5th Co		
6th Co	6th Co., Chesapeake Bay	C.D.C.
7th Co	11th Co., Chesapeake Bay	C.D.C.
8th Co	12th Co., Chesapeake Bay	C.D.C.
9th Co		

WASHINGTON NATIONAL GUARD

2d Inf	161st Inf	41st
1st Sq. Cav.:		
Tr. C	Div. Hq. Tr	41st
Trs. A, B, & D	116th Hq. & M.P	41st

WASHINGTON NATIONAL GUARD—Continued

Former State units	Reorganized as assigned to—	Division
M. G. Tr. Cav	147th M. G. Bn	41st
1st Bn. F. A	146th F. A	41st
1st Bn. Sig. C	116th F. Sig. Bn	41st
F. Hosp. Co. No. 1	116th Sn. Tn	41st
Coast Artillery:		
1st Band	30th C. A. Band	
1st Co	17th Co., Puget Sound	C.D.C.
2d Co	18th Co., Puget Sound	C.D.C.
3d Co	19th Co., Puget Sound	C.D.C.
4th Co.:		
Less 92 E.M	20th Co., Puget Sound	C.D.C.
55 E.M	Btry. F 63d Regt. C.A	
37 E.M	Btry. F 65th Regt. C.A	
5th Co	21st Co., Puget Sound	C.D.C.
6th Co	22d Co., Puget Sound	C.D.C.
7th Co.:		
Less 62 E. M	23d Co., Puget Sound	C.D.C.
17 E.M	Sup. Co. 63d Regt. C.A	
45 E.M	Btry. B 63d Regt. C. A	
8th Co	24th Co., Puget Sound	C.D.C.
9th Co	25th Co., Puget Sound	C.D.C.
10th Co.:		
Less 65 E.M	26th Co., Puget Sound	C.D.C.
65 E. M	Btry. F 63d Regt. C.A Btry. F 65th Regt. C.A	
11th Co	27th Co., Puget Sound	C.D.C.
12th Co.:		
Less 97 E.M	28th Co., Puget Sound	C.D.C.
54 E.M	Btry. D 63d Regt. C.A	
43 E.M	Btry. F 65th Regt. C.A	

WEST VIRGINIA NATIONAL GUARD

1st Inf.:		
Sup. Co	113th Engr. Tn	38th
M. G. Co. & 1st Bn	137th M. G. Bn	38th
Cos. E & F	113th Engrs	38th
Cos. G & H	113th Am. Tn	38th
3d Bn. & Hq. Co. (less Band)	150th Inf	38th
Band	Cp. Gordon, Ga	
2d Inf	150th Inf	38th

WISCONSIN NATIONAL GUARD

Brig. Hq	64th Inf. Brig. Hq	32d
1st Inf.:		
24 Os. and 1,018 E.M	127th Inf	32d
21 Os. and 715 E.M	128th Inf	32d
2 E.M	107th Sn. Tn	32d
4 Os. and 1 E.M	64th Inf. Brig. Hq	32d
2d Inf.:		
1 O. and 16 E.M	Hq. 64th Inf. Brig	32d
Cos. E, F, & G	150th M. G. Bn	42d
29 Os. and 1,341 E.M	127th Inf	32d
21 E.M	120th F. A	32d
3 Os. and 149 E.M	128th Inf	32d
3d Inf.:		
2 E.M	Div. Hq. Tr	32d
12 Os. and 427 E.M	121st M. G. Bn	32d
4 Os. and 280 E.M	127th Inf	32d
27 Os. and 1,306 E.M	128th Inf	32d

WISCONSIN NATIONAL GUARD—Continued

Former State units	Reorganized as or assigned to—	Division
4th Inf.:		
6 Os. and 171 E.M.	119th M. G. Bn.	32d
2 Os. and 183 E.M.	127th Inf.	32d
6 Os. and 315 E.M.	128th Inf.	32d
3 Os. and 181 E.M.	107th T. M. Btry.	32d
94 E.M.	107th Engrs.	32d
6 Os. and 86 E.M.	107th Hq. & M.P.	32d
10 Os. and 390 E.M.	107th Am. Tn.	32d
2 Os. and 150 E.M.	107th Sup. Tn.	32d
149 E.M.	121st F. A.	32d
5th Inf.:		
2 Os. and 1 E.M.	107th Sn. Tn.	32d
11 Os. and 342 E.M.	119th M. G. Bn.	32d
1 O.	125th Inf.	32d
1 O. and 45 E.M.	121st M. G. Bn.	32d
5 Os. and 189 E.M.	127th Inf.	32d
6 Os. and 357 E.M.	128th Inf.	32d
13 E.M.	121st F. A.	32d
85 E.M.	107th Engrs.	32d
12 Os. and 453 E.M.	107th Am. Tn.	32d
1 O. and 76 E.M.	107th Sup. Tn.	32d
6th Inf.:		
3 Os. and 102 E.M.	Div. Hq. Tr.	32d
6 Os. and 210 E.M.	119th M. G. Bn.	32d
5 Os. and 114 E.M.	127th Inf.	32d
5 Os. and 120 E.M.	128th Inf.	32d
221 E.M.	121st F. A.	32d
192 E.M.	107th Engrs.	32d
3 Os. and 218 E.M.	107th Hq. & M.P.	32d
2 Os. and 92 E.M.	107th Am. Tn.	32d
5 Os. and 234 E.M.	107th Sup. Tn.	32d
1st Regt. Cav.:		
18 E.M.	Hq. 57th F. A. Brig.	32d
1 O.	119th F. A.	32d
46 Os. and 1,393 E. M.	120th F. A.	32d
1st Regt. F. A.:		
4 Os. and 14 E.M.	Hq. 57th F. A. Brig.	32d
39 Os. and 1,220 E.M.	121st F. A.	32d
Bn. Sig. C.: 11 Os. and 165 E.M.	107th F. Sig. Bn.	32d
Bn. Engrs.:		
14 E.M.	107th Engr. Tn.	32d
14 Os. and 474 E.M.	107th Engrs.	32d
Amb. Co. No. 1	107th Sn. Tn. [1]	32d
Amb. Co. No. 2	do [1]	32d
F. Hosp. Co. No. 1	do [1]	32d
F. Hosp. Co. No. 2:		
2 E. M.	121st F. A.	32d
Balance	107th Sn. Tn. [1]	32d

[1] Wisconsin sanitary train included 22 officers and 478 enlisted men.

WYOMING NATIONAL GUARD

3d Inf.:		
M. G. Co.	146th M. G. Bn.	41st
Hq. Co., Sup. Co., 1st Bn.	148th F. A.	41st
2d & 3d Bns.	116th Am. Tn.	41st
3 Os.	116th Sn. Tn.	41st

MISCELLANEOUS STATE UNITS

The following former National Guard organizations were utilized in forming the organizations indicated:

Former State units	Reorganized as or assigned to—	Division
1st N. H. Inf. (surplus of regt.)	First Army Hq. Regt	P.D.C.A.Trs.
2d N. Y. Brig. Hq	Hq. 2d Prov. Inf. Brig	P.D.C.A.Trs.
4th N. Y. Brig. Hq	Hq. 1st Prov. Inf. Brig	P.D.C.A.Trs.
1st N. Y. Inf. (surplus of regt.)	1st Pion. Inf. (Corps Trs.)	P.D.C.A.Trs.
14th N. Y. Inf. (surplus of regt.)	2d Pion. Inf. (Corps Trs.)	P.D.C.A.Trs.
5th Mass. Inf. (surplus of regt.)	3d Pion. Inf. (Corps Trs.)	P.D.C.A.Trs.
6th Mass. Inf. (surplus of regt.)	4th Pion. Inf. (Corps Trs.)	P.D.C.A.Trs.
8th Mass. Inf. (surplus of regt.)	5th Pion. Inf. (Corps Trs.)	P.D.C.A.Trs.
10th N. Y. Inf	51st Pion. Inf. (Army Trs.)	P.D.C.A.Trs.
12th N. Y. Inf. (surplus of regt.)	52d Pion. Inf. (Army Trs.)	P.D.C.A.Trs.
47th N. Y. Inf	53d Pion. Inf. (Army Trs.)	P.D.C.A.Trs.
71st N. Y. Inf. (surplus of regt.)	54th Pion. Inf. (Army Trs.)	P.D.C.A.Trs.
74th N. Y. Inf. (surplus of regt.)	55th Pion. Inf. (Army Trs.)	P.D.C.A.Trs.
1st Maine F.A. (surplus of regt.)	56th Pion. Inf. (Army Trs.)	P.D.C.A.Trs.
1st Vt. Inf. (surplus of regt.)	57th Pion. Inf. (Army Trs.)	P.D.C.A.Trs.
1st Conn. Inf. (surplus of regt.)	58th Pion. Inf. (Army Trs.)	P.D.C.A.Trs.
1st Del. Inf	59th Pion. Inf. (Army Trs.)	P.D.C.A.Trs.
Co. A, Conn. Sig. C	326th F. Sig. Bn	P.D.C.A.Trs.
Co B, N. H. Sig. C	do	P.D.C.A.Trs.
15th N. Y. Inf. (colored)	369th Inf	93d
8th Ill. Inf. (colored)	370th Inf	93d
9th Sep. Bn. Inf. (colored), Ohio	372d Inf	93d
1st Sep. Bn. D. C. Inf. (colored)	do	93d
1st Sep. Co. Conn. Inf. (colored)	do	93d
1st Sep. Co. Mass. Inf. (colored)	do	93d
1st Sep. Co. Tenn. Inf. (colored)	do	93d
1st Sep. Co. Md. Inf. (colored)	do	93d

MOBILIZATION OF THE NATIONAL GUARD IN THE INSULAR POSSESSIONS

Hawaii National Guard

This force consisted of 2 regiments of infantry, 2 companies of coast artillery, 1 company of engineers, 1 signal company, and 1 troop of cavalry. Since these units were considered of greater value as a reserve for the garrison of Hawaii than for other purposes, they were not called into Federal service in 1917. However, June 1, 1918, the infantry regiments were mobilized as Federal troops for several months' training.

Philippine Forces

Proposals made by the Governor General on several occasions to organize a Philippine National Guard, during 1917, were not favorably considered as the force proposed would have had the character of a volunteer organization for war purposes only. Troops of this type could not meet the requirements of law governing the creation of National Guard units.

The Governor General next proceeded to organize a tactical division of Militia under local law. On Jan. 26, 1918, the Congress granted authority to call this force into United States service in

the same manner as the National Guard of the States, but with pay and allowances not to exceed that of the Philippine Scouts. However, the administration of these troops rested solely with the Philippine Government; at no time did the Militia Bureau give this organization the status of a National Guard division.

NATIONAL GUARD NOT IN FEDERAL SERVICE

When all duly recognized National Guard units were taken into Federal service Aug. 5, 1917, there remained in several States partially organized units which had not yet been recognized. Some of these organizations were disbanded but others were completed, with the expectation that they would be federalized and assigned to the division already composed, in the main, of troops from the State they represented.

As these new units lacked the necessary training, arms, and equipment, the War Department ruled Nov. 26, 1917, that they would not be called into Federal service for the time being. However, the personnel of these State troops was held to be subject to the draft as individuals.

On Mar. 27, 1918, the Militia Bureau announced the following policy with regard to the organization of new National Guard units:

> The several States are authorized, under existing law, to organize National Guard units to take the place of those taken into Federal service. Upon being duly recognized as National Guard units, the Federal Government will furnish them such arms, clothing, and equipment as may be available. Such National Guard troops will be maintained for domestic duty only and will not be called or drafted into Federal service during the war. National guard troops in State service not being a part of the Army of the United States, their personnel is subject to draft under the Selective Service Regulations. States are advised that they may continue these organizations under the conditions named, or they may apply to have such organizations disbanded.

See table, p. 311.

Federal Personnel

Inspector-instructors and sergeant-instructors were detailed to the National Guard, as personnel became available during the 1919 fiscal year. In addition, several retired officers who had served throughout the war with State organizations were still on active duty.

On June 30, 1919, there were 25 inspector-instructors, 6 retired officers, and 45 sergeant-instructors on duty in 17 States and territories.

STATE OR HOME GUARDS

Protection of public utilities from sabotage became a concern of the States immediately after the declaration of war. Prior to call into Federal service, at least 100,000 National Guard troops were on active duty in State service at sensitive points.

Units Authorized as of Aug. 30, 1918

State	Authorized	Status
Arkansas	1 regiment infantry	Recognized as of May 3, 1918.
	1 battalion engineers	Recognized as of May 17, 1918.
California	2 regiments infantry	4 companies inspected; not qualified.
	6 companies coast artillery	2 companies inspected; not qualified.
Colorado	1 regiment infantry	Inspected; recognition pending.
Florida	3 companies infantry	No progress reported.
	2 companies coast artillery	1 company recognized June 15, 1918; 1 company, no report.
Hawaii	do	Recognized 1917.
	1 company signal corps	Do.
	1 troop cavalry	Ordered disbanded.
	1 company engineers	Recognized 1917.
	1 regiment infantry	1 company recognized.
Indiana	1 regiment field artillery	Recognized Jan. 10, 1918.
Iowa	1 field hospital	Recognized Dec. 12, 1917.
	2 battalions infantry	Recognized 1; no report 1.
	1 battery field artillery	Recognized May 5, 1918.
Maine	1 regiment infantry	Recognized May 11–Aug. 31, 1918
Minnesota	2 regiments infantry	No progress reported.
Missouri	1 regiment infantry	Recognized May 14, 1918.
New Jersey	1 regiment field artillery	Recognized Oct. 26, 1917.
	2 companies coast artillery	Recognized Aug. 30 and Oct. 26, 1917.
Oklahoma	2 regiments infantry	Inspected; recognition pending.
Oregon	1 regiment infantry	Material progress reported.
South Dakota	do	No progress reported.
Tennessee	2 regiments infantry	Recognized (since consolidated into 1 regiment and 1 battalion).
Texas	6 regiments cavalry	Recognized Aug. 21–28, 1918
	3 regiments infantry	Inspection pending.
Utah	1 regiment infantry	No progress reported.
Virginia	5 companies coast artillery	Recognized (U.S. service).
	1 regiment infantry	No progress reported.
Washington	do	Inspected; recognition pending.

RÉSUMÉ

Arm	Recognized	Recognition pending	No progress reported
Infantry	4 regiments, 9 companies	7 regiments	8 regiments, 7 companies.
Cavalry	6 regiments		
Field artillery	2 regiments, 1 battery		
Coast artillery	10 companies		7 companies.
Field hospital	1		

Early notice was given the States that all federalized units would be withdrawn Sept. 15, 1917, except those guarding property pertaining to the United States. Suggestion was made that these organizations should be replaced by a State constabulary or similar force. To this end, the organization of State home guards was encouraged by Federal appropriations to provide the necessary arms and equipment. No arms were available for issue immediately, but sufficient small arms were later supplied by taking over rifles which had been privately manufactured for the Russian Government.

The exact strength of the home guards was not reported to the Militia Bureau. Inasmuch as, up to June 30, 1919, a stand of 78,008 arms had been issued, it was estimated that the number enrolled exceeded 79,000. Units authorized by the Act of June 14, 1917, were reported to the Militia Bureau by the adjutants general of the respective States as follows:

Arkansas.—63 companies home guard (50 to 100 men each), 1 platoon of 30 men.

California.—100 companies home guard.

Connecticut.—Home guard (6,000 officers and men).

Delaware.—1 company of infantry with supply detachment.

Florida.—Home guards in 34 towns.

Georgia.—21 companies State guard (75 men per company).

Indiana.—37 companies of infantry.

Kansas.—49 battalions and 60 separate companies, State guard.

Maryland.—1 regiment (2d Infantry) State guard.

Massachusetts.—2 brigades (4 regiments of infantry each), 1 brigade (3 regiments of infantry), 1 motor corps, 1 troop of cavalry, 1 ambulance company, and 1 military emergency hospital.

Michigan.—2 companies (2 mounted), 3 regiments of infantry, 2 battalions of infantry, and 25 separate companies of infantry.

Minnesota.—Motor corps (10 battalions), 21 battalions home guard.

New Hampshire.—1 regiment of infantry, State guard.

New Jersey.—State militia, staff corps and depots, 7 battalions and 2 separate companies of infantry; State militia reserve, 17 battalions of infantry and 36 separate companies.

New Mexico.—7 companies home guard.

New York.—1 regiment of engineers, 1 battalion of signal troops, 4 squadrons of cavalry, 2 field hospitals, 2 ambulance companies, 40 coast artillery companies, 2 regiments of field artillery, 15 regiments and 2 battalions of infantry.

North Carolina.—53 companies reserve militia (average 64 men each).

Ohio.—50 companies home guard.

Pennsylvania.—3 regiments of infantry, 12 lettered companies each, machine-gun detachment, sanitary detachment, and band for each regiment, and squadron of cavalry (4 troops).

Rhode Island.—18 companies State guard (100 men each), headquarters and supply company, machine-gun detachment, and sanitary detachment.

South Carolina.—1 regiment reserve militia and 1 additional battalion.

South Dakota.—100 companies home guard.

Vermont.—1 regiment of infantry.

Virginia.—8 companies of infantry and 12 separate companies (home and State guards).

Washington.—4 companies of infantry (provisional battalion).

West Virginia.—3 companies militia reserve.

Wisconsin.—State guard: 4 regiments of infantry; State guard reserve: 1 separate battalion, 38 separate companies, and 6 separate platoons.

UNITED STATES GUARDS

This force was used to preserve and protect major utilities in the United States, essential to the war effort, and also to enforce the President's proclamation pertaining to alien enemies.

Organization was authorized, under the direction of the Chief of the Militia Bureau, Dec. 22, 1917. No personnel, commissioned or enlisted, was accepted unless ineligible for draft by reason of age or for oversea service because of physical disqualification. Officers were commissioned on recommendation of the Militia Bureau based on the results of examinations held in the several territorial departments. It was initially provided that enlisted men were to be secured by voluntary enlistment. However, after May 1918, thoroughly trained drafted men, who had been rejected for oversea service on account of some minor physical defect, composed most of the enlisted strength.

The actual organization of units was placed in the hands of department commanders. Organization was suspended Jan. 8, 1918, resumed Apr. 15 of that year, and continued up to the Armistice. Although 48 battalions, including 1,492 officers and 28,800 enlisted men, were authorized, a peak strength of 1,216 officers and 25,068 enlisted men was actually reached at the Armistice.

Distribution was as follows:

Northeastern Department.—Battalions Nos. 3, 7, 8, 27, and 31, including 155 officers and 2,812 enlisted men.

Eastern Department.—Battalions Nos. 1, 9, 10, 11, 12, 13, 14, 15, 16, 32, 33, 34, 45, 47, and 48, comprising 380 officers and 7,447 enlisted men.

Southeastern Department.—Battalions Nos. 4, 17, 28, 35, 41, and 42, consisting of 144 officers and 3,474 enlisted men.

Southern Department.—Battalions Nos. 2, 19, 20, 21, 22, 39, and 40, including 172 officers and 3,760 enlisted men.

Central Department.—Battalions Nos. 5, 18, 26, 29, 36, and 46, comprising 180 officers and 2,851 enlisted men.

Western Department.—Battalions Nos. 6, 23, 24, 25, 30, 37, 38, 43, and 44, consisting of 183 officers and 4,724 enlisted men.

United States Guards relieved all first-line troops on guard duty in the United States, including 20 regiments of Regular infantry and a number of coast artillery companies. From time of organization to demobilization, shortly after the Armistice, the Guards were on duty at 338 points, the protection of which was considered of prime importance in carrying out the war program.

Guard posts were established in 32 States and Territories where they protected installations and properties as follows:

Shipyards	108
Docks and railroad terminals	53
Arsenals	8
United States stores, property, and supplies	99
Government buildings	33
Railroad bridges and tunnels	18
Canal locks and waterways	3
Waterworks, reservoirs, dams, and mines	12
Provost guards	4

CIVILIAN MARKSMANSHIP

The office of Director of Civilian Marksmanship was established Dec. 3, 1916, in the Militia Bureau, to have charge of all matters pertaining to rifle practice by civilians.

All issues of ordnance stores to civilian institutions were suspended in May 1917. A year later, the issue of 3,000 rifles and 2,500,000 ball cartridges to civilian rifle clubs for the 1918 fiscal year was authorized. In addition, as sanctioned by the National Board for the Promotion of Rifle Practice, 5,000 rifles caliber .22 and 22,000,000 cartridges for same were procured for issue to clubs and high schools.

The National Matches were not held in 1917 but were resumed at Camp Perry, Ohio, in Sept. 1918.

Appropriation of $240,000 was made in 1917 and of $210,000 in 1918 for procurement of arms, ammunition, targets, and other accessories for the instruction of United States citizens in marksmanship.

In May 1919, the administration of all matters connected with civilian marksmanship was transferred to the Assistant Secretary of War.

SECTION 16

MOTOR TRANSPORT CORPS

ORIENTATION

Prior to the war, the Quartermaster Corps was charged with the design and procurement of motor transportation for general Army use. The Ordnance Department, the Signal Corps, the Engi-

neer Corps, and the Medical Department purchased the motor vehicles adapted to their own needs.

FUNCTIONS

To control and direct the procurement, design, maintenance and operation of motor transport used in the Army.

CHIEFS

1918

Jan. 26 Col. Charles B. Drake, in charge of Motors Division
Apr. 16 Brig. Gen. Chauncey B. Baker, in charge of Motor Transport Division
May 20 Col. Fred Glover, chief of Motor Transport Service
Aug. 15 Col. Charles B. Drake, chief of Motor Transport Corps
Oct. 11 through June 20, 1919 Brig. Gen. Charles B. Drake, chief of Motor Transport Corps

ORGANIZATION AND DEVELOPMENT

TRANSPORTATION DIVISION

1917

Before organization of the Motor Transport Corps, responsibility for the design and procurement of the greater part of Army motor transportation was lodged in the Transportation Division, Office of the Quartermaster General (see p. 410). This Division had designed a standard truck, but efforts at Army-wide adoption were impeded by the other supply bureaus which continued to procure their special types of motor vehicles independently.

On Oct. 5, first mention was made in orders of "Motors Branch," Transportation Division.

MOTORS DIVISION

1918

On Jan. 26, the Motors Division, Office of the Quartermaster General, was established with the organization shown on chart 38 (see also p. 411).

MOTOR TRANSPORT DIVISION

On Apr. 6, the Motors Division was redesignated the Motor Transport Division. At the same time, the former Maintenance Branch and Machine-Shop Branch were superseded by a new Operation Branch and a new Maintenance and Repair Branch with appropriate subsections to meet requirements.

MOTOR TRANSPORT SERVICE

On Apr. 18, 1918, the War Department appointed a Standardization and Motor Vehicle Board to devise means of reducing the types of motor vehicles in use by all branches of the service, and to secure a maximum interchangeability of parts. Simultaneously

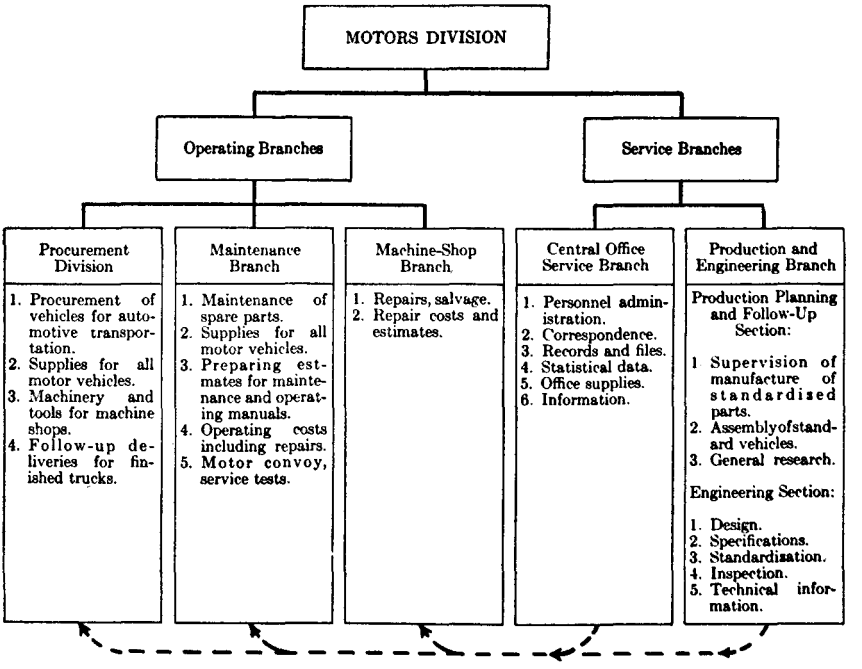


CHART NO. 38.—*MOTOR DIVISION, QUARTERMASTER GENERAL'S OFFICE*

a partial consolidation of all motor transportation was effected by establishment of the Motor Transport Service, Quartermaster Corps, with an assistant to the Quartermaster General as chief.

Its functions were:

To cooperate with the Standardization and Motor Vehicle Board; to take charge of the design, production, procurement, reception, storage, maintenance, and replacement of all chassis, with the exception of caterpillar-type tractors and tanks; and to operate all such vehicles not assigned to combat units. On June 28, 1918, the organization of the Motor Transport Service was as indicated on chart 39 (see also p. 413).

MOTOR TRANSPORT CORPS

On Aug. 15, the Motor Transport Corps, War Department, was created to take over all the functions of the former Motor Transport Service, Quartermaster Corps, and also to assume control of the assignment, organization, and technical training of Motor Transport Corps personnel. However, that part of the functions concerned with the procurement of motor-propelled vehicles was returned to the Quartermaster Corps Sept. 5. The Ordnance Department continued in complete charge of procurement of all tanks and vehicles of caterpillar type, except trucks with caterpillar adapters.

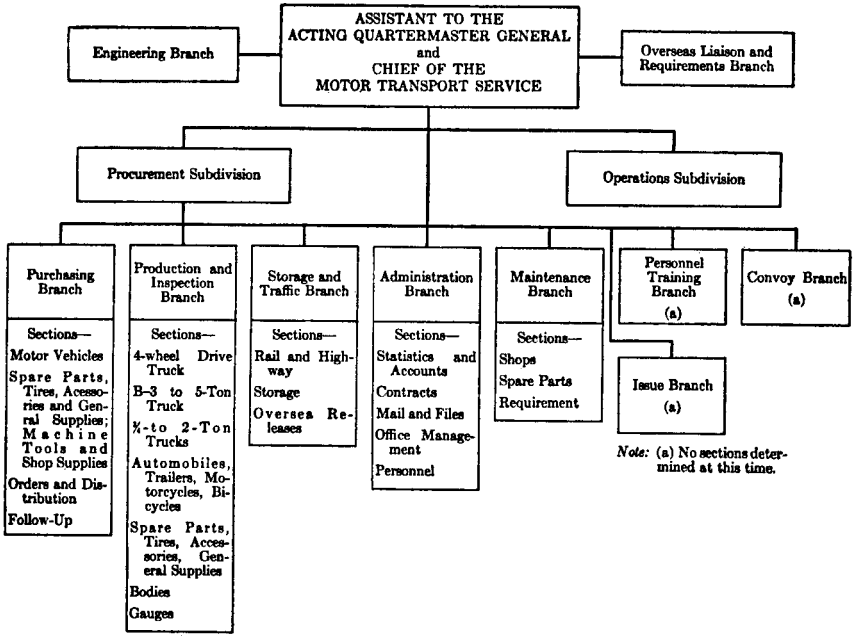


CHART NO. 39.—*MOTOR TRANSPORT SERVICE, QUARTERMASTER CORPS*
June 28, 1918

Approval of the Motor Transport Board, formerly known as the Standardization and Motor Vehicle Board (see p. 315), was required on the design of all motor-propelled vehicles. From some 216 makes of vehicles, this Board finally selected the following models:

Type	Kind	Make	Class
1	Passenger cars (regardless of size or body)	Dodge and Cadillac	
2	Light delivery trucks (1 ton or less capacity)	Dodge, White, G.M.C	AA
3	Cargo trucks (1½- and 2-ton capacity)	White, Packard, Garford	A
4	Cargo trucks (3- and 4-ton capacity)	Riker, Mack, F.W.D., Standard B	B
5	Cargo trucks (5 tons and over)	Mack	B
6	Motorcycles (side cars)	Harley-Davidson, Indian	
7	Ambulances, motor	G.M.C	AA
0	Trailers, cargo (regardless of capacity)	All makes	
00	Machine-shop trucks (regardless of equipment)	Body mounted on one of the above standard chassis.	
10	Trailers, kitchen	F.W.D., Mack, Standard, Riker	
20	Light delivery busses and patrols (1 ton and less)	Dodge, G.M.C., White	AA
30	Trucks, balloon winch	F.W.D	B
50	Disinfectors and fire engines	Dodge and G.M.C	AA
60	Trucks (laboratory, dental, medical, photo, and sterilizing)	Standard	B
70	Trailers, machine shop	All makes	
80	Tank trucks (water and gasoline) and sprinklers	Standard	B
B	Bicycles	Columbia and Westfield	

On Nov. 11, the organization of the Office of the Chief of the Motor Transport Corps was as shown on chart.

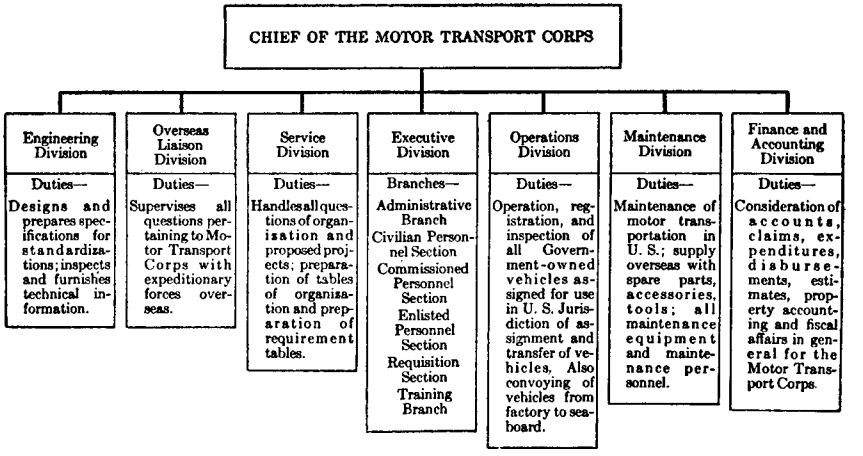


CHART NO. 40.—*OFFICE OF THE CHIEF OF THE MOTOR TRANSPORT CORPS*
Nov. 11, 1918

By June 30, 1919, the Office of the Chief of the Motor Transport Corps had lost the Engineering Division, the Overseas Liaison Division, and the Finance and Accounting Division. The remaining divisions had been given these functions:

Executive Division

To have jurisdiction over all administrative matters, including office management; issuing and transmitting of orders, bulletins, and circulars for the Corps; the preparation of estimates for appropriations; action upon surveys and property questions; the supply, records, and training of personnel; liaison and other miscellaneous matters.

Service Division

To have charge of the collection and compilation of historical data and statistics; of all questions of organization and proposed projects; of the preparation of all personnel, vehicle and supply requirements tables; of consideration of questions of policy and efficiency; of changes in design and specifications of motor vehicles; and of the collection of engineering data as to the performance of motor equipment.

Operations Division

To be responsible for the registration of all motor vehicles pertaining to the Army; for the reception, assignment, transfer, and storage of serviceable and unserviceable motor vehicles; for the control of motor convoys; and for the marking, mapping, and publishing of approved road routes and traffic control regulations.

Maintenance Division

To have charge of the repair of all motor vehicles for the Army; of the requisitioning and distribution of spare parts, material, and equipment; of the operation of overhaul parks and field repair shops, depots, garages, and repair parks; and of the salvaging of motor vehicles and parts.

In accordance with the Act of Congress approved June 4, 1920, the Motor Transport Corps was absorbed by the Quartermaster Corps July 15, 1920, its functions being taken over by the new Transportation Service (see pp. 460, 547).

FIELD ORGANIZATION

On Sept. 18, 1918, the following field organization was announced:

Districts for Operation of Motor Transport Corps

District A.—Philippine Islands.

District B.—Hawaii.

District C.—Canal Zone.

District D.—States of Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Delaware, Maryland, West Virginia, Virginia, Kentucky, Ohio, Indiana, Michigan (Lower Peninsula), and District of Columbia.

District served by Mechanical Repair Shop Unit No. 306, Camp Holabird, Baltimore, Md.

District E.—States of North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Tennessee, and New Orleans, Jackson Barracks, and Fort St. Philip, Louisiana.

District served by Mechanical Repair Shop Unit No. 305, Atlanta, Ga.

District F.—States of Missouri, Kansas, Oklahoma, Arkansas, Louisiana (except New Orleans, Jackson Barracks, and Fort St. Philip), and Texas (east of Marfa).

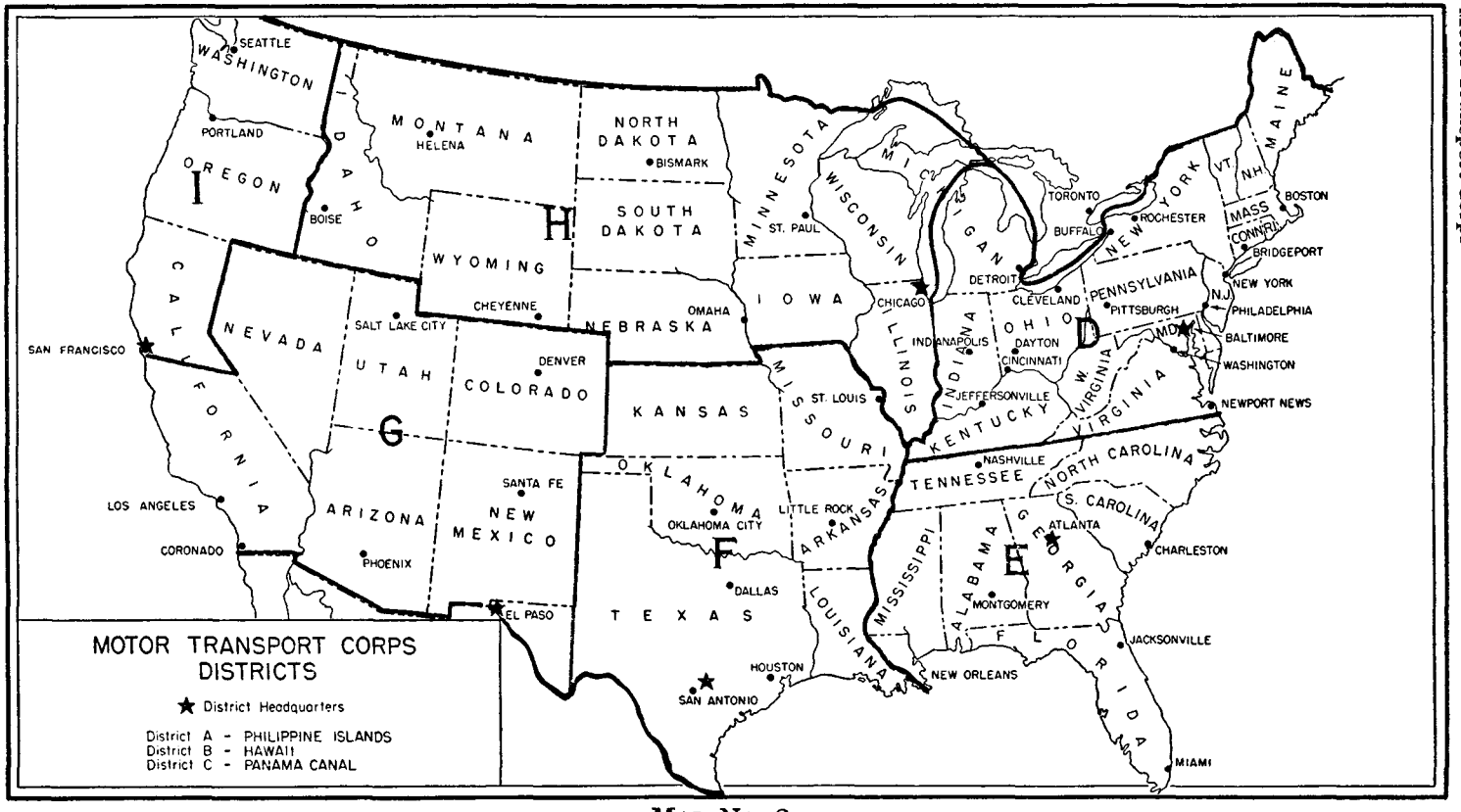
District served by Mechanical Repair Shop Unit No. 304, Fort Sam Houston, Tex.

District G.—States of Texas (Marfa and west), New Mexico, Arizona, California (south of Camp Fremont), Nevada, Utah, and Colorado.

District served by Mechanical Repair Shop Unit No. 315, El Paso, Tex.

District H.—States of Illinois, Wisconsin, Michigan (Upper Peninsula), Minnesota, Iowa, Nebraska, South Dakota, North Dakota, Montana, Idaho, and Wyoming.

District served by General Supply Depot, Motor Transport Corps, Chicago, Ill.


SEATTLE
WASHINGTON
PORTLAND
OREGON
IDAHO
BOISE
MONTANA
HELENA
NORTH DAKOTA
BISMARCK
SOUTH DAKOTA
WYOMING
CHEYENNE
NEBRASKA
OMAHA
NEVADA
SALT LAKE CITY
UTAH
COLORADO
DENVER
CALIFORNIA
SAN FRANCISCO
LOS ANGELES
CORONADO
ARIZONA
PHOENIX
NEW MEXICO
SANTA FE
EL PASO
TEXAS
OKLAHOMA
OKLAHOMA CITY
DALLAS
KANSAS
MINNESOTA
ST. PAUL
IOWA
MISSOURI
ST. LOUIS
ARKANSAS
LITTLE ROCK
LOUISIANA
HOUSTON
SAN ANTONIO
NEW ORLEANS
MISSISSIPPI
WISCONSIN
MICHIGAN
CHICAGO
ILLINOIS
INDIANA
INDIANAPOLIS
OHIO
DAYTON
CINCINNATI
KENTUCKY
JEFFERSONVILLE
TENNESSEE
NASHVILLE
ALABAMA
MONTGOMERY
GEORGIA
ATLANTA
FLORIDA
JACKSONVILLE
MIAMI
S. CAROLINA
CHARLESTON
NORTH CAROLINA
VIRGINIA
W. VIRGINIA
NEWPORT NEWS
MD.
BALTIMORE
WASHINGTON
DETROIT
CLEVELAND
PENNSYLVANIA
PITTSBURGH
NEW YORK
TORONTO
BUFFALO
ROCHESTER
VT.
N.H.
MAINE
MASS.
CONN.
BRIDGEPORT
BOSTON
N.J.
PHILADELPHIA
A
B
C
D
E
F
G
H
I
MOTOR TRANSPORT CORPS
DISTRICTS
★ District Headquarters
District A - PHILIPPINE ISLANDS
District B - HAWAII
District C - PANAMA CANAL

MAP NO. 2.

District I.—States of California (San Francisco and coast defenses, including Camp Fremont and points north), Oregon, and Washington.

District served by General Supply Depot, Motor Transport Corps, San Francisco, Calif.

DISTRICT MOTOR TRANSPORT OFFICERS

Duties: To exercise control and supervision, under authority of the Chief, Motor Transport Corps, over all matters pertaining to operation, maintenance, and repair of all class-one vehicles and technical supervision over all class-two vehicles within the confines of their respective districts, except those in Hawaii, Canal Zone, and Philippine Islands; district motor transport officers of excepted districts to operate under supervision of their respective department commanders.

MOTOR TRANSPORT CORPS OFFICERS

A Motor Transport Corps Officer was appointed for each army, corps, division, army artillery, and for each lower organization and station.

Duties: To be responsible for the efficient operation of the Motor Transport Corps within his command; to command all class-one motor vehicles operated by the Motor Trasnport Corps; to have charge of all Motor Transport Corps maintenance and supply agencies on duty with the command; to function as a staff officer with regard to supply of all Motor Transport Corps property for the command and with respect to technical supervision over all motor vehicles assigned by Tables of Organization to units, i.e. class-two vehicles; and to inspect all motor transportation and appurtenances within the command.

PERSONNEL

1918

RECRUITMENT AND CONSOLIDATION

In April all available technical personnel in the various offices of the War Department and the Quartermaster Corps were transferred to the Motor Transport Service (see p. 315). To provide additional commissioned and enlisted personnel for service overseas and at home, recruiting stations were opened between August and October.

Civilians with technical and administrative experience were commissioned, but, in general, officers were obtained from Motor Transport Corps training schools and from qualified enlisted men. On Nov. 1, the Operations Division, General Staff, assumed direct control over the selection of candidates for commission.

On Aug. 15, all personnel and organizations of each supply bureau until then purchasing or operating motor vehicles were ordered transferred, as of Aug. 31, to the Motor Transport Corps. However, all ambulances and non-cargo and non-personnel carrying motor vehicles, such as mobile repair shops, especially designed for the Ordnance Department, Signal Corps, and Engineer

Corps, gun mounts, rolling kitchens, laboratory trucks, wireless trucks, photographic trucks, searchlight trucks, and water sprinklers were ordered held by the Motor Transport Corps, subject to the orders of the bureau or service for which they had been ordered.

STRENGTH

Authorized and actual strength Nov. 11, 1918, was as follows:

Items	Authorized strength		Actual strength [1]	
	U.S.	A.E.F.	U.S.	A.E.F.
Commissioned officers	1,422	3,221	1,621	1,477
Enlisted men	33,732	80,228	25,402	37,850
Number of organizations:				
Motor Transport Companies	201	130	118	97
Motorcycle companies	7	15	4	6
Service-park units	138	273	131	58
Repair units	9	19	8	6
Headquarters motor commands	44	28	11	3
Supply trains:				
Divisional	----	57	13	34
Corps	----	8	----	3
Army	----	1	----	2
Water-tank trains	----	2	----	----
Troop trains, corps	----	6	1	3
Sanitary trains (2 lieutenants attached)	----	57	----	----

[1] Does not include units in process of transfer.

During the 1920 fiscal year the personnel in the United States and overseas numbered—

	July 1, 1919	*June 30, 1920*
Commissioned officers	2,905	433
Enlisted men	20,699	11,987
Civilians	14,129	2,277

EARLY AUXILIARY PERSONNEL

United States Army Ambulance Service

This Service, also referred to as American Field Service, had been serving the French Army as a volunteer organization for about 2½ years at outbreak of war. For further information see p. 252. At this time the French Automobile Service was suffering from a lack of experienced drivers for its Transport Section. This condition prompted the French Government to inform the American Field Service in Apr. 1917 that personnel for driving trucks was more urgently needed than for manning ambulances.

Reserve Mallet

A section of volunteers from Cornell University arrived in France at the end of April and as a body declared their willingness to serve in the French transport service. They entered the French Automobile Reserve under command of Captain Mallet in May 1917.

Other sections, consisting of about 40 men each, from Andover School, Dartmouth College, from the University of California, from Princeton, Yale, Marietta, Tufts, etc., began to join. By Aug. 1917, some 800 American Field Service drivers had formed the personnel of 14 sections, thus establishing an American transport reserve for the French.

This force was later enlisted in the service of the United States. It became one of the elements abroad around which the American transport system was developed.

ACTIVITIES

CONVOY DUTY

On Dec. 25, 1917, a motor convoy and freight service was inaugurated to alleviate railroad congestion. Convoy bases were established at Chicago, Ill.; Detroit, Mich.; and Kearny, N. J. By June 30, 1919, some 32,400 motor vehicles and over 3,000 tons of freight had been moved from factories to embarkation points. These convoys afforded training for Motor Transport Corps organizations in road work, in addition to reducing railroad haulage by about 20,000 carloads.

MAINTENANCE

Spare parts, accessories, and other matériel for overseas were shipped direct; domestic requirements were filled from depots at Camps Holabird, Jesup, and Normoyle.

Each of these depots included a reconstruction park equipped with modern machinery for rebuilding motor vehicles. The facilities of these three parks covered some 500 acres and cost about $14,000,000.

Shops for overhaul of motor equipment were also established at Camp Boyd, Tex., Fort Mason, Cal., Chicago, Ill., New York, N. Y., and Philadelphia, Pa. In addition, 69 service parks at various stations were engaged in repair work of a minor nature.

INVENTORY

On Nov. 11, 1918, an inventory of all motor transportation was ordered. By Dec. 31, complete data had been secured on more than 100,000 vehicles. As a result some 1,000 vehicles were located which had not appeared on the records.

POOLING SYSTEM

Whenever possible, passenger cars and trucks at military stations were pooled in order to reduce the number of vehicles required at any particular time and place.

TRAINING

Supervision

Arrangements were made whereby the Maintenance Division

(see p. 319) supervised all maintenance training and the Training Branch, Executive Division (see p. 318), the training for field service. The latter included the training of command and company officers, truckmasters, chauffeurs, company mechanics, and motorcycle company officers and operators. Plans were also made for the training of administrative officers and company clerks.

Training Establishments

The only school operating as a Motor Transport Corps training center was at Camp Joseph E. Johnston, Fla. (see p. 832). However, authority had been granted for the establishment of other training centers at Camp Fremont, Calif.; Fort Sheridan, Ill.; Camp Zachary Taylor, Ky.; Camp Bowie, Tex.; and Camp Meigs, D. C. At the time of the Armistice these establishments were prepared to train some 17,000 officers and men monthly to fill the needs of the American Expeditionary Forces.

Maintenance instruction was imparted in schools at Camp Holabird, Md.; Camp Jesup, Ga.; El Paso, Tex.; and Fort Sam Houston, Tex.; which were charged with the organization of one repair unit and 15 service-park units per month. This number was later increased to 35 per month. It was also planned to establish a school at Camp Grant, but owing to the influenza epidemic most of these training projects were considerably hampered. Although it was the intention to send the A.E.F., during Dec. 1918, some 30,000 trained men, only 4,304 applicants had actually been inducted at the signing of the Armistice, notwithstanding that 48,641 men of special mechanical ability had applied to join the Motor Transport Corps.

DEMOBILIZATION

At the Armistice all requisitions on file for motor vehicles were voided. Unfilled portions of orders already placed were also canceled when satisfactory adjustments could be made. In settlement of uncompleted contracts approximately $10,000,000 worth of matériel, originally intended for the A. E. F. or domestic stations, was shipped to the six general depots of the Motor Transport Corps at Camps Holabird, Jesup, Normoyle, Boyd (El Paso), at the Presidio of San Francisco, and at Jeffersonville, Ind.

On June 30, 1919, approximately 175 service parks, 25 overhaul parks, and eight reconstruction parks, manned by 200 service-park units and 12 repair units were still in operation, at home and overseas.

SECTION 17

ORDNANCE DEPARTMENT

ORIENTATION

The Continental Congress appointed a commissary of military

stores in 1776, but the business of procuring arms and ammunition was conducted by a secret committee and the Board of War. As early as 1788, so-called arsenals were maintained for the preservation of ordnance, arms, ammunition, and appendages belonging thereto at the following places: Providence, R. I.; Springfield, Mass.; Fort Herkimer, N. Y.; West Point, N. Y.; Philadelphia, Pa.; New London and Manchester, Va.; and Charleston, S. C.

In 1794, the Federal Congress authorized the President to appoint an officer, under the direction of the Department of War, to receive, safekeep, and distribute military stores. By 1800, armories had been established at Springfield, Mass., and Harper's Ferry, Va., under civilian superintendents. Sundry private concerns were subsequently employed in the manufacture of cannon so that, at outbreak of the War of 1812, an ample supply of brass and iron ordnance existed.

The Ordnance Department was first established by the Act of May 14, 1812. Thereafter, legislation curtailed this wartime organization greatly; however, the Department was resuscitated and placed upon an enduring basis by the Act of Apr. 5, 1832.

FUNCTIONS

To design, procure, produce, inspect, distribute to designated military organizations, and thereafter maintain such matériel for Army uses as prescribed by the General Staff; and to plan and maintain an organization of appropriate personnel and methods so that matériel might be delivered in such quantities and at such times as prescribed by the General Staff.

CHIEFS

1917		
Apr.	6	Brig. Gen William Crozier
Oct.	8	Maj. Gen. William Crozier
Dec.	20	Brig. Gen. Charles B. Wheeler (acting)
1918		
Apr.	11	Brig. Gen. William S. Peirce (acting)
May	2	Brig. Gen. Clarence C. Williams (acting)
July	16	Maj. Gen. Clarence C. Williams
1919		
Mar.	5	Brig. Gen. William S. Peirce (acting)
May through June	18 20	Maj. Gen. Clarence C. Williams

ORGANIZATION AND DEVELOPMENT

THE WASHINGTON OFFICE

1917

On Apr. 6, the Office of the Chief of Ordnance functioned through five Divisions: Gun, Carriage, Small Arms and Equipment, Property and Finance, Mail and Record. On Apr. 16, the Small Arms and Equipment Division was divided into the Small Arms Division, Equipment Division, and Civil Service Division. A Supply Division was established May 23.

About this time, the Office was directed to take charge of the purchase or manufacture of toxic gases and to provide the necessary facilities for the production of gas-shell. These new functions were assigned to the Gun Division.

On May 31, the Office of the Chief of Ordnance included the following divisions with functions as indicated:

Personnel Division

In accordance with requests of procurement divisions, to recruit, assign for instruction purposes, transfer, and keep the records of all enlisted personnel employed, or under instruction for employment, in maintenance work; to perform the same functions with reference to commissioned officers.

Carriage Division

To be responsible for the design, procurement, alteration, and repair of field artillery vehicles, seacoast gun carriages, railway mounts, antiaircraft mounts, machine guns, motor vehicles, and fire-control instruments; and to supervise means for the instruction of commissioned, enlisted, and civilian personnel required in this work.

Gun Division

To handle the design, procurement, and superintendence of production and the inspection of cannon, artillery and seacoast ammunition, explosives, and accessories; to design, procure, and inspect trench warfare matériel, including pyrotechnics, grenades, trench mortars, ammunition, drop bombs, offensive matériel for gas warfare, and incendiary matériel; to develop additional manufacturing facilities for any of the matériel when necessary; to handle the procurement of ammunition and matériel for artillery target practice, including design and procurement of artillery targets; and to provide and supervise means for the instruction of commissioned, enlisted, and civilian personnel required for the maintenance of ordnance matériel designed, modified, and procured by the Division.

Inspection Division

To perform duties connected with the inspection, acceptance, and rejection of ordnance and ordnance stores and supplies procured by purchase or manufacture, excepting matériel manufactured at arsenals and items produced at plants especially excepted from inspection by order of the Chief of Ordnance; to follow up the results of operations and processes so as to keep informed as to the quality of matériel during all stages of manufacture; to receive and digest reports of proving-ground tests and to control certain proving grounds.

Finance Division

To handle questions of funds, maintain records of appropriations and allotments made to arsenals and disbursing officers, handle legal questions in regard to contracts, check expenditures made by contractors under cost-plus contracts, audit freight vouchers, and prepare pay rolls.

Property Division

To have charge of the auditing of property returns covering the care and accountability for ordnance property; disposition of obsolete and condemned property; and receipt, custody, and issue of materials on cost-plus contracts.

Small Arms Division

To be responsible, up to the time the field service assumes control, for the design, production, and procurement of automatic rifles, machine guns of all types, shoulder rifles, bayonets, pistols, revolvers, shotguns, small arms ammunition of all types, sabers, bolos, target matériel, helmets, and trench knives.

Equipment Division

To be responsible for the procurement of all personal and horse equipment.

Supply Division

To keep informed as to the ordnance supplies to be required by the military forces and the time and place that these supplies will be needed; to keep informed as to the orders given for the production of such supplies and the probable time of their delivery, and to give notice to the Chief of Ordnance whenever a shortage of needed supplies threatens; to handle all sales of ordnance materials, except those of components, to manufacturers; to take charge of ordnance stores procured by purchase or manufacture for issue; and to arrange for the shipment of such stores to the proper points for storage and custody, for their preservation from deterioration, and for their issue to the troops or other properly authorized persons.

Mail and Record Division

To have charge of distribution, classification, recording and filing of all correspondence and to serve as a clearinghouse for all ordnance mail.

Civil Service Division

To procure, appoint, and assign all civilian employees of the Ordnance Office; to control all changes in Civil Service status; to cooperate with the Civil Service Commission in specifications for examinations, rating of papers, etc.; and to cooperate with the Efficiency Board.

During the remainder of the year, the following organizational changes took place: July 25, the Nitrate Division was established; Sept. 6, the Inspection Division became the Inspection Section of the Gun Division; Sept. 10, the Division of American Ordnance Depot in France was established; Oct. 30, the Civil Service Division became the Civilian Personnel Division.

The functions of the new divisions were as follows:

Nitrate Division (Nitrogen Fixation Division)

To handle the investigations and manufacturing operations authorized by section 124 of the National Defense Act of June 3, 1916, wherein $20,000,000 was appropriated for nitrate supply; to carry on investigations leading to improvements in processes of nitrogen fixation; to construct plants for the manufacture of ammonium nitrate; to have jurisdiction over experimental stations; and to cooperate with universities, technical schools, Government bureaus, and the National Research Council in connection with nitrogen fixation work.

Division of the American Ordnance Base Depot in France

To be responsible for the completion of plans and projects incidental to the equipment and operation in France of repair and reloading shops and the storing of ordnance and ammunition supplies.

1918

On Jan. 14, a new organization was put into effect consisting

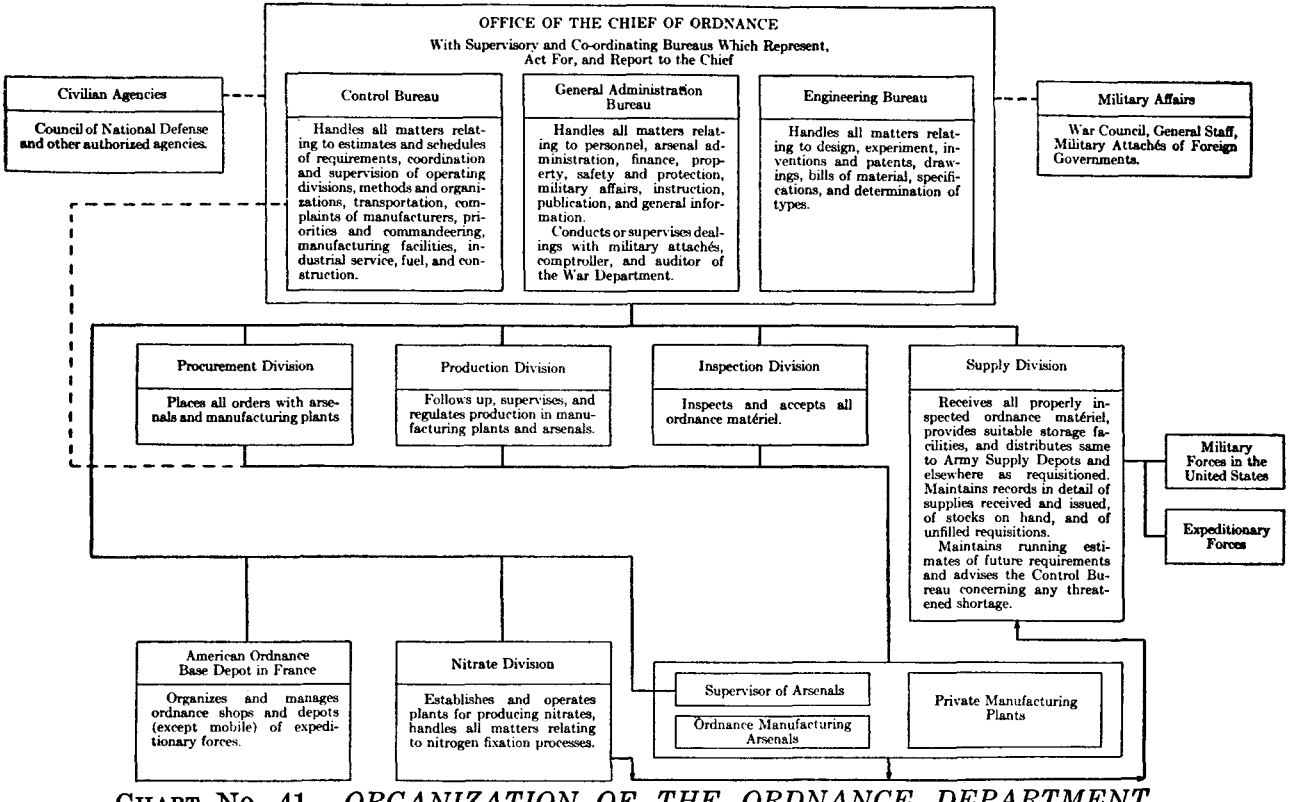


CHART No. 41.—*ORGANIZATION OF THE ORDNANCE DEPARTMENT*

Jan. 1918

of three Bureaus (Control, General Administration, and Engineering), four operating Divisions (Procurement, Production, Inspection, and Supply), the Division of American Ordnance Base Depot in France, the Nitrogen Fixation Division, and the Supervisor of Arsenals, with functions as shown on chart 41.

All former divisions, not shown in the new structure, were abolished and their functions absorbed by the bureaus and operating divisions created Jan. 14.

On May 4, 1918, the functions of the Office of the Chief of Ordnance, which had to do with the design, procurement, and inspection of offensive matériel for gas warfare, were intrusted to a separate organization, known as the Edgewood Arsenal. During the following July, all duties relating to the production and handling of war gases were turned over to the Chemical Warfare Service.

On Aug. 5, a fundamental reorganization was made by the appointment of six special assistants to the Chief of Ordnance, each of whom was placed in charge of special activities, as shown on chart 43.

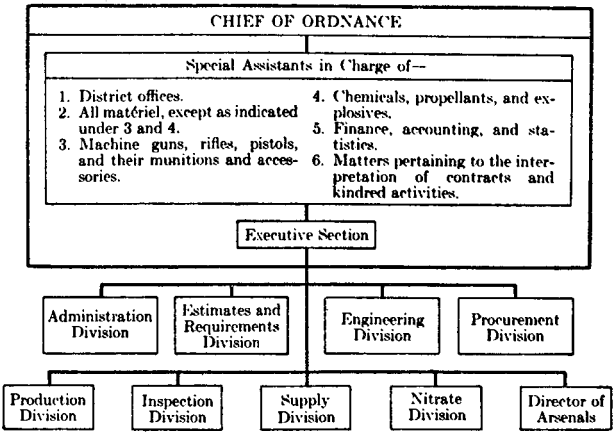


CHART NO. 42.—*ORGANIZATION OF THE OFFICE OF THE CHIEF OF ORDNANCE*
Aug. 1918

On Oct. 2, the use of special assistants was expanded to cover the following fields: 1. District Offices; 2. Miscellaneous; 3. Finance; 4. Contracts; 5. Artillery; 6. Trench Warfare; 7. Ammunition and Metal Components; 8. Explosives and Loading; 9. Small Arms; 10. Motor. On Oct. 23, the Production Division was abolished. See chart.

On Dec. 2, the procurement, storage, and distribution functions of the Ordnance Department were transferred to the Office of the

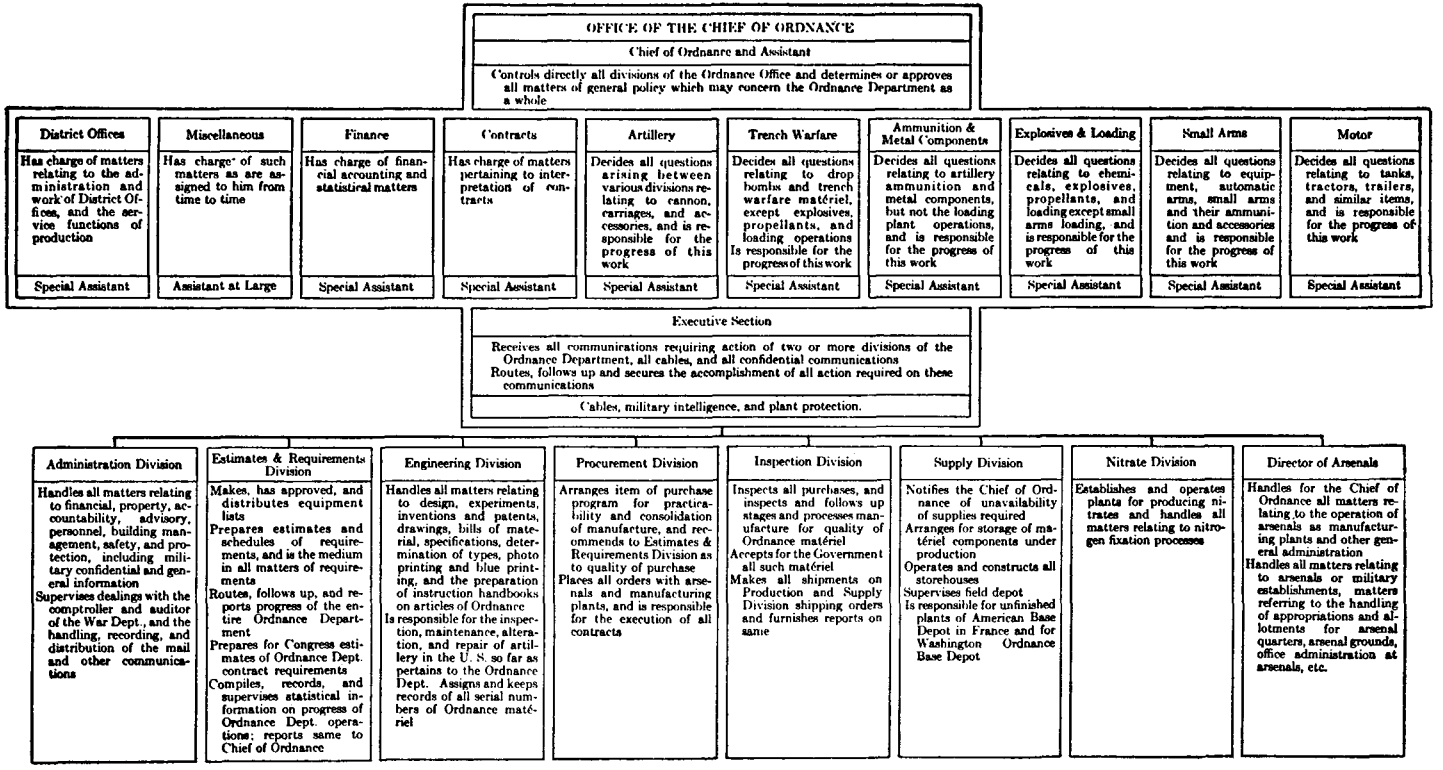


CHART NO. 43.—*ORGANIZATION OF THE OFFICE OF THE CHIEF OF ORDNANCE*

Nov. 1918

Director of Purchase and Storage. For the time being, the Ordnance Department retained control over all functions connected with ammunition and its components and over those having to do with inspection, maintenance, repair and alteration of artillery, machine gun and small arms matériel. Depots located at ordnance establishments remained for guard and discipline under commanders of the Ordnance Department, but in all other respects came under the control of the Director of Purchase and Storage.

1919

On Feb. 1, another fundamental reorganization was effected as shown on chart 44.

ORGANIZATION OF FIELD ESTABLISHMENTS SEPTEMBER 1918

These establishments included: Arsenals and armories; disbursing offices; district offices; field depots; general supply ordnance depots; relations between Ordnance Department and Inland Traffic Service; plants; proving grounds; purchasing offices; and schools.

Arsenals and Armories

The following were in operation Sept. 30, 1918:

Augusta Arsenal, Augusta, Ga.	San Antonio Arsenal, San Antonio, Tex.
Benicia Arsenal, Benicia, Calif.	Springfield Armory, Springfield, Mass.
Frankford Arsenal, Philadelphia, Pa.	Watertown Arsenal, Watertown, Mass.
New York Arsenal, Governors Island, New York	Watervliet Arsenal, Watervliet, N. Y.
Picatinny Arsenal, Dover, N. J.	Hawaii Arsenal, Honolulu, T. H.
Raritan Arsenal, Metuchen, N. J.	Manila Arsenal, Manila, P. I.
Rock Island Arsenal, Rock Island, Ill.	Panama Arsenal, Corozal, C. Z.

For detailed description see Chapter IV.

Disbursing Offices

Disbursing officers were placed wherever they were needed. Those under the jurisdiction of District Offices were responsible to the respective financial managers. All other disbursing agents reported directly to the Finance Section, Administration Division.

In addition to the disbursing offices established in the ordnance districts, arsenals, and armories, offices were in operation at the following places: Office of the Chief of Ordnance, Washington, D. C.; Du Pont Engineering Co., Wilmington, Del.; American Expeditionary Forces, France; Atlas Powder Co., Perryville, Md.; Aberdeen Proving Ground, Aberdeen, Md.; Alabama Powder Co., Birmingham, Ala.; Tuckahoe Ordnance Depot, Tuckahoe, N. J.; Office of Military Attaché, London, England; Mt. Wilson Solar Observatory, Pasadena, Cal.; Camp Perry, Port

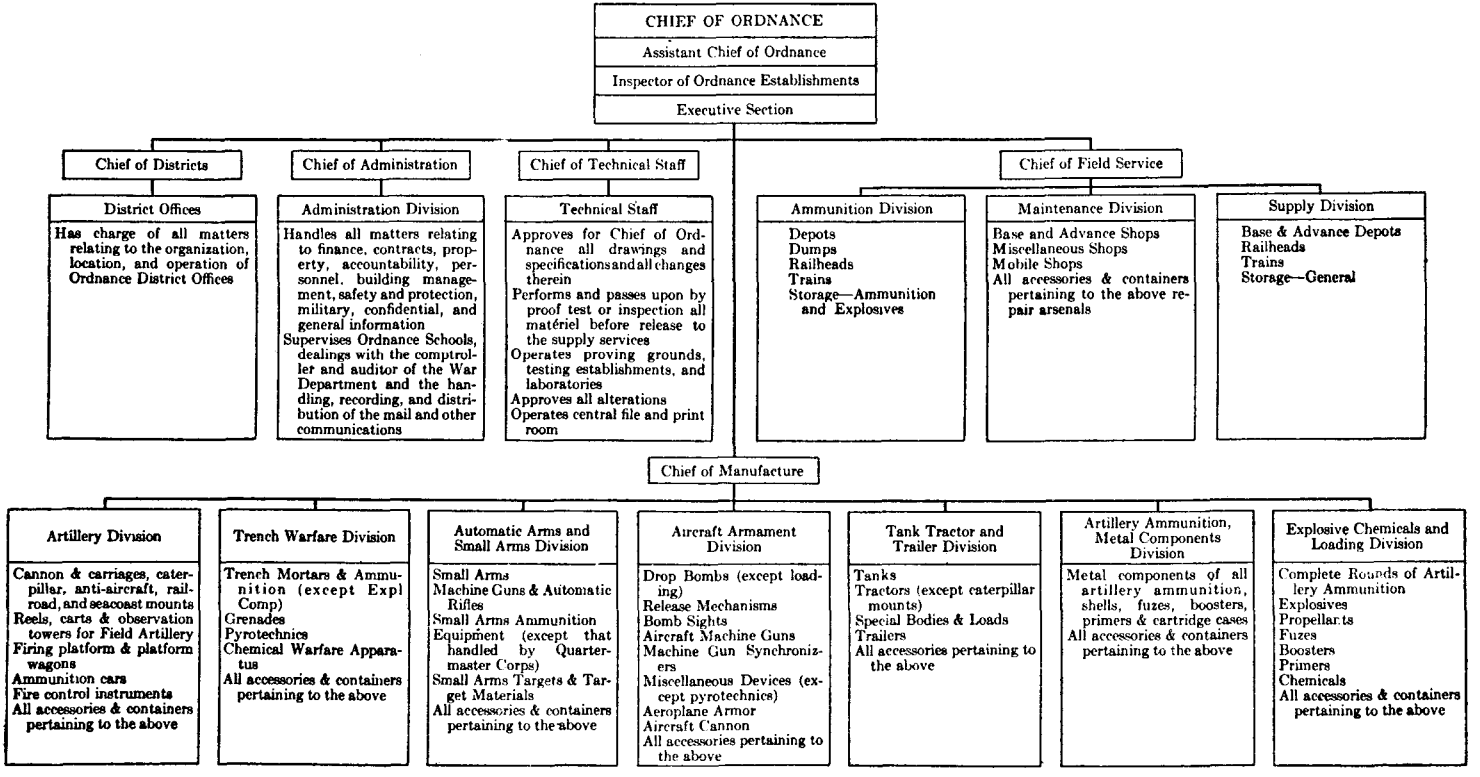
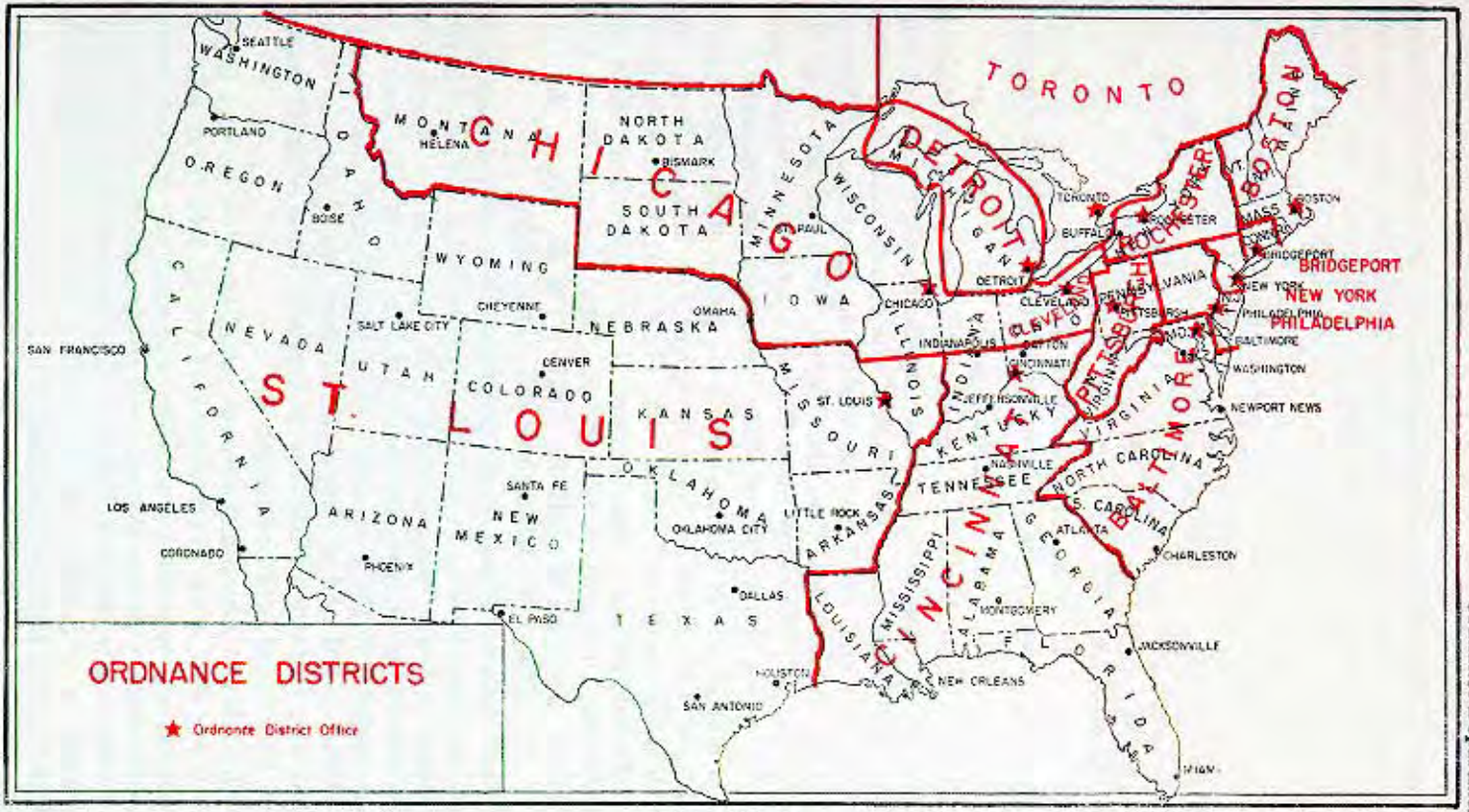


CHART NO. 44.—*ORGANIZATION OF ORDNANCE CHIEF'S OFFICE*

Feb. 1, 1919


ORDNANCE DISTRICTS
★ Ordnance District Office
CHICAGO
DETROIT
TORONTO
ROCHESTER
BOSTON
BRIDGEPORT
NEW YORK
PHILADELPHIA
BALTIMORE
CLEVELAND
PITTSBURGH
CINCINNATI
ST. LOUIS
SEATTLE
WASHINGTON
PORTLAND
OREGON
BOISE
MONTANA
HELENA
NORTH DAKOTA
BISMARK
SOUTH DAKOTA
MINNESOTA
ST. PAUL
WISCONSIN
MICHIGAN
WYOMING
CHEYENNE
NEBRASKA
OMAHA
IOWA
CHICAGO
NEVADA
SALT LAKE CITY
UTAH
COLORADO
DENVER
KANSAS
SAN FRANCISCO
CALIFORNIA
LOS ANGELES
CORONADO
ARIZONA
SANTA FE
NEW MEXICO
PHOENIX
OKLAHOMA
OKLAHOMA CITY
TEXAS
EL PASO
DALLAS
HOUSTON
SAN ANTONIO
ILLINOIS
INDIANAPOLIS
DAYTON
CINCINNATI
MISSOURI
ST. LOUIS
LITTLE ROCK
ARKANSAS
LOUISIANA
NEW ORLEANS
MISSISSIPPI
ALABAMA
MONTGOMERY
GEORGIA
ATLANTA
FLORIDA
JACKSONVILLE
KENTUCKY
LOUISVILLE
TENNESSEE
NASHVILLE
VIRGINIA
NEWPORT NEWS
NORTH CAROLINA
S. CAROLINA
CHARLESTON
DETROIT
CLEVELAND
TOLEDO
BUFFALO
ROCHESTER
BOSTON
MASS.
CONN.
BRIDGEPORT
NEW YORK
PHILADELPHIA
BALTIMORE
WASHINGTON
NEWPORT NEWS

MAP NO. 3.

Clinton, Ohio; American Ordnance Base Depot in France; Arlington Farms, Va.; Sandy Hook Proving Ground, Fort Hancock, N. J.; Government Nitrate Plant No. 1, Sheffield, Ala.; Nitrate Division, Ordnance Department, New York, N. Y.; Siberia Disbursing Office, Siberia; Bethlehem Steel Co., South Bethlehem, Pa.; Port of Embarkation, Newport News, Va.; Atlantic Loading Co., Hammonton, N. J.; Torpedo Depot, Fort Totten, N. Y.; Curtis Bay Ordnance Depot, South Baltimore, Md.; Washington Ordnance Depot, Washington, D. C.; T. A. Gillespie Loading Co., South Amboy, N. J.; Nitro, W. Va.; Remington Arms, U. M. C. Co., Ilion, N. Y.

On Dec. 2, 1918, disbursing offices, including personnel, equipment and records, were transferred to the Director of Finance.

District Offices

Field work involving production, inspection, and engineering specifications came under 13 district offices, each under a district chief who cooordinated the work of the several managers within his district and who was responsible to the Chief of District Offices. The jurisdiction of the district offices did not cover the works of the Bethlehem Steel Company and the arsenals, armories, proving grounds, and other ordnance establishments.

On Mar. 26, 1918, in pursuance of a policy of decentralization, ordnance district offices were set up at (1) Boston, Mass., (2) Bridgeport, Conn., (3) New York, N. Y., (4) Rochester, N. Y., (5) Philadelphia, Pa., (6) Chicago, Ill., (7) Cleveland, Ohio, (8) Cincinnati, Ohio, (9) Pittsburgh, Pa., (10) Detroit, Mich., (11) Toronto, Canada. On July 31, 1918, (12) St. Louis, Mo., and Nov. 13, 1918, (13) Baltimore, Md., were added.

Each district office, except Baltimore, had five managers attending respectively to inspection, engineering work, financial matters, property, and personnel. Later a stores and scrap manager was added. A procurement representative with five assistants was responsible for production. This organization also included a claims board and a contracting officer. The functions of the Baltimore Ordnance District were confined to the work of inspection and claims board activities.

The District Chief had general administrative charge; supervised the field work to coordinate efforts of field force and contractors; and controlled production. His authority did not include modification or change in engineering requirements or instruction methods, prescribed by the Office of the Chief of Ordnance for the guidance of and action by the inspection, production, financial, property, and personnel managers.

District offices served as headquarters for ordnance districts, the geographical limits of which were as follows:

BALTIMORE ORDNANCE DISTRICT

Included the District of Columbia, Virginia, North and South Carolina, and all except the two western counties of Maryland (about 140,000 sq. miles).

BOSTON ORDNANCE DISTRICT

Included all of New England except Connecticut and the four western counties of Massachusetts (about 56,000 sq. miles).

BRIDGEPORT ORDNANCE DISTRICT

Included Connecticut and the four western counties of Massachusetts (about 7,700 sq. miles).

CHICAGO ORDNANCE DISTRICT

Until July 31, 1918, included Illinois, Wisconsin, and all States west of the Mississippi (about 2,226,000 sq. miles). After July 31, 1918, the District included the northern half of Illinois, all of Wisconsin, Minnesota, Iowa, North and South Dakota, and Montana (about 511,000 sq. miles).

CINCINNATI ORDNANCE DISTRICT

Included the southern parts of Ohio and Indiana, and all of Kentucky, Tennessee, Alabama, Georgia, Florida, Mississippi, and Louisiana (about 376,000 sq. miles).

CLEVELAND ORDNANCE DISTRICT

Included northern Ohio and three counties in northwestern Pennsylvania (about 26,000 sq. miles).

DETROIT ORDNANCE DISTRICT

Included all of Michigan (about 59,000 sq. miles).

NEW YORK ORDNANCE DISTRICT

Included New York City, Long Island, nine counties north of New York City, and the 12 northern counties of New Jersey (about 12,000 sq. miles).

PHILADELPHIA ORDNANCE DISTRICT

Included the eastern half of Pennsylvania, eight southern counties of New Jersey, and Delaware (about 30,000 sq. miles).

PITTSBURGH ORDNANCE DISTRICT

Included the western half of Pennsylvania, the two western counties of Maryland, two counties of Ohio, and West Virginia (about 46,000 sq. miles).

ROCHESTER ORDNANCE DISTRICT

Included New York State, except area covered by New York Ordnance District (about 42,000 sq. miles).

ST. LOUIS ORDNANCE DISTRICT

Created July 31, 1918, out of southern and western parts of Chicago Ordnance District to include the southern half of Illinois

and all of the States west of the Mississippi, except Montana, North and South Dakota, Minnesota, Iowa, and Louisiana (about 1,715,000 sq. miles).

TORONTO ORDNANCE DISTRICT

Included eastern Canada. Incompletely organized before Jan. 25, 1919.

Ordnance Field Depots

These depots supplied ordnance matériel to the 36 large camps and cantonments and operated under the Field Depot Branch, General Administration Section, Supply Division. On Sept. 30, 1918, the following were in existence:

Camp Beauregard, La.	Camp Gordon, Ga.	Camp McClellan, Ala.
Camp Bowie, Tex.	Camp Grant, Ill.	Camp Meade, Md.
Camp Cody, N. Mex.	Camp Greene, N. C.	Camp Pike, Ark.
Camp Custer, Mich.	Camp Hancock, Ga.	Camp Sevier, S. C.
Camp Devens, Mass.	Camp Humphreys, Va.	Camp Shelby, Miss.
Camp Dix, N. J.	Camp Jackson, S. C.	Camp Sheridan, Ala.
Camp Dodge, Iowa	Camp Johnston, Fla.	Camp Sherman, Ohio
Camp Doniphan, Okla.	Camp Kearny, Calif.	Camp Taylor, Ky.
Camp Eustis, Va.	Camp Lee, Va.	Camp Travis, Tex.
Camp Forrest, Ga.	Camp Lewis, Wash.	Camp Upton, L. I., N. Y.
Camp Fremont, Calif.	Camp Logan, Tex.	Camp Wadsworth, S. C.
Camp Funston, Kans.	Camp MacArthur, Tex.	Camp Wheeler, Ga.

Between Sept. 30, 1918, and Jan. 30, 1919, the following depots were added:

Camp Bragg, N. C.	Camp Meigs, D. C.	Las Casas, P. R.
Camp Knox, Ky.	Camp Oglethorpe, Ga.	Vladivostok, Siberia
Camp Leach, D. C.	Infantry School of Arms, Columbus, Ga.	

The following depots were abolished during the same period:

Camp Cody, N. Mex.	Camp Fremont, Calif.	Camp Johnston, Fla.
Camp Forrest, Ga.		

The storehouse facilities of a depot usually included two warehouses (60' x 168'), one oil house (20' x 30'), and three magazines (24' x 60').

General Supply Ordnance Depots

On Sept. 30, 1918, the operation of the general supply ordnance depots was under the direction of the Storage Operating Branch, Supply Division. Reserve depots were located in the interior and at Atlantic ports to accumulate stores shipped from manufacturers in the immediate vicinity. District depots were usually located at arsenals and served as distributing centers for troops stationed in the surrounding territory. In addition, pier space was reserved at Atlantic ports for carrying a supply of ordnance matériel for immediate oversea shipment.

Storage space was of three kinds: general warehouse, artillery, and explosive. The first served for the storing of general ordnance supplies; the second for the storing of artillery vehicles and the

assembly of batteries; the third for the storing of smokeless powder, artillery ammunition, and high-explosive materials.

At this time, the following depots were in operation:

General Supply Ordnance Depots

RESERVE

Designation and address	Personnel			Storage space (sq. ft.)
	Off.	Enl.	Civ.	
Arlington G.S.O.D., Kearny, N. J	2	8	45	53,760 (explosive).
Chicago G.S.O.D., 4300 S. Robey St., Chicago, Ill	4	21	57	150,000 (general).
Curtis Bay G.S.O.D., South Baltimore, Md	9	414	1	288,000 (general).
				370,680 (explosive).
Frankford G.S.O.D., Frankford Arsenal, Bridesburg, Philadelphia, Pa	3	9	59	16,849 (general).
				13,886 (explosive).
Middletown G.S.O.D., Middletown, Pa	2	157	-------	320,000 (general).
New York G.S.O.D., Governors Island, New York	3	13	-------	49,207 (general).
Philadelphia G.S.O.D., Philadelphia, Pa	10	3	59	132,411 (general).
Picatinny G.S.O.D., Picatinny Arsenal, Dover, N. J	4	155	15	164,277 (general).
				166,821 (explosive).
Pig Point G.S.O.D., Pig Point, Va	3	111	-------	80,661 (general).
				187,800 (explosive).
Raritan G.S.O.D., Metuchen, N. J	16	1,291	29	67,000 (artillery).
				944,000 (explosive).
Richmond G.S.O.D., Richmond, Va	2	1	7	52,200 (general).
Rock Island G.S.O.D., Rock Island Arsenal, Ill. (also a district depot warehouse)	7	10	361	216,580 (general).
				304,500 (artillery).
				180,000 (explosive).
St. Louis G.S.O.D., St. Louis, Mo	2	8	15	50,000 (general).
Sandy Hook G.S.O.D., Sandy Hook, N. J	4	109	-------	54,600 (explosive).
Springfield G.S.O.D., Springfield, Mass	9	30	159	333,400 (general).
				160 (explosive).
Turner G.S.O.D., Turner Station, Baltimore, Md	1	4	115	54,741 (explosive).
Watertown G.S.O.D., Watertown Arsenal, Watertown, Mass	1	6	15	7,976 (general).

DISTRICT

Augusta G.S.O.D., Augusta Arsenal, Augusta, Ga	5	17	90	123,520 (general).
Benicia G.S.O.D., Benicia Arsenal, Benicia, Calif	1	3	35	106,390 (general).
				14,380 (explosive).
Paterson G.S.O.D., Paterson, N. J	6	45	44	87,016 (general).
San Antonio G.S.O.D., San Antonio Arsenal, San Antonio, Tex	2	3	104	165,328 (general).
				12,882 (artillery).
				8,742 (explosive).
Watervliet, G.S.O.D., Watervliet, N. Y	2	9	253	125,490 (general).
				28,405 (artillery).
				24,597 (explosive).

The reorganization of the Ordnance Department, in Jan. 1919, and the transfer of certain functions to the Purchase, Storage, and Traffic Division, General Staff, necessitated several changes in the ordnance storage arrangements.

Under the new organization, the Ammunition Division, Field Service, was responsible for providing storage facilities for ammunition and explosives; the Supply Division had to provide storage for ordnance matériel other than ammunition and ex-

plosives; and the Maintenance Division was in charge of inspection, maintenance, alteration, and repair of ordnance matériel at designated arsenals.

In Jan. 1919, the following general supply ordnance depots and arsenals were used to provide these storage and maintenance facilities:

General Supply Ordnance Depots, 1919

STORAGE OF AMMUNITION AND EXPLOSIVES

Designation	Personnel			Storage space (sq. ft.)
	Off.	Enl.	Civ.	
Charleston G.S.O.D., S. C	6	600		440,940
Curtis Bay G.S.O.D., Md	19	692	1	839,850
Delaware G.S.O.D., Pedricktown, N. J	8	315		524,020
Mays Landing G.S.O.D., N. J	3			400,360
Morgan G.S.O.D., N. J	5	12		1,490,000
Nitro G.S.O.D., W. Va	5			1,637,490
Penniman G.S.O.D., Va	3	12		1,028,960
Picatinny Arsenal [1]	9	240	10	308,744
Pig Point G.S.O.D., Va	16	220	6	469,143
Raritan Arsenal [1]	19	1,610	6	1,198,206
Sandy Hook G.S.O.D., N. J	3	200		51,250
Seven Pines G.S.O.D., Va	4			658,700
Sparta G.S.O.D., Wis	6	250		
Tobyhanna G.S.O.D., Pa	6	200		
Turner G.S.O.D., Baltimore, Md	1	6	29	54,741
Wingate G.S.O.D., N. Mex	5	500		
Woodbury G.S.O.D., N. J	4			517,700

STORAGE OF MATERIEL OTHER THAN AMMUNITION AND EXPLOSIVES

Designation	Proposed storage space (sq. ft.)	Established storage space (sq. ft.)
Aberdeen General Ordnance Depot	998,000	
Erie General Ordnance Depot	998,000	240,000
Sparta General Ordnance Depot		315,000
Savanna (Ill.) General Ordnance Depot	998,000	
Rock Island Arsenal		800,000
Raritan Arsenal		187,000

[1] With the exception of these two arsenals, all general supply ordnance depots were referred to, after Jan. 27, 1919, as general ordnance depots. Old Bridge General Ordnance Depot, Old Bridge, N. J., and Newcastle General Ordnance Depot, Newcastle, Del., were added to the list of depots for storage of ammunition and explosives at about this time.

MAINTENANCE POINTS

The following arsenals were responsible for maintenance: Augusta, Benicia, Hawaii, Manila, New York, Panama, and San Antonio.

Relations Between Ordnance Department and Inland Traffic Service

A representative of the Inland Traffic Service assigned to an ordnance establishment handled transportation matters at the direction of that Service and reported on the improper use of

transportation facilities in the movement of property by express or freight.

On Sept. 30, 1918, representatives were stationed at the following establishments:

ORDNANCE OFFICE, WASHINGTON, D. C.

Nitrate Division; Production Division; Supply Division.

ARSENALS AND ARMORIES

Augusta, Benicia, Frankford, New York, Picatinny, Raritan, Rock Island, San Antonio, Springfield, Watertown, and Watervliet.

DISTRICT OFFICES

Boston, Mass.; Bridgeport, Conn.; Chicago, Ill.; Cincinnati, Ohio; Cleveland, Ohio; Detroit, Mich.; Philadelphia, Pa.; Rochester, N. Y.

GENERAL SUPPLY ORDNANCE DEPOTS

Arlington, Curtis Bay, Middletown, Philadelphia, Pig Point, Richmond, St. Louis, Springfield, and Paterson Depots.

PLANTS MANUFACTURING ORDNANCE MATÉRIEL

Atlantic Loading Company, Amatol, N. J.; Bethlehem Loading Company, Mays Landing, N. J.

ORDNANCE OFFICERS AT PORTS

Ordnance officers on duty at ports of embarkation assisted and advised the port storage officer on all matters connected with ordnance supplies; made provision for the receipt, storage, preservation, and protection of ordnance supplies; and made necessary reports to the Chief of Ordnance and the port storage officer. Ordnance officers were stationed at the following ports of embarkation: Baltimore, Md.; Newport News, Va.; New York, N. Y.; Philadelphia, Pa.

Plants Under Jurisdiction of Ordnance Department

The Ordnance Department advanced funds in large amounts to commercial firms manufacturing ordnance matériel on contract. In the cases tabulated below, the Government owned the entire plant; in more than 200 other cases funds were allotted for the expansion of facilities which generally became property of the United States upon completion of contracts.

Sixty-seven plants were manufacturing artillery matériel as follows: recuperators (forging), 5; recuperators (machining and assembling), 5; artillery armor, 5; 37-mm. guns, 6; 75-mm. carriages and guns, 8; 4.7-in. carriages and guns, 8; mounts for 5-in. and 6-in. guns, 1; 155-mm. howitzers and carriages, 6; 155-mm. guns and carriages, 3; 9-in. howitzers, 1; 9.2-in. howitzers, 1; 240-mm. howitzers (forging of bodies), 5; 240-mm.

howitzers (machining and assembling), 3; antiaircraft gun mounts, 3; parts of railway mounts for guns of large caliber, 7.

Ninety-two plants were engaged in the manufacture of powder and high explosives, of which 28 made ammonium nitrate; 15, picric acid; 13, smokeless powder; and 11, TNT. Of this number the Government directed the construction of 16, by either actually constructing them or financing their construction. There were 93 other plants engaged in loading shells, bombs, grenades, boosters, fuzes, and propellent charges; and many others in the manufacture of small arms, instruments, and miscellaneous matériel.

On Sept. 30, 1918, the following Government-owned plants were partially completed or in operation:

Name of plant	Matériel manufactured
Atlantic Loading Co., Hammonton, N. J.	Shell-loading.
Atlas Powder Co., Perryville, Md.	Ammonium nitrate.
Atlas Powder Co., Senter, Mich.	Tetryl.
Bethlehem Loading Co., Mays Landing, N. J.	Shell-loading.
Bethlehem Loading Co., New Castle, Del.	Shell-loading.
California Loading Co., Old Bridge, N. J.	Loading fuzes, etc.
Davis Chemical Co., Little Rock, Ark.	Picric acid.
Du Pont de Nemours Co., Richmond, Va.	Smokeless powder.
Du Pont Engineer Co., Nashville, Tenn.	Smokeless powder.
Du Pont Engineer Co., Penniman, Va.	1,240,000 A and B castings.
Du Pont Engineer Co., Tullytown, Pa.	Bag loading.
T. A. Gillespie Co., Morgan, N. J.	75-mm. shell, complete rounds.
T. A. Gillespie Co., Perth Amboy, N. J.	Loading shell with amatol.
Hercules Powder Co., Charleston, W. Va.	Pow er.
Hercules Powder Co., Hercules, Calif.	Crude TNT.
MacArthur Bros. Bag-Loading Plant, Woodbury, N. J.	2,000,000 rounds of smokeless powder cartridges.
Semet-Solvay Co., Grand Rapids, Mich.	Picric acid.
U. S. Nitrate Plant No. 1, Sheffield, Ala.	Ammonium nitrate.
U. S. Nitrate Plant No. 2, Muscle Shoals, Ala.	Ammonium nitrate.
U. S. Nitrate Plant No. 3, Toledo, Ohio.	Ammonium nitrate.
U. S. Nitrate Plant No. 4, Ancor, Ohio.	Ammonium nitrate.

Proving Grounds

Ordnance matériel was tested at the 11 proving grounds of the Ordnance Department. Eight were under the jurisdiction of the Inspection Division and three under the jurisdiction of the Engineering Division.

In addition to the foregoing, the Department used privately-owned proving grounds. The Inspection Division tested mobile artillery guns and carriages manufactured by the Bethlehem Steel Company and the Midvale Steel Company at the Redington Proving Ground, Redington, Pa., which was owned by the Bethlehem Steel Company. Proof work was also done at Camp Devens, Mass., at Saginaw, Mich., and at various powder plants.

On Sept. 30, 1918, proving grounds were in operation as follows:

Under Jurisdiction of Inspection Division

Designation	Matériel tested
Clear Spring Proving Ground, Clear Spring, Md.	37-mm. guns assembled by Maryland Pressed Steel Co., Hagerstown, Md.
Elizabethport Proving Ground, Elizabethport, N. J.	75-mm. gun recuperators manufactured by Singer Mfg. Co.
Erie Proving Ground, Ottawa County, Ohio	Artillery guns and carriages of all calibers.
Nitro Proving Ground, Nitro, W. Va.	Nitrocellulose powder manufactured by Hercules Powder Co. at Government Explosives Plant "C".
Old Hickory Proving Ground, Nashville, Tenn.	Nitrocellulose powder manufactured by the Du Pont Co., at Government Explosives Plant, Nashville, Tenn.
Sacketts Harbor Proving Ground, Sacketts Harbor, N. Y.	75-mm. field gun carriages manufactured by New York Air Brake Co., Watertown, N. Y., and 75-mm. field guns.
Saybrook Proving Ground, Saybrook Junction, Conn.	Antiaircraft gun carriages manufactured by New Britain Machine Co., New Britain, Conn.
Scituate Proving Ground, Scituate, Plymouth County, Mass.	Guns, howitzers, and carriages.

Under Jurisdiction of Engineering Division

Designation	Matériel tested
Aberdeen Proving Ground, Aberdeen, Md.	Guns, carriages, and ammunition (37-mm. to 16-in.).
Sandy Hook Proving Ground, Fort Hancock, N. J.	3-in. to 16-in. railway and seacoast guns and ammunition.
Savanna Proving Ground, Savanna, Ill.	Guns, carriages, and ammunition (75-mm. to 4.7-in.), 155-mm howitzers, carriages, and ammunition. Also other matériel.

Purchasing Offices

All negotiations relating to the procurement of ordnance matériel were conducted through correspondence by "negotiators" with offices in the Procurement Division, Washington, D. C. Interested firms sent representatives to Washington if personal contact was necessary.

The negotiators were organized in 11 purchasing sections: Artillery Section; Packing Container Section; Loading Section; Equipment Section; Motor Equipment Section; Miscellaneous Section; Projectile Section; Raw Materials Section; Small Arms Section; Trench Warfare Section; Explosives Section.

Ordnance Schools

To carry out the ordnance program, a large number of chemists, inspectors, engineers, machinists, skilled mechanics, and technologists of every type were required. Inasmuch as the necessary experts could not be readily obtained, extensive training facilities were created to produce them.

In 1917, some 12 supply schools were established in universities which were supplemented by four arsenal schools. These courses

were discontinued in the spring of 1918 and consolidated in an ordnance school at Camp Hancock, Ga. Supply courses were also held at field depots and at Camp Meade, Md.

In June 1917, an ordnance course was inaugurated at the plant of the Bethlehem Steel Co., for newly commissioned officers, on these subjects: gun carriages; metallurgy of steel; manufacture of bronzes; and other essentials. At the same time, supply schools for officers commissioned from civil life were established at Frankford and Watervliet Arsenals.

Thirteen additional schools were instituted at arsenals, plants, schools, and a proving ground, to train inspectors for the inspection of matériel in process of manufacture as well as in the field. Included therein was a shell-loading school for enlisted inspectors at the Penniman Plant of the Du Pont Engineering Co., Va. A small-arms ammunition inspectors' school was inaugurated at the Winchester Repeating Arms Co. in Aug. 1918. A fuze and primer school was organized at the Du Pont Plant, Pompton Lakes, N. J.

The course of instruction for machine-gun instructors, given at Springfield Armory for several years, was continued until Apr. 1918, when this machine-gun school was transferred to Camp Hancock, Ga.

A specialists' school was established at Camp Jackson, S. C., in connection with artillery replacement depots. This school included a motor school for drivers of trucks, tractors, and motorcycles. It also conducted courses in maintenance and repair of field guns, howitzers, limbers, and caissons; and imparted instruction in saddler's and carpenter's work as well as in camouflage.

On Sept. 30, 1918, the following ordnance schools were in operation:

Designation	Courses
Ordnance Engineering School, Aberdeen Proving Ground, Aberdeen, Md.	Lectures and actual practice with artillery, ammunition and instruments; instruction in trench warfare and aerial bombing; military tactics (3-month course).
Gun Relining School, Watervliet Arsenal, Watervliet, N. Y.	Relining guns (2-month course).
Instrument Repair School, Frankford Arsenal, Philadelphia, Pa.	General course in repair and adjustment of fire-control instruments (3-month course).
Ordnance Motor Instruction School, Raritan Arsenal, Metuchen, N. J.	Course No. 1—General course for officers and officer candidates (3 months). No. 2—Motor course, for officers and enlisted men (2 months). No. 3—Ordnance matériel and equipment course for enlisted men (1 month). No. 4—Small-arms and machine-gun school for enlisted men (1 month).

Designation	Courses
Railway Artillery School, Aberdeen Proving Ground, Aberdeen, Md.	General course in maintenance, operation, and repair of railway artillery and heavy motorized artillery (6-week course).
School of Explosives, Columbia University, New York City.	Intensive theoretical and practical training in the manufacture of explosives (12-week course for officers).
Welding School, Peoria, Ill.	General practical course in electric and oxyacetylene welding (30-day course for mobile ordnance repair shops).
School for Ballistic Engineers, Hercules Powder Company, Kenvil, N. J.	Instruction in scientific and practical ballistics (6-week course for ballistic engineers, Inspection Division).
Engineers of Tests School, Carnegie Institute of Technology, Pittsburgh, Pa.	Testing metals, metallurgy, pyrometry, and chemical analysis (8-week course).
School for Gauge Checkers, Bureau of Standards, Washington, D. C.	Measurement and use of munition limit gauges (2-week course).
School for Intensive Military Training of Ordnance Inspectors, Erie Proving Ground, Ottawa County, Ohio.	Military drill and courtesy; administration; ordnance matériel; observation of proof work (6-week course for candidates for commission and detail as ordnance inspector).
Training School for Instruction of Proof Officers, Erie Proving Ground, Ottawa County, Ohio.	Military drill and courtesy; administration; ordnance matériel and proof methods and requirements (6-week course for candidates for commission and detail as proof officer).
Shell-Loading School, Morgan, N. J.	Practical instruction in shell-loading (1-month course preparatory for high-explosives shell-loading inspection).
Technological School, Carney's Point, N. J.	Chemistry lectures and laboratory work, physics, and drafting (2 to 3-month course for explosives inspectors and chemists).

The following ordnance schools were in operation sometime before Sept. 30, 1918:

Designation	Course
Cannon Inspectors' School, Watervliet Arsenal, Watervliet, N. Y.	Instruction in cannon inspection (6-week course for cannon inspectors).
Small-Arms Ammunition Inspectors' School, Remington Plant, Bridgeport, Conn.	Specifications, drawings, gauging, proof-tests, ballistics, and practical inspections (6-week course for inspectors of small-arms ammunition).

After the Armistice, the foregoing schools were consolidated at Raritan, at Aberdeen Proving Ground, and at Watertown Arsenal. Raritan became a training school for enlisted men, while Aberdeen Proving Ground and Watertown Arsenal developed into the two permanent training schools for officers.

PERSONNEL

OFFICERS

On Apr. 6, 1917, the Ordnance Department consisted of 223 officers (97 of the Regular Army and 126 of the Reserve Corps). Personnel for expansion came initially from the Reserve officers' training camps, the first camp furnishing 356 and the second 383 officers. Thereafter applicants for commissions were examined by boards of ordnance officers.

The status of the commissioned strength in 1918 and 1919 was as follows:

Grade	June 30, 1918		Nov. 1, 1918		June 30, 1919, actual
	Authorized	Actual	Authorized	Actual	
Major general	1		1	1	1
Brigadier general	8	5	11	11	2
Colonel	62	40	78	56	49
Lieutenant colonel	198	80	321	150	114
Major	597	404	775	512	265
Captain	1,893	1,505	2,848	1,636	715
First lieutenant	2,256	1,599	3,537	1,928	706
Second lieutenant	1,998	985	2,784	1,660	469
Total	7,013	4,618	10,355	5,954	2,321

ENLISTED MEN

In addition to furnishing ordnance personnel for duty with combat troops, measures were taken at an early date to provide men for all storage depots and guard companies required for the protection of ordnance establishments.

On Aug. 3, 1917, authority was granted for the organization of the Enlisted Reserve Corps, National Army, with a strength of 20,000. Concurrently the authorized strength of the Regular Army personnel was increased to 1,500. On May 6, 1918, this authorized strength was raised to 47,500 and, Oct. 28, 1918, to 131,250, including 4,500 Regulars.

The foregoing program was never fully realized as shown by the following tabulation:

Date	Actual strength	Date	Actual strength
1918		1919	
June 30	33,689	January 31	41,623
September 30	47,958	February 28	35,786
November 11	62,047	March 31	25,690
December 31	53,445	June 30	18,663

The following table shows the distribution of the enlisted men at peak strength and as of June 30, 1919:

Assigned to—	Strength	
	Nov. 11, 1918	June 30, 1919
American Expeditionary Forces	22,475	15,994
Arsenals	1,119	422
Canal Zone	39	74
China	7	1
Coast defenses	634	310
Corps and army troops	25	
District ordnance offices	1,293	
Depot companies	3,598	373
Forts and barracks	91	44
Hawaiian Territory	52	98
Line organizations	900	240
Miscellaneous establishments	152	61
Mobile ordnance repair shops	370	
Nitrate plants	646	
Ordnance guard companies	1,377	
Philippine Islands	30	137
Ports of embarkation	283	
Proving grounds	6,836	909
Puerto Rico	10	
Shell-loading plants	10,067	
Storage depots	1,661	
Training schools and camps	9,606	
Washington, D. C., detachment	776	
Total	62,047	18,663

CIVILIANS

During the 1918 fiscal year, 10,019 employees were carried on the pay roll of the Washington Office. At the close of the year, the office employed 7,729 civilians.

From July 1, 1918, to June 30, 1919, the maximum number of employees was 8,233 in Washington, D. C., 28,424 in ordnance districts, and 37,025 at the arsenals.

Transfers, promotions, separations, and reinstatements were handled by the Washington Office or by its district representatives. There were 50,000 cases in the 1918 fiscal year and 45,000 in 1919. Apart from Civil Service employees, the mobilization of American industry resulted, by Nov. 11, 1918, in the employment of 3,500,000 civilian workers in the production of Army ordnance.

ACTIVITIES

SUPPLY

During the war, Ordnance Department activities were primarily directed toward production of matériel. The War Department was prepared to expend approximately fifteen billion dollars

for this purpose. Accordingly, about 30,000 prime contracts were let, and some 115,000 sub-contractors were required in an effort which represented about 42 percent of all Government war commitments.

Considered as a whole, American commercial industries were unprepared to manufacture the highly technical and non-commercial articles required by the Ordnance Department. The department had not been able in peacetime to accumulate sufficient stocks of munitions to meet the needs of a rapidly growing army pending initiation of new production. In many instances it was necessary to manufacture special machinery and special tools to be used in making guns, ammunition, tanks, and other matériel. In some cases it was necessary to design and build machines to produce this special machinery and tools. This required considerable time and expenditure of money before quantity production of any finished article desired by the Ordnance Department could begin.

PRODUCTION IN ORDNANCE DISTRICTS

Upon establishment of the ordnance districts, 90 percent of all ordnance contracts were transferred to the district offices, which handled munitions production at its sources (see pp. 334-336).

On Nov. 1, 1918, there were 13,233 contracts in operation, carrying a total of $3,387,972,000. The New York District, at that time, occupied first place with 2,932 contracts which amounted to $522,708,537. At the Armistice the number of contracts outstanding was 13,043 amounting to $2,951,031,693. New York was then leading in the number of contracts, but Philadelphia in the money value involved.

After the Armistice, the district offices became district claims boards. Later, from the same organization, district salvage boards were formed.

Baltimore Ordnance District

Until after the Armistice, production in this district was handled from Washington. On Nov. 13, 1918, the Baltimore office opened. During the war, this was a great shrapnel and loading area. It was also the principal source of supply for ammonium nitrate and 37-mm. guns and ammunition. The Seven Pines bag-loading plant near Richmond, Va., reached a maximum capacity of 40,000 charges a day of propellants for high-caliber guns.

Contracts outstanding Nov. 1, 1918: 1,861, amounting to $199,000,000.

Boston Ordnance District

The district was an important equipment center until Aug.

1918, when both leather and textile equipment were transferred to the Quartermaster Corps. Boston assisted in speeding up production of boosters and adapters when that output lagged behind shells. The district included one loading plant, with a daily production of nearly 100,000 hand grenades, and the largest plant in the United States for the manufacture of 155-mm. carriages, the total production of which exceeded 600. Its production of small arms ammunition was second only to that of Bridgeport. Besides manufacturing nearly all of the cartridges for 155-mm. howitzers, the district engaged in the machining of shells and trench-mortar bombs, and in the production of mechanical time fuzes.

Total contracts: 1,547.

Contracts outstanding Nov. 1, 1918: 846, amounting to $82,440,000.

Bridgeport Ordnance District

The district produced a very large quantity of small arms, including about 140,000 machine guns and automatic rifles, 280,000 Russian rifles, 466,000 modified 1917 Enfield rifles, most of the 30,000 riot shotguns sent overseas, all of 743,660 revolvers and automatic pistols issued to the Army, all the bayonets for the 1917 Enfield rifle, and nearly all of the 123,000 trench knives, model of 1918. Except for the arsenals and two outside plants, all the small-arms cartridges amounting to more than 3,500,000,000 rounds were produced in the district. One plant was engaged in machining and assembling the 155-mm. gun and finished 265. In addition, there was considerable production of trench-warfare matériel, boosters, fuzes, and miscellaneous items.

Contracts outstanding Nov. 1, 1918: 2,068, amounting to $346,000,000.

Chicago Ordnance District

At Hammond and Gary, Ind., and in Chicago, extensive ordnance operations were conducted in manufacturing guns, gun carriages, recuperators, and projectiles. The caterpillar mount for the 240-mm. howitzer carriage was developed. In all, 280 recuperators for the 240-mm. howitzer were machined, and 247 guns of the 4.7-in. type, 190 guns of the 3.3-in. type, 1,600 gun carriages, 10,600 gun sights, 40,300 gun carts, 394,000 artillery wheels, and 2,875 tanks and tractors were made. Ammunition totals included: 12-gauge howitzer shell, 4,797,000; 75-mm. shell, 2,087,000; 155-mm. shell, 146,000; 6-in. shell, 595,000; 9.2-in. shell, 722,000; hand grenades, 17,573,000; rifle grenades, 20,400,000; drop bombs, 429,450; ball cartridges, 40,000,000 rounds; adapters and boosters, 4,626,000; shell forgings, 7,308 tons; and steel billets,

nearly 550,000 tons. Machines and machine tools for munitions were supplied.

Total contracts: About 1,500, involving $450,000,000.

Contracts outstanding Nov. 1, 1918: 895, amounting to $300,777,000.

Cincinnati Ordnance District

This was an important production center of machine tools. In Dayton, Ohio, some 300 factories were in operation for the Government and included the major work in assembling the 6-ton Renault tank. Outstanding plants were: Old Hickory Powder Plant with an eventual production capacity of 1,000,000 pounds of smokeless powder per day; Picric Acid Plant, Brunswick, Ga., with an eventual production expected of 72,000,000 pounds; two nitrate fixation plants at Muscle Shoals, Ala.; and a nitrate fixation plant at Ancor, Ohio. All these enterprises, except the Brunswick and Ancor plants, were in partial production before the Armistice.

Total output: Machining of 1,144,000 shell and 1,840,000 grenades; 358,000 helmet bodies; 879 pounds of black powder; 3,280,857 gallons of toluol; 1,667,000 gunstock blanks; 14,319 azimuth instruments; 84,000,000 rifle cartridges; and 26 carriages for the 155-mm. howitzer.

Contracts outstanding Nov. 1, 1918: 752, amounting to $140,643,000.

Cleveland Ordnance District

This district contained the largest producer of completed big guns and of shell fuzes as it was a great steel accessories center and had an important motor industry.

Output included: 120 six-ton tanks; 45 railway mounts for 12-in. mortars; nine 12-in. gun mounts; three 14-in. mounts; one 16-in. mount; machining of 1,456 howitzers (155-mm.); 1,000 gun carriages (75-mm.); 28 gun carriages (5-in.); 93 gun carriages (6-in.); 13 gun carriages (8-in.); 459 tractors; 14,426,000 shell forgings; 1,113,000 machined shell (37-mm.); 404,000 shell (155-mm.); 562,000 trench-mortar shell; 5,725,000 grenades; 4,885,000 fuzes; and 3,110 gun sights.

A process of making bayonets by rolling instead of forging was developed.

Total contracts: 1,408, involving about $400,000,000.

Contracts outstanding Nov. 1, 1918: 729, amounting to $200,525,000.

Detroit Ordnance District

The district excelled in the manufacture of artillery carriages of all types; of tanks, trucks, and tractors; of large recoil re-

cuperators; and in the forging and machining of shell for big guns.

Output comprised: all the 10-in. shell ordered by the Government; 75 percent of the 240-mm. shell machined in the United States; about 50 percent of all the 155-mm. shell forgings; some 48,000 artillery vehicles; machining of 880 gun recuperators; 15 tanks (3-ton); and machining and assembling of 383 field and antiaircraft guns, including 98 of the 4.7-in. model.

Total contracts: 912.

Contracts outstanding Nov. 1, 1918: 591, amounting to $270,913,000.

New York Ordnance District

The New York district had a virtual monopoly in production of military pyrotechnics and was outstanding in the manufacture of toluol and explosives, shell loading, and of a great number of urgently needed miscellaneous articles.

Output included: Some 5,000,000 pyrotechnic articles; 1,911,700 gallons of crude toluol; 2,898,700 gallons of benzol; 1,113,000 gallons of solvent naphtha; 17,716,000 pounds of pyrocotton; 8,571,000 pounds of TNT (trinitrotoluol); 8,000,000 pounds of powder; 17,134,000 yards of cartridge cloth. Loading results — 8,075,000 adapters and boosters; 9,646,000 fuzes; 8,191,000 shell of all calibers; and 5,835,000 pieces of trench-warfare matériel.

Total contracts: About 3,500, involving $750,000,000.

Contracts outstanding Nov. 1, 1918: 2,932, amounting to $522,709,000.

Philadelphia Ordnance District

The district was outstanding for the forging and machining of big guns; for the production of rifles; for the making of explosives; and for the loading of artillery ammunition.

Output included: 1,521,000 rifles (more than half the national production); 52,000,000 pounds of powder and 6,000,000 pounds of TNT per month at the time of the Armistice; assembly of some 2,000,000 helmets; 1,100 sets of gun forgings; 141,000 bolos; approximately 2,000,000 propellent charges for the larger type of guns; assembly of 1,100 artillery repair trucks and of about 300 equipment repair trucks; 3,000,000 loaded shell of the 155-mm. type; 3,700,000 of the 75-mm. type; 1,000,000 of the 3-in. common shrapnel; and nearly 5,000,000 of the 75-mm. shrapnel.

Contracts outstanding Nov. 1, 1918: 1,196, amounting to $484,897,000.

Pittsburgh Ordnance District

This was a basic district because of its production of steel and of forgings. It supplied forgings both to the Allied Powers and the

United States, and had large contracts with the Navy, the American Fleet Corporation, and the Ordnance Department.

Output included: 82 gun forgings for the 3-in. antiaircraft type; 80 forgings (4.7-in. gun); 67 forgings (155-mm. gun); 15 forgings (240-mm. howitzer); and recoil recuperator forgings, including 4,255 for the 155-mm. howitzer; 1,734 for the 155-mm. gun, and 710 for the 240-mm. howitzer. The Neville Island project, largest of its kind, was halted by the Armistice before reaching production of 165 rifles (14-in. 50-caliber) at the rate of 15 per month. Contemplated forging of 14-in. and 16-in. shell at the rate of 40,000 per month was likewise abandoned. As to raw materials, the district produced approximately 80 percent of all the steel and about 75 percent of all the bituminous coal consumed by the munitions makers. Optical glass was produced in quantity.

Total contracts: Over 1,100.

Contracts outstanding Nov. 1, 1918: 550, amounting to $215,400,000.

Rochester Ordnance District

The district excelled in the production of optical glass. Two plants were engaged in this activity and in the manufacture of telescopes, range finders, and aiming circles.

In addition to above, output included: 40,000 Lewis guns; 600,000 modified Enfield rifles, model of 1917; 416 American and 860 French 75-mm. guns; and 540 trench-mortar barrels (6-in.). Forging and machining of 3-in. and 75-mm. shell reached an annual rate of approximately 16,000,000. Production of picric acid exceeded one-fourth of national output; more than 10,000,000 pounds of this explosive came from one plant.

Contracts outstanding Nov. 1, 1918: 422, amounting to $152,000,000.

St. Louis Ordnance District

This District procured an adequate supply of walnut for gunstocks by a minute search of forest areas.

Munitions output: Some 3,285,000 walnut gun stocks and 744,000 handguards. Toluol was produced at a monthly rate of 3,000,000 pounds in two plants by a process of extraction from petroleum distillate. Potash was derived from sea-kelp of the Southern California coast to meet all national black-powder requirements. The picric acid plant at Picron near Little Rock, Ark., with a monthly capacity of 14,500,000 pounds, reached production stage just prior to the Armistice. Other production included shell of the larger calibers and small-arms ammunition in mills in and around St. Louis.

Total contracts: 510, involving $145,000,000.

Contracts outstanding Nov. 1, 1918: 445, amounting to $122,000,000.

Toronto Ordnance District

The district was primarily an ammunition area, manufacturing shrapnel for the British and 75-mm. shell for the United States.

Contribution to American ordnance program: Forged approximately 8,400,000 and machined about 6,375,000 shell (75-mm.).

The Imperial Munitions Board acted as agent for the United States during the war and as district claims board after the Armistice.

Contracts outstanding Nov. 1, 1918: 181, amounting to $142,558,000.

PRODUCTION IN ARSENALS AND ARMORIES

Frankford Arsenal

Output from Apr. 6, 1917, to June 30, 1919: 485,023 rounds of shell and 630,030 rounds of shrapnel, of various calibers; 303,423,000 rounds of small-arms ammunition, including ball cartridge caliber .30, pistol ball and high-pressure cartridges caliber .45, and 50,000,000 rounds of tracer, incendiary, and armor-piercing cartridges caliber .30.

Manufacture of forgings for artillery ammunition was begun.

Instruments manufactured and repaired included: Scales for antiaircraft guns, battery commander's telescopes, sights for field guns, aiming circles, quadrants, longitudinal levels, panoramic sights, fuze setters, deflection and range boards.

Picatinny Arsenal

Output from Apr. 6, 1917, to June 30, 1919: 1,315,627 pounds of pyro (smokeless powder); 2,613,850 pounds of finished cannon powder; and 992,300 pounds of small-arms powder.

Research and main laboratories dealt with problems relating to the development of powders, explosives, projectiles, and fuzes.

Rock Island Arsenal

Output from Apr. 6, 1917, to Nov. 9, 1918: 47,251 U. S. rifles caliber .30, model of 1903 (popularly known as the Springfield rifle); 36,800 bayonets for the Springfield; 3,000 bayonet scabbards; a large number of haversacks; and 183 gun carriages (4.7-in., model of 1906).

Machining and assembling of recuperators began in Nov. 1918; a total of 552 units was completed.

Springfield Armory

Output from Apr. 6, 1917, to Nov. 9, 1918, amounted to 265,627 U. S. rifles caliber .30, model of 1903 (popularly known as the Springfield rifle). A total of 142,697 was produced during the 1918 fiscal year, in addition to 134,834 bayonets.

Originally equipped to produce 450 rifles per 8-hour shift day, a production capacity of 1000 per day was attained by Nov. 1, 1917. By Nov. 11, 1918, production had increased to 1,500 rifles per day; thereafter, output dropped to a daily rate of 300.

Watertown Arsenal

Output from Apr. 6, 1917, to June 30, 1919: Principal articles only—7 barbette carriages (12-in., model of 1917); 3 transport wagons for 12-in. howitzer; 1 railway carriage (14-in.); 47 anti-aircraft mounts (3-in.); 2,783 shells (12-in.); 113 seacoast targets; 2,282 high explosive projectile forgings (12-in.); 79 howitzer carriages (240-mm.); 124 vehicles for 240-mm. carriage; 2,032 tons of major gun forgings; 1,188 tons of miscellaneous forgings; and 152 axles.

The principal forgings made were for 240-mm. howitzer, 155-mm. gun, 75-mm. gun, and 12-in. howitzer. On Nov. 11, 1918, 282 recuperator forgings for 155-mm. howitzer and 21 for 240-mm. howitzer were completed.

Watervliet Arsenal

Output from Apr. 6, 1917, to June 30, 1919: 1,066 guns of calibers 1.457-in. to 16-in.; modifying and relining of 187 guns and howitzers; 161,622 spare parts.

On June 30, 1919, orders on hand called for the manufacture of 935 guns, ranging from 75-mm. to 16-in., and of 403 howitzers all but 3 of which were 240-mm.; 100 navy guns (4-in.), and 110 mortars (240-mm.).

WAR PRODUCTION IN DETAIL

Guns

Item	1917	1918	1919	Total	Remarks
Finished cannon: (1)					
75-mm	5	1,855	906	2,766	(1) Carriages, recuperators, and sights had to be added to these cannon to make them complete units ready for service.
3-in. antiaircraft	3	228	74	305	
4.7-in. gun		229	188	417	
155-mm. howitzer		1,483	306	1,789	
155-mm. gun		137	355	492	
8-in. howitzer	1	190	54	245	
240-mm. howitzer		2	190	192	
Total	9	4,124	2,073	6,206	
Cannon forgings:					
75-mm	124	5,816	37	5,977	
3-in. antiaircraft	70	523	3	596	
4.7-in. gun		434	8	442	
155-mm. howitzer	2	1,710	261	1,973	
155-mm. gun		416	467	883	
8-in. howitzer	37	204	5	246	
240-mm. howitzer		169	241	410	
Total	233	9,272	1,022	10,527	

Mobile Field Artillery

Item and process	To July 1, 1918	Remainder of 1918	1919	Total	Remarks
Recuperators: (1)					(1) The process of manufacture of recuperators required four steps: forging, rough machining, finish machining, and assembling.
75-mm. gun recuperator:					
Forging	262	3,850	516	4,628	
Finish machining and assembling	----------	1	798	799	
155-mm. howitzer recuperator:					
Forging	676	3,924	1	4,601	
Finish machining and assembling	----------	1,460	141	1,601	
155-mm. gun recuperator:					
Forging	212	1,522	----------	1,734	
Finish machining and assembling	----------	30	851	881	
240-mm. howitzer recuperator:					
Forging	286	445	----------	731	
Finish machining and assembling	----------	1	424	425	
Complete Artillery Units: (2)					(2) A complete unit included gun body complete, carriage, and recoil mechanism or recuperator.
75-mm. gun, model 1897	----------	1	798	799	
75-mm. gun, model 1916	----------	255	108	363	
75-mm. gun, model 1917	1	845	63	909	
75-mm. antiaircraft gun	----------	46	5	51	
3-in. antiaircraft gun	3	94	159	256	
4.7-in. gun	----------	229	188	417	
5-in. seacoast gun	----------	28	----------	28	
6-in. seacoast gun	----------	92	----------	92	
155-mm. howitzer	----------	273	352	625	
155-mm. gun	----------	30	462	492	
8-in. howitzer	1	190	54	245	
9.2-in. howitzer	----------	----------	1	1	
240-mm. howitzer	----------	1	181	182	
Total	5	2,084	2,371	4,460	

Item and process	Completed at Armistice	Total number completed	Remarks
37-mm. guns:			
Infantry - accompanying gun, model 1916 (3)	826	1,200	(3) 841 of these weapons were purchased from the French and turned over to the A. E. F.
Model 1916 gun, modified for tanks	----------	1,200	
Model 1918 semi-automatic tank gun	----------	2	
Total	826	2,402	

Railway Artillery

Type	Number produced to—		Guns available (8)	Remarks
	Nov. 11, 1918	Dec. 31, 1919		
7-in. navy gun, railway mount (1).	12	12	12	(1) For anti-submarine work.
8-in. 35-caliber seacoast gun, railway mount.	18	47	96	((2) Fabricated matériel and trucks, complete, produced in U. S., mount to be assembled in France.
10-in. 34-caliber seacoast gun on French type railway mount (2).	8	36	111	
10-in. 34-caliber seacoast gun on French type railway mount (3).	----	----	18	(3) Project cancelled at Armistice.
12-in. 35-caliber seacoast gun on French type railway mount.	----	6	49	(4) Guns obtained from Chilean Government; manufactured in U. S.
12-in. 50-caliber gun on American sliding railway mount (4).	3	3	6	(5) Sixty-one howitzers under construction; reduced to 13.
14-in. 50-caliber naval gun on railway mount.	11	11	21	(6) Project cancelled Mar. 11, 1919.
12-in. 10-caliber seacoast mortar on railway mount.	1	91	150	(7) Sixty mounts contemplated, had the war continued.
16-in. 20-caliber howitzer on railway mount (5).	1	1	1	(8) 464 heavy guns were taken from seacoast defenses, obtained from the Navy, or commandeered at private ordnance plants where they were being manufactured for foreign governments.
14-in. 50-caliber gun on American sliding railway mount (6).	----	----	----	
12-in. 20-caliber howitzer on railway mount (7).	0	----	----	
Total	54	207	464	

Motorized Artillery

SELF-PROPELLED MOUNTS

The Ordnance Department developed designs for the following caterpillar gun mounts: a 2½-ton and a 5-ton tractor for the mounting of 75-mm. guns; a caterpillar mount for 8-in. howitzers; a caterpillar mount for 155-mm. guns; and a caterpillar mount for 20-mm. howitzers.

Orders were placed for—

53 mounts, 8-in. howitzer,
50 mounts, 155-mm. G. P. F. gun,
250 mounts, 240-mm. howitzer.

Following the Armistice, these orders were drastically reduced, and only enough mounts were ordered completed to serve for further experimentation.

ORDNANCE MOTOR VEHICLES

Type	Number produced to—		Quantity ordered	Remarks
	Nov. 11, 1918	Jan. 31, 1919		
Tractors: (1)				(1) Caterpillar tractors were used to drag guns, limbers, and caissons, in substitution for the teams of artillery horses.
2½-ton	10	25	5,586	
5-ton	1,543	3,480	11,150	
10-ton	1,421	2,014	6,623	
15-ton	267	267	267	
20-ton	126	154	1,165	
Trailers: (2)				
1½-ton antiaircraft machine gun	150	562	2,289	(2) The trailers were built for the following uses: 1½-ton and 3-ton for antiaircraft guns; 3-ton for 75-mm. gun; 4-ton for mobile repair shops; and 10-ton for transporting the 6-ton Renault tank.
3-in. field gun	235	472	830	
4-ton shop bodies	101	384	576	
4-ton shop chassis	260	555	576	
10-ton	104	245	540	
3-in. antiaircraft	543	611	612	
Trucks: (3)				(3) Five of every six ordnance trucks were used for hauling ammunition. A few carried machine guns and trench mortars. Practically all the rest were designed for use as field repair shops, at which emergency repairs to the artillery could be made and other field ordnance could be reconditioned.
F. W. D. chassis	5,361	10,615	13,907	
Nash chassis	7,137	12,884	16,165	
Ammunition bodies	18,212	21,709	24,729	
Ammunition mountings	9,615	11,024	24,729	
Artillery repair	1,318	1,332	1,332	
Artillery supply	813	1,838	5,474	
Light repair	1,012	1,012	1,012	
Dodge chassis	1,012	1,012	1,012	
Commerce chassis	1,500	1,500	1,500	
Machine-gun body, mounted on Commerce or White 1-ton chassis	486	1,306	1,500	
1-ton supply	60	60	60	
White chassis	1,929	2,695	2,695	
Reconnaissance	712	1,003	1,081	
Staff observation	1,164	1,175	1,175	
Equipment repair	310	310	310	
H. M. R. S. trucks	287	416	624	

Sights and Fire-Control Apparatus

The following table contains a selection from the principal items produced during the war:

Articles	Deliveries to—		Total ordered
	Nov. 11, 1918	Feb. 20, 1919	
Aiming circle, model 1916	815	1,215	1,571
Clinometers, machine-gun	8,270	21,972	37,616
Compass, lensatic	8,150	11,651	11,651
Compass, prismatic	4,428	7,028	13,603
Cylinders, cannon pressure	8,000	8,000	8,000
Electrical equipment for aiming posts	--------	11,765	26,888
Flash lights	281,507	396,269	491,797
Glass, optical, lbs	28,211	28,977	52,940
Periscopes, battery commander's	289	5,000	11,701
Periscopes, mirror	60,072	60,072	96,625
Periscopes, rifle, model 1917	173,549	173,549	198,840
Periscopes, trench, No. 10	2,948	9,252	32,512
Quadrants, elevation	119	226	334
Quadrants, gunner's	209	5,805	13,053
Quadrants, range	532	1,126	1,586
Range finders, 80-cm	2,167	2,600	6,470
Range finders, 1-meter	1,508	1,665	7,131
Range finders, 15-foot	55	55	65
Rules, battery commander's	27,906	27,906	27,906
Rules, slide	6,352	6,352	6,352
Sights, antiaircraft, model 1917	26	85	85
Sights for antiaircraft carriages	27	63	519
Sights, telescope, for antiaircraft carriages	66	255	519
Sights, bomb	100	100	100
Sights, bore	1,425	4,448	4,591
Sights, panoramic, for machine guns	--------	525	10,510
Sights, panoramic, model 1917	2,236	3,210	16,300
Sights, telescopic, rifle, model 1913	4,000	4,000	4,000
Sights, telescopic, 37-mm. infantry gun	142	578	4,100
Sights, telescopic, 37-mm. tank gun	50	386	6,576
Sights for 75-mm. gun	221	1,100	4,632
Sights for 3-in. gun, model 1916	455	591	1,456
Sights for 4.7-in. gun	70	251	786
Telescopes, battery commander's	2,872	3,750	10,509
Telescopes, battery commander's, tripod	9,858	15,730	15,730

Explosives, Propellants, and Artillery Ammunition

EXPLOSIVES

The total war production of high explosives amounted to 375,656,000 pounds. Included therein were—

	Pounds		*Pounds*
TNT (trinitrotoluol)	101,775,000	Ammonium picrate	12,408,000
Tetryl	1,249,000	Ammonium nitrate	95,451,000
Picric acid	38,244,000		

The Ordnance Department also made extensive use of amatol, a mixture of TNT and ammonium nitrate.

In theory, the following scheme was observed in loading: TNT for shell up to and including those of the 4.7-in guns; amatol for shell of calibers between 4.7-in. and 9.5-in., including the latter;

ammonium picrate for shell of 10-in. caliber and larger. Actually, amatol was loaded into shell of all sizes, and so was TNT. However, the use of ammonium picrate conformed to the original loading scheme.

PROPELLANTS

Prior to Nov. 14, 1918, American powder plants produced a total of 273,115,000 pounds of smokeless powder and 10,796,000 pounds of black powder.

At the Armistice the following quantities were on hand: smokeless powder, approximately 200,000,000 pounds; black powder, approximately 6,850,000 pounds.

Up to this time, about 33,000,000 pounds of smokeless powder had been assembled into fixed ammunition, some 32,300,000 pounds into bags, properly packed for shipment; and 19,741,500 pounds of powder had been loaded into small-arms ammunition.

DELIVERIES FROM LOADING PLANTS UP TO NOV. 30, 1918

Artillery ammunition	Completed rounds	Other items	Number
37-mm.	4,061,859	Trench mortar shells	805,869
75-mm., high explosive	4,742,447	Boosters	11,203,588
75-mm., shrapnel	8,385,318	Point detonating fuses	14,592,043
3-in., high explosive	806,171	Time fuses	10,663,950
3-in., shrapnel	2,118,861	Base fuzes	3,463,713
4.7-in., high explosive	140,657	Hand grenades	7,686,019
4.7-in., shrapnel	320,019	Rifle grenades	9,197,452
6-in., high explosive	112,264	Drop bombs	51,350
155-mm., high explosive	784,274	Propellent charges for gun and howitzer ammunition	2,775,000
8-in., high explosive	306,156		
8.2-in., high explosive	150,190	Propellent charges for 3-in. trench mortar shell	21,076,869
10-in., high explosive	74,468		

Tanks

The French developed the light 6-ton, 2-man Renault tank. In the United States, the Ford Motor Company originated during the summer of 1918 a 3-ton, 2-man tank. An agreement was reached with the British for the manufacture of a 35-ton tank (known as the Anglo-American Mark VIII) with an assembling plant in France, the American components representing about 43 percent of the value of the tank, which was $35,000. At the Armistice, the manufacture of an all-American Mark VIII was about to begin.

DELIVERIES

	Accepted to—		Number ordered	Remarks
	Nov. 11, 1918	End of War		
3-ton	15	15	15,015	Government obligations for tanks amounted to $175,000,000, inclusive of cost of expanding factories.
6-ton	64	950	4,440	
Anglo-American Mark VIII	1	1	1,500	
American Mark VIII	--	100	1,450	
Total	80	1,066	22,405	

Automatic Weapons

The total production between Apr. 6, 1917, and the Armistice amounted to 181,622 machine guns and machine rifles.

OUTPUT IN UNITED STATES AND CANADA

Type	1917	1918	1919	Total
Ground machine guns:				
Browning, heavy	------	56,608	15,892	72,500
Vickers, field	2,031	10,094	------	12,125
Colt	2,500	316	------	2,816
Lewis, field	2,209	291	------	2,500
Lewis, caliber .303	750	300	------	1,050
Aircraft machine guns:				
Browning	------	580	1,031	1,611
Marlin	12	37,988	------	38,000
Lewis, flexible	256	40,047	------	40,303
Vickers, caliber .30	------	2,476	1,824	4,300
Vickers, 11-mm.	------	1,238	1,420	2,658
Tank machine guns:				
Browning	------	4	1,802	1,806
Marlin	------	1,470	1,176	2,646
Automatic rifles:				
Browning, light	------	69,960	32,165	102,125
Airplane cannon:				
37-mm. semiautomatic motor cannon	------	------	100	100
Total number	7,758	221,372	55,410	284,540

Service Rifles

Type	1917	1918 to Nov. 9	Total output	Remarks
U. S. Rifle, caliber .30, model of 1903, known as the Springfield rifle	128,475	184,403	312,878	Eddystone, Winchester, and Ilion plants produced the Enfield, while Springfield Armory and Rock Island Arsenal turned out the Springfield.
U. S. Rifle, caliber .30, model of 1917, known as the Enfield rifle	302,887	1,890,542	2,193,429	
Total number	431,362	2,074,945	2,506,307	

Pistols and Revolvers

Type	1917	1918	Total output
Pistols, Colt, caliber .45, automatic:			
Produced by the Colt's Patent Firearms Manufacturing Co	58,500	367,000	425,500
Produced by the Remington Arms-Union Metallic Cartridge Co	------	13,152	13,152
Revolvers, caliber .45, double-action:			
Produced by the Colt's Patent Firearms Manufacturing Co	20,900	130,800	151,700
Produced by the Smith and Wesson Co	9,513	143,798	153,311
Total number	88,913	654,750	743,663

Small Arms Ammunition

Type	Production Apr. 6, 1917, to Nov. 30, 1918 (rounds)	Remarks
Rifle, caliber .30:		
Service ammunition	2,604,411,400	The production of ammunition for all small arms, including machine guns, rifles, pistols, and revolvers, reached a total of 3,940,682,744 rounds on Jan. 31, 1919,
Tracer cartridges	28,302,000	
Incendiary cartridges	1,574,148	
Armor-piercing cartridges	6,726,900	
Machine gun, 8-mm.	269,631,800	
Pistol and revolver, caliber .45	334,642,700	
Total	3,245,288,948	

Trench-Warfare Matériel

Type	Completed to—		Shipped overseas	Remarks
	Nov. 8, 1918	Feb. 1, 1919		
Hand grenades: (1)				(1) All figures, with the exception of those for grenades sent overseas, represent unloaded grenades.
Dummy	415,870	415,870	----------	
Practice	3,605,864	3,605,864	----------	
Defensive	17,477,245	25,312,794	516,533	
Offensive	5,359,321	7,000,000	173,136	
Gas	635,551	1,501,176	249,239	
Phosphorus	505,192	521,948	150,600	
Thermit	----------	----------	----------	
Rifle grenades	(2) 20,000,000	----------	685,200	(2) Ready for loading.
Toxic gas equipment:				
Livens projector barrels	63,000	----------	----------	
Livens projector base plates	100,000	----------	----------	
Livens projector drums	73,700	----------	----------	
Gas set cylinders	24,688	----------	----------	
Gas set valves	9,765	----------	----------	
Gas set nozzles	23,753	----------	----------	
Trench mortars:	*Nov. 11, 1918*			
3-in	1,609	1,830	843	
4-in	444	778	----------	
6-in	368	500	48	
240-mm. (9.45-in.)	29	30	----------	
Trench mortar shell: (3)				(3) All figures, with the exception of those for trench mortar shell sent overseas, represent unloaded shell.
3-in., live (rounds)	3,136,275	3,741,237	157,785	
3-in., practice (rounds)	607,178	782,340	----------	
4-in., gas (rounds)	----------	212	----------	
6-in., live (rounds)	292,882	492,404	----------	
240-mm. (9.45-in.) (rounds)	67,829	131,124	----------	

Type	Completed to—		Shipped overseas	Remarks
	Nov. 8, 1918	Feb. 1, 1919		
Pyrotechnics:	*Nov. 8, 1918*		*Ordered*	
Signal rockets	437,101	544,355	615,000	
Position lights	1,187,532	1,670,070	2,072,000	
Rifle lights	55,000	55,000	55,000	
Signal lights	2,661,008	2,710,268	3,110,000	
V. B. cartridges	110,000	673,200	1,215,000	
Very cartridges			300,000	
Smoke torches	31,000	188,102	500,000	
Wing-tip flares	70,000	100,865	112,000	
Airplane flares	2,100	8,000	50,083	

Miscellaneous Ordnance Equipment [1]

Articles	Total number delivered (2)	Total ordered	Remarks
Helmets and armor:			(1) Under this category are included the many articles the soldier carried with him, and which added to his comfort, safety, and efficiency as a fighter. The articles enumerated were selected at random from thousands of miscellaneous items produced during the war, it being impracticable to mention here the entire range of equipment manufactured.
Helmets	2,707,217	7,000,000	
Body armor (sets)	5,000		
Bayonets and trench knives:			
Bayonets, Enfield	2,507,038		
Bayonets, Springfield	384,333		
Bayonet scabbards	3,480,000		
Trench knives and scabbards, model 1917	123,000		
Trench knives and scabbards, mark I	119,424	1,232,780	
Textile equipment:			
Canteen covers	4,500,000		
Haversacks	4,500,000		
Bags of all kinds	2,250,000		
Carriers for entrenching shovels, axes, and picks	3,750,000		(2) Figures in this column are approximate only.
Breech-lock covers for rifles	4,450,000		
First aid pouches	4,750,000		
Pouches for small articles	2,000,000		
Entrenching tools:			
Axes	661,690	1,200,000	
Picks	727,000		
Shovels	1,800,000		
Wire cutters	5,000		
Horse equipment:			
Cavalry saddles	234,689		
Field artillery saddles	134,092		
Mule saddles	15,287		
Saddle bags	482,459		
Spur straps	2,843,092		
Saddle blankets	809,541		
Curry combs	1,000,000		

MATERIEL SHIPPED OR DELIVERED TO AMERICAN EXPEDITIONARY FORCES

(Principal Items Only)

Articles	Shipments to Nov. 15, 1918	British and French deliveries to Nov. 11, 1918	Total	Remarks
1	2	3	4	5
75-mm. guns	143	1,888	2,031	Totals in column 2 include the following quantities sunk by enemy action: 380,000 rounds 75-mm. shrapnel. 17,000 rounds 4.7-in. shrapnel. 1,000 Browning machine guns. 700 rifles. 31,410,000 rounds rifle and m. g. amm. 2,837,000 rounds pistol and revolver amm. 100 75-mm. caissons, 30 tractors (10-ton). British and French deliveries (column 3) do not include guns lent temporarily to the U. S., and amm. furnished direct by the French and British to troops. They also exclude guns shipped to the U. S. for training purposes or turned over from British orders in the U. S., viz.: 34 guns, 75-mm. 7 howitzers, 155-mm. 1 gun, 155-mm. 4 howitzers, 8-in. 4 howitzers, 9.2-in. (a) without recuperators.
4.7-in. guns	64		64	
155-mm. howitzers		747	747	
5-in. seacoast guns	26		26	
6-in. seacoast guns	72		72	
155-mm. guns	16	(a) 226	242	
8-in. howitzers	96	141	237	
9.2-in. howitzers		37	37	
8-in. seacoast guns, railway mts	3		3	
14-in. navy guns	8		8	
75-mm. antiaircraft guns	26	52	78	
Total guns	454	3,091	3,545	
75-mm. ammunition	8,595,000	2,614,000	11,209,000	
4.7-in. ammunition	242,000		242,000	
155-mm. howitzer ammunition	199,000	1,126,000	1,325,000	
155-mm. gun ammunition		39,000	39,000	
5 and 6-in. seacoast gun ammunition	19,420		19,420	
8-in. howitzer shell		311,000	311,000	
9.2-in. howitzer shell	10,000	104,000	114,000	
14-in. gun shell	1,000		1,000	
Total artillery ammunition	9,066,420	4,194,000	13,260,420	
Rifles	1,800,000		1,800,000	
Pistols and revolvers	615,000		615,000	
Machine guns	49,350	4,158	53,508	
Machine rifles	38,000	33,915	71,915	
Rifle and machine gun ammunition	1,629,300,000	95,900,000	1,725,200,000	
Pistol and revolver ammunition	233,848,000		233,848,000	
Grenades	1,745,000	5,508,000	7,253,000	
Caissons (75-mm. and 155-mm.)	5,000	2,676	7,676	
Tractors	1,547	348	1,895	
Tanks	25	341	366	

TRAINING

The ordnance schools, described on pp. 341-343 graduated the following personnel, both commissioned and enlisted:

Courses	*Number of graduates*
Supply courses:	
Colleges	3,244
Arsenals	1,985
Field depots	6,000
Camp Hancock, Ga.	2,000
Camp Meade, Md.	268
Inspection schools: A total of thirteen	1,552
Maintenance and Repair Courses:	
Total number graduated prior to consolidation	7,540
Raritan Arsenal School	3,546
Aberdeen Ordnance Training:	
School	466
Railway artillery school	174
Instrument Repair School, Frankford Arsenal, Pa.	136
Springfield Armory	353
Camp Hancock Training School, less supply students	23,367
Total	50,631

DEMOBILIZATION

PERSONNEL

Officers

Emergency officers were discharged as soon as their services in connection with the settlement of claims and the work of the Salvage Board could be spared.

The commissioned strength as of June 30, 1920, consisted of 1 major general, 16 colonels, 17 lieutenant colonels, 103 majors, 230 captains, 125 first lieutenants, 14 second lieutenants—a total of 506 officers, of whom 471 were engaged in ordnance work and 35 detailed with other branches.

Enlisted Men

The enlisted strength as of June 30, 1920, was 3,609, which was 891 short of the authorized strength of 4,500. Of the latter, 297 men were allotted to 11 light mobile ordnance repair shops, 221 to the 12th Provisional Light Mobile Ordnance Repair Shop in Germany, 75 to the American forces in Siberia, 235 to five heavy mobile ordnance repair shops, 386 to nine provisional ordnance detachments, 330 to ordnance depot companies, 1,636 to line organizations and coast defenses, and the balance to other ordnance facilities and organizations.

PRODUCTION

Curtailment

Curtailment of munitions production began Nov. 11, 1918. Forging work was stopped immediately and, in general, no further production of raw or semi-finished material was allowed. Shell-machining plants continued operation until Jan. 31, 1919. Manufacturers of gun carriages, tanks, and special instruments were allowed to deliver only limited numbers of completed units. Some of the more elaborate units under manufacture from 12 to 18 months were completed and delivered as late as June 1, 1919. District boards made definite recommendations as to date or rate of production suspension.

Liquidation

This part of demobilization involved disposal of plants, machinery, equipment, finished and semi-finished material, and surplus raw materials; refund by manufacturers of public moneys advanced to them; and settlement with American industry for obligations incurred by the Government under contract. The greater part of this work consisted in the settlement of claims and salvage operations incident thereto.

SETTLEMENT OF CLAIMS

On Nov. 2, 1918, the Ordnance Claims Board was established to settle claims arising under contracts executed by the Ordnance Department. On Nov. 15, this Board took over the functions of the Board of Review—appointed Oct. 26, 1918, charged with the review of projects involving new industrial facilities — and assumed settlement of all claims arising from suspension or cancellation of contracts during the post-armistice period. On Nov. 25, 1918, the Comptroller of the Treasury ruled that approximately 7,500 contracts in the so-called proxy class were invalid, except in so far as payment might be made for articles actually delivered. On December 14, 1918, with a view to decentralizing settlement of claims, boards were established in all Ordnance districts; at Rock Island, Frankford, Watertown, Springfield, and Picatinny Arsenals; and in the Nitrate Division. Liquidation of wartime production of munitions with fairness to all parties concerned rested with these claims boards.

On Nov. 1, 1918, there were 13,233 contracts in operation, carrying a total of $3,198,322,836.

On Nov. 11, 1918, outstanding contracts were:

District	Number of contracts	Amount
Baltimore	1,579	$111,127,350
Boston	901	54,422,825
Bridgeport	2,046	323,932,034
Chicago	914	322,094,499
Cincinnati	337	139,726,845
Cleveland	672	192,136,308
Detroit	627	254,282,827
New York	2,862	461,479,724
Philadelphia	1,126	468,000,000
Pittsburgh	533	195,338,025
Rochester	425	151,815,893
St. Louis	307	113,675,363
Toronto	214	163,000,000
Total	13,043	2,951,031,693

Settlement of claims averaged about 12 percent of the uncompleted portion of the contracts.

On Jan. 20, 1919, the War Department Claims Board was established, and the district claims boards thereby removed from the jurisdiction of the Ordnance Department. No change in the existing organization was made.

On Mar. 2, 1919, when legislation was enacted which permitted informal contracts to be validated by the various claims boards of the War Department, the Ordnance Claims Board took action and expedited payments.

The total of all claims filed was $2,672,717,397, of which the Claims Board approved $514,187,973.

SALVAGE OPERATIONS

On Nov. 19, 1918, an Ordnance Salvage Board was established to dispose, by sale or storage, of all manufacturing materials, equipment, and buildings, which were or would become the property of the United States through the termination of Ordnance Department contracts. A district salvage board was convened in each of the 13 district ordnance offices. Each board had a committee which became an operating and selling organization for the Washington office.

The principal tasks of the Salvage Board was to dispose of surplus ordnance property to the best advantage of the Government, without injuring industry by dumping vast quantities of supplies.

On Nov. 11, 1918, the Ordnance Department had a surplus of materials and components amounting to some $237,000,000. Likewise, buildings and equipment of 326 projects, where plant facilities had been furnished the contractors by the government, awaited action by the Salvage Board. In addition, a large amount of equipment to which title had been taken in settlement of con-

tractors' claims, was turned over to the Board. The total value of plant facilities was estimated at about $500,000,000.

By July 31, 1919, the Board had disposed of property to the value of $2,500,000 and realized $2,629,000 from the sale of buildings and manufacturing equipment.

On Nov. 26, 1919, the Assistant Secretary of War reserved to the Office of the Director of Sales the disposal of the following ordnance projects:

Baltimore District: Saltville, Va., Fraser Brace Co.	$2,097,675.00
Boston District:	
Lowell, Mass., United States Cartridge Co.	1,980,691.54
Orange, Mass., New Home Sewing Machine Co.	835,388.51
Worcester, Mass., United States Light & Heat Corporation	85,028.41
Swanton, Mass., Remington Arms U. M. C. Co.	47,136.44
Worcester, Mass., Standard Steel Car Co.	1,059,753.45
Pawtucket, R. I., Potter & Johnson Co.	1,331,032.89
Boston, Mass., Mead Morrison Co.	302,866.78
West Barrington, R. I., O'Bannon Corporation	275,000.00
Bridgeport District:	
Bridgeport, Conn., Remington Arms U. M. C. Co.	9,306,403.40
Springfield, Mass., National Operating Corporation	32,582.48
New Haven, Conn., Marlin-Rockwell Corporation	1,060,027.71
Waterbury, Conn., Scoville Manufacturing Co.	1,300,000.00
New Britain, Conn., New Britain Machine Tool Co.	218,984.99
Bridgeport, Conn., Locomobile Co. of America	1,068,213.98
New Britain, Conn., Landers, Frary & Clark	358,993.17
Chicago District:	
Racine, Wis., DuPont Engineering Co.	2,000,000.00
Kensington, Ill., American Clay Machinery Co.	980,000.00
Indiana Harbor, Ind., American Steel Foundry	730,105.07
Chicago, Ill., Cribben & Sexton Co.	839,741.99
Peru, Ill., Illinois Zinc Co.	391,388.70
Cuba City, Wis., National Zinc Sep. Co.	482,435.26
Chicago, Ill., Otis Elevator Co.	1,627,466.73
Hegewisch, Ill., Pressed Steel Car Co.	849,941.47
Chicago, Ill., Pullman Co.	849,246.58
Moline, Ill., Root & Vandervoort	79,915.79
Indiana Harbor, Ind., Standard Forgings Co.	1,840,012.76
Hammond, Ind., Standard Steel Car Co.	3,733,526.69
South Bend, Ind., Studebaker Corporation	194,222.08
Stillwater, Minn., Twin City Forge & Foundry Co.	814,968.20
New Diggins, Wis., Wisconsin Zinc Co.	326,174.99
Chicago, Ill., Winslow Bros.	1,095,059.03
Cincinnati District:	
Ancor, Ohio, Air Nitrates Corporation (United States, No. 4)	5,484,656.32
Dayton, Ohio, International Clay Machinery Co.	82,371.53
Indianapolis, Ind., Premier Motor Corporation	141,124.46
Cincinnati, Ohio, Peters Cartridge Co.	1,872,374.41
Dayton, Ohio, National Cash Register Co.	611,589.97
Dayton, Ohio, Recording & Computing Mach.	150,000.00

Beech Bottom, W. Va., Whitaker-Glassner Co.	115,924.96
Dayton, Ohio, Dayton Products Co.	270,598.12
Middletown, Ohio, American Rolling Mill Co.	184,801.41
Hamilton, Ohio, American Rolling Mill Co.	678,912.60
Fairmont, Ind., Bell Manufacturing Co.	12,000.00
Dayton, Ohio, Dayton Steel Foundry Co.	3,000.00
Marion, Ind., Indiana Fiber Products Co.	25,371.26
Cleveland District:	
Erie, Pa., Alliance Gas & Power Co.	124,977.67
Findley, Ohio, Grant Motor Car Co.	795,595.45
Cleveland, Ohio, Hydraulic Pressed Steel Co.	1,766,099.67
Bedford, Ohio, the McMyler Interstate Co.	225,366.00
Cleveland, Ohio, the Van Dorn Iron Works Co.	273,824.89
Toledo, Ohio, Willys Overland Co.	409,144.52
Detroit District:	
Detroit, Mich., Detroit Shell Co.	2,369,000.00
Detroit, Mich., Dodge Bros.	9,260,000.00
Grand Rapids, Mich., Semet-Solvay Co.	3,243,762.96
Lansing, Mich., Reo Motor Car Co.	256,000.00
New York District:	
Mt. Union, Pa., Aetna Explosives Co.	181,755.66
Emporium, Pa., Aetna Explosives Co.	48,570.42
Bound Brook, N. J., Calco Chemical Co.	3,729,075.00
Dunnellen, N. J., Hall Print Press Co.	137,900.00
New Brunswick, N. J., Hercules Engraving Co.	28,456.00
Brooklyn, N. Y., Deep Drawn Metal Co.	233,116.00
Elizabethport, N. J., Singer Manufacturing Co.	5,098,022.00
Philadelphia District:	
Bethlehem, Pa., Bethlehem Steel Co. (housing)	715,000.00
Port Penn, Del., Marlin-Rockwell Loading Co.	3,366,150.00
Philadelphia, Pa., Midvale Steel & Ordnance Co.	3,460,763.75
Philadelphia, Pa., Barrett Manufacturing Co.	1,065,171.40
Philadelphia, Pa., Lanston Monotype Co.	150,000.00
Milton, Pa., Milton Manufacturing Co.	350,000.00
Burnham, Pa., Standard Steel Works	1,558,819.86
Hazleton, Pa., Worthington Pump & Machinery Co.	1,855,926.30
Rochester District: Utica, N. Y., Savage Arms Corporation	168,272.83
St. Louis District:	
Little Rock, Ark., Everly M. Davis Chemical Corporation	6,745,587.51
Springfield, Ill., Western Cartridge Co.	4,775.35
East Alton, Ill., Western Cartridge Co.	717,727.06
St. Louis, Mo., Wagner Electric Manufacturing Co.	485,166.88
Richmond, Calif., Standard Oil Co.	950,800.00
St. Louis, Mo., Scullin Steel Co.	1,373,598.84
St. Louis, Mo., Laclede Gas Light Co.	3,604,523.88
Vernon, Calif., General Petroleum Corporation	1,969,924.82
St. Louis, Mo., Curtis Manufacturing Co.	636,623.30

On June 19, 1920, in a supplementary list, the following additional manufacturing plants were reserved for disposal to the Office of the Director of Sales:

Symington Forge Co., Rochester, N. Y., Ordnance.
Symington Machine Co., Rochester, N. Y., Ordnance.

Evans Engineering Co., Old Bridge, N. J., Ordnance.
California Loading Co., Old Bridge, N. J., Ordnance.
Bethlehem Loading Co., Mays Landing, N. J., Ordnance.
Scituate Proving Grounds, Scituate, Mass., Ordnance.
DuPont Engineering Co., Penniman, Va., Ordnance.
DuPont Engineering Co., Seven Pines, Va., Ordnance.
Bag-filling plant, Woodbury, N. J., Ordnance.
Old Hickory powder plant, Jacksonville, Tenn., Ordnance.
Bag-loading plant, Tullytown, Pa., Ordnance.

Up to and including June 30, 1920, surplus ordnance property had been disposed of as follows:

Method of disposal	By committee on sale of materials	By committee on sale of buildings and equipment
Sales	$121,586,176.42	$28,757,287.74
Transfers to War Department bureaus	51,110,287.61	50,367,733.24
Transfers to Navy Department	339,333.72	3,049,670.65
Transfers to other Federal activities	826,523.31	2,098,546.77
Total	173,862,321.06	84,273,238.40

According to the foregoing, the Ordnance Salvage Board, by this time, had disposed of a total of $258,135,559.46 worth of property at an average rate of slightly over $620,000 per day. The expense involved in the disposal of this property amounted to approximately 5 percent of the total value mentioned herein.

Disposal of Munitions in France

After Nov. 11, 1918, the Ordnance Department collected in France 44,985 tons of artillery ammunition, 13,665 tons of gas ammunition, and 5,016 tons of bombs, grenades, pyrotechnics, and trench-warfare matériel, all of which was declared surplus. These munitions were finally included as part of the movable property sold to the French Government by the United States Liquidation Commission for $400,000,000.

SECTION 18

PROVOST MARSHAL GENERAL'S DEPARTMENT

ORIENTATION

In 1863, a Provost Marshal General's Bureau was established, headed by the Provost Marshal General in Washington, and with an assistant provost marshal general for every Federal State, and a provost marshal for every Congressional district. The Bureau was charged, by statute, with raising the necessary armed forces for the conduct of the war, either by voluntary enlistment or draft. However, the statute was emasculated by a provision which allowed drafted men to hire substitutes. As a

result, only 46,347 men out of 776,829 conscripts actually joined the colors during the Civil War. Moreover, the enforcement of the draft provoked riot and protest throughout the Nation and reduced the city of New York to a state of anarchy.

The Bureau was discontinued Aug. 28, 1866, and all outstanding matters were transferred to the Adjutant General's Office for liquidation. Thereafter, the post of Provost Marshal General was not revived until the enactment of the Selective Service Law May 18, 1917.

FUNCTIONS

To direct the process of selecting men for induction into the military service, from the initial registration to the actual arrival of the men in camp. This duty included the examination of registrants; their classification in groups; the rendering of decisions in cases involving claims for exemption; the handling of appeals from the rulings of local boards; and the entraining of men for camp.

CHIEFS

1917		
May	22	Brig. Gen. Enoch H. Crowder, Provost Marshal General
Oct.	6	Maj. Gen. Enoch H. Crowder, Provost Marshal General
1919		
Mar.	18	Col. John H. Wigmore, Acting Provost Marshal General
May to July 15	8	Maj. Winfield S. Price, Acting Provost Marshal General

ORGANIZATION AND DEVELOPMENT

Preliminary studies concerning the draft were instituted when American participation in the war seemed inevitable. The general plan of organization was worked out in the Office of The Judge Advocate General and was approved Apr. 10, 1917.

The administration of the selective service system was based on the principle of supervised decentralization. Under the direction of the Provost Marshal General, the district and local boards, explicitly created by the Act of 1917, were linked through the State executives. The draft machinery consisted of the following coordinated parts, operating regularly and almost constantly: the Provost Marshal General; the State governors and draft executives; the district boards; the industrial advisers; the local boards; the Government appeal agents; the medical advisory boards; the legal advisory boards; the boards of instruction; and civic associations casually contributing volunteer assistance.

OFFICE OF THE PROVOST MARSHAL GENERAL

1917

Tentative organization was achieved May 10. The office originally included an executive officer, a disbursing officer, a committee to prepare registration regulations, and these Subdivisions: Quotas and Credits; Appointment; and Correspondence.

1918

As in other wartime agencies, expansion and reorganization became necessary. By Oct. 31, the old divisions had disappeared and 13 new ones had replaced them, with functions as follows:

Administrative Division

To have cognizance of all questions relating to the personnel of local and district boards, legal and medical advisory boards, Government appeal agents, and State headquarters, including complaints from official sources, resignations, removals, increased membership of boards, appointments, rank of Army officers detailed as disbursing agents, and board activities.

Aliens Division

To handle questions relating to the classification and deferment of aliens, declarants of intention to become naturalized, recruiting by foreign powers (other than those under treaties), citizenship, passports, and international law.

Appeals Division

To make recommendations for the decision of selective service cases sent on appeal to the President.

Auxiliary Agencies and Statistics Division

To handle matters relating to: the "Industrial Index" (a statistical summary of the occupations of registrants); the local boards of instructions set up to inform and instruct men called into the military service prior to their arrival in camp; and the Students' Army Training Camps. Also to perform statistical and other work for the yearly report of the office.

Classification Division

To have jurisdiction over all questions arising under the Selective Service Act that relate to classification, reclassification, transfers, the apprehension and disposition of delinquents and deserters, furloughs, the placing of registrants on the "Emergency Fleet Classification List," and, in general, questions relating to the status of registrants both before and after induction.

Finance Division

To have cognizance of all matters covered by Selective Service disbursement regulations.

Information Division

To answer all requests for general information, attend to general correspondence not otherwise assigned, and handle personal calls upon the office.

Inspection and Investigation Division

To have jurisdiction over all information concerning the activities of the local and district draft boards received from sources other than official, investigate complaints against boards or draft executives, and supervise the system of national inspectors.

Law Division

To handle general questions of law in connection with the Selective Service system, except those relating to citizenship, alienage, and international law. Included were matters involving amendments, changes, or interpretations of the Selective Service Regulations and matters relating to the jurisdiction,

powers, and duties of boards and draft officers generally, including questions of procedure.

Medical Division

To handle matters relating to rules and regulations covering physical requirements and the examination of registrants and, in cooperation with the Administrative Division, matters regarding the medical aides assigned to State headquarters and the local medical advisory boards.

Mobilization Division

To handle matters relating to allocation and to the accomplishment of individual inductions under the Selective Service Act, and to confer with the other divisions of the office on questions of interpretations, modifications, changes, or suspensions of the Selective Service Act and Regulations.

Publication Division

To have cognizance of all matters having to do with the publication of forms and documents and their distribution to the Selective Service officials.

Registration Division

To have jurisdiction over all matters relating to registration under the Selective Service Act, including the giving of serial and order numbers; the making out and filing of questionnaires; listings on the "classification list;" the "Work or Fight" regulations; registration and classification under treaty provisions; matters pertaining to the personnel of the industrial advisers; and, in general, matters affecting registrants up to and including the filing of questionnaires.

FIELD ORGANIZATION

The Selective Service Act authorized the President "to utilize the services of any or all departments and any or all officers or agents of the States, Territories, and the District of Columbia," and required all persons so designated "to perform such duty as the President shall order or direct."

The State Executives

GOVERNORS

Questions involving exemptions and deferred classification were within the exclusive jurisdiction of local and district boards, subject to review by the President only. All other matters arising in the execution of the selective draft were under the general supervision and direction of the governors within their States. In order to lighten the burden of these new responsibilities, each governor was allowed to charge his adjutant general with the administration of the details of the system.

STATE HEADQUARTERS

These headquarters established and maintained registration, selection, and auxiliary boards. Under the Selective Service Act, the President appointed their members, but appointments, re-

movals, and substitutions were made only upon the recommendations of the governors.

In addition to this primary task, State Headquarters was charged with these duties: the handling of delinquency cases; the purchase and distribution of supplies and paying for them; the apportionment of quotas, the allotment of calls, the routing and entrainment of registrants, and the performance of other duties relating to induction and mobilization; the conduct of correspondence; the assignment of serial numbers to late registrants, and the cancellation of registrations; the general supervision and direction of the work of the selective service boards, including medical advisory boards; the interpretation of the regulations, involving correspondence with the Office of the Provost Marshal General; the selection and nomination of members of all the various selective service boards, the investigation of charges against boards or members thereof, and the maintenance of a sound morale throughout the system; the preparation of reports called for by the Provost Marshal General's Office; the organization and supervision of boards of instruction; the performance of all duties required of them as commanders of the force of enlisted men assigned to headquarters and to the officers of the various boards; cooperation with State councils of defense, the War Risk Insurance Bureau, and other organizations or bureaus in war work of all kinds.

STATE INSPECTORS

Each governor was allowed to employ a limited number of State inspectors for contact with the various draft agencies.

District Boards

There were 155 of these boards. The original membership totaled 780; it was later increased to 1,089. Each board was composed of a minimum of five members familiar with local conditions: one representing agriculture; one, industry; one, labor; a lawyer; and a physician.

The boards reviewed decisions of local boards, upon appeal, and heard and determined, as courts of first instance, all questions of accepting for or excluding from the draft persons engaged in industry, agriculture, or other necessary occupations. In practice, these agencies provided a check on irregularities by local boards and guarded the industrial and agricultural interests of the Nation.

Industrial Advisers

Authority was granted each district board by the Act of Aug. 31, 1918, to appoint three industrial advisers, one of whom was

to be nominated by the Department of Labor, one by the Department of Agriculture, and one by the board itself.

These advisers conferred with responsible representatives of industry and agriculture and informed them of their right to file deferred-classification claims for registrants in their employ. Advisers also furnished the district boards with information that might prove useful in the work of classification.

Local Boards

Except for the initial registration of June 5, 1917, local boards mobilized the selectees as ordered ,and had charge of every detail in the transit from home to camp. They constituted the cornerstone of the Selective Service system.

Boards were established in each county or similar subdivision of each State. Likewise, every city of more than 30,000 population had one board for each 30,000. There were in operation 4,648 local boards, including those in the territories, with 14,416 members.

GOVERNMENT APPEAL AGENTS

One or more persons were assigned to each local board by the governors to take appeals for and on behalf of the United States. They were charged with protecting the rights of the Government and of the registrants, and especially with safeguarding the rights of such persons who, due to nonculpable ignorance, failed to make appeals. These agents, of whom there were 4,679, also assisted the boards in legal matters.

Medical Advisory Boards

Board members were nominated by the Governor and appointed by the President. They made physical examinations of registrants whose cases had been appealed to them by the registrant, by a Government appeal agent, or on motion of a local board. These examinations revealed many obscure physical defects in registrants and also exposed malingerers, thus materially reducing rejections at mobilization camps.

The boards consisted of three or more members. The desired minimum included the following specialists: internist; eye, ear, nose, and throat specialist; orthopedist; surgeon; psychiatrist; radiographer; and dentist. There were 1,319 boards, with a total membership of 9,577.

Legal Advisory Boards

The boards were nominated by the Governor and appointed by the President. Associate members were appointed by the permanent legal advisers. The boards were charged with these duties:

to advise registrants of the true meaning and intent of the Selective Service Law and Regulations; to assist registrants in making full and truthful answers to questionnaires; and to aid in the just administration of the law.

There were 3,646 legal advisory boards, with 10,915 permanent and 108,367 associate members.

Boards of Instruction

Members of these boards maintained intimate contact with the selectees of their community, to secure cheerful and intelligent acceptance of military service, especially on joining the colors. Appointments were made by the local draft boards.

A total of 2,952 instruction boards, with a membership of more than 16,000, was in operation.

Civic Cooperating Agencies

The following organizations, among others, contributed toward the smooth operation of the Selective Service system:

The American Red Cross. — Furnished canteen service for selectees at the various railroad stations along the route to camp.

The American Protective League.—Placed its entire membership at the disposal of the Department of Justice and of local boards, to locate delinquents and furnish useful information.

Representatives of the Press. — Kept registrants informed, through their printed space, of the duties required under the Selective Service Act.

The American Bar Association.—Assisted the Governor in the organization of legal advisory boards.

The American Medical Association.—Made the suggestion for medical advisory boards and assisted in their selection.

The National Dental Association.—Was instrumental in the expansion of the Preparedness League of American Dentists, which furnished free service to the selectees and other military personnel.

The Body of School Teachers in the United States.—Volunteered, under the guidance of the Bureau of Education, to assist in transcribing 9,000,000 occupational cards for the Industrial Index.

PERSONNEL

WASHINGTON OFFICE

1917

Upon organization, the administrative staff consisted of eight officers and a small clerical force, which at the end of October

reached a strength of 35 officers and 150 clerks. During Nov. and Dec., an additional 25 officers, assisted by 45 members of the District of Columbia Bar, were on temporary duty in the Appeals Division to brief the mass of cases appealed to the President.

1918

During the spring, a large accession to the clerical force was trained by 20 experts, loaned by the Director of the Census, to compile the Industrial Index.

TOTAL PERSONNEL EMPLOYED

On Oct. 31, 1918, the personnel, by categories, engaged in the administration of the Selective Service Law, both in Washington and in the field, was as follows:

	Categories	Number	Percent
1	Total personnel	193,117	100.00
2	Governors [1]	54	.03
3	Military personnel	4,004	2.07
4	Commissioned officers	192	.10
5	Enlisted men	3,812	1.97
6	Civilian personnel	189,059	97.90
7	Board members and other officials	57,104	29.57
8	Other civilians	131,955	68.33
9	Provost Marshal General's Office	429	.22
10	Commissioned officers	45	----------
11	National inspectors	12	----------
12	Civilians	343	----------
13	Enlisted men	29	----------
14	State headquarters	999	0.52
15	Governors [1]	54	----------
16	Military officers	147	----------
17	Civilians	624	----------
18	Enlisted men	174	----------
19	District boards	2,539	1.31
20	Members	1,039	----------
21	Industrial advisers	411	----------
22	Other civilians	944	----------
23	Enlisted men	145	----------
24	Local boards	43,579	22.57
25	Members	14,416	----------
26	Government appeal agents	4,679	----------
27	Additional examining physicians	12,039	----------
28	Other civilians	9,227	----------
29	Enlisted men	3,218	----------
30	Medical advisory boards	10,234	5.30
31	Members	9,577	----------
32	Other civilians	411	----------
33	Enlisted men	246	----------
34	Legal advisory boards	119,282	61.77
35	Members	10,915	----------
36	Associate members	108,367	----------
37	Boards of instruction	16,055	8.31

[1] Includes the Commissioners of the District of Columbia, Governor of Alaska, Hawaii, and Puerto Rico.

ACTIVITIES

THE SELECTIVE SERVICE LAW

In 1866, recommendations were made to the Secretary of War for the avoidance, in the future, of certain shortcomings that had manifested themselves in the draft system during the Civil War.

The following points were stressed: (1) registration by personal report of the citizen at a registration office, and not by a house-to-house census; (2) the determination of regional liability for manpower to be made by the place of residence of the citizen, and not by his casual place of registration; (3) the responsibility for furnishing quotas to be allotted to the several States, and not to the congressional districts, and the calculations of the quantities to be centralized at State headquarters; (4) substitutes to be forbidden; (5) bounties for volunteering to be forbidden; (6) short periods of service to be abandoned, and the duration of the war to be the uniform period of service; (7) State headquarters to have a supervising medical aide; and (8) State officials to have legal advisers on the administration of the law.

These lessons were heeded in the drafting of the Selective Service Act and the regulations governing its administration.

1917

The Selective Service Act of May 18 provided for a selective draft based upon liability to military service on the part of all male citizens, or male persons not alien enemies who had declared their intention to become citizens, between the ages of 21 and 30 years.

The President was authorized to utilize the service of any or all departments and any or all officers or agents of the United States and of the several States, Territories, and the District of Columbia, in the execution of the Selective Service Law.

1918

On May 17, the so-called "work or fight order" was promulgated requiring idle men, of draft age, to go to work or become available for immediate induction into military service. The Act of May 20 directed all men, who had reached the age of 21 since June 5, 1917 (date of first registration), to register so that the increasing demands of the military program could be met.

On Aug. 31, legislation was approved which extended the draft to all persons between 18 and 45 years of age, and authorized the President to require registration at subsequent intervals of those males who, from time to time, would reach the age of 18. This Act was intended to produce 2,000,000 additional inductions to satisfy the manpower demands from Oct. 1918 to June 1919.

REGISTRATION

Periods

Registrations were held as follows: The first, June 5, 1917; the second, June 5 to Aug. 24, 1918; and the third, Sept. 12 through Oct. 1918.

Total Registration

The ratio of each registration to the whole was as follows:

	Total registration	Number	Percent of total	Percent of total
1	Total of all three registrations	24,234,021	100.00	100.00
2	June 5, 1917—Sept. 11, 1918	9,925,751	40.96	
3	June 5—Aug. 24, 1918	912,564	3.77	
4	Sept. 12, 1918	13,395,706	55.27	
5	Alaska, Hawaii, and Porto Rico (3 series)	325,445		1.34
6	United States without Territories (3 series)	23,908,576	100.00	98.66
7	June 5, 1917—Sept. 11, 1918	9,780,535	40.91	
8	June 5—Aug. 24, 1918	899,279	3.76	
9	Sept. 12, 1918	13,288,762	55.33	

COLORED REGISTRANTS

Colored registrants, in all three regisrtations, numbered 2,290, 527, or 9.63 percent of total registration.

INDIAN REGISTRANTS

Indian registration totaled 11,803 for the first two registrations and 5,510 for the third. Prior to Sept. 11, 1918, 6,509 Indians were inducted, only 228 claiming deferment.

TOTAL REGISTRATION, INCLUDING REGISTRATION OF ALIENS AND ENEMY ALIENS, BY STATES

State	Total registration	Total alien registrants	German males (ages 18–45) registered June 5, 1917, to Sept. 12, 1918
Alabama	444,842	4,370	189
Arizona	94,310	37,609	357
Arkansas	365,904	2,235	329
California	839,614	231,280	7,735
Colorado	216,820	29,090	841
Connecticut	374,400	139,320	2,558
Delaware	55,277	8,175	184
District of Columbia	90,361	5,105	108
Florida	209,248	12,604	326
Georgia	549,235	3,514	177
Idaho	105,337	11,693	433
Illinois	1,574,877	318,039	14,801
Indiana	639,834	52,953	3,212
Iowa	524,456	35,125	4,459
Kansas	382,065	18,520	1,447
Kentucky	486,739	3,969	323
Louisiana	392,316	9,942	437
Maine	159,631	24,485	148
Maryland	313,489	23,467	1,963
Massachusetts	886,728	292,287	2,799
Michigan	873,383	211,105	10,675
Minnesota	541,607	86,485	4,887
Mississippi	344,724	1,752	69
Missouri	765,045	34,086	3,044
Montana	201,256	39,736	1,335
Nebraska	287,414	22,820	3,500
Nevada	30,808	9,530	218
New Hampshire	95,158	23,325	183
New Jersey	762,485	207,704	11,936
New Mexico	81,013	11,652	141
New York	2,511,046	784,439	36,609
North Carolina	482,463	2,700	47
North Dakota	160,292	20,748	1,124
Ohio	1,389,474	252,964	7,446
Oklahoma	435,668	9,014	449
Oregon	179,436	28,385	1,133
Pennsylvania	2,069,407	495,237	10,713
Rhode Island	134,515	41,617	429
South Carolina	307,350	3,358	92
South Dakota	145,706	11,319	1,458
Tennessee	474,347	2,984	141
Texas	990,522	87,868	2,799
Utah	103,052	18,129	527
Vermont	71,484	7,463	100
Virginia	465,439	8,531	256
Washington	328,466	65,336	2,125
West Virginia	325,266	29,318	646
Wisconsin	586,290	85,969	13,558
Wyoming	59,977	9,727	343
United States	23,908,576	----	----
Alaska	15,851	----	----
Hawaii	72,741	----	----
Puerto Rico	236,853	----	----
Grand Total	24,234,021	3,877,083	158,809

TOTAL REGISTRATION BY AGE GROUPS
[United States without Territories]

State	Total Registration	Registration, age 18	Registration, age 19 to 36	Registration, age 37 to 45
Alabama	444,842	27,084	332,162	85,596
Arizona	94,310	2,297	66,828	25,185
Arkansas	365,904	19,638	252,738	93,528
California	839,614	21,259	587,067	231,288
Colorado	216,320	7,790	147,516	61,514
Connecticut	374,400	11,304	259,881	103,215
Delaware	55,277	2,188	38,184	14,905
District of Columbia	90,361	3,620	58,422	28,319
Florida	209,248	9,949	143,487	55,812
Georgia	549,235	33,772	383,529	131,934
Idaho	105,337	3,731	71,869	29,737
Illinois	1,574,877	50,618	1,093,100	431,159
Indiana	639,834	23,798	436,003	180,033
Iowa	524,456	20,247	365,707	138,502
Kansas	382,065	15,578	259,887	106,600
Kentucky	486,739	25,309	332,935	128,495
Louisiana	392,316	20,549	276,870	94,897
Maine	159,631	5,740	105,494	48,397
Maryland	313,489	13,552	211,611	88,326
Massachusetts	886,728	27,384	592,554	266,790
Michigan	873,383	27,370	625,152	220,861
Minnesota	541,607	20,102	380,888	140,617
Mississippi	344,724	21,594	241,524	81,606
Missouri	765,045	29,971	527,196	207,878
Montana	201,256	4,130	146,536	50,590
Nebraska	287,414	11,309	202,108	73,997
Nevada	30,808	533	20,614	9,661
New Hampshire	95,158	3,476	62,749	28,933
New Jersey	762,485	25,292	618,888	118,305
New Mexico	81,013	3,322	59,069	18,622
New York	2,511,046	79,931	1,915,867	515,248
North Carolina	482,463	29,392	340,045	113,026
North Dakota	160,292	5,938	112,407	41,947
Ohio	1,389,474	44,984	960,853	383,637
Oklahoma	435,668	20,982	298,682	116,004
Oregon	179,436	5,724	116,269	57,443
Pennsylvania	2,069,407	73,531	1,405,179	590,697
Rhode Island	134,515	4,557	90,320	39,638
South Carolina	307,350	20,615	224,971	61,764
South Dakota	145,706	5,725	102,464	37,517
Tennessee	474,347	26,611	326,897	120,839
Texas	990,522	47,956	703,604	238,962
Utah	103,052	3,816	65,584	33,652
Vermont	71,484	2,819	47,421	21,244
Virginia	465,439	27,232	321,789	116,418
Washington	328,466	9,140	194,625	124,701
West Virginia	325,266	15,183	221,411	88,672
Wisconsin	586,290	22,335	417,036	146,919
Wyoming	59,977	1,624	43,834	14,519
Total	23,908,576	940,601	16,809,826	6,158,149

SELECTION PROCESS

Serial Numbers

Each local board prepared a separate and independent list, numbered from 1 upward, from which every registrant was as-

signed a number. By citing his local board name and his serial number, any registrant could be identified.

Order Numbers

To determine the sequence in which registrants were to be called, a single national drawing or lottery was instituted. Each of the three registrations required a drawing. These were held in Washington, D. C., July 20, 1917, and June 27 and Sept. 30, 1918, respectively.

A "master list," prepared in the Provost Marshal General's Office, published all numbers in the exact order in which they were drawn. The local boards, following the "master list," prepared their own final list, showing, besides names, both registration and order numbers, thus determining the order of induction for each registrant.

Selection

Originally, each registrant was examined physically and, upon qualifying for service, given an opportunity to submit claims for exemption, deferment, or discharge. Registrants without claims or whose claims had been disallowed were certified for service.

To simplify the process, the procedure was later reversed. First, each registrant filed answers to a questionnaire which also dealt with exemption and deferment. Thereafter, the entire registration list was classified on this basis, and only those in Class I were examined physically.

PHYSICAL FITNESS

Prewar Army standards were used until the fall of 1918, when requirements were relaxed to secure the additional force called for by the Army program. However, from Dec. 1917, a greater utilization of manpower had already been attained by the establishment of grades, or groups, of physical qualification. Distinctions were drawn as follows:

Group A.—Vigorous men, without any defects which might interfere with the full performance of military duty.

Group B.—Individuals with certain physical defects, diseases, or abnormalities, capable of cure. This grade was known as the "deferred remediable" group.

Group C.—Men physically below standard for full military duty, but capable of rendering services of value in vocations which would not impose too great a strain.

Group D.—Registrants physically unfitted for military service.

Up to Dec. 15, 1917, local boards had examined physically 2,510,706 registrants, of whom 730,756 or 29.11 percent failed to qualify. Following that date, examination results were as follows:

	Physical groups	Number	Percent of registrants	Percent of examined
1	Total registrants Dec. 15, 1917, to Sept. 11, 1918, due to be classified	9,952,735	100.00	
2	Not physically examined	6,744,289	67.76	
3	Examined physically Dec. 15, 1917–Sept. 11, 1918	3,208,446	32.24	100.00
4	Fully qualified (Group A)	2,259,027		70.41
5	Disqualified partly or totally	949,419		29.59
6	Placed in Group B	88,436		2.76
7	Placed in Group C	339,377		10.58
8	Placed in Group D	521,606		16.25

Interest attaches to a break-down of rejections by racial groups:

	Colored and white physical rejections compared	Number	Percent of examined	Percent of partial disqualifications
1	Total, colored examined Dec. 15, 1917, to Sept. 11, 1918	458,838	100.00	
2	Group A	342,277	74.60	
3	Disqualified partly or totally	116,561		100.00
4	Group B	9,605	2.09	8.24
5	Group C	27,474	5.99	23.57
6	Group D	79,482	17.32	68.19
7	Total white examined Dec. 15, 1917, to Sept. 11, 1918	2,749,608	100.00	
8	Group A	1,916,750	69.71	
9	Disqualified partly or totally	832,858		100.00
10	Group B	78,831	2.87	9.47
11	Group C	311,903	11.34	37.45
12	Group D	442,124	16.08	53.08

CLASSIFICATION

Every registrant belonged in Class I until his right to a deferred classification was clearly established. Classes II, III, and IV were the "deferred" classifications, while all individuals not considered subject to induction were placed in Class V.

Class I registrants were liable to military service in the order determined by the drawings. Those placed in Class II were not available until Class I was exhausted. Similarly, Classes III and IV became liable only after prior classes had been depleted.

Comparison of Grounds for Deferment

	Deferment grounds	Number	Percent of registrants	Percent of deferment, 1918
1	Total registrants June 5, 1917–Sept. 11, 1918	10,679,814	100.00	
2	Total deferments on all grounds	6,973,270	65.29	100.00
3	Physically disqualified	521,606		7.48
4	Deferred on other grounds	6,451,664		92.52
5	Alienage	1,033,406		14.82
6	Specific vocations	76,497		1.10
7	Necessary agricultural and industrial vocations	364,876		5.23
8	Dependency	3,903,733		55.98
9	Military and naval service	619,727		8.89
10	Morally unfit	18,620		.27
11	Undistributed in reports	434,815		6.23

Deferments and Exemptions in General

	Classification	Number	Percent of total registrants	Percent of total exemptions
1	Total registrants June 5, 1917–Sept. 11, 1918, classified since Dec. 15, 1917	9,952,735	100.00	
2	Total deferments and exemptions on all grounds	6,973,270	70.07	100.00
3	Class II	989,568		14.18
4	Class III	407,125		5.84
5	Class IV	3,026,178		43.40
6	Class V	2,123,825		30.46
7	Undistributed in reports	426,574		6.12
8	Placed in Class I	2,979,465	29.93	

Dependency deferments made Class IV the largest of the deferred classifications. Class V, next in importance, mainly represented physical disqualifications, alienage, and military service.

Effective Class I in 1918

	Analysis	Number	Percent of nominal Class I	Percent of noneffective
1	Total nominally recorded in Class I, since Dec. 15, 1917, of registrants June 5, 1917–Sept. 11, 1918	2,979,465	100.00	
2	Deductions for noneffectives	839,315	28.17	100.00
3	Reported delinquent	324,137		38.62
4	Qualified physically for limited service only (Group C)	339,377		40.43
5	Qualified only after physical defects remedied (Group B)	88,436		10.54
6	Noncombatant creeds	38,991		4.65
7	Suspended in emergency fleet	48,374		5.76
8	Net effectives, Class I	2,140,150	71.83	

Analysis of Deferments and Exemptions

Alienage

From June 5, 1917 to Sept. 11, 1918, a total of 1,703,006 aliens registered. Of this number, 1,288,617, or 75.67 percent, were placed in deferred classes as follows:

Cobelligerent aliens	709,168
Neutral aliens	187,092
Alien enemies	392,357

Dependency

Married Registrants

Of 4,883,213 married men registered from June 5, 1917 to Sept. 11, 1918, a total of 3,619,466, or 74.12 percent, was deferred on ground of dependency of wife or children.

Single Registrants

Deferments were granted to 284,267 men, registered from June 5, 1917 to Sept. 11, 1918, representing only 7.28 percent of all dependency deferments. Cases favorably considered included 14,816, on account of adopted children; 236,553, because of dependent parents; and 32,898, on account of dependent brothers and sisters.

Military or Naval Service

The Act of May 18, 1917, exempted from registration all males who were already in the military or naval service. These men were placed by the local boards in Class V-D, on formal finding that they had been enlisted or commissioned, after registering and before being called in the draft. However, the number so recorded did not reflect the number of men actually in service. Many failed to notify their local boards on enlistment or acceptance of commissions. Hence, while voluntarily serving with the colors they were nominally carried as deserters on the records of their local boards.

In this connection the following table is of interest:

	Persons in military or naval service	Number	Percent in service
1	Total ages, 21-30, in military or naval service (estimated)	3,579,805	100.00
2	Enlisted before registration	364,298	10.18
3	Enlisted after registration (estimated)	548,640	15.33
4	Placed in Class V-D	619,727	
5	Inducted	2,666,867	74.49

Sundry Specific Vocations

The Selective Service Act granted exemption or deferment to persons in specifically recognized vocations as follows:

	Vocations specifically recognized	Number	Percent of exempted or deferred to total persons	Percent of exemptions, etc., to total exemptions
1	Total engaged in vocations specifically recognized, ages 21-30	129,337	100.00	
2	Total exempted and deferred on vocational grounds	76,497	59.15	100.00
3	Federal and State officers (V-A)	6,700	100.00	
4	Federal officers	4,000		
5	State officers	2,700		
6	Exempted	6,695	99.93	8.75
7	Ministers (V-B) [1]	17,761 [1]	100.00	
8	Exempted	18,067	101.72	23.62
9	Divinity and medical students (V-C)	19,600	100.00	
10	Exempted	16,673	85.07	21.80
11	Pilots (V-I)	1,900	100.00	
12	Exempted	1,705	89.74	2.23
13	Mariners (IV-B)	41,698	100.00	
14	Deferred	16,128	38.68	21.08
15	County or municipal officers (III-D)	3,480	100.00	
16	Deferred	2,767	79.51	3.62
17	Firemen and policemen (III-E)	19,273	100.00	
18	Deferred	2,885	14.97	3.77
19	Customhouse clerks (III-F)	[2]		
20	Deferred	577		.75
21	Mailmen (III-G)	18,925	100.00	
22	Deferred	6,381	33.72	8.34
23	Artificiers in arsenals, etc.: (III-H)	[2]		
24	Deferred	4,619		6.04
25	Other Federal employees subject to designation by the President (III-I)	[2]		

[1] Estimated. [2] Not ascertainable. [3] See table below.

The designation of other Federal employees by the President was as follows:

	Federal employees designated by President	Number	Percent of deferments to total male employees, ages 21–30	Percent of deferments to total deferments
1	Total male Federal employees ages 21-30 in principal departments	32,380	100.00	
2	Deferred under Class III—I	3,478	10.74	100.00
3	State Department	390	100.00	
4	Deferred	176	45.13	5.06
5	Treasury Department	3,043	100.00	
6	Deferred	607	19.95	17.45
7	Department of Justice	245	100.00	
8	Deferred	71	28.98	2.04
9	War Department	12,825	100.00	
10	Deferred	642	5.01	18.46
11	Post Office Department	243	100.00	
12	Deferred	20	8.23	.58
13	Navy Department	523	100.00	
14	Deferred	345	65.97	9.92
15	Interior Department	2,757	100.00	
16	Deferred	309	11.21	8.88
17	Department of Agriculture	5,634	100.00	
18	Deferred	828	14.70	23.81
19	Commerce Department	1,639	100.00	
20	Deferred	446	27.21	12.82
21	Labor Department	1,080	100.00	
22	Deferred	[1]		
23	Food Commission	1,737	100.00	
24	Deferred	27	1.55	.78
25	Fuel Commission	2,177	100.00	
26	Deferred	6	.28	.17
27	War Industries Board	87	100.00	
28	Deferred	1	1.15	.03

[1] No report.

Necessary Agricultural and Industrial Workers

According to the Industrial Index, there were in all occupations in the United States a total of 43,206,912 male employees of all ages—13,777,454 in agriculture and 29,429,458 in industries other than agriculture. Of this number, 8,577,719 were between the ages of 21 and 30 in the first registration with 2,509,698 registered as agricultural workers and 6,068,021 as engaged in other industries, resulting in the following classification:

Classification	Agriculture	Industry	Total
Deferments as necessary workers (II-C, D; III-J, K, L; IV-C, D)	180,363	119,060	299,423
Deferments on other grounds	1,575,937	4,022,362	5,598,299
Class I, 1918	753,398	1,926,599	2,679,997

The deferments on other grounds, such as dependency, alienage, etc., amounting to more than 65 percent of the total registrants, gave ample protection to agriculture and industry. The 299,423 deferments granted solely on agricultural and industrial grounds merely added 3.5 percent to this protection.

Moral Disqualification

The Act of May 18, 1917, authorized the President to exclude from the draft the morally deficient. An individual was classified as such when it was shown that he had been convicted of treason, a felony, or an infamous crime.

The total number of convicts and ex-convicts, age 21-30, was estimated as 26,520. Of this number 18,620, or 70.21 percent were placed in Class V-H (exempted). Some 7,900 were presumably inducted or enlisted for lack of any claim by them for exemption; and 5,969 were released by courts for induction or enlistment.

Non-effectives

Delinquents

Failure to return questionnaire or to report for physical examination constituted delinquency. Each case was reported to State headquarters by a local board, whereupon the State Adjutant General mailed induction orders to the delinquent. Failure to report for entrainment on these orders, or upon orders of a local board after classification and examination, constituted desertion.

According to final figures, draft desertions originally stood at 489,003. Of this number, 151,354 cases were accounted for by enlistment in American or Allied armies, leaving 337,649 net desertions. A total of 163,738 deserters was apprehended, thus accounting for almost one-half of these delinquents.

Of 474,816 registrants reported as deserters up to Sept. 11, 1918, 369,030 were white (3.86 percent of all white registrants) and 105,831 were colored (9.81 percent of all colored registrants). The comparatively large percentage of colored draft deserters was attributed primarly to ignorance, illiteracy, and the frequency with which colored laborers changed their places of employment.

Resistance to the enforcement of the Selective Service Law never obstructed or retarded the raising of the new armies. A few isolated cases in Texas, Oklahoma, Montana, and North Dakota were reported in which 15 or 20 persons were fatally hurt while resisting county or State officers. In every case, trouble stemmed from the influence of radical elements and from ignorance or misinformation as to the purpose of the draft.

Noncombatants

Members of religious sects whose creed forbade participation in war in any form were liable to military service in noncombatant capacities. The following religious bodies were reported as holding the doctrine of nonresistance:

	Religious denominations opposed to war	Total membership	Membership reporting sex	Males
1	Brethren in Christ	3,805	3,805	1,541
2	The Yorker, or Old Order Brethren	432	432	174
3	United Zion's Children	1,152	1,145	478
4	Christadelphians	2,922	2,905	1,235
5	Amana Society	1,534	1,534	715
6	Churches of Christ	317,937	317,812	132,755
7	Church of the Brethren (Conservative Dunkers)	105,102	103,135	44,923
8	Old Order German Baptist Brethren	3,399	3,399	1,494
9	Brethren Church (Progressive Dunkers)	24,060	23,648	9,699
10	German Seventh Day Baptists	136	136	48
11	Church of God (New Dunkers)	929	676	261
12	Friends	112,982	105,161	47,864
13	Mennonites	79,363	77,294	35,656
	Total			276,843

Local boards received claims for, and granted the noncombatant privilege as follows:

	Noncombatant religious creeds and conscientious objectors	Number
1	Total registrants ages 21 to 30, June 5, 1917, to Sept. 11, 1918, professing noncombatant religious creeds	[1] 55,368
2	Total claims made for noncombatant classification	64,693
3	Total claims recognized	56,830

[1] Estimated.

Religious-creed members were classified like any other registrant but, if inducted, were assigned to noncombatant service only.

Conscientious Objectors

The so-called conscientious objector was not recognized, either in law or in Selective Service Regulations. In camp, no marked distinction was drawn between creed members and conscientious objectors. Camp commanders, acting under instructions issued by the Secretary of War, dealt with those who refused noncombatant service.

A board, appointed by the Secretary of War to inquire into the individual cases of recalcitrants, reported as follows:

	Disposal of conscientious objectors	Number
1	Total cases of objectors inquired into	1,697
2	Found to be sincere entirely or in part	1,461
3	Found insincere	103
4	Remanded for further inquiry	88
5	Remanded for examination as to mental deficiency	7
6	Otherwise disposed of	38

Summary

The following tables show final classification figures, by States, and cover the entire draft period:

Analysis of Principal Classifications, All Ages

State	Total classification	Held for service	Agricultural deferments	Dependency deferments	Industrial deferments	Aliens	In military or naval service	Physically disqualified	Other deferments
Alabama	256,370	120,478	4,852	70,796	7,323	20,292	13,469	13,966	5,212
Arizona	71,352	18,143	402	17,511	630	28,186	1,775	4,352	363
Arkansas	271,597	111,020	1,283	134,314	742	850	6,503	13,371	3,514
California	690,970	318,589	6,225	175,654	6,071	106,628	36,691	27,657	13,455
Colorado	152,805	49,203	6,311	60,678	2,273	14,232	6,693	11,726	1,689
Connecticut	269,803	82,739	1,551	85,201	11,347	59,236	13,382	13,055	3,292
Delaware	39,599	13,512	2,240	14,718	1,890	3,931	1,169	1,822	317
District of Columbia	61,926	24,719	42	22,352	1,001	1,679	4,430	4,013	3,690
Florida	147,925	64,812	637	58,833	1,510	7,330	4,873	7,376	2,554
Georgia	413,690	161,397	2,192	202,752	1,659	1,314	10,280	30,075	4,021
Idaho	74,786	28,193	3,097	28,757	430	5,451	4,064	3,796	998
Illinois	1,183,669	397,171	30,364	482,052	15,046	135,474	49,734	60,844	12,984
Indiana	475,500	156,908	17,401	216,546	9,202	21,964	25,810	21,113	6,556
Iowa	433,814	144,765	43,752	181,991	5,656	14,247	15,614	22,255	5,534
Kansas	277,882	91,528	23,045	121,947	2,401	9,892	15,439	11,423	2,207
Kentucky	347,860	136,867	3,264	165,648	4,708	1,252	9,015	22,987	4,119
Louisiana	290,557	126,130	1,854	127,362	2,702	4,230	7,761	17,849	2,669
Maine	107,675	38,353	3,017	44,711	1,927	3,990	4,579	9,531	1,567
Maryland	214,785	85,295	6,855	91,708	4,405	9,906	7,076	4,882	4,658
Massachusetts	618,874	208,351	2,017	210,400	11,074	97,647	42,556	36,056	10,773
Michigan	630,836	194,716	18,850	247,214	11,347	78,082	25,669	44,537	10,433
Minnesota	400,464	147,979	42,323	130,687	7,053	29,149	14,745	23,668	4,860
Mississippi	268,115	109,555	1,540	129,094	1,678	668	6,258	16,336	2,985
Missouri	533,763	197,509	17,205	236,874	4,856	15,465	20,848	32,520	8,486
Montana	146,255	57,546	9,723	48,152	1,751	13,384	7,800	6,700	1,199
Nebraska	250,053	85,918	28,649	97,977	3,085	9,008	10,688	11,579	3,149
Nevada	20,775	7,248	740	5,083	511	4,890	1,062	938	303
New Hampshire	65,240	21,699	1,796	23,849	1,581	7,062	4,352	3,939	962
New Jersey	528,045	164,775	6,068	209,797	14,131	78,891	23,904	22,668	7,811
New Mexico	61,517	19,457	4,469	23,890	1,183	5,674	1,867	4,146	831
New York	1,929,894	714,894	35,129	672,401	32,083	245,476	78,428	97,854	53,629
North Carolina	365,239	136,088	2,825	188,572	2,631	699	8,986	21,658	3,780
North Dakota	116,685	42,158	15,296	39,728	890	6,501	5,916	5,395	801
Ohio	1,003,664	403,600	19,038	378,425	7,757	45,006	48,824	47,091	53,923

Oklahoma	310,838	123,500	5,814	147,143	2,712	5,902	9,248	13,915	2,604
Oregon	122,296	43,986	4,745	45,940	2,402	8,295	8,471	6,950	1,507
Pennsylvania	1,470,508	475,587	30,058	560,095	75,410	198,388	52,211	58,638	20,121
Rhode Island	94,822	28,817	505	35,859	3,048	11,738	5,631	7,181	2,043
South Carolina	218,597	94,512	1,867	98,037	1,981	582	4,985	14,258	2,375
South Dakota	103,275	38,784	12,338	37,132	612	2,901	3,854	6,349	1,305
Tennessee	368,242	130,915	7,469	185,306	4,511	1,389	8,781	26,404	3,467
Texas	712,629	251,242	8,051	323,677	3,361	54,372	26,348	32,720	12,858
Utah	96,820	24,375	980	43,924	567	12,189	3,373	3,551	7,861
Vermont	48,837	16,530	3,246	19,361	1,243	2,417	1,903	3,367	770
Virginia	338,823	132,451	13,510	141,115	10,498	3,557	10,757	21,990	4,927
Washington	214,763	74,051	4,974	72,591	7,612	22,693	14,206	13,797	4,839
West Virginia	234,515	87,706	2,503	100,047	7,403	14,321	5,621	11,913	5,001
Wisconsin	493,532	151,347	45,225	195,062	12,812	35,925	24,054	26,104	3,003
Wyoming	43,269	18,306	1,480	13,265	864	4,946	2,632	1,558	218
Total	17,593,778	6,373,414	506,815	6,964,229	317,570	1,467,319	722,335	925,873	316,223

Analysis of Classification, All Ages, All Classes

State	Total registration	Percentage of registrations in States to total registration	Classified in Class I		Classified in Classes II, III, and IV		Classified in Class V		Not classified	
			Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama	444,842	1.86	120,418	27.08	86,107	19.34	49,903	11.22	188,454	42.35
Arizona	94,310	.39	18,143	19.23	18,669	19.77	34,540	36.61	22,958	24.33
Arkansas	365,904	1.53	111,020	30.32	137,567	37.66	23,010	6.27	94,307	25.75
California	839,614	3.51	318,589	37.94	194,943	23.21	177,438	21.14	148,644	17.71
Colorado	216,820	.91	49,203	22.69	70,091	32.32	33,511	15.46	64,015	29.53
Connecticut	374,400	1.57	82,739	22.10	100,202	26.77	86,862	23.20	104,597	27.93
Delaware	55,277	.23	13,512	24.44	18,992	34.36	7,095	12.84	15,678	28.36
District of Columbia	90,361	.38	24,719	27.33	26,251	29.03	10,954	12.21	28,435	31.44
Florida	209,248	.88	64,812	30.97	62,104	29.67	21,009	10.05	61,323	29.31
Georgia	549,235	2.30	161,397	29.38	208,306	37.93	43,987	8.02	135,545	24.67
Idaho	105,337	.44	28,193	26.76	32,732	31.08	13,861	13.15	30,551	29.00
Illinois	1,574,877	6.59	397,171	25.21	534,465	33.94	252,033	16.01	391,208	24.84
Indiana	639,834	2.68	156,908	25.68	245,777	38.41	72,815	11.38	164,333	25.68
Iowa	524,456	2.19	144,765	27.60	233,987	44.61	55,062	10.50	90,642	17.29
Kansas	382,065	1.60	91,528	23.96	148,229	38.80	38,125	9.97	104,183	27.27
Kentucky	486,739	2.04	136,867	28.12	175,762	36.11	35,231	7.24	138,879	28.53
Louisiana	392,316	1.64	126,130	32.15	133,337	32.99	31,090	8.93	101,759	25.93
Maine	159,631	.67	38,353	24.02	50,540	31.67	18,782	11.77	51,956	32.54
Maryland	313,489	1.31	85,295	27.21	105,833	33.76	23,657	7.55	98,714	31.48
Massachusetts	886,728	3.71	208,351	23.49	231,100	26.09	179,423	20.23	267,854	30.19
Michigan	873,383	3.65	194,706	22.27	282,499	32.32	153,631	17.57	242,547	27.84
Minnesota	541,507	2.27	147,979	27.32	182,579	33.71	69,906	12.91	141,143	26.06
Mississippi	344,724	1.44	109,555	31.76	133,860	38.83	24,700	7.17	76,609	22.22
Missouri	765,045	3.20	197,509	25.82	262,379	34.24	73,875	9.66	231,283	30.23
Montana	201,256	.84	57,546	28.59	60,069	29.85	28,640	14.23	55,001	27.33
Nebraska	287,414	1.20	85,918	29.89	131,771	45.85	32,364	11.26	37,361	13.00
Nevada	30,808	.13	7,248	23.52	6,423	20.86	7,104	23.06	10,033	32.56
New Hampshire	95,158	.40	21,699	22.78	27,801	29.28	15,740	16.52	29,918	31.42
New Jersey	762,485	3.19	164,775	21.62	234,072	30.70	129,198	16.94	234,440	30.74
New Mexico	81,013	.34	19,457	24.02	29,830	29.33	12,230	15.10	19,496	24.06
New York	2,511,046	10.50	714,894	28.47	766,299	30.52	448,701	17.86	581,152	23.15
North Carolina	482,463	2.02	136,088	28.20	196,298	40.70	32,853	6.81	117,224	24.29

North Dakota	160,292	.67	42,158	26.30	56,133	35.01	18,394	11.48	43,607	27.21
Ohio	1,389,474	5.81	403,600	29.05	408,340	28.68	191,724	13.80	385,810	27.77
Oklahoma	435,668	1.82	123,500	28.35	156,585	35.94	30,753	7.06	124,830	28.65
Oregon	179,436	.75	43,986	24.52	53,852	30.01	24,458	13.63	57,140	31.84
Pennsylvania	2,069,407	8.65	475,587	22.98	678,044	32.76	316,877	15.32	598,899	28.94
Rhode Island	134,515	.56	28,817	21.43	40,901	30.40	25,104	18.66	39,693	29.51
South Carolina	307,350	1.29	94,512	30.75	103,036	33.52	21,049	6.85	88,753	28.88
South Dakota	145,706	.61	38,784	28.50	50,865	37.90	13,626	10.35	32,431	23.25
Tennessee	474,347	1.98	130,915	27.59	198,947	41.95	38,380	8.10	106,105	22.36
Texas	990,522	4.14	251,242	25.36	339,686	34.30	121,701	12.28	277,893	28.04
Utah	103,052	.43	24,375	23.66	45,858	44.49	26,587	25.80	6,232	6.05
Vermont	71,484	.30	16,530	23.10	24,130	33.71	8,177	11.43	22,647	31.76
Virginia	465,439	1.95	132,451	28.46	168,118	36.12	38,254	8.22	126,616	27.20
Washington	328,466	1.37	74,051	22.55	88,432	26.91	52,280	15.92	113,703	34.62
West Virginia	325,266	1.36	83,656	25.70	113,987	34.90	32,822	10.07	95,771	29.33
Wisconsin	586,290	2.45	151,349	25.80	251,910	42.96	90,273	15.40	92,758	15.82
Wyoming	59,977	.25	18,306	30.52	15,688	26.15	9,275	15.47	16,708	27.86
Total	23,908,576	100.00	6,369,396	26.64	7,923,386	33.14	3,297,066	13.79	6,319,728	26.43

Analysis of Class I, All Ages

State	Total	Physically qualified for general military service	Physically qualified for limited military service	Physically qualified in remediable group	Registrants on emergency fleet list	Delinquents	Deserters	Physical examinations pending	Registrants inducted or called into military service
Alabama	120,478	22,002	7,500	872	2,395	2,559	7,006	19,111	59,033
Arizona	18,143	3,308	802	312	119	794	581	2,980	9,347
Arkansas	111,020	29,994	6,161	1,785	144	4,884	3,848	7,971	56,233
California	318,589	145,318	13,008	2,083	3,256	12,060	4,686	60,606	77,572
Colorado	49,203	8,552	2,838	595	188	671	1,360	9,719	25,280
Connecticut	82,739	10,562	6,029	1,615	1,250	6,109	3,173	18,918	35,083
Delaware	13,512	1,823	1,560	40	436	470	426	3,528	5,229
District of Columbia	24,719	2,246	1,651	689	658	1,147	642	6,908	10,778
Florida	64,812	13,525	3,521	828	596	4,711	5,375	10,353	25,903
Georgia	161,397	23,982	9,311	2,072	647	7,929	8,047	44,855	64,554
Idaho	28,193	8,338	1,732	542	235	868	698	2,736	13,044
Illinois	397,171	94,791	25,252	6,247	1,814	14,898	6,914	61,725	185,530
Indiana	156,908	64,900	9,042	2,165	762	2,497	2,778	203	74,561
Iowa	144,765	41,038	8,333	1,865	517	1,825	1,478	17,342	72,367
Kansas	91,528	18,444	3,726	1,563	301	1,951	1,392	16,636	47,515
Kentucky	136,867	38,251	5,272	1,382	356	2,439	1,344	30,254	57,569
Louisiana	126,130	23,111	6,065	2,470	629	5,583	5,003	26,934	56,335
Maine	38,353	5,735	4,200	942	977	866	487	8,564	16,582
Maryland	85,295	10,627	4,275	789	1,913	4,317	2,418	25,815	35,141
Massachusetts	207,351	30,021	24,292	3,240	5,540	10,352	5,895	38,159	90,852
Michigan	194,706	33,251	14,590	3,755	1,675	8,546	6,594	25,260	101,035
Minnesota	147,979	51,493	9,528	2,088	826	4,815	3,428	----------	75,801
Mississippi	109,555	39,044	4,761	1,549	554	5,165	6,321	8,724	43,437
Missouri	197,509	45,410	11,002	2,307	638	4,097	3,437	32,381	98,237
Montana	57,546	12,243	3,564	678	268	3,457	2,652	6,746	27,938
Nebraska	85,918	26,778	3,438	1,405	166	1,693	975	17,237	34,226
Nevada	7,248	1,956	496	231	58	401	356	501	3,249
New Hampshire	21,699	4,619	2,709	132	659	919	256	3,043	9,362
New Jersey	164,775	20,886	14,980	2,225	4,145	10,796	8,924	28,448	74,371
New Mexico	19,457	2,216	702	132	50	936	855	5,516	9,050
New York	714,894	92,366	49,585	13,136	6,764	31,819	18,118	237,412	265,693
North Carolina	136,088	29,416	7,884	1,832	1,080	2,750	2,067	32,996	58,063

North Dakota	42,158	8,414	2,029	358	102	1,375	174	9,977	19,729
Ohio	403,600	138,604	15,818	6,224	3,363	15,856	10,771	63,937	149,027
Oklahoma	123,500	32,732	4,845	1,380	222	2,874	2,941	10,030	68,476
Oregon	43,986	8,573	3,358	757	1,619	936	727	9,492	18,524
Pennsylvania	475,587	64,323	24,162	6,366	7,077	25,163	11,613	127,047	209,836
Rhode Island	28,817	3,522	3,022	538	442	536	2,246	6,463	12,048
South Carolina	94,512	12,975	4,361	1,360	516	2,803	3,114	25,982	43,401
South Dakota	38,784	9,965	2,278	628	263	252	418	3,697	21,283
Tennessee	130,915	25,216	6,886	2,097	317	3,671	3,562	28,301	60,865
Texas	251,242	55,992	7,981	2,568	843	9,588	6,704	43,492	124,074
Utah	24,375	3,528	645	681	203	1,548	649	5,103	12,018
Vermont	16,530	2,465	1,919	319	143	115	149	4,325	7,095
Virginia	132,451	23,931	6,586	1,469	2,711	7,199	5,457	28,758	56,340
Washington	74,051	10,694	5,330	855	2,292	2,862	2,689	17,187	32,142
West Virginia	83,686	24,217	4,168	390	297	4,888	2,325	4,269	43,132
Wisconsin	151,347	39,858	10,706	3,538	1,173	4,179	1,200	15,404	75,289
Wyoming	18,306	5,189	635	275	49	1,355	1,504	972	8,327
Total	6,368,396	1,426,446	372,538	91,369	61,248	247,425	173,777	1,216,017	2,780,576

Analysis of Class V, All Ages

[Totals for the United States]

Officer—legislative, executive, or judicial—of the United States or of States, Territory, or District of Columbia	31,700
Regularly or duly ordained minister of religion	46,203
Student who on May 18, 1917, or on May 20, 1918, was preparing for ministry in recognized theological or divinity school, or who on May 20, 1918, or since that date was preparing for practice of medicine and surgery in recognized medical school	37,004
Person in military or naval service of United States	722,335
Alien enemy	540,000
Resident alien (not an enemy) claiming exemption	927,252
Person totally and permanently physically or mentally unfit for military service	925,903
Person morally unfit to be a soldier of the United States	42,190
Licensed pilot actually employed in the pursuit of his vocation	3,012
Person discharged from the Army on the ground of alienage or upon diplomatic request	1,842
Subject or citizen of cobelligerent country, enlisted or enrolled in the forces of such country under the terms of a treaty between such country and the United States providing for reciprocal military service of their respective citizens and subjects	3,534
Subject or citizen of neutral country who has declared his intention to become a citizen of the United States and has withdrawn such intention under the provisions of Act of Congress approved July 9, 1918, and Selective Service Regulations	2,035
A declarant or non-declared British subject to whom a certificate of exemption from military service in the United States has been issued by the British Government in accordance with the British and Canadian conventions concluded June 3, 1918	14,029
Grand total	3,297,059

Quotas

The size of the quota to be furnished by each State, Territory, and the District of Columbia was at first determined by the proportion which the population of any such subdivision bore to the total population of the United States, due credit being given for men already in military service. On this basis, the first levy was made as follows:

QUOTA SHEET NO. 1

	Gross quotas	Enlistment credits	Net quotas	Furnished to Dec. 31, 1917	Due Jan. 1, 1918	Date last of these men were called
United States	1,152,985	465,985	687,000	516,212	170,788	
Alabama	21,300	7,651	13,612	10,926	2,686	Mar. 29, 1918
Arizona	4,478	998	3,472	2,999	473	Mar. 4, 1918
Arkansas	17,452	7,155	10,267	6,521	3,746	Apr. 26, 1918
California	34,907	11,786	23,060	23,079	—19	Nov. 2, 1917
Colorado	9,797	5,027	4,753	4,105	648	Mar. 4, 1918
Connecticut	18,817	7,807	10,977	9,739	1,238	Apr. 30, 1918
Delaware	2,569	1,363	1,202	925	277	Mar. 4, 1918
District of Columbia	3,796	2,860	929	941	—12	Nov. 2, 1917
Florida	10,129	3,786	6,325	2,224	4,101	Apr. 30, 1918
Georgia	27,209	8,825	18,337	8,215	10,122	Apr. 26, 1918
Idaho	4,833	2,538	2,287	2,302	—15	Nov. 2, 1917
Illinois	79,094	27,304	51,653	33,940	17,713	Apr. 26, 1918
Indiana	29,971	12,409	17,510	11,500	6,010	Do.
Iowa	25,465	12,672	12,749	6,456	6,293	Feb. 23, 1918
Kansas	17,795	11,325	6,439	5,712	727	Do.
Kentucky	22,152	7,878	14,236	9,687	4,549	May 1, 1918
Louisiana	18,481	4,867	13,582	8,297	5,285	Apr. 26, 1918
Maine	7,076	5,243	1,821	1,899	—78	May 1, 1918
Maryland	14,139	7,018	7,096	7,118	—22	Nov. 2, 1917
Massachusetts	43,109	22,448	20,586	18,342	2,244	Apr. 30, 1918
Michigan	43,936	13,569	30,291	23,309	6,982	Mar. 29, 1918
Minnesota	26,021	8,198	17,778	9,312	8,466	Feb. 23, 1918
Mississippi	16,429	5,600	10,801	6,103	4,698	Mar. 29, 1918
Missouri	35,461	16,740	18,660	15,664	2,996	Apr. 26, 1918
Montana	10,423	2,533	7,872	7,911	—39	Nov. 2, 1917
Nebraska	13,900	5,691	8,185	7,085	1,100	Mar. 4, 1918
Nevada	1,435	382	1,051	1,053	—2	Nov. 2, 1917
New Hampshire	4,419	3,207	1,204	1,180	24	Apr. 30, 1918
New Jersey	35,623	14,896	20,665	12,740	7,925	Mar. 4, 1918
New Mexico	3,856	1,558	4,102	1,972	320	Do.
New York	122,424	52,971	69,241	57,828	11,413	Apr. 26, 1918
North Carolina	23,486	7,471	15,974	9,992	5,982	Do.
North Dakota	7,737	2,452	5,272	2,652	2,620	Mar. 29, 1918
Ohio	66,474	27,586	38,773	31,754	7,019	Mar. 15, 1918
Oklahoma	19,943	4,344	15,564	12,292	3,272	Apr. 26, 1918
Oregon	7,387	6,657	717	741	—24	Nov. 2, 1917
Pennsylvania	98,277	37,248	60,859	51,081	9,778	Mar. 29, 1918
Rhode Island	6,277	4,055	2,211	2,090	121	Apr. 30, 1918
South Carolina	15,147	5,040	10,081	6,717	3,364	Feb. 23, 1918
South Dakota	6,854	4,125	2,717	2,325	392	Mar. 4, 1918
Tennessee	22,158	7,592	14,528	11,061	3,467	Apr. 26, 1918
Texas	48,116	17,488	30,545	24,451	6,094	Do.
Utah	4,945	2,566	2,370	2,383	—13	Nov. 2, 1917
Vermont	3,243	2,188	1,049	996	53	May 1, 1918
Virginia	21,354	7,522	13,795	13,809	—14	Oct. 27, 1917
Washington	12,768	5,450	7,296	7,327	—31	Nov. 2, 1917
West Virginia	14,848	5,721	9,101	7,613	1,488	Mar. 4, 1918
Wisconsin	28,199	15,274	12,876	9,033	3,843	Apr. 26, 1918
Wyoming	2,683	1,868	810	811	—1	Nov. 2, 1917
Alaska	710	13	696	----------	696	June 30, 1918
Hawaii	2,403	4,397	----------	----------	----------	----------
Puerto Rico	13,480	624	12,833	----------	12,833	June 20, 1918

QUOTA SHEET NO. 2

Quota Sheet No. 2 was published May 1, 1918. According to this sheet, gross quotas were 1,036,046; credits for enlistments in the Regular Army, National Guard, and Enlisted Reserves totaled 481,503; and net quotas on basis of population with credits amounted to 554,543. Of this number, 254,543 were furnished under second draft leaving a balance of 300,000 due on net quotas.

QUOTA SHEET NO. 3

Change in the quota basis was authorized by Congress May 16, 1918. Thereafter, quotas were not determined by population but by classes, omitting credits for enlistments. From June 1 on, all registrants in Class I, throughout the United States, were drawn upon exclusively until exhausted, and Class II was not touched except on special calls for skilled men.

As large numbers of registrants were enlisting in the Navy and Marine Corps each month, it proved impracticable to regard 100 percent of Class I as to the quota basis, and 80 percent was adopted as such.

Accordingly, Quota Sheet No. 3, showing Class I quotas as of June 1, 1918, presented the following totals for the United States:

Remaining on June 1, 1918, finally classified in Class I and examined physically and accepted for general military service	1,166,317
Inducted and called for induction since the date of completing quotas on first levy	255,414
Voluntary and individual inductions	61,095
Total, or equivalent of quota basis	1,482,826
Quotas, 80 percent of quota basis	1,186,262
Less credits for previous inductions	627,405
Net current quotas not called	559,439

QUOTA SHEET NO. 4

The Act of July 9, 1918, made quota apportionment, based on Class I registrants, retroactive to include the first levy of 687,000 (See Quota Sheet No. 1, ante.) The 80 percent quota basis was abandoned as being too low and fixed at 89 percent until July 23, 1918. On this date the War Department prohibited further releases from Class I for enlistment in the Navy and Marine Corps, thus obviating this method of calculation. A further step affecting quotas was taken Aug. 9, when volunteer enlistments both in the Army and Navy were suspended.

Based on the above considerations, Quota Sheet No. 4, showing Class I quotas as of Sept. 1, 1918, took this form with regard to totals in the United States:

Remaining on Sept. 1, 1918, finally classified in Class I and examined physically and accepted for general military service	290,820
Inducted and called for induction since the date of completing quotas on first levy	1,506,405
Voluntary and individual inductions	85,990
Total, or equivalent of quotas	1,883,215
Less credits for previous inductions	1,744,159
Net current quotas not called	139,056

QUOTA SHEET NO. 5

This sheet carried the Class I quotas as of Oct. 1, 1918. The totals for the United States were as follows:

Remaining on Oct. 1, 1918, finally classified in Class I and examined physically and accepted for general military service	193,712
Inducted and called for induction since the date of completing quotas on first levy	1,774,381
Voluntary and individual inductions	93,797
Total, or equivalent of quotas	2,061,890
Less credits for previous inductions	2,003,757
Net current quotas not called	58,133

Thus, on Nov 1, 1918, a total of 58,133 Class I men, representing the remnants from the first and second registrations, were still awaiting induction. This number was subject to call before any State was required to furnish men from the registration of Sept. 12, 1918.

Entry Into Service

The original Selective Service Regulations provided that every registrant, who had been ordered to report for duty, was in the military service from the time specified for repairing to his local board. Induction was either voluntary, when the person subject to the draft applied for induction before being called, or involuntary, when he reported upon order from Selective Service officials.

On the other hand, enlistment in any one of the services was always voluntary. It was accomplished by the individual desiring enlistment applying to the proper recruiting officer and, upon acceptance, taking the oath of enlistment.

Induction had the effect of stimulating enlistments. Such voluntary entry into service, from outbreak of war until fall of 1918, contributed almost one-third of the manpower raised during mobilization.

The results obtained are shown in the following table:

Enlistments and Inductions, Compared by Months

Enlistments and inductions, compared by months	Total increment by enlistment and induction	Inductions		Enlistments					
		Total	Per cent of increment	Army	Per cent of increment	Navy and Reserves	Per cent of increment	Marine Corps and Reserves	Per cent of increment
Total from April 2, 1917, to November 11, 1918	4,178,172	2,810,296	67.26	877,458	21.00	437,527	10.47	52,891	1.27
1917									
April	113,633			86,405	76.04	24,593	21.64	2,635	2.32
May	146,868			119,470	81.35	22,174	15.10	5,224	3.55
June	150,249			95,818	63.77	50,502	33.61	3,929	2.62
July	85,838			73,887	86.08	8,698	10.13	3,253	3.79
August	66,172			59,556	90.00	4,641	7.01	1,975	2.99
September	324,243	296,678	91.50	24,367	7.51	2,025	.63	1,178	.36
October	210,392	163,493	77.71	31,216	14.84	15,292	7.27	391	.18
November	90,395	35,721	39.52	45,699	50.55	8,458	9.36	517	.57
December	194,700	20,320	10.44	141,931	72.90	31,076	15.96	1,373	.70
1918									
January	93,522	23,288	24.90	41,225	44.08	26,860	28.72	2,149	2.30
February	121,693	83,779	68.84	26,197	21.53	10,258	8.43	1,459	1.20
March	169,791	132,484	78.03	25,268	14.88	11,362	6.69	677	.40
April	220,079	174,377	79.23	23,155	10.52	19,921	9.05	2,626	1.20
May	428,466	373,063	87.07	25,794	6.02	24,537	5.73	5,072	1.18
June	431,582	301,941	69.96	27,583	6.39	97,158	22.51	4,900	1.14
July	452,417	401,147	88.67	19,028	4.21	23,732	5.24	8,510	1.88
August	346,924	282,898	81.54	10,859	3.13	48,137	13.88	5,030	1.45
September	273,080	262,984	96.30			8,103	2.97	1,993	.73
October	107,363	107,363	100.00						
November	7,331	7,331	100.00						
Total first and second registrations		2,666,867							
1918–Third registration									
October	141,822	141,822	100.00						
November	1,607	1,607	100.00						

NAVY AND MARINE CORPS

Voluntary enlistment, in the long run, proved an impediment to the effective working of Selective Service. The situation was remedied by the Act of Aug. 31, 1918, which, beginning Oct. 1, rendered all inducted men liable to service in the Army, the Navy, or the Marine Corps. Accordingly, during Oct. and Nov. the Navy received 3,394 men, and the Marine Corps 6,259, from this source.

STUDENTS' ARMY TRAINING CORPS

On Oct. 1, 1918, this corps was established with an authorized strength of 200,000 men to provide material for junior officers. Enrollment was open only to Class I men, who had registered Sept. 12, 1918. At date of Armistice, 145,012 individual induction orders had been issued to supply the required men (see p. 556).

TOTAL ARMED FORCES RAISED

This total was made up from the forces raised by induction and by enlistment, and from individuals who entered the service direct as commissioned officers. Detailed figures as to original strength and increments are given below.

Forces and components	Number	Percent of total forces	Percent of total military forces	Percent of military increment
Total United States armed forces raised to November 11, 1918	4,791,172	100.00		
Total military forces	4,185,220	87.35	100.00	
Total naval forces	605,952	12.65		
Existing strength April 1, 1917	378,619	7.92		
Military forces	291,880		6.97	
Regular Army	127,588			
National Guard	164,292			
Naval forces	86,739			
Navy	69,029			
Marine Corps	13,599			
Coast Guard	4,111			
Increments to November 11, 1918	4,412,553	92.08		
Military forces	3,893,340		93.03	100.00
Commissioned	203,786			5.23
Inducted	2,810,296		67.15	72.18
Enlisted	877,458			22.54
Regular Army	390,874			10.04
National Guard	296,978			7.63
Reserve Corps and National Army	189,606			4.87
United States Guards (commissioned and enlisted) [1]	1,800			.05
Naval forces	519,213			
Navy	462,229			
Commissioned	24,702			
Enlisted	437,527			
Marine Corps	54,690			
Commissioned	1,799			
Enlisted	52,891			
Coast Guard	2,294			

[1] On Nov. 11, 1918, the U. S. Guards numbered 25,906, but actually only 1,800 were commissioned or enlisted in this force. The balance came from men already in the service.

Mobilization

Under the Selective Service administration, the process of mobilization embraced the requisition, the call, and the entrainment.

REQUISITIONS

The Provost Marshal General levied men under authority of the Secretary of War, upon requisition prepared by the General Staff and issued through The Adjutant General; or, after Oct. 1, 1918, upon requisition from the Secretary of the Navy, issued through the Bureau of Navigation, Director of Mobilization.

The following requisitions were received:

From The Adjutant General

Requisition No.	Date received	Qualifications	Number of men
	1917		
01	Aug. 25	Run of the draft to 16 mobilization camps	31,643
02	Aug. 8	do	265,035
03	Sept. 22	Run of the draft to 18 mobilization camps	126,800
04	Oct. 13	Run of the draft to 12 mobilization camps	31,790
05	do	Run of the draft to 2 mobilization camps	18,471
06a	Nov. 6	Run of the draft to 1 mobilization camp	6,454
06b	Nov. 5	do	10,796
07	Nov. 21	do	8,440
08	Nov. 15	Run of the draft to 15 mobilization camps	6,408
09	Dec. 8	Run of the draft to 21 coast defenses	9,000
09a	Dec. 7	Run of the draft to 1 mobilization camp	1,000
010	Dec. 14	Run of the draft to 8 mobilization camps	(1)
011	Dec. 29	Run of the draft to 9 mobilization camps	(1)
012	Dec. 31	Run of the draft to 3 mobilization camps	(1)
	1918		
013	Jan. 3	Run of the draft to 2 mobilization camps	(1)
014	do	Spruce producers	5,000
015	Jan. 19	Cost accountants	200
016	Feb. 2	Run of the draft to 13 mobilization camps	74,116
017	Feb. 11	Run of the draft to 2 mobilization camps	8,000
018	Feb. 20	Run of the draft to 5 mobilization camps	(1)
019	Feb. 27	Run of the draft to 1 mobilization camp	(1)
1	Feb. 28	1,470 airplane mechanics and assemblers; 972 apprentice gunsmiths, machinists, and instrument makers and repairers; 1,200 engine airplane mechanics or auto mechanics; 978 rigger airplane mechanics or auto mechanics, or general repair men; 240 general auto mechanics; 120 general blacksmiths; 96 journeymen joiner cabinetmakers; 180 boat, carriage, or house carpenters or pattern makers; 1,200 truck chauffeurs; 378 general clerical workers or stenographers; 372 cooks; 108 coppersmiths or tinsmiths; 12 draftsmen; 150 electricians; 12 engine block testers; 66 camera repairmen or engineering, general, mechanical, nautical, or watch and clock instrument makers or repairmen; 150 general machinists; 150 magneto and ignition auto mechanics; 54 general sheet metal workers; 270 motorcyclists; 12 motorcycle repairmen; 12 molders; 24 painters; 12 pattern makers; 72 propeller makers or testers; 108 wireless constructors; 60 wireless operators; 6 saddlers; 108 stock keepers; 186 tailors or awning, tent or sail makers; 54 truck masters; 54 vulcanizers; 54 welders; 30 telegraphers; 30 wireless telephone operators.	9,000
2	Mar. 1	Photographers	800
3	Apr. 10	Inspectors for gas defense	40
4	Mar. 3		
	Mar. 12	Chemists	60
5	Mar. 11	50 meteorologists; 95 physicists; 90 mechanical engineers; 50 civil engineers; 10 instrument makers or repairmen; 5 clerical workers.	300

From The Adjutant General (Cont'd.)

Requisition No.	Date received	Qualifications	Number of men
7	Mar. 1	2 lithographers; 31 instrument repairmen; 5 propeller makers; 8 sailmakers; 10 tailors.	56
7a	Apr. 10	100 surveyors; 15 lithographers	115
8	Mar. 1	Laborers	1,000
9	Mar. 15	Photographers	64
9G	Mar. 10	Run of the draft to 16 mobilization camps	94,808
9aG	Mar. 11	Run of the draft to 1 coast defense	11,500
10	Apr. 10	Telephone operators with extensive knowledge of German	75
12	Apr. 18	442 locomotive engineers; 368 conductors; 1,075 brakemen and flagmen; 326 locomotive firemen; 53 yardmasters; 76 switch tenders; 8 engine house firemen; 6 engine dispatchers; 323 railroad shop mechanics; 84 locomotive inspectors; 149 airbrake inspectors; 58 flue repairmen; 223 boiler makers and helpers; 46 plumbers; 2 electricians; 78 carpenters; 29 stationary engineers and firemen; 58 locomotive hostlers; 4 car inspectors; 23 riveters and helpers; 137 car repairmen; 15 machinist foremen; 8 boiler maker foremen; 32 acetylene welders; 26 pneumatic riveters; 26 hand riveters; 20 buckers up; 40 structural steel rivet heaters; 40 structural steel punchers; 44 tinsmiths; 16 boiler inspectors; 11 railroad shop draftsmen; 28 electric crane operators; 40 steel railroad car workers.	3,914
13	Mar. 22	Grammar-school education with mechanical experience for 14 schools	4,509
14	Mar. 30	Grammar-school education with mechanical experience for 10 schools	2,825
14G	Apr. 3	Run of the draft to 16 mobilisation camps	150,000
15	Apr. 1	42 buglers; 40 building construction foremen; 395 carpenters; 48 chauffeurs; 34 clerks; 68 cooks; 300 bricklayers; 24 blacksmiths; 195 levelers; 3,420 laborers.	4,566
16	Apr. 2	Photographers	400
17	Apr. 3	6 steam engineers; 2 quarry foremen; 6 powdermen; 2 gyratory crusher foremen; 4 jaw crusher foremen; 6 firemen; 5 auto truck drivers; 5 bakers; 19 barbers; 49 blacksmiths; 76 carpenters; 22 civil engineers; 2 cobblers; 116 cooks; 18 crusher operators; 8 gas engine men; 3 gunsmiths; 3 horseshoers; 16 plumbers; 30 rock drill runners and helpers; 5 shovel operators; 92 teamsters; 48 railroad construction foremen; 243 railroad section hands; 36 railroad engineers; 24 bridge construction foremen; 120 railroad section foremen; 48 masons; 48 bridge carpenters; 5 level men and transit men; 6 pile drivers; 18 railroad track foremen; 26 bricklayers; 36 bridge foremen; 90 clerks; 4 concrete foremen; 20 concrete workers; 16 draftsmen; 13 earthwork foremen; 6 gas engine repairmen; 14 pipe fitters; 8 pump men; 4 shoemakers; 6 steam shovel runners and cranemen; 51 stenographers; 17 tailors; 6 tinsmiths; 3 water supply foremen; 120 section foremen; 816 section hands; 18 buglers; 36 civil engineers and draftsmen; 104 airbrake inspectors; 860 brakemen and flagmen; 280 conductors; 128 electricians; 368 locomotive engineers; 372 locomotive firemen; 50 locomotive inspectors; 60 switchmen; 12 yardmasters; 144 boiler makers and helpers; 88 car repairmen; 12 engine dispatchers; 24 flue repairmen; 16 locomotive hostlers; 140 railroad machinists; 52 railroad clerks; 1,311 laborers; 8 car inspectors; 12 engine house foremen; 50 electrical engineers; 90 gas engineers; 15 forest rangers; 25 timber cruisers; 10 optical instrument makers; 15 electrical instrument makers; 15 instrument makers; 30 oxyacetylene welders; 20 topographical draftsmen; 30 surveyors; 30 railroad surveyors; 30 topographers; 15 acetylene workers; 15 compressor workers; 15 hydrogen oxygen workers; 15 illuminating gas workers; 15 poison gas workers; 20 construction foremen; 20 steam enginemen; 24 molders; 20 pattern makers; 50 structural steel workers; 50 wagon makers; 20 solderers; 20 map makers; 5 auto chauffeurs; 5 auto mechanics; 6 instrument repairmen; 44 linemen; 10 truck drivers; 2 photographers; 2 store keepers; 12 topographical surveyors; 2 telegraph operators; 12 telephone operators; 10 mathematicians; 10 meterologists; 10 physicists; 8 ship carpenter foremen; 24 marine gasoline enginemen; 80 steersmen; 4 ship carpenters; 12 hoistmen; 12 ship and boat blacksmiths; 12 ship riggers; 12 sailmakers; 12 saddlers; 200 bargemen or boatmen; 4 pipemen; 924 railroad section hands.	8,535
17G	Apr. 11	Run of the draft to 11 mobilisation camps	49,757
18	Apr. 6	Gunsmiths	630
18G	Apr. 18	Run of the draft to 1 mobilisation camp	696

From The Adjutant General (Cont'd.)

Requisition No.	Date received	Qualifications	Number of men
19	Apr. 8	3 timekeepers and checkers; 5 storekeepers; 4 overseers of labor; 80 laborers; 8 cooks; 2 buglers; 10 riggers; 13 machinists; 11 machinist helpers; 15 floor hands; 5 auto mechanic helpers; 6 blacksmiths; 10 blacksmith helpers; 10 angle iron-smiths; 20 boiler makers; 10 riveters; 5 riveter helpers; 10 sheet iron workers; 5 tinsmith helpers; 7 plumbers; 9 plumber helpers; 10 steam fitters; 9 steam fitter helpers; 16 carpenters and joiners; 10 carpenter helpers; 6 boat builders; 6 boat builder helpers; 5 wood carpenters; 37 painters; 6 sailmakers; 8 electricians, armature winders and wiremen; 5 stenographers and typists; 5 tinsmiths.	376
22	Apr. 10	Chemical engineers	35
23	---do---	Gas inspectors	20
24	---do---	Chemists	10
25	Apr. 17	Grammar-school education with mechanical experience to 5 schools	1,190
26	Apr. 10	Stock raisers, veterinarians, hostlers and stablemen	1,600
27	Apr. 24	5 laundry foremen; 25 laundry workers; 50 horseshoers; 80 journeymen teamsters; 50 mule packers; 15 horse trainers; 6 hostlers; 50 journeymen tailors; 20 wheel-wrights; 100 journeymen carpenters; 75 apprentice blacksmiths; 75 apprentice electricians; 150 apprentice mechanics.	701
28	Apr. 25	120 telegraphers; 120 telephone and telegraph linemen; 3 cobblers; 12 buglers; 6 tailors; 6 barbers; 30 telephone operators; 12 wire chiefs; 6 caterers; 15 cooks; 6 general repairmen; 6 wireless operators; 6 motorcycle repairmen; 33 laborers.	381
29	---do---	Grammar-school education with mechanical experience to 26 schools	8,985
29G	May 3	Run of the draft to 27 mobilization camps	233,600
33	May 1	Grammar-school education with mechanical experience to 1 school	150
33G	May 6	Run of the draft to 1 mobilization camp	150
34G	May 14	Run of the draft to 11 mobilization camps	51,600
35	May 2	Grammar-school education with mechanical experience to 72 schools	25,873
35G	May 15	Run of the draft to 1 mobilization camp	200
36	May 3	Grammar-school education with mechanical experience to 19 schools	6,125
36G	May 22	Run of the draft to 12 mobilization camps	40,000
37	May 10	Grammar-school education with mechanical experience to 5 schools	1,980
37G	May 25	Run of the draft to 22 mobilization camps	200,000
40	May 27	50 locomotive engineers; 50 firemen; 50 railroad grade foremen; 50 railroad track foremen; 100 wooden bridge carpenters; 200 locomotive repairmen; 50 telephone linemen; 50 surveyors; 25 telegraphers; 25 draftsmen; 25 pile driver foremen; 25 stationary engineers for donkey engines; 25 steam shovel operators; 500 car-penters; 50 steam fitters; 100 electricians; 100 auto mechanics; 100 auto drivers; 300 cooks; 250 clerks; 6,625 laborers; 200 railroad brakemen; 50 railroad con-ductors.	9,000
40G	June 10	Run of the draft to 1 mobilization camp	12,468
41	June 4	1 clerk; 1 caterer; 2 cooks; 17 butchers; 12 assistant butchers; 23 laborers	56
41G	June 10	Run of the draft to 1 mobilization camp	4,336
42	June 4	Grammar-school education with mechanical experience to 1 school	381
43	June 7	Grammar-school education with mechanical experience to 3 schools	803
43G	June 18	Run of the draft to 14 mobilization camps	54,500
44	June 8	Grammar-school education with mechanical experience to 34 schools	13,030
44G	June 20	Run of the draft to 12 mobilization camps	45,000
45	June 18	Grammar-school education with mechanical experience to 30 schools	8,976
45G	June 20	Run of the draft to 10 mobilization camps	25,000
46	June 19	Grammar-school education with mechanical experience to 1 school	500
47	June 21	Grammar-school education with mechanical experience to 2 schools	330
48	June 24	Grammar-school education with mechanical experience to 1 school	2,800
49	---do---	-----do-----	100
50	June 26	-----do-----	185
51	---do---	-----do-----	258
52	June 27	108 auto repairmen; 54 axmen; 162 blacksmiths; 108 boatmen; 543 bridge car-penters; 162 cabinetmakers; 54 calkers; 54 concrete foremen; 272 concrete wor-kers; 54 construction foremen; 162 cooks; 108 draftsmen; 54 electricians; 54 gas enginemen; 54 stationary enginemen; 27 farriers; 54 horseshoers; 54 litho-graphers; 108 machinists; 54 buglers; 54 photographers; 54 plumbers; 12 pow-dermen; 54 quarrymen; 108 riggers; 27 saddlers; 27 shoemakers; 108 surveyors; 27 tailors; 54 teamsters; 54 telephone operators; 270 timbermen; 108 topo-graphers; 108 clerks; 3,265 laborers.	6,630

From The Adjutant General (Cont'd.)

Requisition No.	Date received	Qualifications	Number of men
52G	July 2	Run of the draft to 1 mobilization camp	300
53	July 3	Grammar-school education with mechanical experience to 43 schools	25,575
53G	July 2	Clerks	650
54	July 8	35 general logging superintendents; 35 section bosses; 35 rigging foremen; 35 hook-tenders; 35 hook-on men; 35 high climbers; 70 chasers; 70 chokermen; 35 head riggers; 105 donkey engineers; 70 donkey firemen; 195 fallers; 345 buckers; 35 spool tenders; 35 crosscut saw filers; 50 head buckers; 35 snipers; 35 knotters; 35 blacksmiths; 35 blacksmiths' helpers; 96 carriage men; 24 cooks; 48 assistant cooks; 24 doggers; 24 edgermen; 24 assistant edgermen; 24 chief engineers; 48 engineer helpers; 48 band filers; 24 circular filers; 24 assistant circularfilers; 24 head foremen; 75 assistant foremen; 48 general sawmill foremen; 75 graders; 24 log deckers; 24 millwrights; 48 assistant millwrights; 48 offbearers; 48 oilers; 35 camp helpers; 35 pumpmen; 35 head loaders; 35 signal boys; 24 trimmermen; 195 planer feeders; 195 planer trimmermen; 24 resawers; 48 setters; 144 tallymen; 48 assistant trimmermen.	3,000
54G	do	Run of the draft to 11 mobilization camps	46,000
55	July 11	Grammar-school education with mechanical experience to 12 schools	7,528
55G	do	Run of the draft to 1 mobilization camp	10,000
56G	July 12	Cooks	400
57G	July 17	Run of the draft to 15 mobilization camps	50,100
58G	do	Physicians	(1)
59	July 16	Grammar-school education with mechanical experience to 12 schools	3,814
62	July 19	264 laborers; 8 plumbers; 12 electricians; 8 blacksmiths; 8 machinists; 80 clerks; 28 stenographers; 24 foremen; 16 cooks; 8 second cooks; 8 mess sergeants; 8 printers; 24 carpenters; 8 crane operators; 16 painters; 20 motor mechanics; 12 motor truckmasters; 48 chauffeurs.	600
63	July 18	6 instrument repairmen; 6 mechanical instrument makers; 6 camera repairmen; 6 instrument makers.	24
63G	July 29	Run of the draft to 1 mobilization camp	6,000
64	July 20	Grammar-school education with mechanical experience to 10 schools	4,325
65	July 23	Grammar-school education with mechanical experience to 5 schools	1,261
65G	July 27	Clerks	10
66	July 26	Grammar-school education with mechanical experience to 1 school	309
66G	July 30	Run of the draft to 1 mobilization camp	1,084
67	Aug. 2	2 plumbers; 3 electricians; 2 blacksmiths; 2 machinists; 20 clerks; 7 stenographers; 6 foremen; 4 cooks; 2 second cooks; 2 mess sergeants; 2 printers; 6 carpenters; 2 crane operators; 4 painters; 5 motor mechanics; 3 motor truckmasters; 12 chauffeurs; 66 laborers.	150
67G	Aug. 1	Run of the draft to 13 mobilization camps	30,000
68	Aug. 23	75 auto repairmen; 19 stenographers	94
68G	Aug. 1	Run of the draft to 16 mobilization camps	100,000
69G	Aug. 8	Run of the draft to 3 mobilization camps	12,000
70	Aug. 3	25 stenographers; 25 clerks	50
71	Aug. 5	Grammar school education with mechanical experience to 10 schools	2,339
72	Aug. 15	Draftsmen	253
73	do	Stenographers	15
74	do	do	15
75	Aug. 27	Grammar-school education with mechanical experience to 8 schools	2,304
75G	Aug. 20	Run of the draft to 21 mobilization camps	21,200
76	Sept. 30	Grammar-school education with mechanical experience to 53 schools	21,329
76G	Aug. 20	Run of the draft to 11 mobilization camps	40,500
77G	do	Run of the draft to 21 mobilization camps	125,000
79G	Aug. 15	Photographers	3
80G	Aug. 22	Run of the draft to 1 mobilization camp	5,000
81G	do	do	900
82G	Aug. 29	Clerks	6,054
83G	Aug. 28	Mechanical draftsmen	200
84G	Sept. 9	Stenographers and typists	2,000
85G	Sept. 10	Run of the draft to 20 mobilization camps	39,750
87G	do	Telegraphers	5
88G	Sept. 13	Run of the draft to 1 mobilization camp	956
89G	Sept. 17	Run of the draft to 6 mobilization camps	13,000

From The Adjutant General (Cont'd.)

Requisition No.	Date received	Qualifications	Number of men
90G	Sept. 25	Spruce producers	1,800
91G	Oct. 4	Run of the draft to 38 mobilization camps	[2]114,395
92G	Oct. 22	Run of the draft to 1 mobilization camp	2,000
93G	Oct. 17	Run of the draft to 56 mobilization camps	[2]290,773
94G	Nov. 2	Warehousemen, clerks, stenographers, typists, stationary engineers, and firemen, forestrymen and lumbermen, electricians, and stockkeepers for 10 mobilization camps.	[2]18,300
95G	Nov. 7	Photographers for 3 mobilization camps	[1]900
		From The Navy Department	
1	Oct. 3	Run of the draft to 2 mobilization points	1,000
2	Nov. 1	Carpenters for 5 mobilization points	300
3	do	Boiler makers for 6 mobilization points	200
4	do	Coppersmiths for 5 mobilization points	200
5	do	Cooks for 2 mobilization points	200
6	do	Stewards for 4 mobilization points	200
7	Nov. 7	Bridge riggers for 13 mobilization points	[3]200

[1] Unlimited.

[2] Portions of the requisitions so indicated were suspended on account of the influenza epidemic, and such suspended requisitions were subsequently canceled by the President's order of November 11, 1918.

[3] Requisition canceled account suspension of hostilities.

INDUCTION CALLS

In order to fill requisitions, the Provost Marshal General notified a State or States, by wire, to furnish a specified number of men, at a specified time or times, for entrainment to a specified place or places. This constituted a call. Each induction telegram bore a serial number, prefixed by A, N, or M, signifying Army, Navy, Marine Corps, which served as designation to describe the particular duty and mobilization point of a drafted man.

Upon receipt of the call, the Governor of the State concerned notified, in turn, the particular local board or boards within his State of the exact number of men to be furnished by each, and of date, place, and hour of entrainment.

During 1917, all requisitions and calls were made for white or colored men physically qualified for general military service. These calls were filled by local boards by taking registrants in sequence of order numbers, regardless of occupational or educational qualifications. Such calls were known as "the run of the draft."

In 1918, general, special, and individual calls were instituted. A general call was made for a specified number of men having certain physical qualifications; a special call referred to men with specified occupational or educational qualifications; and an individual call concerned a particular individual. There were also voluntary calls, under which volunteers were advertised for and

listed; voluntary special calls which permitted registrants with the specified qualifications to volunteer for the call; and list calls upon which individuals known to possess certain occupational or educational qualifications could be inducted.

The following tables show the number of inductions made under various calls:

Qualifications Compared

Mobilization, by kinds of calls issued	Number	Percent of inductions
Total inductions to Nov. 11, 1918	2,810,296	100.00
Qualified only as to physical conditions and color ("Run of the draft")	2,384,026	84.83
Occupational qualifications also ("Special lists")	54,779	1.95
Educational qualifications also ("Schools")	127,943	4.55
More specific qualifications ("Individual inductions")	243,548	8.67

Voluntary and Involuntary Inductions Compared

Types of induction	Number	Percent of inductions	Percent of voluntary inductions
Total inductions June 5, 1917, to Nov. 11, 1918	2,810,296	100.00	
Involuntary	2,365,752	84.18	
Mixed	160,984	5.73	
Voluntary	283,560	10.09	100.00
Individual	243,548		85.89
General	40,012		14.11

Colored and White Inductions Compared

Colored and white inductions	Number	Percent of inductions
Total colored and white inductions, June 5, 1917—Nov. 11, 1918	2,810,296	100.00
Colored	367,710	13.08
White	2,442,586	86.92
From registration of June 5, 1917—Sept. 11, 1918	2,299,157	
From registration of Sept. 12, 1918	143,429	

Calls, Inductions, Acceptances, and Rejections, by States

States	Total called	Total inducted	Total accepted	Total rejected	Total rejected cancellation of draft
Alabama	60,138	64,405	58,215	6,108	82
Arizona	8,813	9,580	8,537	308	735
Arkansas	52,261	55,419	49,497	3,702	2,220
California	76,469	79,593	71,249	3,273	5,071
Colorado	25,363	25,950	23,772	1,216	962
Connecticut	34,287	36,010	34,533	1,400	77
Delaware	5,259	5,527	5,099	393	35
District of Columbia	11,184	11,029	10,024	531	474
Florida	25,354	37,988	25,683	2,294	11
Georgia	68,775	72,383	63,786	8,390	207
Idaho	13,282	13,824	12,810	980	34
Illinois	187,334	193,338	180,512	10,796	2,030
Indiana	75,417	77,440	73,048	3,828	564
Iowa	77,331	74,512	69,032	3,504	1,976
Kansas	46,837	49,757	45,626	3,016	1,115
Kentucky	67,899	60,617	57,177	3,399	41
Louisiana	58,310	61,623	55,262	5,667	694
Maine	16,433	17,659	16,232	1,402	25
Maryland	35,428	36,334	34,556	1,681	97
Massachusetts	88,502	93,960	83,220	5,379	5,361
Michigan	101,811	106,802	98,780	6,919	1,103
Minnesota	76,764	79,383	74,275	4,522	586
Mississippi	48,092	47,319	42,428	4,418	473
Missouri	101,491	104,591	91,859	7,499	5,233
Montana	29,638	29,446	27,507	1,649	230
Nebraska	40,648	34,783	31,276	1,648	1,859
Nevada	3,242	3,384	3,211	161	12
New Hampshire	9,205	9,665	9,139	492	34
New Jersey	74,438	78,615	72,946	5,229	440
New Mexico	9,412	9,508	8,968	509	31
New York	267,472	279,875	254,309	18,371	7,195
North Carolina	62,166	62,557	57,507	4,956	94
North Dakota	22,473	20,680	18,663	1,117	900
Ohio	146,435	154,236	146,304	7,606	326
Oklahoma	69,101	71,926	64,834	4,008	3,084
Oregon	18,382	19,617	17,776	1,676	165
Pennsylvania	212,188	223,122	202,551	16,765	3,806
Rhode Island	12,148	12,551	11,757	710	87
South Carolina	44,451	47,341	42,836	4,499	6
South Dakota	22,771	22,423	21,060	1,350	13
Tennessee	62,779	66,064	58,195	5,924	1,945
Texas	132,683	127,797	118,383	5,378	4,036
Utah	12,024	12,309	11,638	591	80
Vermont	7,220	7,450	6,905	536	9
Virginia	61,141	61,878	55,583	6,180	115
Washington	31,580	33,257	31,403	1,722	132
West Virginia	46,607	46,596	42,683	3,897	16
Wisconsin	77,233	79,012	72,008	5,072	1,932
Wyoming	8,550	8,790	8,174	537	79
Alaska	1,852	2,090	1,926	143	21
Hawaii	5,420	6,008	5,400	607	1
Puerto Rico	15,733	16,901	14,473	2,427	1
Total	2,869,826	2,952,927	2,702,687	194,385	55,855

MOVEMENT TO CAMP

Entrainment of inducted men, in most communities, took on the marks of a public celebration which added much to making the draft popular. The Railroad Administration provided transportation for the contingents and made arrangements for feeding men en route.

During 1917, inducted men were sent to the 16 National Army camps only. In 1918, the requirements were changed, and men were sent to every Army station in the United States, Alaska, Hawaii, and Puerto Rico.

Distribution was made as follows:

Camp or station	Number	Camp or station	Number
Fort Armstrong (Hawaii)	5,420	Camp Lee	138,349
Camp Beauregard	14,887	Camp Lewis	112,474
Camp Bowie	14,524	Camp Logan	4,000
Camp Cody	20,852	Camp MacArthur	11,124
Camp Custer	89,146	Camp McClellan	7,805
Camp Devens	93,819	Camp Meade	103,305
Camp Dix	105,528	Camp Pike	116,236
Camp Dodge	111,462	Camp Sevier	14,414
Camp Forrest	16,532	Camp Selby	26,673
Camp Fremont	8,000	Camp Sheridan	5,224
Camp Funston	122,364	Camp Sherman	103,800
Camp Gordon	102,603	Camp Taylor	120,522
Camp Grant	114,140	Camp Travis	112,357
Camp Greene	19,423	Camp Upton	111,737
Camp Greenleaf	39,664	Camp Wadsworth	55,834
Camp Hancock	15,980	Camp Wheeler	31,209
Camp Humphreys	17,941	Fort William Seward (Alaska)	1,852
Camp Jackson	96,704	Coast Artillery posts	47,386
Camp Johnston	4,429	Recruit depots	191,084
Camp Kearny	11,000	Schools	269,657
Camp Las Casas (Puerto Rico)	15,733	Miscellaneous	185,103

Cost of Operation

It was initially planned that all board members and clerks, who were financially able to do so, should serve without compensation. However, this arrangement was abandoned when it became apparent that, in the majority of cases, the strain on their resources would be too great.

APPROPRIATIONS

Appropriations for registration and selection for military service (R. & S. for M. S.) totaled $54,896,903 made up as follows:

Appropriations	Amounts
R. & S. for M. S. 1917—18, Act of June 15, 1917	$2,658,413.00
R. & S. for M. S. 1918, Act of Oct. 6, 1917	4,000,000.00
Urgent deficiency, 1918, Act of Mar. 28, 1918	8,476,490.00
National Security and Defense, War Department; allotted by President Apr. 15, 1918	4,000,000.00
R. & S. for M. S., 1919, Act of July 9, 1918	15,762,000.00
Urgent deficiency, 1919, Act of Nov. 4, 1918	20,000,000.00

DISBURSEMENTS

The total expenditures from the several appropriations shown above amounted to $30,847,914.24, distributed as follows:

Pay to board members	$12,324,060.08
Pay to employees	14,036,999.76
Physical examination	726,314.06
Travel per diem, auto hire, drayage, etc.	406,430.91
Supplies and miscellaneous expenses	3,354,109.43

The miscellaneous expenses included the following variety of items:

Office rent, fuel, light, phone, etc.	$ 711,101.88
Printing, forms, etc.	288,327.83
Filing cabinets	388,704.14
Typewriters	366,888.75
Binders, guide cards	61,946.37
Envelopes for mailing questionnaires	153,947.76
Office furniture	298,912.77
Stationery	924,649.41
Lapel buttons for board members and exempts	35,530.95
Miscellaneous covering small items, such as repairs, cleaning offices, etc.	124,099.57

PER-CAPITA COST

Considering a total registration of 23,908,576 men of whom 17,588,848 were classified up to Dec. 30, 1918, the per capita cost of the operation of the Selective Service system and its comparison with the voluntary enlistment and Civil War methods becomes of interest.

With the above disbursements as a basis, the per capita cost per registrant was $1.26; per registrant classified, $1.74; per man inducted, $10.38; and per man accepted at camp $11.34. Comparison of the cost per man accepted ($11.34) with the cost per man secured by voluntary enlistment in the Army ($28.95) and in the Navy ($30.23) proves that also in respect to national economy the selective service system is to be preferred. Comparing the cost per accepted man under the selective-service law with the corresponding cost per man under the Civil War Enrollment Act, it would appear that the cost under the latter legislation was, per capita, $217.87 for bounty and $9.84 for operating expenses, a total of $227.71, against a per capita cost of $11.34 under the Selective Service Law.

Physique of the Soldier

The following statistics deal with stature, weight, and chest measurement of the individual soldier and are based on a study by the Medical Department. The data are derived from an analysis of these three standard physical measurements taken on 1,000,000 recruits during the war and on 100,000 troops at demobilization.

The resulting figures were compared with similar data for the Civil War, prepared by B. A. Gould, 1869, and by J. H. Baxter, 1875.

STATURE

The average height of the first million recruits, drafted 1917-18, was 67.49 inches. This figure was obtained by considering the stature of both white and colored troops, ages 21 to 30, inclusive. When compared with the 67.502 inches, representing the mean height of recruits in the Civil War, it would appear that practically no change had taken place during the 55 years following that conflict.

WEIGHT

The average weight of the first million recruits, 1917-18, was 141.54 pounds. This was slightly in excess of the mean weight of 136.05 pounds recorded for a few thousand white American recruits in the Civil War. Upon demobilization the veteran weighed, on the average, 3⅛ pounds more than he did as recruit. A similar difference obtained in the Civil War between measurements of individuals made upon entry into service and those made upon demobilization. Thus, conditions of Army life tended to raise the weight of the soldiers to a uniform high level in both cases.

CHEST CIRCUMFERENCE

For 1917-18, a total of 873,159 recruits averaged a chest circumference, deflated, of 33.22 inches. The mean circumference for the uninflated chest of 95,867 troops at demobilization was 34.94 inches. The difference between the two measurements, therefore, amounted to 1.72 inches, which however does not present the exact picture. Recruits of 1917-18 were told to deflate the chest as much as possible, while the veterans at demobilization were instructed to keep the chest in a quiescent state, i. e., neither inflated nor uninflated. Inasmuch as this divergence of instructions accounts for an average of ¾ inch, only about 1 inch of the increased chest circumference may be attributed to expansion resulting from the intensive training which all troops received.

On the other hand, the statistics for the Civil War indicate a mean girth at exhalation of 33.53 inches as derived from measurements of 500,000 drafted men, taken from a population greatly depleted by volunteers. At demobilization, however, the mean circumference at expiration, for white soldiers, had increased to 34.49 inches, representing a difference of 0.96 inch.

Drawing comparison between the results obtained from measurements during the period 1917-19 and those of the Civil War, it will be found that the chest expansion, because of training and out-door life, has been consistently uniform.

DEMOBILIZATION

Preliminaries

1918

On Nov. 11, when approximately 250,000 selectees were to begin mobilization, all calls for the Army were canceled.

At this time, while the classification of registrants, enrolled Sept. 12, was in progress, the Provost Marshal General issued to local and district boards these instructions:

To classify the 18-year group, which had not then been touched.

To complete the 19-36 age group, which was almost finished.

To discontinue all work on the 37-45 age group, which was then substantially advanced.

On Nov. 13, all Navy calls were canceled and, on the 16th, all district boards were ordered to cease work on classification and appeals. Three days later, local boards were ordered to complete classifications and to close their records not later than Dec. 10, 1918.

On Nov. 25, passport restrictions, theretofore imposed on persons of military age, were lifted and local boards notified accordingly.

Completion

On Nov. 27, The Adjutant General was designated as the permanent custodian of all records pertaining to the Selective Service organization. Thereafter the activities of the Provost Marshal General's Office and of the State and local agencies were directed toward complying with this order and toward disbanding their organizations.

On Nov. 28, demobilization was ordered for inducted men assigned to clerical duty at State headquarters and at district, local, and medical advisory boards. However, the records of the various boards were kept open until after Dec. 10, to enable the Provost Marshal General to prescribe a uniform procedure of preparing the records for final disposal. The task of assembling and disposing of these records was tremendous. It involved nearly 24,000,000 cases filed in the offices of 4,648 local boards, 155 district boards, 1,319 medical advisory boards, and 52 State headquarters.

1919

By Mar. 8, demobilization had progressed to permit issuance of orders directing the closing of local, district, and medical advisory boards not later than Mar. 31. The several State headquarters continued in operation to complete administrative matters still pending. This work was completed and the last State headquarters demobilized May 21.

The Provost Marshal General's Office remained in operation until July 15, 1919, when it was discontinued and the Selective Service organization terminated.

SECTION 19

QUARTERMASTER CORPS AND PURCHASE AND STORAGE SERVICE

ORIENTATION [1]

The supply service during the Revolutionary War bore little resemblance to the Quartermaster Corps. During this early period there was a Quartermaster General but his functions were those of a general staff officer, chiefly concerned with the supervision of transport and supply, and not those of a bureau chief or supply officer. Operation of the supply service was in the hands of Government agents, both military and civilians, who were charged with procurement and distribution of supplies.

During the first quarter of the 19th Century, a Quartermaster Department slowly developed, but it did not begin to operate in the modern sense until 1842. Thereafter, no important changes occurred until Aug. 24, 1912, when the Subsistence and Pay Departments were consolidated with the Quartermaster's Department to constitute the Quartermaster Corps.

FUNCTIONS

(QUARTERMASTER CORPS APR. 6, 1917)

To pay all personnel connected with the Army; to provide transportation of various kinds; to furnish all public animals, their forage and equipment; to supply clothing, camp and garrison equipment, subsistence, and articles of authorized sale and issue; to provide barracks, storehouses, and other buildings; to construct and repair roads, railways, and bridges; to build and charter boats, ships, and docks needed for military purposes; to give instructions for procurement, distribution, issue, sale and accounting for all quartermaster and subsistence supplies; to attend to all matters connected with military operations not expressly assigned to some other bureau of the War Department.

(PURCHASE AND STORAGE SERVICE)

To be responsible for and have authority over the purchase, storage, distribution, and issue within the United States of supplies for the Army.

---

[1] Because of the surrender of all purchasing and distributing functions by the Quartermaster Corps to the Purchase and Storage Service in the fall of 1918, the two services have been treated together.

CHIEFS

(QUARTERMASTER CORPS)

1917
Apr. 6 Maj. Gen. Henry G. Sharpe, Quartermaster General.
Dec. 20 Maj. Gen. George W. Goethals,[1] Acting Quartermaster General.
1918
May 10 Brig. Gen. Robert E. Wood, Acting Quartermaster General.

(PURCHASE AND STORAGE SERVICE)

Sept. 12 Brig. Gen. Robert E. Wood, Acting Quartermaster General and Director of Purchase and Storage.
1919
Feb. 13 through June 20 Maj. Gen. Harry L. Rogers, Quartermaster General and Director of Purchase and Storage.

ORGANIZATION AND DEVELOPMENT

QUARTERMASTER CORPS

OFFICE OF THE QUARTERMASTER GENERAL

1917

At outbreak of war, the Office of the Quartermaster General supplied the Army through department, depot, camp, post, and other subsidiary quartermasters. There were seven general supply depots and other establishments designated as points of supply. Depot quartermasters were in charge of these depots and of procurement and storage of supplies, which were issued in response to requisitions from department quartermasters.

Camp and post quartermasters supplied their troops by requisition on depots through department quartermasters, except in case of urgent necessity when direct purchase was authorized.

On Apr. 6, the Office of the Quartermaster General operated through these Divisions: Administrative, Finance and Accounting, Supplies, Construction and Repair, and Transportation.

On Aug. 4, the Water Transportation Branch of the Transportation Division was attached to the Embarkation Service and effectively passed from control of the Quartermaster General's Office, although actual transfer was delayed until Apr. 22, 1918 (see p. 499).

By Oct. 8, the Remount and Cantonment Divisions had been added. On Oct. 16, the old Construction and Repair Division was absorbed by the Cantonment Division; concurrently the Personnel and Warehouse Divisions were created.

1918

On Jan. 10, the Assistant Chief of Staff, Director of Storage and Traffic, took over the duties and personnel of that part of the Transportation Division which handled inland transportation and incorporated them in his organization as the Inland Transporta-

[1] Appointed Director, Purchase, Storage, and Traffic Division, General Staff, in addition to his duties as Acting Quartermaster General, Apr. 16, 1918.

tion Division. Similarly, the recently created Warehouse Division was merged with the Storage Control Division of Storage and Traffic, Jan. 11. One week later, the Fuel and Forage Division was established in the Quartermaster General's Office.

On Jan. 26, the Office of the Quartermaster General was completely reorganized. General Administration, Quartermaster Supply Control, and Personnel and Planning Staffs were set up as so-called service bureaus, while the operating functions of the Office were assigned to these Divisions: Supply and Equipment, Reclamation, Subsistence, Fuel and Forage, Remount, Motors, and Cantonment. The Cantonment Division from then on reported direct to the Secretary of War. Inasmuch as this new organization failed to give the Quartermaster General control over the distribution of supplies, the Warehousing Division was reestablished Feb. 13.

On Apr. 16, Maj. Gen. George W. Goethals, Acting Quartermaster General, was in addition appointed the Director of the newly created Purchase, Storage, and Traffic Division, General Staff. At this time the structure of the Quartermaster General's Office underwent another change, which tended further to make it a purchasing, planning, and distributing agency. The Administrative, Personnel, Finance and Accounts, Methods Control, and Supply Control Divisions constituted the service agencies; while the Supply and Equipment, Motor Transport, Subsistence, Fuel and Forage, Transportation, Depot, Reclamation, and Remount Divisions continued as operating departments, the last two under a Special Assistant to the Acting Quartermaster General.

The new Depot Division evolved from the old Warehousing Division. The Motor Transport Division absorbed many of the functions of the then dissolving Transportation Division after the latter's Water Transportation Branch had been transferred to the Purchase, Storage, and Traffic Division, General Staff; the remaining transportation functions were assumed by the Central Disbursing and Depot Divisions June 15.

All financial activities of the Quartermaster General's Office were placed under an Assistant in Charge of Finances June 12, leaving supervisory direction only to the Acting Quartermaster General.

On June 14, largely to tighten control within the Office, another reorganization took place, resulting in the following structure:

Organization of Quartermaster General's Office
June 14, 1918

I.

OFFICE OF THE QUARTERMASTER GENERAL.—Brig. Gen. Robert E.

Wood, Acting Quartermaster General; Mr. Robert J. Thorne, Assistant.

II.

OFFICE OF THE EXECUTIVE OFFICER.—Maj. Benjamin L. Jacobson, Acting Executive Officer.

1. *Administrative Division,* with four Branches: Administrative Control; Communications; Cemeterial; Office Equipment.
2. *Personnel Division,* with five Branches: Commissioned Personnel; Enlisted Personnel; Civilian Personnel; Departmental Personnel; Administrative.
3. *Methods Control Division,* with six Branches: Orders and Regulations; Investigation; Information and Statistics; Organization; Purchase Records; Office Service.

III.

OFFICE OF THE ASSISTANT TO THE ACTING QUARTERMASTER GENERAL.—Mr. Robert J. Thorne, in charge.

1. *Supply Control Division,* with three Branches: Requirements; Contracts Advisory; Office Service.
2. *Clothing and Equipment Division,* with nine Branches: Textile (Subdivision); Cotton Goods; Woolen Goods; Knit Goods; Wool Tops and Yarn; Manufacturing; Shoes, Leather & Rubber Goods; Leather Materials; Administrative and Control.
3. *Hardware and Metals Division,* with four Branches: Metals and Heavy Hardware; Camp & Kitchen Equipment; Tools & Hardware Sundries; Administrative.
4. *Vehicles and Harness Division,* with three Branches: Vehicles; Harness; Administrative.
5. *Subsistence Division,* with six Branches: Purchasing; Allotment; Dehydrated Products; Planning and Inspection; Overseas Subsistence; Administrative.
6. *Depot Division,* with three Branches: Depot Service; Distribution; Administrative.

IV.

OFFICE OF THE ASSISTANT TO THE ACTING QUARTERMASTER GENERAL.—Col. John S. Fair, in charge.

1. *Conservation & Reclamation Division,* with seven Branches: Salvage and Gardening; Shoe Repair; Hat Repair; Clothing Repair; Laundries; Dry Cleaning; Administrative.
2. *Remount Division,* with four Branches: Purchasing and Issue; Remount Depot; Remount Inspection; Administrative.

3. *Fuel and Forage Division,* with four Branches: Fuel; Forage; Oil; Administrative.

V.

OFFICE OF THE ASSISTANT TO THE ACTING QUARTERMASTER GENERAL. —Col. Fred Glover, in charge.

1. *Motor Transport Service,* with two Subdivisions: Procurement, Operations; and two Branches: Engineering, Administrative.

VI.

OFFICE OF THE ASSISTANT TO THE ACTING QUARTERMASTER GENERAL. —In Charge Finances: Col. Herbert M. Lord.

1. *Finance and Accounts Division,* with nine Branches: Financial Control; Apportionment Accounts; Money Accounts; Property Accounts; Subsistence Returns; Cost-Keeping; Claims; Contract Files; Office Service.
2. *Central Disbursing Division,* with four Branches: Pay and Mileage; Personal Deposits & Allotments; Transportation and Telegraph; Office Service.

By mid-June the Purchase, Storage, and Traffic Division of the General Staff had evolved a general policy to shift all procurement of particular supplies for the entire Army to the supply bureau which was already buying the largest quantities of these items. Through its Purchase and Supply Branch, the Division began to enforce the new policy Apr. 24, gradually concentrating in the Quartermaster Corps sole procurement authority which, at the end of the 1918 fiscal year, covered the following: Burlap and jute; cotton goods; woolen goods; leather and leather goods; Manila, sisal, and cotton rope; silk fabric, silk yarn, and silk thread; rubber and rubber goods; linen and linen thread; needles; ice boxes and refrigerators; garment workers', cobblers', and saddlers' power tools; animal and hand-drawn vehicles; paper and cartons; hand tools; general hardware; cots, bunks, and bedsteads; soap, washing and bleaching powders.

On June 26, the Depot Division underwent one reorganization and Aug. 15, another, when it was designated as the Operating Division.

Two months later, the Quartermaster General's Office, in addition to its other duties, was given authority over and made responsible for the storage, distribution, and issue within the United States of all supplies for the Army.

Other changes included the reorganization of the Supply Division Aug. 30, and the consolidation, Sept. 14, of the Methods Control and Administrative Division into a new Administrative Division. This was followed within 4 days by the establishment

of the Requirements Division which absorbed the former Requirement Branch, Supply Control Division. This new Division was charged with the determination of requirements for all supplies to be secured under the direction of the Acting Quartermaster General and Director of Purchase and Storage.[1]

Up to this time the office of the Quartermaster General had procured the greater part of all Army supplies. Yet, at this juncture, all procurement divisions and all divisions concerned with storage and distribution were taken from the control of the Quartermaster General and placed under the supervision of the Director of Purchase and of the Director of Supply Operations, respectively, in the office of the Director of Purchase and Storage.

The creation, Oct. 11, of the Office of the Director of Finance (see p. 208) removed all financial functions from the Quartermaster General's Office. This was followed Oct. 21 by the transfer of all procurement and operating functions and of many administrative functions from the Office of the Quartermaster General to the Office of the Director of Purchase and Storage. As a result, the Office of the Quartermaster General retained only these Branches: Executive, Commissioned Personnel, Enlisted Personnel, Departmental Personnel, Civilian Personnel, Bakery Organization, Labor Organization, Training, Cemeterial, and Remount Operating.

FIELD ORGANIZATION

1917

The supply system existing at outbreak of war (see p. 410) was first modified in Oct., when the supply of divisional camps and cantonments was exempted from the control of department commanders. This inaugurated a distinct supply service whereby the depots filled requisitions direct, without further reference to military channels.

1918

In Jan., remount depots and animal embarkation depots were also authorized to fill requisitions direct under the new policy. On Feb. 11, War Department orders fixed the control of quartermaster supplies still further. Thereafter general supply depots operated in accordance with instructions emanating from the Quartermaster General's Office. This control was exerted through the several procurement divisions with respect to production, manufacture, inspection, and delivery from place of production; and through the Warehouse Division in regard to warehousing and distribution.

The existing field organization began to expand when the

[1] To understand the meaning of this provision, it should be kept in mind that Brig. Gen. Robert E. Wood had held both offices since September 12, 1918.

office of the Wool Purchasing Quartermaster was opened in Boston with branch offices in Philadelphia, Chicago, San Francisco, and Portland, Ore. With this trend toward centralization of control, definite zones of jurisdiction were assigned the various supply depots May 13, in order to utilize and develop the resources of each zone by allocation of purchases to industries. On June 4, the procurement of unfabricated wool and cotton as well as the purchases of the Remount and the Motor Transport Services were exempted from this control.

On July 1, the Office of the Quartermaster General issued final instructions dealing with zones of procurement and the operation of general supply depots. As a result, the United States and possessions were divided, not only for general procurement but for subsistence procurement and for distribution of supplies as well, into 13 zones as follows:

Organization for Procurement and Distribution of Quartermaster Supplies

(Legend: 1 = areas of procurement and operations of general supply depots; 2 = areas of distribution; 3 = supply depots; 4 = camps, cantonments, posts, forts, aviation fields and other military establishments in areas of distribution assigned to general supply depot.)

ZONE 1

1. Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut.

2. Maine, New Hampshire, Vermont, Massachusetts, Rhode Island.

3. *Boston General Supply Depot,* Cambridge, Mass., was the main source of supply for one camp and several posts and forts in the northeastern section of the country. It supplied approximately 32,000 men. It was also a very important procurement depot for shoes and textiles. The major part of the employees at this depot was devoted to procurement and inspection functions. Storage space: 699,673 sq. ft.

4. Headquarters, Northeastern Department, Boston, Mass.; North Atlantic Coast Artillery District, Boston, Mass.; *Camp Devens,* Ayer, Mass.; School for Engineer Officers, Massachusetts Institute of Technology, Cambridge, Mass.; Forts Andrews, Banks, Revere, Rodman, Standish, Strong, and Warren, Springfield Armory, Watertown Arsenal, and Lowell, Mass.; Forts Foster, McKinley, Preble, and Williams, Me.; Forts Constitution and Stark, N. H.; Fort Ethan Allen, Vt.; Forts Adams, Getty, Greble, Mansfield, Phil Kearny, and Wetherill, R. I.


GENERAL PROCUREMENT ZONES
QUARTERMASTER CORPS
★ General Supply Depot
1
2
3
4
5
6
7
8
9
10
11
12
13
SEATTLE
WASHINGTON
PORTLAND
OREGON
BOISE
MONTANA
HELENA
NORTH DAKOTA
BISMARK
SOUTH DAKOTA
MINNESOTA
ST. PAUL
WYOMING
CHEYENNE
SALT LAKE CITY
UTAH
NEVADA
CALIFORNIA
SAN FRANCISCO
LOS ANGELES
CORONADO
DENVER
COLORADO
NEBRASKA
OMAHA
IOWA
CHICAGO
WISCONSIN
MICHIGAN
DETROIT
TORONTO
BUFFALO
ROCHESTER
NEW YORK
MAINE
VT.
NH.
MASS.
CONN.
BOSTON
BRIDGEPORT
NEW YORK
PENNSYLVANIA
PITTSBURGH
PHILADELPHIA
BALTIMORE
WASHINGTON
CLEVELAND
OHIO
DAYTON
CINCINNATI
INDIANA
INDIANAPOLIS
KANSAS
ST. LOUIS
MISSOURI
JEFFERSONVILLE
KENTUCKY
WEST VIRGINIA
VIRGINIA
NEWPORT NEWS
NASHVILLE
TENNESSEE
NORTH CAROLINA
S. CAROLINA
ATLANTA
GEORGIA
CHARLESTON
OKLAHOMA
OKLAHOMA CITY
LITTLE ROCK
ARKANSAS
SANTA FE
NEW MEXICO
ARIZONA
PHOENIX
DALLAS
EL PASO
TEXAS
HOUSTON
SAN ANTONIO
LOUISIANA
NEW ORLEANS
MISSISSIPPI
ALABAMA
MONTGOMERY
FLORIDA
JACKSONVILLE
MIAMI

MAP NO. 4.

ZONE 2

1. New York, New Jersey (Trenton and north—but for purchase and inspection of articles of subsistence the New York Zone included the entire state of New Jersey), Pennsylvania (purchase and inspection of subsistence only).

2. New York, Connecticut, New Jersey, Pennsylvania, Puerto Rico and establishments in the West Indies (for subsistence and miscellaneous supplies).

3. *New York General Supply Depot* was the principal source of supply for four camps and furnished approximately 169,000 men. It had a large manufacturing-procurement function, being located in a clothing manufacturing district. It also did a large amount of procurement on hardware items and, for a time, served as the medium through which quartermaster supplies were shipped to oversea destination. Storage space: 1,746,344 sq. ft.

4. Headquarters, Eastern Department, Governors Island, N. Y.; Middle Atlantic Coast Artillery District, Fort Totten, N. Y.; Medical Supply Depot, 629 Greenwich Street, New York City; U. S. A. General Hospital No. 1, Bainbridge Avenue and Gun Hill Road, New York City; *Camp Upton,* Yaphank, L. I., N. Y.; Hazelhurst Field, Mineola, L. I., N. Y.; *Camp Mills,* L. I., N. Y.; Aviation General Supply Depot and Concentration Camp, Garden City, L. I., N. Y.; Gas Defense Plant, L. I., N. Y.; New York Arsenal, N. Y.; Forts Hamilton, Hancock, Jay (Atlantic Branch U. S. Disciplinary Barracks), Mitchell, Schuyler, Slocum (Recruit Depot), Terry, Totten, Tyler, Wadsworth, Wood, and H. G. Wright; U. S. Military Academy, West Point, N. Y.; Watervliet Arsenal, N. Y.; Forts Ontario, Niagara, and Porter, N. Y.; Syracuse, N. Y.; Madison Barracks and Plattsburg Barracks, N. Y.; School of Aerial Photography, Rochester, N. Y.; School of Military Aeronautics, Cornell University, Ithaca, N. Y.; U. S. A. General Hospital No. 4, Fort Porter, N. Y.; U. S. A. General Hospital No. 5, Fort Ontario, N. Y.; U. S. A. General Hospital No. 8, Otisville, N. Y.; U. S. Hospital, Dansville, N. Y.; Columbia University, New York City (Photographic School).

Fort Trumbull, Conn.; New Britain, Conn.; Saybrook Proving Ground, Saybrook, Conn.; U. S. Military Hospital, New Haven, Conn.

Embarkation Port, Hoboken, N. J.; Port Newark Terminal, N. J.; *Camp Merritt,* N. J.; Raritan Arsenal, Metuchen, N. J.; *Camp Dix,* Wrightstown, N. J.; Camp Alfred Vail, Little Silver, N. J.; Sandy Hook Proving Ground, N. J.; Fort Mott, N. J.; School of Military Aeronautics, Princeton University, Princeton,


SUBSISTENCE PROCUREMENT ZONES
QUARTERMASTER CORPS
★ General Supply Depot
SEATTLE
WASHINGTON
PORTLAND
OREGON
BOISE
IDAHO
MONTANA
HELENA
NORTH DAKOTA
BISMARK
SOUTH DAKOTA
MINNESOTA
ST. PAUL
WISCONSIN
MICHIGAN
TORONTO
BUFFALO
ROCHESTER
NEW YORK
VT.
NH
MAINE
MASS
BOSTON
CONN.
BRIDGEPORT
NEW YORK
NJ
PHILADELPHIA
MD.
BALTIMORE
WASHINGTON
NEWPORT NEWS
PENNSYLVANIA
PITTSBURGH
CLEVELAND
DETROIT
CHICAGO
WYOMING
CHEYENNE
OMAHA
IOWA
NEBRASKA
SALT LAKE CITY
UTAH
DENVER
COLORADO
NEVADA
CALIFORNIA
SAN FRANCISCO
LOS ANGELES
CORONADO
ARIZONA
PHOENIX
SANTA FE
NEW MEXICO
KANSAS
OKLAHOMA
OKLAHOMA CITY
ST. LOUIS
MISSOURI
ILLINOIS
INDIANA
INDIANAPOLIS
OHIO
DAYTON
CINCINNATI
JEFFERSONVILLE
KENTUCKY
W. VIRGINIA
VIRGINIA
NASHVILLE
TENNESSEE
NORTH CAROLINA
S. CAROLINA
ATLANTA
CHARLESTON
ARKANSAS
LITTLE ROCK
MISSISSIPPI
ALABAMA
GEORGIA
MONTGOMERY
JACKSONVILLE
FLORIDA
MIAMI
LOUISIANA
NEW ORLEANS
DALLAS
EL PASO
TEXAS
HOUSTON
SAN ANTONIO
1
2
4
5
7
8
9
10
11
12
13

MAP NO. 5.


DISTRIBUTION ZONES
QUARTERMASTER CORPS
★ General Supply Depot
SEATTLE
WASHINGTON
PORTLAND
OREGON
BOISE
IDAHO
MONTANA
HELENA
NORTH DAKOTA
BISMARK
SOUTH DAKOTA
WYOMING
CHEYENNE
NEBRASKA
OMAHA
13
NEVADA
CALIFORNIA
SAN FRANCISCO
SALT LAKE CITY
UTAH
DENVER
COLORADO
11
KANSAS
8
OKLAHOMA
OKLAHOMA CITY
LOS ANGELES
CORONADO
ARIZONA
PHOENIX
SANTA FE
NEW MEXICO
12
EL PASO
TEXAS
10
DALLAS
HOUSTON
SAN ANTONIO
MINNESOTA
ST. PAUL
WISCONSIN
IOWA
7
MICHIGAN
DETROIT
CHICAGO
ILLINOIS
ST. LOUIS
MISSOURI
INDIANAPOLIS
INDIANA
JEFFERSONVILLE
KENTUCKY
LITTLE ROCK
ARKANSAS
9
MISSISSIPPI
LOUISIANA
NEW ORLEANS
TORONTO
BUFFALO
CLEVELAND
OHIO
DAYTON
CINCINNATI
NASHVILLE
TENNESSEE
ROCHESTER
NEW YORK
2
PENNSYLVANIA
PITTSBURGH
MD.
BALTIMORE
WASHINGTON
VIRGINIA
4
NEWPORT NEWS
NORTH CAROLINA
S. CAROLINA
ATLANTA
GEORGIA
5
CHARLESTON
ALABAMA
MONTGOMERY
FLORIDA
JACKSONVILLE
MIAMI
VT.
N.H.
MAINE
MASS.
BOSTON
CONN.
BRIDGEPORT
NEW YORK
PHILADELPHIA

MAP NO. 6.

N. J.; U. S. A. General Hospital No. 3, Colonia, N. J.; U. S. A. General Hospital No. 9, Lakewood, N. J.; U. S. A. General Hospital No. 16, Cape May, N. J.

Frankford Arsenal, Bridesburg, Pa.; Medical Supply Depot, 1210 Arch Street, Philadelphia, Pa.; U. S. A. General Hospital, Markleton, Pa.; General Aviation Supply Depot, Middletown, Pa.; Chandler Field, Essington, Pa.; Camp Crane, Allentown, Pa.; Camp Colt, Gettysburg, Pa.

For subsistence and miscellaneous supplies—San Juan, Camp Las Casas, Henry Barracks, and recruiting stations in Puerto Rico.

ZONE 3

1. New Jersey (south of Trenton), Pennsylvania (except for purchase and inspection of articles of subsistence, which were handled for this zone by the New York General Supply Depot).

2. Puerto Rico and establishments in the West Indies (for clothing and equipage, tableware and kitchen utensils).

3. *Philadelphia General Supply Depot* was wholly a manufacturing and procurement depot. It had a large factory operating division in which were made a great many uniforms. It was the sole source of supply in the country for chevrons, ornaments, flags, kitchen ware, and tableware. This depot, being located in a general procurement zone, handled a large amount of textiles and their manufacture into finished garments. It had under its jurisdiction the subdepot of Pittsburgh. Storage space: 1,911,952 sq. ft.

4. For clothing and equipage, tableware, and kitchen utensils—San Juan, Camp Las Casas, Henry Barracks, and recruiting stations in Puerto Rico.

ZONE 4

1. Delaware, Maryland, District of Columbia (except matters then handled or supervised by the Washington Depot), Virginia, West Virginia (purchase and inspection of subsistence only).

2. Delaware, Maryland, Virginia (except Fort Myer and points in the vicinity of Newport News, Va., as listed under 4).

3. *Baltimore General Supply Depot* was the main supply depot for three camps. It supplied approximately 90,000 men, and in addition did a certain amount of procurement in subsistence items and handled an appreciable amount of clothing manufacturing. Storage space: 1,235,969 sq. ft.

Washington Depot was operated for the supply of local posts and departments, securing supplies through the Quartermaster Corps. In this capacity it was largely a procurement and disbursing organization. Storage space: 69,520 sq. ft.

Newport News Depot was created as a general supply depot for

certain camps, posts and military establishments in its vicinity. It was the sole source of supply of some 40,000 troops. Storage space: 2,150,400 sq. ft.

4. *a. Assigned to Baltimore General Supply Depot.*—Edgewood Arsenal, Md.; *Camp Meade,* Admiral, Md.; *Camp Holabird,* Baltimore, Md.; Chesapeake Bay, Md.; Forts Armistead, Carroll, Howard, McHenry, Smallwood, Washington, Md.; U. S. A. General Hospital No. 2, Fort McHenry, Md.; U. S. A. General Hospital No. 7, Roland Park, Baltimore, Md.; Radio School, College Park, Md.

Forts Delaware and DuPont, Del.

Camp Lee, Petersburg, Va.; Langley Field, Hampton, Va.; Aerial Photographic School, Hampton, Va.; General Aviation Supply Depot, Richmond, Va.; Coast Artillery School, Fort Monroe, Va.; Forts Hunt, Monroe, Story, Wool, Woodbridge, Va.

b. Assigned to Washington Depot.—Fort Myer, Va.; Camp Leach, American University, D. C.; Camp Meigs, D. C.; Potomac Park, D. C.; Washington Barracks, D. C.; Washington, D. C. (for all casuals).

c. Assigned to Newport News Depot.—Camps Eustis, Hill, Morrison, Stuart, Va.; Guard Camp at Lee Hall, Va.; Stevedore Camp at Newport News, Va.; Pig Point, Va.; Embarkation Remount Camp, Newport News, Va.; Embarkation Camp at Norfolk, Va.; Lambert's Point, Va.; Embarkation Hospital at Camp Stuart, Va.

ZONE 5

1. North Carolina, South Carolina, Georgia, Florida, Alabama.

2. North Carolina, South Carolina, Georgia, Florida (except Forts Barrancas, McRee and Pickens and Barrancas National Cemetery), Alabama (except Forts Gaines and Morgan, and Mobile National Cemetery), Tennessee (except Park Field, at Millington, Tenn.).

3. *Atlanta General Supply Depot* furnished materials for nine camps in the southeastern section of the country. Outside of supplying some 230,000 men, it did a comparatively small amount of procurement in cotton materials. Storage space: 994,389 sq. ft.

4. Headquarters, Southeastern Department, Charleston, S. C.; South Atlantic Coast Artillery District, Charleston, S. C.; *Camp Wadsworth,* Spartanburg, S. C.; *Camp Sevier,* Greenville, S. C.; *Camp Jackson,* Columbia, S. C.; Forts Fremont, Moultrie, Sumter, S. C.

Fort Caswell, N. C.; *Camp Greene,* Charlotte, N. C.; C. D. of Cape Fear, N. C.; U. S. A. General Hospital, Kenilworth Inn, Asheville, N C.; U. S. A. General Hospital, Waynesville, N. C.

Medical Supply Depot, Atlanta, Ga.; *Camp Gordon,* Atlanta,

Ga.; *Camp Wheeler,* Macon, Ga.; *Camp Hancock,* Augusta, Ga.; Augusta Arsenal; Forts McPherson, Oglethorpe, Pulaski, Screven, Ga.; C. D. of Savannah, Ga.; Brunswick, Ga.; Souther Field, Americus, Ga.; School for Supply Officers, Ga. School of Technology, Atlanta, Ga.; Civilian Balloon School, Macon, Ga.; U. S. A. General Hospital No. 6, Fort McPherson, Ga.; U. S. A. General Hospital, Fort Oglethorpe, Ga.

Camp Johnston, Jacksonville, Fla.; Carlstrom Field, Arcadia, Fla.; Dorr Field, Arcadia, Fla.; Forts Dade and DeSoto, Fla.; Key West Barracks, Fla.; C. D. of Key West, Fla.; C. D. of Tampa, Fla.

Camp McClellan, Anniston, Ala.; *Camp Sheridan,* Montgomery, Ala.; Taylor Field, Montgomery, Ala.

ZONE 6

1. West Virginia (except purchase and inspection of subsistence), Ohio (except subsistence), Indiana—Indianapolis and south, exclusive of Evansville and Terre Haute (except purchase and inspection of subsistence), Kentucky (except purchase and inspection of subsistence), Tennessee (except purchase and inspection of subsistence).

2. No zone of distribution.

3. *Jeffersonville General Supply Depot* supplied no troops. It was located in the center of a manufacturing district and was the general procurement depot for vehicles and harness, field equipment, and miscellaneous supplies. It also had a large factory operating division where much manufacturing was done locally. Storage space: 2,747,837 sq. ft.

4. None.

ZONE 7

1. Ohio (purchase and inspection of subsistence only); Indiana —north of Indianapolis (for purchase and inspection of subsistence the entire state of Indiana, except Evansville and Terre Haute), Michigan, Wisconsin, Minnesota, North Dakota, South Dakota, Illinois (except territory south of Jacksonville, Springfield and Decatur), Iowa (east of Des Moines and Fort Dodge).

2. West Virginia, Ohio, Kentucky (except Camp Taylor), Indiana, Michigan, Wisconsin, Minnesota, Illinois (except south of Jacksonville, Springfield, and Decatur), Iowa (except articles of subsistence to Camp Dodge).

3. *Chicago General Supply Depot* was the main source of supply for four camps and supplied approximately 141,000 men. It was also one of the main procurement depots for subsistence supplies and had under its jurisdiction considerable manufacturing of clothing and equipage articles. Storage space: 2,826,688 sq. ft.

4. Headquarters, Central Department, Chicago, Ill.; Medical Supply Depot, 3930 Federal Street, Chicago, Ill.; Fort Sheridan, Ill.; *Camp Grant,* Rockford, Ill.; Rock Island Arsenal, Ill.; Motor Equipment Instruction School, Peoria, Ill.; Chanute Field, Rantoul, Ill.; School of Military Aeronautics, University of Illinois, Urbana, Ill.

Fort Benjamin Harrison, Ind.; Aviation Repair Depot, Indianapolis, Ind.; Jeffersonville Depot, Ind.

Fort Thomas, Ky. (Recruit Depot).

Camp Sherman, Chillicothe, O.; McCook Field, Dayton, O.; Wilbur Wright Field, Fairfield, O.; School of Military Aeronautics, Ohio State University, Columbus, O.

Camp Custer, Battle Creek, Mich.; Selfridge Field, Mt. Clemens, Mich.; Forts Wayne and Brady, Mich.

Camp Dodge, Ia. (except subsistence).

Camp Robinson, Wis.; Motor Equipment Instruction School, Clintonville, Wis.; Motor Equipment Instruction School, Kenosha, Wis.

Fort Snelling, Minn.; Sig. C. Avn. Mechanics Training School, St. Paul, Minn.

ZONE 8

1. Missouri, Illinois (south of Jacksonville, Springfield and Decatur), Kentucky (purchase and inspection of subsistence only), Tennessee (purchase and inspection of subsistence only), Kansas, Oklahoma, Arkansas, Evansville, and Terre Haute, Ind.

2. Missouri, Illinois (south of Jacksonville, Springfield and Decatur), Kansas, Oklahoma, Arkansas; Park Field, at Millington, Tenn.; Camp Taylor, Louisville, Ky.

3. *St. Louis General Supply Depot* supplied four camps, furnishing approximately 111,000 men and had under its jurisdiction the subdepot of Kansas City with a storage space of 36,247 sq. ft. It was also a procurement depot for shoes and clothing manufactured in that zone. Storage space: 838,662 sq. ft.

4. *Camp Taylor,* Louisville, Ky.

Scott Field, Belleville, Ill.

Jefferson Barracks, St. Louis, Mo. (recruit depot); Medical Supply Depot, 510 N. 4th St., St. Louis, Mo.; Missouri Aeronautic School, St. Louis, Mo.

Camp Funston, Kan.; Fort Riley, Kan.; Mounted Service School, Fort Riley, Kan.; U. S. A. General Hospital, Fort Riley, Kan.; Medical Officers Training Camp, Fort Riley, Kans.; Fort Leavenworth, Kans. (U. S. Disciplinary Barracks); Signal Corps Officers Training Camp, Fort Leavenworth, Kans.; Army Service Schools, Fort Leavenworth, Kans.

Fort Sill, Okla., including Camp Doniphan, Post Field, Infantry School of Arms, School of Fire for Field Artillery, School of Aerial Observers; Remount Depot, Fort Reno, Okla.

Camp Pike, Little Rock, Ark.; Eberts Field, Lonoke, Ark.; Fort Logan H. Roots, Ark.; U. S. A. General Hospital, Fort Logan H. Roots, Ark.; Army and Navy General Hospital, Hot Springs, Ark.

Park Field, Millington, Tenn.

ZONE 9

1. Louisiana, Mississippi.

2. Louisiana, Mississippi, Forts Barrancas, McRee and Pickens, and Barrancas National Cemetery, Fla.; Forts Gaines and Morgan, and Mobile National Cemetery, Ala.; Forts Crockett, San Jacinto and Travis, Tex.; Canal Zone.

3. *New Orleans General Supply Depot* was the principal source of supply for two camps. It was also headquarters for shipping to the Canal Zone. It supplied approximately 54,000 men. Storage space: 2,406,195 sq. ft.

4. *Camp Shelby,* Hattiesburg, Miss.; Payne Field, West Point, Miss.

Camp Beauregard, Alexandria, La.; Gerstner Field, Lake Charles, La.; Jackson Barracks, La.; Fort Philip, La.

Forts Gaines and Morgan, Ala.; Mobile National Cemetery, Ala.; C. D. of Mobile, Ala.

Forts Barrancas, McRee, Pickens, Fla.; Barrancas National Cemetery, Fla.; C. D. of Pensacola, Fla.

Forts Crockett, San Jacinto, Travis, Tex.; C. D. of Galveston, Tex.

Headquarters, Panama Canal Department, Ancon, C. Z.; Amador, C. Z.; Balboa, C. Z.; Corozal, C. Z.; C. D. of Cristobal, C. Z.; Empire, C. Z.; Forts Grant, Randolph, Sherman, C. Z.; Gatun, C. Z.; Quarry Heights, C. Z.; Camp E. S. Otis, C. Z.; Camp Gaillard, C. Z.

ZONE 10

1. Texas.

2. Texas (except Forts Crockett, San Jacinto, and Travis, and except posts or camps then occupied in the western corner of Texas, immediately south of New Mexico from Marathon, Texas, and west on the line of the Southern Pacific Railroad).

3. *Fort Sam Houston General Supply Depot* supplied four camps, furnishing approximately 70,715 men. Storage space: 450,145 sq. ft.

4. Headquarters, Southern Department, Fort Sam Houston, Tex.; U. S. A. General Hospital, Fort Sam Houston, Tex.; *Camp*

Bowie, Fort Worth, Tex.; Camp Dick, Dallas, Tex.; *Camp Logan,* Houston, Tex.; *Camp MacArthur,* Waco, Tex.; *Camp Travis,* San Antonio, Tex.; Medical Supply Depot, San Antonio, Tex.; Brooks Field, San Antonio, Tex.; Kelly Field No. 1, San Antonio, Tex.; Kelly Field No. 2, San Antonio, Tex.; Ground Officers' Training School, Kelly Field No. 2, San Antonio, Tex.; San Antonio Arsenal, Tex.; Civilian Balloon School, San Antonio, Tex.; Ellington Field, Houston, Tex.; Taliaferro Field, Fort Worth, Tex.; Barron Field, Everman, Tex.; Carruthers Field, Benbrook, Tex.; Love Field, Dallas, Tex.; Rich Field, Waco, Tex.; Aviation Mobilization Camp, Waco, Tex.; Aviation Repair Depot, Dallas, Tex.; Headquarters, Aviation School, Fort Worth, Tex.; School of Military Aeronautics, University of Texas, Austin, Tex.; Brownsville, Tex.; Camp Stanley, Leon Springs, Tex.; Camp S. F. B. Morse, Leon Springs, Tex.; Camp Mercedes, Tex.; Del Rio, Tex.; Forts Clark, McIntosh, Ringgold, Tex.; Eagle Pass, Tex.; Harlingen Depot, Tex.; Kingsville, Tex.; Progreso, Tex.

ZONE 11

1. Iowa (Des Moines, Fort Dodge, and west), Nebraska, Colorado, Utah, Wyoming.

2. Nebraska, Colorado, Utah, Wyoming, North Dakota, South Dakota, Camp Dodge (for subsistence only).

3. *Omaha General Supply Depot* was primarily a purchasing depot for subsistence, fuel, and forage. Storage space: 150,953 sq. ft.

4. *Camp Dodge,* Des Moines, Ia. (for subsistence only); U. S. A. General Hospital, Fort Des Moines, Ia.

Forts Crook, Omaha, Robinson, Neb.; U. S. A. Balloon School, Fort Omaha, Neb.

Fort Lincoln, N. D.

Fort Meade, S. D.

Fort D. A. Russell, Cheyenne, Wyo.; Fort McKenzie, Sheridan, Wyo.; Fort Yellowstone, Wyo.

Fort Logan, Denver, Colo. (recruit depot).

Forts Douglas, Duchesne, Utah.

ZONE 12

1. New Mexico, Arizona.

2. New Mexico, Arizona; Forts and camps in Texas, Marathon, Tex., and west.

3. *El Paso General Supply Depot* supplied only one camp of about 23,000 men. Storage space: 267,949 sq. ft.

4. Fort Bliss, Tex.; Marfa, Tex.

Camp Cody, Deming, N. Mex.; Columbus, N. Mex.; Fort Bay-

ard, N. Mex. (Army General Hospital); Forts Hachita, Wingate, N. Mex.

Forts Huachuca, Apache, Ariz.; Whipple Barracks, Ariz.; Douglas, Nogales, Yuma, Ariz.

ZONE 13

1. California, Oregon, Washington, Idaho, Montana, Nevada.

2. California, Oregon, Washington, Idaho, Montana, Nevada, Alaska, Hawaiian Department, Philippine Department, stations in China.

3. *San Francisco General Supply Depot* was the principal source of supply for three camps on the Pacific coast, numbering about 71,000 men, and had under its jurisdiction three subdepots (Seattle, Portland, Los Angeles). This depot did considerable procurement in the Pacific coast region. Storage space: 772,325 sq. ft.

4. Headquarters, Western Department, San Francisco, Cal.; South Pacific Coast Artillery District, Monadnock Block, San Francisco, Cal.; Medical Supply Depot, 50 Bay Street, San Francisco, Cal.; Presidio of San Francisco, Cal.; Letterman General Hospital, Presidio of San Francisco, Cal.; *Camp Kearny,* Linda Vista, Cal.; *Camp John Beacon,* Calexico, Cal.; March Field, Riverside, Cal.; Mather Field, Sacramento, Cal.; Rockwell Field, San Diego, Cal.; Aviation School, San Diego, Cal.; Arcadia Balloon School, Arcadia, Cal.; Alcatraz Island, Cal. (U. S. Disciplinary Barracks); Benicia Arsenal, Cal.; Forts Barry, Baker, Mason, McDowell (recruit depot), MacArthur, Miley, Rosecrans, Winfield Scott, Cal.; Mare Island, Cal.; Presidio of Monterey, Cal.; School of Military Aeronautics, University of California, Berkeley, Cal.; Sequoia National Park, Cal.; Yosemite National Park, Cal.

Fort Stevens, Ore.

North Pacific Coast Artillery District, Seattle, Wash.; *Camp Lewis,* American Lake, Wash.; Bremerton, Wash.; Forts Canby, Casey, Columbia, Flagler, George Wright, Lawton, Walla Walla, Ward, Worden, Wash.; Vancouver Barracks, Wash.

Boise Barracks, Idaho.

Forts Keogh (remount depot), Missoula, William Henry Harrison, Mont.

Forts Davis, Gibbon, Liscum, St. Michael, William H. Seward, Valdez, Alaska.

Headquarters Hawaiian Department, Honolulu, T. H.; Forts Kamahameha, Ruger, Shafter, Hawaii; Schofield Barracks, Hawaii.

Headquarters Philippine Department, Manila, P. I.

Stations in China.

RESERVE DEPOTS

Storage space for oversea shipments and for reserve stocks earmarked for other supply depots was obtained by construction of reserve depots at Columbus, Ohio; New Cumberland, Pa.; and South Schenectady, N. Y.; which, upon completion, had storage accommodations of 2,606,070 sq. ft., 1,993,515 sq. ft., and 2,980,609 sq. ft., respectively.

OTHER DEPOTS

Additional depots, not mentioned elsewhere, were maintained at Charleston, S. C., and Mobile, Ala., with storage space each of 11,027 and 309,000 sq. ft.

CAMP STORAGE

The following storage accommodations were available at the various camps:

Subsidiary to *Boston General Supply Depot.*—Devens, with 214,384 sq. ft.

Subsidiary to *New York General Supply Depot.*—Dix, Merritt, Mills, Upton, with a total of 363,840 sq. ft.

Subsidiary to *Baltimore General Supply Depot.*—Lee, Meade, with a total of 185,000 sq. ft.

Subsidiary to *Atlanta General Supply Depot.*—Gordon, Greene, Hancock, Jackson, McClellan, Sevier, Sheridan, Wadsworth, Wheeler, with a total of 1,178,856 sq. ft.

Subsidiary to *Chicago General Supply Depot.*—Custer, Dodge, Grant, Sherman, with a total of 369,397 sq. ft.

Subsidiary to *St. Louis General Supply Depot.*—Pike, Doniphan, Funston, with a total of 284,550 sq. ft.

Subsidiary to *New Orleans General Supply Depot.*—Beauregard, Shelby, with a total of 230,677 sq. ft.

Subsidiary to *Fort Sam Houston General Supply Depot.*—Bowie, MacArthur, Logan, Travis, with a total of 353,050 sq. ft.

Subsidiary to *El Paso General Supply Depot.*—Cody, with 163,076 sq. ft.

Subsidiary to *San Francisco General Supply Depot.*—Fremont, Kearny, Lewis, with a total of 467,693 sq. ft.

Organization for Procurement and Distribution of Remounts

At the beginning of the war, the Transportation Division of the Quartermaster General's Office supervised all remount matters, including the three permanent and two auxiliary remount depots then in existence. Later a Remount Branch originated in the Transportation Division which, in Sept. 1917, became the Remount Division. Its functions were to procure horses and mules and to ship them to depots to be trained and put in condition for

issue to organizations or for shipments overseas; to supervise the construction, organization, administration, and personnel at permanent remount, auxiliary remount, and animal embarkation depots in the United States; and to cooperate with the Department of Agriculture in the breeding of suitable horses for the military service.

Procurement zones were established as follows:

Eastern Zone, with headquarters at the Front Royal Remount Depot, Front Royal, Va.;

Southern Zone, with headquarters at Fort Reno Remount Depot, Fort Reno, Okla.;

Northern Zone, with headquarters at Fort Keogh Remount Depot, Fort Keogh, Mont.;

Central Zone, with headquarters at Kansas City, Mo.

Later the southern and central zones were consolidated with headquarters at Kansas City.

For purposes of distributing, caring for, and conditioning animals, there was established an auxiliary remount depot at each divisional camp and cantonment, in addition to those already in operation at Fort Sill, Okla.; and Fort Bliss, Tex. Besides, animal embarkation depots were maintained at two ports.

Depot strengths were as follows:

Station	Average strength		Station	Average strength	
	Horses	Mules		Horses	Mules
Camp Devens, Mass	4,095	3,127	Camp Grant, Ill	3,308	2,951
Camp Upton, N. Y	1,823	2,465	Camp Dodge, Ia	3,625	3,058
Camp Dix, N. J	2,850	3,002	Camp Funston, Kans	4,235	3,688
Camp Meade, Md	4,122	3,152	Camp MacArthur, Tex	3,687	3,442
Camp Lee, Va	3,232	3,032	Camp Logan, Tex	2,936	3,819
Camp Green, N. C	4,205	2,779	Camp Cody, N. Mex	4,782	3,328
Camp Wadsworth, S. C	5,583	3,490	Fort Sill, Okla	6,288	2,583
Camp Hancock, Ga	2,741	1,836	Camp Bowie, Tex	4,405	3,256
Camp McClellan, Ala	4,744	2,921	Camp Travis, Tex	12,672	4,385
Camp Sevier, S. C	4,098	3,454	Camp Kearny, Cal	4,809	3,246
Camp Wheeler, Ga	4,583	2,723	Camp Lewis, Wash	3,631	3,214
Camp Sheridan, Ala	3,489	2,578	Camp Fremont, Cal	2,613	1,785
Camp Shelby, Miss	5,403	3,567	Camp Johnston, Fla	2,343	1,292
Camp Beauregard, La	3,168	3,286	Remount Depot, Front Royal, Va	002	27
Camp Jackson, S. C	5,684	3,066	Remount Depot, Fort Keogh, Mont	2,034	41
Camp Gordon, Ga	1,583	3,728	Remount Depot, Fort Reno, Okla	1,337	73
Camp Pike, Ark	2,383	3,644	Fort Bliss, Tex	9,190	2,362
Camp Sherman, O	3,897	3,350	Animal Emb. Depot, Newport News, Va.	4,599	3,759
Camp Taylor, Ky	3,367	2,665	Animal Emb. Depot, Charleston, S. C	1,362	2,253
Camp Custer, Mich	3,458	3,078			

Training Establishments

The Methods Control Division (see p. 412) had charge of the training of the entire Quartermaster Corps personnel, which was carried on at the following stations:

Camp Joseph E. Johnston, Jacksonville, Fla. (see p. 832);
Camp Meigs, Washington, D. C. (see p. 747);
Camp Alexander, Newport News, Va. (see p. 711);
Camp Jesup, Ga. (see p. 832);
Fort Sam Houston, Tex. (see p. 913).

OFFICERS' AND CANDIDATES' SCHOOLS

Officers' School, Camp Joseph E. Johnston.—Trained commissioned personnel as specialists in contracts; water, rail, and motor transportation; money accounts; property accounts; general administration and company administration; supplies, subsistence, and clothing and equipage; construction and repair; motor truck; motor car; motorcycle; and personnel.

Officers' School, Camp Meigs.—Resembled Camp Johnston in many respects but specialized in orienting personnel newly commissioned from civil life, and civilians employed in responsible executive and administrative divisions of the Quartermaster General's Office, in the organization and functions of the various war agencies. It also provided instruction in the scientific fitting of shoes.

Q.M. Officers' Training Camp, Camp Joseph E. Johnston.—Prepared candidates for commissions.

Remount Service Officers' Training Camps at Camp Joseph E. Johnston and Camp Shelby (pp. 832, 850).—Prepared candidates for commissions.

Depot Schools.—Were maintained at Camp Joseph E. Johnston; Jeffersonville General Supply Depot; San Francisco General Supply Depot; and in the office of the Quartermaster, Central Department. These schools prepared student officers for assignment to any of the general or reserve supply depots.

Transport Quartermaster Schools.—Were conducted at Port of Embarkation Hoboken and in the office of the Port Storage Officer, Baltimore, to meet the big demand for transport quartermasters, which was created by the increase in the number of ships chartered to carry American troops overseas.

ENLISTED MEN'S SCHOOLS

Schools for Bakers and Cooks.—Were maintained at 39 camps and stations:

Camp Beauregard	Camp Funston	Camp Lee
Camp Bowie	Camp Gordon	Camp Lewis
Camp Cody	Camp Grant	Camp Logan
Camp Custer	Camp Greene	Camp MacArthur
Camp Devens	Camp Hancock	Camp McClellan
Camp Dix	Camp A. A. Humphreys	Camp Meade
Camp Dodge	Camp Jackson	Camp Merritt
Camp Fremont	Camp Kearny	Camp Pike

Camp Sevier	Camp Travis	Fort Sam Houston
Camp Shelby	Camp Upton	Kelly Field
Camp Sheridan	Camp Wadsworth	Presidio of San Francisco
Camp Sherman	Camp Wheeler	Fort Shafter
Camp Taylor	Fort Riley	Fort William McKinley

On June 6, 1918, administrative control of these schools passed from the Quartermaster General to the Adjutant General, the commissioned personnel on duty being transferred from the Quartermaster Corps to the Adjutant General's Department.

Schools for Horseshoers, Teamsters, Packers, Saddlers, and Stable Sergeants.—Were established at each auxiliary remount depot and animal embarkation depot.

Packing Service School.—Established at Forest Products Laboratory, Madison, Wis., to train Quartermaster Corps personnel in the scientific methods of box and crate construction.

PURCHASE AND STORAGE SERVICE

OFFICE OF THE DIRECTOR OF PURCHASE AND STORAGE

1918

On Sept. 12, the Acting Quartermaster General was also appointed Director of Purchase and Storage. At the same time control over storage, distribution, and issue within the United States passed from the Quartermaster General to the Director of Purchase and Storage. On the same day, a Director of Purchase and a Director of Storage were appointed with the following functions: the former to have charge of the procurement of supplies for the Army, including their purchase, production, and inspection; the latter to direct the storage, distribution, and issue within the United States of all Army supplies. Six days later, the purchasing and operating divisions of the Office of the Quartermaster General were transferred to the Purchase and Storage Director's Office. The old Depot Division and the old Conservation and Reclamation Division (see p. 412) thus transferred were expanded Oct. 9 into these operating Divisions: Operations Administrative; Domestic Operations; Overseas Warehouses; Distribution; and Conservation and Reclamation.

On Oct. 21, the initial organization of the Office of the Director of Purchase and Storage was as follows:

Initial Organization of Purchase and Storage Director's Office

I

OFFICE OF THE EXECUTIVE OFFICER

1. Administrative Division.

II

OFFICE OF THE CHIEF OF REQUIREMENTS

1. Requirements Division.

III

OFFICE OF THE DIRECTOR OF PURCHASE

1. Purchase Administrative Division.
2. Clothing and Equipage Division.
3. Subsistence Division.
4. Motors and Vehicles Division.
5. Machinery and Engineering Materials Division.
6. Raw Materials and Paints Division.
7. Medical and Hospital Supplies Division.
8. Remount Procurement Division.
9. General Supplies Division.

IV

OFFICE OF THE DIRECTOR OF STORAGE

1. Operations Administrative Division.
2. Domestic Operations Division.
3. Overseas Warehouse Division.
4. Distribution Division.
5. Salvage Division.

Thereafter, the Office of the Director of Purchase and Storage made further acquisitions, to wit:

Oct. 22, from the Corps of Engineers—the depot, administrative, engineering and purchasing departments, less some procurement functions, of the General Engineer Depot, as well as the storage and distribution subdivisions of the Office of the Director General of Military Railways;

Oct. 23, from the Signal Corps—Supply Division, purchase, production and inspection sections of Procurement Division, and requirements section of Executive Division;

Oct. 24, from the Surgeon General's Office—Supply Branch, Supply Depots Branch, and the purchase, storage, requisition and requirements parts of the Administrative Division.

With the completion of these changes and others, the Office of the Director of Purchase and Storage assumed this organization:

Organization of Purchase and Storage Director's Office

Nov. 1, 1918

I

OFFICE OF THE DIRECTOR.—Brig. Gen. Robert E. Wood, Director of Purchase and Storage; Mr. Robert J. Thorne, Assistant Director of Purchase and Storage.

II

OFFICE OF THE EXECUTIVE OFFICER.—Lt. Col. Benjamin L. Jacobson, Executive Officer.

1. *General Administrative Division,* with four Branches: Administrative Control; Orders and Regulations; Industrial Relations; Administrative Service.

   Conducted the administration of the Purchase and Storage Director's Office.

2. *Statistical Division,* with five Branches: Administrative; Purchase Summaries; Storage Summaries; Reports; Publicity Service.

   Compiled statistical data, prepared statistical reports, and acted as a clearing house for statistical information.

3. *Surplus Stocks Division,* with five Branches: Administrative; Interbureau Transfers; Domestic Surplus Sales; Overseas Surplus Sales; Planning.

   Established Oct. 28, 1918, but never functioned. On Nov. 30, 1918, it was superseded by the—

   Surplus Property Division, which had charge of the disposal of materials held by the Department declared to be surplus.

III

OFFICE OF THE CHIEF OF REQUIREMENTS.—Maj. Julian R. Orton, in charge.

1. *Requirements and Requisition Division,* with four Branches: Commodities Requirements; Raw Materials Requirements; Emergency Requirements; Office Service.

   Computed requirements for standard Army supplies, issued procurement authorizations to procurement divisions in the Office of the Director of Purchase and Storage, and issued overseas shipping authorizations.

IV

OFFICE OF THE DIRECTOR OF PURCHASE.—Brig. Gen. William H. Rose, Director of Purchase; Mr. G. P. Baldwin, Assistant to the Director of Purchase.

1. *Purchase Administrative Division,* with eight Branches: Purchase; Production; Inspection; Research, Design; External Relations; Purchase Records; Award and Contract; Office Service.

   Coordinated the activities of purchase commodity divisions; supervised purchase policies and methods; had charge of personnel; maintained contact with agencies concerned with the control and manufacture of raw ma-

terials; handled contracts and legal matters; and had charge of office service.

2. *Clothing and Equipage Division,* with seven Branches: Administrative; Cotton Goods; Wool Tops and Yarn; Woolen and Knit Goods; Leather and Rubber; Manufactured Goods; Planning.

   Procured clothing and equipment for the use of the armed forces.

3. *Subsistence Division,* with thirteen Branches; Administrative; Packing-House Products; Flour and Cereals; Canned Goods; Milk, Butter, Cheese, Eggs, and Fresh Vegetables; Dehydrated Products; Sugar, Spices and Condiments; Jams, Jellies, Preserves, Syrup, and Molasses; Tobacco; Commissary Supplies; Tea, Coffee, Oils, Soap, Baking Powder, and Miscellaneous; Planning; Forage.

   Supervised and coordinated the procurement, distribution, and inspection of food supplies for the Army.

4. *Motors and Vehicles Division,* with four Branches: Administrative; Motor Vehicles; Horse and Hand-drawn Vehicles; Planning.

   Had charge of the procurement of motor vehicles, exclusive of tanks, tractors, and other special types, and of the procurement of animal and hand-drawn vehicles.

5. *Machinery and Engineering Materials Division,* with five Branches: Administrative; Machinery; Electrical Equipment and Supplies; Precision Instruments; Engineering and Construction Materials.

   Was to have charge of the purchase of materials assigned to it and of the production and acceptance of materials contracted for. The Division had just begun to function when the Armistice was signed, and thereafter, although procurement activities continued, it was principally engaged in the adjustment and settlement of the claims of contractors.

6. *Raw Materials Division,* with six Branches: Administrative; Ferrous; Non-ferrous; Fuels; Oils and Paints; Chemicals.

   Had charge of the procurement of paints, fuels, and other raw materials.

7. *Medical and Hospital Supplies Division,* with four Branches: Administrative; Drugs and Medicines; Medical, Hospital and Surgical Apparatus; Hospital Equipment and Supplies.

   Had charge of the procurement of medical and hospital

supplies, the preparation and revision of specifications, and the revision of medical supply tables.

8. *General Supplies Division,* with seven Branches: Administrative; Hardware and Tools; Kitchen and Camp Equipment; Office Equipment and Supplies; Containers; Hemp and Jute Products; Miscellaneous.

   Had charge of the procurement of such items as hardware, hand tools, metals, office equipment, rolling kitchens, caskets, and camp equipage.

9. *Remount Purchase Division,* with three Branches: Remount Depot; Remount Inspection; and Remount Purchase, Issue and Sales.

   Procured mounts for the Army and maintained a remount service.

V

OFFICE OF THE DIRECTOR OF STORAGE.—Col. Frederick B. Wells, Director of Storage; Col. L. M. Nicolson, Assistant Director of Storage.

1. *Storage Administrative Division,* with five Branches: Administrative; Special Service; Statistical and Records; Operating Methods; Office Service.

   Was responsible for the entire personnel under the supervision of the Director of Storage, all statistical records and reports required by the Director, and all matters pertaining to office administration.

2. *Domestic Distribution Division,* with an Administrative Branch and eight Subdivisions: Quartermaster; Engineer; Motor Transport; Ordnance; Signal; Aircraft; Medical; Chemical Warfare.

   The Quartermaster Subdivision had five Branches: Clothing and Equipage, Subsistence, Motors and Vehicles, Raw Materials, General Supplies.

   Had charge of the receipt of goods from centers of production and of the distribution of supplies to troops in the United States. It released supplies needed to fill overseas requisitions.

3. *Domestic Operations Division,* comprising Administrative Branch; Cold Storage Branch; General Supply Depots Subdivision, and Army Reserve Depots Subdivision. The General Supply Depots Subdivision had nine Branches: Quartermaster; Engineer; Motor Transport; Ordnance; Tanks; Signal; Aircraft; Medical; Chemical Warfare.

   Had charge of the operations of general supply depots,

Army reserve depots, and cold storage plants; supervised fire and accident prevention; was responsible for adherence to packing, boxing, baling, and marking standards; was responsible for the installation of operating methods in depots under its supervision; and provided storage space at interior points for Army supply purposes.

4. *Overseas Distribution Division,* with an Administrative Branch and eight Subdivisions: Quartermaster; Engineer; Motor Transport; Ordnance; Signal; Aircraft; Medical; Chemical Warfare. The Quartermaster Subdivision had five Branches: Clothing and Equipage, Subsistence, Motors and Vehicles, Raw Materials, General Supplies.

   Was in charge of the detailed movement of supplies to ports, in accordance with tonnage allotments set up by the Port Operations Division; and was responsible for the filling of requisitions for overseas forces.

5. *Port Operations Division,* with eleven Branches: Executive; Overseas Storage Service; Quartermaster; Motor Transportation; Ordnance; Chemical Warfare; Engineer; Aviation; Signal; Medical; Office Service.

   Had charge of supply operations at primary and secondary ports of embarkation; regulated the movement of supplies to these ports; saw that the supplies moved through the ports in accordance with established priorities; and prepared and transmitted to the Overseas Distribution Division statements showing the tonnage required at each port of embarkation for floating and port reserve stocks.

6. *Salvage Division,* with seven Branches: Administrative; Clothing Renovation; Shoe and Harness Repair; Laundries; Waste Materials; Farms; Canvas Repair.

   Had charge of the repair of clothing and equipage; laundering and dry cleaning; contracts for the renovation of clothing and equipage; the development of agricultural, mineral, and forest lands for the benefit of the Army; and the organization and training of men of Army units for salvage work. It established repair shops, laundries, base salvage plants, printing plants, wagon-repair shops, and carpentry shops. It supervised and controlled the conservation of food and the disposition of garbage and other refuse, including junk, bags, paper, rope, and similar items.

1918

The process of reorganization and consolidation continued. By

Nov. 6, the *Requirements and Requisitions Division* had been reorganized into an Administrative and Interbureau Branch and the following commodity requirements Branches: Component Materials; Clothing and Equipage; Subsistence; Motors, Vehicles, and Harness; Machinery and Engineering Materials; Raw Materials; Remount and Forage; Medical and Hospital Supplies; General Supplies.

On Nov. 15, the Office of the Surgeon General transferred the Supply and Supply Depot Branches of its Finance and Supply Division to Purchase and Storage, where they became the *Medical and Hospital Supplies Division* (see p. 433).

1919

On Feb. 1, the *Overseas Supply Division* was formed by consolidation of the Overseas Distribution Division and the Port Operations Division; it was given charge of the movement of supplies to and through ports of embarkation. On May 27, the *Statistical Division* was placed in the Requirements and Requisitions Division and became its General Statistics Branch.

On Apr. 11, the operating department, known until then as the Purchase and Storage Director's Office, was designated as the *Purchase and Storage Service,* while the operating units of the Purchase Director's Office became the *Purchase Service* and those of the Storage Director's Office changed into the *Storage Service.* Three days later, the Remount Purchase Division—meanwhile named *Remount Division*—was separated from the Purchase Service and made an independent subdivision of the Purchase and Storage Service with the designation of *Remount Service.* It functioned through Administrative, Issue and Sales, Service, and Depot Branches.

About this time, the *Requirements and Requisitions Division* underwent a second reorganization with the following Branches established: Procurement Authorizations; General Statistics; Administrative; Requirements; and Apportionments.

On May 13, the Domestic Operations Division was consolidated with the Storage Administrative Division to form the *Operations Control Division,* Storage Service, with the following functions: to be responsible for all personnel, military and civilian, and all industrial relations and welfare matters under the supervision of the Director of Storage; to have charge of the coordination of the operating activities of the Storage Service; and to maintain supervision over office service, cold-storage plants, general supply depots, Army reserve depots, and fire and accident prevention. On May 19, the Domestic Distribution Division was consolidated with

the Overseas Supply Division to form the *Supplies Division.* It supervised the distribution and issue of supplies to the Army, determined surpluses, equalized and maintained stocks, regulated the movement of supplies, and obtained and allocated tonnage to ports.

By June 23, the Procurement Authorizations and the Apportionments Branches of the Requirements and Requisitions Division had disappeared, and the Raw Products and Priorities and the Finance and Interbureau Branches had been organized. The name of the Division had meanwhile been changed to *Requirements Division.* On June 30, the Motors and Vehicles Division functioned through an Administrative Branch and three procurement Branches: Motor Vehicles, Spare Parts and Tires, and Horse and Hand-drawn Vehicles. By this time the name of the Raw Materials Division had again been changed to *Raw Materials and Paints Division.*

From these changes and others, there resulted the following organization:

Organization of Purchase and Storage Director's Office

June 30, 1919

I

OFFICE OF THE DIRECTOR

II

OFFICE OF THE EXECUTIVE OFFICER

1. *General Administrative Division,* with five Branches: Executive; Administrative Control; Historical; Building Service; Cemeterial.

III

OFFICE OF AN ASSISTANT TO THE DIRECTOR OF PURCHASE AND STORAGE

1. *Personnel Division,* with five Branches: Executive; Commissioned; Enlisted; Civilian; Departmental.

IV

OFFICE OF THE CHIEF OF REQUIREMENTS

1. *Requirements Division,* with five Branches: Administrative; General Statisitcs; Requirements; Raw Products and Priorities; Finance and Interbureau.

V

OFFICE OF THE CHIEF OF THE REMOUNT SERVICE

1. *Remount Service,* with four Branches: Administrative; Service; Issue and Sales; Depot.

VI

OFFICE OF THE DIRECTOR OF PURCHASE

1. *Administrative Division,* with four Branches: Purchase; Engineering and Standardization; Contract; Office Service.
2. *Clothing and Equipage Division,* with four Branches: Administrative; Clothing and Textiles; Wool Tops and Yarn; Leather and Rubber.
3. *Subsistence Division,* with eight Branches: Administrative; Forage; Flour and Cereals; Canned Goods; Dried and Fresh Fruits and Fresh and Dehydrated Vegetables; Packing House and Dairy Products; Sugar, Coffee, Tea and Cocoa; Cigars, Cigarettes, Tobacco, Cigarette Papers, Pipes, etc.; Jam, Jellies, Preserves, Sirups, Condiments, Baking Powder, Spices, Soaps, Salts and Miscellaneous Groceries and Commissary Supplies.
4. *Motors and Vehicles Division,* with four Branches: Administrative; Motor Vehicles; Spare Parts and Tires; Horse and Hand-drawn Vehicles.
5. *Machinery and Engineering Materials Division,* with six Branches: Administrative; Machinery; Electrical Equipment and Supplies; Precision Instruments; Engineering and Construction Materials; Signal Corps Terminations.
6. *Raw Materials and Paints Division,* with four Branches: Administrative; Fuels; Oils; Paints.
7. *Medical and Hospital Supplies Division,* with five Branches: Administrative; Drugs and Medicines; Medical, Hospital and Surgical Apparatus; Hospital Equipment and Supplies; Dental Instruments, Appliances, and Supplies.
8. *General Supplies Division,* with four Branches; Administrative; Hardware and Hand Tools; Mess, Camp and Personal Equipment; Office Equipment and Sundries.

VII

OFFICE OF THE DIRECTOR OF STORAGE

1. *Operations Control Division,* with eight Branches: Administrative; Accounting Methods and Service; Fire and Accident Prevention; Packing Service; Reserve Depot and Space Allotment; Cold Storage; Cost Reduction; Inventory and Catalogue.
2. *Supplies Division,* with five Branches: Administrative; External Relations; Cable and Requisition Service; Port Operations; Commodity.

3. *Salvage Division,* with five Branches: Administrative; Repair Shops; Farms; Laundries; Waste Materials.
4. *Surplus Property Division,* with ten Branches: Administrative; Sales Supervision; Clothing and Equipage; Subsistence; Raw Material; Machinery and Engineering Materials; Motors and Vehicles; Medical and Hospital Supplies; General Supplies; Remount.

Several minor changes took place thereafter. On Aug. 18, 1919, the Requirements Division was merged with and made part of the Office of the Director of Purchase. At this time, the Machinery and Engineering Materials Division; the Raw Materials and Paints Division; and the General Supplies Division became branches of the *Regular Supplies Division* of the Purchase Service. On Nov. 22, the name of the Operations Control Division was changed to *Storage Administrative Division.*

FIELD ORGANIZATION

1918

The field mechanism of the Office of the Director of Purchase and Storage was an exact duplicate of that of the Quartermaster Corps.

On Oct. 28, the general procurement, subsistence procurement, remount procurement, and distribution zones of the Quartermaster Corps were transferred without change to the zones of supply of Purchase and Storage. Depot quartermasters of the Quartermaster Corps became zone supply officers and representatives of the Director of Purchase and Storage.

Organization of Purchase and Storage Zones

ZONE SUPPLY OFFICERS

By Nov. 11, 1918, all zone activities and operations relating to purchase, procurement, inspection, storage, and distribution of all Army supplies were supervised by the new zone supply officers. At this time, signal, medical, engineer, and ordnance supply depots within each zone were being gradually placed under the control of the zone supply officer, unless specifically excepted.

The organization of a zone supply office was similar to that of the Purchase and Storage Director's Office, as shown on chart. The zone supply officer represented the Director of Purchase and Storage, the zone purchase officer the Director of Purchase, and the zone storage officer the Director of Storage. Each zone supply officer was also charged with salvage operations throughout his zone,

and with the disposal of surplus supplies through the zone surplus property officer. For purpose of expediting business, direct correspondence between the zone officers and the respective divisions and branches of the Office of the Director of Purchase and Storage was authorized.

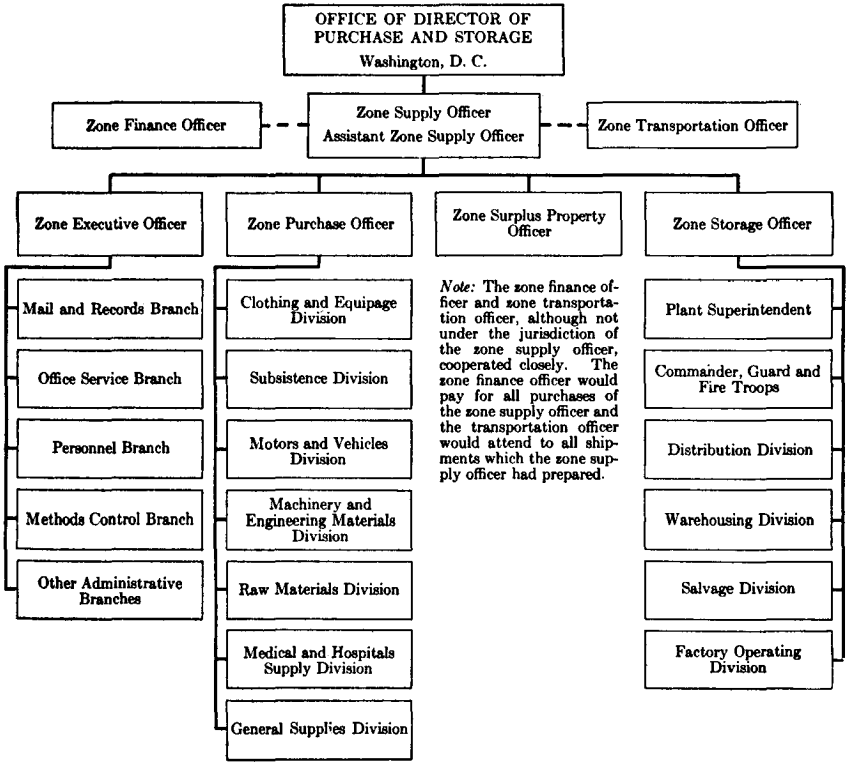


CHART NO. 45.—*ORGANIZATION OF ZONE SUPPLY OFFICE*

Consolidation of Depot Activities

The Domestic Operations Division, Storage Director's Office, assumed responsibility for engineer depots and subdepots Nov. 20, 1918; for signal supply depots and subdepots Nov. 20; for all general medical supply depots, reserve depots, and camp medical supply depots Dec. 10; and for ordnance depots (less storage of artillery and parts, and ammunition and components) Jan. 6, 1919.

TRANSFER OF DEPOTS TO PURCHASE AND STORAGE ZONES

Actual transfer was ordered as follows:

Date	Name of depot transferred	To Zone Supply Officer at—
1918		
Nov. 23	Engineer Interior Depot at Washington, D. C	Washington, D. C.
Nov. 23	Engineer Subdepot at Camp A. A. Humphreys, Va	Washington, D. C.
Nov. 23	Departmental Engineer Depot at Fort Benjamin Harrison	Jeffersonville, Ind.
Nov. 23	Departmental Engineer Depot at Fort Leavenworth	St. Louis, Mo.
Nov. 23	Departmental Engineer Depot at Fort Sam Houston	San Antonio, Tex.
Nov. 23	Departmental Engineer Depot at Fort Douglas	San Francisco, Calif.
Dec. 2	Signal Corps General Supply Depot at Ft. Wood	New York, N. Y.
Dec. 2	Signal Corps General Supply Depot at Philadelphia	Philadelphia, Pa.
Dec. 2	Signal Corps General Supply Depot at Chicago	Chicago, Ill.
Dec. 2	Signal Corps General Supply Depot at Atlanta	Atlanta, Ga.
Dec. 2	Signal Corps General Supply Depot at Fort Sam Houston	San Antonio, Tex.
Dec. 2	Signal Corps General Supply Depot at San Francisco	San Francisco, Calif.
Dec. 13	Medical Supply Depot at New York City	New York, N. Y.
Dec. 13	Medical Supply Depot at Philadelphia	Philadelphia, Pa.
Dec. 13	Field Medical Supply Depot at Washington, D. C	Washington, D. C.
Dec. 13	Medical Supply Depot at Atlanta, Ga	Atlanta, Ga.
Dec. 13	Medical Supply Depot at Chicago, Ill	Chicago, Ill.
Dec. 13	Medical Supply Depot at St. Louis	St. Louis, Mo.
Dec. 13	Medical Supply Depot at San Antonio	San Antonio, Tex.
Dec. 13	Medical Supply Depot at San Francisco	San Francisco, Calif.
Dec. 17	Engineer Subdepot at Camp A. A. Humphreys, Va	Baltimore, Md.
1919		
Jan. 3	Departmental Engineer Depot at Fort Benjamin Harrison	Chicago, Ill.
Jan. 6	Augusta General Supply Ordnance Depot, Augusta, Ga	Atlanta, Ga. [1]
Jan. 6	Middletown General Supply Ordnance Depot, Middletown, Pa	Philadelphia, Pa. [1]
Jan. 6	Paterson General Supply Ordnance Depot, Paterson, N. J	New York, N. Y. [1]
Jan. 6	Springfield General Supply Ordnance Depot, Springfield, Mass	Boston, Mass. [1]
Jan. 6	Washington General Supply Ordnance Depot, Washington, D. C	Washington, D. C. [1]
Jan. 6	Benicia General Supply Ordnance Depot, Benicia, Calif	San Francisco, Calif. [2]
Jan. 6	Rock Island General Supply Ordnance Depot, Rock Island, Ill	Chicago, Ill. [2]
Jan. 6	San Antonio General Supply Ordnance Depot, San Antonio, Tex	San Antonio, Tex. [2]
Jan. 6	Watervliet General Supply Ordnance Depot, Watervliet, N. Y	New York, N. Y. [2]

[1] These ordnance depots were ordered "to report" to the several zone supply officers with regard to distribution of certain personal and horse equipment, small arms, machine guns, target material, spare parts and maintenance material.

[2] Ordered "to report" to the several zone supply officers upon all matters pertaining to receipt, storage, handling and distribution of ordnance articles and material stated under note 1.

GENERAL SUPPLY DEPOTS IN OPERATION

On Nov. 19, 1918, the General Supply Depot, Fort Sam Houston, Tex., was designated as the General Supply Depot, San Antonio, Tex.

On Dec. 2, the following general supply depots were in operation in 13 purchase and storage zones:

No. 1. Boston, Mass. (Cambridge)
No. 2. New York, N. Y.
No. 3. Philadelphia, Pa.
Pittsburgh Subdepot
No. 4. Baltimore, Md.; Washington, D. C.; Newport News, Va.
No. 5. Atlanta, Ga.
No. 6. Jeffersonville, Ind.
No. 7. Chicago, Ill.
No. 8. St. Louis, Mo.
No. 9. New Orleans, La.
No. 10. San Antonio, Tex.
No. 11. Omaha, Nebr.
No. 12. El Paso, Tex.
No. 13. San Francisco, Calif.

On Jan. 15, the Washington General Supply Depot was established as an independent depot; and on May 1 it was designated as Zone 14. On Aug. 8, the El Paso General Supply Depot, known as Zone 12, was assigned as a subdepot of Zone 10, and Zone 12 was abolished.

ARMY RESERVE DEPOTS

Construction was completed as follows: Cumberland—Nov. 1, 1918; Columbus—Nov. 30, 1918; Schenectady—Jan. 31, 1919 (see p. 427).

CAMP SUPPLY OFFICERS

On Dec. 3, 1918, subdepot quartermasters at camps and cantonments were designated as camp supply officers and directed to report to the appropriate zone supply officer on all matters heretofore reported on to the depot quartermaster. The authority over and responsibility for quartermaster supplies was extended to include all Army supplies under the jurisdiction of the Director of Purchase and Storage, for storage, distribution and issue. All organizations, with personnel, stores, supplies, and records of the Ordnance Department, Engineer Corps, Medical Department, and Signal Corps at the various camps and cantonments, performing duties involving supply of the Army, were transferred to the Office of the Director of Purchase and Storage and consolidated under the camp supply officer.

On Dec. 11, 1918, camp supply officers were authorized to take over the supply organizations, stores and records, including enlisted and civilian personnel, of the Chemical Warfare Service at their respective camps.

Supply Organization of Ports

The supply operations at primary and secondary ports of embarkation were controlled and coordinated by the Port Operations Division (see p. 435). Each primary port was under the command of a general officer; a secondary port was under the control of the zone supply officer in whose zone it was located.

PORT STORAGE OFFICERS

At secondary ports of embarkation, the zone supply officer was also the port storage officer. Port storage officers were responsible for and had authority over the storage and distribution of all supplies, operation of all storage facilities, and transportation of supplies within their ports.

At primary ports, the storage officer was subordinate to the commanding general and, through him, to the Purchase, Storage, and Traffic Division. At secondary ports, the storage officer re-

ported to the Director of Purchase and Storage through the Port Operations Division. Direct communication between port storage officers and the Director of Storage was authorized.

On Nov. 11, 1918, port storage officers were appointed for the ports of Boston, New York, Philadelphia, Baltimore, Newport News, and New Orleans.

CONSOLIDATION OF PORT STORAGE

On Nov. 20, 1918, the Port Operations Division took over operation of engineer depots and, 5 days later, of signal supply depots at the ports. On Dec. 10, control was extended to all medical and veterinary supplies and, Jan. 6, 1919, to all ordnance. Consolidation was concluded when, Apr. 1, 1919, all piers and the goods on them were turned over to the port storage officers (see chart).

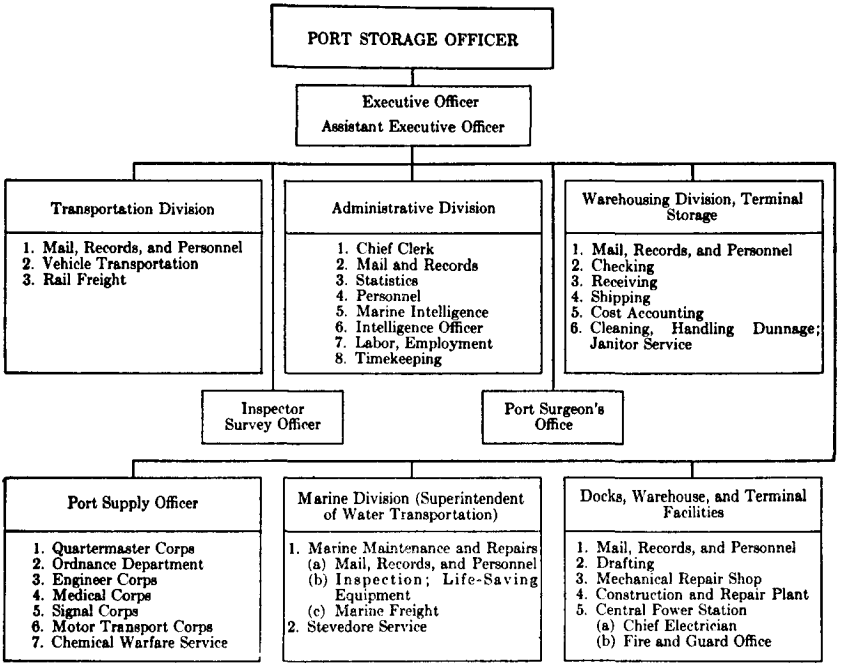


CHART NO. 46.—*ORGANIZATION OF PORT STORAGE OFFICE AT A SECONDARY PORT*

QUARTERMASTER CORPS PERSONNEL [1]

Officers

During the 1917 fiscal year, the Regular Army commissioned strength of the Quartermaster Corps increased from 185 to 369,

[1] No Purchase and Storage Service personnel has been mentioned inasmuch as all officers, enlisted men and civilians serving therein were drawn from other supply departments, in which they are accounted for.

including 85 retired officers placed on active duty. In the same period 892 Reserve officers were commissioned, selected principally from individuals whose civilian occupations specially fitted them for quartermaster duty; of this number 750 were placed on active duty.

In the next fiscal year, 7,400 officers were appointed in the Quartermaster Corps, Quartermaster Reserve Corps, Quartermaster Corps of the National Guard and of the National Army. About half of these officers were commissioned from the training camp at Camp Joseph E. Johnston (see p. 429). On July 1, 1918, officers numbered 8,834. In Nov. the total reached 11,718, not including 2,231 officers previously transferred to the Motor Transport Corps.

Enlisted Men

On June 30, 1917, the enlisted strength of the Quartermaster Corps was 8,346. A year later it had increased to 191,038, reaching a peak of 230,714 on Sept. 15, 1918. By Nov. 11, after transfer of 61,643 men to the newly created Motor Transport Corps, the total was 216,986.

Civilians

At outbreak of war the Quartermaster General's Office had 300 civilian employees. By Nov. 11, 1918, this number had increased to 3,500.

The total of civilian employees in Washington and in the field was 20,200 July 1, 1917, and 89,788 one year later.

Units

New and changing conditions in the supply of troops and other quartermaster activities made it necessary to organize a large number of special and technical units. By spring 1919, the following had been constituted:

Number of organizations	
6	Advance animal transportation depots
2	Animal embarkation depots
33	Auxiliary remount depots
137	Bakery companies
2	Base animal transport depots
6	Bathing and delousing units
57	Butchery companies
18	Clothing units
16	Clothing and bath units
14	Clothing squads
10	Delousing units
51	Fire truck and hose companies
21	Graves registration service units
43	Guard and fire companies
1	Ice plant company
52	Labor battalions
47	Reserve labor battalions
23	Labor companies
30	Laundry companies
2	Provisional laundry companies
114	Machine shop truck units
6	Mechanical repair shops
13	Mobile bath units
56	Mobile laundry companies
15	Motor car companies
14	Motorcycle companies
197	Motor truck companies
61	Pack trains

Number of organizations	
5	Provisional guard and fire battalions
10	Railhead supply detachments
2	Refrigerating plant companies
66	Remount squadrons
68	Sales commissary units
26	Salvage squads
22	Salvage units
1	Ship repair shop unit
4	Stevedore regiments
43	Supply companies
22	Motor supply trains
12	Wagon companies
2	Water tank trains

ACTIVITIES [1]

SUPPLY OPERATIONS

REQUIREMENTS

The Requirements and Requisitions Division (see p. 432) computed requirements for standard Army supplies; provision was made for the following reserves:

For United States initial issue, 1 month;
For United States maintenance, 3 months;
For embarkation issue (if any), 1 month;
For overseas initial shipment, 1 month;
For overseas maintenance, 1 month.

Requirements were based on the numerical strength of the Army and basic data which provided information of the quantity required of every item to supply 1,000 men in a given period under varied conditions. These basic data for automatic supply, supplemented by space and weight figures—compiled from information supplied by depots, quartermaster manuals and other sources—determined the tonnage required to transport overseas every 1,000 men and maintain them there. Other determining factors were the amount of tonnage available and overseas priority lists.

The quantities of supplies covered by purchase authorizations was enormous as shown hereafter under the operations of the various procurement divisions.

PROCUREMENT

All the supplies consolidated for purchase were divided into seven groups, viz:

Clothing and Equipage

WOOL AND WOOLEN GOODS.—About 490,000,000 pounds of wool, costing over $344,500,000, were bought. The larger items of manufactured articles purchased included 22,000,000 blankets, costing $145,000,000; more than 100,000,000 yards of melton cloth for overcoats and uniforms.

COTTON GOODS.—Among the larger items were 21,378,000 cotton

[1] In the following account, the operations of the Quartermaster Corps and those of the Purchase and Storage Service are treated together.

shirts; over 100,000,000 yds. of denim; 140,000,000 yds. of gauze; 300,000,000 yds. of various kinds of duck; 120,000,000 yds. of webbing; 3,800,000 sheets; 2,800,000 pillow cases; more than 25,000,000 towels.

KNIT GOODS.—Principal items included 85,000,000 undershirts; 81,000,000 pairs of drawers; 153,000,000 pairs of stockings; 27,000,000 pairs of gloves; 17,000,000 pairs of puttees; 2,500,000 toques; valued at about $300,000,000.

MANUFACTURED CLOTHING. — Purchases were approximately 15,000,000 wool coats; 23,000,000 wool breeches and trousers; 9,500,000 overcoats; 14,500,000 pairs of cotton breeches and trousers; 9,500,000 cotton coats; 11,000,000 denim coats and 12,000,000 pairs of denim trousers.

TEXTILE EQUIPMENT.—Up to Dec. 1, 1918, production of principal items totaled some 2,500,000 haversacks, about 3,750,000 canteen covers, about 1,500,000 cartridge belts, and 31,000,000 bandoleers, totaling approximately $20,000,000.

TENTAGE.—Purchases included 7,500,000 shelter-tent halves, about 600,000 large tents and over 200,000 flies valued at nearly $17,000,000; 9,000,000 tent pins and poles costing about $1,333,000; and $5,000,000 worth of paulins.

RUBBER GOODS.—Over 4,000,000 pairs of rubber boots were purchased at a cost of about $20,500,000; ponchos, raincoats, and slickers totaled about 10,000,000 garments valued at more than $46,000,000.

LEATHER GOODS.—Procurement included over 34,450,000 pairs of shoes at a cost of $203,568,000; 2,800,000 leather jerkins costing $12,000,000; about 6,500,000 pairs of leather gloves and mittens valued at some $16,500,000; and 2,500,000 pairs of canton flannel gloves with leather palm costing approximately $800,000.

OVERSEA SHIPMENTS.—Up to the Armistice the A. E. F. were supplied with the following principal articles: 3,127,000 blankets; 3,423,000 coats, denim; 3,871,000 coats, wool; 3,889,000 drawers, summer; 10,812,000 drawers, winter; 1,780,000 overcoats; 6,401,000 shirts, flannel; 9,136,000 shoes, marching and field; 29,733,000 stockings, wool, light and heavy; 6,191,000 trousers and breeches, wool; 4,567,000 undershirts, summer; 11,126,000 undershirts, winter.

Subsistence and Forage

SUBSISTENCE.—The cost of subsisting the Army during the war, up to Dec. 1, 1918, was $727,092,430.44.

OVERSEA SHIPMENTS.—The value of subsistence shipped to our forces overseas from the United States, up to Dec. 1, 1918, was $327,060,097, itemized as follows:

Item	Quantity	Unit price	Total value
	Pounds	*Cents*	
Ham	1,772,917	34.42	$610,238
Bacon	147,956,223	44.42	65,722,154
Beef, fresh, frozen	250,584,692	23.36	58,536,584
Beef, tinned	140,843,476	32.46	45,717,792
Fish, salmon	30,961,801	14.24	4,408,960
Cheese	314,203	27.75	87,191
Flour	542,874,797	5.25	28,500,927
Hard bread	27,978,830	12.92	3,614,865
Corn meal	16,074,687	4.58	736,221
Oatmeal	4,661,732	6.35	296,020
Beans, dry	39,648,677	10.84	4,297,700
Beans, baked	54,731,786	9.55	5,226,886
Rice	25,466,547	7.97	2,029,684
Hominy	1,826,269	8.54	155,963
Tomatoes	100,081,789	6.02	6,024,924
Peas, green	4,689,425	5.60	262,608
Corn, sweet	7,639,786	5.65	431,648
Beans, stringless	2,148,759	5.92	127,207
Vegetables, dehydrated	12,971,935	30.25	3,924,000
Prunes	15,748,931	10.35	1,630,014
Fruit, evaporated	8,976,848	13.27	1,191,228
Jam	26,029,028	18.74	4,877,840
Apples, canned	1,831,096	6.39	117,007
Peaches, canned	2,415,182	10.56	255,043
Apricots, canned	863,415	9.12	78,743
Pears, canned	1,150,120	10.22	117,542
Cherries, canned	423,444	12.21	51,703
Pineapples, canned	899,258	9.12	82,012
Coffee	39,185,167	12.07	4,729,650
Sugar	106,169,345	7.43	7,888,382
Milk, evaporated	42,922,743	10.48	4,498,303
Lard and substitutes	15,781,228	24.47	3,861,666
Butter and substitutes	16,200,799	39.71	6,433,337
Candy	7,895,053	27.76	2,191,667
Tobacco	27,449,645	67.06	18,407,732
Salt	13,707,276	.88	120,624
Vinegar	1,319,877	27.85	367,586
Pickles	1,333,210	46.94	625,809
Sirup	6,171,808	59.22	3,654,945
Cigars	160,180,225	4.85	7,768,741
Cigarettes	2,439,260,097	.62	15,123,412
Special reserve rations	15,623,150	76.00	11,873,594
Emergency rations	765,400	52.50	401,835
Total			$327,060,097

FORAGE.—Purchases from Jan. 30, 1918, to June 30, 1919, amounted to 1,820,752 tons of hay; 1,621,785 tons of oats; 207,064 tons of straw; 105,693 tons of bran.

Motors and Vehicles

MOTORS.—Procurement activities regarding principal types, up to July 1, 1919, were as follows:

Type	Ordered	Completed and delivered	Canceled
Ambulances and light delivery trucks	31,820	16,019	15,801
Ambulances and trucks AA, 1 T	18,602	18,598	4
Trucks A, 1½–2 T	29,474	16,704	12,770
Trucks B, 3–5 T for overseas	69,700	36,520	32,865
Trucks B, 3–5 T for domestic use	4,340	2,975	1,365
Trucks TT, FWD 2–3 T	44,772	29,247	15,525
Trucks, Heavy Aviation	4,675	4,675	----
Passenger cars, all types	37,031	17,359	19,672
Bodies AA, cargo and ambulance	19,318	9,318	10,000
Bodies A, wood cargo	22,945	14,668	4,720
Bodies A, steel cargo	3,911	3,911	----
Bodies B, wood cargo	53,060	30,320	22,740
Bodies B, steel cargo	9,808	9,808	----
Bodies for trailers	1,663	1,663	----
Bodies, ammunition, artillery repair, machine guns and other special types	37,000	37,000	----
Motorcycles, single-cylinder type	1,526	1,526	----
Motorcycles, twin-cylinder type	67,200	37,500	29,700
Side cars for above	65,416	35,716	29,700
Bicycles	68,456	38,456	30,000
Trailers, rolling kitchen type	15,061	13,061	2,000
Trailers, cargo, 1½—20 tons	20,793	14,341	6,452
Spare parts (figures in tons)	52,854	35,491	9,805
Tires, tubes	898,092	800,272	----
Tires, casings	784,145	755,255	----
Tires, solids	325,983	324,650	----

HORSE-DRAWN VEHICLES.—A total of 181,077 commercial vehicles costing $41,247,911 and spare parts valued at $39,690,255 were ordered. Up to Nov. 11, 1918, 89,024 vehicles were delivered, including 3,319 ambulances, 38,613 escort wagons, 7,099 combat wagons, 14,729 water wagons, 10,185 ration carts, 2,350 medical carts, and 4,607 hand carts.

During the same period, 28,918 vehicles were shipped overseas, including 507 ambulances, 15,979 escort wagons, 2,672 combat wagons, 5,314 water carts, 3,231 ration carts, and 1,068 medical carts.

Machinery and Engineering Materials

Included therein were machinery, electrical apparatus and supplies, engineering and construction materials, precision instruments, wires and cables. The procurement had hardly begun through the Machinery and Engineering Materials Division (see p. 433) when, owing to the Armistice, all purchases were stopped. For procurement preceding Nov. 11, 1918, see—

ENGINEERING MATERIALS, page 192 et seq.

SIGNAL CORPS ARTICLES, page 483 et seq.

Raw Materials and Paints

FUELS.—During the 1918 and 1919 fiscal years, 1,300,000 tons of anthracite and 4,400,000 tons of bituminous coal were delivered to the Army for use at camps and cantonments and other purposes.

OILS.—Total oil purchases Apr. 1–Dec. 31, 1918, amounted to $30,522,837. Troops in the United States alone required 49 items, such as lubricating oils, fuel oils, oils for paints and varnishes, gasoline for motor transportation and airplanes, axle grease, floor oil, tempering oil, oil for preservation and waterproofing of shoes, harness, and other leather equipment.

During these 9 months the Army motors consumed 484,282 barrels of gasoline in the United States and 703,104 barrels in the A. E. F., costing $15,553,007. Concurrently aviation requirements in the United States were 306,082 barrels of special aviation gas and 146,780 barrels for the A. E. F. at a total cost of $6,655,489.

PAINTS.—This category included chemicals and miscellaneous commodities as well as paints and related materials. From Jan. 1 to June 30, 1919, contracts called for 1,401,064 lbs. of which 491,768 were delivered. During this period alone 245 requisitions were handled, and orders placed totaled more than $600,000.

Medical and Hospital Supplies

Procurement of these supplies, having been transferred immediately after the Armistice to Purchase and Storage, was handled through the Medical and Hospital Supplies Division (see p. 438). As very few purchases were then made, the work of the Division consisted mainly of cancellations and reductions of outstanding contracts. The total of outstanding orders and contracts taken over from the Surgeon General's Office was about $84,931,000. Of this amount $54,120,000 was cancelled at a cost of $2,756,000 in adjustment.

From Nov. 15, 1918, to Aug. 1, 1919, the total value of purchase orders and contracts was $2,366,144. Purchases were made under four classifications: (1) drugs, medicines, antiseptics, and laboratory chemicals; (2) surgical and veterinary instruments and appliances, and laboratory supplies; (3) hospital equipment and supplies; and (4) dental instruments, appliances, and supplies.

General Supplies

Large quantities of miscellaneous articles, including kitchen and camp equipment and sundries, were required to meet the demands of troops at home and abroad. For purpose of illustration, a few of these items selected at random are shown:

Items	Purchased during war		Delivered during 1919 fiscal year	Shipped overseas during 1919 fiscal year
	Quantities	Cost		
Rope, Manila ..... lbs.	14,000,000	$9,000,000	9,076,729	7,709,772
Rope, halter ..... do.	2,500,000		.....	.....
Twine, cotton and jute ..... do.	2,000,000		.....	.....
Axes ..... each	1,534,679	1,838,979	484,650	204,407
Shovels ..... do.	1,256,994	1,140,412	730,954	571,755
Wrenches ..... do.	425,522	395,776	388,872	137,481
Fire extinguishers ..... do.	380,752	1,761,711	111,964	20,130
Safety razors ..... do.	2,621,521	3,171,806	2,482,743	1,825,714

REMOUNTS

Early in the war the Quartermaster Corps was charged with the procurement of the necessary animals for the Army to complete its war-strength organization. The animals purchased in the United States and abroad from Jan. 1, 1917, to Jan. 1, 1919, are shown in the following table:

Where purchased	Horses			Mules		Grand total
	Cavalry	Light artillery	Heavy artillery	Draft	Pack and riding	
France	21,450	61,944	42,973	2,181	7,160	135,708
Spain	1,400	423	.....	13,329	3,295	18,447
Great Britain	2,633	6,388	4,352	6,714	943	21,030
United States	60,439	106,554	9,129	114,687	9,450	300,259
Private Mounts	507	47	.....	.....	.....	554
Young horses	4,474	1,045	.....	.....	.....	5,519
Total purchased	90,903	176,401	56,454	136,911	20,848	481,517

Animals shipped overseas from America included 38,885 horses and 29,063 mules.

Animal losses from all causes up to Jan. 1, 1919, were as follows:

	Horses	*Mules*
In the United States	24,144	6,040
Overseas	37,615	5,667
Total	61,759	11,707

On the same date, there were on hand in the United States 271,438 animals classified as follows: 83,774 cavalry horses, 77,172 draft horses, 13,950 pack and riding mules, 96,542 draft mules.

From Dec. 11, 1918, to June 30, 1919, 170,355 surplus animals were sold at public auction in the United States for $19,073,544.37, representing 60 percent of the original cost. Concurrently 160,051 animals were sold overseas, thus accounting for 330,306 animals disposed of during this period.

DEPOT OPERATIONS

The scope of supply activities during the war is indicated by the accomplishments of the general supply depots as described below:

Atlanta, Ga.

(Zone 5)

Ultimately supplied 12 camps sheltering 350,000 men. Between May 17, 1917, and Mar. 31, 1919, this depot disbursed $98,137,006.93.

Baltimore, Md.

(Zone 4)

Supplied 250,000 men for greater part of war. Between Sept. 25, 1917, and Feb. 28, 1919, disbursements amounted to $77,097,157.86. Principal procurement items were: canned goods (150,000,000 cans of tomatoes alone); harness (one order alone consisted of 30,000 sets of machine-gun cart harness); clothing (over 5,000,000 garments exclusive of underwear); tents (over 170,000 pyramidal and wall); oil, coal, and gasoline, mainly for A. E. F.

Boston, Mass.

(Zone 1)

Supply of troops grew from 13,840 men in Apr. 1917 to 54,924 in Nov. 1918. Expenditures increased from $527,237.64 for May 1917 to $60,170,124.92 for Oct. 1918. Disbursements for clothing and clothing materials totaled $427,309,519; for shoes, $103,115,384.44; for candy and chocolates, $7,096,900.10.

Chicago, Ill.

(Zone 7)

Supplied 910 troops in Apr. 1917 and 161,026 by Aug. 1918. The principal depot for subsistence procurement and Army meat supply. During the period Sept. 1917—Apr. 1919, 487,688,031 lbs. of beef costing $117,986,680.29 were delivered, almost all of which went to the A. E. F. Grocery purchases increased from $106,132.96 in May 1917 to $17,780,529.41 in Oct. 1918. Over 10,000,000 cases of canned goods were purchased. Contracts for clothing and equipage totaled $230,806,717.66. Expenditures of this depot from Apr. 1, 1917, to Mar. 31, 1918, amounted to $702,372,681.13.

El Paso, Tex.

(Zone 12)

Supplied 36,736 troops in Apr. 1917 and 38,283 in Nov. 1918. Depot expenditures from Apr. 1, 1917, to Nov. 30, 1918, were $17,247,475.35.

Fort Sam Houston, Tex.

(Zone 10)

Supplied 25,000 troops in Southern Department in May 1917 as compared with 133,567 in Nov. 1918. Subsistence procurement increased from $78,427.25 in Apr. 1917 to $417,777.99 in Nov. 1918. Depot disbursements from Sept. 4, 1917, to Mar. 1, 1919, totaled $39,655,218.77.

Jeffersonville, Ind.

(Zone 6)

Manufacturing depot specializing in the production of flannel shirts, denim clothing, wagons, Army ranges, laundry stoves, harness, field ranges, field bakeries, and field equipment. Monthly expenditures for all purposes increased from $415,000 in Apr. 1917 to $4,000,000 in Nov. 1918. During the war its shirt-manufacturing plant became the largest of its kind in the world, employing a maximum of 20,000 employees, with an output of 8,500,000 shirts a year. The depot's uniform factories produced 750 woolen coats and 1500 pairs of breeches a day. Disbursements for the purchase of escort wagons, spare wheels, and harness alone reached $49,151,171 during the war.

New Orleans, La.

(Zone 9)

Troops supplied increased from 1,143 in Apr. 1917 to a maximum of 85,000 in July 1918. Procurement expanded from an annual expenditure of $119,000 in 1917 to a monthly total of $1,790,944.88 in Nov. 1918.

New York, N. Y.

(Zone 2)

Troops supplied in the United States increased from 27,850 in Apr. 1917 to 186,700 in Apr. 1919, in addition to providing rations and general supplies to the A. E. F.; up to spring 1918 it carried on the whole service of supplies for those forces. Purchase of clothing and equipage totaled $413,621,876.48; subsistence, $255,235,823.63; motor vehicles and accessories, $65,000,000; fuel, gasoline, and mineral oil, $9,357,436.92; forage and bedding, $2,563,311.87; class A supplies, $36,664,124.96. Salvage operations saved $14,125,563.79 in addition to the renovation and reissue of $14,120,500 worth of garments.

Omaha, Neb.

(Zone 11)

Supplied an average of 175,677 troops a month. Purchases totaled $21,607,009.82 of which $18,510,628.62 was for subsistence.

Philadelphia, Pa.

(Zone 3)

Manufacturing Depot. Expenditures during war totaled $318,753,837.42 compared with a prewar annual volume of $15,000,000 to $20,000,000. Its manufacturing plant produced 2,185,301 garments, mostly woolen, valued at $17,704,596.46; chevrons, $258,192; flags, $471,703; tents, $7,832,313.28.

San Francisco, Cal.

(Zone 13)

Specialized in subsistence. Supplied an average of 75,000 troops. Purchases from Apr. 6, 1917, to Mar 31, 1919, totaled $65,096,924.45 as against a prewar annual average of $6,000,000. Expenditures for clothing and equipage amounted to $14,133,887.84, for subsistence $26,270,345.09. Subsistence items included 21,291,000 lbs. of evaporated peaches, 50,000,000 lbs. of prunes, 15,000,000 lbs. of canned tomatoes, 19,000,000 lbs. of dehydrated vegetables, and 85,279,114 cans of salmon.

This depot also handled export tonnage to the Philippines, Hawaii, Guam, Vladivostok, Nagasaki, Panama, and Alaska by means of the regular fleet of the Transport Service consisting of the transports Logan, Sheridan, Sherman, Thomas, and the freighter Dix.

St. Louis, Mo.

(Zone 8)

Supplied an average of 300,000 troops. Disbursements totaled $93,751,680.15 for the war, against an annual average of about $750,000 in prewar times. Some $79,000,000 were spent for clothing and equipage, the principal item of which consisted of 3,516,890 pairs of shoes.

Washington, D. C.

(Zone 14)

Supplied an average of 15,665 troops. Procured and distributed typewriters, portable laundries, refrigerating equipment, parts of motor trucks, filing cabinets and other office equipment. These supplies were bought for overseas use and for camps, posts, and stations in the United States.

SALVAGE OPERATIONS

Large base salvage plants were operated at Fort Sam Houston, Tex.; Washington, D. C.; Atlanta, Ga.; New York, N. Y.; Philadelphia, Pa.; El Paso, Tex.; Newport News, Va.; and Jeffersonville, Ind. Smaller base plants were operated at Chicago, Ill.; New

Orleans, La.; San Francisco, Calif.; Fort Leavenworth, Kans.; Alcatraz Island, Calif.; Baltimore, Md.; and St. Louis, Mo.

Shoe, Clothing, and Canvas Repair

Shoe-repair shops were operated at all divisional camps and at a number of other posts. These shops had a combined daily capacity of 500 pairs of shoes. Peak performance was reached in Nov. 1918 when 500,000 pairs of shoes were repaired.

Clothing repair included dry-cleaning, repair and renovation of hats, and the reclamation of outer clothing and of underwear. The base plants at Atlanta and Fort Sam Houston, with almost limitless capacity, were the principal repair centers. Hats were repaired and renovated at all camps and base plants. In Oct. 1918 alone 30,871 hats were repaired at these establishments and 106,230 by contract.

Canvas repair included mending of leggings, tents, cots and other canvas materials. The work required only simple equipment and therefore was carried on mainly at camps.

Laundries

At outbreak of war, the Army maintained only 14 small laundries. Expansion created 19 modern laundries, each costing over $300,000, at cantonments, and 43 mobile laundry units each with a specially trained complement of 37 men.

During the war, Government laundries handled an average of 10,909,850 pieces monthly, with gross receipts of more than $500,000.

Waste Material

To reduce mess waste, increase revenue to the Government, and obtain matter containing glycerine elements, a system of garbage separation was instituted at all military stations. Prior to July 1, 1918, the average mess waste per day per man was 2 pounds; by Oct. 1918, this was reduced to 7/10 of a pound. Revision of garbage contracts throughout the country also saved approximately $416,803.49.

After the Armistice, the Salvage Division (see p. 435) was charged with the sale and disposal of all unserviceable or worn Government supplies and materials resulting from the demobilization of the Army and the dismantling of camps and other installations. From May 1, 1918, to May 1, 1919, a total of over $5,000,000 was realized from the sale of condemned supplies and wastes of every description.

Farming

During 1918, there were 3,483 acres under cultivation at the various camps, which yielded a revenue of about $108,000.

Recapitulation

Between July 1, 1918, and June 30, 1919, salvage activities included the following operations:

Activities	Estimated operating cost	Actual sales	Turned over to Army organizations	Total estimated savings
Repair operations of shoes, hats, clothing, tents, cots, and shelter halves	$9,249,269			$42,842,531
Dry-cleaning operations	2,128,061			408,926
Laundry operations	3,315,155			2,703,906
Collection of waste material		$5,388,982	$4,494,596	9,883,578
Collection of garbage, manure and miscellaneous materials		847,666		847,666
Farm products			121,204	121,204
Total	14,692,485	6,236,648	4,615,800	56,807,811

FINANCE

QUARTERMASTER CORPS EXPENDITURES

Finance functions remained with the Quartermaster General's Office until Oct. 21, 1918. Expenditures of the Quartermaster Corps during the 1918 fiscal year were as follows:

Items	1918	1917–18 (act June 15, 1917)
Supplies, services and transportation, exclusive of clothing and equipage	$1,028,130,098.53	$196,628,845.89
Contracts, clothing and equipage	906,970,533.06	331,846,452.87
Pay, etc., of the Army	473,209,647.04	326,296,198.90
Mileage to officers and contract surgeons	7,755,056.33	422,779.19
Horses for Cavalry, Artillery, Engineers, etc	8,216,044.83	25,277,283.77
Barracks and quarters	134,229,825.30	54,313,430.47
Military post exchanges	913,772.47	493,281.58
Roads, walks, wharves and drainage	23,341,100.00	11,137,740.33
Construction and repair of hospitals	54,534,593.45	14,489,703.88
Quarters for hospital stewards	18,672.98	
Shooting galleries and ranges	3,994,718.27	
Maintenance Army War College	11,786.50	
Pay of Military Academy	827,007.86	
Rent of buildings, Q. M. Dept., District of Columbia	79,100.10	
Civilian military training camps	4,709,898.54	3,419,084.40

During this period, advance payments of $31,030,053.71 were made to contractors; soldier deposits of $1,568,449 received; and allotments totaling $61,559,621.97 paid.

Under Act of Congress, May 11, 1908, amended May 3, 1914, death benefits of $146,128.80 were disbursed for obligations in-

curred prior to Oct. 6, 1917, when these statutes were rendered inoperative by the passage of war-risk insurance legislation.

RETURNS AND MONEY ACCOUNTS

From July 1, 1917, to June 30, 1918, 4,032 subsistence returns and 6,493 officers' money accounts were examined. During the same fiscal year 2,613 property returns were audited, under a new system of accounting in which accounting periods end Dec. 31 and June 30, respectively.

PURCHASE AND STORAGE PROCUREMENT

Value of purchases during the 1919 fiscal year was as follows:

Clothing and equipage	$360,413,555
Subsistence	630,421,067
Fuel and forage	50,874,538
General supplies	74,787,358
Vehicles and harness	15,651,608
Motors and vehicles	107,352,998
Service	7,463,703
Miscellaneous	10,011,284
Medical and Hospital	716,751
Salvage	3,147,926
Raw materials	37,457,596
Remount	543,284
Machinery and engineering material	6,872,417
Total	1,305,714,085

TRANSPORTATION

The Quartermaster Corps retained control of the seven transports serving overseas stations in the Pacific throughout the war (see San Francisco General Supply Depot, p. 453). All other water transport activities as well as inland traffic matters were transferred to Embarkation and Inland Traffic Services early in the war and are described under Transportation Service, pp. 498, 525 et seq.

TRAINING

CAMP JOSEPH E. JOHNSTON

This camp was the principal center of quartermaster training. From its officers' training camp, 4,363 candidates were commissioned. Of the quartermaster personnel completing specialist training, 2,397 officers were assigned to duty elsewhere and 8,152 enlisted men were transferred to stations in the United States, in addition to those sent directly overseas.

The camp was also the mobilization and training center for field remount squadrons. By Nov. 11, 1918, Field Remount Squadrons

301 to 346 had been shipped overseas and Squadrons 347 to 363 were ready to go. See also pp. 429, 832.

CAMP MEIGS

The schools at this camp gave an introductory survey course to 314 newly commissioned officers and to civilians holding important positions in supply organizations. Other courses graduated 2,408 laundrymen, 1,840 clerks, 350 gas and oil specialists, and a great number of coffee blenders, cooks and mess sergeants. See also pp. 429, 747.

CAMP ALEXANDER

At this camp some 1,700 officers and 200 enlisted men received instruction in stevedore work. See also p. 711.

CAMP JESUP AND FORT SAM HOUSTON

At these stations, motor repair-shop units underwent training. See also pp. 832, 913.

OTHER TRAINING CENTERS

Bakers and Cooks Schools

Prior to their transfer to the Adjutant General's Department, these schools qualified some 12,000 instructors in cooking, 1,600 mess sergeants, and 90,000 cooks (see p. 429).

Depot Courses

Courses at certain general supply depots, the Central Department, and Camp Joseph E. Johnston qualified personnel for depot duties (see p. 429).

Remount Courses

Officers' training camps held at Camp Johnston and Camp Shelby graduated 100 and 32 officers, respectively.

Schools at auxiliary remount depots qualified and filled requirements for horseshoers, teamsters, packers, saddlers, and stable sergeants.

See also pp. 429, 430, 832, 850.

DEMOBILIZATION

PERSONNEL AND UNITS

Commissioned Officers

Demobilization began immediately after the Armistice. By July 1, 1919, this personnel had declined to 7,310 of whom 3,430 officers were still in the American Expeditionary Forces. On June 30, 1920, only 794 officers remained including those performing purchase and storage duties.

Enlisted Men

By June 30, 1919, demobilization had reduced the enlisted personnel to 69,776 and, by Sept. 1, to 11,204.

Civilian Personnel

Due to the necessity of replacing discharged military personnel, the demobilization of civilian employees progressed slowly. On June 1, 1919, there were still some 81,000 employees at large and 3,500 in the office of the Quartermaster General. A year later, this number had declined to 27,000 in the field and 897 in the Washington Office.

Quartermaster Units

By the end of 1919, almost all emergency units had been demobilized. Only such organizations continued to exist as pertained to Regular divisions and demobilization camps and similar establishments or which were needed by United States forces abroad.

CESSATION OF PRODUCTION

On Nov. 11, 1918, 15,739 contracts in force committed the Government to purchase supplies to the extent of about $1,800,000,000.

Role of Director of Purchase

The Director was charged with the settlement of war production activities and functioned through 13 zone claims boards and seven boards established in the procurement divisions. These 20 primary boards were responsible to a General Purchase Claims Board which reported to the War Department Claims Board.

Settlements

All contracts were settled with due regard to the interests of the Government and the economic situation. No payment of prospective profits was made, but the manufacturer was reimbursed for all legitimate expenses. On this basis 4,457 outstanding contracts were terminated without compensation and 4,955 were completed; the remaining 6,327 were settled by negotiation.

By June 30, 1919, 1,062 awards had been made, totaling $35,462,737.67, in settlement of contracts which originally involved $262,156,477.17.

Post-Armistice Procurement

These purchases amounted to $611,000,000, of which total $420,000,000 was expended for food alone to supply the considerable forces awaiting demobilization.

DISPOSAL OF SURPLUS PROPERTY

Reserve Stocks

Before any surplus supplies were disposed of, a supply of clothing and non-perishable articles pertaining to the individual equipment of the soldier, sufficient to equip a force of 1,000,000 men, was placed in indefinite storage at reserve depots (see p. 427).

To this end, large quantities of goods originally consigned to the A. E. F. were diverted to the reserve depots after the Armistice. By Aug. 13, 1919, approximately 26,000 carloads of supplies, valued at about $700,000,000, were stored, a large part of which was kept for future Army use.

Organization

The Surplus Property Division (see p. 432) had charge of the disposal of surplus materials, which consisted of raw materials, clothing and equipage, subsistence, machinery, engineering materials, motors, and vehicles that were no longer needed by the Army.

On Jan. 7, 1919, a Director of Sales was appointed, restricting the authority of the Property Division to property not in excess of $100,000 in any transaction; in all other cases the approval of the Director of Sales had to be obtained.

General Sales

The Armistice found the Wool Administration with about 460,000,000 lbs. of wool on hand, even after the British Government had cancelled the unfilled portion of its wool contract. By Dec. 1919, 365,000,000 lbs. had been sold at public auction, without prejudicing the market of the American farmer; thereafter the disposal of the balance was assured.

By July 12, 1919, sale and transfer of surplus property amounted to $204,674,847.90, representing a recovery value of 81%; by Jan. 31, 1920, to $357,195,393, recovery percentage 77.57%; and by June 30, 1920, to $382,247,081. At that date the Surplus Property Division still had about $200,000,000 worth of supplies to liquidate.

Of the supplies sold, clothing and equipage represented approximately 60%; subsistence about 10%; retail stores nearly .07%; remounts about .06%; machinery and engineer materials, motor vehicles and parts, general supplies and raw materials the remainder.

Retail Sales

General sales of supplies were supplemented by sales through retail stores and mail order (parcel post). During the period Aug.–Sept. 1919, some $12,000,000 worth of supplies, mostly subsistence items, were sold through 58,000 post offices.

Retail stores, under the direct supervision of zone supply officers, opened Sept. 25, 1919, and sold supplies valued at $35,148,292.

POSTWAR ORGANIZATION

The Act of Congress approved June 4, 1920, abolished the Purchase and Storage Service and the title of Director of Purchase and Storage, until then held by the Quartermaster General. The Act also caused extensive changes in the structure of the Quartermaster General's Office and considerable expansion of the activities of the Quartermaster Corps, into which were merged the Transportation Service (see p. 547), the Motor Transport Corps (see p. 319), the Construction Division (see p. 157), and the Real Estate Service (see p. 462).

SECTION 20

REAL ESTATE SERVICE

ORIENTATION

Prewar organization and Army Regulations placed all real estate transactions under the bureau, corps, or other War Department agency concerned in the acquisition or disposal of real estate. No Government body or agency existed in which these activities were centralized.

FUNCTIONS

To procure by purchase, lease, rental, condemnation, requisition, or donation all real estate or interests therein (such as buildings, docks, piers, offices, and storage space) required for the use of the War Department; to grant and renew all leases, licenses, permits, or privileges authorizing the use of any real estate acquired for use of the War Department; to sell or otherwise dispose of all real estate or any interests therein, including cancellation, extension, or modification of all leases, licenses, permits, and privileges acquired for use of the War Department; to establish and maintain a filing and recording system of all grants, deeds, abstracts, leases, and other instruments pertaining to real estate and interests therein under the control of the War Department, and maintain an indexing and mapping system therefor.

DIRECTOR

Apr. 1, 1919 to Feb. 15, 1920, Mr. Gilbert F. Woods

ORGANIZATION AND DEVELOPMENT

1918

On June 22, the Purchase, Storage, and Traffic Division, General Staff, assumed control over all War Department real estate matters. It exercised this supervision through a Real Estate Unit which had been created in the Purchase Section of its Purchase

and Supply Branch. On Aug. 27, the Real Estate Unit became a section in the Facilities Department, Purchase, Storage, and Traffic Division (see p. 45), charged with responsibility for and authority over procurement of real estate.

1919

On Apr. 1, the Facilities Department became an operating service, supervised by the Director of Purchase, Storage, and Traffic, under the designation of Real Estate Service (see pp. 47-49). It was organized as shown on chart.

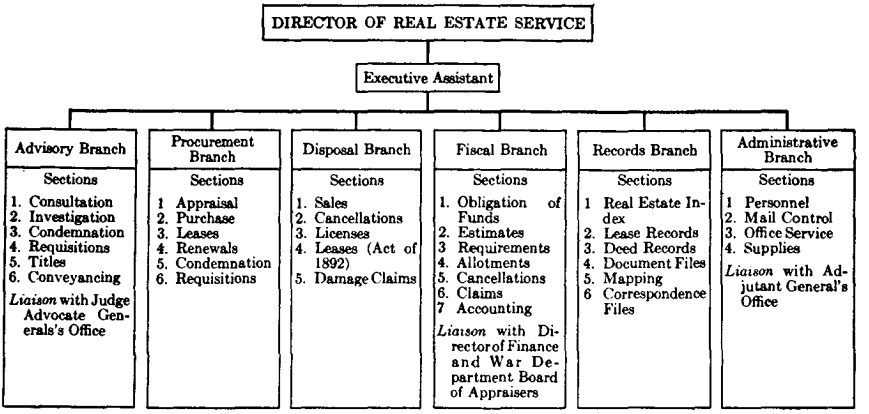


CHART NO. 47.—*ORGANIZATION OF REAL ESTATE SERVICE*
Apr. 1, 1919

WASHINGTON OFFICE ORGANIZATION

The Office of the Director of Real Estate was so organized that specific projects originating in any War Department agency could be assigned to a special representative and liaison agent.

Advisory Branch

Advised and assisted in all legal matters and litigation and represented the Service in transactions with the office of the Judge Advocate General; interpreted legal regulations and limitations in matters of policy, procedure, and legal forms.

Procurement and Disposal Branches later absorbed by Field Operations Branch

Accomplished all transactions in connection with procurement or disposal of real estate or interests therein for use of the War Department; supervised all activities incident to transactions, including surveys, mapping, preparation of legal papers, and record of transactions.

Fiscal Branch

Advised and assisted in matters pertaining to funds and claims; reserved and allotted funds; represented the Service in reports to, and transactions with, the Director of Finance; passed on claims arising out of occupation of real estate by the War Department; and undertook any other duties assigned to it.

Records Branch

Had custody of documents, maps and papers in completed cases; maintained a recording and indexing system; accumulated statistics; and cooperated in preparation of lists, statements and reports.

Administrative Branch

Attended to matters of personnel, orders, and office supplies.

FIELD ORGANIZATION

Representatives of the Real Estate Service were appointed at all posts, camps, and stations, and similar representatives were assigned on the technical staff of each department commander. This field personnel was trained to cope with questions arising from procurement and disposal of real estate.

1920

Under the Act of June 4, the Real Estate Service was absorbed by the Quartermaster Corps July 15. All duties performed by the Service at each department headquarters and at depots, camps, posts, stations, and other establishments of the Army were also taken over by the Corps on that date.

PERSONNEL

Officers familiar with real estate law and Army procedure were assigned to the Service, and experienced and successful real estate men were taken from civil life and from enlisted personnel.

The Real Estate Service reached its maximum strength of 49 officers in July 1919, and of 107 civilians in Sept. of that year.

ACTIVITIES

PROCUREMENT

In some cases, the War Department bureau or agency completed procurement projects in hand; in other instances, cooperating with the bureau concerned, the Real Estate Service took over and completed the project.

When real estate was to be purchased, the Fiscal Branch would allot the funds to the proper disbursing officer and often secure check for delivery to the grantor when closing title, after the Advisory Branch had furnished the papers. Close liaison was maintained with the Office of the Director of Finance to expedite payments.

During the year ending June 30, 1919, the Real Estate Service acquired the following properties by purchase, condemnation, or requisition:

Project	Location	Acreage	Amount
CAMPS AND POSTS			
Camp Bragg	Fayetteville, N. C.	120,000.00	$1,500,000.00
Camp Bullis	Leon Springs, Tex	5,000.00	95,000.00
Fort Ethan Allen	Fort Ethan Allen, Vt	169.25	6,793.70
Camp Hancock	Augusta, Ga	402.80	66,080.00
Camp Holabird	Baltimore, Md	42.52	129,884.00
Camp Humphreys	Accotink, Va	4,616.00	362,927.00
Camp Henry Knox	Stithton, Ky	40,000.00	2,500,000.00
Target Range Proebstel	Vancouver Barracks, Wash	3,030.00	100,000.00
Fort Revere	Boston, Mass	.44	925.00
Camp Alfred Vail	Long Branch, N. J	444.50	125,000.00
AIR SERVICE			
Arcadia Balloon School	Arcadia, Calif	185.50	55,655.00
Aero Coast Defense Station	Newdorp, Staten Island, N. Y	186.69	420,041.48
Carlstrom Field	Arcadia, Fla	640.00	5,120.00
Chanute Field	Rantoul, Ill	640.00	208,000.00
Chapman Field	Miami, Fla	850.00	71,500.00
Dorr Field	Arcadia, Fla	640.00	5,120.00
Ellington Field	Olcott, Tex	1,280.00	102,400.00
Ellington Field	----do	535.00	41,125.00
Kelly Field	San Antonio, Tex	1,381.29	349,686.00
Love Field (Septic Tank)	Harves, Tex	1.50	900.00
March Field	Riverside, Calif	640.00	64,000.00
Mitchel Field	Mineola, Long Island, N. Y	443.73	468,999.50
Park Field	Millington, Tenn	9,907.61	88,010.50
Aviation General Supply Depot	Richmond, Va	15.56	20,000.00
Scott Field	Belleville, Ill	642.81	122,895.50
Selfridge Field	Mount Clemens, Mich	640.00	190,000.00
Souther Field	Americus, Ga	406.68	32,534.00
Mather Field	Sacramento, Calif	786.73	78,673.00
Brooks Field	San Antonio, Tex	951.31	199,299.60
Engine and Plane Repair Depot	Montgomery, Ala	313.42	35,247.90
ORDNANCE			
Nitrate Plant No. 4	Cincinnati, Ohio	1,338.00	357,112.00
Acid Plant	Emporium, Pa	100.00	12,300.00
Machine Shop	Erie, Pa	12.70	500,000.00
Picric Acid Plant	Grand Rapids, Mich	1,390.00	138,420.00
Loading Plant	Hammonton, N. J	6,000.00	177,275.00
Experimental Station (Navy)	Lakehurst, N. J	1,345.50	13,000.00
Ordnance Depot	Middletown, Pa	88.11	41,912.00
Acid Plant	Mt. Union, Pa	21.27	1,191.00
Chemical Plant	Saltville, Va	70.00	10,000.00
Delaware Ordnance Depot	Oldman, N. J	1,824.61	177,995.10
Loading Plant	Port Penn, Del	923.00	112,000.00
Nitrate Plant No. 3	Toledo, Ohio	367.75	595,230.00
Bag Loading Plant	Tullytown, Pa	1,148.99	115,000.00
Arsenal (additional ground)	Watervliet, N. Y	32.00	300,000.00
STORAGE			
Boston Army Supply Base	Boston, Mass	18.36	950,000.00
New Orleans Army Supply Base	New Orleans, La	28.70	282,000.00
Philadelphia Army Supply Base	Philadelphia, Pa	31.00	500,000.00
HOSPITAL			
General Hospital No. 19	Azalia, N. C	88.00	84,149.00

CONDEMNATION

The following summaries show the various bureaus, corps, or services concerned in condemnation proceedings:

Prior to June 22, 1918

Occupying bureau, corps, or service	Approximate area in acres		
	Fee title	Temporary use	Total
Air Service		464.50	464.50
Corps of Engineers	976.23		976.28
Field Artillery		150.00	150.00
Medical Department	1,100.00	115.00	1,215.00
National Army and National Guard Camps	478.00		478.00
Ordnance Department	75.30		75.30
Quartermaster Corps	34.00		34.00
Regular Army Posts	254.00		254.00
Total acres	2,917.58	729.50	3,647.08

June 22, 1918, to June 30, 1919

Occupying bureau, corps, or service	Approximate area in acres		
	Fee title	Temporary use	Total
Air Service	1,043.88	2,263.30	3,307.18
Chemical Warfare Service	1.51		1.51
Engineer Corps	104.56		104.56
Field Artillery	145,887.00		145,887.00
Medical Corps		157.00	157.00
Motor Transport Corps	4.22		4.22
National Army and National Guard Camps	115,198.70	3.16	115,201.85
Ordnance Department	7,738.91	4.40	7,743.31
Quartermaster Corps	28.90	315.76	344.66
Regular Army Posts	960.58		960.58
Tank Corps		1,600.00	1,600.00
Total acres	270,968.26	4,343.62	275,311.87

LEASES

Prior to June 30, 1919, forty welfare organizations, three public corporations, four public utilities and five individuals were granted revocable licenses to permit certain activities on military properties. In addition, revocable leases were issued on the unused portions of 13 military reservations.

However, in the main, leasing operations comprised cancellation, renewal, and renegotiation of leases already in effect. No centralized record of these transactions was kept prior to the creation of the Real Estate Service, but on Apr. 1, 1919, a filing, recording and mapping system became an essential function of the Service as indicated below:

French leases recorded	3,500
Other leases recorded	2,700

Deeds recorded	216
Revocable licenses recorded	65
Maps compiled and procured	5,000

REAL ESTATE SERVICE LEASES

In Effect June 30, 1919

These leases were concerned with aviation fields, aviation training camps, auxiliary landing fields, artillery ranges, camp sites, cantonment sites, drill grounds, barracks and stables, gunnery ranges, garages, hospitals, infirmaries, lodgings, maneuver grounds, offices, port facilities, quarters, rifle ranges, storage facilities, trench training grounds, manufacturing plants, and many other facilities and properties used in the military service.

Corps or other Government agency involved	Number of leases
Adjutant General's Office	203
Army Transport Service	22
Aviation Section, Aeronautics	1
Bureau of Aircraft Production	81
Chemical Warfare Service	19
Construction Division	4
Corps of Engineers	27
Director of Military Aeronautics	1
Division of Military Aeronautics	164
Educational Department	1
Embarkation Service	25
Engage Service	1
Expeditionary Depot	1
Government Departments	1
Headquarters, Western Department	1
Headquarters, Recruiting	1
Infantry	1
Inland Traffic Service	18
Insurance Bureau	1
Medical Department	223
Military Attache, Tokyo	4
Military Intelligence Division	18
Motor Transport Corps	38
Ordnance Department	107
Quartermaster Corps	1,867
Quartermaster General's Office	1
Quartermaster Storage and Traffic Office	1
Sanitary Corps	5
Signal Corps	32
Training Camp Activities	26
Wool Administration and Distributor	1
Total number of leases in effect	2,896

DEMOBILIZATION

Procurement

In its postwar activities, the War Department continued to acquire fee title to certain real estate. These cases were assigned to the Real Estate Service for action, which through its Fiscal

Branch during the 1920 fiscal year made 117 allotments totaling $3,892,472 and covering the purchases of real estate for 27 projects.

The Army appropriation bill for the 1920 fiscal year prevented further activity in the acquisition of real estate generally. Remedial legislation was enacted in Feb. 1920, which authorized expenditure of funds for the following projects:

GROUP A

[Authorized by Public No. 151, 66th Cong.]

Camp Benning, Columbus, Ga.	$515,252.00
Camp Bragg, Fayetteville (near), N. C.	1,128,000.00
Camp Eustis, Lee Hall, Va.	42,198.23
Camp Holabird, Baltimore, Md.	140,000.00
Camp A. A. Humphreys, Accotink, Va.	20,455.00
Camp Henry Knox, Stithton, Ky.	811,338.00
Camp Normoyle, San Antonio, Tex.	2,500.00
Camp Alfred Vail, Monmouth County, N. J.	110,000.00
Fort Revere, Hull, Mass.	975.00
Schofield Barracks, Kalena tract, Honolulu (near), Hawaii	20,000.00
Arcadia Balloon School, Los Angeles, Calif.	55,655.00
Brooks Field, San Antonio, Tex.	140,446.00
Chapman Field, Miami, Fla.	71,500.00
Chanute Field, Rantoul, Ill.	208,000.00
Ellington Field, Houston (near), Tex.	40,642.00
Kelly Field No. 2, San Antonio, Tex.	349,686.33
Langley Field, Hampton, Va.	12,000.00
March Field, Riverside, Calif.	64,000.00
Mather Field, Sacramento, Calif.	78,673.00
Park Field, Memphis, Tenn.	80,400.00
Scott Field, Belleville, Ill.	100.00
Aviation general supply depots:	
Little Rock, Ark.	55,000.00
Middletown, Pa.	50,000.00
Richmond, Va.	5,100.00
Curtiss-Elmwood Plant, Buffalo, N. Y. (settlement of claims included)	1,804,300.00
Edgewood Arsenal, Harford County, Md.	7,000.00
Raritan Arsenal, New Brunswick, N. J.	(1)
Watervliet Arsenal, Watervliet, N. Y.	236,000.00
United States Nitrate Plant No. 4, Ancor, Cincinnati, Ohio	180,000.00
Saltwell site, Midland, Mich.	3,072.00
Walter Reed General Hospital, Washington, D. C.	350,000.00

Several other projects were specifically authorized as follows:

GROUP B

By Public No. 155, Sixty-sixth Congress, approved Mar. 6, 1920:	
Site for ammunition storage depot, Ogden, Utah	$98,000
Purchase of old bridge at Fort Leavenworth, Kans.	35,000

[1] Not determined.

By Public No. 251, Sixty-sixth Congress, approved June 5, 1920:

Addition to Leon Springs Military Reservation (Camp Bullis)	88,880
Purchase of Selfridge Field, 640 acres	190,000

Sections A and B (Bolling Field) set aside for use as a military reservation.

Legislation was presented to Congress, May 4, 1920, but without action prior to its adjournment, June 5, 1920, for the following:

GROUP C

Army reserve depots:	
New Cumberland, Pa.	$282,000.00
Schenectady, N. Y.	3,000.00
Army supply bases:	
Brooklyn, N. Y.	3,555,000.00
Charleston, S. C.	135,000.00
New Orleans	282,000.00
Norfolk, Va.	337,000.00
Philadelphia	766,937.00
General Supply Depot, Jeffersonville, Ind.	225,000.00
Quartermaster warehouse:	
Baltimore, Md.	100,000.00
Newport News, Va.	223,670.00
Bethlehem sewer right of way, Bethlehem, Pa.	275.00
Recuperator plant, Detroit, Mich.	140,000.00
Delaware Ordnance Depot, Pedricktown, N. J.	250,000.00
Middletown General Ordnance Depot, Middletown, Pa.	50,000.00
General Hospital No. 19, Azalea, N. C.	55,000.00
Ordnance proving ground, Lakehurst, N. J.	15,000.00
Souther Field, septic tank site, Americus, Ga.	750.00
Field Artillery range, Tobyhanna, Pa.	7,533.67

The following projects were held to be exceptions to the prohibitive legislation of July 1, 1919:

GROUP D

Alabama:
- Birmingham coke and byproducts plant.
- Montgomery Engine and Plane Repair Depot.
- United States Nitrate Plant No. 1, Sheffield.
- United States Nitrate Plant No. 2, Muscle Shoals.
- Gorgas right of way for No. 2.
- Waco Quarry site for Nitrate Plant No. 2.
- Waco Quarry right of way.
- Waco Quarry transmission line.

Arkansas: Picric-acid plant, Picron, near Little Rock.

Canada:
- Lachine shell plant (Munitions and Machinery, Ltd.), Lachine, Quebec.
- Montreal shell plant (Caron Bros.), Montreal.
- Montreal shell plant (Peter Lyall Construction Co.).
- Ordnance plant (Motor Trucks, Ltd.), Brantford, Ontario.

Delaware:
- Marlin-Rockwell loading plant, Port Penn.
- Marlin-Rockwell loading plant right of way, Port Penn.

Illinois:
Ammunition and storage project at East Alton.
Chicago District Ordnance Office, Chicago.
Michigan: Grand Rapids picric-acid plant, Grand Rapids.
New Jersey:
Bound Brook right of way (Calco Chemical Co.).
Mays Landing shell-loading plant, Mays Landing.
Morgan General Ordnance Depot, South Amboy.
New York:
Rochester forge plant (Symington-Anderson).
Rochester gun plant (Symington-Anderson).
Rochester machine plant (Symington-Anderson).
Pennsylvania:
Midvale gun plant, Philadelphia.
Neville Island gun plant, Pittsburgh.
Tullytown bag-loading plant, Tullytown.
Ohio: United States Nitrate Plant No. 3, Toledo.
Tennessee: Old Hickory Powder Plant, Nashville.
Virginia:
Big Bethel water-supply development for Langley Field, Elizabeth City.
Portsmouth water-supply development.
Russell County coke plant (Dumps Creek).
Sodium cyanide plant, Saltville.
Washington: Proebstel Target Range (for Vancouver Barracks) Clark County.

Certain other projects were abandoned, sold, or otherwise disposed of, among them the following:

GROUP E

California: Mount Wilson optical plant (Pasadena).
Georgia: Brunswick picric-acid plant.
Illinois: Savanna proving ground (one small tract).
Maryland: Perryville ammonium-nitrate plant.
Pennsylvania:
Emporium sulphuric-acid plant.
Erie howitzer plant (Brown Folding Machine Co.).
Mount Union sulphuric-acid plant.
Tacony shell-loading plant (Philadelphia).
Wisconsin:
Milwaukee gun plant.
Racine T. N. T. plant.

Certain other projects, on June 30, 1920, were in a state of suspense, by reason of lack of legislative or other authority, as follows:

GROUP F

Boston Army Supply Base.
Aberdeen Proving Ground.
Rockwell Field.
Schofield Barracks, Kalena tract, Hawaii.

Leases Fiscal Year 1920

Total number of leases in effect June 30, 1920	1,717
Total number of renewals entirely finished	194

Total number executed but not entirely completed	167
Total number authorized but not executed and completed	724
Total number on which requests for renewals or new leases for the fiscal year 1921 were received	225
Total number on which no requests for renewal or cancellation were received from occupying agencies	150
Total number reported as not being acquired for the ensuing fiscal year	257

Revocable Leases

The following revocable leases on unused portions of military reservations were on file in the Real Estate Service, June 30, 1920:

Camp Sherman	3
Fort William Henry Harrison	6
Fort Meade, S. Dak.	1
New York City Ordnance Bureau	1
Vashon Island, Wash.	1
Foulweather Point, Wash.	1
Vancouver Point Military Reservation, Wash.	1
Chattanooga National Cemetery, Tenn.	1
Hoboken Army Pier	1
Tobyhanna Artillery Target Range, Pa.	1
Morrow Aviation Field, Mich.	1
Fort Pickens, Fla.	2
Whipple Barracks, Ariz.	1
Fort Logan, Colo.	2
Fort Berry, Colo.	1
Fort McPherson, Nebr. (see p. 600)	1
Fort Meade, S. Dak.	1
Old Hickory Powder Plant, Tenn.	7
Camp Hancock, Ga.	1
Fort Walla Walla, Wash.	1
Camp Logan, Tex.	1
Fort Missoula Military Reservation, Mont.	2
Fort Williams, Maine	2
Washington Harbor Military Reservation, Wash.	3
Ordnance plant, Dayton, Ohio	1
Gigling Military Reservation, Calif.	2
Point Peter, Ga.	1
Fort Des Moines, Iowa	1
Fort Montgomery, N. Y.	1
Fort Macon, N. C.	1
Lopez Military Reservation, Wash.	1
Mee-ah Harbor Military Reservation, Wash.	1
Shaw Island Military Reservation, Wash.	1
St. Andrews Bay Military Reservation, Fla.	1
Fort Wadsworth Military Reservation, N. Y.	1
Sand Island Military Reservation, Wash.	3
Moreno Point Military Reservation, Fla.	10
Keaahala Military Reservation, Hawaii	1
Fort Crook Military Reservation, Nebr.	1
Fort Robinson	1
Port Newark Terminal	1

Disposal of Real Estate

While the disposal of all real estate or interests therein was a function of the Real Estate Service, the disposal of the following ordnance projects was reserved by the Assistant Secretary of War to the Office of the Director of Sales, Purchase, Storage, and Traffic Division (see p. 50) Nov. 26, 1919:

CHICAGO DISTRICT	
Racine, Wis., DuPont Engineering Co.	$2,000,000.00
Kensington, Ill., American Clay Machinery Co.	980,000.00
Indiana Harbor, Ind., American Steel Foundry	730,105.07
Chicago, Ill., Cribben & Sexton Co.	839,741.99
Peru, Ill., Illinois Zinc Co.	391,388.70
Cuba City, Wis., National Zinc Sep. Co.	482,435.26
Chicago, Ill., Otis Elevator Co.	1,627,466.73
Hegewisch, Ill., Pressed Steel Car Co.	849,941.47
Chicago, Ill., Pullman Co.	849,246.58
Moline, Ill., Root & Vandervoort	79,915.79
Indiana Harbor, Ind., Standard Forgings Co.	1,840,012.76
Hammond, Ind., Standard Steel Car Co.	3,733,526.69
South Bend, Ind., Studebaker Corporation	194,222.08
Stillwater, Minn., Twin City Forge & Foundry Co.	814,968.20
New Diggins, Wis., Wisconsin Zinc Co.	326,174.99
Chicago, Ill., Winslow Bros.	1,095,059.03
ST. LOUIS DISTRICT	
Little Rock, Ark., Everly M. Davis Chemical Corporation	6,745,587.51
Springfield, Ill., Western Cartridge Co.	4,775.35
East Alton, Ill., Western Cartridge Co.	717,727.06
St. Louis, Mo., Wagner Electric Manufacturing Co.	485,166.88
Richmond, Calif., Standard Oil Co.	950,800.00
St. Louis, Mo., Scullin Steel Co.	1,373,598.84
St. Louis, Mo., Laclede Gas Light Co.	3,604,523.88
Vernon, Calif., General Petroleum Corporation	1,969,924.82
St. Louis, Mo., Curtis Manufacturing Co.	636,623.30
CINCINNATI DISTRICT	
Ancor, Ohio, Air Nitrates Corporation (United States, No. 4)	5,484,656.32
Dayton, Ohio, International Clay Machinery Co.	82,371.53
Indianapolis, Ind., Premier Motor Corporation	141,124.46
Cincinnati, Ohio, Peters Cartridge Co.	1,872,374.41
Dayton, Ohio, National Cash Register Co.	611,589.97
Dayton, Ohio, Recording & Computing Mach.	150,000.00
Beech Bottom, W. Va., Whitaker-Glassner Co.	115,924.96
Dayton, Ohio, Dayton Products Co.	270,598.12
Middletown, Ohio, American Rolling Mill Co.	184,801.41
Hamilton, Ohio, American Rolling Mill Co.	678,912.60
Fairmont, Ind., Bell Manufacturing Co.	12,000.00
Dayton, Ohio, Dayton Steel Foundry Co.	3,000.00
Marion, Ind., Indiana Fiber Products Co.	25,371.26
PHILADELPHIA DISTRICT	
Bethlehem, Pa., Bethlehem Steel Co. (housing)	715,000.00
Port Penn, Del., Marlin-Rockwell Loading Co.	3,366,150.00

Philadelphia, Pa., Midvale Steel & Ordnance Co.	3,460,763.75
Philadelphia, Pa., Barrett Manufacturing Co.	1,065,171.40
Philadelphia, Pa., Lanston Monotype Co.	150,000.00
Milton, Pa., Milton Manufacturing Co.	350,000.00
Burnham, Pa., Standard Steel Works	1,558,819.86
Hazleton, Pa., Worthington Pump & Machinery Co.	1,855,926.30
NEW YORK DISTRICT	
Mt. Union, Pa., Aetna Explosives Co.	181,755.66
Emporium, Pa., Aetna Explosives Co.	48,570.42
Bound Brook, N. J., Calco Chemical Co.	3,729,075.00
Dunnellen, N. J., Hall Print Press Co.	137,900.00
New Brunswick, N. J., Hercules Engraving Co.	28,456.00
Brooklyn, N. Y., Deep Drawn Metal Co.	233,116.00
Elizabethport, N. J., Singer Manufacturing Co.	5,098,022.00
BRIDGEPORT DISTRICT	
Bridgeport, Conn., Remington Arms U. M. C. Co.	9,306,403.40
Springfield, Mass., National Operating Corporation	32,582.48
New Haven, Conn., Marlin-Rockwell Corporation	1,060,027.71
Waterbury, Conn., Scoville Manufacturing Co.	1,300,000.00
New Britain, Conn., New Britain Machine Tool Co.	218,984.99
Bridgeport, Conn., Locomobile Co. of America	1,068,213.98
New Britain, Conn., Landers, Frary & Clark	358,993.17
BOSTON DISTRICT	
Lowell, Mass., United States Cartridge Co.	1,980,691.54
Orange, Mass., New Home Sewing Machine Co.	835,388.51
Worcester, Mass., United States Light & Heat Corporation	85,028.41
Swanton, Mass., Remington Arms U. M. C. Co.	47,136.44
Worcester, Mass., Standard Steel Car Co.	1,059,753.45
Pawtucket, R. I., Potter & Johnson Co.	1,331,032.89
Boston, Mass., Mead Morrison Co.	302,866.78
West Barrington, R. I., O'Bannon Corporation	275,000.00
DETROIT DISTRICT	
Detroit, Mich., Detroit Shell Co.	2,369,000.00
Detroit, Mich., Dodge Bros.	9,260,000.00
Grand Rapids, Mich., Semet-Solvay Co.	3,243,762.96
Lansing, Mich., Reo Motor Car Co.	256,000.00
CLEVELAND DISTRICT	
Erie, Pa., Alliance Gas & Power Co.	124,977.67
Findley, Ohio, Grant Motor Car Co.	795,595.45
Cleveland, Ohio, Hydraulic Pressed Steel Co.	1,766,099.67
Bedford, Ohio, the McMyler Interstate Co.	225,366.00
Cleveland, Ohio, the Van Dorn Iron Works Co.	273,824.89
Toledo, Ohio, Willys Overland Co.	409,144.52
BALTIMORE DISTRICT	
Saltville, Va., Fraser Brace Co.	2,097,675.00
ROCHESTER DISTRICT	
Utica, N. Y., Savage Arms Corporation	168,272.83

On June 19, 1920, the following supplemental list of plants was approved by the Assistant Secretary of War for disposal under direction of the Office of the Director of Sales:

West Virginia Pulp & Paper Co., Mechanicsville, N. Y., Air Service.
West Virginia Pulp & Paper Co., Tyrone, Pa., Air Service.
Edgewood Arsenal, Belle, W. Va., C. W. S.
Symington Forge Co., Rochester, N. Y., Ordnance.
Symington Machine Co., Rochester, N. Y., Ordnance.
Evans Engineering Co., Old Bridge, N. J., Ordnance.
California Loading Co., Old Bridge, N. J., Ordnance.
Bethlehem Loading Co., Mays Landing, N. J., Ordnance.
Scituate Proving Grounds, Scituate, Mass., Ordnance.

Disposal by the office of the Director of Sales of the following plants, when declared surplus, was included in the approval:
Du Pont Engineering Co., Penniman, Va., Ordnance.
Du Pont Engineering Co., Seven Pines, Va., Ordnance.
Bag-filling plant, Woodbury, N. J., Ordnance.
Old Hickory powder plant, Jacksonville, Tenn., Ordnance.
Bag-loading plant, Tullytown, Pa., Ordnance.

Transfer of Hospitals

Other operations included the transfer of certain hospitals to the Public Health Service as shown below:

BASE HOSPITALS

State	Location	Designation	Transferred
California	Palo Alto	Camp Fremont Base Hospital	Apr. 1, 1919
Georgia	Augusta	Camp Hancock Base Hospital	May 9, 1919
Florida	Jacksonville	Camp Johnston Base Hospital	May 1, 1919
Louisiana	Alexandria	Camp Beauregard Base Hospital	Apr. 27, 1919
New Mexico	Deming	Camp Cody Base Hospital	Apr. 14, 1919
South Carolina	Greenville	Camp Sevier Base Hospital	Apr. 5, 1919
Texas	Houston	Camp Logan Base Hospital	Mar. 12, 1919
UNITED STATES ARMY GENERAL HOSPITALS			
Massachusetts	East Norfolk	General Hospital No. 34	June 25, 1919
Missouri	St. Louis	General Hospital No. 40	June 16, 1919
New York	Dansville	General Hospital No. 13	Apr. 21, 1919
Texas	Corpus Christi	General Hospital No. 15	May 31, 1919
HOSPITALS—PORTS OF EMBARKATION			
New York	New York (Brooklyn)	Norwegian Lutheran Deaconess' Home and Hospital.	May 16, 1919
Virginia	Newport News	Sewall's Point USQM Terminal Hospital	May 27, 1919

SECTION 21

SIGNAL CORPS

NOTE

Until May 20, 1918, the Signal Corps was responsible for aviation developments. However, to preserve continuity of presentation, these activities are combined with the Air Service, and are not touched upon hereinafter.

ORIENTATION

Appointment of the first "Signal Officer, U. S. Army," was authorized by Congress in 1860. The Signal Corps as a separate organization was created by the Act of March 3, 1863, for the duration of the Civil War, with a Chief Signal Officer at its head. Signal organizations proved their worth during the Civil War, and in 1866 statutory provision was made for a Chief Signal Officer but not for a Corps other than by a limited detail of six officers and not to exceed 100 men from the Engineers. This early establishment was usually referred to as the "Signal Service." In 1880, the Signal Corps attained equality of consideration with the other War Department bureaus.

FUNCTIONS

(1917 to May 26, 1918)

To have charge of the development of the Army's aviation program, including operation of all military aircraft; to provide the Army's telephone, telegraph, radio, and annunciator-buzzer systems; to supply its flag, panel and projector, and other signaling requirements; to maintain its motorcycle dispatch, meteorological, and time services; to conduct the photographic work for the pictorial history of the war; to control the personnel of the Signal Corps, including civilian employees attached thereto, and direct their training; to have charge of the procurement, storage, and distribution of aviation and signal supplies, and of the procurement and issue of signal equipment required in coast defenses.

(May 27, 1918 through 1919)

To supply equipment for the means of communication of the Army; to train personnel and to supply matériel used by field signal battalions, telegraph battalions, and fire-control stations; to supply photographic matériel; and to organize units for field service at home and abroad.

CHIEFS

1917		
Apr.	6	Brig. Gen. George O. Squier
Oct.	8	Maj. Gen. George O. Squier
Oct.	11	Brig. Gen. Charles McK. Saltzman (acting)
Nov.	13	Maj. Gen. George O. Squier
1919		
May through June	8 20	Col. Charles McK. Saltzman (acting)

ORGANIZATION AND DEVELOPMENT

OFFICE OF THE CHIEF SIGNAL OFFICER

1917

On April 6, the Office was organized into three main divisions with functions as follows:

ADMINISTRATIVE DIVISION

To control the administrative functions of the entire force and coordinate the work of the three divisions. To administer all matters relating to procurement of commissioned, enlisted, and civilian personnel; the activities of the

Corps in the United States, its insular possessions, and the Canal Zone; the service schools and the training of enlisted personnel; supervision of the preparation of orders and technical publications and their distribution; and the examination of all property accountability.

ENGINEERING DIVISION

To attend to the procurement, inspection, and issue of supplies; estimates; authorities and requisitions for funds; examination of money accountability of the disbursing officers of the Corps; design, construction, and inspection of technical equipment; supervision of supply depots, laboratories, cable, telephone and telegraph systems, and cable ships; preparation of Signal Corps publications, and printing requisitions.

AERONAUTICAL DIVISION

To conduct all air activities of the Army pertaining to heavier-than-air and lighter-than-air craft, except the procurement and distribution of supplies.

In addition to the foregoing, there was a Department of General Production as shown on chart.

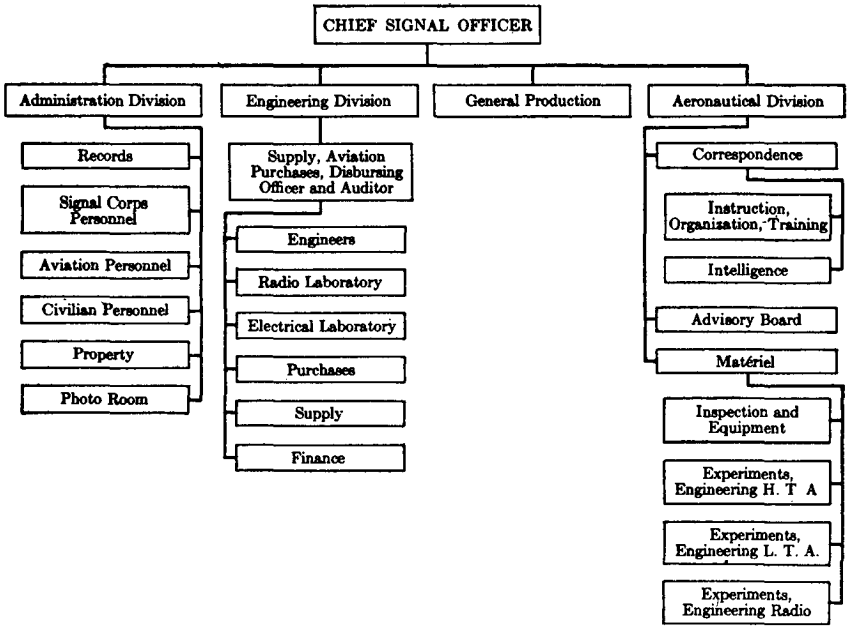


CHART NO. 48.—*ORGANIZATION OF CHIEF SIGNAL OFFICER'S OFFICE*
Apr. 6, 1917

By Oct. 1, a new organization had been completed. The old Engineering Division, which meanwhile had become the Finance and Supply Division, was transformed into the Equipment Division; the Aeronautical Division was changed into the Air Division; and these new Divisions were added: Science and Research, Construction, Radio, and Photographic.

1918

On Apr. 1, a basic reorganization provided the Chief Signal Officer with a military and an industrial executive and divided the Office into these Divisions: Administration, Air, Civilian Personnel, Equipment, Land, Medical, Science and Research, and Supply. The functions of these divisions were as follows:

ADMINISTRATION DIVISION

To perform executive and administrative duties.

AIR DIVISION

To attend to all aviation matters.

CIVILIAN PERSONNEL DIVISION

To administer all matters pertaining to the civilian personnel of the Signal Corps.

EQUIPMENT DIVISION

To handle all matters of production and finance pertaining to the Signal Corps.

LAND DIVISION

To supervise matters pertaining to commissioned and enlisted personnel of the Signal Corps, exclusive of the Aviation Section, including procurement, assignment, organization, and training matters; the training of radio personnel of the Signal Corps and the maintenance of radio stations; and Signal Corps telegraph and telephone service, Army commercial telephone service, and coast artillery fire control.

SCIENCE AND RESEARCH DIVISION

To work upon technical problems of the Signal Corps, especially in connection with aeronautics.

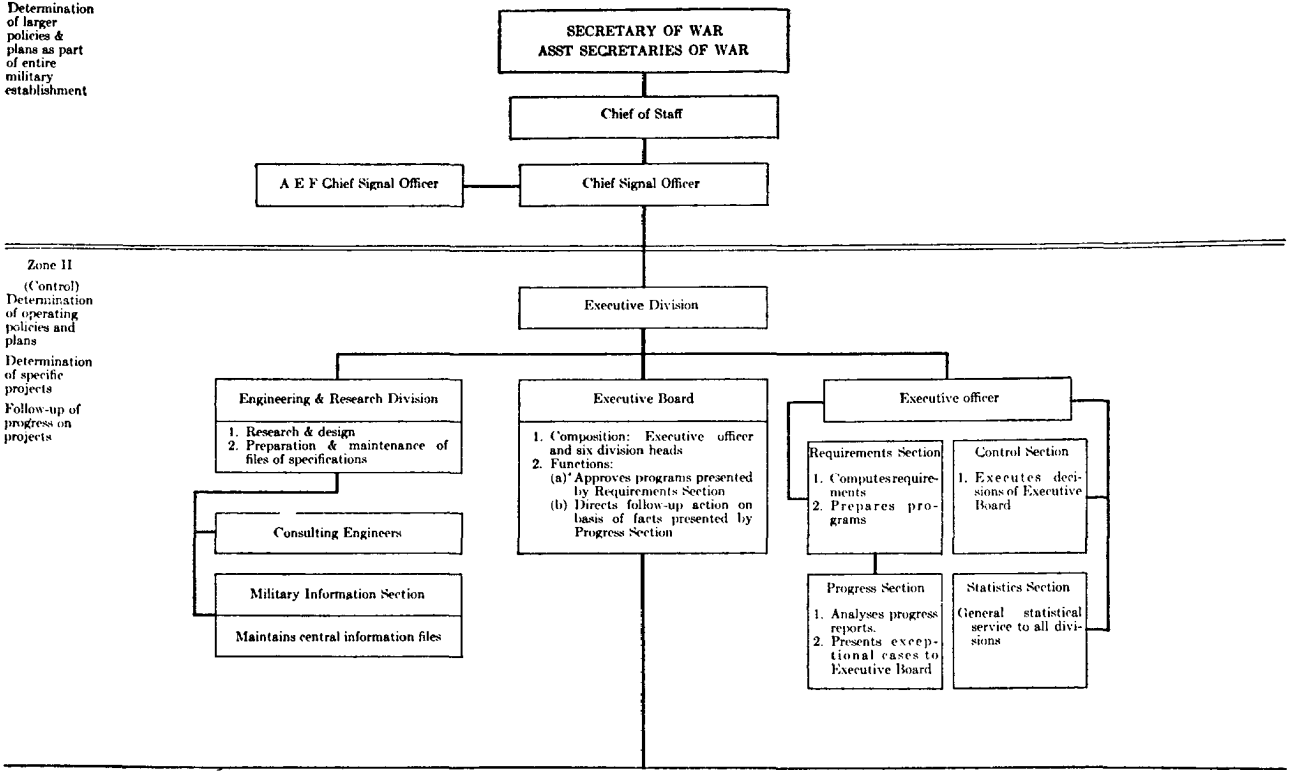
SUPPLY DIVISION

To control matériel after release by a manufacturer or seller; to control and operate depots of the Signal Corps; and to supply matériel upon requisition.

The removal of air activities, May 27, compelled a new alignment which was put into effect July 17. This set-up comprised the following Divisions: Executive, Organization and Personnel, Equipment, Supply and Accounts (formerly Supply), Training and Instruction, and Engineering and Research. A body of consulting engineers was also included.

An executive board, composed of the executive officer and the six division chiefs, operated in the Executive Division to facilitate the completion and functioning of this new organization. Several minor changes were made thereafter, one of which involved the revival of the old Supply Division. By Sept. 7, the structure was as shown on chart 49.

On Oct. 23, the Supply Division, the Purchase Section, Production Section, and Inspection Section of the Procurement Division, and the Requirements Section of the Executive Division were transferred to the Office of the Director of Purchase and Storage. On Oct. 25, the Finance Section of the Administration Division was transferred to the Finance Service.


Zone I
Determination of larger policies & plans as part of entire military establishment
SECRETARY OF WAR
ASST SECRETARIES OF WAR
Chief of Staff
A E F Chief Signal Officer
Chief Signal Officer
Zone II
(Control)
Determination of operating policies and plans
Determination of specific projects
Follow-up of progress on projects
Executive Division
Engineering & Research Division
1. Research & design
2. Preparation & maintenance of files of specifications
Consulting Engineers
Military Information Section
Maintains central information files
Executive Board
1. Composition: Executive officer and six division heads
2. Functions:
(a) Approves programs presented by Requirements Section
(b) Directs follow-up action on basis of facts presented by Progress Section
Executive officer
Requirements Section
1. Computes requirements
2. Prepares programs
Control Section
1. Executes decisions of Executive Board
Progress Section
1. Analyses progress reports.
2. Presents exceptional cases to Executive Board
Statistics Section
General statistical service to all divisions

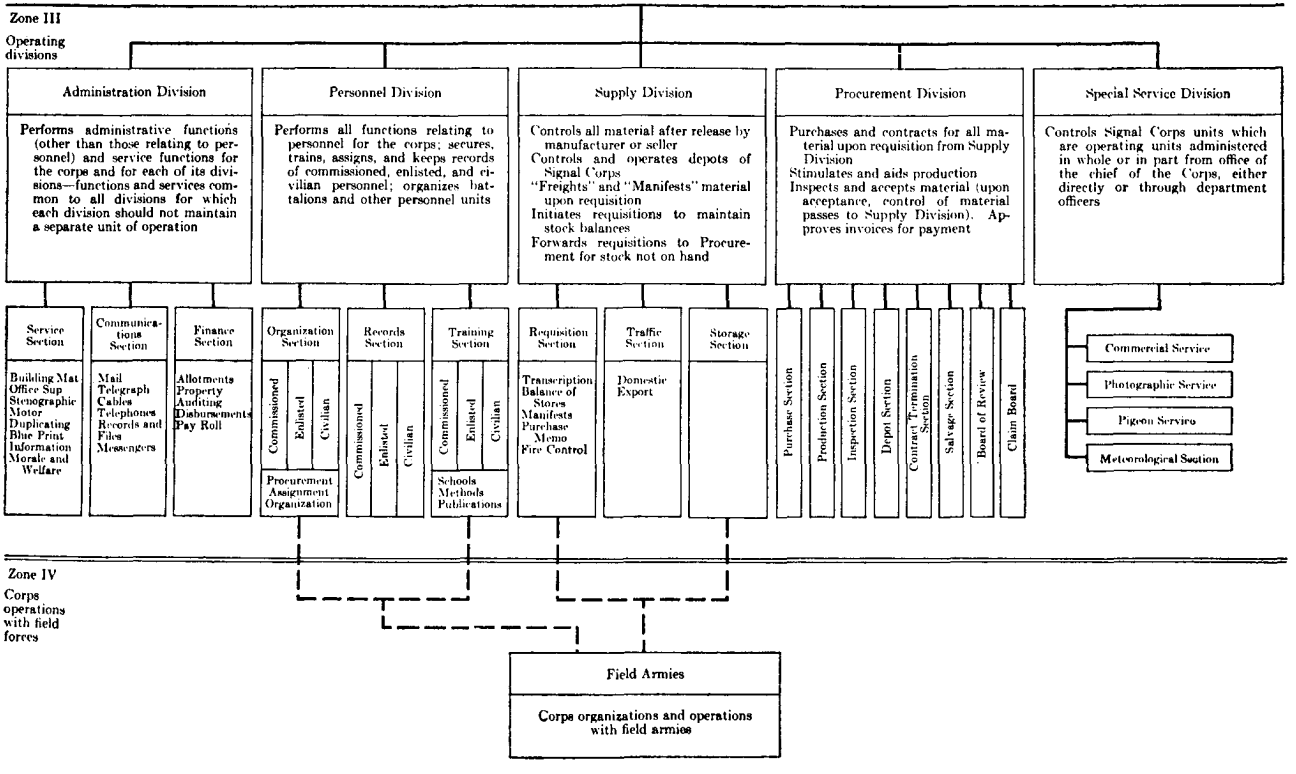


CHART NO. 49—*ORGANIZATION OF CHIEF SIGNAL OFFICER'S OFFICE*
Sept. 7, 1918

1919

By January, the last revisions had been made to meet peacetime conditions. Throughout the year, the organization of the Office remained practically unchanged.

FIELD ORGANIZATION AND INSTALLATIONS

PROCUREMENT AGENCIES

Procurement of supplies was handled in the Office of the Chief Signal Officer by various divisions or sections in the earlier organizations, which were finally concentrated in the Procurement Division. See preceding chart.

Inspection and special expediting staffs were maintained at the various headquarters of territorial departments. These staffs were attached to the Department Signal Office for administration but operated under the technical supervision of the Chief Signal Officer. During the summer and fall of 1918, the following inspection districts were maintained:

1st District—Northeastern Department;
2d District—Eastern Department;
3d District—Maryland and Washington, D. C.;
4th District—Southeastern Department;
5th District—Central Department;
6th District—Southern Department;
7th District—Western Department.

DEPOTS

All Signal Corps depots were operated under the control of the Supply Division. On May 15, 1918, the following general supply depots were in operation:

Atlanta, Ga.	Manila, P. I.
El Paso, Tex.	Omaha, Neb.
Fort Mason, Calif.	San Antonio, Tex.
Fort Wood, N. Y.	Seattle, Wash.
Honolulu, H. T.	Washington, D. C.

Combat divisions in the United States were supplied from these depots through a divisional signal officer and a supply officer stationed at each divisional camp, except at Camps Upton and MacArthur. Oversea shipments were made through signal officers stationed at the primary ports of Hoboken and Newport News and the secondary ports of Baltimore, Boston, Charleston, and Philadelphia.

TRAINING FACILITIES

Training camps and schools were established at the following centers:

Signal Corps Training Camps

Camp Alfred Vail, Little Silver, N. J.—For Signal Corps officers.

Camp Samuel F. B. Morse, Leon Springs, Tex.—Initially established as a

training camp for reserve officers; later used for instruction of officer candidates selected from enlisted personnel of the Signal Corps.

Fort Leavenworth, Kans.—Reserve officers' training camp; buzzer school; Army Signal School.

Presidio of Monterey, Calif.—Reserve officers' training camp.

Franklin Cantonment, Camp Meade, Md.—Established in Aug. 1918 as a center at which as many Signal Corps activities as possible would be concentrated.

Technical Courses

Technical training in Signal Corps specialties was established at the following educational institutions:

PRELIMINARY TECHNICAL TRAINING

Agricultural and Mechanical College, College Station, Tex.
College of the City of New York, New York, N. Y.
University of Vermont, Burlington, Vt.

RADIO SCHOOL

Maryland State Agricultural College, College Park, Md.

RADIO COMMUNICATION COURSE

Alabama Polytechnic Institute, Auburn, Ala.
Armour Institute of Technology, Chicago, Ill.
Carnegie Institute of Technology, Pittsburgh, Pa.
Case School of Applied Science, Cleveland, Ohio.
Columbia University, New York, N. Y.
Cornell University, Ithaca, N. Y.
Georgia School of Technology, Atlanta, Ga.
Harvard University, Cambridge, Mass.
Johns Hopkins University, Baltimore, Md.
Lafayette College, Easton, Pa.
Lehigh University, South Bethlehem, Pa.
Leland Stanford University, Palo Alto, Calif.
Massachusetts Institute of Technology, Cambridge, Mass.
Michigan Agricultural College, East Lansing, Mich.
New York University, New York, N. Y.
North Carolina State College, West Raleigh, N. C.
Ohio State University, Columbus, Ohio.
Oregon State University, Corvallis, Oreg.
Pennsylvania State College, State College, Pa.
Polytechnic Institute of Brooklyn, Brooklyn, N. Y.
Purdue University, West Lafayette, Ind.
Rose Polytechnic Institute, Terre Haute, Ind.
Rutgers College, New Brunswick, N. J.
State College of Washington, Pullman, Wash.
Syracuse University, Syracuse, N. Y.
Texas Agricultural and Mechanical College, College Station,

Tex.
Throop College of Technology, Pasadena, Calif.
University of California, Berkeley, Calif.
University of Florida, Gainesville, Fla.
University of Georgia, Athens, Ga.
University of Illinois, Urbana, Ill.
University of Kentucky, Lexington, Ky.
University of Michigan, Ann Arbor, Mich.
University of Minnesota, Minneapolis, Minn.
University of Nebraska, Lincoln, Neb.
University of Oklahoma, Norman, Okla.
University of Notre Dame, Notre Dame, Ind.
University of Pennsylvania, Philadelphia, Pa.
University of Pittsburgh, Pittsburgh, Pa.
University of Tennessee, Knoxville, Tenn.
University of Washington, Seattle, Wash.
University of Wisconsin, Madison, Wis.
Washington University, St. Louis, Mo.
Worcester Polytechnic Institute, Worcester, Mass.
Yale University (Sheffield Scientific School), New Haven, Conn.

Courses for radio electricians, telephone electricians, field signal battalion officer candidates, radio operators, telegraph operators, military photographers, meteorologists, and multiplex telegraphers were established at the following institutions:

Name of institution	Authorized strength	In operation	Remarks
		From–To	
College of the City of New York	200	Feb. 18–Nov. 30, 1918	Multiplex.
	300	July 2, 1917–Nov. 30, 1918	Radio.
Dodge Institute of Telegraphy	300	Nov. 15–23, 1918.	
Maryland State Agricultural College	300	Dec. 7, 1917–Sept. 15, 1918.	
Oregon Agricultural College	300	Oct. 12–Nov. 16, 1918.	
Purdue University	300	Aug. 31–Nov. 30, 1918.	
Texas Agricultural and Mechanical College	300	Mar. 1–Nov. 30, 1918	Meteorology.
	300	Mar. 1–Nov. 30, 1918	Radio.
Tulane University	600	Nov. 15–30, 1918.	
University of California	300	Oct. 19–Nov. 30, 1918.	
University of Indiana	300	Sept. 14–Nov. 16, 1918.	
University of Michigan	300	Sept. 26–Nov. 30, 1918.	
University of Minnesota	300	Sept. 15–Nov. 30, 1918.	
University of Nebraska	300	Sept. 13–Nov. 23, 1918.	
University of Utah	300	Nov. 15–30, 1918.	
University of Vermont	200	Sept. 25, 1917–Nov. 23, 1918.	
University of West Virginia	300	Oct. 26–Nov. 30, 1918.	
University of Wisconsin	450	Nov. 15–Dec. 1, 1918.	

LABORATORIES

Laboratory for Radio Development at Camp Alfred Vail, Little Silver, N. J.

Signal Corps Radio Laboratory at the Bureau of Standards, Washington, D. C.

Engineering Division Laboratory, 1710 Pennsylvania Avenue, Washington, D. C.

Laboratory for Still and Moving Pictures at Washington Barracks, D. C.

MILITARY METEOROLOGICAL STATIONS

Fort Brown, Tex.	Fort Screven, Ga.
Fort Leavenworth, Kans.	Camp Devens, Mass.
Fort Monroe, Va.	Camp Jackson, S. C.
Fort Sill, Okla.	Camp Knox, Ky.
Fort Snelling, Minn.	Several flying fields.

PERSONNEL

OFFICE OF THE CHIEF SIGNAL OFFICER

On Apr. 6, 1917, the office force consisted of 11 officers, 10 enlisted men, and 103 civilians. By Mar. 31, 1918, personnel had increased to 616 officers, 659 enlisted men, and 2,272 civilians, including the Air Division. Following the loss of the air component, the office force declined considerably and, Oct. 1, 1918, reached a maximum strength of 164 officers, 182 enlisted men, and 1,275 civilians.

SIGNAL CORPS TROOPS

Initial Strength

At outbreak of war, the Regular Army strength was 55 officers and 1,570 enlisted men, organized into 4 field battalions, 4 skeletonized field telegraph battalions, and 6 depot companies.

The National Guard troops totaled 163 officers and 3,510 men, represented by 10 field battalions and 16 separate companies.

Units of the Reserve Corps were newly authorized and temporarily under strength. However, its 27 field battalions and 12 telegraph battalions were rapidly filled with qualified officers and men.

Expansion

To secure the best trained technicians from the telephone, telegraph, and electrical industries, five leading engineers and executives were commissioned at once and charged with the selection of qualified personnel for 12 battalions, which were made ready for immediate service overseas.

Technicians required in field organizations included the following occupations:

Telephone and telegraph engineers; traffic and plant experts; operators, both male and female, speaking French, English, and German; installers and maintenance experts; telephone and telegraph repeater experts; printing telegraph mechanicians; traffic supervisors and testboard men; traffic and wire chiefs; linemen; switchboard repairers and installers; radio engineers, constructors, and operators; electrical-research experts; meteorologists; photographers, both still and motion; pigeon fanciers; optical experts and field-glass repairmen; instrument makers and repairers; shop-practice experts and oxyacetylene welders; production experts; gasoline and motor-transport experts; motorcyclists; chauffeurs; dry and storage battery experts; storehouse managers; cable experts and operators; draftsmen.

In mid-July 1918, the authorized and actual strength of Signal Corps troops was as follows:

Authorized number July 15, 1918	Units	Authorized strength July 15, 1918		Actual aggregate strength July 13, 1918
		Officers	Enlisted men	
58	Field signal battalions	812	26,763	21,660
1	Cavalry divisional battalion	14	245	----
21	Telegraph battalions	189	4,410	4,804
3	Construction battalions	27	630	----
16	Training battalions	224	7,344	----
10	Depot battalions	150	4,000	2,374
47	Service companies	[1] 94	[1] 7,050	5,623
----	Administrative companies (A. E. F.)	----	----	1,048
----	Field service companies	----	----	53
2	Pigeon companies	18	648	----
----	Pigeon section	----	----	400
56	Divisional photo units	56	112	----
1	Photographic section	43	783	100
1	Meteorological section	45	578	100
1	Radio development department	91	248	----
----	Buzzer school	----	----	631
----	Miscellaneous, S. O. S., etc.	----	----	600
	Totals	1,763	52,847	37,393

[1] Strength not fixed; estimated at 2 officers and 150 men in each company.

By Nov. 11, 1918, the strength of the Signal Corps, not including troops in the insular possessions and in Siberia, had reached a total of 2,343 officers and 49,761 enlisted men, of whom 1,279 officers and 34,998 enlisted men were in the A. E. F. and 1,064 officers and 14,763 enlisted men in the United States. In addition, 233 women telephone operators served in France.

ACTIVITIES

SUPPLY

MATERIEL

Signal matériel included telephone and telegraph apparatus; radio apparatus; line-construction materials; batteries; wire and cables; field glasses; wire carts; photographic supplies, pigeons and pigeon supplies; and chests, kits, tools, mechanical signals, electric signals, meteorological apparatus, and wrist watches.

Research laboratories were established in the United States and in France and staffed with electrical, chemical, physiological, and mechanical specialists. Facilities of the Bureau of Standards were requisitioned for the solution of numerous special problems, and the principal personnel of the Weather Bureau was employed in the newly established meteorological service.

Many improvements in design resulted. Scarcely an item of technical apparatus that had been regarded as adequate Apr. 6, 1917, was to be found in the Signal Corps equipment prescribed Nov. 11, 1918.

Supplies for Oversea Signal Lines

The initial plan for the Army communications system in France called for construction of 500 miles of main pole lines, carrying 10 telephone and telegraph wires. Except for the poles, all this matériel, plus supplies for 600 miles of extensions, was procured in the United States and shipped within 6 months. By Nov. 1918, a total of 282 American telephone exchanges were in operation in France with 14,956 lines reaching 8,959 stations. In addition, 133 complete telegraph stations had been installed in the Services of Supply. These stations handled a daily average of 43,845 messages during the final weeks of hostilities.

The following quantities of equipment, selected from among the more important items, were produced between Apr. 6, 1917, and Nov. 11, 1918, and shipped to France:

Items	Produced	Floated overseas
TELEPHONE EQUIPMENT		
Batteries, dry	970,171	396,427
Bells:		
Extension	865	470
Vibrating	13,756	12,934
Blocks, connecting	6,500	6,500
Cabinets, wire chief, testing	225	225
Coils:		
Induction	255	50
Repeating	801	801
Condensers	10,205	6,788
Cords:		
For telephones	5,000	5,000
For switchboards	23,539	11,890
Fuses for monocord switchboard	670,000	341,000
Receivers, diaphragms	2,7[illegible]0	2,050
Receivers, telephone	12,950	9,354
Repeaters, telephone	362	362
Staples, insulated	912,300	809,800
Switchboards:		
Camp, 40-line	111	68
Commercial types	304	304
Switchboard, telephone, monotype	14,462	13,264
Telephones:		
Artillery type (W. E. 1375)	65,544	46,123
Camp	38,456	32,668
Commercial types	2,669	1,514
Telephone offices, truck	1	1
TELEGRAPH EQUIPMENT		
Buzzers' service	3,983	3,478
Connectors, stud	8,027	8,027
Disks, cipher	6,157	6,157
Keys	1,830	1,830
Relays	1,672	1,147
Sounders	1,998	1,998
Switchboard, telegraph	1,321	550
Telegraph office, truck	1	1
Typewriters	920	880
Vibroplex, transmitter	470	420

The telegraph apparatus installed in the Services of Supply was of commercial type. However, field telephones were of special design, combining both telephone and telegraph principles. The switchboard used in dugouts was not of American make. One type of mobile switchboard, developed by the French, was known as the monotype and accommodated up to 12 trunk lines; another type, used in camps, had a capacity of 40 lines.

Radio Equipment

The first extensive manufacture of vacuum tubes, heretofore produced only in laboratories at great expense, was undertaken for apparatus of new and advanced design. This production involved an actual expenditure of $1,650,000 while $5,315,350 was spent for storage batteries, out of an authorization for $45,000,000.

By the end of the war, 75 types of radio sets had been devel-

oped and some 25 were in production. Of these there were three types of radio-telephone sets and three of radio-telegraph for airplane equipment; three of spark sets (sending and receiving), three of continuous-wave Army radio telegraph, and four types of T. P. S. (earth telegraphy) for land-radio equipment.

The total production of radio equipment at date of Armistice consisted of the following major items:

4,263 airplane interphone sets
7,029 airplane radio telegraph receiving sets
3,971 airplane radio telegraph transmitting sets
3,186 airplane radio telephone sets
1,250 amplifiers
455 battery charging sets
8,052 ground radio telegraph receiving sets
2,637 ground radio telegraph transmitting sets
527 ground radio telephone sets
227,139 storage batteries
2,510 T. P. S. receiving sets
1,995 T. P. S. transmitting sets
2,010 T. P. S. two-way sets
446,818 vacuum tubes
8,042 wavemeters

Field Glasses

No optical glass was manufactured in the United States until after 1914, when imports were interrupted by the European conflict. Aided by the Bureau of Standards and the Carnegie Institute, steps were taken in 1915 by American optical-instrument makers to produce suitable glass. This industry was still in its infancy in 1917 but was well established by Nov. 11, 1918, when some 106,000 pairs of American-made field glasses had been shipped to the American Expeditionary Forces.

The cost of field glasses purchased during the war, including the eight-power type procured in France for the American artillery, exceeded $4,000,000.

Wrist Watches

When the demand for wrist watches reached unexpected proportions, specifications were prepared for a standard timepiece at a reasonable price. Practically every available watchmaker in the United States received an order. Early difficulties, arising from a scarcity of experienced watchmakers, were overcome, and more than 49,000 watches were produced.

Photographic Equipment

With the creation of the Air Service, the Signal Corps was no longer responsible for aerial photography but continued to take all photographs of historical or current military interest and to produce training films.

Camera lenses were not procurable as American optical factories were running at capacity on other war orders. This difficulty was solved by an advertising campaign which resulted in

obtaining sufficient high-grade lenses from private owners.

The principal items of photographic equipment procured and shipped overseas were as follows:

Items	Production	Shipped overseas
Chemicals, pounds	50,723	41,881
Cameras	1,641	954
Lenses	2,797	696
Film, motion picture, feet	7,500,000	4,000,000
Film, still, rolls	48,814	28,814

Line Construction Material

The following principal items were produced and shipped overseas prior to the Armistice:

Items	Produced	Floated overseas
Anchors, guy	17,360	17,120
Braces, cross-arm	123,162	98,440
Brackets	277,834	277,209
Cable, telephone, miles	80,328	1,771
Cross arms	38,500	38,500
Insulators for lance poles	291,124	26,700
Insulators, glass	1,158,836	1,158,836
Insulators, porcelain	2,411,670	1,793,220
Pins, cross-arm	807,653	477,400
Poles, lance	209,000	23,685
Wire:		
Stranded, messenger, feet	2,470,577	2,470,357
Telephone, miles	240,037	146,318
Wire carts	721	327

SERVICES

The Special Service Division, Chief Signal Officer's Office, controlled and directed the work of the following units:

PIGEON SERVICE

Steps were taken to organize a carrier pigeon service during the summer of 1917 although authorization was not obtained until the following November.

By Nov. 11, 1918, stationary lofts had been erected at 74 training camps and posts, and at 10 stations on the Mexican border, 9 in the Panama Canal Department, 2 in Hawaii, and 15 at Atlantic and Pacific coast defenses. These lofts housed 10,000 pigeons while more than 15,000 trained carriers had been sent to the American Expeditionary Forces. The records showed that 95 percent of the messages carried by pigeons in combat were delivered.

METEOROLOGICAL SERVICE

France, England, and Germany had developed meteorological services to provide data for use in connection with artillery cor-

rections, aerial navigation, defense against enemy gas, use of offensive gas, and as an aid in forecasting operations.

Upon request for meteorological personnel by the A. E. F., in June 1917, about 500 men were procured. For the most part these were physicists; mathematicians; electrical, mechanical, and civil engineers; or experienced men from the United States Weather Bureau.

The first of these specialists were sent to various Weather Bureau stations for preliminary training. Later a school of meteorology was opened at College Station, Texas, where about 300 men underwent instruction. More than 300 specialists were sent to France, where the first American meteorological station was established in May 1918.

The combat functions of the meteorological service included the following: providing data on wind effects for the artillery; determination of upper winds for aviation; observations required in forecasting and for use of sound-ranging units.

In the United States, 37 stations were set up to supply aviation fields, ordnance proving grounds, and the gas warfare service with useful data. Special investigations were also undertaken in military meteorology and related problems.

TELEPHONE AND TELEGRAPH SERVICE

Prewar activities of the Signal Corps were confined to the operation of the Washington-Alaska military cable and telegraph system; installation, maintenance, and general supervision of telephone systems at interior posts; purchase of material and general supervision over records, fire control, and post telephone installation at coast artillery posts; and engineering activities in connection with coast artillery, interior posts, and the Alaskan Cable System.

EXPANSION

The Signal Corps was directed to supply the necessary telephone plants and service for the various wartime camps and, from Dec. 1, 1917, to take over from the Quartermaster Corps payment for long-distance calls. As the Signal Corps did not possess adequate resources for this task, it employed by contract the services of commercial telephone companies. Under this arrangement, the Government paid for the rental, and cost of operating official telephones and for equipment used for pay-station purposes.

As finally developed, the system was in operation at 94 camps, 123 army posts, 41 flying fields, 4 aviation acceptance parks, 11 aviation schools, 21 air service facilities, 34 quartermaster corps depots and warehouses, 19 gas and chemical plants, 5 signal corps

supply depots, 34 miscellaneous offices, facilities, and services, 15 arsenals, 10 proving grounds, 9 loading plants, 12 ordnance depots, 10 district ordnance offices, 72 hospitals and similar institutions. In addition, numerous War Department offices of an administrative nature, established throughout the country, were provided with commercial telephone service by the respective department signal officers.

WASHINGTON-ALASKA MILITARY CABLE AND TELEGRAPH SYSTEM

Maintenance of this system was a Signal Corps function. The cable length, on June 30, 1919, was 2,678 miles, with land line totaling 799 miles. Thirteen radio stations were also in operation. For detailed description see Alaskan Telegraph and Cable Lines Reservations, p. 935.

CODE-COMPILATION SERVICE

A code-compilation section was organized in Jan. 1918. In May 1918, the "Staff Code," containing some 39,000 words for the transmission of messages between the various staff organizations in the field and at the several headquarters, was sent to press and completed within one month. The first "Trench Code," for use in the front-line trenches and the zone of advance and issued down to battalions only, was found to be unsatisfactory as to scope. A revision, known as the "Potomac Code," the first of the so-called river series, was put out in June 1918. A copy of this book was captured July 20 and, within 2 days, was replaced by a new code book throughout the entire Army in the field. In addition, 3,000 copies of a "Front-Line Code" to meet the needs of the small units were issued.

In 10 months of active operations, the Code Compilation Section completed and published more than 80,000 code books.

PHOTOGRAPHY

The Signal Corps compiled a photographic history of America's participation in the World War, both in motion pictures and in still views.

The motion-picture recordings, between Feb. 1918 and July 1919, required 9,976,054 feet of film. Still work comprised 3,218 enlargements, 808,591 prints, 44,470 negatives, 20,246 copies, 128,347 lantern slides, and 60 enlargement exhibits.

In addition, thousands of photographs of military and civilian personnel were made for purpose of individual identification in buildings, factories, and munition plants under Government control.

TRAINING

Supervision of training of all branches of the Army in signal

work was centered in the Training Section, Personnel Division, Office of the Chief Signal Officer. The Training Section gave particular attention to Signal Corps personnel at the various schools.

Signal Corps units organized in 1917 had exhausted the trained personnel available from civilian sources. Educational institutions and other schools were called upon, thereafter, to meet the rapidly growing demands for specialists.

EDUCATIONAL INSTITUTIONS

In Aug. 1917, study courses lasting 13 weeks were opened at the University of Vermont, College of the City of New York, and the Agricultural and Mechanical College of Texas for approximately 500 men. In addition, several thousand inducted men who showed some proficiency in international Morse code were sent, according to their qualifications, to the Signal Corps Radio School, College Park, Md., to a field signal battalion, to a radio electricians' school, or to the Signal Corps Buzzer School at Fort Leavenworth, Kans.

A 3-month radio communication course was given at 45 institutions to junior and senior engineer students. Some 200 of these students completed the course, a large percentage of whom were commissioned (see pp. 479, 480).

By July 1918, the shortage of specialists had become acute. Through the Committee on Education and Special Training, General Staff, arrangements were made with certain institutions for courses required to graduate the following:

1,600 radio electricians per month following a 13-week course;
400 telephone electricians per month following a 13-week course;
110 officer candidates per month following a 13-week course;
1,000 radio operators per month following an 8-week course;
50 telegraph operators per month following an 8-week course;
30 multiplex-telegraphy experts per month following a 4-month course;

and specialists in military photography and meteorology, to be assigned to duty as soon as they had become proficient (see pp. 480-481).

By Nov. 11, 1918, 2,414 students had been graduated and 3,301 were still in training at the 16 schools selected.

TRAINING CAMPS

Reserve Officers Camps

The Signal Section, first series of officers' training camps, was held at Camp Alfred Vail, Fort Leavenworth, Camp Samuel F. B. Morse, and Presidio of Monterey; the second series at Fort Leavenworth; and thereafter Reserve officer training courses were continued at Camp Alfred Vail until the Armistice.

At Camp Samuel F. B. Morse, Leon Springs, Tex., two training camps for candidates for commissions, selected from Signal

Corps enlisted personnel, were held after the first Reserve officers' training camp. In Aug. 1918, the instructors were transferred to Franklin Cantonment, Camp Meade, Md., where Signal Corps activities were being concentrated. This was followed, in Nov. 1918, by the transfer to Camp Meade of the Fort Leavenworth buzzer school.

The course of a Reserve officers' training camp generally extended over 13 weeks. Regular Signal Corps officers and efficient noncommissioned officers of long service served as instructors.

Signal Instruction for Field Artillery

Instruction of artillery radio personnel at the firing centers of Camps Doniphan and Jackson was inaugurated in June 1918 and, 1 month later, at the Field Artillery Central Officers' Training School, Camp Taylor.

DEMOBILIZATION

PERSONNEL

At the Armistice, the Signal Corps consisted of 55,989 officers and men, 36,277 of whom were in the American Expeditionary Forces. These troops were organized into 56 field signal battalions, 33 telegraph battalions, 12 depot battalions, 6 training battalions, and 40 service companies.

By Mar. 14, 1919, all Signal Corps personnel had vacated Franklin Cantonment, and Camp Alfred Vail was being used as a demobilization point. By June 30, 1919, the Signal Corps had been reduced to 1,216 officers and 10,372 enlisted men. By Aug. 15, 1919, the last signal organization, other than service companies and Regular Army units, returning from overseas had been demobilized.

On June 30, 1920, the Signal Corps consisted of 241 officers and 4,662 enlisted men, organized into 10 field battalions, 6 telegraph battalions, 14 service companies, and 1 detachment.

MATÉRIEL

Upon conclusion of hostilities, the Signal Corps had 1,244 contracts in force and orders outstanding for matériel valued at $45,205,049. Production was curtailed at once with due regard to the rights of the industrialists, interests of the Government, and avoidance of disturbances of labor. In this connection, it was the function of the Contract Termination Section, Procurement Division, to investigate contracts and orders and to report its findings to the Board of Contract Review, War Department Claims Board. This Section handled all matters concerning termination, suspension or cancellation of contracts.

Settlement of Claims

About 307 contracts and orders, totaling $25,190,445, were subject to cancellation, reduction, or termination. Of these, 48 were ordered completed and 44 cancelled without payment of termination costs, upon delivery of goods then in a finished state in the possession of the manufacturer. As finally reported, the Termination Section settled 208 of the remainder, totaling $22,946,873, at a cost to the Government of $4,399,013.

Disposal of Property

A Salvage and Sales Board was organized in the Office of the Chief Signal Officer to dispose of surplus matériel. District sales offices were opened in New York, Boston, and Chicago, under supervision of the department signal officers on duty at these places. A mail-order system was devised to reach throughout the Nation.

Up to June 30, 1920, the sale of major items (metals, textiles, wire, etc.) had netted $238,688, while property valued at $187,000 had been transferred to other Government departments, exclusive of about $75,000 worth of photographic matériel transferred without adjustment of funds.

The telegraph and telephone installations in the A. E. F. were sold to the French Government for $6,400,000 as a separate transaction not included in the general bulk sale conducted by the United States Liquidation Commission. Moreover, France and England jointly paid $130,000 for the American cross Channel cable, which had been laid at an approximate cost of $238,000.

An adequate war reserve of new and unused matériel was placed in safe storage. Large quantities of finished articles and partly manufactured apparatus were also shipped to the laboratories at Camp Alfred Vail for study and development.

SECTION 22

TANK CORPS

ORIENTATION

The Tank Corps had no prewar antecedents.

FUNCTIONS

(DIRECTOR OF TANK CORPS)

To have charge of organizing, arming, equipping, and training tank units; to supervise all tank activities in the United States, including procurement of officers and enlisted men, and establishment and maintenance of tank camps.

(CHIEF OF TANK CORPS)

To supervise the Tank Corps; to submit all matters concerning tactics, organization, and policy to the General Staff for coordination; and to furnish

directives to the supply departments as to design, class, and production of tank equipment.

CHIEFS

1918
Mar. 9 Col. Ira C. Welborn, Director of Tank Corps in U. S.
1919
Aug. 15 to June 30, 1920 Brig. Gen. Samuel D. Rockenbach, Chief of Tank Corps (Chief of Tank Corps, A. E. F. from Dec. 23, 1917).

GENESIS

1917

In the fall, American, British, and French authorities agreed to coordinate their tank programs and to cooperate in the production of the new weapon. Following this tripartite agreement, Col. Samuel D. Rockenbach was appointed Chief of Tank Corps, American Expeditionary Forces.

1918

On Feb. 6, the Chief of Tank Corps was made a member of the staff of the Commander-in-Chief, A. E. F., and adviser on all tank matters. On July 25, the duties of the Chief of Tank Corps were defined as follows:

> To inspect all tank units of the command with respect to organization, training, matériel and equipment, methods, and all other phases affecting efficiency; to be responsible for the preparation of all details concerning the instruction and training of tank units, and to supervise tank training centers; to supervise the training of tank organizations until they join tactical units to which they may be attached; and to prepare and submit to the Chief of Staff drafts of such tank manuals and other tank literature as may be necessary in the training and employment of tanks.

In the United States, meanwhile, a Tank Branch had been established in the Motor Equipment Section, Procurement Division, Office of the Chief of Ordnance.

On Feb. 18, a Tank Service, National Army, was authorized and placed under the control of the Chief of Engineers. The 65th Engineers (light and heavy tanks) was organized as the nucleus of the new arm.

On Mar. 5, the Tank Service was established as a separate branch of the War Department. Four days later, a Director of the Tank Service was appointed. The Service was renamed Tank Corps, Mar. 22.

ORGANIZATION AND DEVELOPMENT

WASHINGTON OFFICE ORGANIZATION

1918

The Office of the Director of the Tank Corps was organized into

four Divisions: Administration, Commissioned Personnel, Organization, and Recruiting and Enlisted Personnel.

As the Ordnance Department was charged with the production of tanks, the Director of the Tank Corps was not responsible for procurement. In late summer the Tank Branch, Office of the Chief of Ordnance, was established as the Tank Division of the same office and continued to handle production.

1919

On Mar. 8, Franklin Cantonment, Camp Meade, Md., was designated as headquarters of the Tank Corps. On Aug. 15, General Headquarters, Tank Corps, A. E. F., returned from France and took station at the cantonment. At the same time, the Office of the Director of the Tank Corps at Washington was ordered to be merged with the A. E. F. Tank Corps Headquarters.

The consummation of the merger created a new General Headquarters of the Tank Corps at Franklin Cantonment, with the following organization: A. C. of S. (G–1) for equipment and transportation (ordnance, signal, quartermaster, medical, utilities); A. C. of S. (G–2) for intelligence (information, topography, censorship); A. C. of S. (G–3) for operations (strategical studies and plans, operation orders, organizations, troop-movements, and training and instruction).

The duties which the General Headquarters, Tank Corps, was to perform have been stated under functions of Chief of Tank Corps (see p. 491).

1920

On June 4, the Tank Corps as such was abolished by amendment to the National Defense Act, which provided that tank units would thereafter form part of the infantry arm.

FIELD ORGANIZATION AND INSTALLATIONS

Camps

CAMP COLT

Was the primary Tank Corps camp. Established Mar. 19, 1918, to provide preliminary training for officers and enlisted men. Ordered abandoned Nov. 13, 1918 (see p. 720).

CAMP DIX

Troops from Camp Colt were received Nov. 18, 1918, and were reduced by discharge and transfer to Camp Polk to about 250 men (see p. 723).

CAMP GREENE

Late in 1918, a few tank units were sent to this camp, apparently for discharge (see p. 823).

CAMP POLK

Received initially personnel from Camps Tobyhanna and Colt, the latter furnishing one heavy tank battalion to serve as nucleus for a training cadre. Camp Polk was intended ultimately to accommodate 8,000 men, but only 4,000 were receiving training at date of Armistice. Thereafter a few battalions were organized (see p. 845).

CAMP TOBYHANNA

With the arrival from overseas of an experienced training staff, commissioned and enlisted, this camp became a training center July 20, 1918. Some 2,000 men were trained here and sent overseas. On Oct. 1, 1918, all training personnel was transferred to Camp Polk (see p. 794).

CAMP BENNING

On Dec. 26, 1918, tank troops arrived at this station for combined training with infantry units in connection with the projected Infantry School (see p. 813).

CAMP MEADE

(FRANKLIN CANTONMENT)

During Feb. 1919, all tank troops in the United States were assembled at this cantonment (see p. 745).

Schools

An officers' training camp was established at Camp Colt (see p. 493) June 15, 1918.

Plans for Tank Corps reorganization, adopted Aug. 15, 1919, provided for a Tank School at Camp Meade, with a maximum strength of 62 officers and 812 enlisted men. The curriculum was to include training in infantry work, mechanics, tank driving, heavy weapons, compass reading, signalling, gas warfare, and intelligence.

PERSONNEL

GROWTH

While the tank organization was under control of the Chief of Engineers (see p. 492), 115 selected officers and 1,050 enlisted men were assigned to the 65th Engineers (Tank Service). These troops were later transferred to the new organization.

On Mar. 5, 1918, a Tank Service to consist of 914 officers and 14,746 men was authorized, based on the original program submitted by Gen. Pershing in Sept. 1917.

On Mar. 22, 1918, when the designation of the Tank Service was changed to Tank Corps, a strength of 925 officers and 13,911 men was authorized, to provide personnel for:

30 light tank companies (one for each division),

30 light tank companies (army troops),

15 heavy tank companies (army troops),
5 carrier companies (army troops),
2 artillery carrier companies (army troops);

General Headquarters Troops—

10 training companies (training and replacement),
6 depot companies (repair and salvage),
1 depot company (depot).

Under original instructions, the Director of the Tank Corps was charged with securing men from the draft, i. e., men already in service. On Apr. 5, 1918, further authorization allowed the Tank Corps to institute its own recruiting and on Aug. 15, to establish recruiting stations in large cities. Of the men so procured, 65 percent were technicians, mechanics, or machinists.

Meanwhile instructions had been issued to proceed without delay with the selection of personnel for, and the organization of, 12 heavy tank companies and 24 light companies. However, June 4, there were only 700 men in the Tank Corps of the A. E. F. and about 5,000 in the United States organization.

On July 29, 1918, the status of the Tank Corps was as fellows:

Authorized	Organized in		Not yet organized
	United States	Overseas	
General Tank Headquarters			1
General Light Tank Headquarters			1
General Heavy Tank Headquarters			1
8 Tank Centers	1	2	5
8 Repair and Salvage Cos	2	1	5
3 Training and Replacement Cos. (H.)		2	1
10 Training and Replacement Cos. (L.)	4	4	2
1 Depot Company	1		
15 Heavy Companies	12	3	
5 Heavy Battalion Headquarters	1	2	2
60 Light Companies	24	6	30
20 Light Battalion Headquarters	1	2	17

On Aug. 29, 1918, to provide training organizations in the United States, the following additional units were authorized: 2 heavy tank battalions, 6 light tank battalions, 1 light tank repair and salvage company, and 1 heavy tank repair and salvage company.

On September 12 and 27, 1918, further authorizations provided for the following overseas tank organizations:

General headquarters	1	Light companies	60
Army tank headquarters	2	Training and replacement cos., heavy	6
Brigade and center headquarters	13	Training and replacement cos., light	12
Repair and salvage companies	13	Depot companies	2
Heavy battalion headquarters	10		
Heavy companies	30		
Light battalion headquarters	20		

On Sept. 30, 1918, training and replacement units in the United States were ordered increased by 2 training centers, 1 training and replacement company (heavy), 1 training and replacement company (light), and 1 headquarters.

In addition, to provide personnel for depots, schools, and the Office of the Director of the Tank Corps, an increase of 151 officers and 588 enlisted men was granted.

MAXIMUM STRENGTH

At date of Armistice the Tank Corps had a strength of 1,090 officers and 14,870 enlisted men. Of this total, 47 percent were in the A. E. F. or en route thereto, and 53 percent in the United States.

UNITS

On Nov. 11, 1918, tank units in the A. E. F. consisted of:

3 training center headquarters;
6 training and replacement companies (light);
2 brigade headquarters;
5 heavy tank battalions, comprising 15 companies;
10 light tank battalions, comprising 30 companies;
4 repair and salvage companies.

On Nov. 30, 1918, units in the United States included:

2 brigade headquarters or tank centers at Camp Dix;
3 heavy tank battalion headquarters and 9 heavy companies at Camp Polk;
5 light tank battalion headquarters and 15 light companies at Camp Dix;
4 light tank battalion headquarters and 12 light companies at Camp Polk;
1 heavy training and replacement company at Camp Dix;
2 light training and replacement companies at Camp Dix;
2 repair and salvage companies at Camp Dix;
1 depot company at Camp Dix.

On Mar. 8, 1919, the strength of the Tank Corps was fixed at not to exceed 300 officers and 5,000 enlisted men.

ACTIVITIES

SUPPLY

Production

Two types of tanks were adopted—the light 6½-ton, and the heavy 35-ton tank.

LIGHT TANK

In Dec. 1917, plans and samples of the French Renault tank reached the United States, where all light tanks were to be manufactured. Adaptation of the French machine to American mass production methods necessitated so

many changes that the result was virtually a new model. Manufacture of parts was allotted to many concerns, and assembly was made at Dayton and Cleveland, Ohio.

Contracts called for delivery of 4,440 light tanks. Actual manufacture did not begin until Feb. or Mar. 1918. Delivery of the first machines began in Oct. 1918; production expanded at a rapid rate thereafter.

HEAVY TANK

In the manufacture of this weapon, known as the Mark VIII tank, the Liberty engine, tractor mechanism, and electrical installation were of American make, the British furnishing the armored hull. Assembly was to be made at an Anglo-American plant in France.

FORD TANK

In the summer of 1918, the tank program was augmented by the development of a 3-ton, 2-man tank, originated by the Ford Motor Company. Only 15 were built before Nov. 11, 1918, most of which were sent to France for final test.

ACCOMPLISHMENT

A total of $175,000,000 was obligated on tank construction. Following the Armistice, contracts were greatly reduced resulting in the following production:

Tank-type	Number ordered	Number accepted to Nov. 11, 1918	Total number accepted	Floated to Nov. 11, 1918
3-ton	15,015	15	15	10
6½-ton	4,440	64	950	6
Anglo-American Mark VIII	1,500	1	1	----
American Mark VIII	1,450	----	100	----

TRAINING

Early in 1918 the first qualified instructors, commissioned and enlisted, returned to the United States from the A. E. F., to assist in tank training. Until July, Camp Colt (see p. 493) was the only center of instruction; it went no further than to provide preliminary training before sending tank troops overseas to receive technical and tactical instruction at American training centers in England and France.

The establishment of the training centers at Camps Tobyhanna and Polk (see p. 494) enabled furthering of plans under which practically all training would be done in the United States, except final preparation for combat to be accomplished abroad.

It was estimated that one brigade of tanks, consisting of one heavy and two light battalions and one repair and salvage company, would be required for each army corps. In addition, a training and replacement cadre, totaling 30 percent of combat strength was to be provided. Had the war continued, five tank brigades, fully trained and equipped, would have been ready for action by the spring of 1919.

Notwithstanding the delayed program of training and production, the Tank Corps by using British and French matériel participated in combat in the fall of 1918. Three battalions of light tanks took part in the operations of the American First Army, and one battalion of heavies supported the British in Flanders.

DEMOBILIZATION

Personnel

On Nov. 25, 1918, orders were issued to demobilize all emergency Tank Corps personnel in the United States, except 31 officers and 450 men. Within 2 months this phase of demobilization was completed. By May 1919, the greater part of Tank Corps overseas personnel had been returned, through Camp Meade (see p. 494), and discharged.

On July 1, 1919, a strength of 300 officers and 5,000 men was authorized but the Tank Corps at that time numbered only 81 officers and 213 enlisted men, all stationed at Camp Meade. On Dec. 31, 1919, a temporary allotment of 154 officers and 2,508 men was made, yet 6 months later the total strength was only 101 officers and 1,824 enlisted men.

Matériel

On July 1, 1919, Tank Corps equipment consisted of 32 British heavy tanks of obsolete type, 213 French light Renaults, 618 American 6½-ton lights, and the components for 100 Mark VIII Anglo-American heavies, including hulls and gears produced by the British.

Upon completion of outstanding contracts, the Tank Corps possessed 1,163 machines, of which 828 light tanks, the 33 British heavy, and 7 assembled Mark VIII tanks were stored at Camp Meade. Other points of storage included the Columbus General Supply Depot with 38 tanks; Rock Island Arsenal and nearby Proving Grounds with 127; and Fort Bliss with 50.

SECTION 23

TRANSPORTATION SERVICE
INCLUDING
EMBARKATION AND INLAND TRAFFIC SERVICES

I

EMBARKATION SERVICE

ORIENTATION

The Embarkation Service, Inland Traffic Service, and Transportation Service have their origins in the Quartermaster Corps. Before the war, the Transportation Division of the Quartermaster General's Office handled all transportation activities of the Army.

FUNCTIONS

as of Aug. 4, 1917

To exercise direct supervision over all movements of munitions and supplies destined for Europe from points of origin to ports; to coordinate all overseas troop movements; to supervise operations at ports of embarkation; to exercise control over Army transports and commercial shipping carrying troops and supplies in the trans-Atlantic service; to arrange with the Navy for convoy service; to expedite shipments and troop movements in accordance with demands of the A. E. F.; and to advise the Chief of Staff with reference thereto.

CHIEFS

1917	
Aug. 4	Brig. Gen. Francis J. Kernan
Aug. 24	Col. Chauncey B. Baker (acting)
Aug. 29	Col. Chauncey B. Baker
Oct. 5	Brig. Gen. Chauncey B. Baker
1918	
Feb. 7	Maj. Frank T. Hines
Feb. 12	Lieut. Col. Frank T. Hines
Mar. 22	Col. Frank T. Hines
Apr. 30 to Mar. 12, 1919	Brig. Gen. Frank T. Hines

ORGANIZATION AND DEVELOPMENT

WATER TRANSPORTATION BRANCH

1917

At outbreak of war, the Army Transport Service was supervised by the Water Transportation Branch, Transportation Division, Quartermaster General's Office. The Branch functioned through operations, construction, personnel, and finance subdivisions. Many of the duties were delegated to the Superintendent, Army Transport Service; others, such as allocating vessels to different services, drawing plans and estimates for construction and repairs were attended to by the Water Transportation Branch.

Ocean tonnage under control of the Branch consisted of seven transports serving the Philippines, Alaska, Panama, and Cuba. Local superintendents of the Army Transport Service managed the harbor facilities and other shore installations.

This organization soon proved inadequate. On June 20, the Quartermaster General therefore recommended the creation of ports of embarkation at New York, Newport News, and other points, if needed. Early in July, the plan was approved.

After organization of ports of embarkation, port commanders placed local superintendents on their staffs and took over many of the duties incident to operations formerly performed by the Water Transportation Branch and its agencies. Although the Branch had been attached to the Embarkation Service to assist in chartering, financing, constructing, and repairing vessels, it nevertheless continued to function under the Quartermaster General until Apr. 22, 1918.

EMBARKATION SERVICE, OFFICE OF THE CHIEF OF STAFF

On Aug. 4, the Embarkation Service was created as a separate bureau of the War Department, to enable the Chief of Staff to exercise effectively his supervisory and coordinating powers in respect to oversea movements. The Service's first concern was traffic congestion at the principal ports, which it dealt with until Jan. 10, 1918, when the Division of Inland Transportation took over this function (see pp. 526, 527).

To speed up the turnabout of transports and supply ships, the War Board for the port of New York was created Nov. 3, including in its membership the Secretary of War and other cabinet officers.

A further improvement in the supervision of transportation was achieved by the establishment of the Storage and Traffic Service Dec. 28. It coordinated the movement of troops and supplies of every kind and controlled the Embarkation Service and the Division of Inland Transportation, through which it functioned (see p. 32).

1918

Early in the year, a serious shortage of tonnage called for immediate action and rendered imperative an ordered direction of available shipping. To this end, the Shipping Control Committee was appointed by the Secretary of War Feb. 7 and confirmed by the United States Shipping Board (see p. 11) four days thereafter.

The Shipping Control Committee took over the duties of the War Board at the Port of New York and certain duties hitherto performed by the Ship Operating Branch of the Embarkation Service and by the General Superintendent, Army Transport Service. The functions of the Shipping Control Committee were:

To allocate available tonnage at the ports to various uses; to distribute tonnage; to arrange for exchange of ships on behalf of the War Department; to load and unload, arrange for coaling, provisioning, and repairing; to manage docks, piers, and loading facilities of the War Department; to manage all ships, whether under military authority or not, while in port.

These functions were carried out by the Committee through representatives at every port of importance, in harmony with the Embarkation Service.

On Feb. 9, the Storage and Traffic Service became a division of the General Staff, and the Embarkation Service continued to function under it (see chart 7). The Shipping Control Committee and the port commanders were subordinated to the Embarkation Service and represented its operating divisions. Operations of a commercial character were under the administration and control of the Shipping Control Committee; those of a purely military nature, under the commanding generals of the ports. At this time the Embarkation Service functioned through the Administration

Branch and the Ship Operating Branch. The latter had an Overseas Shipments Control Section, a Passenger Traffic Section, and an Information and Statistics Section.

On Apr. 16, the Purchase, Storage, and Traffic Division, General Staff, was organized, and the Embarkation Service became one of its subdivisions. On Apr. 22, the Water Transportation Branch (see p. 499) under the new designation of "Water Transport Branch" was transferred from the Quartermaster Corps to the Embarkation Service, but retained for some months its separate organization. At this time, the organization of the Embarkation Service was as follows:

Administrative Section.—In charge of courier service; baggage; remains and effects; records, including troop, cargo, and ship statistics, and transmitting data concerning same to the Services of Supply, A. E. F.; other routine matters.

Passenger Section.—Maintained records of all troop movements from date reported ready for oversea service or return to the United States by the Operations Division, General Staff, until landed at port of destination.

Ship Section.—Kept the Chief of Embarkation advised of troop and cargo ships available, through contact with the United States Shipping Board and Shipping Control Committee; made recommendations as to equipment, repair and maintenance of ships in service and of future acquisitions.

Cargo Section.—Controlled movements of all supplies from points of origin or storage to the seaboard to meet priority schedules fixed by the A. E. F.; in liaison with the Inland Transportation Division (see p. 526), followed up all shipments en route to the ports to prevent congestion at any point and to assure adequate stores for loading on ships.

Water Transport Branch.—Financed, chartered, constructed, and altered vessels.

On Aug. 26, certain subdivisions of the Purchase, Storage, and Traffic Division were designated as operating departments. Among them was the Embarkation Service, which was specifically charged with responsibility for and authority over embarkation and ocean transportation.

New changes had inception Sept. 27, whereby (1) the Primary Ports of Embarkation were made an operating department, under the Director of Purchase, Storage, and Traffic, and coordinated with the Embarkation Service; (2) Secondary Ports were placed under the Director of Purchase and Storage. By Nov. 7, when the plan to reorganize the Army supply system was published, many changes had already been put into effect; others remained to be made as rapidly as circumstances would permit.

In November, the Water Transport Branch was assimilated by the new Construction and Maintenance Section and by the new Finance Section of the Embarkation Service. In addition, a Freight Traffic Section was organized and the former Cargo Section transferred to the Office of the Director of Storage and the

old Ship Section to the Vessel Operations Section. This resulted in the organization shown on chart.

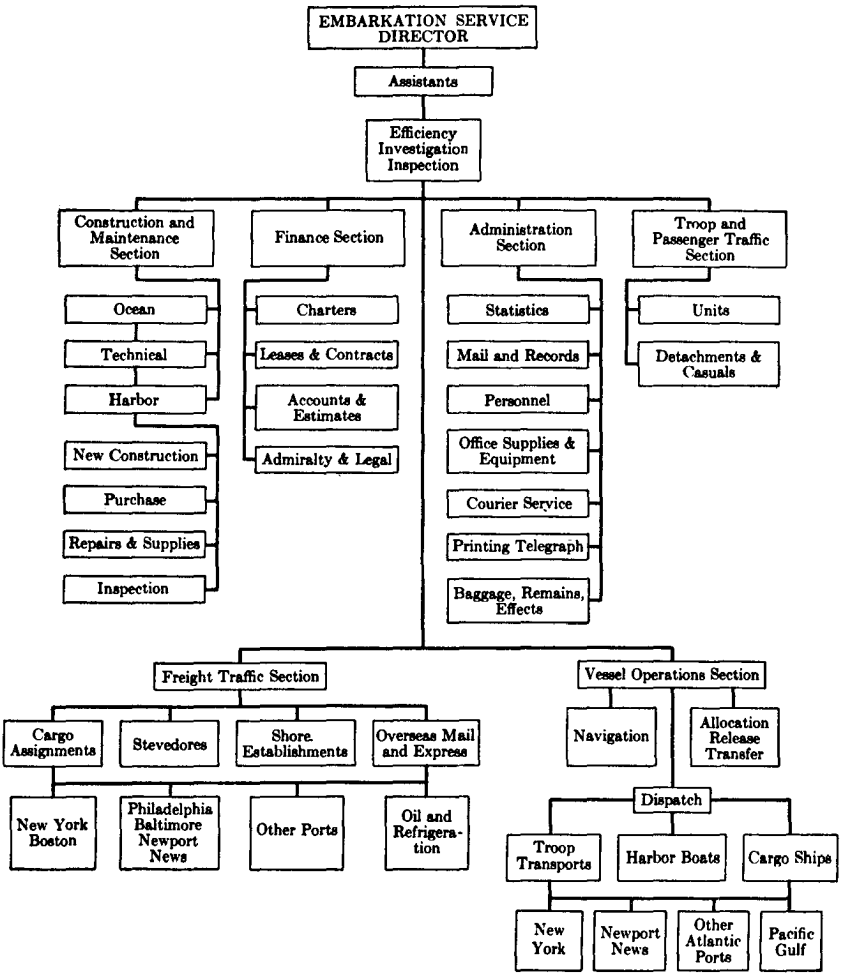


CHART NO. 50.—*ORGANIZATION OF EMBARKATION SERVICE*
Dec. 1918

1919

On Mar. 11, the Embarkation Service was made a part of the Transportation Service.

FIELD ORGANIZATION

Until their separation, the Embarkation Service supervised Primary Ports of Embarkation (see p. 512) and the Secondary Ports (see p. 523). It also controlled all other agencies of the War Department insofar as they were directly concerned with embarkation.

Ports

Primary ports of Embarkation were New York and Newport News; secondary ports, Boston, Philadelphia, and Baltimore. Limited use was also made of certain other ports for shipment of troops and cargo (see p. 525).

Transport Fleet

1917

The United States Shipping Board (see p. 11) was granted emergency powers after the declaration of war, the most important of which was to acquire, operate, manage, and dispose of vessels. On Apr. 16, the greater part of these functions was delegated to its newly created subsidiary organization, the Shipping Board Emergency Fleet Corporation (see p. 11).

By June 30, six cargo ships had been chartered. However, the first substantial increment consisted of 19 seized German ships, representing 460,000 D.W. tons.

1918

In the spring, 300,000 D.W. tons of Dutch vessels were acquired, all available American shipping was requisitioned, and 180 British and Allied vessels were procured. The British manned and convoyed their own ships. Certain American Army transports were manned by the Army. However, 83 percent of naval escort was provided by the United States Navy. Troop ships were being convoyed in groups of from four to 12 vessels.

The trans-Atlantic fleet and cross-Channel fleet on Nov. 11 consisted of 616 vessels representing a total of 3,557,000 D.W. tons. The growth and subsequent decline of the Transport Fleet are shown below.

Month	Troopships	Refrigerators	Tankers	A.E.F. cargo ships	Food ships	Out of operation	Approximate total dead weight tonnage
1917							
July 1	46,000			48,000			94,000
Oct. 1	64,000			224,000			288,000
1918							
Jan. 1	243,000	15,000		528,000			786,000
Apr. 1	274,000	15,000	9,000	902,000			1,200,000
July 1	403,000	25,000	19,000	1,306,000			1,753,000
Oct. 1	397,000	50,000	29,000	1,854,000			2,330,000
Nov. 1	390,000	93,000	53,000	2,164,000			2,700,000
Dec. 1	493,000	117,000	127,000	2,400,000		109,000	3,246,000
1919							
Jan. 1	681,000	123,000	78,000	1,778,000	275,000	313,000	3,248,000
Apr. 1	928,000	106,000	61,000	704,000	142,000	159,000	2,100,000
July 1	1,134,000	13,000		95,000		85,000	1,327,000
Oct. 1	128,000					382,000	515,000
Nov. 1	38,000					81,000	119,000
Dec. 1							35,000

After the Armistice, British ships with few exceptions were no longer available for American troop movements. Consequently, between Dec. 13, 1918, and June 7, 1919, 56 cargo ships—40 of which were of American registry—were converted into transports to speed the return of American troops; thus adding to the fleet 406,138 gross tonnage. In addition, the United States Navy assigned 15 battleships, 10 cruisers, two hospital ships, and several light craft. Other passenger ships were obtained so that on June 23, 1919, 173 vessels were in use, identified as to nationality as follows:

American flag transports, 141 with troop capacity of	364,069
British flag transports, 4 with troop capacity of	5,621
Italian flag transports, 13 with troop capacity of	27,572
French flag transports, 8 with troop capacity of	10,954
Spanish flag transports, 4 with troop capacity of	4,185
Dutch flag transports, 3 with troop capacity of	6,850
Total, 173 with troop capacity of	419,251

PERSONNEL

CHIEF'S OFFICE

The personnel in Washington during the 1919 fiscal year was—

Date	Commissioned	Army Field Clerks	Enlisted	Civilians
1918				
July 1	25		2	223
Oct. 1	33		5	267
Oct. 15	17		4	[1] 86
1919				
Jan. 1	42		17	153
Mar. 1	55	1	20	182

[1] Decrease due to transfer of the Cargo Section to the Office of the Director of Storage.

FIELD FORCE

Personnel at the ports and establishments connected therewith reached a peak Nov. 11, 1918, when 3,411 officers, 106 Army field clerks, 41,059 enlisted men, and 8,738 civilians were reported.

ACTIVITIES

The movement overseas of troops and supplies and subsequent repatriation are described in tables below. After Mar. 1919, the Transportation Service (see p. 540) was in charge of all movements.

TROOP MOVEMENTS

Embarkation of Troops from United States for Europe

[Marines not included]

	Officers	Enlisted men	Field clerks	Nurses	Civilians [1]	Total	Cumulative
1917							
May	229	986	36	438	29	1,718	1,718
June	400	11,663	19	158	17	12,257	13,975
July	625	12,082	----	248	31	12,986	26,961
August	1,197	16,619	28	202	325	18,371	45,332
September	3,580	28,758	38	97	49	32,522	77,854
October	2,205	35,606	176	173	247	38,407	116,261
November	1,391	21,409	26	84	106	23,016	139,277
December	3,418	44,549	116	215	526	48,824	188,101
1918							
January	3,927	42,359	104	105	214	46,709	234,810
February	2,235	44,904	139	441	292	48,011	282,821
March	3,366	79,826	126	141	323	83,782	366,603
April	4,557	112,255	67	253	70	117,202	483,805
May	8,372	235,062	74	646	53	244,207	728,012
June	10,212	266,195	140	1,154	193	277,894	1,005,906
July	11,004	293,852	132	1,132	132	306,302	1,312,208
August	9,763	270,254	140	1,145	152	281,454	1,593,662
September	8,697	241,002	163	1,907	331	252,100	1,845,762
October	7,028	172,544	73	144	162	179,951	2,025,713
November 1–11	755	9,749	4	24	29	10,561	2,036,274
November 11–30	1,164	17,505	----	1,168	131	19,968	2,056,242
December	63	283	94	400	157	997	2,057,239
1919							
January	51	207	106	2	132	498	2,057,737
February	32	169	15	----	542	758	2,058,495
March	39	125	55	----	583	802	2,059,297
April	26	64	----	----	207	297	2,059,594
May	218	3,774	----	----	222	4,214	2,063,808
June	639	4,009	----	----	180	4,828	2,068,636
July	449	2,894	----	----	212	3,555	2,072,191
August	31	312	----	----	218	561	2,072,752
September	28	8	----	----	222	258	2,073,010
October	265	4,914	6	1	263	5,449	2,078,459
November	16	1,427	----	----	190	1,633	2,080,092
December	27	1,331	1	----	408	1,767	2,081,859
1920							
January	10	291	----	----	78	379	2,082,238
February	18	365	3	12	251	649	2,082,887
March	15	7	1	2	26	51	2,082,938
April	16	126	----	2	113	257	2,083,195
May	15	34	----	15	127	191	2,083,386
Total	86,083	1,977,519	1,882	10,359	7,543	2,083,386	----

[1] Includes War Department and miscellaneous civilians, and welfare workers.

By November 11, 1918, 2,079,880 troops had been transported to Europe in 1142 troopships as follows:

Nationality of vessels	Total number	Percentage of total
In United States transports	911,047	43.75
In British ships	1,006,987	48.25
In British-leased Italian ships	68,246	3.00
In other United States ships	41,534	2.50
In other foreign ships (French, Italian, etc.)	52,066	2.50
Total carried in United States vessels	952,581	46.25

Arrival of Troops in United States from Europe

[Marines not included]

	Officers	Enlisted men	Field clerks	Nurses	Civilians [1]	Total	Cumulative
1917							
July	1	26				27	27
October	5	108		2	31	146	173
November	9	42			36	87	260
December	5				1	6	266
1918							
January	23	164	2	4	65	258	524
February	98	232	1	7	32	370	894
March	107	396	6	8	173	690	1,584
April	176	221	1	15	190	603	2,187
May	287	493	3	2	187	972	3,159
June	268	461	2	6	438	1,175	4,334
July	284	881		10	278	1,453	5,787
August	674	1,375		14	188	2,251	8,038
September	1,366	3,180	3	8	235	4,792	12,830
October	539	3,758	1	17	153	4,468	17,298
November 1–11	575	3,108	5	18	124	3,830	21,128
November 11–30	399	4,104	2	8	49	4,562	25,690
December	3,545	65,294	10	107	1,184	70,140	95,830
1919							
January	6,332	113,369	27	137	1,114	120,979	216,809
February	8,093	131,674	49	506	1,168	141,490	358,299
March	7,564	197,591	74	1,660	1,025	207,914	566,213
April	11,017	261,046	135	2,062	1,159	275,419	841,632
May	11,842	299,687	182	1,072	1,595	314,378	1,156,010
June	12,449	326,162	175	1,572	2,436	342,794	1,498,804
July	17,497	274,769	403	1,709	4,871	299,249	1,798,053
August	7,544	105,743	277	809	4,959	119,332	1,917,385
September	3,815	43,650	213	37	2,077	49,792	1,967,177
October	1,548	17,758	71	15	414	19,806	1,986,983
November	350	3,979	73	109	735	5,246	1,992,229
December	289	2,569	60	17	369	3,304	1,995,533
1920							
January	251	1,366	73	8	301	1,999	1,997,532
February	52	721	8		106	887	1,998,419
March	42	446	4	2	98	592	1,999,011
April	33	1,887	6	11	101	2,038	2,001,049
May	44	503	8	4	137	696	2,001,745
Total	97,123	1,866,763	1,874	9,956	26,029	2,001,745	

[1] Includes War Department and miscellaneous civilians, and welfare workers.

Approximately 84 percent of troops returning were carried in American ships; 8 percent in British or British controlled tonnage; 2 percent in French ships; 3 percent in Italian bottoms; and some 46,000 troops in vessels of other countries. German ships confiscated at outbreak of war transported more than 500,000 American troops to France and returned to the United States over 400,000.

SHIPMENTS OF SUPPLIES

Quantities Sent Abroad Expressed in Short Tons

Corps	1917 June–December	1918 January–June	1918 July–December	1919 January–June	Grand total
Medical	22,293	11,554	63,299	6,585	103,731
Signal	21,255	12,520	23,487	182	57,444
Aviation			79,710	569	80,279
Engineer	177,505	108,597	713,695	17,008	1,016,805
Quartermaster	176,655	200,616	1,964,981	740,578	3,082,830
Ordnance	72,809	89,739	737,221	8,166	907,935
Chemical Warfare Service			11,391		11,391
Motor Transport			181,241	20,309	201,550
French account				8,176	8,176
Freight cars			54,361	138,793	193,154
Locomotives			84,857	36,158	121,015
Food Administration				168,409	168,409
Miscellaneous	1,962	20	83,741	62,447	148,170
Grand total	472,479	423,046	3,997,984	1,207,380	6,100,889

Quantities Returned to United States Expressed in Short Tons

Corps	1918–19								
	November	December	January	February	March	April	May	June	Tota
Medical Corps			3	201	2		9	85	300
Signal Corps	10	260	1,578	3,269	1,120	1,088	361	407	8,093
Aviation	110	4,611	5,667	3,665	1,996	2,847	1,438	1,113	21,387
Engineer Corps	590	10,682	51,028	39,770	47,716	26,606	27,721	18,237	227,750
Quartermaster Corps	81	199	1,019	1,223	382	335	224	106	3,570
Ordnance Department	17	26,019	45,439	47,978	38,039	33,629	24,798	24,284	230,203
Chemical Warfare Service	87	1,906	2,079	1,928	996	8	3		7,007
Motor Transport Corps		87	553	1,223	621	135	196	16	2,831
Miscellaneous	150	555	1,099	3,817	2,511	6,894	2,356	5,274	22,656
Total	1,045	49,719	108,405	103,074	93,384	71,542	57,106	49,522	533,797

OPERATIONS OF TRANSPORT FLEET

Mar. 1 to Aug. 30, 1918,

only

United States Troop Transports

Transport	Gross tons	Troops carried	Trips	Days	Average cycle (days)	Troops per total tonnage per day	Troops per 1,000 tons per day
Aeolus	13,102	9,063	3	153	51	59.36	4.53
Agamemnon	19,361	16,644	4	140	35	114.6	5.92
America	22,622	18,427	4	134	33.5	137.51	6.08
Antigone	2,935	6,056	3	145	48.3	41.76	4.26
Calamares	7,782	6,069	4	136	34	44.62	5.72
Covington	17,000	11,505	[1] 2½	82	32.8	140.30	8.25
De Kalb	8,797	3,777	4	145	36.2	21.91	2.48
Finland	12,222	8,947	3	122	40.7	73.33	6.01
George Washington	25,570	21,796	4	141	35.2	154.58	6.03
Great Northern	8,256	17,096	6	144	24	118.72	14.47
Harrisburg	10,232	4,620	2	71	35.5	65.07	6.38
Henderson	7,483	4,119	3	153	51	26.92	3.58
Huron	10,771	5,397	2	72	36	74.95	6.94
Kroonland	12,241	8,124	3	122	40.5	66.59	5.45
Lenape	5,179	4,751	3	112	37.3	42.41	8.31
Leviathan	54,282	48,629	5	152	30.4	319.92	5.89
Louisville	10,230	4,685	2	81	40.5	57.84	5.67
Madawaska	9,410	8,212	4	142	35.5	57.83	6.15
Mallory	6,063	6,349	4	129	32.2	49.21	8.06
Manchuria	13,639	10,302	3	99	33	104.06	7.65
Martha Washington	8,312	11,108	4	145	36.2	76.6	9.23
Matsonia	9,728	8,777	4	153	38.2	57.36	5.91
Mercury	10,984	10,742	4	181	45.2	59.34	5.39
Mongolia	13,639	7,616	2	72	36	105.77	7.77
Mount Vernon	19,502	19,859	5	149	29.8	133.28	6.83
Northern Pacific	8,256	11,902	5	126	25.2	94.46	11.51
Orizaba	7,652	9,244	3	86	28.6	107.48	14.14
Pastores	7,962	4,640	3	104	34.6	44.61	5.57
Plattsburg	10,080	4,433	2	79	39.5	56.11	5.61
Pocahontas	10,893	12,629	5	177	35.4	71.35	6.54
Powhatan	10,531	8,281	4	168	42	49.29	4.69
President Grant	18,172	15,496	3	135	45	114.78	6.30
President Lincoln	18,072	9,380	[1] 1½	62	41.3	151.29	8.35
Princess Matoika	10,981	11,196	3	104	34.6	107.65	9.78
Ryndam	12,527	9,382	3	104	34.6	90.21	7.21
Siboney	7,652	12,770	4	134	33.5	95.29	12.53
Susquehanna	10,058	9,504	4	153	38.2	62.11	6.21
Tenadores	7,782	4,994	4	129	32.2	38.71	4.96
Von Steuben	14,808	6,026	4	142	35.5	42.43	2.86
Wilhelmina	6,975	5,636	3	104	34.6	54.19	7.73
Zeelandia	7,995	3,517	2	80	40	43.96	5.49
Total	516,639	420,520	141	5,062	1,502.8	3,424.76	282.44
Less Von Steuben, De Kalb, and Henderson	485,551	407,198	130	4,622	1,380.1	3,333.5	273.52
General average	12,777	10,715	3.4	122	36.3	87.72	7.19

[1] Torpedoed on return passage.

British Ships Transporting Troops

Transport	Gross tons	Troops carried	Trips	Days	Average cycle (days)	Troops per total tonnage per day	Troops per 1,000 tons per day
Adriatic	24,541	6,795	3	120	40	56.62	2.31
Agapenor	7,565	1,438	1	44	44	32.68	4.30
Ajax	7,040	1,006	1	46	46	21.86	3.12
Anchises	10,046	5,913	3	121	40.3	48.86	4.88
Anselm	5,450	2,263	2	85	42.5	26.62	4.93
Aquitania	45,647	18,302	3	94	31.3	194.70	4.27
Armagh	9,220	4,068	2	81	40.5	50.22	5.45
Ascanius	10,048	2,075	1	71	71	29.22	2.92
Baltic	23,876	11,465	4	169	42.2	67.84	2.83
Beltana	11,120	1,976	1	69	69	28.64	2.58
Bohemian	8,555	4,163	2	98	49	42.48	4.99
Briton	10,248	3,774	2	88	44	42.88	4.20
Canada	9,415	4,579	3	121	40.3	37.84	4.02
Canopic	12,097	3,029	2	96	48	31.55	2.60
Carmania	19,524	12,238	4	156	39	78.44	4.02
Cardiganshire	9,426	1,664	1	40	40	41.60	4.42
Caronia	19,687	8,735	2	80	40	109.18	5.53
Carpathia	13,603	7,374	[1] 2½	123	49.2	59.92	4.40
Cedric	21,040	8,091	3	122	40.6	66.32	3.11
Ceramic	18,481	2,957	1	48	48	61.60	3.33
City of Exeter	9,373	2,714	2	89	44.5	30.49	3.24
City of Glasgow	6,545	918	1	48	48	19.10	2.93
City of Poona	7,474	1,199	1	42	42	28.54	3.80
City of Calcutta	7,636	1,349	1	56	56	24.09	3.17
Corinthic	12,343	599	1	72	72	8.32	.67
Corsican	11,419	4,866	3	124	41.3	39.24	3.44
Cretic	13,518	6,248	3	124	41.3	50.38	3.73
Demosthenes	11,223	3,459	2	110	55	31.44	2.80
Derbyshire	6,776	1,209	1	45	45	26.86	3.96
Elpenor	7,901	2,515	2	81	40.5	31.05	3.93
Grampian	10,955	4,483	2	81	40.5	55.34	5.03
Haverford	11,635	2,072	1	64	64	32.37	2.79
Hororata	11,243	2,115	1	46	46	45.98	4.10
Justicia	32,120	14,120	[1] 2½	104	41.6	135.76	4.23
Karmala	8,983	4,239	2	80	40	52.98	5.88
Karoa	7,009	4,739	3	125	41.6	37.91	5.41
Kashmir	8,841	6,401	3	122	40.6	52.46	5.96
Khiva	8,947	1,623	1	48	48	33.81	3.79
Khyber	8,946	4,243	2	80	40	53.03	5.96
Kursk	9,854	4,077	3	129	43	31.60	3.22
Laomedon	6,693	2,451	2	91	45.5	26.93	4.02
Lapland	11,565	6,049	3	124	41.3	48.78	2.63
Leicestershire	8,059	3,876	2	100	50	38.76	4.84
Margha	6,260	954	1	59	59	16.23	1.95
Mauretania	30,704	23,907	5	156	31.2	153.25	4.99
Megantic	14,878	5,578	3	124	41.3	44.98	3.01
Melita	15,000	4,651	2	65	32.5	71.55	4.77
Mentor	7,585	2,790	2	81	40.5	34.44	4.53
Mesaba	6,833	2,331	1	49	49	47.57	6.99
Metagama	12,420	4,242	2	81	40.5	52.37	4.22
Miltiades	7,814	1,532	1	60	60	25.53	3.27
Minnekahda	13,100	3,819	1	47	47	81.25	6.20
Missanabie	12,469	4,134	2	105	52.5	39.37	3.15
Nankin	6,853	1,445	1	59	59	24.49	3.60
Nestor	14,501	5,611	2	81	40.5	69.27	4.77
Northland	11,995	1,450	1	56	56	25.89	2.17
Northumberland	12,160	1,942	1	72	72	26.97	2.22
Olympic	46,359	17,558	3	100	33.3	175.58	3.78
Orduna	15,499	3,857	3	137	45.6	28.15	1.81

[1] Torpedoed on return passage.

British Ships Transporting Troops—Continued

Transport	Gross tons	Troops carried	Trips	Days	Average cycle (days)	Troops per total tonnage per day	Troops per 1,000 tons per day
Port Lincoln	7,243	1,232	1	51	51	24.15	3.35
Port Melbourne	9,152	1,618	1	56	56	28.59	3.17
Pyrrhus	7,603	1,329	1	40	40	33.22	4.37
Rhesus	6,704	2,468	2	101	50.5	24.43	3.64
Saturnia	8,611	2,181	1	53	53	41.15	4.77
Saxon	12,385	4,282	2	89	44.5	48.11	3.87
Saxonia	14,297	2,460	1	56	56	43.92	3.07
Scandinavian	12,099	3,717	2	91	45.5	40.84	3.37
Scotian	10,322	5,285	3	161	53.6	32.82	3.18
Shropshire	12,184	1,103	1	57	57	19.35	1.58
Talphybius	10,224	1,288	1	43	43	29.95	2.93
Tennyson	3,944	756	1	61	61	12.39	3.17
Themistocles	11,231	1,848	1	65	65	28.43	2.53
Tunisian	10,576	1,697	1	45	45	37.71	3.55
Vestris	10,494	1,420	1	67	67	21.19	2.01
Winifredian	10,422	2,223	1	57	57	39	3.75
Toloa	7,445	2,390	2	87	43.5	27.47	3.71
Tsar	6,516	1,304	1	60	60	21.73	3.34
Tsarita	6,597	4,103	3	128	42.6	32.05	4.85
Ulua	7,451	1,072	1	66	66	16.24	2.19
Vauban	10,660	2,875	2	117	58.5	24.57	2.31
Total	962,841	329,326	149	6,668	3,776.2	3,602.57	297.20
Average	12,187.8	4,168.6	1.8	84.4	47.8	45.60	3.76

Italian Ships Routed in United States Convoys

Transport	Gross tons	Troops carried	Trips	Days	Average cycle (days)	Troops per total tonnage per day	Troops per 1,000 tons per day
America	8,996	7,195	3	96	32	74.94	8.32
Caserta	6,938	5,325	3	112	37.3	47.54	6.88
Dante Alighieri	9,737	6,659	3	104	34.6	64.02	6.60
Duca d'Abruzzi	8,294	3,888	2	80	40	48.60	5.85
Duca d'Aosta	8,169	6,154	3	113	37.6	54.46	6.64
Re d'Italia	6,878	4,802	3	112	37.3	42.87	6.49
Regina d'Italia	6,239	1,696	1	43	43	39.44	6.36
Total	54,951	35,719	18	660	261.87	371.87	47.14
Average	7,850	5,102.7	2.5	94.2	37.4	53.12	6.73

French Ships Routed in United States Convoys

La France	24,800	4,529	1	47	47	96.36	3.88
Lutetia	14,581	1,970	1	43	43	45.81	3.13
Patria	11,850	2,095	1	52	52	40.28	3.41
Total	51,231	8,594	3	142	142	182.45	10.42
Average	17,077	2,864.6	1	47.3	47.3	60.81	3.47

Summary of Foreign Ships Sailing in United States Convoys

America, Italian	8,996	7,195	3	96	32	74.94	8.32
Caserta, Italian	6,938	5,325	3	112	37.3	47.54	6.88
Dante Alighieri, Italian	9,737	6,659	3	104	34.3	64.02	6.6
Duca d'Abruzzi, Italian	8,294	3,888	2	80	40	48.60	5.85
Duca d'Aosta, Italian	8,169	6,154	3	113	37.6	54.46	6.64
Kursk, British	9,854	4,077	3	129	43	31.60	3.22
La France, French	24,800	4,529	1	47	47	96.36	3.88
Lutetia, French	14,581	1,970	1	43	43	45.81	3.13
Patria, French	11,850	2,095	1	52	52	40.28	3.41
Re d'Italia, Italian	6,578	4,802	3	112	37.3	42.87	6.49
Regina d'Italia, Italian	6,239	1,696	1	43	43	39.44	6.36
Toloa, British	7,445	2,390	2	87	43.5	27.47	3.71
Tsar, British	6,516	1,304	1	60	60	21.73	3.34
Tsarita, British	6,597	4,103	3	128	42.6	32.05	4.85
Ulua, British	7,451	1,072	1	66	66	16.24	2.19
Vauban, British	10,660	2,875	2	117	58.5	24.57	2.31
Total	154,705	60,134	36	1,389	717.1	707.98	77.18
Average	9,669	3,758.3	2.2	86.8	44.8	44.24	4.82

VESSELS SUNK OR LOST IN SERVICE OF WAR DEPARTMENT

Name	Date sunk	Place sunk	Cause
A. A. Raven	Mar. 14, 1918, 10:45 p. m.	Wolf Rock Light, Land's End	Torpedoed.
Antilles	Oct. 17, 1917, 6:45 a. m.	Bay of Biscay	Do.
Berwind	Aug. 3, 1918, 1 p. m.	Off Penmarch	Do
Buenaventura	Sept. 16, 1918, 8:53 p. m.	Off Corunna, Spain	Do.
Chattahoochee	Mar. 23, 1918. 10 p. m.	Off Penzance	Do.
Covington	July 1, 1918	En route to America	Do.
Crimdon	July 29, 1918	English Channel	Do.
Cubore	Aug. 15, 1918, 10:30 p. m.	En route to America	Do.
Dora	Sept. 4, 1918, 5:55 a. m.	400 miles off French coast	Do.
Dwinsk	June 18, 1918	En route to America	Do.
Harry Luckenbach	Jan. 6, 1918, 12:15 a. m.	English Channel	Do.
Helge	Aug. 26, 1918	----do	Do.
John G. McCullough	May 18, 1918, 4:57 a. m.	Ile d'Yeu	Do.
Jos. Cudahy	Aug. 17, 1918, 4:45 a. m.	En route to America	Do.
Lake Edon	Aug. 21, 1918, 1:19 p. m.	Off coast New Quay, England	Do.
Lake Owens	Sept. 3, 1918, 2:10 a. m.	4 miles west coast Cornwall, England.	Do.
Lake Portage	Aug. 3, 1918, 2 p. m.	Off Brest, France	Do.
Lucia	Oct. 18, 1918, 3:20 p. m.	Off United States coast	Do.
Montanan	Aug. 15, 1918, 6 p. m.	En route Europe	Do.
President Lincoln	May 30, 1918, 11:40 a. m.	Off French coast	Do.
Ticonderoga	Sept. 30, 1918	En route to France	Do.
Tippecanoe	July 25, 1918, 7 p. m.	550 miles off Brest	Do.
Westover	July 11, 1918, 7:20 a. m.	En route to Europe	Do.
Californian	June 22, 1918, 8:20 a. m.	Near Gironde River	Mines.
Seatia	Nov. 9, 1918, 8:20 a. m.	Off Maryland coast	Do.
Herman Frasch	Oct. 4, 1918, 12:25 a. m.	Off Nova Scotia coast	Collision.
Neches	May 14, 1918, 11 p. m.	Plymouth, England	Do.
Oosterdijk	July 10, 1918, 2:14 p. m.	At sea	Do.
West Gate	Oct. 7, 1918, 2:40 a. m.	Off Atlantic coast	Do.
Zaanland	May 13, 1918, 7:09 a. m.	En route to Europe	Do.
Jinsen Maru	Dec. 4, 1918, 12:15 a. m.	Ile d'Yeu	On rocks.
Lake Weston	Jan. 13, 1919, 5:45 p. m.	Off Cardiff, Wales	Do.
Lake Bloomington	Dec. 12, 1918	English Channel	Grounded.
Lake Borgne	Oct. 12, 1918	----do	Do.
Lake Damita	Nov. 9, 1918	Ause de Bertheaume	Do.
Piave	Feb. 4, 1919 (night)	Off Dover	Do.
Tenadores	Dec. 28, 1918, 12:33 a. m.	Off Bay of Biscay	Do.
Ophir	Nov. 11, 1918, 6 p. m.	Off Gibraltar	Burned.
Sixaola	Feb. 23, 1919, 1:40 p. m.	Off Pier 29, Hoboken	Do.

PORTS

PRIMARY PORTS OF EMBARKATION

In 1918, the functions of commanding generals of primary ports of embarkation were defined as follows:

To be responsible for and have authority over the activities of the port of embarkation; of the camps, hospitals, and other establishments connected therewith; of the reception, supply, embarkation, and transportation of troops; and of the receipt, storage, and transportation of supplies.

Primary ports were New York (Port of Embarkation and Debarkation, Hoboken, N. J.) and Port of Embarkation and Debarkation, Newport News, Va. During the movement overseas, Boston; Philadelphia; Baltimore; Portland, Maine; Halifax, Nova Scotia; St. Johns, Newfoundland; Montreal and Quebec, Canada, were subports of New York. For the return movement, Baltimore was a subport of Newport News. Other ports were designated as secondary ports (see p. 525).

At this time, the staff organization of a general commanding a primary port of embarkation included, besides the military staff proper, the following officers whose duties were:

Troop Movement Officer.—To be responsible for the movement of troops and their immediate supplies; for their care and control in embarkation camps; and for the embarkation and debarkation of troops.

Port Storage Officer.—To be responsible for and to have authority over storage and distribution of supplies of all departments, bureaus, corps, and other agencies of the War Department, and the operation of all storage facilities.

Port Traffic Officer.—To be responsible for and to have authority over all terminal and intraport transportation.

Port Utilities Officer.—To have charge of supply of articles and facilities needed for the operation of piers, warehouses, offices and the like; of finance, including the pay of officers and troops at the port proper and those passing through, and disbursing for other port agencies; of maintenance and repair of warehouses, piers and other structures pertaining to the port proper; and of the operation of employment bureau for the hiring of civil employees, laborers, and other personnel.

Port of New York

(Port of Embarkation Hoboken, N. J.)

PORT COMMANDERS

1917		
July	7	Brig. Gen. William M. Wright
Aug.	1	Brig. Gen. David C. Shanks
Aug.	23	Maj. Gen. David C. Shanks
1918		
Sept.	10	Brig. Gen. William V. Judson
Nov.	19	Brig. Gen. George H. McManus (ad interim)
Dec.	6	Maj. Gen. David C. Shanks
1919		
June	18	Brig. Gen. Peter W. Davidson (ad interim)

July 6 Maj. Gen. David C. Shanks
Oct. 25 Brig. Gen. Andrew Moses (ad interim)
Oct. 28 to Apr. 24, 1920 Maj. Gen. David C. Shanks

ORGANIZATION AND DEVELOPMENT

1917

Until July 7, the Commanding General, Eastern Department, exercised control over Army activities at the Port of New York. Following appointment of a port commander, organization of the port of embarkation began. On July 27, headquarters was established formally at Hoboken, N. J., and officers in charge of local Quartermaster Corps, Medical Department, Engineer Corps, Ordnance Department, and Signal Corps activities were placed on the staff of the Commanding General. Arrangements were made soon thereafter to lease piers and provide adequate storage facilities for these five supply departments.

1918

On Jan. 1, the entire plant of the Bush Terminal Company was taken over, and its manager was designated as Director of Harbor and Terminal Facilities for the Port of New York, which title was subsequently changed to Chief of Embarkation.

On Feb. 6, the Marine Freight, Rail Freight, Marine Director's (Stevedoring), and Terminal Storage Departments of the General Superintendent's Office, Army Transport Service, were transferred to the Office of the Chief of Embarkation. This office was subdivided into three Divisions: Steamship, Transport, and Storage.

On Feb. 16, all branches of the Army Transport Service, engaged in procurement, loading, discharging, repairs, maintenance, and management of ships were transferred to the Shipping Control Committee (see p. 500). At the same time, the Director of Shipping, Port of New York, was designated as the representative of the Committee at that port.

On Apr. 9, a Port Storage Officer was appointed to control all storage facilities at the port; later a Port Supply Office was opened to handle all quartermaster supplies.

On June 15, a New York branch of the Army Railway Traffic Service was organized to expedite deliveries.

On Sept. 27, when primary ports were taken from control of the Embarkation Service (see p. 501), the port came under the immediate jurisdiction of the Director of Purchase, Storage, and Traffic. At this time, the Office of the General Superintendent, Army Transport Service, was abolished, its functions being taken over by the Port Utilities and Troop Movement Offices. Likewise

the Army Railway Traffic Office was absorbed by that of the Port Traffic Officer (see p. 512).

1919

A reorganization, Jan. 13, restricted the authority of the Troop Movement Officer to the routing and control of troops to embarkation camps; created the office of Superintendent of Water Transportation to take over operation, maintenance, and repair of all water transportation from the Shipping Control Committee (see p. 500); and established a Port Finance Office, which assumed the duties of hiring civilians and of paying all personnel, civil and military, at the port.

On June 30, the organization of the Port of Embarkation, Hoboken, was as shown on chart 51.

FACILITIES

Facilities comprised the port proper, including the coastal region in and about New York Harbor and the storage facilities adjacent thereto, together with piers and transportation (water, rail, and motor); embarkation and debarkation camps; and embarkation and debarkation hospitals operated as separate units.

Piers

Hoboken, N. J.—12 piers; average daily shipping, 250,000 tons.

Brooklyn, N. Y.—8 piers; average daily shipping, 100,000 tons (6 piers property of Bush Terminal Company).

Manhattan, New York City.—Piers Nos. 45, 89, and 90, North River.

Storage

Hoboken, N. J.—7 warehouses, each 550 by 100 feet.

Brooklyn, N. Y.—120 warehouses of Bush Terminal Company, storage space 2,500,000 sq. ft. Army Supply Base at 55th Street comprising 57 acres and 2 warehouses.

Port Newark, N. J.—Army Supply Base comprising 133 acres with 9 warehouses and 1,600 feet of wharfage.

Kearny, N. J.—Army Supply Base (originally N. Y. Engineer Depot) comprising 73 acres with 4 warehouses and 1000 feet wharfage (see p. 184).

Embarkation and Debarkation Hospitals

Designation	Reference
Embarkation Hospital No. 1, Hoboken, N. J	P. 770.
Embarkation Hospital No. 2, Secaucus, N. J	P. 770.
Embarkation Hospital No. 3, Hoffman Island, N. Y	P. 770.
Embarkation Hospital No. 4, (Polyclinic Hospital), New York	P. 770.
Debarkation Hospital No. 1, Ellis Island, N. Y	P. 768.
Debarkation Hospital No. 2, Fox Hills, Staten Island, N. Y	P. 769.
Debarkation Hospital No. 3, (Greenhut Bldg.), New York	P. 769.
Debarkation Hospital No. 4, Long Beach, Long Island, N. Y	P. 769.
Debarkation Hospital No. 5, (Grand Central Palace), N. Y	P. 769.
Auxiliary Hospital No. 1, New York, N. Y	P. 767.
General Hospital No. 1, New York, N. Y	P. 772.
Nurses' mobilization station, Ellis Island, N. Y	
Base Hospital, Camp Mills, Long Island, N. Y	P. 771.
Base Hospital, Camp Merritt, N. J	P. 771.

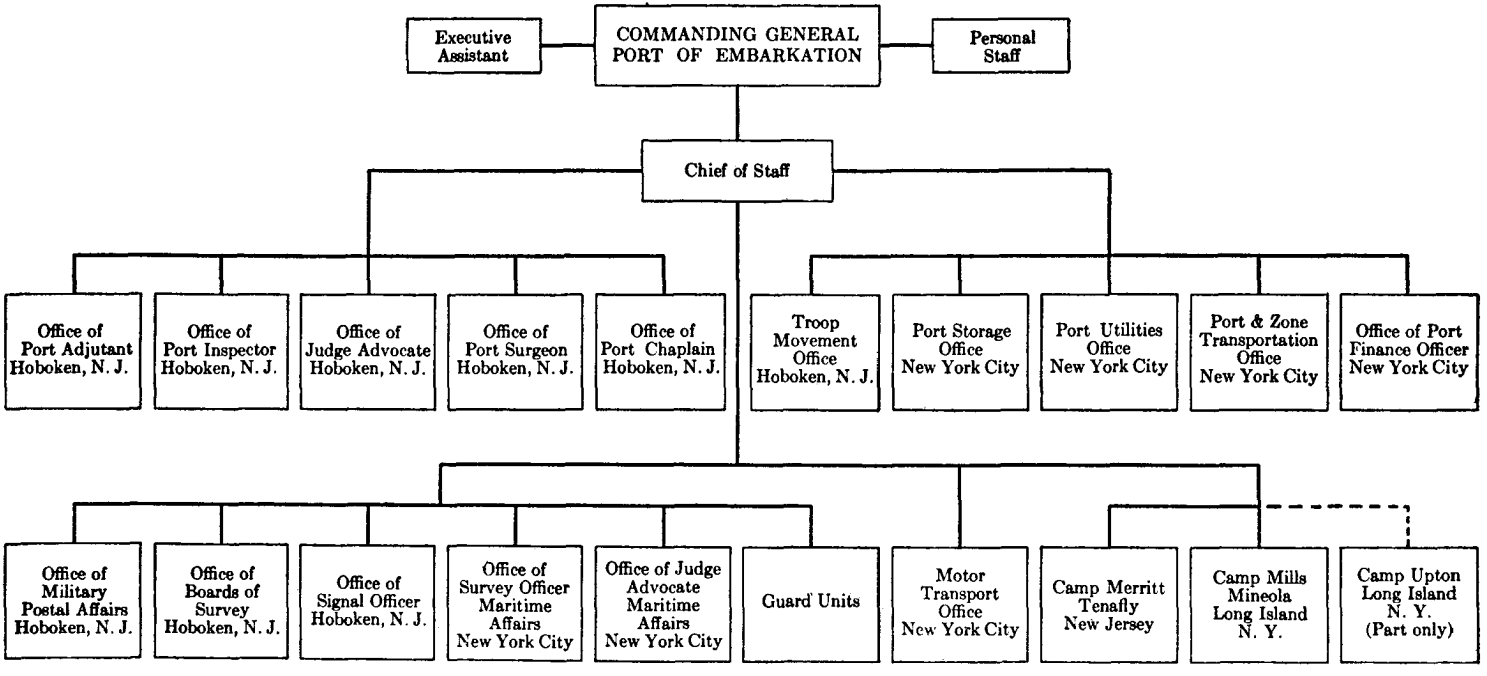


CHART NO. 51.—*ORGANIZATION OF PORT OF EMBARKATION, HOBOKEN, N. J.*

Embarkation and Debarkation Camps

Camps Merritt, N. J., Mills, N. Y., and Upton, N. Y., with an aggregate capacity of 122,000 troops, were operated on the district system by a permanent camp personnel whose task it was to receive, house, feed, inspect, and equip practically all troops dispatched from the Port of Embarkation overseas or received therefrom. Troops arriving from overseas underwent physical examination, a sanitary process with subsequent inspection and completion of equipment, whereupon they were segregated into detachments according to states and sent to camps nearest their homes.

Camp Merritt, N. J.

Situated about 17 miles north of Hoboken, this camp sheltered some 586,000 men en route overseas and about 511,000 returning troops (see p. 748).

Camp Albert L. Mills, N. Y.

Situated on Long Island, about 23 miles from New York, this camp sheltered more than 400,000 men en route overseas and approximately 311,000 returning troops (see p. 753).

Camp Upton, N. Y.

Situated on Long Island, about 63 miles from New York, this camp sheltered about 275,000 troops en route overseas and 166,500 after debarkation (see p. 796).

PERSONNEL

The complement of the Port of Embarkation was:

Date	Officers	Enlisted men	Civilians
July 31, 1917	86	587	
Nov. 1, 1918	1,950	16,899	7,434
July 1, 1919	2,092	10,737	14,193
June 30, 1920	179	339	4,517

PORT ACTIVITIES

Troop Movements

Up to the Armistice, 1,777,109 troops moved overseas, through the Port of Embarkation, Hoboken, as follows:

New York Harbor		Subports			
Brooklyn	147,492	Baltimore, Md	3,814	Philadelphia, Pa	35,628
Hoboken	699,713	Boston, Mass	44,610	Portland, Me	4,026
Jersey City	3,958	Halifax, N. S	5,148	Quebec, Canada	11,369
New York City	781,630	Montreal, P. Q	38,490	St. John's, Newfoundland	1,231
Total	1,632,793	Total	92,062	Total	52,254

In the return movement no Canadian ports were used, and the other subports no longer operated under Hoboken. Up to Jan. 31, 1920, New York received 1,428,265 troops. For debarkations at other ports see p. 524.

Return of Sick and Wounded

From the Armistice to Dec. 31, 1919, debarkation hospitals of the Port received 102,967 patients from overseas and evacuated them to general and base hospitals throughout the country.

Other Operations

Animal Shipments.—Between Oct. 10 and Dec. 1, 1918, a total of 18,834 animals were shipped to the A. E. F. from New York and subports.

Supplies.—Total shipments through the Port and subports amounted to 5,189,801 tons, distributed as follows:

Period	New York	Philadelphia	Baltimore
June–Dec. 1917	262,984	43,346	7,815
Jan.–Dec. 1918	2,917,350	494,970	609,901
Jan.–June 1919	728,933	52,459	72,043
Total tons	3,909,267	590,775	689,759

Return shipments from Nov. 11, 1918, to June 30, 1919, passing through New York totaled 295,578 tons.

Evacuation of Remains.—Up to June 30, 1921, the remains of 22,982 men who had died overseas were returned through the Port.

Port of Newport News

PORT COMMANDERS

1917		
July	11	Col. Grote Hutcheson
Aug.	24	Brig. Gen. Grote Hutcheson
1918		
Aug.	27	Maj. Gen. Grote Hutcheson
Nov.	18	Brig. Gen. Harley B. Ferguson
1919		
May	29	Maj. Gen. Adelbert Cronkhite
Sept.	16	Col. Ellison L. Gilmer (ad interim)
Oct.	2	Brig. Gen. George H. McManus
Nov. 1 to Dec. 31, 1919		Col. George H. McManus

ORGANIZATION AND DEVELOPMENT

1917

Port headquarters was established at Newport News, Va., July 27. Taking full advantage of existing utilities and installations, terminal and storage facilities were leased at points from Norfolk to Lee Hall. During the succeeding months, additional piers and warehouses were constructed as well as camps, an embarkation hospital, and an animal embarkation depot. Besides, an Army supply base and terminal facilities, to cost $29,000,000, were authorized at Newport News. Ultimately port installations were

developed to include a quartermaster supply depot, a general ordnance supply depot, and an engineer depot.

The prewar establishments of the Depot Quartermaster, Newport News, and of the Quartermaster, Fort Monroe, Va., served as a nucleus for the port headquarters staff, which eventually included:

CHIEF OF STAFF
ADJUTANT

Judge Advocate	Aviation Officer	Casual Officer
Inspector	Provost Marshal	Supervising Veterinarian
Surgeon	Statistical Officer	General Superintendent, Army Transport Service
Quartermaster	Storage Officer	
Ordnance Officer	Welfare Officer	
Signal Officer	Motor Transport Officer	

1918

On Mar. 11, the Hampton Roads Division of the Shipping Control Committee was established and took over the loading and operating of ships from the Port Quartermaster and the General Superintendent, Army Transport Service.

On July 25, the Quartermaster Depot, Newport News, was designated as a General Supply Depot. Thereafter it functioned under the commanding general of the port in matters connected with the port only; otherwise it was under the direct control of the Quartermaster General.

On Sept. 4, a port storage officer was appointed, and a port supply officer designated for each of the following departments: Quartermaster Corps, Medical Department, Ordnance Department, Signal Corps, Air Service, and Motor Transport Corps.

On Sept. 27, primary ports were placed directly under Purchase, Storage, and Traffic (see p. 513). Subsequent reorganization and expansion conformed to direction of this new General Staff division and was similar to that of the Port of New York. After this date, the staff of Headquarters, Port of Embarkation, Newport News, consisted of a military staff, a troop movement office, a port storage office, a port utilities office, and an office of the port traffic officer.

On Dec. 16, a port supply office was established, with the Depot Quartermaster operating under its supervision. Within 2 weeks this new office developed into the Office of the Port Depot Officer.

On Dec. 21, the work of the Shipping Control Committee (see p. 500) was returned to the Quartermaster and General Superintendent, Army Transport Service.

1919

On Jan. 1, all quartermaster, ordnance, engineer, signal, and

medical supplies were placed under the Port Depot Officer, who was given charge of all Army supplies intended for issue or sale at the port. On Jan. 9, the Port General Supply Depot came wholly under the control of the port commander. Two weeks later, the Office of the Port Depot Officer was abolished and that of the Depot Supply Officer created.

In Feb., the Port Traffic Office was merged with the Transportation Division of the Depot Supply Office. On May 1, the Port Transportation Office was organized to consolidate all transportation activities at the port except those of the Motor Transport Corps.

Beginning in July, all activities at Newport News were gradually shifted to the Army Supply Base. This movement was completed by mid-August. On Dec. 23, the official designation of the Port of Embarkation, Newport News, Va., was changed to "Headquarters, Army Supply Base, Norfolk, Va."

FACILITIES

Facilities included piers and railway terminals at Newport News, Norfolk, and Pig Point; warehouses, open storage, cold storage plants, magazines and hay sheds, and embarkation and debarkation hospitals.

Piers

Newport News, Va.—Use of Chesapeake and Ohio Railroad's terminal, including 12 piers extending to channel 85 feet deep.

Norfolk, Va.—Use of Norfolk and Western Railroad's terminal at Lambert's Point with 3 piers, accommodating ships of 32 feet draught. Army Supply Base with 2 piers and 15 foot channel.

Pig Point, Va.—General Ordnance Depot with one 580 foot pier including 3,900 feet of approach.

Storage

Newport News, Va.—25 warehouses, storage space about 550,000 sq. ft., open storage 3,400,000 sq. ft.

Norfolk, Va.—Army Supply Base: 8 warehouses, storage space 1,507,460 sq. ft.; open storage 2,486,147 sq. ft. U. S. Engineer Depot: 5 warehouses, storage space 220,000 sq. ft.; open storage 330,000 sq. ft. Anheuser-Busch Cold Storage Plant with 150,000 sq. ft. of storage space.

Portlock, Va.—Open storage 1,555,400 sq. ft.

Sewell's Point.—Open storage 215,000 sq. ft.

Camp Hill.—24 warehouses, storage space 480,000 sq. ft.; open storage, 550,000 sq. ft.

Camp Stuart.—8 warehouses, storage space about 80,000 sq. ft.

Camp Morrison.—24 warehouses, storage space 250,000 sq. ft.

Camp Alexander.—Auto siding and hay shed with 246,000 sq. ft. of storage space.

Pig Point.—General Supply Ordnance Depot including 75 magazines and warehouses with 469,193 sq. ft. of storage space.

Richmond, Va.—Richmond Cold Storage containing 500,000 sq. ft. of storage space.

Embarkation and Debarkation Hospitals

Newport News, Va.—Embarkation Hospital, Camp Stuart; bed capacity 1,754 in hospital proper and 1,800 in 3 venereal camps (see p. 791).

Hampton, Va.—Debarkation Hospital No. 51 (see p. 776), bed capacity 2,000.

Richmond, Va.—Debarkation Hospital No. 52 (see p. 785), bed capacity 1,000.

Embarkation and Debarkation Camps and Depots

There were nine camps and depots under the jurisdiction of the port commander, located as follows:

On the Newport News side of Hampton Roads—Camps Morrison, Alexander, Hill, Stuart, Animal Embarkation Depot 301, and Quartermaster General Supply Depot.

On the Norfolk-Portsmouth side of Hampton Roads—the Army Supply Base, Norfolk Engineer Depot, and Pig Point General Supply Ordnance Depot.

For role of embarkation and debarkation camps see page 516.

Camp Morrison, Va.

Situated about 6 miles from Newport News. Capacity 8,000 troops. Almost 15,000 men, mostly aviation personnel, passed through this camp en route overseas, and more than 30,000 returned (see p. 762).

Camp Alexander, Va.

Situated about 3 miles from Newport News. Capacity about 10,000 troops. About 50,000 men passed through this camp en route overseas, and some 13,000 returned; mostly colored labor troops (see p. 711).

Camp Hill, Va.

Situated about 1½ miles from Newport News. Capacity 10,000 troops. Used by about 63,000 men en route overseas and approximately 35,000 returning (see p. 734).

Camp Stuart, Va.

Situated 1½ miles east of Newport News. Capacity 18,000 troops. Used by approximately 115,000 troops en route overseas and 160,000 returning (see p. 791).

Animal Embarkation Depot 301

Occupied an area of about 70 acres adjacent to and north of Camp Hill. Camp capacity: 10,000 animals. The former British remount depot at Breeze Point, 1 mile southeast of Port Headquarters provided accommodations for an additional 5,000 animals in an emergency. From Oct. 14, 1917 to Nov. 30, 1918, a total of 47,237 animals were shipped overseas; the total number of animals handled during the existence of the depot was 58,278.

Newport News General Quartermaster Supply Depot

Located on 36th Street, Newport News, Va., on the south side of Chesapeake and Ohio Railroad tracks. Handled clothing and subsistence, miscellaneous supplies, ships' supplies, oil, and kindred commodities.

Army Supply Base, Norfolk

Initially known as Norfolk Quartermaster Terminal. Situated at Bush Bluff on Norfolk side of Hampton Roads, between Sewell's Point and Norfolk, Va. Area comprised 900 acres, including a camp site later known as "Camp U. S. Troops." From July 3 to Aug. 30, 1919, about 33,000 troops were debarked at this base (see p. 776).

U. S. Engineer Depot, Lambert's Point

Depot for storage and oversea shipments of engineer supplies. From Sept. 1917 to Dec. 1918, cargo loaded on ships at the depot totaled 771,591 tons (see p. 184).

General Supply Ordnance Depot, Pig Point

Depot for storage and shipment of ammunition and explosives. Up to Mar. 1, 1919, 105,409 tons of cargo had been handled at the depot (see p. 338).

PERSONNEL

Permanent Garrison

Date	Officers	Army field clerks	Enlisted men	Civilians	Total
1918					
July 22	1,216	----	16,894	----	18,110
Nov. 1	1,378	104	23,887	714	26,083
1919					
July 1	888	----	12,755	3,335	16,978
1920					
June 30	74	----	439	371	884

The distribution of the permanent garrison at maximum strength, together with available accommodations for all troops at the port as of Sept. 1, 1918, follows:

Organization	Transient		Permanent	
	Officers	Men	Officers	Men
Aviation Camp, Morrison	225	5,200	225	5,200
Stevedore Cantonment	62	2,300	62	2,300
Animal Embarkation Depot Barracks	8	480	8	480
Animal Embarkation Depot Veterinary Hospital	----	125	----	125
Animal Embarkation Depot Wagon Co. Barracks	----	150	----	150
Camp Hill	333	6,402	----	----
Camp Hill Guard-Fire Co. Barracks	2	80	2	80
Port Headquarters Barracks	60	350	60	350
Camp Stuart	496	15,736	----	----
Camp Stuart Laundry & Bakery Barracks	----	198	----	198

Organization	Transient		Permanent	
	Officers	Men	Officers	Men
Camp Stuart Ordnance Personnel Barracks		66		66
Camp Stuart Guard-Fire Co. Barracks	2	80	2	80
Embarkation Hospital	88	1,056	88	1,056
Lee Hall (Guard & Fire Co. Barracks)	6	132	6	132
Newport News, Detachments, etc.:				
Motor Truck Group	9	524	9	524
58th St. Barracks		528		528
Va. Ave. Dormitory		20		20
Reclamation Unit near Brewery	14	312	14	312
Q. M. Depot Barracks	7	132	7	132
Labor Company Barracks		198		198
Guard-Fire Co. Barracks	58	1,524	58	1,524
Officers' Quarters	144		144	
Total, Newport News and vicinity	1,514	35,593	685	13,455
Ordnance Munitions Plant	22	1,060	22	1,060
Norfolk Q. M. Terminals:				
Guards	70	2,838	70	2,838
Stevedores	69	2,548	69	2,548
Lambert's Point (Guard-Fire Co. Barracks)	12	528	12	528
Portlock (Guard-Fire Co. Barracks)	6	132	6	132
Total, Norfolk and vicinity	179	7,106	179	7,106
Grand total	1,693	42,699	864	20,561
Stevedore and Labor camps	68	4,712	68	4,712
Animal Embarkation Depot (Point Breeze)		105		105
Motor Truck Group		170		170
Shipyard Guard	5	250	5	250
Sanitary Corps Detachment	6	222	6	222
3 Venereal Tent Hospitals	36	150	36	150
Total tent accommodations	115	5,609	115	5,609
Total barracks accommodations	1,693	42,699	864	20,561
Total tent accommodations	115	5,609	115	5,609
Grand total	1,808	48,308	979	26,170

PORT ACTIVITIES

Troop Movements

From Oct. 1917 to Dec. 1918, 261,820 troops were sent overseas. In the return movement 441,146 troops debarked, of whom 35,820 were sick and wounded.

Other Operations

Animal Shipments.—See page 520.

Supplies.—From Sept. 3, 1917, to Apr. 30, 1919, 677,435 tons were shipped overseas from Newport News and 805,654 from Norfolk; total for the port, 1,483,089 tons. From the Armistice to June 30, 1919, 129,403 tons of cargo were returned from the A. E. F. through the port.

SECONDARY PORTS

These ports, in charge of expeditionary quartermasters and referred to as "Expeditionary Depots," primarily shipped freight, but troops were embarked on cargo ships when accommodations were available.

On Sept. 27, 1918, secondary ports were placed under the Director of Purchase and Storage, who appointed a Port Storage Officer for each port to supersede the Expeditionary Quartermaster, with the following functions:

To be responsible for and have authority over storage and distribution of supplies of all departments, bureaus, corps, or other agencies of the War Department and the operation of all storage facilities, and transportation of supplies within the port.

On Nov. 18, 1918, the Office of the Port Storage Officer had the organizations shown on chart.

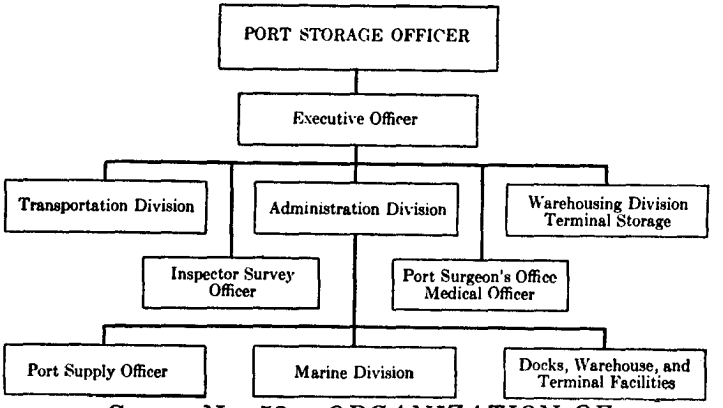


CHART NO. 52.—*ORGANIZATION OF PORT STORAGE OFFICE*

Supplies for overseas were invoiced to the local representative of Inland Traffic serving on the staff of the Port Storage Officer, but deliveries for shipment were made to the Port Superintendent of Water Transportation.

Boston, Mass.

FACILITIES

Initially, Commonwealth Pier and 12 warehouses [1,300,000 sq. ft. of storage space] were rented. Upon completion of the Army Supply Base [2,204,200 sq. ft. of storage space] and two warehouses [327,600 sq. ft. of storage space], most of the rented warehouses were released.

OPERATIONS

From July 1918 to June 1919, 73,724 tons of cargo and about 45,000 troops were shipped overseas. In the return movement 81,400 troops were landed and 10,344 tons of war matériel dis-

charged. During the movement overseas, Boston was a subport of New York; in Feb. 1919, it became a debarkation port in connection with the nearby demobilization center at Camp Devens. The port operated under the control of the Commanding General, Northeastern Department, during the return movement of troops and supplies.

Philadelphia, Pa.

FACILITIES

City Pier No. 78; Philadelphia Army Supply Base [1,997,570 sq. ft. of storage space]; Army port terminal.

OPERATIONS

From Oct. 1917 to June 1919, 590,775 tons of matériel were shipped to Europe and 69,919 tons were returned. Some 35,000 troops were embarked and approximately 56,000 debarked (see p. 517); subport of New York.

Baltimore, Md.

FACILITIES

Piers: Two at Locust Point; one at Canton, Md. Warehouses: at Locust Point and Canton [about 145,000 sq. ft. of storage space]. Open storage at Canton: three tracts, totaling 728,675 sq. ft.

OPERATIONS

From June 1917 to June 1919, 689,759 tons of supplies and some 4,000 troops were shipped overseas. A total of 37,322 tons of supplies were returned through this port, but practically no troops. It was a subport of New York during the overseas movement and subsidiary to Newport News during the return of troops (see p. 714).

PORTS OF DEBARKATION

The following ports of debarkation were in operation: Hoboken, N. J. (see p. 512); Newport News, Va. (see p. 517); Boston, Mass. (see p. 523); and Charleston, S. C.

Charleston, S. C.

FACILITIES

Quartermaster Terminal (Army Supply Base), with sheds and pier sheds having about 2,300,000 sq. ft. of storage space.

OPERATIONS

From Feb. 10 to July 15, 1919, used in connection with demobilization center at Camp Jackson, S. C., for debarking approximately 49,600 troops.

SUMMARY OF OVERSEAS AND RETURN MOVEMENTS

Ports	Troops		Cargo		Animals shipped overseas
	Embarked	Debarked	Shipped (tons)	Returned (tons)	
Primary ports:					
New York	1,632,793	1,428,265	3,909,267	295,578	18,834
Newport News	261,820	441,146	1,483,089	129,403	47,237
Secondary ports:					
Boston	44,610	81,400	73,724	10,344	----
Philadelphia	35,628	56,327	590,775	69,919	----
Baltimore	3,814	----	689,759	37,322	----
Port of debarkation: Charleston, S. C	----	49,600	----	----	----
Other ports:					
Portland, Maine	4,026	----	----	----	----
Halifax	5,148	----	----	----	----
St. John's	1,231	----	700	----	----
Montreal	38,490	----	50,576	----	----
Quebec	11,369	----	----	----	----
Jacksonville	----	----	20,651	----	----
New Orleans	----	----	164,382	----	----

Small shipments were also forwarded from Wilmington, N. C.; Savannah and Brunswick, Ga.; Mobile, Ala.; Gulfport, Miss.; and Galveston, Tex.

NOTE

For further developments, see Transportation Service (pp. 540-547).

II

INLAND TRAFFIC SERVICE

FUNCTIONS

To keep records of the movements of Government property and personnel by rail, and to regulate the arrival of property and personnel at points of embarkation so as to prevent congestion by operating a system of releases in conjunction with the Embarkation Service.

CHIEFS

1918
Jan. 10 Mr. H. M. Adams (Vice-President in Charge of Traffic, Missouri-Pacific R. R. Co.)
1919
Mar. 1-10 Col. George W. Winterburn

ORGANIZATION AND DEVELOPMENT

EARLY ARRANGEMENTS

1917

Railway War Board

Control of railroads to merge activities, hitherto competitive, into a continental system became a prerequisite for placing the Nation's resources on a war basis. To this end, the Council of National Defense (see p. 2), Apr. 21 organized a Railway War Board, officially designated as "Executive Committee, Special

Committee on National Defense, American Railway Association." The functions of the Railway War Board were:

To regulate the car supply; to give preference to the sources of supply and movements through congested areas; to eliminate duplication of service by railroads operating in the same territory; and to coordinate and achieve cooperation between the railroads.

The Railway War Board, with office in Washington, originally consisted of seven members but was later expanded to 33, including the executives of almost all important railways. Its activities were carried on by subcommittees on car service, military transportation accounting, military equipment standards, military passenger traffic, military freight traffic, and express transportation.

United States Railroad Administration

On Dec. 28, the Government took over the railways, and the Railway War Board ceased to function. However, its Subcommittee on Military Passenger Traffic, retaining practically the same personnel and functions, was absorbed by the Troop Movement Section of the new United States Railroad Administration (see p. 10).

Government control of railroads was assumed to facilitate the transportation of troops and war matériel, and to overcome a serious traffic congestion which had developed.

Release System

At the outbreak of war, the purchasing agencies of the five War Department supply bureaus, as well as various other Government departments procured, and shipped matériel to the A. E. F. and the Allies independently. As a result, freight poured into the principal ports beyond available facilities, thus creating in the fall and winter (1917-1918) a serious traffic congestion, which threatened to paralyze the whole transportation system.

In Sept. 1917, steps were taken by the Embarkation Service (see p. 500) to correct this situation. It inaugurated a system of releases which required the purchasing agency of any department or bureau to obtain from the commanding general of the port of embarkation a shipping permit before the railroads could accept supplies for shipment at point of origin. This action was to enable the ports to clear up congestion, to obtain priority delivery on articles most needed in the A. E. F., and to insure that freight would not arrive in excess of any port's storage and shipping capacity. Releases were later granted by the Embarkation Service in Washington. However, no agency existed that could enforce the system effectively.

1918

DIVISION OF INLAND TRANSPORTATION

To remedy the above deficiency, the Division of Inland Trans-

portation was established as an operating agency of the Storage and Traffic Service, General Staff, Jan. 10 (see p. 32). Its functions were as follows:

To have jurisdiction over all matters pertaining to routing and transportation, inland, of all troops and property of the War Department, by whatever means of transport; to conduct all negotiations with inland carriers in order to promote efficiency of movements; to exercise control over movement of all War Department property for the purpose of regulating flow to prevent congestion of Government facilities and railroad terminals.

The Division functioned through the following branches:

Troop Movements Branch

This branch was primarily a liaison agency between the Troop Movement Section of the United States Railroad Administration and the Army unit to be served. Its duties embraced the routing and all other details of troop or animal movements by rail, inland waterways, motor trucks or other conveyances, publicly or privately owned.

Property Movements Branch

This branch served the United States Shipping Board (see p. 11) and the Navy as well as the Army. It took all steps, short of making the transportation contract, in connection with the transportation of all supplies of the Army procured by any War Department bureau. It also had charge of the imposition and the lifting of embargoes; of tracing and expediting shipments; of keeping car records; and of checking routing and movement in general to eliminate unnecessary expense.

Control of Shipments

Shipments by carriers to ports of embarkation and other congested places were accepted only at points of origin with the approval of Inland Transportation. This required the Army supply bureau interested in a shipment to obtain a release from the Embarkation Service before a transportation order could be obtained from Inland Transportation for shipment.

FINAL ORGANIZATION

On Apr. 22, the name of the Division of Inland Transportation was changed to Inland Traffic Service. On June 8, the separate transportation units in the various supply bureaus and the Construction Division were abolished. Their activities were centralized in Inland Traffic, the enlarged functions of which were defined as follows:

To take over all duties pertaining to transportation, inland and coastwise, of all troops and all Army property moving by express, freight or otherwise; to route all traffic; to order all cars or vehicles for use in the shipping of property; to expedite or give preference in movement by tracing, and checking

of railroad yards; to instruct the carriers on all matters, including disposition of shipments at destination and questions pertaining to transportation. To have jurisdiction over and control of all Government railway, freight, and passenger equipment, other than locomotives, and the records thereof. This includes tank cars belonging to the Signal Corps and Ordnance Department, the freight cars purchased from the Panama Canal, and such other equipment as might be acquired.

Effective Aug. 20, by agreement with the American Railway Express Company, control over express shipments was assumed to reduce the excessive use of that service on the part of shipping officers.

In addition to the functions hitherto mentioned, the Service gave attention to the construction and maintenance of railroad trackage; to prompt unloading of cars; to loading cars to full capacity; to the prompt accomplishment of bills of lading by receiving officers; to arrangements for movement in special trains of high explosives, poison gases, and highly important freight; to the inauguration and operation of suburban passenger traffic for persons employed in the construction and operation of War Department plants and for the accommodation of troops at camps and cantonments.

FIELD ORGANIZATION

On Apr. 22, 1918, the Inland Traffic Service assumed control of certain field forces previously organized by the Ordnance Department for its own purpose. This field organization was at once utilized to handle all Government freight, regardless of bureau classification, and new offices were established in New York, Chicago, St. Louis, Jacksonville, Fla., May 1.

This field force still proved inadequate to care for the steady expansion of the Army and War Department activities. On July 16, a comprehensive organization was initiated by establishing branch and district offices at all important centers throughout the Nation and by placing representatives of the Inland Traffic Service in charge at ports, arsenals, depots, warehouses, camps, cantonments, aviation fields, and other Army stations. Reorganization became effective at the New York Office on July 1; at all other places on Aug. 1.

The field organization as of Oct. 1, 1918, was as follows:

Branch Offices

ATLANTA BRANCH

Territorial assignment: Tennessee, on and east of the line of the Louisville and Nashville R. R., Guthrie to Nashville, and the line of the Nashville, Chattanooga & St. Louis R. R., Nashville to the Alabama state line; Georgia, north of the line of the Seaboard Air Line R. R., from Montgomery to Savannah, Ga.

District offices under branch: Birmingham, Ala.; Charlotte, N. C.; Jacksonville, Fla.

BOSTON BRANCH

Territorial assignment: Rhode Island, Connecticut, Massachusetts, Vermont, New Hampshire, and Maine; Canada east of the line of the Grand Trunk Railway, Rouses Point, to but not including Montreal.

District offices under branch: None.

CHICAGO BRANCH

Territorial assignment: North Dakota, South Dakota, Minnesota and Wisconsin. Illinois, on and north of the line of the Wabash R. R., Indiana state line near Danville, Ill., to Decatur, Ill., and east of the line of the Illinois Central R. R., Decatur, through LaSalle to Freeport and the Wisconsin state line. Indiana, on and north of the line of the Wabash R. R., Lafayette, Ind., to the Illinois-Indiana state line near Danville, Ill., and on and west of the line of the Chicago, Indianapolis & Louisville, R. R., Lafayette, Ind., to the Michigan state line.

District offices under branch: Detroit, Mich.; Peoria, Ill.; Toledo, Ohio.

NEW ORLEANS BRANCH

Territorial assignment: Louisiana; Florida, west of the Chattahoochee River; Alabama, on and south of the line of the Louisville & Nashville R. R., from Flomaton to the Mississippi state line; Mississippi, south of the Southern R. R., Columbus, Miss., to Greenville, Miss.; Texas, south of the line of the Texas & Pacific R. R., from the Louisiana state line near Waskom, Tex., to Longview, Tex.; thence east of the line of the International & Great Northern R. R., to Rockdale; thence east of the line of the San Antonio & Aransas Pass R. R., to Corpus Christi.

District offices under branch: Dallas, Tex.

NEW YORK BRANCH

Territorial assignment: New York, south of the line of the Delaware, Lackawanna & Western R. R., Elmira, N. Y., to Binghamton, N. Y.; thence south of the line of the Delaware & Hudson R. R., Binghamton, N. Y., to Albany, N. Y.; thence south of the line of the Boston & Maine R. R., Albany to the Vermont state line. New Jersey, on and north of the line of the Pennsylvania R. R., Trenton to Sea Girt.

District offices under branch: Albany, N. Y.; Buffalo, N. Y.

PITTSBURGH BRANCH

Territorial assignment: Pennsylvania, west of the line of the

Pennsylvania R. R., New York state line, near Elmira, N. Y., to Harrisburg, Pa.; thence west of the line of the Cumberland Valley R. R., Harrisburg to the Maryland state line, and south of the line of the Erie R. R., Ohio-Pennsylvania state line near Shenango, Pa., through Corry, Pa., to the New York-Pennsylvania state line. West Virginia, west of the Maryland state line and the Western Maryland R. R., to Elkins, W. Va., thence on and north of the line of the Coal & Coke R. R., Elkins to Charleston; thence via the Chesapeake & Ohio R. R., to the Kentucky state line.

District offices under branch: Cincinnati, Ohio; Cleveland, Ohio (abolished Jan. 1, 1919, territory transferred to Pittsburgh branch); Indianapolis, Ind. (abolished Jan. 1, 1919, territory transferred to Cincinnati district).

ST. LOUIS BRANCH

Territorial assignment: Arkansas; Ill., south of the line of the Wabash R. R., Indiana state line near Danville, Ill., through Springfield, Ill., to the Mississippi River, and north and west of the line of the Cleveland, Cincinnati, Chicago & St. Louis R. R., Cairo to the Illinois-Indiana state line. Missouri, east of the line of the Missouri Pacific R. R., Kansas City, Mo., through Butler and Lamar to the Arkansas state line.

District offices under branch: Kansas City, Mo.

District Offices

ALBANY DISTRICT

Territorial assignment: Province of Quebec, on and west of the line of the Grand Trunk R. R., Rouses Point, to Montreal; Province of Ontario on and east of the line of the Canadian Pacific R. R., Renfrew, Ont., to Kingston, Ont.; New York east of the line of the Northern Central Railroad, Sodus Point to Elmira, N. Y., thence on and north of the line of the Delaware, Lackawanna and Western R. R., to Binghamton, N. Y., thence on and north of the line of the Delaware and Hudson R. R. to Albany, thence on and north of the Boston and Maine R. R., Albany, to the Vermont state line.

Reporting to New York branch office.

BALTIMORE DISTRICT

Territorial assignment: Maryland; Pennsylvania on and east of the line of the Cumberland Valley R. R., Maryland state line to Harrisburg; on and west of the line of the Northern Central R. R., Harrisburg to the Maryland state line not including Harrisburg.

Reporting to Chief, Inland Traffic Service, Washington, D. C.

BIRMINGHAM DISTRICT

Territorial assignment: Alabama, north of the line of the Louis-

ville and Nashville R. R. from Flomaton to Mississippi state line; Tennessee west of the line of the Louisville and Nashville R. R., Guthrie to Nashville, and the Nashville, Chattanooga and St. Louis R. R., Nashville to the Alabama state line; Mississippi on and north of the Southern R. R., Columbus, Miss., to Greenville, Miss.

Reporting to Atlanta branch office.

BUFFALO DISTRICT

Territorial assignment: New York, on and west of the line of the Northern Central R. R., Sodus Point, N. Y., to Elmira, N. Y.; Province of Ontario, west of the line of the Canadian Pacific R. R., Renfrew to Kingston, Ont., and east of the line of the Grand Trunk R. R., Goderich south through London, Ontario, to Lake Erie.

Reporting to New York branch office.

CHARLOTTE DISTRICT

Territorial assignment: North Carolina and South Carolina, except Charleston, S. C., and Port Royal, S. C.

Reporting to Atlanta branch office.

CINCINNATI DISTRICT

Territorial assignment: Ohio on and south of the line of the Cincinnati, Hamilton and Dayton R. R., from the Indiana state line to Hamilton; on and east of the Baltimore and Ohio R. R., Hamilton to Piqua, on and south of the line of the Pennsylvania R. R., Piqua to Columbus, and the Toledo and Ohio Central R. R., Columbus to the Ohio-West Virginia state line; Kentucky.

Reporting to Pittsburgh branch office.

CLEVELAND DISTRICT

Territorial assignment: Ohio south and east of the line of the Lake Erie and Western R. R., Sandusky to Lima; east of the Baltimore and Ohio R. R., Lima to Piqua; north of the line of the Pennsylvania R. R., Piqua to Columbus, and the Toledo and Ohio Central R. R., Columbus to the Ohio-West Virginia state line. Pennsylvania on and north of the line of the Erie R. R., Ohio-Pennsylvania state line near Shenango, Pa., through Corry to the New York-Pennsylvania state line.

Reporting to Pittsburgh branch office.

DALLAS DISTRICT

Territorial assignment: Texas on and north of the line of the Texas and Pacific R. R., from the Louisiana state line near Waskom, Tex., to Longview; thence on and west of the line of the International and Great Northern R. R., to Rockdale; thence on and west of the line of the San Antonio and Aransas Pass R. R., to Corpus Christi; Oklahoma and New Mexico.

Reporting to New Orleans branch office.

DETROIT DISTRICT

Territorial assignment: Michigan, except that part lying on and south of the Lake Shore and Michigan Southern R. R., Indiana-Michigan state line near White Pigeon through Adrian to Lake Erie near Monroe; Canada, Province of Ontario, west of the line of the Grand Trunk Railroad, Goderich to Lake Erie, through London.

Reporting to Chicago branch office.

INDIANAPOLIS DISTRICT

Territorial assignment: Indiana south of the line of the Lake Erie and Western R. R., Ohio-Indiana state line to Lafayette, and the Wabash R. R., Lafayette to the Illinois state line. Illinois on and east of the line of the Cleveland, Cincinnati, Chicago and St. Louis R. R., Illinois-Indiana state line to Cairo, Ill. Ohio south of the line of the Lake Erie and Western R. R., Indiana-Ohio state line to Lima; west of the line of the Baltimore and Ohio R. R., Lima to Hamilton and north of the line of the Cincinnati, Hamilton and Dayton R. R., Hamilton to Indiana state line.

Reporting to Pittsburgh branch office.

JACKSONVILLE DISTRICT

Territorial assignment: Florida, east of the Chattahoochee River; Georgia on and south of the Seaboard Air Line R. R. from Montgomery to Savannah, Ga., also the ports of Savannah, Ga., Charleston, S. C., and Port Royal, S. C.

Reporting to Atlanta branch office.

KANSAS CITY DISTRICT

Territorial assignment: Nebraska, Kansas, Colorado and Wyoming; also St. Joseph, Mo.; Council Bluffs, Iowa; Missouri on and west of the line of the Missouri Pacific R. R., Kansas City through Butler and Lamar to the Arkansas state line.

Reporting to St. Louis branch office.

NORFOLK DISTRICT

Territorial assignment: Virginia—Norfolk, Newport News, Portsmouth, Phoebus, Hampton, Pig Point, Cape Charles, Morrison, Camp Hill, Camp Stuart, Camp Hood, Lambert's Point, Busch Bluff and intermediate points.

Reporting to Chief, Inland Traffic Service, Washington, D. C.

PEORIA DISTRICT

Territorial assignment: Illinois, on and west of the line of the Illinois Central R. R., Decatur, Ill., through La Salle to Freeport and the Wisconsin state line, and north of the line of the Wabash R. R., Decatur, through Springfield, Ill., to the Mississippi River;

State of Iowa except points on the Missouri River.

Reporting to Chicago branch office.

PHILADELPHIA DISTRICT

Territorial assignment: Pennsylvania on and west of the line of the Pennsylvania R. R., Elmira, N. Y., to Harrisburg, Pa., thence east of the line of the Northern Central R. R., to the Maryland state line; Delaware; New Jersey south of the line of the Pennsylvania R. R., Trenton to Sea Girt, N. J.

Reporting to Chief, Inland Traffic Service, Washington, D. C.

PORTLAND DISTRICT

Territorial assignment: Oregon, Washington, Montana, and Idaho.

Reporting to Chief, Inland Traffic Service, Washington, D. C.

RICHMOND DISTRICT

Territorial assignment: Virginia, except Norfolk, Newport News, Portsmouth, Phoebus, Hampton, Pig Point, Cape Charles, Morrison, Camp Hill, Camp Stuart, Camp Hood, Lambert's Point, Busch Bluff, and intermediate points; West Virginia east and south of the line of the Coal & Coke R. R., Elkins, W. Va., to Charleston, W. Va.; thence via the line of the Chesapeake & Ohio R. R., to the Kentucky state line.

Reporting to Chief, Inland Traffic Service, Washington, D. C.

SAN FRANCISCO DISTRICT

Territorial assignment: California, Nevada, Utah, and Arizona.

Reporting to Chief, Inland Traffic Service, Washington, D. C.

TOLEDO DISTRICT

Territorial assignment: Ohio, on and north of the line of the Lake Erie and Western R. R., Sandusky, to the Indiana state line; Indiana on and north of the line of the Lake Erie and Western R. R., from the Ohio state line to Lafayette, Ind., and east of the line of the Chicago, Indianapolis and Louisville R. R., Lafayette to the Michigan state line; Michigan on and south of the line of the Lake Shore and Michigan Southern R. R. Michigan-Indiana state line, near White Pigeon through Adrian to Lake Erie near Monroe.

Reporting to Chicago branch office.

Inland Traffic Service Representation

Representatives were placed in charge of Inland Traffic Service activities in supply bureaus, depots, camps, ports, and other stations as follows:

SUPPLY BUREAUS

Bureau of Aircraft Production; Chemical Warfare Service;

Chief of Engineers, Special Service Division; Chief of Ordnance—Nitrate Division, Production Division, Supply Division; Chief Signal Officer of the Army, Transportation Branch; Construction Division; Division of Military Aeronautics; Motor Transport Service; Quartermaster General's Office—Oil Branch, Fuel and Forage Division; Surgeon General's Office, Transportation Branch.

ARSENALS

Augusta, Benicia, Edgewood, Frankford, New York, Picatinny, Raritan, Rock Island, San Antonio, Springfield, Watertown, Watervliet.

CAMPS

Aviation

Call Field, Tex.; Carlstrom Field, Fla.; Chanute Field, Ill.; Dorr Field, Fla.; Eberts Field, Ark.; Ellington Field, Tex.; Gerstner Field, La.; Kelly Field, Tex.; Langley Field, Va.; Love Field, Tex.; March Field, Calif.; Mather Field, Calif.; Park Field, Tenn.; Payne Field, Miss.; Scott Field, Ill.; Selfridge Field, Mich.; Souther Field, Ga.; Taliaferro Field, Tex.; Taylor Field, Ala.; Wilbur Wright Field, Ohio.

Mobilization, Training, and Embarkation

John H. Beacom, Beauregard, Bowie, Bragg, Cody, Custer, Devens, Dick, Dix, Dodge, Eagle Pass, Abraham Eustis, Funston, Gordon, Grant, Greene, Hancock, Holabird, A. A. Humphreys, Jackson, Jesup, Joseph E. Johnston, Kearny, Knox, Lee, Lewis, Logan, MacArthur, McClellan, Meade, Mills, Pike, Shelby, Sheridan, Sherman, Stanley, Travis, Upton, Wadsworth, Wheeler, and North Columbia Cantonment, S. C.

Coast Defense Service

Coast Defenses of the Columbia, Fort Stevens, Oreg.

DEPOTS

Animal Embarkation

Charleston, S. C.; Newport News.

Army Reserve

Columbus, Ohio; New Cumberland, Pa.; South Schenectady, N. Y.

Army Supply Bases

Baltimore, Md.; New Orleans, La.; Newport News, Va.; Norfolk, Va.; North Charleston, S. C.; Philadelphia, Pa. (two depots); South Brooklyn, N. Y.

Auxiliary Remount

At the following camps: Beauregard, Bowie, Cody, Custer, Devens, Dix, Dodge, Funston, Fremont, Gordon, Grant, Greene, Hancock, Jackson, Johnston, Kearny, Lee, Lewis, Logan, Meade,

MacArthur, McClellan, Pike, Sevier, Shelby, Sheridan, Sherman, Taylor, Travis, Upton, Wadsworth, Wheeler, and Fort Sill, Okla.

Remount

Fort Reno, Okla.; Fort Keogh, Mont.; Front Royal, Va.; Kansas City, Mo.

Aviation General Supply

Americus, Ga.; Dayton, Ohio; Houston, Tex.; Middletown, Pa.; Morrison, Va.; Richmond, Va.; San Antonio, Tex.

Engineer

New York, N. Y.; Philadelphia, Pa.

Engine Repair

Dallas, Tex.; Indianapolis, Ind.; Montgomery, Ala.

Medical Supply

Atlanta, Ga.; Chicago, Ill.; New York, N. Y.; Philadelphia, Pa.; St. Louis, Mo.; Washington, D. C.; San Antonio, Tex.; San Francisco, Calif.

Motor Supply

Motor Ambulance Supply Depot, Louisville, Ky.

Ordnance General Supply

Baltimore, Md.; Ft. Hancock, N. Y.; Middletown, Pa.; Newark, N. J.; New York, N. Y.; Paterson, N. J.; Pedricktown, N. J.; Philadelphia, Pa.; Pig Point, Va. (Constructing); Pig Point, Va. (Ordnance); Richmond, Va.; St. Louis, Mo.; Springfield, Mass.; Tuckahoe, N. J.

Quartermaster

Baltimore, Md.; Bush Terminal, N. Y.; Cambridge, Mass.; Chicago, Ill.; El Paso, Tex.; Fort Sam Houston, Tex.; Jeffersonville, Ind.; New York, N. Y.; Philadelphia, Pa.; St. Louis, Mo.; San Francisco, Calif.; Seattle, Wash.

Signal Corps General Supply

Atlanta, Ga.; Chicago, Ill.; Fort Mason, Calif.; Fort Wood, N. Y.; San Antonio, Tex.

DISTRICT OFFICES, ORDNANCE

Boston, Mass.; Bridgeport, Conn.; Chicago, Ill.; Cincinnati, Ohio; Cleveland, Ohio; Detroit, Mich.; Philadelphia, Pa.; Rochester, N. Y.

FIELD REPRESENTATIVES

Bureau of Aircraft Production

Buffalo, N. Y.; Chicago, Ill.; Dayton, Ohio (Dayton-Wright Airplane Co.), Dayton, Ohio (McCook Field); Detroit, Mich.; Elizabeth, N. J.; Elyria, Ohio; New York, N. Y.; Plainfield, N. J.; Portland, Oreg.; Vancouver, Wash.

Construction Division

Meridian, Miss.; New Orleans, La.; Savannah, Ga.

Fuel and Forage Division, Quartermaster Corps
Chicago, Ill.
Motor Transport Service
Chicago, Ill.; Cleveland, Ohio; Detroit, Mich.; New York, N. Y.

MANUFACTURING, ASSEMBLING AND PRODUCTION PLANTS AND YARDS

Air Nitrates Corp., Cincinnati, Ohio; Atlantic Loading Co., Amatol, N. J.; Bethlehem Loading Co., Mays Landing, N. J.; Gilmerton Lumber Storage Yard, Gilmerton, Va.

ARTILLERY PROVING GROUNDS

Aberdeen, Md.

SIGNAL CORPS—PORTS OF EMBARKATION

Baltimore, Md.; Hoboken, N. J.; Newport News, Va.; Philadelphia, Pa.

PERSONNEL

Personnel was largely drawn from experienced railroad traffic men, consisting July 1, 1918, of 32 officers and 179 civilians. On Nov. 11, the total was 372, including 37 officers and 335 civilians of the United States Railroad Administration who had been attached to the Inland Traffic Service. After the Armistice the personnel was reduced 50 percent.

Key positions were held by—

WASHINGTON OFFICE

Maj. Neill E. Bailey, Aide to the Chief, formerly Superintendent, Southern Pacific R. R.

Lt. Col. Hal S. Ray, Chief of Troops Movements Branch, formerly Assistant General Passenger Agent, C. R. I. & P. R. R.

Mr. O. G. Parsley, Chief of Property Movements Branch, formerly Traffic Manager, M. O. & G. R. R.

Other persons assigned for traffic duty by the Director, Division of Traffic, United States Railroad Administration, were:

Mr. B. M. Flippin, formerly Assistant Traffic Manager, M. P. R. R.
Mr. H. L. Daw, formerly Division Freight Agent, N. & W. R. R.
Mr. J. E. McGrath, formerly General Agent, N. Y., N. H. & H. R. R.
Mr. C. H. Hawley, formerly Traveling Freight Agent, S. P. Lines.
Mr. E. J. Sticknoth, formerly Contracting Agent, S. P. Lines.
Mr. T. L. Manning, formerly Traveling Freight Agent, C. R. I. & P. R. R.
Mr. Andrew Jensen, formerly Traveling Freight Agent, C. R. I. & P. R. R.
Mr. Frank Rich, formerly Chief Clerk, Erie R. R.
Mr. C. J. Nelson, formerly Traveling Freight Agent, C. B. & Q. R. R.
Mr. C. D. Peirce, formerly District Freight Agent, C. B. & Q. R. R.
Mr. G. B. Johnson, formerly Soliciting Agent, C. & N. W. R. R.
Mr. B. W. Hanson, formerly Traveling Freight Agent, C. & N. W. R. R.
Mr. R. F. Bertling, formerly Traveling Freight Agent, U. P. R. R.
Mr. S. L. Wiggins, formerly Traveling Freight and Passenger Agent, U. P. R. R.
Mr. P. J. Peckens, formerly Contracting Freight Agent, C. M. & St. P. R. R.

Mr. W. J. Hart, tormerly Contracting Freight Agent, C. M. & St. P. R. R.

Mr. A. J. Seitz, formerly Secretary to Vice-President, M. P. R. R.

IN CHARGE OF BRANCH OFFICES

Mr. A. S. Edmonds, at Atlanta, Ga., formerly Assistant Freight Traffic Manager, Missouri Pacific R. R.

Mr. J. E. McGrath, at Boston, Mass., formerly General Agent, New York, New Haven, and Hartford R. R.

Mr. R. B. Robertson, at Chicago, Ill., formerly Assistant General Freight Agent, Chicago, Indianapolis and Louisville R. R.

Mr. N. C. Barnett, at New Orleans, La., formerly Assistant General Freight Agent, Gulf Coast Lines.

Mr. B. M. Flippin, at New York, N. Y., formerly Assistant Traffic Manager, Missouri Pacific R. R.

Mr. J. E. Weller, at Pittsburgh, Pa., formerly General Freight Agent, Pennsylvania R. R.

Mr. C. A. Morrill, at St. Louis, Mo., formerly Assistant Freight Traffic Manager, St. Louis-San Francisco, R. R.

IN CHARGE OF DISTRICT OFFICES

Mr. C. E. Harris, at Albany, N. Y., formerly General Eastern Agent, Minneapolis and St. Louis R. R.

Maj. S. A. Tubman, at Baltimore, Md., formerly General Freight Agent, Merchant and Mines Transportation Co.

Mr. R. M. Dozier, at Birmingham, Ala., formerly Assistant General Freight Agent, Missouri Pacific Railroad.

Mr. A. P. Wakefield, at Buffalo, N. Y., formerly Acting Eastbound Agent, New York Central Lines.

Mr. C. Sanderson, at Charlotte, N. C., formerly Freight Agent, Mobile and Ohio R. R.

Mr. W. H. Conner, at Cincinnati, Ohio, formerly General Agent, Union Pacific R. R.

Mr. Leonard Smith, at Cleveland, Ohio, formerly Commercial Agent, Lehigh Valley R. R.

Mr. J. D. Gowin, at Dallas, Tex., formerly Acting Assistant General Freight Agent, Gulf Coast Lines.

Mr. A. J. Dutcher, at Detroit, Mich., formerly General Agent, Union Pacific R. R.

Mr. George W. Smith, at Indianapolis, Ind., formerly Export Agent, Pennsylvania R. R.

Mr. Willis Calloway, at Jacksonville, Fla., formerly Florida Agent, Norfolk and Western R. R.

Mr. J. L. Hohl, at Kansas City, Mo., formerly General Agent, Denver and Rio Grande R. R.

Mr. J. F. Dalton, at Norfolk, Va., formerly General Freight and Passenger Agent, Norfolk Southern R. R.

Mr. Chas. Shackell, at Peoria, Ill., formerly General Freight Agent, Fort Dodge, Des Moines and Southern R. R.

Mr. J. B. Trimble, at Philadelphia, Pa., formerly General Agent, Missouri Pacific R. R.

Mr. W. C. Dibblee, at Portland, Oreg., formerly General Agent, Missouri Pacific R. R.

Mr. G. M. Graig, at Richmond, Va., formerly Assistant General Passenger Agent, Erie R. R.

Mr. F. L. Hanna, at San Francisco, Calif., formerly Division Freight and

Passenger Agent, Atchison, Topeka and Santa Fe R. R.

Mr. P. B. Doddridge, at Toledo, Ohio, formerly Division Freight Agent, International and Great Northern R. R.

ACTIVITIES

Through the cooperation of the Operations Division of the General Staff, the Embarkation Service, the Inland Traffic Service, and the Troop Movement Section of the United States Railroad Administration, troop movements were planned and put into effect without unnecessary interference with commercial traffic.

TROOP MOVEMENTS

MEXICAN BORDER TROOPS

From May 18 to June 4, 1917, approximately 25,500 troops were transported from the Border to points in the interior. The 1st Division's concentration at Hoboken, prior to being sent to France, formed part of the movement.

NATIONAL GUARD

Organizations of the National Guard, numbering approximately 343,000 men, were transported to their camps from Aug. 4 to Nov. 23, 1917, the movement extending over 11 weeks.

NATIONAL ARMY

The first detachments of selective service men were transported from their homes to cantonments on Sept. 5, 1917, and by Nov. 10, 1918, a total of 2,287,926 had been moved.

INTERCAMP MOVEMENTS

Beginning Aug. 1, 1917, large intercamp movements took place, including transportation of many troops from northern to southern cantonments and transfer of drafted men from National Army cantonments to National Guard and Regular Army divisions. By Jan. 1, 1918, approximately 308,000 men had been moved to meet current requirements. Between Jan. 1 and Nov. 11, 1918, movement of troops from the West toward the eastern coast and distribution of men from depot brigades to units throughout the country accounted for about 42 percent of the military passenger traffic.

MOVEMENTS TO PORTS OF EMBARKATION

Between May 1, 1917, and Nov. 11, 1918, approximately 2,174,455 men were transported by rail from camps to ports; 81 percent to Hoboken; 12 percent to Newport News; the remainder to various other ports.

RECAPITULATION

From May 1, 1917, to Nov. 10, 1918, the railroads transported 8,714,582 men. Of this number 26 percent were selective service

men reporting to cantonments and camps; 49 percent represented intercamp movements and those incident to the mobilization of the Regular Army and National Guard; and 25 percent were troop movements to ports of embarkation.

Analysis

Drafted men moved from their homes to camps	2,287,926
Troops transported on regular trains	1,380,564
Organizations transported on special troop trains	5,046,092
Total troops transported up to Armistice	8,714,582
Number transported in Pullman cars	2,671,074
Number of men shipped in coaches	6,043,508

Military passenger traffic incident to demobilization is analyzed on page 546.

FREIGHT MOVEMENTS

At height of the freight congestion (see p. 526) at the North Atlantic ports, 30,000 carloads of military supplies were on hand, including consignments to Allied governments. By Mar. 30, 1918, after the release system had been put in operation, there were still 22,118 carloads of matériel at these ports. However, War Department cargo had been reduced to 1,938 carloads, including freight on wheels, on piers, and on the ground.

An insight into the tonnage involved is afforded by the following tabulations:

TRANSPORTATION ORDERS

(F. Y. 1919)

Month	Transportation orders issued	Approximate number of cars	Approximate number of tons
1918			
July	2,922	18,706	654,710
August	2,898	19,215	672,525
September	3,035	21,359	747,565
October	4,771	31,558	1,104,530
November	3,400	26,709	934,815
December	2,548	31,037	1,086,295
1919			
January	2,947	32,400	1,134,000
February	2,877	36,373	1,273,055
March	2,842	41,301	1,445,535
April	2,909	27,771	971,985
May	1,716	23,523	537,059
June	1,319	18,712	662,353
Total	34,184	328,664	11,224,427

VOLUME OF MATÉRIEL SHIPPED TO PORTS

From June 1 to Dec. 31, 1917

1917	New York		Philadelphia		Baltimore		Newport News		Other Ports		Total	
	Tons	Per-cent	Tons	Per-cent	Tons	Per-cent	Tons	Per-cent	Tons	Per-cent	Tons	Per-cent
June	15,848	100	----------	----	----------	----	----------	----	----------	----	15,848	3.5
July	11,831	100	----------	----	----------	----	----------	----	----------	----	11,831	2.5
August	19,390	100	----------	----	----------	----	----------	----	----------	----	19,390	4
September	48,197	92	----------	----	----------	----	378	1	4,005	7	52,580	11
October	50,408	46	20,112	18	----------	----	19,858	18	20,330	18	110,708	24
November	25,559	33	9,452	12	663	1	30,251	39	11,018	15	76,943	17
December	91,751	52	13,782	8	7,152	4	41,819	23	23,400	13	177,904	38
Total	262,984	56	43,346	9	7,815	2	92,306	20	58,753	13	465,204	-----

From Jan. 1 to Dec. 31, 1918

1918												
January	66,739	56	7,188	6	5,901	5	24,322	20	14,602	13	118,752	2
February	141,802	60	16,137	7	25,948	11	40,639	18	8,791	4	233,317	4
March	139,610	48	35,308	12	16,432	6	85,217	30	12,180	4	288,747	5
April	187,551	51	27,150	7	54,206	15	74,810	20	26,499	7	370,216	6
May	161,955	36	46,549	10	58,073	13	143,603	32	39,787	9	449,967	7
June	236,976	56	24,604	6	42,504	10	105,273	25	13,669	3	423,026	8
July	230,094	43	55,679	10	56,088	11	129,285	24	60,223	12	531,369	9
August	285,319	49	46,961	8	88,543	15	126,131	22	32,288	6	580,242	10
September	386,710	57	43,501	6	58,224	9	145,577	22	41,950	6	685,962	12
October	371,431	50	82,616	11	80,225	10	161,489	22	52,084	7	747,845	13
November	479,047	59	64,274	8	68,882	9	163,117	20	34,454	4	809,774	14
December	230,116	40	45,003	8	54,875	9	78,300	13	[1] 174,861	30	583,155	10
Total	2,917,350	50	494,970	9	609,901	10	1,277,763	22	512,388	9	5,812,372	-----

[1] Includes San Francisco, 1,064 tons, 0.2 per cent; United States Food Administration, 108,136 tons, 18.5 per cent.

NOTE

For further data concerning inland transportation see page 546.

III

TRANSPORTATION SERVICE

FUNCTIONS

To be responsible for and have authority over the transportation of the supplies and personnel of the Army by rail and water.

CHIEFS

1919

Mar. 13 through June 20 Brig. Gen. Frank T. Hines

ORGANIZATION AND DEVELOPMENT

WASHINGTON OFFICE

1919

On Mar. 11, the Transportation Service was created by the consolidation of the Embarkation Service (see p. 500) and the

Inland Traffic Service (see p. 525), thereby placing all War Department transportation activities, except those of the Motor Transport Corps, in one operating agency. On Apr. 9, the Washington Office was organized as shown on chart.

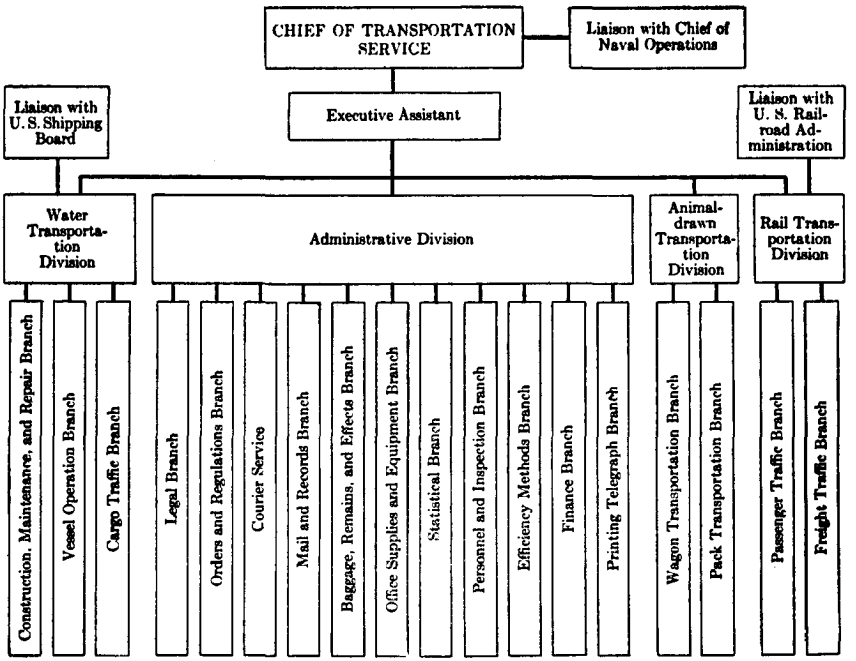


CHART NO. 53.—*ORGANIZATION OF OFFICE OF CHIEF OF TRANSPORTATION SERVICE*

Water Transportation Division

As successor of the former Embarkation Service, this Division supervised and coordinated the shipment of troops and supplies overseas.

Rail Transportation Division

This Division was essentially a continuation of the former Inland Traffic Service. In cooperation with the Railroad Administration, it directed and controlled the movement of Government property and troops on railroads.

Animal-Drawn Transportation Division

Was established May 6, 1919, and operated and managed all animal-drawn transportation for the Army.

Administrative Division

In this Division were assembled all administrative duties connected with transportation that were not Water, Rail, or Animal-Drawn Division matters.

1920

On Jan. 8, a Port Terminal Branch was formed in the Water Transportation Division to coordinate activities at Army bases. This Branch absorbed the Inland Waterways Division of the Railroad Administration, and Mar. 1 became the—

Inland Waterways and Port Terminals Division

whose duty it was to supervise the operation of the War Department port terminals and to operate inland waterways.

FIELD ORGANIZATION

1919

Beginning Apr. 21, a field organization was evolved which in 1920 assumed the form shown on chart 54.

Post Transportation Officer

(See A on Chart)

At each station, the Post Transportation Officer handled all matters pertaining to the transportation of military personnel, by rail, water, or animal-drawn vehicles, and was responsible for maintaining Government property allocated for that purpose at his station.

Department Transportation Officer

(See B on Chart)

To centralize supervision of all tactical transportation matters under each Department Commander, the Department Transportation Officer was responsible for the administration of the transportation activities at posts within his department.

Zone Transportation Officer

(See C on Chart)

All transportation matters exempted from control of the Department Commander came under the supervision of the Zone Transportation Officer. His activity was intimately connected with the supply service and was largely concerned with nontactical transportation matters, such as applied to general service schools, arsenals and proving grounds, supply and reserve depots, miscellaneous experimental and production plants, Army supply bases, and similar activities. Subzones (see D on Chart) were established whenever necessary.

Peacetime Organization

In Dec. 1919, the Department Transportation Officer absorbed the functions of the Zone Transportation Officer, thereby placing

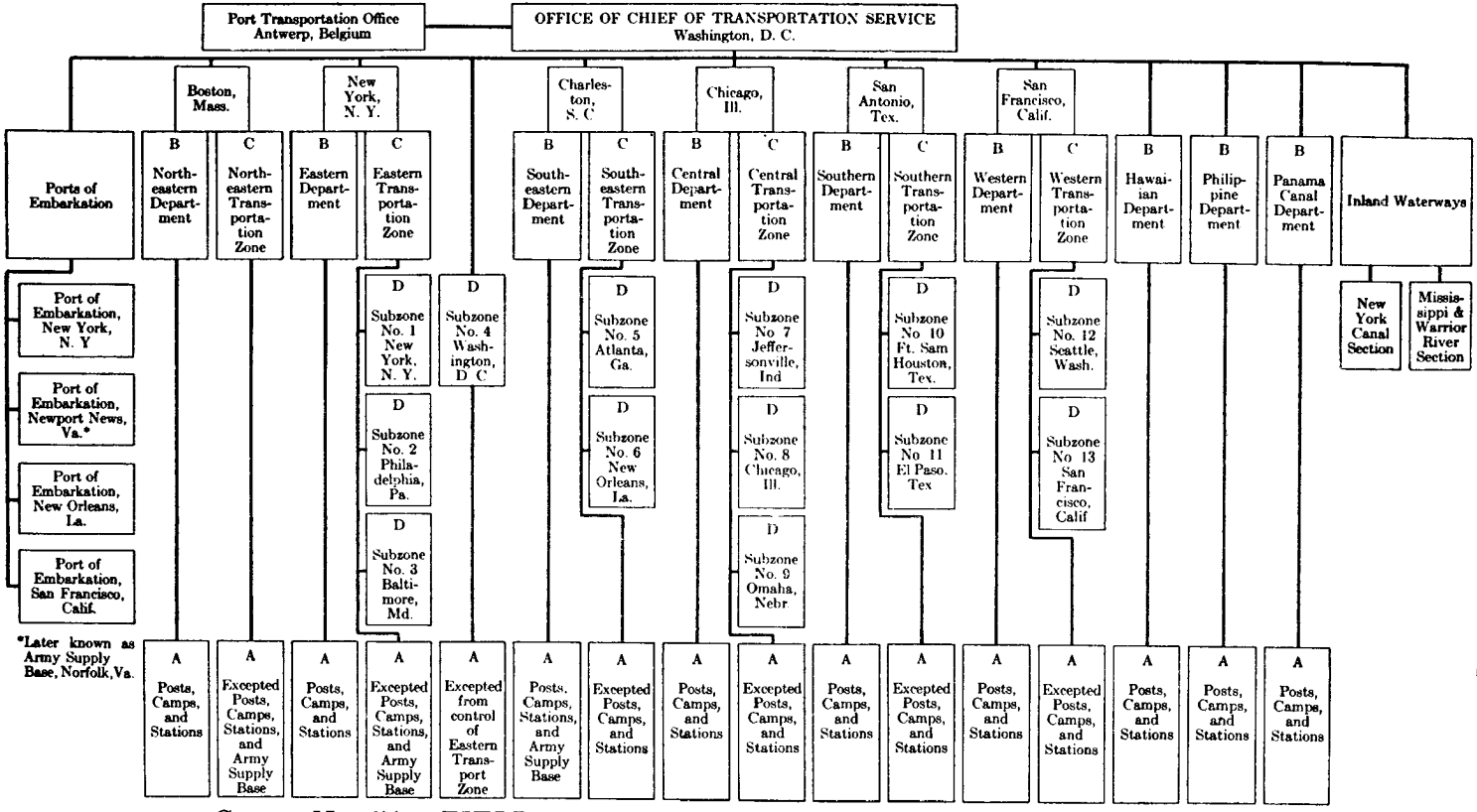


CHART No. 54.—*FIELD ORGANIZATION OF TRANSPORTATION SERVICE*

all transportation matters, tactical and nontactical, under the same head in each territorial department.

Army Terminals

On Feb. 10, 1920, the following Army terminals were placed under the Chief of the Transportation Service: South Boston, South Brooklyn, Port Newark, Philadelphia, Norfolk, Charleston, and New Orleans.

PERSONNEL

Personnel in the Office of the Chief of Transportation Service comprised:

July 1919—90 officers, 11 enlisted, 373 civilians.

Jan. 1920—79 officers, 11 enlisted, 327 civilians.

June 1920—50 officers, 1 Army field clerk, 9 enlisted, 182 civilians.

Outside of Washington there were on June 30, 1919: 327 permanent officers; 3,256 temporary officers; 23,869 enlisted men; 22,153 civilians; on June 30, 1920: 853 officers; 2,023 enlisted men; 14,031 civilians.

Of the foregoing, the following were stationed at:

Ports	July 1, 1919			June 30, 1920		
	Officers	Enlisted men	Civilians	Officers	Enlisted men	Civilians
Boston	4		71	2	2	62
Charleston	8	15	9	7	3	131
Hoboken	2,092	10,737	14,193	179	339	4,517
Norfolk	888	12,755	3,335	74	439	371
Philadelphia	11		73	8		64
San Francisco	5		1,012	8	2	1,973
Total	3,008	23,507	18,693	278	785	7,118

ACTIVITIES

WATER TRANSPORTATION

Overseas and return movements of troops and supplies have been described heretofore (see pp. 505-507).

The troop movements recorded below cover the 1920 fiscal year and include, besides Army personnel, members of the Navy and U. S. Marine Corps, American civilians, and foreigners.

TROOP MOVEMENTS

From Europe

Months	Monthly total	Cumulative total	Flag of tonnage			
			American	British	French	Miscellaneous
To June 30, 1919	1,531,810	1,531,810	1,278,069	131,489	41,543	80,709
1919						
July	301,151	1,832,961	267,499	14,380	1,821	17,451
August	136,304	1,969,265	133,012	722	562	2,008
September	50,638	2,019,903	49,586	1,044	2	6
October	20,351	2,040,254	20,345		6	
November	5,716	2,045,970	5,716			
December	4,156	2,050,126	4,154	1	1	
1920						
January	2,227	2,052,353	2,224	3		
February	909	2,053,262	855		54	
March	642	2,053,904	556	1	85	
April	2,043	2,055,947	2,043			
May	719	2,056,666	717	2		
June	599	2,057,265	599			
Total for F. Y.	525,455		478,306	16,153	2,531	19,465
Grand total		2,057,265	1,765,375	147,642	44,074	100,174

To Europe

To June 30, 1919	2,139,554	2,139,554	972,580	1,114,585	47,701	4,688
July–December 1919	13,271	2,152,825	13,271			
Jan–June 1920	1,887	2,154,712	1,885	2		
Total for F. Y.	15,158		15,156	2		
Grand total		2,154,712	987,736	1,114,587	47,701	4,688

DISPOSAL OF TRANSPORT FLEET

Between Nov. 11, 1918, and June 30, 1919, the War Department returned 372 vessels, aggregating 2,569,692 D. W. tons to the United States Shipping Board (see p. 11). This left the War Department 168 trans-Atlantic and trans-Pacific vessels with a cargo capacity of 458,218 tons and accommodations for 333,923 troops.

In the following months further vessels were returned direct to their owners or to the United States Shipping Board. On Dec. 31, 1919, only 26 ships remained, with cargo capacity of 52,183 tons and accommodations for 58,083 men.

RAIL TRANSPORTATION

Troop movements by rail to the Armistice are described on pp. 538, 539. The following tabulation primarily takes into account military travel from debarkation ports or other stations to demobilization centers, and from there to the home of the individual.

TROOP MOVEMENTS

Month	Special trains run	Passengers handled		Total
		On special trains	On regular trains	
1918				
November	446	185,529	94,373	279,902
December	816	307,141	426,893	734,034
1919				
January	850	301,988	352,663	654,651
February	673	265,519	241,619	507,138
March	868	367,307	240,786	608,093
April	1,009	469,371	251,252	720,623
May	1,293	594,801	277,299	872,100
June	1,209	542,091	366,374	908,465
Cumulative total	7,164	3,033,747	2,251,259	5,285,006
July	1,173	529,290	420,370	949,660
August	611	286,851	179,201	466,052
September	421	164,709	88,806	253,515
October	150	54,092	49,281	103,373
November	83	18,754	42,013	60,767
December	44	11,412	21,512	32,924
Cumulative Total	9,646	4,098,855	3,052,442	7,151,297
1920				
January	21	4,999	11,302	16,301
February	23	4,723	5,630	10,353
March	10	2,625	3,830	6,455
April	17	4,800	3,379	8,179
May	24	7,384	3,940	11,324
June	22	5,542	7,105	12,647
Total	9,763	4,128,928	3,087,628	7,216,556

FREIGHT MOVEMENTS

Freight movements by rail to June 30, 1919, are shown on pp. 539, 540.

From July 1, 1919, to June 30, 1920, military freight totaled 11,281,011 tons, the most important items of which were: miscellaneous quartermaster supplies 414,349 tons; subsistence 313,049 tons; forage 2,933,169 tons; fuel 1,464,431 tons; ordnance 1,208,652 tons; Construction Division supplies 3,819,805 tons; sales and surplus property 279,203 tons.

ADMINISTRATION

The magnitude of Transport Service operations is indicated by the financial transactions stated below:

Items	Fiscal year 1918	Fiscal year 1919
Expenditures:		
Owned transport service	$4,714,894.22	$3,509,270.00
Chartered transport service	97,452,805.01	110,799,904.65
River and Harbor service	878,164.38	1,182,835.00
Coast Artillery boat service	693,664.41	1,256,297.08
	103,739,528.02	116,748,306.73
Obligations and reservations:		
Estimated amount to be reimbursed to:		
Navy Department	30,000,000.00	85,000,000.00
United States Shipping Board	35,000,000.00	175,000,000.00
Amount reserved for payment for transportation of troops and cargo to:		
British Government	35,000,000.00	----------
French Government	7,000,000.00	----------
Allied Governments	----------	90,000,000.00
Amount reserved to cover obligations	----------	13,463,889.78
Amount reserved to cover claims and losses not presented	25,000,000.00	----------
Balance held to cover emergency claims, etc	----------	30,880,126.45
Total	235,739,528.02	511,092,322.96

TRANSFER OF TRANSPORTATION SERVICE

The Act of June 4, 1920, placed the Transportation Service under the Quartermaster General, effective July 15, to be organized and operated as a separate service of the Quartermaster Corps. In its new role, the Service was charged with the transportation of the Army by land and water, including transportation of troops and supplies by mechanical or animal means, and with the furnishing of means of transportation of all classes and kinds required by the Army.