EVOLUTION OF THE G-3 FUNCTION AT DIVISION LEVEL
FROM 1917 TO 1945

A thesis presented to the Faculty of the U. S. Army Command and General Staff College in partial fulfillment of the requirements of the degree

MASTER OF MILITARY ART AND SCIENCE

V. A. HENSON JR., Major, USA

Fort Leavenworth, Kansas
1965
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MASTER OF MILITARY ART AND SCIENCE

by

V. A. HENSON JR., Major, USA

Fort Leavenworth, Kansas
1965
U.S. ARMY COMMAND AND GENERAL STAFF COLLEGE

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The opinions and conclusions expressed herein are those of the individual student author and do not necessarily represent the views of either the United States Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)
This thesis traces the development of the G-3 function at division level from 1917 through 1945. Reference is made to other general and special staff sections only when necessary to fully describe the operations function. Doctrine and practice are compared and the changes in function correlated with major events and changes in organization and doctrine.

The thesis begins with a brief summary of the staff history of Germany, France, and Great Britain—nations whose prior staff development affected the United States Army staff system. The background is completed by a brief sketch of the staff history of the U. S. Army prior to 1917.

The thesis proper is divided into three periods—1917 through 1919, 1920 through 1939, and 1940 through 1945. During each of these periods, the operations function is examined with respect to staff organization, duties and responsibilities of the G-3, and the relationship of the G-3 with other staff officers and subordinate commanders of the division. In addition, the formats of plans, orders, estimates, and standing operating procedures are examined to ascertain the scope of the G-3's responsibility.

During the period 1917 through 1919, our staff system was basically a hybrid of French organization and British terminology. The dominating influence of the French on our AEF staffs was a natural outgrowth of the situation which placed our forces under French command. The duties actually performed by division G-3's followed stated doctrine quite closely; the position of G-3, however, assumed greater importance than was originally intended.
Officers selected for division G-3 positions during World War I had received prior staff training and were in almost constant contact with their commanders. As a result, the commanders placed a great deal of confidence in their G-3's and often gave them a measure of directive authority. The detailed plans and orders used during this period were well suited to the deliberate character of the War.

The evolution of the division G-3's function during the period between the two World Wars was marked by a refinement of existing methods and techniques with no abrupt or far reaching changes being made. The Staff School at Fort Leavenworth became the center for staff doctrine and training. Mobilization planning and training assumed increased importance on the list of G-3's duties due to the peacetime role of the Regular Army. Cooperation and coordination, both within the staff and between the staff and the subordinate commanders, became the keystones of proper staff action. Finally, the formats for plans and orders were standardized and simplified.

The comparative ease with which the mobilization problems of World War II were overcome was, in part, a result of the staff theory and practice which had matured during the two decades following World War I. The experience gained during World War II produced additional refinements in staff procedure but did not significantly change the doctrine previously established.

The training of hundreds of commanders and staff officers at Fort Leavenworth, both prior to and during the War, served to promote understanding between officers serving in each of these positions and served to minimize problems in command and staff relationships. During
World War II, increased mobility and improved communications dictated the conduct of operations through the use of fragmentary orders rather than complete field orders. Standing operating procedures were used to further simplify and expedite operations.

The conclusions reached in the thesis include the following:

1) Divisions consistently augmented the number of personnel authorized the G-3 sections during periods of combat in order to increase its efficiency.

2) The position of division G-3 assumed a greater importance than those of the other general staff officers during periods of combat.

3) The duties and responsibilities of the division G-3 steadily increased during the period covered by the study.

4) Potential problems arising from the relationship between staff officers and subordinate commanders were minimized by training both groups of officers in proper staff procedure.

5) Practice often preceded doctrine in staff theory and procedure.

The evolution of the G-3 function at division level did not end in 1945. The experience gained during the nearly thirty years covered by this study has, however, had a lasting effect on our staff doctrine. Many of the lessons learned, during both peace and war, are of immeasurable value today.
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CHAPTER I

GENERAL INTRODUCTION

The reader may be familiar with Hittle's excellent history of General Staff development of the great military powers of the world.¹ It was this volume which stimulated the author to examine in greater detail our own staff organization and procedure. As this study progressed to lower organizational levels, a lack of readily available material concerning the operations function was noted. Although articles, studies and even books describing the personnel, intelligence and logistics functions at division level were easily uncovered, not a single reference dealing exclusively with the operations function, or G-3, was found.

This seems incongruous, since the operations function has long enjoyed the greatest popularity among students of military art. Perhaps it is because of this popularity, and not in spite of it, that the void of written material on the subject exists. Since the study of division operations has been avidly pursued throughout the years, there has been little need to stimulate interest in the subject by writing of it. In addition, the function of the G-3 at division

level has undergone a gradual evolution unmarked by drastic changes such as those which have occurred in the G-1 and G-4 functions.

Nevertheless, the changes in function of the operations section at division level, though not drastic, have been substantial in character. The importance of these changes, together with the inability to readily identify their cause, motivated the author to prepare this thesis. It is hoped that the student of General Staff organization and procedure will find it useful.

Statement of Purpose

This study undertakes to examine the duties and functions of the division G-3 during the period 1917 to 1945. An analysis and appraisal of events, both within and without the Army, which affected the evolution of these functions is made. This thesis has three major goals:

1) To compare, historically, staff doctrine with practice as it pertains to the division G-3 section;

2) To correlate the changes in function with major events, changes in organization and doctrine and other factors; and

3) To analyze major changes in function to ascertain the trends established.

Command and staff relationships, tables of organization and formats for plans and orders are examined to the degree necessary to gain a complete understanding of the G-3's role. General reference only is made to other general and special staff sections in order to fully describe the operations function.
Importance of the Study

The importance of this thesis is based on the following three factors:

1) The division is the basic Army unit of the combined arms and services. It is also the lowest level at which a General Staff is found in our Army. An understanding of General Staff functions at this level, therefore, forms the foundation for a broad knowledge of staff procedure.

2) Of the five basic General Staff functions—personnel, intelligence, operations, logistics, and civil affairs—operations is the broadest. If a major problem arises in operations, it will almost certainly affect each of the other functions. Likewise, a significant development in any of the other functions has an impact on operations. A complete understanding of the operations function, therefore, presupposes an appreciation of the other four.

3) During the period covered by this study, the Army employed many divisions in two great wars. The experience gained in sustained combat during these conflicts had a lasting effect on our staff doctrine. In addition, many of the lessons learned during the decades of training between the wars are applicable today.

Sources of Data

The bulk of the material from which this study is drawn is found in public documents, primarily United States Army Manuals. Other sources include:

1) United States Army Tables of Organization;

2) Manuscripts and texts of service schools and colleges;
3) Staff studies and committee reports;
4) Official after action reports and combat orders;
5) Books and letters written by personnel who were division G-3's or closely associated with the G-3 function during the period under study; and
6) Articles in military publications.

Methodology

The historical method is used to present this thesis. The period under study is divided into three major portions, related more to major events than to length of time. The records of each are then critically examined and analyzed to determine each change in the division G-3 function and its underlying cause. Finally, conclusions are drawn from the material as a whole.

Organization of the Study

Chapter I consists of a general introduction. The purpose, scope and importance of the study are discussed. The chapter is concluded by a brief outline of the presentation.

Chapter II begins with a brief summary of staff history of other nations. Only those facets which greatly affected our early staff development are discussed. This is followed by a brief sketch of U. S. Army staff history prior to 1917.

Chapter III examines in detail the function of the division G-3 during the period 1917 through 1919. Authorized personnel and their assigned duties as found in official publications are compared with personnel actually assigned and the duties they performed during the first World War. Next, the G-3's relationship with commanders
and the remainder of the staff is discussed. Finally, the format of plans and orders are examined to ascertain the scope of the G-3's responsibilities.

Chapter IV describes the G-3 functions at division level during the period 1920 through 1939. Efforts to ascertain lessons learned during the War and put them to proper use are first discussed. This is followed by a detailed examination of the functions using the format established in the preceding chapter. The effect of the drastic reduction of the Army as a whole and the attendant difficulties in proving new doctrine and procedures is noted.

Chapter V, covering the period 1940 through 1945, examines the impact of World War II on division G-3 organization and procedure. The format established in the two preceding chapters is again used. The effect of advanced technology on the G-3 function is also discussed.

Chapter VI contains an analysis of the major findings of the study and the conclusions drawn therefrom.
CHAPTER II

BACKGROUND

Examples of military staffs can be found in the earliest military formations. The very early staffs, however, had no pattern and varied according to the personality and wishes of the individual commander. They first came into being as a result of the need to free the commander of administrative burdens so that he might devote his full attention to operational planning and execution.

It is generally accepted that a good deal of modern military staff procedure had its birth in the Swedish army of Gustavus Adolphus in the early 17th century. The Gustavian regimental major performed duties which approximated those of the modern regimental S-3 in addition to shouldering other responsibilities. The Brandenburg Army of 1635 had a staff organization which was patterned after that of the Swedes and this, in turn, became the basis for development of the famous Prussian staff system.

Prussian Staff Development

It was Frederick the Great who instituted the system of selecting and training junior officers for specific staff duties.

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presumably as a result of his experiences in the Seven Year's War (1756-63). The Prussian staff, like its parent army, increased in quantity and quality until finally the "Great General Staff" was established in Berlin by Scharnhorst in the early 19th century. It was also Scharnhorst who made the chief of staff a "junior partner" to the commander. Although the commander made the final decision, the chief of staff, if he desired, could record a dissenting opinion. In this respect, the Prussian staff system remained unique in European armies.

One other major feature of the Prussian (later German) general staff is worthy of mention at this time. The operations function was considered the most important and the operations officer joined the commander and chief of staff to form the "inner circle of the staff." This feature remained until after World War II when the West German staff organization was patterned after that of the United States in a move to reject Nazi methods and facilitate operations with U. S. forces in NATO.

The French Staff System

The French, concurrently with the Prussians, evolved their own staff system. Although they also were influenced by Gustavian

3U. ..., The General Service Schools, Command, Staff & Logistics (Fort Leavenworth: The General Service Schools Press, 1923), p. 29.
4Goerlitz, op. cit., pp. 31-39. 5Ibid., p. 90.
6Hittle, op. cit., p. 67. 7Ibid., p. 81.
8Ibid., p. 85.
9Condensed from Hittle's history, op. cit., pp. 87-123.
thought, the French had previously recognized a difference between intelligence and operations in staff functions. As a result, these functions were assigned to separate officers prior to 1610.

Pierre de Bourcet (1700-30) is credited with originating the "estimate of the situation" as well as founding his country's general staff. He became director of the Staff College at Grenoble in 1764; one year later, Frederick the Great opened his academy and staffed it, in part, with French instructors. Thus it is felt by some that Bourcet's thinking had an indirect influence on Prussian military development.

While no revolutionary concepts in French staff development resulted from the Napoleonic era, staff procedure continued to be refined. Berthier, Napoleon's chief of staff, outlined his ideas on staff organization in 1796. It was not until 1800, however, that Thiebault, the French Adjutant General, wrote the first manual to contain a complete set of principles of staff theory and technique. The superiority of French staff organization during this period is generally recognized.

Marshal Saint-Cyr instituted the French general staff corps and provided an academy for training its members in 1818. By 1826 the system was developed whereby staff officers were periodically rotated to tours of duty in the line as a prerequisite for promotion above the grade of captain. Unfortunately, the French staff development entered a period of regression soon afterwards, beginning with a law in 1833 which made the staff corps a closed service, open only to junior officers who were to remain on staffs throughout their entire careers.
Defeat in the Franco-Prussian War (1870-71) stimulated the French to improve the capability of their staffs. The reforms instituted included additional education for officers, rotation between staff and line, and reorganization of the staff proper. By 1900 the staff organization had evolved which formed the basis for our own system soon thereafter.

This organization provided for, in addition to a chief of staff, three bureaus. The first bureau was responsible for supply and administration, the second for intelligence and the third for operations. After World War I began, a fourth bureau was created which assumed responsibility for supply from the first. Thus the French staff system reached the maturity of organization which remains basically unchanged today.

The British System\(^\text{10}\)

Oliver Cromwell is credited with establishing, in 1645, the first regular standing army in England's history. Its staff, organized along Gustavian lines, was characterized by administrative efficiency. This characteristic was developed to an even higher degree by the Duke of Marlborough (1650-1722).

After Marlborough, British staff development remained dormant until the Duke of Wellington reorganized his staff shortly before 1800, placing most of the administrative duties under the quartermaster general and the bulk of the operations function under the adjutant general. The delineation of duties along functional lines was not complete, however, and each had operational and administrative

\(^{10}\)Condensed from Hittle's history, op. cit., pp. 130-159.
functions. A notable achievement of Wellington's organization was the standardization of field staffs at army and division levels.

After 1815, the British staff system again stagnated. No schooling for staff officers was provided until 1858 since it was felt that staff knowledge had to be acquired "in the field." It was not until after 1900 that sweeping reforms were instituted and the British attained a staff organization comparable to other European powers.

The staff organization established at that time combined Prussian thought with British tradition and exists with minor modifications today. It consists of two basic parts, the general staff and the administrative staff. The general staff has responsibility for operations and intelligence and the administrative staff, with its adjutant general and quartermaster general, is charged with personnel and logistics. No chief of staff is provided; the senior general staff officer (operations officer) coordinates the entire staff effort. The chief of the administrative staff has the authority to deal directly with the commander, however.

Early U. S. Army Staff Development

Washington's Revolutionary Army, after a shaky beginning, improved rapidly with the assistance of Baron Von Steuben. Although primarily noted for his infantry training methods, he functioned as an operations and intelligence officer during active operations. Washington received excellent "estimates" from Von Steuben on several occasions.\footnote{Hittle, op. cit., pp. 171-179.}
The field staffs of the Revolutionary Army were quite naturally patterned after the British, although French influence was present to a degree in some of the States' militia. Little was done to improve the system during the War of 1812 and the Civil War despite evidence that reform was needed. There was no staff organization on the national level, field staffs were formed at the discretion of the individual commanders, and no school was available to teach what little was known of staff procedure.  

It was Elihu Root, who became Secretary of War in 1899, who was most responsible for the program of reform from which our present staff system evolved. His initial effort culminated in the establishment, in late 1901, of an educational system for Army officers. He then attempted to establish a General Staff for the Army with a bill introduced in Congress on February 14, 1902.  

This proposal, however, met stiff opposition from Lieutenant General Miles, Commanding General of the Army, and the bureau chiefs. It was not until one year later, after much testimony from both sides, that Congress passed the legislation which abolished the office of Commanding General and established the office of Chief of Staff.  

The law, which became effective August 15, 1903, read in part:  

that the duties of the General Staff Corps shall be . . . to render professional aid and assistance to the Secretary of War as to general officers and other superior commanders, and to act as their agents in informing and coordinating. . . .

12 Ibid., pp. 180-185.  
13 Ibid., pp. 197-200.  
14 U. S., Statutes at Large, XXXII, Part 1, p. 830.  
15 Ibid.
The act further provided for the detail of, in addition to the Chief of Staff, two generals, four colonels, six lieutenant colonels, twelve majors and twenty captains for a four year period. For the first time in our history, a sizable group of officers was available to devote full time to the staff function.

However, great confusion existed within the Army, and even within the General Staff itself, as to just what functions these officers were to perform. Part of the confusion may have come from the term "general staff" itself. Borrowed from the German "Generalstab," a better translation might have been "General's staff." To many in the Army, however, it meant that the general staff officer had duties of a general nature, rather than a highly specialized function, and that those duties encompassed each and every military activity. 16

Unfortunately, there were no officers available at the time of the General Staff's creation who had had formal instruction in staff work and although very able officers were appointed to the General Staff Corps, they were without training or experience in this special field. Whereas the Germans, for example, had had a general staff with troops for several years before they established "The Great General Staff" in Berlin, we began our general staff development by starting at the top. 17

The initial problem created by this procedure is best summed up in a text used at Fort Leavenworth in 1923 which states:

16 *Command, Staff & Logistics*, p. 32.

We were confronted with the problem of establishing a general staff in a country where there were no trained general staff officers. It was a good deal like attempting to establish a college of physicians and surgeons in a country where there were no doctors. Without knowledge of the proper mission of the general staff and without the fundamental and specific training . . . it concerned itself with many matters which did not properly pertain to it and became correspondingly unpopular throughout the service.18

It should be noted, however, that at the time the general staff was established, there were no units in being large enough to warrant a general staff, save at the echelon at which it was established. Building from the bottom up, although perhaps more desirable, was not possible with the standing Army organization at that time.19

Fortunately, in 1906, a course of instruction was initiated at Fort Leavenworth which used "concrete cases" to teach command and staff principles. One of the fundamentals taught was that general staff officers were to assist commanders in the command function.20 The soundness of this training was to be combat proven in little more than ten years.

It was not until 1917, however, that a Staff Manual for the United States Army was produced. Prefacing the manual, the then Chief of Staff, Major General Bliss, stated that nowhere was the staff service treated in a single document and that information had to be obtained from a variety of regulations and manuals. He also noted: "The principal defect of our existing regulations is that responsibility for these duties is not clearly assigned to the General Staff

18Command, Staff & Logistics, p. 31.
19Connolly, loc. cit. 20Command, Staff & Logistics, p. 32.
or to any other agency under the Commanding General." The manual was, therefore, the first attempt to clearly define the functions of the various staff sections at division and higher levels.

CHAPTER III

THE DIVISION G-3 DURING WORLD WAR I

1917-1919

Introduction

This chapter traces the development of the division G-3 function during a relatively short period of time. It is extremely significant to this study, however, in that we find the newly formed staff doctrine of the Army being tested, expanded, and firmly established during war. Indeed, much of the doctrine which existed when the conflict had ended is with us even today.

When the United States entered the war in 1917, the Army was faced with many problems, among them the organization and training of a force many times its previous size. This, in turn, created an acute need for trained staff officers. Since the most capable and experienced staff officers had been placed at higher levels the need was particularly critical at division level.

Recognizing this need, the American Expeditionary Force established a Staff College at Langres, France, in November, 1917. Since the school at Fort Leavenworth was closed in 1917 for the duration of the war, the AEF course was the only one available during this period.

The faculty at Langres, which included French, English and American officers, carried out an intensive three month program of
instruction. It was here that many future division operations officers, as well as other staff officers, received their first instruction in staff procedure. A statistical breakdown of students attending the course in late 1918 reveals officers from 35 different divisions, representing 15 branches of service, and ranging from second lieutenant to brigadier general in rank.\footnote{Army General Staff College, Fourth Course, October-December 1918 (Langres, France: Base Printing Plant, 29th Engineers, 1918), pp. 9-10.}

It was at Langres that the custom of designating the general staff officers as "G's" originated. Adopted from the British, it began as a matter of convenience during the working of problems.\footnote{J. D. Hittle, The Military Staff, Its History and Development (Harrisburg, Pa.: The Military Service Publishing Co., 1949), p. 213.} At division level, the intelligence officer and operations officer were called G-2 and G-3 respectively, while the Adjutant, although not a general staff officer, was called G-1. It was not until some years later, however, that the titles became official.\footnote{Minutes of Conference of Department and Division Commanders, January 12-19, 1920, Washington, D. C. (Mimeographed.).}

**Organization**

At the beginning of World War I, the Army division was organized as shown in Figure 1. General Pershing considered this division too unwieldy for the fighting in France and received permission from the War Department to reorganize the division as shown in Figure 2. The Tables of Organization of 1918 reflected this change...
Figure 1. Major combat elements of the Infantry Division as derived by the author from Table 6 and 22.

Total personnel: 28,256

3.8 inch howitzers

3 inch
Figure 2. Major combat elements of the Infantry Division authorized by General Order 14, American Expeditionary Force, dated July 15, 1917, as derived by the author from the order.
and the latter organization, with minor revision, was used throughout the war. 4

The Staff Manual of 1917 contained a chart, similar to that shown in Figure 3, which portrayed the composition of the division staff. It should be noted that the general staff proper consisted of only the operations and intelligence sections. The Adjutant, in addition to having direct responsibility for the records section, was charged with the supervision of the technical and administrative staff.

The Table of Organization current at the time of the Manual's publication did not authorize assistants for any of the general staff officers and provided but one field clerk for the chief of staff, operations officer, and intelligence officer combined. 5 This authorization was carried forward to the 1918 Table without change. 6

Some provision was made to augment the general staff, however. The Manual had this to say about the general's aides: "When not on duty directly under the commanding general one will be detailed in the operations section and one in the intelligence section of the general staff." 7 It also stated that the "signal officer . . . is given duty in the operations section of the general staff. . . ." 8


6U. S., War Department, Table of Organization, Series A, 1918, (Washington: U. S. Government Printing Office, 1918), Table 2 dated October 1, 1918.

Figure 3. The Organization of the Staff as shown in the Staff Manual, United States Army, 1917 (Washington: U. S. Government Printing Office, 1917), Appendix A. The grades shown are those authorized by Table of Organization, Series A, 1918 (Washington: U. S. Government Printing Office, 1918), Part I, Table 2.
In regard to the latter statement, it is interesting to note that the authorized grade for the signal officer was a lieutenant colonel while that for the operations officer was a major. Just what relationship actually existed between these two officers can only be speculated upon, since no mention of the signal officer's duty with the operations section is contained in accounts of the day. It is possible that he was fully occupied with his primary duty and had little or no opportunity to assist in the operations section.

As might be expected, divisions found it necessary to augment their operations sections in combat. The initial U. S. division to fight in France was the 1st Division. In describing the organization of that division's operations section during the Meuse-Argonne campaign, a former member of the section stated: "In the 1st Division it was found that the minimum number of officers that the [operations] section could function with was four..."^9

The 1st Division G-3, in addition to supervising the entire section, was personally responsible for combat orders, estimates, troop movements and contact with higher, lower, and adjacent units. The "executive" was responsible for routine reports, records, and files; he also assisted the G-3 and was prepared to take over the latter's duties if necessary. Two "utility" officers actually performed the liaison with the brigades and assisted in other duties as necessary.^10

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^10 Ibid.
Additional liaison officers were detailed to higher and adjacent units when necessary. These officers came from other staff sections: Judge Advocate, Inspector, etc. A sergeant, who was a mimeographer and typist, and a private to act as messenger, orderly, and janitor rounded out the section.\(^{11}\)

The need for additional personnel for the operations section was apparently felt in the 3rd Division also. While in France this division assigned five officers to assist the division G-3 in the performance of his duties.\(^{12}\) Thus we find very early that it was necessary to augment the one authorized officer space in the operations section in order that it might properly function.

The practice of using administrative staff officers for liaison proved unsatisfactory in the 1st Division, a result of the lack of training of those officers in this type of duty.\(^{13}\) Nevertheless, this policy was to be a part of our doctrine throughout the 20's, due to the lack of available personnel who were better qualified.

**Duties and Responsibilities**

The 1917 Staff Manual, which was in effect throughout the war, enumerated the duties and responsibilities of the operations section as follows:

1. Planning for maneuvers and combat.

\(^{11}\)Ibid.

\(^{12}\)Letter from Sumner Waite, Assistant G-2 of the 3rd Division in 1918, to H. H. C. Richards, March 17, 1930. (Attached to an unpublished monograph by Major Richards in the Command and General Staff College Library, Fort Leavenworth, Kansas).

\(^{13}\)Caffrey, op. cit., p. 41.
2. Providing advice pertaining to attachment and detachment of units.

3. Drafting of field orders and "defense schemes."

4. Posting of the daily situation map, to include intelligence information.

5. Organization for combat.

6. Liaison with adjacent commands.

7. Movement and positioning of units.

8. Responsibility for the preparation of training plans and the operation of division schools.

9. Preparation of the war diary.

10. Operation of the message center.

11. Responsibility for "the efficient working" of all forms of communications and signal security, through the signal officer.\textsuperscript{14}

For movements, the G-3 normally prepared a warning order and followed it with a complete field order. Regardless of the type of movement (rail, motor or foot march), the field order included dates, routes, special officer assignments, march or movement tables, and billeting or assembly areas in both old and new locations.\textsuperscript{15} "In the 1st Division, troop movements of a major nature were handled by G-3 personally with all other available members of the section assisting."\textsuperscript{16}

\textsuperscript{14}Staff Manual, U. S. Army, 1917, p. 11.

\textsuperscript{15}U. S., American Expeditionary Forces, Handbook for Brigade and Division Commanders (Langres, France: Army General Staff College, 1918), pp. 3-25.

\textsuperscript{16}Caffrey, op. cit., p. 40.
The attachment and detachment of units was not a common occurrence during this period. Only occasional examples can be found in which tanks or special types of artillery were added to a division for a particular operation. In these few cases, the G-3 was responsible for a recommendation concerning their employment with the division.

In order to formulate plans and draft orders intelligently, the G-3 was expected to perform frequent reconnaissances. During the performance of this "outside duty," as it was called, the G-3 also gained information for future estimates, gathered special information for the commander and insured that subordinate commanders understood their responsibilities in planned operations. The formats for plans, orders, and estimates are covered in a separate section later in this chapter.

The next duty listed, that of posting the situation map, brings out the point that only one such map was kept in the division command post and it was the responsibility of the G-3. The G-2, however, was charged with the gathering of intelligence information and the preparation and distribution of a daily intelligence summary. 17

The term "organization for combat" did not have the same meaning in 1918 that it does today; instead, it was used to describe tactical formations. In France, the formation normally used in the attack was brigades abreast, two regiments in line, each regiment in a column of battalions. The defense was organized in depth with a minimum of two positions occupied by each echelon up to the regiment.

The normal division frontage was approximately 2500 yards. For both offense and defense, the division habitually utilized engineers or other division troops for its reserve rather than infantry units from the brigades.

The liaison duties of the G-3 extended only to the adjacent commands in the 1917 Manual. The need for liaison with higher and subordinate units was soon felt in combat, however, and the G-3 acquired these additional liaison responsibilities.

The next duty, that concerning the movement and positioning of units, seems, on the surface, to conflict with the responsibility of the Quartermaster. The latter officer, who was under the supervision of the Adjutant (G-1), was charged with the transportation of personnel, selection of campsites and the provision of quarters as well as many other duties. In practice, however, the delineation of responsibility between the G-3 and the quartermaster was simple and logical. The G-3 selected (with the commander's approval) the general area, planned the movement, drafted the orders and supervised the move. The quartermaster, on the other hand, provided the means of movement and, in the case of an administrative move, procured and allocated space in the new area. For tactical moves, the G-3 was responsible for the placement of units in the new location.

The training responsibilities of the G-3 as stated in the Staff Manual were very broad indeed:

The operations section is charged ... with the preparation of plans for the instruction and training of the command for war; the operation of schools for staff, artillery, musketry, bombers, etc.; the preparation of problems, schedules and critiques, and the conduct of maneuvers.\footnote{Ibid., p. 11.}
These duties encompassed all aspects of training except conduct and supervision. At Langres, it was taught that the conduct of training was a responsibility of the commanders and that all division staff officers were expected to supervise training of the subordinate commands. "While training, Divisional Staff should be constantly out on the ground with the troops, helping and advising, learning their weak points and bringing them to the notice of the Divisional Commander."²⁰

The preparation of the war diary was accomplished by filling out a standard form and forwarding it through channels to the War Department. Each form covered a twenty-four hour period and allowed the G-3 to record all events which were significant to the division as a whole. Columns were provided for listing the number of officers and men who were killed, wounded, or missing; other columns were used to list losses of horses, mules, wagons, guns, and caissons. Another section provided for a chronological record of events, and appropriate sketches, orders, and messages were appended to the diary when forwarded.²¹

The G-3's responsibility for the message center and signal operations was a result of the operations section's need to have immediate knowledge of important information received from higher, lower and adjacent units. The majority of information at this time was transmitted by written messages, hand carried from one headquarters

²⁰U. S., American Expeditionary Forces, Army General Staff College, "Artillery-Infantry Training, AEF" (A mimeographed collection of manuscripts and lesson plans in the Command and General Staff College Library, Fort Leavenworth, Kansas), Conference 138, Second Course, undated, p. 2.

²¹Staff Manual, U. S. Army, 1917, Appendix C.
to another. The lack of detailed information concerning the relationship between the signal officer and the G-3 in this area has already been noted; we do know, however, that the 1st Division G-3 was directly responsible for the delivery of field orders to subordinate units.  

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Plans, Orders and Estimates

In combat, the primary duty of the G-3 was the formulation of plans and orders. An examination of their format, therefore, will give further insight to the scope of the G-3's responsibilities.

During this period, formats of orders were prescribed or suggested for every conceivable type of military operation. Attack, withdrawal, defense, movement to contact, and administrative movement are but some of the tasks for which special formats were provided. If time permitted, elaborate plans were prepared; when necessary, however, brief orders were issued, allowing the subordinate commanders considerable flexibility in execution.

A field order for an attack during "open warfare" was, therefore, quite different from the plan of engagement used in trench warfare. Due to the tactical situation in France, the plan of engagement was most often used in the AEF. The format shown below was taught at Langres; formats in other publications current at that time vary only slightly from this one.

Plan of Engagement

I. Mission

II. Additional Means

22 Caffrey, op. cit., p. 35.
III. Information
IV. Intention of the Maneuver [sic]
V. Mission and Zone of Action of the Attacking Forces
VI. Artillery Preparation
VII. Use of Special Means
VIII. Use of Aeronautics (Aeroplanes and Balloons)
IX. The Use of Cavalry
X. Attack Dispositions for the Infantry
XI. Support of the Attack by Artillery
XII. Location of Commanding Posts.

The next few paragraphs briefly explain the information contained in each section of the plan. The mission was stated as received from higher headquarters. Section II, Additional Means, was similar to the organization for combat that we use today. All units attached to the division were listed and further attached to the brigades and/or left under division control. Machine gun units, engineers, aviation, and various types of artillery were among those units sometimes attached.

A brief summary of what was known of the enemy defense system was given under Information. The section which followed, "Intention of the Maneuver," was not unlike the present "concept." It contained a brief description of the planned maneuver and the timing to be employed.

Section V, Mission and Zone of the Attacking Forces, was the heart of the order. Each infantry unit, down to battalion level, was given objectives, zones of action, and the direction of the attack. This section also provided for the composition, location, and method

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of employment of the reserve and often contained information concerning the missions of adjacent units.

Only the general plan for the artillery preparation was found under the section bearing that title. The details of artillery support were contained in the Artillery Plan which was prepared by the artillery commander. Use of Special Means concerned the planned employment of gas, smoke, and tanks. The latter was, of course, relatively uncommon.

The next two sections, Aeronautics and Cavalry, contained only brief mention of the planned use of these means since the details of their employment were contained in separate plans. The initial dispositions of the troops, although dictated by the "Intention of the Maneuver," were described separately in Section X.

Section XI, Support of the Attack by Artillery, insured that all units knew where steady barrages were to be fired, when creeping barrages should be moved forward, and at what distance the infantry should follow the fire. As previously stated, the detailed instructions for artillery units were contained in the Artillery Plan. Finally, the last section listed the location of division and brigade command posts.

Depending on the amount of time available for planning, a varying number of supplementary plans were used in conjunction with the plan of engagement. Some of these were plans for the use of artillery, machine guns, tanks, cavalry, and the sanitary service. Others concerned military police and prisoners, liaison, replenishment, evacuation, and occupation of the conquered ground. All of the supplementary
plans were the responsibility of the appropriate commander or technical staff officer.\textsuperscript{24}

So much for the "school solution." The format actually used in combat differed not only between divisions, but within them, as borne out by Field Order 27, 1st Division, dated July 16, 1918.\textsuperscript{25} Although this order most closely follows the Langres format of any issued by that division, it consists of seventeen paragraphs and excludes cavalry, aviation, and attachments. The additional paragraphs were used to describe the missions of army, corps, and adjacent units as well as to provide administrative instructions. Furthermore, the order was amended by changes, annexes (Liaison and Intelligence), and memorandums totaling twelve before a message from G-3 on July 17th ordered the attack to commence at 0435 the following morning.

Although the spirit of offense permeated the teachings at Langres and prevailed throughout the AEF, the realities of trench warfare dictated a defensive posture for our divisions much of the time. The G-3, therefore, was often called upon to draft defense plans. The format of such a plan, the one taught by the AEF Staff College, is shown in Figure 4.

Most of the section titles are self-explanatory; Paragraph V, however, merits additional discussion. The following four points were to be listed under this paragraph:

\textsuperscript{24}Ibid.

\textsuperscript{25}World War Records, First Division, AEF, Volume II (A mimeographed collection of 1st Division documents bound in chronological order. In the Command and General Staff College Library, Fort Leavenworth, Kansas).
PLAN OF DEFENCE FOR THE SECTOR OF A DIVISION

FIRST PART - GENERAL VIEW

I. Mission of the Division.
II. General Organization of defence in the Sector.
   a) Boundaries of the Sector of the Division.
   b) Brief description of the Sector of the Division.
   c) Principal features of the terrain.
   d) Short description of the 1st position.
   e) Short description of the intermediary position. (if there
      is one).
   f) Short description of the 2nd position.
III. Division in subsectors of Brigades, Regiments and Battalions.
IV. Elements of the Sector not belonging to the Division. (Terri-
    torial units, Trench batteries, machine guns, etc.)

SECOND PART - PLAN OF DEFENCE

V. General Principles followed in establishing the plan.
VI. Determination of the probable zones of attack.
VII. Choice of the main centers of resistance.
VIII. Distribution and employment of the troops occupying the sector.
IX. Preparation of local counter-attacks.
X. Study of the conditions of execution of counter offensives by
    the reserves of Brigades, Division and Army Corps.
XI. Arrangements for the troops of the Division in case of alarm.
XII. Means of defence against tanks.
XIII. Use of aeronautics.
XIV. Instructions in case of a gas attack.
XV. Plan for replenishment.
XIV. Plan of evacuations.

THIRD PART - PLAN FOR LIAISON

FOURTH PART - PLAN OF ACTION FOR THE ARTILLERY

FIFTH PART - MAPS

Figure 4. The plan of defense as found in "Artillery-Infantry
a) The defence is carried out on successive positions comprising several lines.
   b) Any troop affected to the defence of a portion of the terrain must never abandon it, no matter what happens.
   c) Any terrain lost is retaken by a counter-attack carried out by troops held in reserve for this purpose.
   d) Everything must be organized for an immediate counter-attack i.e. to be launched as soon as the enemy has penetrated into our lines.  

The paragraph was, therefore, a statement of the philosophy of the defense as it was then fought.

As in the case of the plan of engagement, the divisions did not follow this precise format in writing their orders. The salient points were included in the actual plans, however, including some of the "general principles." For example, the 1st Division's Plan of Defence for the Cantigny Sector dated June 28, 1918 contains this statement:

   ... fight in place. The only elements in the Division authorized to retire are the sentry posts in advance of the platoons in the Outpost Zone. The safety of each man lies in every man's killing Boches.  

If the situation permitted, a definite sequence was established for the formulation of these plans. First the G-3 received guidance from the commander and/or chief of staff and drafted the basic plan. He then conferred with subordinate commanders concerning the employment or distribution of their units; with G-1 concerning replenishment, evacuations and other administrative matters; and with the commanders of special units concerning their employment. As previously mentioned, artillery, machine gun, aviation, cavalry, and other unit commanders


27World War Records, First Division, AEF, Volume II.
were responsible for detailed plans for the employment of these means; these plans became annexes to the basic plan.

Since time did not always permit the preparation of extremely detailed plans, however, warning, fragmentary or brief field orders were often issued. Contrary to today's practice, however, these were habitually written and dispatched by messenger to subordinate commanders.

The following account, written by an assistant G-3 of the 1st Division during the operation described, clearly demonstrates the use of warning, fragmentary, and field orders during a move by the division in connection with the Meuse-Argonne campaign:

G-3 . . . was called to the telephone /at 1630 hours/. It was the Army G-3 who gave the division G-3 a startling order to move the Division by marching /starting within two hours/ to the Nixeville area; that all units would be in the new area by daylight the following morning; that the "voie Sacree" could not be used for nor crossed during the movement. G-3 immediately reported to the Chief of Staff and both of them went into conference with the Division Commander. The latter made two important decisions ie. first to have the organizations alerted at once and second to issue fragmentary orders for the march.

G-3 upon conclusion of this conference, sent an assistant G-3 and a member of the French mission to the Nixeville area on reconnaissance and to report back not later than 10:00 PM (I am not certain of the hour--it may have been 9:00 PM).

G-3 then held a conference with G-1 and the brigade and organization liaison officers. He instructed them to alert their organizations and return in 30 minutes for orders.

The Chief of Staff and G-3 next planned the details of the march. When the liaison officers reported, each was handed a map with the roads his organization were to use with brief written instructions attached and was told to inform his commanding officer that further orders would be sent later.

Based upon a map study, the Chief of Staff and G-3 prepared the formal field order for the move which included march
tables and billeting areas. Upon the return of the assistant G-3, the necessary adjustments were made in the billeting areas and FO 41, 1st Division, was the result.  

It is now appropriate to discuss the manner in which the G-3 gathered information to draft orders once the battle was joined. During heavy engagement, whether defense or attack, it was customary for the staff, particularly the G-3, to obtain direct reports of the action from officers of the staff sent forward for that purpose. These officers occupied observation posts or, when possible, "advanced information centers." The latter is described as a "bomb-proof shelter in the first line trench, which has telephonic connections; to it comes all the information from the firing line either by telephonic or optic communication, or by messenger." If the battle progressed beyond the view from this center, the officer stationed there moved forward to the command post of the unit making the attack as soon as telephone communications were established to the rear from that location.

In the event of a deep penetration, when telephone lines could not be laid quickly enough, aircraft and radio were used to keep the commander, through his staff, informed of the progress. Ideally, message centers were established in the vicinity of each radio with landing strips for the aircraft provided nearby. In order to maintain the momentum of a deep penetration, doctrine dictated that mission type orders be issued, giving only objectives and direc-

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tions of attack. Subordinate commanders were thus allowed to use their initiative and first hand knowledge of the situation to the best advantage.\textsuperscript{30}

One additional device available to the G-3 as an aid in the performance of his duties remains to be discussed: the "estimate of the situation." Although the formulation of estimates was not mentioned in the 1917 Staff Manual, it was taught to all potential staff officers at Langres as a means for the orderly consideration of those factors affecting decisions. The format used at Langres is shown below.

ESTIMATE OF THE SITUATION

1. Mission

2. The Enemy
   (Strength
   (Position
   (Movements
   (Probable Intentions

3. Our Own Forces
   (Strength
   (Position
   (Supporting Forces

4. Terrain

5. Comparison of Plans

6. Decision\textsuperscript{31}

Students were taught not to "slavishly follow the form" but to vary it to suit the situation under consideration. On the other hand,

\textsuperscript{30}Ibid., Conference 107, April 29, 1918, p. 8.

\textsuperscript{31}U. S., American Expeditionary Forces, Army General Staff College, "Organization, Administration and Miscellaneous, AEF," (A mimeographed collection of manuscripts and lesson plans in the Command and General Staff College Library, Fort Leavenworth, Kansas), Lecture 7, dated December 7, 1917, p. 9.
it was recommended that they memorize the format as a general guide so that they might not forget important considerations when making an estimate. Furthermore, the methodical approach brought about by the proper use of the estimate format precluded the staff officer from jumping from idea to idea and allowed him to complete estimates more rapidly. \textsuperscript{32}

Command and Staff Relationships

The purpose of a staff has always been to assist the commander in the exercise of his command; the purpose of the staff during this period was no exception. The question arises, however, concerning the manner in which the assistance was accomplished within the staff and the relationships which were established between the staff and the remainder of the command as a result thereof. The purpose of this section, therefore, is to examine the relationship of the G-3 with the other key members of the division.

The G-3 was directly responsible to the Chief of Staff as were the Intelligence Officer (G-2) and the Adjutant (G-1). Since an assistant division commander was not provided, the Chief of Staff represented the commander in the latter's absence, pending the formal assumption of command by the next senior line officer in the division. In the event both the commander and the chief of staff were absent, the G-3, being the next senior general staff officer, performed the duties of the chief of staff, consulting the senior line officer present prior to the issuance of orders. \textsuperscript{33}

\textsuperscript{32}ibid., pp. 8-9.

\textsuperscript{33}Staff Manual, U. S. Army, 1917, p. 10.
Once a division entered combat, this "order of succession" became increasingly important. Conceivably, many important tactical decisions were made by G-3's in the absence of higher authority due to the relative lack of communications available at that time. This may account for the practice of divisions assigning lieutenant colonels as G-3's. \textsuperscript{34}

The responsibility for the coordination of all staff action was given to the chief of staff by the 1917 Staff Manual. However, direct contact between staff officers was necessary for the efficient performance of their duties. Perhaps the most important coordination required was that between the G-3 and the G-2.

It has already been noted that the G-2 furnished the operations section the enemy information necessary to complete the daily situation map. In addition, the G-3 required intelligence for making estimates, planning operations and drafting orders. Unfortunately, a collection system had not been perfected in our Army at that time.

"The G-2 section collected information of the enemy, vast amounts of it, but there was no systematic search for information in connection with the mission of the Division and the Division scheme of maneuver." \textsuperscript{35}

Normally, the G-3's contact with the technical and administrative staff was through the G-1 who was responsible for the administrative portion of plans and orders. It was customary, therefore, that

\textsuperscript{34}Another logical reason for this practice was to give the G-3 a rank equal to that of the Adjutant (G-1), Quartermaster, Inspector, Surgeon, Judge Advocate, Signal Officer and Machine Gun Officer, all of whom were listed as lieutenant colonels in the Table of Organization, Series A, dated October 1, 1918.

\textsuperscript{35}Caffrey, \textit{op. cit.}, p. 41.
he be present during the drafting of operations orders.\textsuperscript{36} In addition, the G-3 was required to furnish copies of all important documents to the G-1, who was charged with the maintenance of the division's permanent files.

The relationship of the G-3 with subordinate commanders is not easily defined. The Staff Manual stated that "staff officers, as such, have no authority over the troops... every order given by them is given by authority and on the responsibility of the authorized commander."\textsuperscript{37} The latter portion of that statement implies that the commander had the prerogative to delegate directive authority to his staff.

Evidence that this authority was delegated is contained in a book written by an officer who was a member of the AEF staff and later commanded the artillery brigade of the 1st Division in combat. "A general staff officer, acting in the name of his commander, can give orders to officers who far outrank him. The operations officer of a division, who may be a Lieutenant-Colonel or a Major, may himself direct a Brigadier General what to do."\textsuperscript{38} (The infantry brigades of the division were commanded by brigadier generals in 1918.)

There is also evidence that the practice was considered advantageous to the efficient exercise of command. A draft manual, part of a study of staff organization conducted by the War Department during 1918 and 1919, contains this paragraph:

\textsuperscript{37}Ibid., p. 19.  
Theoretically, all orders to subordinate commanders emanate from the higher commander himself. . . . Yet all have staffs organized alike and many of the functions of command are performed for each by his staff. This leads to more or less direct dealings between these corresponding staff officers of the higher and lower staffs, all acting under the authority and responsibility of their respective commanders.39

Although the manual was never published, it is indicative of the thinking of that time.

It is evident, therefore, that directive authority was given to at least some G-3's. This procedure, if not wise, is certainly understandable. Few officers, regardless of their rank, had had the benefit of combined arms training at this time. Division G-3's were either graduates of the staff course at Fort Leavenworth or the intensive program of instruction at Langres. This training, coupled with the almost constant contact with the commander, was naturally conducive to building the commander's confidence in them.

Summary

Basically, our staff "system" during the period 1917 to 1919 was a hybrid of French organization and British terminology. The dominating influence of the French on our AEF staffs was a natural outgrowth of the situation which initially placed our forces under French command. The fact that we paralleled their organization greatly facilitated the pursuit of World War I.

Although the operations section was authorized too few personnel to properly perform its function, the divisions somehow acquired addi-

39U. S., War Department, "Study in Staff Organization 1918-1919," Appendix VII (Mimeographed), Section I.
tional officers and men to augment the section. The G-3's duties, as actually performed, followed stated doctrine rather closely; his position, however, assumed greater importance than was originally intended. The plans and orders formulated by G-3, very detailed by present standards, were suited to the deliberate, slow moving characteristics of warfare in 1918.

The relationship of the G-3 with the remainder of the division's key personnel, particularly the subordinate commanders, seems contrary to sound staff doctrine. However, it was not without precedent, notably in Prussian staff practice. And, too, it served to utilize the specialized training which these officers had received.

This, then, was the "knee pants" stage of the division G-3's development. The general staff doctrine of the U. S. Army as a whole had faced, and passed, a severe test in its infancy. The experience gained during this period was to be evaluated and correlated during subsequent years and a more concrete set of staff principles and procedures set down.
CHAPTER IV

BETWEEN THE WARS, 1920-1939

Introduction

The victory in Europe signalled a frenzied attempt on the part of the American people to return to normal. The "war to end all wars" over, a great deal of pressure was placed on the Army to return the millions of temporary soldiers from France and separate them from the service. Although this task posed several problems, notably the lack of available shipping, it was accomplished with dispatch.

The National Defense Act of 1920 authorized a standing Army of 297,000 officers and men.^1 Because of budgetary limitations imposed by the Congress, however, the active Army force had been cut to 150,000 by October of 1921. In his 1922 report to the President, Secretary of War Weeks lamented an even further reduction in strength:

Their act of revising the plans for operation was met at the close of the year by the act of appropriation which enforces upon the Regular Army a reduction to a strength of approximately 12,000 officers and 125,000 enlisted men. The fiscal year [of 1922] thus closed with the Regular Army shaken under an economy drive which in its present effects has been quite damaging.\(^3\)

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^3 Ibid.
This and other pleas for additional monies fell on deaf ears and by June 30, 1926, the actual active strength of the Army had dwindled to 11,961 officers and 113,066 enlisted men.\textsuperscript{4} This strength was not materially improved until the late 1930's when the aggregate strength was gradually increased to 176,279 by June 30, 1938.\textsuperscript{5} Soon thereafter, the possibility of war, followed by our actual entry into the conflict, caused a rapid buildup of our forces.

Meanwhile, however, the small active army had a great many missions to perform. Among those listed in a Staff School text in 1923 were the maintenance of:

1) Garrisons for the continental frontiers of the United States;

2) A covering force in the event of major war;

3) A small, highly trained, completely equipped expeditionary force;

4) Overseas garrisons;

5) Garrisons for the permanent seacoast defenses;

6) A national police force;

7) Training cadres for the development and training of the Regular Army, National Guard and Organized Reserves; and


3) An organization for the administration and supply of the peacetime establishment.\(^6\)

Despite this wide range of responsibilities and its small strength, the Army managed to organize a portion of its force into eleven divisions in 1922. Only four of these were active, however, while the remainder were "partially active."\(^7\) In an attempt to supplement this small Regular Army with forces which could be rapidly mobilized, 32 Organized Reserve divisions were organized. In addition, 22 National Guard divisions, some of which were in being prior to the War, continued to train.\(^8\)

It is interesting to note that the fully active divisions were not garrisoned on a single post. Instead, each division had its forces stationed at more than two places. For example, the 1st Cavalry division had a brigade each at Fort Bliss and Fort Clark, Texas. Troops of these brigades were stationed at smaller posts throughout Texas and New Mexico. From time to time, the divisions would "concentrate" for a maneuver or other field exercise. During the 1920's and early 1930's, the divisions were able to assemble in the field only


\(^7\)U. S., War Department, Report of the Secretary of War to the President, 1922 (Washington: U. S. Government Printing Office, 1922), p. 138. "Partially active" divisions were, in reality, single regiments on active duty which represented a cadre for their parent divisions in the event of mobilization.

\(^8\)Command, Staff and Tactics, pp. 5-7.
every other year at best, and then usually at less than complete strength.\(^9\)

Because of travel costs and the widespread locations of the forces, only command post exercises were held above division level prior to the late 1930's. The primary purpose of these "CPX's" was to train the commanders and staffs of the Reserve and National Guard divisions. Unfortunately, these CPX's were not held at regular intervals, primarily because of budget limitations. As an average, one per year was programmed and held in one of the Corps (later Army) sectors on a rotation basis. They proved particularly useful in the training of staffs, especially as the experience level attained during World War I declined.\(^10\)

The mission of training the Reserve and National Guard forces consumed a large portion of the active Army's effort. Although the number of active personnel engaged in this effort varied from year to year, the average figures in terms of percentage are startling. For example, it was reported that eighty percent of the officer personnel from the combat arms were engaged in reserve component summer training in 1923.\(^11\) The number of officer and enlisted personnel

\(^9\)This information was gathered from a study of the Reports of the Secretary of War to the President for the years 1922 through 1938, and the reports of various field exercises, maneuvers and CPX's found in the library of Command and General Staff College, Fort Leavenworth, Kansas.

\(^10\)Ibid.

so engaged during the summer of 1926 was placed at forty-nine percent of the total active force.  

Individual training of staff officers was conducted at Fort Leavenworth during this period. Between 1920 and 1922, selected graduates of the School of the Line were retained for a second year of study in the Staff College. In 1923 the program of instruction was modified and all students at Leavenworth attended the Command and General Staff Course for one year. This course was lengthened to two years for the period 1927 through 1935 when it again reverted to one year. The one year program remained in effect until the outbreak of World War II.

It was at Fort Leavenworth that staff doctrine was formulated and sustained during the lean years between the wars. Much of what follows in this chapter was gathered from texts, regulations and manuals which were written at the General Staff School during this period.

Determination of Lessons Learned in the AEF

Immediately following the end of World War I, several boards were convened in an attempt to evaluate the experience gained in that conflict. Two of these boards saw fit to include recommendations concerning division staffs in their recommendations.


The most important of these boards was the Superior Board on Organization and Tactics which consisted of six experienced officers, including three major generals. Convened by Headquarters, American Expeditionary Force, the board met on April 27, 1919 and deliberated for more than two months. Its report included the following recommendation:

In units down to include a division, a Director with the necessary assistants must be at the head of each of the sections of the operative staff; their designation should be "Director of Personnel," (G-1), "Director of Intelligence," (G-2), "Director of Operations," (G-3), and "Director of Logistics," (G-4).\textsuperscript{14}

In discussing whether the members of this staff should be general staff officers, the board noted that it made little difference, the question being one of name only. The important point, they felt, was that these officers would have to be educated in general staff procedures and be carefully selected for duty on the staff.\textsuperscript{15} Although General Pershing took exception to many of the board's recommendations in his forwarding indorsement, he did not comment on this particular point, which, in effect, constituted his approval.

The "Lewis Board," also convened by the AEF during this period, concerned itself primarily with organization, tactics, and equipment within the division. Its only recommendation concerning the general staff called for the addition of a major to the operations section to act as artillery operations officer. This officer was to be responsible for the artillery situation map and the preparation of the


\textsuperscript{15}\textit{Ibid.}, p. 9.
artillery portions of orders and reports. This would relieve the artillery commander of these duties and, in the board's opinion, more efficiently integrate the artillery into the overall division effort. 16

Neither of the board's recommendations was placed into effect in its entirety. By dividing the duties formerly performed by the Adjutant (G-1) between the G-1 (Personnel) and the G-4 (Logistics), the basic four sectioned general staff organization recommended by the Superior Board was followed. However, the title of "director" (and its inherent authority) was not given to the general staff section chiefs. The recommendation of the Lewis board was not followed in that the artillery commander retained responsibility for the employment of that arm to include the formulation of orders and reports. The G-3 did, however, receive responsibility for making recommendations concerning the integration of artillery into the tactical scheme.

Organization

The organization of the infantry division as employed in France was considered to be a good one; consequently, no drastic changes were made in its basic structure. However, as a result of board recommendations previously discussed, and other studies, certain refinements were made in the division organization. These

16 Report of the Board convened by Special Order 98, General Headquarters, American Expeditionary Force, dated April 8, 1919 to "consider lessons gained from experiences of the war."
were incorporated in the new division Table of Organization published in 1921.¹⁷

This table gave official recognition to the "G" titles which had been used during the war and established a general staff of four sections. These included the previous G-2 (Intelligence) and G-3 (Operations) sections and, in addition, the G-1 (Personnel) and G-4 (Logistics) sections. The Adjutant General, previously known as G-1, was placed on the technical and administrative staff and charged only with records and administration. The general staff section chiefs were listed as "assistants to the Chief of Staff."¹⁸ The organization of the division staff is shown in Figure 5.

Note that each of the general staff sections was now authorized a lieutenant colonel. In addition, the G-3 section included two other officers, two warrant officers, and one enlisted man. Although several new tables were published later in this period, the authorizations remained essentially the same until the advent of the "triangular" division just prior to World War II. The discussion of this division's organization appears in the following chapter.

A suggested organization within the G-3 section was set forth in a General Service Schools text in 1923. It was recommended that the G-3 concern himself with the overall supervision of the section and perform those duties which he felt important enough to warrant his personal attention. One of his commissioned assistants was charged


¹⁸Ibid.
BASIC ORGANIZATION OF A DIVISION STAFF

Division Commander  
(Maj Gen)  

3 Aides  

C of S  
(Col)  

AC of S: G-1  
(Lt Col)  

AC of S: G-2  
(Lt Col)  

AC of S: G-3  
(Lt Col)  

AC of S: G-4  
(Lt Col)  

General Staff

Technical and Administrative Staff

Adjutant (Lt Col)  
Inspector (Lt Col)  
Judge Advocate (Lt Col)  
Chaplain (Capt)  
HQ Omdt & P. M. (Lt Col)  
NG & Howitzer O. (Lt Col)  
Tank Commander (Capt)  
P.A. Brig C.O. (Brig Gen)  
*Air Service C.O. (Maj)  
*Signal Officer (Lt Col)  
*Engineers (Col)  
*Surgeon (Col)  
Ordnance (Lt Col)  
Quartermaster (Lt Col)  
Finance Officer (Lt Col)  

*Indicates staff officers who also command division units.

Figure 5. Organization of the division staff as shown in Military Organization of the United States (Fort Leavenworth: The General Service Schools Press, 1924), p. 45. Grades shown were added by the author from those authorized by Table of Organization 2W, dated April 27, 1921 (Washington: U. S. Government Printing Office, 1921).
with office administration to include filing and the routine preparation of orders, messages, reports, journals and the diary. The other officer was assigned to "outside duty" such as reconnaissance, inspections and the supervision of officers performing liaison duty. 19

One warrant officer was designated as chief clerk while the other worked on field orders, messages and reports. These positions were later changed to non-commissioned officer "slots" with the same duties. The other enlisted man was a clerk. If drafting was necessary, it was recommended that one of the four draftsmen assigned to the intelligence section be utilized. 20

Liaison officers were not authorized during this period; instead, the utilization of officers from the administrative staff for this purpose continued to be recommended:

Officers of the inspector and judge advocate sections may be utilized by the G-3 with the approval of the division commander to assist the section in keeping in touch with the situation at the front. 21

Duties and Responsibilities

A Staff School text of 1921 lists the following duties for the division G-3:

1) Preparation of estimates of the situation;
2) Preparation of combat plans;
3) Performance of necessary reconnaissances;

19 U. S., The General Service Schools, Command, Staff and Logistics (Fort Leavenworth: The General Service Schools Press, 1923), Plate X.

20 Ibid., p. 70a.

21 Ibid., p. 69.
4) Responsibility for cooperation with and by contiguous forces:

5) Responsibility for troop movements and locations;

6) Preparation of drafts and field orders;

7) Preparation of a journal of operations;

8) Preparation of operations reports;

9) Supervision of signal communications;

10) Responsibility for training;

11) Responsibility for the combat efficiency of the troops;

and

12) Control of the message center.\(^{22}\)

The difference between the duties found in this list and those published in the 1917 Staff Manual reflect, to some degree, the experience of World War I. For example, it was previously noted that the need for estimates and reconnaissances was stressed at Langres and that these duties were actually performed by division G-3's in combat. On the other hand, although liaison with subordinate units was practiced in France, the above list does not include that duty.

Other differences exist between the two lists. The earlier manual included posting of the situation map and the providing of advice pertaining to the attachment of units, neither of which was carried forward to the list above. However, the first of these duties is discussed elsewhere in the 1921 text as a duty of the G-3 but apparently was not considered important enough to include on the list.

The second may have been dropped because it had been found that attachments rarely occurred in France.

In 1923 still other changes were made which further delineated the duties of the G-3 along functional lines. While G-3 retained the responsibility for plans and orders concerning the use of signal communications, he was no longer charged with the direct supervision of the communications means. In addition, the G-3 lost the responsibility for the operation of the message center which was transferred to control of the signal officer. The relationship established between the G-3 and the signal officer is discussed in detail later in this chapter.

The 1923 text's list of G-3 duties once again included the maintenance of the situation map on which friendly and enemy dispositions were pictured. In addition, the operations map was introduced in this text. This map was used to depict lines of departure, disposition of troops, zones of action, planned maneuver objectives, and important enemy defenses. The map was, then, the forerunner of the graphic portion of operations orders although overlays of the map were not made and issued at this time.

It was in 1924 that the G-3 was first charged with the

23Command, Staff and Logistics, Plate K.


25Command, Staff and Logistics, p. 71.
recommendation of plans and policies for the mobilization of the command. This, of course, was a result of the defense posture of the nation at that time. The small standing army and the many inactive or partially active divisions in being dictated the need for detailed mobilization plans. This duty was to remain near the top of all lists of G-3 duties from that time until the present day.

Although these and other changes had been made in staff organization and procedure which, taken as a whole, were quite important to staff functioning, it was not until 1928 that a new Staff Manual for use throughout the Army was published. The duties listed for the division G-3 in that publication follow:

1. Prepares plans for, secures approval thereof, and supervises--
   a. Mobilization of the command.
   b. Organization and equipment of combat units.
   c. Training.
   d. Attachment of units for tactical operations.
   e. Movement of combat troops.
   f. Tactical dispositions of combat troops, including the allotment of quartering areas.
   g. Security measures, reconnaissance and maintenance of lateral communications in combat.
   h. Liaison with adjacent units.

2. Keeps informed of and studies--
   a. Location and effective strength and morale of combat troops.
   b. Needs for replacements and reinforcements.
   c. State of equipment and supplies.
   d. Enemy situation.
   e. Adaptability of terrain to combat operations.
   f. Instructions, tactical plans and field orders received from higher or adjacent units.

3. Prepares field orders and, when approved, is responsible for their timely delivery to the troops; prepares estimates of the situation and plans for combat when required.

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4. Recommends priorities for assignment of replacements and equipment.

5. Keeps in touch by personal visits with the commanders of subordinate combat units and with commanders of attached units and technical troops. In person, or by means of assistants, maintains direct observation of combat operations and troop movements.

6. Makes a continuous study of the situation in order to be prepared for contingencies that may arise, and to recommend such changes in attack formations or combat methods as may be necessary.

7. Keeps the diary of the unit.  

It was in this manual that the G-3 section was first called the operations and training section. Since training duties assumed increasing importance during the peacetime years, it is natural that this change in title was made. This title has been retained until the present time. The next few paragraphs will discuss the duties of the section which represent a significant change from those previously assigned.

The first of these concerns the return to the list of responsibility for recommendations concerning the attachment of units, which had been deleted in 1921. Next, six areas in which the G-3 was to be kept informed were added, covering duties which, for the most part, were the primary staff responsibility of other general staff officers.

For example, those dealing with strength, morale and replacements were the responsibility of the G-1. The state of equipment and supplies was a G-4 responsibility and gathering of information of the enemy and terrain was a duty of the G-2. The study of instruc-

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tions from higher headquarters was, of course, a primary G-3 function shared by other members of the general staff.

Although this responsibility for keeping informed was first set forth in this manual, it certainly had been performed by all prudent G-3's from the beginning of their existence. Its inclusion in the list of duties merely indicates the increased stress placed by the formulators of doctrine on coordination and cooperation among members of the general staff. The other members of the general staff were likewise charged with keeping informed of operation and training plans.

The next duty which warrants additional comment is that which required the G-3 to make recommendations concerning priorities for the assignment of equipment and replacement personnel. Prior to this time, the G-1 made personnel assignments on his own initiative or as instructed by the commander or chief of staff. The G-4 did the same with equipment.

It was noted earlier that observation of combat by the G-3 was one of the principles taught at Langres and that troop movements made by the 1st Division in France were personally supervised by their G-3. Here we find these duties included in the official list.

The 1928 Staff Manual was superseded by one published in 1932. 28 However, few changes were made in the manual as a whole and the duties listed for the G-3 were identical to those previously set forth. It was not until 1940 that substantial changes were made in the G-3's duties; these will be discussed in the next chapter.

Command and Staff Relationships

The relationship of the division G-3 with the commander and the chief of staff did not change from what it had previously been. However, all of the general staff section chiefs were listed as assistants to the chief of staff as early as 1921. As a result, the G-3 no longer automatically assumed the chief of staff's duties in his absence. Instead, the commander designated an acting chief of staff, normally the senior general staff officer. 29

The need for cooperation and exchange of information between the general staff officers had been experienced during World War I. Doctrine at that time placed the responsibility for this coordination upon the chief of staff, however, and did not specifically charge each of the general staff members with a similar responsibility. Although the chief of staff retained responsibility for overall coordination, the individual staff officer's part in this portion of proper staff functioning received increasing attention during this period, beginning with instruction at Fort Leavenworth.

In a 1923 text of the General Service School, each of the primary functions of the G-3 which required action by or information from other staff officers was singled out and the correlated action stressed. For example, in discussing the preparation of field orders, it was noted that the coordination of the other general staff officers was required for the proper completion of the duty. The same text stated that many of the G-3's duties were "dovetailed" with those of

other sections of the general staff. This did not mean, however, that the G-3 had coordination authority over the other sections. Instead, "closest cooperation" between the various staff officers had to be exercised in order for the staff to properly function. It was the chief of staff's responsibility to see that this cooperation existed.  

This doctrine of cooperation was expanded in the 1928 Staff Manual which stated that "teamwork is essential for efficient staff functioning. It is assured by proper cooperation and collaboration with and between all sections of the staff." To insure the proper exchange of information between the staff members, daily staff conferences were recommended as early as 1923.  

Now let us examine the relationship of the G-3 and other members of the general staff with the members of the "special staff." To begin with, it was the responsibility of the special staff officers to advise the commander and his general staff on technical matters. This advice included information concerning the requirements, capabilities, limitations, and utilization of units of their respective  

30 Command, Staff and Logistics, p. 68.  
31 Staff Officers' Field Manual, U. S. Army, 1928, p. 4.  
32 Command, Staff and Logistics, p. 49.  
33 The term "special staff" was introduced by the 1928 Staff Officers' Field Manual (p. 2), as a replacement for the previously used "technical and administrative staff." For the sake of uniformity, it will be used in this study from this point on regardless of the time frame.
branches. Where information had a bearing on the tactical situation, it was, of course, discussed with the G-3.

The key to the general staff officer's actions in dealing with members of the special staff was "coordination." It was recognized that recommendations submitted by several special staff officers might conflict. As a result, it was the responsibility of the general staff to "make harmonious adjustments of these conflicting claims." 34

The specific relationship between the G-3 and the signal officer requires additional explanation. It was previously noted that the G-3 had responsibility for overall supervision of signal communications and the formulation of plans and orders for their use. The signal officer, on the other hand, was responsible for operation of the signal means to include the message center.

By 1928, the division of responsibility between these two officers had evolved to where the G-3 had responsibility for the tactical supervision of communications while the signal officer retained technical supervision of the means. The G-3, therefore, gave broad guidance for signal requirements and operation and the signal officer supervised the installation, maintenance, and operation of the available communications means. In addition, the signal officer was charged with the training, assignment, and replacement of signal personnel. 35

The relationship between the general staff and the subordinate commanders of the division underwent more change than did the other

34 Command, Staff and Logistics, pp. 40-41.
relationships previously discussed. Although it is difficult to ascertain what forces brought about the change, it is apparent that the staff officer's directive authority gradually declined. A possible reason for the change was the desire to inculcate a sense of trust in the staff on the part of "the troops."

That the division G-3 did not always enjoy this trust was suggested in a discussion of training in a text of 1921:

While it is not apparent to the troops at the time that the Third Section is assisting them it probably will be later when it is learned the steps that were saved, and how many casualties they escaped, as a result of the efficiency of this section.36

The trend toward building the mutual trust and respect between the staff and the subordinate commanders began with the following statement from a 1923 text: "A general staff officer must know not only what his business is but what it is not." This approach was amplified in discussing the G-3's duties in connection with the supervision of training:

The supervision by G3 of the training of troops requires the maximum of tact and common sense from him. He is here sorely tempted to enter too much into methods and incur antagonism. He must remember that he is an inspector for results, more than for methods; the results must be uniform and in accord with the plan of training; much latitude is allowed, in methods of training, to officers of experience.

His action on the training field should be such as to convey the idea of assistance, if possible, rather than of an assumption of authority, which will be detected at once and probably resented. . . . Tactful and helpful action should be given, and adequate results demanded.37

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36 General Discussion of Basic Principles Underlying the Organization of Any Staff, p. 13.

37 Command, Staff and Logistics, pp. 66-67.
The 1928 Staff Manual reiterated the doctrine that a staff officer has no authority to command but rather translates the commander's desires into written or oral instructions for which the commander retains responsibility. The subject of staff inspections was treated in considerable detail by this manual; it clarified the manner in which all general staff officers were to conduct themselves during their official visits to lower headquarters:

When making such a visit or inspection, the staff officer conducts himself as to promote cordial relations and cooperation between the staff and the troops. He first calls on the commander of the unit concerned, informs him of the purpose of the visit, requests such assistance as is necessary, and before leaving reports to the commander such facts as have been noted. He carefully avoids criticism or unauthorized interference with the responsibility of the subordinate commander.

The same manual gave the G-3 authority to communicate directly with the commanders of all units of the division. The purpose of the direct contact was to enable the G-3 to arrange details for coordination of effort and employment of the combined arms in combat. In so doing, the G-3 received the advice of the commanders of the artillery, aviation, engineer and technical service units and called upon them for plans, reports and annexes to field orders.

In 1936, General Parker, the Commanding General of Third Army, edited a group of reference documents for the commanders and staffs of his command. In discussing the relationship of the staff to com-

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39 Ibid., p. 4.
40 Ibid., p. 12.
manders, he stressed two points in defining the role of the staff officer:

The staff neither commands nor executes, for it has no element subordinated to its authority. It only assists the commander in preparing, transmitting and following up his orders and in so doing recognizes no authority save that of the commander. Secondly, the staff serves the commander best when it assists the troops most.\(^{41}\)

The problem of command and staff relationships did not disappear during the period, however. This is reflected in texts used at Fort Leavenworth throughout the period. While it was recognized that the staff officer had no command authority, the Staff School taught that after proper coordination, some one had to see that orders were complied with. Therefore, "without power to make decisions and the authority to put them into effect, the general staff, as an institution, would be rendered ineffective."\(^{42}\)

The answer to the whole problem of command and staff relationship was considered to be the proper training of both staff officers and commanders. The combination of command and staff training at Fort Leavenworth was, in part, a result of the feeling that these two groups of officers would be similarly trained, thereby gaining an appreciation of the other's role. Through this training, the staff officer, for his part, would be able to draw the fine line between proper staff action and meddling.\(^{43}\)

\(^{41}\) Major General Frank Parker, "Reference Documents for Commanders and Staffs of Large Units." A collection of mimeographed documents written and edited by General Parker in 1936.


\(^{43}\) Ibid., pp. 30-34.
Plans, Orders and Estimates

The overall trend of plans and orders during this period was toward clarity, standardization and, to some degree, brevity. Although suggested formats for each type of military operation continued to be shown in manuals and regulations dealing with the subject, nearly all of these formats were based on a standard five paragraph structure.

In 1920, the first paragraph of a division plan or order was used to describe the friendly and enemy situation and state the mission of the entire force. The second paragraph gave the division mission, normally stated in terms of the objective to be taken or retained. In addition, the division boundaries, scheme of maneuver, line of departure, and time of attack were spelled out in brief terms.

The third paragraph was used to give instructions to the subordinate units. The first two subparagraphs were used to give each of the brigades their missions, using the same technique used for the division. Subsequent subparagraphs were utilized to state, in general terms, the missions of the field artillery brigade, the engineers, and the air service. This was followed by information of the division reserve, normally only a statement of their location. Any tactical information applicable to the command as a whole was given in subparagraphs lettered x, y, and z.

The fourth paragraph was utilized for information pertaining to the main supply route and evacuation. The axes of signal communication and the location of command posts of the division as well as
higher, lower, and adjacent units were listed in the final paragraph. 44

The five paragraph field order was carried forward to the Field Service Regulations published in 1923, although a few refinements were made. This publication was quite detailed, consisting of nearly two hundred pages including the annexes. The format for an attack order as given in the FSR is shown in Figure 6; formats for other missions differed only in the type of information given. 45

The 1923 Field Service Regulations stated that fragmentary orders would often be issued in active operations. These orders, whether given verbally or in writing, were to follow the sequence prescribed for the body of the formal order. The Regulations also pointed out that the minimum time expected for an order to reach all of the lower units of a division was six hours. 46

Since the G-3 was the principal officer concerned with the writing of orders, some mention of the techniques expected should be made. First of all, such expressions as "attempt to capture," "try to hold," and "as far as possible" were forbidden on the grounds that they divided responsibility. In describing directions, it was proper to use the points of the compass instead of "right" or "left." Finally, "the order should not trespass upon the authority of the subordinate. It should contain everything beyond the independent authority of the subordinate, but nothing more." 47

44U. S., The General Service Schools, General Tactical Functions of Larger Units, 1920 (Fort Leavenworth: The General Service Schools Press, 1920), p. 120.


Field Order for the Attack

1. Information

2. General plan of the commander—give mission or objective, scheme of maneuver (whether envelopment, penetration, etc.), zone of action and direction of attack, time of attack, line of departure.

3. a. Instructions for infantry (a separate lettered subparagraph being assigned to each infantry unit to which instructions are given).

   b. Artillery assignments, general locations, missions or targets, general instructions as to forward displacements. Amplify in annex.

   c. Instructions for cavalry—position, reconnaissance, special missions.

   d. Instructions for air service—reconnaissance, combat and special missions.

   e. Instructions for tanks.

   f. Instructions for the reserve—composition, position, special missions.

   g. Instructions for engineers—assignments, special missions.

   h. Instructions for any troops not otherwise covered.

   x. Instructions applicable to the whole command.

4. If an administrative order is issued, refer to it by number. If not, give administrative instructions.

5. a. Plan of signal communications: Refer to annex or indicate changes.

   b. Axes of signal communications: Give axis of unit and of next lower units.

   c. Command posts: Give location of command post of unit and when appropriate, next lower units.

These Field Service Regulations were in effect until 1939. That they should survive so long is a tribute to their completeness and workability. The changes brought about in 1939 will be discussed in the following chapter.

It was noted earlier that the estimate of the situation became a designated duty of the G-3 as early as 1921. The format used for the estimate at Fort Leavenworth beginning in 1923 is shown in Figure 7. By 1936, the estimate had evolved into a five paragraph format as follows:

1) Mission
2) The Situation and Opposing Lines of Action
3) Analysis of the Opposing Lines of Action
4) Comparison of Own Lines of Action
5) Decision

The content of this estimate was nearly identical with the one now used and therefore requires no explanation.

Summary

The basic staff doctrine of the Army had been established during World War I and the few years preceding it. It was during the period 1920 to 1940 that it matured. The question was no longer whether the division should have a general staff but how it should operate.

It is natural that not all the experience of World War I was immediately incorporated into doctrine. First of all, the nature

ESTIMATE OF THE SITUATION

I. Mission

A. Situation.
   a. Strength and composition.
   b. Location and distribution.
   c. Troops within supporting distances, movements.
   d. Physical condition, morale, training and equipment.

B. Probable knowledge of our situation.
   a. Observation.
   b. Reconnaissance.
   c. Prisoners, documents, inhabitants.

II. Enemy

C. General factors.
   a. Time and space.
   b. Terrain.
   c. Roads and railroads.
   d. Weather.
   e. Visibility.
   f. Supply

D. Lines of action open to enemy.
   a. Situation.
   b. General factors.
   c. Special factors.

E. Probable intentions. General plan.

Figure 7. Estimate of the situation as found in Command, Staff and Tactics, 1923 (Fort Leavenworth: The General Service Schools Press, 1923), pp. 167-168.
Figure 7--Continued

A. Situation

a. Strength and composition.
b. Location and distribution.
c. Supporting troops.
d. Physical condition, morale, training and equipment.

III. Our own troops. B. General factors.

a. Time and space.
b. Terrain.
c. Roads and railroads.
d. Weather.
e. Visibility.
f. Supply.

C. Lines of action open to us.

Comparison of lines of action as influenced by:

a. Our situation.
b. General factors.
c. Enemy's probable intentions.
d. Advantages and disadvantages of each.

IV. Decision. General plan, expressed definitely and briefly.
of needed changes was not agreed upon by all those who had experience; secondly, there is always some resistance to any change.

Early in this period, the four section general staff was established and the technical and administrative staff realigned. This was an extension of the organization which had been used at Corps and higher level headquarters in France. Additional personnel were provided for the staff as a result of war experience.

The broad responsibilities of the G-3 did not materially change during the period although training assumed greater importance. Increasing emphasis was placed on the need for cooperation and coordination among staff officers. The problem of the relationship between general staff officers and subordinate commanders, while not completely solved, was greatly improved through careful definition of duties and proper training. Finally, improved communications, increased training and probability of a "war of movement" all helped to establish a relatively clear and concise order format.

Thus the evolution of the division G-3 function during this period was marked by a refinement of methods and techniques; no abrupt or far reaching changes were made. When the Army's problem of too many missions and too few resources is considered, it is remarkable that progress was made in any field. The majority of the credit for the refinement of staff procedure belongs, of course, to the schools at Fort Leavenworth.
CHAPTER V

THE DIVISION G-3 DURING MOBILIZATION FOR
AND CONDUCT OF WORLD WAR II
1940-1945

Introduction

The mobilization and training problems encountered by the United States Army during World War II are too complex to discuss in depth in this study. A brief examination of a few statistics concerning the rapid buildup of forces is advantageous, however, for an understanding of the impact of these problems upon division G-3's.

The Regular Army of 1940 consisted of 14,000 officers and 243,095 enlisted men.\(^1\) The National Guard strength at that time was just over 260,000 officers and men while the Organized Reserve Corps, which contained officers only, numbered 104,228.\(^2\)

The combat troops of the Regular Army were organized into eight divisions, all of which were understrength, and a few corps elements. The divisions had been able to gather their organic units from scattered posts and train as divisions only once every four years. The eighteen divisions of the National Guard, meanwhile, had had but

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two weeks of field training each summer. It was not until 1940 that "the first genuine corps and army maneuvers in the history of this Nation" were staged.³

Many of the Reserve and National Guard officers had not attended any service school, much less courses such as that given at the Command and General Staff School. In an effort to train as many staff officers as possible, drastic changes were made in the program of instruction at Fort Leavenworth. The students of the last regular course prior to World War II graduated on February 1, 1940, after only five and one half months of instruction.⁴

The new program of instruction, initially set at nine weeks duration and later lengthened to ten, was built around the idea of qualifying each student for one of the general staff sections (G-1, G-2, etc.). This specialized course was later changed to training by type of division (infantry or armored), and still later to specialization by type of force (Air, Ground or Service). In addition, the New Division Course was established to train the commander and general staff of the newly activated divisions. Lasting four weeks, this course not only provided a refresher in staff procedure, but allowed the commanders and staffs of new divisions to work as a team prior to their commencing the training of their divisions.⁵


During the World War II period, the United States mobilized a total of ninety-one divisions and inactivated two. Eighty-nine of the divisions were deployed overseas at one time or another during the conflict. By April, 1945, a peak of nearly six million personnel, excluding those of the Army Air Forces, were in the uniform of the United States Army. 6

This effort was of a greater magnitude than the mobilization for World War I. Although problems were encountered, the fact that such a force could be fielded and sustained speaks highly of staff organization and doctrine under which the feat was accomplished.

Organization

A proposal to change the basic structure of the infantry division had been tested in 1937. Known as the "triangular" division, it eliminated the brigade headquarters formerly used and placed three regiments directly under division headquarters' control. The test, conducted by the 2nd Infantry Division, resulted in an enthusiastically favorable report. 7

Although immediate action to reorganize existing divisions was not taken, nine Regular Army divisions were finally ordered to conform to the triangular organization by October 1, 1940. The eighteen National Guard divisions called up before Pearl Harbor trained as

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7 U. S., War Department, "Report of the Field Service Test of the Proposed Infantry Division Conducted by the 2nd Infantry Division, U. S. Army, 1937," (Mimeographed).
"square" divisions during their first year of Federal service and did not reorganize into triangular divisions until January and February of 1942. Several changes in supporting troops were made before the division organization stabilized in 1943 with the major components shown in Figure 8.

The staff organizations for both "square" and "triangular" divisions were basically the same. As early as 1928, the technical and administrative staff's designation had been changed to "special staff." The organizational chart for the division staff of 1940 is shown in Figure 9. The relationship shown in this chart will be discussed later.

Besides the special staff officers shown, other members were added during the course of the war. Notable examples are the anti-tank officer and the civil affairs officer. The anti-tank officer came into being as the commander of the anti-tank battalion included in the infantry division early in the war. The anti-tank battalion was eliminated from the infantry division in 1943 and each maneuver battalion was given an organic anti-tank capability. The anti-tank officer, however, was retained on the special staff.

The civil affairs officer was authorized for territorial com-

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8 U. S., Department of the Army, Historical Division, The Organization of Ground Combat Troops (Washington: U. S. Government Printing Office, 1927), pp. 11-12. The term "square," used to describe the older division organized with four regiments, was coined as a matter of convenience when the "triangular division," with three regiments, came into being.

Command Channel

Coordination Channel (down)
Advice and Recommendations (up)
Cooperation and Information

Figure 9. Organization of the Staff as shown in the Staff Officers' Field Manual, The Staff and Combat Orders, FM 101-5
mands as early as 1940. The increased civil affairs activity in Europe during the latter part of the war dictated the need for a civil affairs section as low as division level. This officer was a member of the special staff, a part of the G-1 section, or, in some divisions, the fifth general staff officer.

All special staff sections were authorized lieutenant colonels as section chiefs throughout the war. An exception was the artillery officer, a brigadier general, who was also the division artillery commander. The general staff sections were also authorized lieutenant colonels as chiefs with the exception of the G-3, which was elevated to an authorized grade of colonel in January, 1945. This authorization lasted only six months, however, before being reduced to lieutenant colonel once again.

The authorization for personnel within the G-3 section underwent considerable change during the war. When the "triangular" division was originally tested, one of the principal findings of the 2nd Infantry Division was that the staff could be materially reduced. As a result, the recommended Table of Organization submitted with the report

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allocated but one lieutenant colonel, one major or captain, and three enlisted men to the G-3 section. 14

Presumably as a result of this recommendation, the Table of Organization for the triangular division finally published in 1940 authorized precisely those personnel. 15 Although minor changes in the Table were made in 1943, it was not until 1945 that the G-3 section received two additional majors—the Air-Ground Liaison Officer and the Information and Education Officer. These additions, along with increased authorizations for enlisted personnel, brought the section to an authorized total of four officers and eight enlisted men by the beginning of 1945. 16

Because of the G-3's responsibility for liaison, he controlled the three liaison officers (captains) who were authorized throughout the period. In addition, the commanding general could make one or both of his aides available for duty with the G-3 section. Both the liaison officers, however, and the aides were available to the G-3 on a part time basis at best. Realizing that the total number of personnel available in the G-3 section might be inadequate, the Staff School at Fort Leavenworth had this to say: "If the G-3 has a thorough knowledge

14 U. S., War Department, "Report of the Field Service Test of the Proposed Infantry Division Conducted by the 2nd Infantry Division, U. S. Army, 1937," (Mimeographed), Appendix C.


of what has to be done at a particular time, the old man will not hesi-
tate to make the necessary personnel available."\textsuperscript{17}

Many divisions did not consider the authorized strength suf-
ficient to perform the necessary functions of the operations and train-
ing section. The most complete discussion of this problem was set
forth by the G-3 section of the 76th Infantry Division which fought
in Europe. In stating its case, it was first noted that the assistant
G-3 (Air-Ground Liaison) and the assistant G-3 (Information and Educa-
tion) had special duties to perform and were therefore available to
assist the G-3 in planning and operations only on a part time basis.
It did, however, recommend that these officers perform such routine
tasks as submission of periodic and after action reports.\textsuperscript{18}

Next, it was noted that the G-3 and his remaining assistant
were unable to properly function on a twenty-four hour basis or when
two echelons for movement were necessary. The need for planning neces-
sitated the G-3 be freed from all but the most pressing current problems.
In addition, they found that the planning group and the current situa-
tion group of the section functioned most efficiently when separated.\textsuperscript{19}

As a result of its findings, which were based on combat ex-
perience, the 76th Division's G-3 section recommended the following
authorizations:

One Colonel, G-3

\textsuperscript{17}U. S., War Department, Command and General Staff School, "G-3
Section--Division General Staff" Special Class, 1940, Volume 1, pp. 8-9.


\textsuperscript{19}Ibid.
One Lieutenant Colonel, Assistant G-3 for Plans and Operations

Three Majors, Assistant G-3's for Information and Education, Anti-tank, and Air-Ground Liaison respectively

Three Captains, Duty Officers

Four Captains, Liaison Officers

Utilizing these personnel, the duty officers rotated for eight hour shifts but reported two hours prior to their shift to become oriented. The liaison officers were utilized for corps, the two adjacent divisions and as otherwise needed. It was noted that the multiplicity of forces and the breakdown of communications in combat had often dictated the need for five or six liaison officers.²⁰

The recommendation for enlisted personnel was thirteen, to be utilized for twelve hour shifts. This total did not, however, include the enlisted men for the Information and Education, Anti-tank, and Air-Ground Liaison sub-sections.²¹

This recommendation for increased personnel, and others like it, were made as a result of experience gained in sustained combat. Increased authorizations did not materialize, however, and the Table of Organization published in 1948 authorized the same four officers and eight enlisted men as before.²²

Duties and Responsibilities

The Staff Officers' Field Manual of 1940, with minor changes, was effective throughout this period. It listed the duties of the G-3 section as follows:

1. Preparation and coordination of plans for and supervision of—
   a. Mobilization of the command.
   b. Organization and equipment of units. (Coordination with G-4 for allocation of equipment.)

2. Preparation and coordination of plans for and supervision of training of units and individuals, including—
   a. Preparation of training directives, programs, and orders. (Coordination with G-2 for combat intelligence training and with G-4 for logistical training of service units.)
   b. Selection of training sites and firing and bombing ranges. (Coordination with G-4 on preparation of sites and ranges.)
   c. Organization and conduct of schools.

3. Operations, to include, in general: tactical and strategical studies and estimates; plans and orders based thereon; supervision of combat operations; and future planning. Specific duties relative to operations may include—
   a. Continuous study of the tactical situation, as affected by—
      (1) The enemy situation. (Coordination with G-2.)
      (2) Instructions from higher units.
      (3) Actions of adjacent or supporting units.
      (4) Location, morale, and capabilities of the troops. (Coordination with G-1 for replacements.)
      (5) Needs for replacements and reinforcements. (Coordination with G-1 for replacements.)
      (6) Terrain and weather conditions. (Coordination with G-2.)
      (7) Status of equipment and supplies. (Coordination with G-4 for priorities of replacement of matériel and allocation of supplies.)
   b. Preparation of estimates, reports, and recommendations based on the tactical situation.
   c. Preparation of plans for and supervision of activities concerning—
      (1) Reconnaissance and security measures. (Coordination with G-2 for intelligence missions of combat troops.)
      (2) Troop movements. (Coordination with G-4 for movements requiring transportation in addition to organic transportation and for routes.)
      (3) Tactical employment of units. (Coordination with G-4 for influence of supply and evacuation on operations; G-2 for capabilities of enemy; G-1 on morale of troops.)
      (4) Defense of administrative installations and lines of communication. (Coordination with G-4.)
(5) Tactical measures to preserve secrecy and effect surprise. (Coordination with G-2.)

d. Preparation and authentication of field orders and operation maps required to carry out the tactical plan, and their transmission to units and staff officers concerned. (Coordination with G-2 for maps and for paragraphs and annexes dealing with enemy information, reconnaissance, and counterintelligence measures; G-4 for paragraph dealing with administrative matters.)

e. Maintaining contact with the commanders of subordinate units; observing or supervising troop movements and tactical operations as directed by the commander.

f. Establishment of liaison with adjacent, higher, and subordinate units.

g. Supervision of signal communication.

h. Preparation of tentative plans for subsequent phases of a tactical operation and for future tactical operations. (Coordination with G-2 for enemy capabilities; G-4 for practicability of operations from a supply point of view.)

4. Recommendations to the commander of priorities for assignment of personnel and equipment. (Coordination with G-1 for assignment of personnel; G-4 for allocation of equipment.)

Two basic differences between this list and those that preceded it are immediately apparent. First it is much more detailed; second, the necessary coordination for the performance of the duties is spelled out. Now let us examine some of the more specific changes found in this latest list of duties.

The first major addition to the G-3's responsibility is found well down the list under the heading of "preparation of plans for and supervision of activities concerning defense of administrative installations and lines of communication." This rear area security mission

was the result of the changing character of warfare which included the threat of airborne assault, air attack, guerrilla activity, and sabotage.²⁴

Next we find the G-3 concerned with plans and activity to preserve secrecy and surprise. Although tactics in this field were not new, the inclusion of this specific duty on the list indicates increased emphasis on surprise and deception.

Note that the G-3 was charged with authentication of operations maps and field orders. Prior to this time, the chief of staff had had that responsibility. It was during this period, incidentally, that operations maps or overlays, used in conjunction with the field order, became standard. The beginning of this practice can be traced to the instruction at Fort Leavenworth where, as early as 1934, a field order was placed directly on an overlay which depicted the maneuver of a division.²⁵

The next change noted is that which required the establishment of liaison with higher and subordinate as well as adjacent units. This does not mean that the division was required to furnish all the officers for this duty. The principles established in the manual provided officers be sent from supporting to supported; from subordinate to higher; and between adjacent units as directed by higher authority. In addition, liaison was established from higher to subordinate units, at


²⁵From a collection of maps and overlays used in the 1st Year Course, 1934-1935, The Command and General Staff School. In the library of the Command and General Staff College, Fort Leavenworth, Kansas.
the discretion of the commander, to obtain information, transmit orders, clarify the existing situation, and transmit requests for assistance. 26

Two of the above duties, although not new to the G-3's list, gained increased importance during the war and deserve additional comment here. The first of these, organization and equipment of units, was the first task a G-3 of a new division faced. The utmost skill was required to build his division into a fighting force for, as he was taught at Fort Leavenworth, he could never expect to be given the amount of personnel and equipment prescribed in Tables of Organization and Basic Allowances. 27

The other primary duty of the G-3 which required much of his attention was training. His responsibility for the supervision of training extended throughout the division, to include the technical training conducted by members of the special staff. That his work was never completed in this area is exemplified by a principle taught at the General Staff School: "Training begins with mobilization and continues as long as the unit is active." 28

During the period, two principal duties were added to the above list: "air-ground liaison" and "information and education." It was previously noted that personnel were added to the section in

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26 Staff Officers' Field Manual, The Staff and Combat Orders, FM 101-5, pp. 31-32.

27 U. S., War Department, The Command and General Staff School, "G-3 Section—Division General Staff," 1st Special Class, 1940-1941, Schedule #7, p. 2.

28 Ibid., pp. 2-3.
1945 to perform these duties. Since their overall supervision was the responsibility of the G-3, it is appropriate that these duties be examined in more detail.

The need for liaison between air and ground units was brought about by the increased use of the airplane as a means of supporting ground action. "Air-ground" liaison officers had been used at corps and higher levels early in the war to coordinate requests for air support. It was not until 1944, however, that officers with the primary duty of coordination of air-ground activity were employed at division level.29

From the outset, these officers, most of whom were artillery, infantry or coast artillery by branch, worked as part of the G-3 section. Their job was to coordinate requests from subordinate units and the staff and pass them on to the Air Force through the "Support Aircraft Party."30 The official authorization for ground personnel to accomplish this coordination was given in 1945.31

The second major duty acquired by the G-3 during the war was "information and education." Early in the conflict, the G-1 had been given the responsibility for "orientation" of the troops. The program


30Letter from Headquarters, Sixth Army, to the War College, Washington, D. C., dated 4 May 1945, Subject: "Air Ground Cooperation," p. 4. "Support Aircraft Parties" were composed of Air Corps personnel on duty with ground units.

was gradually expanded until, when given to the G-3, it embraced "orientation, information, education, research on factors affecting morale and related morale activities." 32

Some of the methods used to perform this duty were the publishing of unit newspapers, the distribution of educational materials, and the showing of films such as the "Why We Fight" series. The circular which set forth the program in 1944 and gave its responsibility to the G-3 also authorized an officer and three enlisted men to carry it out. 33 This authorization was carried forward to the Table of Organization published in January, 1945, as previously noted.

Command and Staff Relationships

The relationships previously established were not substantially changed. Cooperation and coordination continued to be stressed; indeed, they were considered the foundation for proper staff action. In referring to the chart found in the Staff Manual (Figure 9), it was pointed out that the open lines between the staff officers should be considered as "open doors through which passage is not only welcome but encouraged." 34

Because of the rapidly changing situations encountered in combat, flexibility became a prime attribute of a good G-3. Or, as stated at Fort Leavenworth: "Remember that the first prerequisite of a staff officer is the ability to accept a situation as dictated by


33 Ibid., p. 4.

34 U. S., War Department, The Command and General Staff School, "The Commander and His Staff," 18th General Staff Course, April–June 1944, Schedule #10, p. 1.
God, the Enemy and your General and to make the best of the conditions as they exist."\textsuperscript{35}

It was recognized at Fort Leavenworth that the personalities of the commander and the personnel on the staff would influence staff procedure. When a key member of the staff or the commander changed, it was likely that the procedure used by the staff would change.\textsuperscript{36} In general, however, it was anticipated that the G-3 would conduct his business with the chief of staff rather than dealing directly with the commander.\textsuperscript{37}

Although it was necessary for the G-3 to work closely with all of the other general staff officers, his relationship with the G-2 was particularly close in combat. Four primary considerations affected tactical recommendations and decisions: the mission; the enemy situation; the terrain; and the friendly situation. Of these, information concerning the enemy and terrain were obtained by the G-2. It was imperative, therefore, that the G-3 and the G-2 work closely together.\textsuperscript{38}

On the other hand, the friendly situation was greatly affected by personnel and logistic factors which were the responsibility of the G-1 and G-4 respectively. The need for complete coordination between all general staff officers was further necessitated by the

\textsuperscript{35}U. S., War Department, The Command and General Staff School, "G-3 Section--Review," 17th General Staff Course, January-March 1944, Schedule #223, p. 2.

\textsuperscript{36}"The Commander and His Staff," loc. cit.

\textsuperscript{37}"G-3 Section, Division General Staff," loc. cit., p. 6.

\textsuperscript{38}Ibid., pp. 7-8.
doctrine which provided that "general staff officers may be required to assist, or to take over temporarily, one or more other sections. This condition frequently exists in divisions and corps, especially when the headquarters of these units are operating on a 24-hour basis." 39

An examination of the general functions of the special staff as found in the 1940 Staff Manual provides a better understanding of the relationship between the G-3 and the members of that group:

1. Technical and tactical advice and recommendations to the commander and his general staff.

2. Preparation of plans, estimates, and orders in order to relieve the general staff of routine duties.

3. Coordination with the general staff sections of their tactical and administrative plans and activities. 40

In connection with the first duty listed above, the general staff was given the responsibility to seek the advice of the special staff; thus coordination between the two was a dual responsibility.

The special relationship previously established between the G-3 and the signal officer continued, a result of the vital importance of communications to combat operations. The Staff Manual charged the G-3 with the overall supervision of signal communications while the signal officer had responsibility for technical supervision of the installation, maintenance and operation of the signal system as well as the training of signal personnel. 41 At Fort Leavenworth it was taught that while all technical training conducted by special staff

40 Ibid., p. 17.
41 Ibid., p. 24.
officers should be supervised by the G-3, "of such importance as to merit special mention is training in the use of signal communications means, to develop maximum speed and certainty in transmittal of information and orders." 42 Although it was recognized that the signal officer worked primarily with the G-3, it was pointed out that he did not work for the G-3 and, in fact, had a responsibility to serve the other staff officers as well. 43

Previously published Staff Manuals had discussed in detail the proper relationship of the general staff officer with subordinate commanders, yet only a brief paragraph was utilized for this purpose in the 1940 Staff Manual. It stated, very simply, that the staff officer had no command authority and that the commander retained responsibility for orders issued by staff officers in his name. 44

The instruction at Fort Leavenworth expanded this principle somewhat. There it was taught that it was first necessary for the commander to state his policy, make a decision or authorize a basic plan. Then supplementary decisions could be made by the staff and orders issued in the commander's name. Furthermore, orders issued had to implement the commander's plan or policy and not contradict or amend it. 45

42 "G-3 Section--Division General Staff," loc. cit., p. 3.

43 U. S., War Department, The Command and General Staff School, "The Commander and His Staff," 8th Special Class, May-July 1942, Volume 1, Schedule #3, p. 6.

44 Staff Officers' Field Manual, The Staff and Combat Orders, FM 101-5, p. 5.

45 "The Commander and His Staff," loc. cit., p. 4.
To preclude the possibility that Staff School students might become overly cautious about issuing orders, a somewhat different approach was used during instruction in the G-3 function. Although it was reiterated that orders must be based on the commander's desires, the students were told that "the staff officer does give orders. Make no mistake about that, because the fact is often obscured." 46

Once orders were issued, it was the responsibility of the G-3 to supervise their execution by subordinate commanders. If, during the course of this supervision, he found errors or omissions in the subordinate unit, it was his duty to discuss these immediately and frankly with the unit commander. If the shortcomings were not corrected, he was to report them to the division commander. 47

In order to properly perform his function, the G-3 was expected to confer directly with all subordinate commanders. Although the division had regiments, the G-3 was reminded that the battle was fought by battalions and he should, therefore, get to know the battalion commanders well so that he could make recommendations regarding the employment of their units. 48 In all his associations with subordinate units, however, he was to remember that his duty was to serve, assist and pacify "the troops" and not annoy them. 49

46 U. S., War Department, The Command and General Staff School, "G-3 Section--Division General Staff," 8th Special Class, May-July 1942, Volume 1, Schedule #6, p. 7.

47 Ibid.

48 Ibid., pp. 8-9.

49 U. S., War Department, The Command and General Staff School, "The Commander and His Staff," 8th Special Class, May-July 1942, Volume 1, Schedule #3, p. 5.
Plans, Orders and Standing Operating Procedures

The formats for plans and orders set forth in the Staff Manual of 1940 were substantially the same as those prescribed by the 1923 Field Service Regulations (Figure 6). The same five paragraph sequence was used as before; however, the distribution of troops was inserted under a heading of "Troops" between the second and third paragraphs. This was done only in the first field order issued by the division or when an unusual grouping was made. 50

The Staff Manual stated that, at division and lower levels, fragmentary orders would be the rule rather than the exception. This doctrine was followed at Fort Leavenworth where, in 1940, the students received one hour of instruction in the preparation of a complete field order while five hours were devoted to the technique of writing fragmentary orders. The students were urged to memorize the complete field order format, however, for the sequence was used in formulating fragmentary orders and "it may be necessary to write a full one at some time." 51

Students at the Staff School were taught that fragmentary orders need not contain any minimum or maximum amount of material. In order to capitalize on speed of transmission, only the information and instructions that the unit needed to carry out its mission were used. The message was not headed "fragmentary order," it was sent to either

50 Staff Officers' Field Manual, The Staff and Combat Orders, FM 101-5, p. 41.

51 U. S., War Department, The Command and General Staff School, "Combat Orders I," 1939-40 Regular Course, Volume 19, Schedule #3, p. 3.
single or multiple addressees and, if possible, was followed by a complete field order.

The practice of divisions in the field followed closely the procedure taught at Fort Leavenworth. An examination of official records of the war reveals very few complete field orders and these, for the most part, were written after the fact for historical purposes. Indeed, most of the divisions that entered combat issued instructions that warning, oral, and fragmentary orders were the preferred method of operation.52

The first reference to "Standing Operating Procedure" is found in the 1939 Field Service Regulations. The SOP, as it was called, was to be prescribed for every unit, covering those procedures which lent themselves to standardization. Its use was to simplify and expedite operations in the field by saving time in the issuance of orders and minimizing confusion and error under stress of combat.53

The Staff Manual amplified the information found in the Field Service Regulations only slightly. It stated that no uniform SOP was prescribed; instead, each unit was expected to develop its own based on its needs.54 For the first example of SOP format, it is necessary to turn once again to Fort Leavenworth. Beginning in early 1941, students were given sample SOP's to use with the divisions they "played"

52 SOP's, 1st Infantry Division, dated 7 February 1944, 80th Infantry Division, dated 30 July 1944, et passim.


54 Staff Officers' Field Manual, The Staff and Combat Orders, FM 101-5, p. 34.
during the course of their instruction. A condensed version of this document follows:

SOP--Triangular Division

Section I. General
1. Application--All cases except when specifically modified.
2. Unit Procedure--Subordinate units have SOPs based on this one.
3. Tactical Groupings--For marches and combat:
   Combat Teams 1, 2 and 3
      1 Regiment
      1 Field Artillery Battalion
      1 Platoon Engineers
      1 Company Medics
   Division Troops
      Division Artillery (-)
      Engineer Battalion (-)
      Medical Battalion (-)
      Quartermaster Battalion
      Military Police Company
      Signal Company
      Reconnaissance Echelon
      Reconnaissance Troop

Section II. Operations
4. Orders--Division Orders to major subordinate elements only. Missions to other elements separately in supplemental orders.
5. Division Headquarters--Echelonment of division headquarters into forward (G-2, 3, and 4, Headquarters Commandant, Signal Officer, Liaison Officers and necessary enlisted personnel) and rear (remainder).
7. Liaison--a. To division by reconnaissance troop, combat teams, division artillery, division reserves, anti-tank unit and units attached to division. b. Supporting to supported. c. Laterally to adjacent units.

Section III. Intelligence
8. General. Warning of enemy made expeditiously with all available information.
9. Information of the Enemy. Information desired for each type of enemy activity. For example: Artillery--give location, amount, caliber, targets, type of ammunition.
10. Special Reports. Activity requiring special reporting action. For example: Use of chemicals by enemy.
11. Prisoners and Documents. a. Rapid examination below division level, fifteen minutes maximum. b. Information for handling prisoners including those wounded.
12. Periodic Reports. Submitted by subordinate units daily to division. Summary daily from division to subordinate units.


Section IV. Movement


15. Marching and Motor Movement. a. Division moves as a whole with units not having enough vehicles marching. b. Marching troops lead, motors follow by bounds. c. Marching troops take 10 minute break each hour. d. Open and closed column explained.

16. Shuttle movement, a. Normal movement when enemy contact is remote. b. Standard plans for this type of movement have been prepared and distributed.

17. Change in Direction or Objective. a. Guides posted immediately. b. Provost Marshal responsible for circulation plan and immediate posting of traffic police. c. Avoid halting columns.

Section V. Development for Combat

18. General. Division may be committed from march or assembly area.

19. Development. a. From march units proceed directly into positions without assembling. b. Assembly areas used when time permits. Guides are used to direct troops into assembly areas, troops leave road promptly. Move to positions in dispersed formation.

20. General information. a. During development, orders are issued, communications established, traffic control organized and ammunition refill initiated. b. Combat is conducted by Combat Teams until tasks performed by non-infantry elements can be controlled by their respective commanders. Division notifies Combat Teams when central control is established.

21. Field Artillery Support. a. No artillery in reserve. b. Upon initiation of centralized control, light battalions are in direct support. The battalion whose regiment is not engaged reinforces the fires of other light artillery. c. The medium battalion is in general support and establishes liaison with the light battalions.

Section VI. Administration

22. Supply, General. All vehicles are placed in a pool within units for maximum flexibility.

23. Supply, Ammunition. a. Regimental and separate units pick up ammunition at the division supply point. b. Credits established with division ordnance officer at the ASP. c. Dumps are established at Regiments and Battalions.
24. Class I Supply. a. Rations provided daily in regimental lots at division supply point, supper cycle. b. Water picked up and chlorinated by units.

25. Class III Supply. a. All vehicles carry 10 gallons of gas and 1 quart of oil in containers as reserve. b. Trucks refill when going to rear. In forward areas, vehicles are resupplied by exchanging empty containers for full ones.

26. Motor Maintenance. Repair as possible in units with parts from the Quartermaster Battalion. If beyond repair at unit, turn over vehicle to Quartermaster Battalion.

27. Ordnance Maintenance. Repair when possible, notify Ordnance Officer when beyond capability.


29. Traffic Control and Circulation. Main Supply Road (one or more) designated by division. Engineers mark and maintain.

An examination of SOP's published by divisions during the war reveals striking similarity to the one above. The SOP published by the 1st Division in early 1944, for example, also consists of twenty-nine paragraphs and generally follows the Fort Leavenworth format. It is, however, much more detailed and includes information on air requests, antiaircraft and antitank defense, and graves registration.

Summary

The rapid mobilization for World War II produced many problems for staff officers in general and G-3's in particular. For example, the duties of the G-3's in connection with organizing and training newly activated divisions were substantial. The fact that these pro-


56 U. S., War Department, 1st Infantry Division, "Standing Operating Procedures," dated 7 February 1944.
blems were overcome with comparative ease was, in part, a result of the staff theory and practice which had matured during the two decades following World War I. The experience gained during World War II produced additional refinements in staff procedure but did not significantly change the doctrine previously established.

The divisions which entered combat found that the authorized strength of the G-3 section was inadequate to perform the necessary tasks. As a result, the G-3 sections were augmented with additional personnel to plan future actions and operate on a sustained twenty-four hour basis. This practice was perhaps the greatest departure from doctrine found during this period.

The G-3 retained responsibility for those duties which had been previously assigned and, in addition, acquired the responsibility for supervision of Air-Ground Liaison and Information and Education. Along with the latter duties came the personnel to perform the functions.

The relationship between the staff and subordinate commanders of the division had been well established prior to the outbreak of World War II. The training of hundreds of commanders and staff officers at Fort Leavenworth, both prior to and during the war, served to promote an even greater understanding between officers serving in each of these positions. As a result, few problems were encountered in this area.

As a result of the rapid moving situations encountered and the need for speed in transmitting orders, the full field order was seldom used at division level. Instead, fragmentary orders, both written and oral, became standard. In addition, the Standing Operating Procedure was introduced and proved to be a valuable aid in simplifying and expediting operations.
CHAPTER VI

SUMMARY AND CONCLUSIONS

An analysis of the material contained in preceding chapters leads to several basic conclusions. Since the chief value of history lies in its application to current problems, only those findings which have possible application to today's doctrine will be noted.

From a historical standpoint, the entire general staff concept of the United States Army is relatively new. Although changes have occurred since creation of the General Staff in 1903, they have been evolutionary in character, and without abrupt departures from doctrine in being at the moment of change. Since this trend has continued to the present, twenty years beyond the close of this study, it is likely to endure.

Augmentation of Authorized Personnel

Divisions consistently augmented the number of personnel authorized in the G-3 section to increase its efficiency in combat. During World War I, as many as six officers were assigned to the G-3 section although only one was authorized. In World War II, although the maximum authorized officer strength for the section reached four, as many as eight officers often performed duty in the section.

The need for additional personnel during World War I was primarily a result of the necessity for increased liaison which had
been unforeseen prior to entering that conflict, and the nature of trench warfare which required more detailed planning at division level than had previously been necessary.

During World War II, divisions were very often engaged in rapidly moving situations which required the operations section to function twenty four hours a day in controlling current operations and, in addition, to allocate personnel for planning. The frequent movement of division headquarters often required an echelonment of the section to maintain continuous control. It is concluded, therefore, that the nature of combat was the primary reason for augmentation of the operations section during World War II.

Primacy of the G-3

The position of the G-3 assumed greater importance than that of the other general staff officers during periods of combat. This had some basis under the doctrine in existence during World War I since the G-3 had the authority to assume the duties of the chief of staff in the latter's absence. This provision was removed soon after the war, however, and our doctrine since that time has specifically attached equal importance to the functions of each of the primary general staff officers. During World War II, however, officers in the grade of colonel, one grade above that of other general staff officers and equal to the chief of staff, were assigned as division G-3's. Although the increased grade authorization was in effect for only six months toward the end of the war, it indicated the increased importance placed on the position at that time.

The operations function was the broadest of all general staff
functions for, in order to make a sound tactical recommendation, the G-3 had to consider the personnel, intelligence, logistic, and civil affairs situations. Likewise, the primary consideration of the other general staff officers when formulating their plans and orders was the operations plan. Thus the G-3's function became the focal point for staff effort in combat.

Increased Duties and Responsibilities

The duties and responsibilities of the division G-3 steadily increased during the period covered by this study. Most of the added duties, such as increased liaison, organization of the command, rear area security, and air-ground liaison, were a result of the increased complexity of warfare.

As a result of the need for rapid mobilization to augment the small standing Army of the 1920's, planning for mobilization became a G-3 function. The G-3 was given responsibility for information and education because of its close relationship to training for which he was already responsible.

Training of Staff Officers

Proper training minimized potential problems in the relations between staff officers and commanders of subordinate units. This conclusion is drawn from an analysis of the amount of writing, critical of the power of the general staff officer, which appeared prior to and just after World War I and the almost complete lack of similar criticism before and after World War II. This change stems from the fact that thousands of staff officers and commanders were trained at Fort
Leavenworth during the two decades preceding World War II and during
the period of war itself.

The line between proper staff action and interference with
commander's prerogatives was so finely drawn that it almost defied
description. So much depended upon the situation and the personalities
of the staff officer and the commander that it was imperative that
both not only be trained in staff procedure, but also be given the
same training.

Practice Preceded Doctrine

An analysis of the evolution of the G-3 function reveals that
doctrine was very often the result of practice in the field. Although
this was particularly true of the early portion of the period covered
by this study, it is also evident in the latter portion. A few exam-
pies follow:

1) The primary staff officers were called "G's" beginning in
1917; the titles were recognized in 1921.

2) As a result of the widespread augmentation of authorized
personnel in the G-3 section during World War I, increased authoriza-
tions of officer and enlisted personnel were made in 1921.

3) Lieutenant colonels were assigned as division G-3's in
1918; the authorization for lieutenant colonels as G-3's became effec-
tive in 1921.

4) As a result of the demonstrated need to deal directly with
technical staff officers during World War I, the doctrine which speci-
fied going through the Adjutant or Chief of Staff was changed in 1923.

5) The practice of staff officers of a higher level dealing
directly with their counterparts on the next lower level during World War I was reflected in doctrine in 1923.

6) As a result of a recommendation by the 2nd Division, which first organized under the triangular concept in 1937, the authorization for staff personnel was reduced in the Table of Organization published in 1939.

7) The widespread use of ground officers in the G-3 section for Air-Ground Liaison duties during 1944 resulted in the function being added to the G-3 section in 1945, along with personnel to perform that function.

From the above list, it can be seen that practice instituted in combat was most likely to influence doctrine. This trend is logical since the only true test of doctrine is combat. However, it must be kept in mind that the number of maneuvers and field exercises conducted during the years between the two World Wars was extremely limited. Therefore, the changes in doctrine which occurred during that period were initiated at the Command and General Staff School where most of the practice in tactical staff work took place, even though it was in the form of map exercises. In addition, the Staff School was responsible for the formulation of staff doctrine during that period.

Summary of Changes

The following chart provides a comparison, in capsule form, between the G-3 section at the beginning of 1917 and its counterpart at the end of 1945:
Authorized Strength and Organization

1 Major, responsible for all duties. (A field clerk was shared with the chief of staff and the G-2).

1 Lieutenant Colonel, G-3, responsible for supervision of the entire section.

3 Majors, assistant G-3's, responsible for Plans and Operations, Information and Education, and Air-Ground Liaison respectively.

8 Enlisted personnel.

Basic Duties and Responsibilities

1. Operations, to include plans, orders, and estimates.

2. Training.

3. Liaison with adjacent units.


5. Information and education.

6. Air-Ground liaison.

Relationship With Other General Staff Officers

1. G-3 was subordinate in rank to G-1 (Adjutant) but acted for Chief of Staff in latter's absence.

1. All chiefs of general staff sections were of equal rank.

2. G-3 was superior in rank and position to G-2.

2. Each general staff function was considered of equal importance.

3. No G-4 authorized.
Relationship With Special Staff Officers

1. Contact with "technical and administrative" staff through the Adjutant (G-1) or Chief of Staff

1. Direct contact with Special Staff officers authorized.

2. Special Staff officers responsible to keep G-3 informed.

Relationship With Subordinate Commanders

1. G-3 was delegated considerable authority to issue orders to subordinate units.

1. G-3 issued orders to subordinate units only after approval of plans by division commander, to implement commander's policy or in routine matters.

2. Deficiencies in subordinate units reported to division commander when found.

2. Subordinate units given opportunity to correct deficiencies before G-3 reported them to division commander.

3. Little restraint in contacts with subordinate commanders.

3. G-3 guarded against interference with subordinate commanders' prerogatives. Tact exercised to maximum.

4. G-3's responsibility to "the troops" equalled his responsibility to the division commander.

The author recognizes that the evolution of the G-3 function did not end in 1945. The introduction of mass destruction weapons and psychological warfare as well as the increased emphasis on guerrilla warfare are but a few of the developments which have forced additional duties on the G-3 since the close of this study. The evolution which has continued as a result of these developments, coupled with the experience gained during the Korean conflict, several years of "cold war," and the present effort in Vietnam provides material of sufficient scope to warrant an additional study of this size.
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