

ACHIEVING OPERATIONAL FLEXIBILITY THROUGH TASK ORGANIZATION: HOW THE AMERICAN FORCES IN EUROPE BEAT NAZI GERMANY BY MAKING THE DIFFICULT ROUTINE

A Monograph

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ABSTRACT

ACHIEVING OPERATIONAL FLEXIBILITY THROUGH TASK ORGANIZATION: HOW THE AMERICAN FORCES IN EUROPE BEAT NAZI GERMANY BY MAKING THE DIFFICULT ROUTINE, by LTC Brian North, 105 pages.

On the eve of World War II, the United States Army was a small cadre force without deployable combat divisions. Because of years of preparation and planning during the interwar years, the Army completed the transformation into a huge organization with multiple army groups spread across the world in less than four years. This new army displayed remarkable battlefield flexibility. Doctrine and training guided senior leaders in the European Theater of Operations to ensure overwhelming combat power at the point of attack. They constantly shifted their divisions, a limited asset on the continent for the majority of 1944, between corps headquarters immediately prior to major battles. Many divisions changed corps assignments four times in a three-month period and corps moved between armies on a regular basis with no apparent difficulty. Changing task organization in the face of the enemy is a complex undertaking, affecting command relationships, logistics, and every other staff function. Despite the potential for introducing unwanted friction, the shifting of units from one headquarters to another was a common practice in the European theater in 1944. How were these newly formed units able to display the flexibility to integrate effectively while engaged in combat?

This monograph proposes operational flexibility resulted from a unique American way of war developed during the interwar period by veterans of the First World War. Three factors – common doctrine, carefully selected leaders, and an effective organizational structure – provided senior commanders the organizational flexibility they required in combat. Without this flexibility, the Army would have had difficulty executing its breakout from the Normandy bridgehead, pursuing the retreating German forces across France, and quickly thwarting the Nazi offensive in the Ardennes at the end of 1944. The interwar school system and stable doctrine enabled a common understanding on how to solve tactical and operational military problems. The high quality and close-knit officer corps, particularly the Regular Army officers who served in senior leadership positions, facilitated the process of unit integration. The design of large unit organizations, and the staff structure which supported them, greatly simplified the process of moving divisions between units to accommodate the changing situation in the face of an aggressive and adaptable enemy.

There is a clear parallel between the roles of U. S. Army World War II era corps and modern divisions. The current division headquarters is designed to integrate brigade combat teams for specific missions much like the 1944 corps. This monograph suggests that many components of our current doctrine, leadership model, and organization are well designed to enable flexibility. Some components of our current system do not facilitate task organization changes in combat, and we must address them before that capability becomes indispensable on a future battlefield. In particular, this study highlights the importance of stable and widely understood doctrine, use of high quality liaison officers, and rigorous selection and education of the officer corps. Our leadership and doctrine recognize those concepts, but fail to provide the resources and processes to implement across the service. The Army's reliance upon pooling of critical assets, lack of mass in field artillery unit allocation, and rigidity of current communications systems are potential areas that could constrain options for rapid changes in task organization, and deserve further analysis of both historical precedents and future application.

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This monograph owes a great deal to the suggestions, guidance, and support of my monograph director, Dr. Stephen Bourque. It was at his initial suggestion that I looked at the United States Army during the initial European campaign in a new light, and as such I will never read another history book without stopping and asking how did they make that task organization change so easy? As a Signal Corps officer, I inherently understand how difficult changing task organization can be, and it surprised me how both participants and historians have failed to examine or give credit to those factors that made it possible. I also would like to thank Dr. Peter Schifferle, whose book provides the base upon which this monograph has been built and who has been generous with providing me leads and sources. Colonel James Sisemore served as both my second reader and another primary source, as I built upon his study of the quality of students and instructors during the interwar period. I hope to have lived up to his standards. Like any research project, I relied heavily upon the experience of professional research assistants, in this case at both the Fort Leavenworth Combined Arms Library and the Eisenhower Presidential Library. Elizabeth and John Dubuisson from Fort Leavenworth provided a wealth of materials from their collection. Kevin M. Bailey and Chalsea Millner from Eisenhower Presidential Library were exceptionally helpful and their efforts ensured that in two days I was able to collect more information that I could possibly fit into this monograph. Finally, I need to thank my both my mother and wife, neither of whom are historians, who helped with both editing and clarity in my writing. In the end, this project has been both professionally and personally rewarding, and any shortcoming are purely my own.

TABLE OF CONTENTS

INTRODUCTION.....	1
DOCTRINAL FOUNDATION.....	9
Army Schooling System.....	10
Mission Type Orders and Five Paragraph Format.....	21
Stability in Concepts.....	25
Summary of Doctrinal Foundations	35
LEADERSHIP.....	36
Ensuring the Quality of the Officer Corps.....	37
Quality Commanders.....	45
Role of the Staff.....	54
Summary of Leadership	57
ORGANIZATION FOR COMBAT.....	59
Designed to Fight	61
Supporting the fight.....	67
CONCLUSION	72
APPENDIX A (TASK ORGANIZATION CHANGE ANALYSIS).....	78
APPENDIX B (TASK ORGANIZATION CHARTS)	81
APPENDIX C (GLOSSARY).....	87
BIBLIOGRAPHY	90

INTRODUCTION

Major General Leland Hobbs and the 14,000 soldiers of the 30th Infantry Division, “Old Hickory,” came ashore on the beaches of Normandy, France on June 11, 1944 as an untested unit. They joined British, Canadian, and American units in an effort to break out of the Normandy beachhead and defeat the German Army Group B. Over the next two months, the United States First Army Staff would change the higher headquarters of this division seven times, almost weekly, as senior leaders shifted their few combat effective divisions in an effort to penetrate the German defense line and break into the French countryside. Upon landing, the 30th Infantry Division received orders to report to XIX Corps and took its placed holding a defense line. On July 7, XIX Corps directed the division to conduct a critical canal crossing, and then halt a major German counterattack on July 11. Four days later, Major General Omar Bradley, Commander of First United States Army, began to shift his forces in preparation for Operation Cobra. July 15 would be a busy day for 30th Infantry Division. At 0540, it attacked to secure the intended line of departure for the entire operation, an offensive that continued throughout the day. That night XIX Corps sent an order transferring the division to VII Corps effective at 2400 hours. Completing the change during the night, Hobbs resumed the offensive at 1000 the following morning under his new corps leadership.¹ The division participated as one of the lead divisions in Cobra, which included the infamous short dropping of bombs that resulted in sixty-four killed and three hundred and seventy-four wounded in two days.² Despite this loss, Hobbs and his troops achieved all of their assigned objectives. As the successful breakout became exploitation, the 30th Infantry Division changed back to XIX Corps control on July 28. Six days later, it joined V Corps control and the next day subsequently to VII Corps as the army level adjusted forces in an attempt to encircle German army. By August 13, the division

¹ July 1944 G3 After Action Report “30th Infantry Division After Action Reports,” 12, accessed October 28, 2012, <http://www.OLDHICKORY30TH.COM/index.htm>.

² Ibid., 20.

returned to XIX Corps control, where it replaced 1st Infantry Division around St. Barthelmy, France and repulse the German counterattack aimed at Avranches at Mortain.³

During this entire period, the 30th Infantry Division was constantly in contact, conducting offensive missions, defending against enemy counter-attacks, or clearing areas of remaining enemy soldiers. Despite his ever-changing corps headquarters, Hobbs never required an operational pause to integrate with his new command. This division performed extraordinarily well, especially considering the conditions. Colonel S.L.A. Marshall, the European Theater Command Historian, wrote a letter to Hobbs in 1946, stating he and thirty other command historians studying the European Theater campaigns recommended that General Dwight D. Eisenhower, Supreme Allied Commander for Europe, recognize the 30th Infantry Division as the top ranked division based upon its flawless combat record.⁴ However, it was far from the only division to undergo multiple task organization changes while in combat. In the period between June and October 1944, there were nine changes of corps alignment under United States armies and no less than sixty-five changes of division alignment under corps.⁵ The American way of war in World War II relied upon this organizational flexibility.

Changing task organization was, and is, not an easy mission. The linkage between a unit and its higher headquarters entails a significant shift in the mechanics that run modern mechanized armies. A commander must understand the capabilities and limitations of the units he directs, and this understanding does not come from briefing charts on manpower numbers, combat power, or operational readiness rates. History is replete with examples where the human element has played a large role determining victory or

³ Peter R Mansoor, *The GI Offensive in Europe: the Triumph of American Infantry Divisions, 1941-1945* (Lawrence, Kan.: University Press of Kansas, 1999); “30th Infantry Division After Action Reports.”

⁴ S.L.A. Marshall, “S.L.A. Marshall Letter to MG Leland S. Hobbs,” March 16, 1946, http://www.30thinfantry.org/marshall_letter.shtml.

⁵ See Appendix A for a listing of task organization changes during this period.

defeat. The morale of the unit, personality of the senior leaders, and capability of junior leaders often have a decisive effect upon a battle – all of which require time for a commander to gain appreciation for new units working for him.⁶

For the staffs, changes in task organization could be even more disruptive. Staffs must share common procedures in order to transmit orders, receive reports, collect and disseminate intelligence, and coordinate fire support. From the simple problems of format and suspenses for reports, to the more important tasks of linking requirements to capabilities, smooth staff interoperability is integral for the functioning of modern armies. The exchange of liaison officers plays a huge role in coordination between units. In times of limited communications and fast moving battles, these liaison officers represented their commanders in decision-making, planning, and tracking of the battle. Sustaining modern armies requires a substantial supply system, especially when further complicated by keeping up with fast moving and changing chains of command. Logistics is typically the most critical factor in determining operational reach and preventing culmination. Establishing and maintaining communications systems among all of these units was also a major challenge. The technology available in 1944 relied primarily upon wire based communications, especially at the division and above levels. Each change of relationship required rerouting circuits and establishing new lines, which takes time and effort. Without these communications, staffs would be unable to coordinate the complex command, control, and support requirements of the modern battlefield. Despite the complicated nature of task organization changes, army and corps

⁶For more information on the role of commanders in war: Martin Van Creveld, *Command in War* (Cambridge, Mass.: Harvard University Press, 1985); Carl H Builder et al., *Command Concepts: A Theory Derived From the Practice of Command and Control* (Santa Monica, Ca.: Rand, 1999); *Army Leadership*, Army Doctrinal Reference Publications 6-22 (Washington D.C., USA: Department of the Army, 2012); *Mission Command*, Army Doctrinal Reference Publications 6-0 (Washington D.C., USA: Department of the Army, 2012); *Command and Staff Functions, Special Text No. 12* (Fort Riley, KS: Army General School, 1948); *Commander and Staff Guide*, Army Technical and Tactical Publication 5-0.1 (Washington D.C., USA: Department of the Army, 2011).

commanders in the European Theater of Operations still directed changes on a regular basis without losing combat effectiveness. This paper seeks to explain how they made this possible.⁷

The United States' entry into World War II presented the nation's military leadership with a number of significant challenges, and their solutions would be in line with the perception of an American way of war. The experiences of the previous war affected every senior leader, whether they had served or not. The First World War led American officers to believe French and British methods were incompatible with their vision of modern warfare. The problems faced with fire support, logistics, tactics, and command and control of large unit operations in Aisne-Marne and Meuse-Argonne drove the development of United States Army doctrine and education during the interwar years in a distinctly American way of warfare.⁸ The shadow of the First World War and tribulations of the interwar years steered senior leader decision making when preparing for the next war. Starting in 1940, they transformed an army of 120,000 regular soldiers with no practical experience operating in units above the regimental level into a combat effective force of nearly eight million in army groups operating across the globe. The War Department created new large unit organizations, trained thousands of citizens to serve as commanders and staff officers, and developed strategic and operational plans for defeating the Axis forces in every imaginable environment. They faced enemy forces that had years of combat experience and had already defeated nearly every other army in battle with superior tactics and equipment. One of the major factors that contributed to the success of the American army was organizational flexibility. This flexibility enabled commanders to exploit opportunities by shifting units where needed. The infantry

⁷ For more information on the role of the modern staff: *Command and Staff Functions, Special Text No. 12; Commander and Staff Guide; Mission Command*.

⁸ Mark E Grotelueschen, *The AEF Way of War: The American Army and Combat in World War I* (Cambridge: Cambridge University Press, 2010), 84–88, 234; *American Armies and Battlefields in Europe*, Center for Military History Publication 23-24 (Washington D.C., USA: U.S. Government Printing Office, 1938); Kenneth E. Hamburger, "Learning Lessons in the American Expeditionary Forces," CMH Publication 24-1 (Washington D.C., USA: Center for Military History, United States Army, 1997).

division was the basic combined arms unit in the army's concept for large unit employment. The division was self-sustaining and capable of fighting independently.⁹ A decision to limit the total army to ninety divisions in order to preserve the nation's industrial capacity resulted in the limited availability of combat ready divisions for planning and executing operations throughout the war.¹⁰ The decision to land in Normandy, France, added more operational limitations driven by terrain and ports available. Once the Allies broke out of the bocage of Normandy, the front expanded eastward without a natural break creating a widening and contiguous battlefield unlike experienced in any other theater. Western Europe geography forced commanders to deal with the problems of massing combat power on this expanding front with limited experienced divisions and regular introduction of untested new divisions from the limited ports in the rear. The solution, more often than not, required shifting division and corps task organization to ensure overwhelming combat power at decisive points. Commanders at the army group, army, and corps levels moved units around frequently, particularly in preparation for an operation. Many divisions changed corps assignments four times in the three-month period. Even corps moved between armies, with VIII Corps reporting to three different army headquarters in October 1944 alone.¹¹ Senior leaders must have believed the benefits of making these changes outweighed the inherent risks.

⁹ *Operations (Tentative) (1939)*, Field Manuals 100-5 (Washington D.C., USA: War Department, 1939), 5; *Operations (1941)*, Field Manuals 100-5 (Washington D.C., USA: War Department, 1941); *Operations (1944)*, Field Manuals 100-5 (Washington D.C., USA: War Department, 1944); *Field Service Regulation* (Washington D.C., USA: War Department, 1923).

¹⁰ For background on the decision to only field 90 divisions, see Maurice Matliff, "The 90 Division Question," in *Command Decisions*, ed. Kent Roberts Greenfield, United States Army in World War II CMH Publication 70-7-1 (Washington D.C., USA: Center for Military History, United States Army, 1987); R. Elberton Smith, *The Army and Economic Mobilization - CMH Publication 1-7*, United States Army in World War II Publication 1-7 (Washington D.C., USA: Center for Military History, United States Army, 1959), 156; Mansoor, *The GI Offensive in Europe*; Russell F Weigley, *Eisenhower's Lieutenants: the Campaign of France and Germany, 1944-1945* (Bloomington: Indiana University Press, 1990).

¹¹ Appendix A to this monograph provides an analysis of each division and corps task organization changes between June 1944 and October 1944.

Remarkably, neither participants nor historians have emphasized, studied, or analyzed how they achieved this flexibility in task organization. Many historians have studied the transformation from a peacetime army into a dominant mechanized combat force. The distinguished historian, Russell Weigley in *Eisenhower's Lieutenants* set the standard for many historians by analyzing the application of American military thought during the interwar period through what he terms as the "American army's greatest campaign."¹² Peter Schifferle explores the role the Fort Leavenworth military education system had in preparing the future leaders of the army for positions as division, corps, army, and army group leaders in his book *America's School for War*. Michael R. Matheny expands that study to include the entire military school system, focusing on the role of the service war colleges in developing operational artists in his book *Carrying the War to the Enemy*. Carlo D'Este in *Decision in Normandy*, Peter R. Mansoor in *The GI Offensive in Europe*, David W. Hogan Jr. in *A Command Post at War*, Michael D. Doubler in *Closing with the Enemy*, James Jay Carafano in *After D-Day*, and Edward G. Miller in *Nothing Less than Full Victory* all have variations on this general theme of transformation from frontier or third rate army into the ruling world power on the plains of Europe.¹³ All of these historians note the task organization changes, often crediting them with providing the decisive combat power at the right moment. However, none comments on how they were able to accomplish this feat.

¹² Weigley, *Eisenhower's Lieutenants*, xv.

¹³ Peter J Schifferle, *America's School for War: Fort Leavenworth, Officer Education, and Victory in World War II* (Lawrence: University Press of Kansas, 2010); Michael R Matheny, *Carrying the War to the Enemy: American Operational Art to 1945* (Norman: University of Oklahoma Press, 2011); Carlo D'Este, *Decision in Normandy* (New York: Konecky & Konecky, 1994); Mansoor, *The GI Offensive in Europe*; David W. Jr. Hogan, *A Command Post at War: First Army Headquarters in Europe, 1943-1945*, United States Army in World War II CMH Publication 70-60 (Washington D.C., USA: Center for Military History, United States Army, 2000); Michael D Doubler, *Closing with the Enemy: How GIs Fought the War in Europe, 1944-1945* (Lawrence, Kan.: University Press of Kansas, 1994); James Jay Carafano, *After D-Day : Operation Cobra and the Normandy Breakout* (Boulder, Colo.: Lynne Rienner Publishers, 2000); Edward G Miller, *Nothing Less Than Full Victory: Americans at War in Europe, 1944-1945* (Annapolis, Md.: Naval Institute Press, 2007).

The biographies and autobiographies of many of the American leaders confirm the view that the transformation was both remarkable and successful. General Omar N. Bradley, General George S. Patton III, General J. Lawton Collins, and Lieutenant General Troy H. Middleton all credit the interwar period for influencing their ability to lead large units, and specifically the Army school system for influencing their personal development and success. Each of them felt a great deal of pride in the performance of the United States Army in Europe and the effectiveness of the American way of war. They often mention task organization changes, sometimes in reference to a conference or decision, but like the historians, they do not address the complexity or impact of making the changes.¹⁴ Although these historians and participants approach and examine the American experience in Europe from different perspectives, they agree that the United States Army had succeeded in building a capable force by the fall of 1944. They all address the task organization changes in a similar fashion; mentioning the changes briefly in passing, usually while linking the arrival of a new unit with the success in a particular battle. They seem to accept that the units were able to execute quickly and without significant effort, ignoring the inherent complexity of the task. While both historians and participants recognize flexibility was critical to massing combat power, none examined what was necessary to support that flexibility.

The United States Army built a citizen-based army in less than three years and executed complicated task organization changes on a routine basis in combat. What factors enabled the US Army to execute rapid task organization changes during combat at the corps and division levels during World War II? This level of flexibility could have come from a standing professional army well versed in large unit operations, but the army that landed on the beaches of Normandy was heavily reliant upon citizens

¹⁴ Omar N Bradley, *A Soldier's Story* (Toronto: Random House, 1951); Carlo D'Este, *Patton: A Genius for War* (New York: HarperPerennial, 1995); George S Patton and Paul D Harkins, *War as I Knew It* (Boston: Houghton Mifflin Co., 1995); J. Lawton Collins, *Lightning Joe : An Autobiography* (Novato, CA: Presidio Press, 1994); H. Paul Jeffers, *Taking Command: General J. Lawton Collins from Guadalcanal to Utah Beach and Victory in Europe* (New York: New American Library, 2009); P.N. Kaune, "General Troy H. Middleton: Steadfast in Command" (DTIC Document, 2011); Frank James Price, *Troy H. Middleton: A Biography* (Baton Rouge: Louisiana State University Press, 1974).

turned soldiers. Another method could have been a rigid command and control system that expected every unit to operate like part of a machine – interchangeable and lockstep in following orders. This does not describe the United States’ philosophy of mission command and initiative that was clearly in place. Determining the factors that enabled this success can guide current and future force development.

If our nation calls on our army to execute combined arms maneuver operations today, the current operational concept relies upon brigade combat teams to demonstrate the same flexibility in task organization. Today’s brigade combat teams operate under different divisions as our predecessors did in World War II with divisions under corps. With similar limitations on force structure, it will be critical that these units be able to integrate with new division headquarters on the move and maintain the initiative. This flexibility will enable commanders to maintain the initiative and exploit operational opportunities as they present themselves. Much like the army of the inter-war period, there will be little opportunity for brigade combat teams and divisions to practice this kind of organizational flexibility in field exercises. Thus, we must turn to history to identify the factors that enabled previous success.

The United States Army was successful in making rapid task organization changes during World War II in the European Theater of Operations because of a combination of three factors. First, during the interwar period Regular Army officers established a common doctrinal foundation built through professional education and stable doctrine. The professional officers who served as trainers and cadre for the expanding army were able to draw upon both their experience and published manuals to train the new units. Second, only the best officers commanded divisions, corps, and armies. General George C. Marshall, United States Army Chief of Staff throughout the war, personally led the process that ensured the selection of high quality commanders and primary staff at the corps and division level. Finally, the army built an organizational structure designed to support rapid task organization. Reflecting upon their experience in the First World War and interwar years, returning leaders carefully planned the design of large units that would support operational employment concepts of fire and maneuver. When units were

able to combine common doctrine, great leadership, and effective organizational structure, commanders gained the flexibility to respond to battlefield changes and exploit opportunities.

DOCTRINAL FOUNDATION

The doctrinal foundation of the Army relied upon the interaction between a strong school system that drove doctrine, a way of war that encouraged initiative through mission type orders, and doctrinal concepts that remained stable over two decades. One common refrain from senior Army leaders in interviews, memoirs, and reflective speeches was that the interwar schooling system was critical to their success in World War II.¹⁵ Starting immediately after the November 1918 armistice, the interwar period was a trying time for the military. All services suffered severe budget constraints driven by a national desire to avoid international entanglements and a belief that the First World War ended war. The economic crisis of the Great Depression, which only ended in 1940 with the decision to mobilize the nation to prepare for war, only compounded the national resistance to a large standing army. This period provided the small enduring professional officer corps an opportunity to reflect upon the lessons of the previous conflict in order to develop a common understanding of how to conduct future operations. They developed concepts that intentionally diverged from European armies, validated them in classroom exercises, and eventually published them in doctrinal publications. The Regular Army served as cadre for newly activated units, led divisions, organized special schools, and effectively spread the common doctrinal framework to the expanding army.¹⁶ One of the key reasons they were successful in employing

¹⁵ “First Army Headquarters - After Actions Report Initial Draft with Comments,” April 15, 1945, U.S. Army, 1st Army Headquarters: Records 1943-1955 (73-19) Box 2, Eisenhower Presidential Library; Hogan, *A Command Post at War: First Army Headquarters in Europe, 1943-1945*; Schifferle, *America’s School for War*; Matheny, *Carrying the War to the Enemy*; Collins, *Lightning Joe*, 56–57; Jeffers, *Taking command*, 23; Price, *Troy H. Middleton*, 91; Robert Berlin, “U.S. World War II Corps Commanders: A Composite Biography,” *Journal of Military History* 53 (April 1986): 4.

¹⁶ The term Regular Army officers is used to delineate those officers who served in the professional standing army, versus officers in the Army of the United States, which included the larger draftee forces and mobilized civilian officers. At this time, all West Point graduates and select Reserve Training Officer Course were Regular Army officers. Regular Army officers could hold dual ranks – one

large unit organizations was the school system and doctrine developed to support that system. The school system did this by identifying and developing high quality officers, institutionalizing of the concept of mission type orders that provided flexibility, and maintaining stable doctrine that proved effective in combat. These factors provided the Army the advantage of operating under a common understanding during the war, which was an important prerequisite for enabling the flexible task organization evident during the 1944 campaign in France.

Army Schooling System

During the interwar years, the school system was the center of the Army's intellectual and professional development. The end of the First World War brought deep cuts to the military budgets and personnel.¹⁷ Without large standing units, money to conduct force-on-force exercises, or active combat action, officers preparing for the next conflict were forced to rely upon the schoolhouse to develop and test ideas. Training, education, and doctrine development became the primary focus for much of the Army. In 1929, nearly half of the regular infantry captains and field grade officers were serving as either instructors or students somewhere in the school system, a state of affairs reflective of the entire interwar period.¹⁸ In schools, the institution had free reign to teach the science and art of combined arms warfare, develop new concepts, and most importantly identify those exceptional officers upon whom the nation could rely when the call came. General John Pershing, Commander of the American Expeditionary

their permanent rank in the Regular Army and a second, higher, rank in the Army of the United States, which could be revoked at the end of the war. One of the first concerns when activating the National Guard was equalizing the peacetime Regular officer promotions with the National Guard rank system. Mark S. Watson, *The War Department: Chief of Staff Prewar Plans and Preparations*, The United States Is World War II CMH Publication 1-1 (Washington D.C., USA: Center for Military History, United States Army, 1950), 247, 263.

¹⁷ Allan Reed Millett and Peter Maslowski, *For the Common Defense: A Military History of the United States of America* (New York; London: Free Press ; Collier Macmillan, 1984), 363.

¹⁸ Schifferle, *America's School for War*, 19.

Forces for the First World War and later Army Chief of Staff, recognized in 1923: “In no other army is it so imperative that the officers of the permanent establishment be highly perfected specialists, prepared to serve as instructors and leaders for the citizen forces which are to fight our wars.”¹⁹ The school system became the method to identify and develop the most qualified officers in the Army.

The War Department designed the school system with a progression from training to education in order to prepare the best-qualified officers for higher-level command. Driven by the Elihu Root reforms and the McGlachlin report, these schools served a vital role in the professionalization of the entire officer corps.²⁰ The United States Military Academy (West Point) provided most cadets their initial officer education, although many received commissions through Reserve Officer Training Courses at participating universities. Each Army post or garrison ran its own school, providing new officers with on the job training for basic skills. The closing of the frontier in the 1880s signaled a shift in the concept of professionalism in the army, recognized in the desire for more advanced and centralized technical skills training. The first effort was the School of Infantry and Cavalry at Fort Leavenworth, but other branches quickly followed with a mounted school at Fort Riley and the School of Fires at Fort Sill. These schools would develop into advanced courses for senior lieutenants and captains, including the Infantry School, Engineer School of Application, School of Antisubmarine Defense, School of Application for Cavalry and Field Artillery, and Army Medical School. With the proliferation of branch specific schools, the

¹⁹ Ibid., 19–20.

²⁰ The Root reforms were in response to identified shortcomings in the Spanish-American War. Wide ranging, one component was the push for professional schooling. Millett and Maslowski, *For the Common Defense*, 310–312. The McGlachlin Report, or officially the “Report of Board of Officers Re-Study of Army School System” was published in 1922. This report drove the structure of the school system, including missions and roles for each level, student evaluations, tour length, and interval between courses. Major General Edward F. McGlachlin was a former commandant of the Fires School and future commandant of the War College. Schifferle, *America’s School for War*, 33; Boyd L. Dastrup, “History of the US Army Field Artillery School from Birth to the Eve of World War II,” *Fires* (February 2011); Judith Stiehm, *The U.S. Army War College: Military Education in a Democracy* (Philadelphia: Temple University Press, 2002).

School of Infantry and Cavalry transformed into an intermediate course called at various times the School of the Line, General Service and Staff College, and eventually the Command and General Staff School. The Leavenworth school taught select majors and senior captains the art and science of combined arms warfare to prepare them as cadre for new regiments and divisions when the peacetime army expanded in time of war. From 1919 to 1922 and again from 1929 to 1935, Leavenworth ran a second year course for selected officers expanding the instruction to corps and army level staff.²¹ In 1901, the War Department established the Army War College in Washington D.C. as the senior post-graduate education program in the Army. The War College prepared leaders to serve on the War Department General Staff and to lead army and larger organizations. As officers moved up each level of the school system, the selection for attendance became stricter, performance expectations increased, and the ratio of education compared to training increased.²² During the interwar period, the lessons of the First World War very much influenced the curriculum of the Army schools at every level. All of the initial post-war instructors were combat veterans, who consciously sought to pass on the important lessons from their experience.²³ Each level of the school system contributed to building the common understanding and doctrinal foundation that enabled task organizational flexibility in World War II.

The branch schools provided junior officers standardized instruction in their specific technical and tactical skillset. Growing out of the realization that branch specific skills were necessary to support combined arms fire and maneuver operations, each branch was responsible for developing its own

²¹ The War Department reduced the course to one year during those intervening years in an effort to increase the student throughput, and shifted some of the responsibility for senior staffs to the Army War College. Schifferle, *America's School for War*; Matheny, *Carrying the War to the Enemy*.

²² Schifferle, *America's School for War*, 32, 79; Major General Edward F. McGlachlin, "The Army War College," *The Coast Artillery Journal* 57, no. 4 (October 1922): 289; Stiehm, *The U.S. Army War College: Military Education in a Democracy*, 23; Matheny, *Carrying the War to the Enemy*; Gilbert Cook, "Officer Education System," n.d., Gilbert R. Cook Papers 1908-1959 (A91-11 & A92-12) Box 1, Eisenhower Presidential Library.

²³ Schifferle, *America's School for War*, 92.

schools. Some turned to Europe for models. Captain Dan T. Moore, an artilleryman, visited a number of European artillery schools in 1908 and developed the first Field Artillery course at Fort Sill based upon the German methods he observed.²⁴ As noted earlier, branch chiefs established schools for mounted cavalry, infantry, engineers, coastal artillery, medical, aviation, and other specialty branches.²⁵ Each of these schools focused on teaching through practical application, with hands on exercises and field exercises when possible. Lieutenant General Joe Collins, a future World War II corps commander and postwar Army Chief of Staff, reflected that while he was on the staff at the Infantry School, students thrived in an “innovative, experimental, testing-and-proving atmosphere.”²⁶ General Marshall served as Deputy Commandant of the Infantry School from 1927 to 1932 and he led a revolution in the instructional style and tactical concepts. Based upon his First World War experience, he focused instruction on the importance of firepower and maneuver. Recognizing the reality that the Army would have to expand quickly in time of war, he sought to “develop a technique and methods so simple and so brief that the citizen officer of good common sense can readily grasp the idea.” This simplicity was important to counter the rigidity of orders he found stifling during his experience in the First World War and China.²⁷ Students faced challenging practical exercises, in which the faculty encouraged the use of initiative instead of blind obedience to published orders.²⁸ At the Fires School, the faculty led by Captain Moore,

²⁴ Dastrup, “History of the US Army Field Artillery School from Birth to the Eve of World War II,” 7.

²⁵ Stiehm, *The U.S. Army War College: Military Education in a Democracy*, 26.

²⁶ Collins, *Lightning Joe*, 36.

²⁷ Forrest C. Pogue, *George C. Marshall: Education of a General 1880-1939* (New York: Viking, 1963), 248–251.

²⁸ Ed Cray, *General of the Army: George C. Marshall, Soldier and Statesman* (New York, N.Y.; [Lanham, MD]: Cooper Square Press ; Distributed by National Book Network, 2000), 104–106; Charles F Brower, *George C. Marshall: Servant of the American Nation* (New York: Palgrave Macmillan, 2011), 31–33.

"set out to teach officers by actual practical exercise . . . the general principals in conducting fire ... [and] the tactical employment of field artillery, with a clear emphasis on gunnery."²⁹ These schools also developed new tactics and techniques. For example, the Field Artillery faculty developed the concept of fire direction centers and procedures for the use of a firing chart to mass fires.³⁰ All of these schools reinforced the combined arms concept, teaching the basics to those officers who formed the core of the World War II commanders and staffs. The technical skills, tactical experience, and new techniques developed in the branch schools would form the basis upon which further education built common understanding.

Attendance at the Command and General Staff School was one of the few ways for an officer to distinguish himself during the interwar years, and competition among students was fierce. Branch chiefs, typically the senior general officer in each branch, were responsible for selecting only their best officers for attendance based upon a review of their efficiency reports and reputation. With only limited spaces available, General Pershing closely monitored the selection process to enforce high standards across branches. Famously, General Dwight D. Eisenhower, unable to secure a slot through the infantry branch, accepted a temporary assignment to Adjutant General Corps to receive their opening.³¹ Competition while in school was also critical. A student's class ranking determined their follow-on assignments, placement on General Staff Eligible List, and most importantly identified the top performers to senior leaders. An analysis of the World War II senior leaders supports this conclusion. Of the thirty-four corps commanders in World War II, thirteen were honor graduates or at the top of their class, while only two

²⁹ Dastrup, "History of the US Army Field Artillery School from Birth to the Eve of World War II," 8.

³⁰ Ibid., 10.

³¹ Eisenhower would end up graduating first in his class. Schifferle, *America's School for War*, 129–130.

graduated in the bottom half of the class.³² A study of select division commanders identified the importance of attendance at Command and General Staff School, with all completing the resident course and thirty-six percent selected to attend the second year as well.³³ By the summer of 1944, graduates of Command and General Staff School served in key staff billets in armies, corps, and divisions. Graduates of both Command and General Staff School and the Army War College dominated General Omar Bradley's First Army staff.³⁴ At the corps level, the majority of the primary staff officers were graduates, while in divisions typically the chief of staff and G3 were graduates. Commanders sought Leavenworth graduates because they understood combined arms doctrine, possessed staff problem solving skills, and demonstrated ability.

The Command and General Staff School had the mission to prepare officers for duty at the division and corps level by training combined arms tactics, responsibility of the commander, and functions of the general staff. During the years when the course included a second year option, the expanded curriculum increased the focus on large unit operations and logistics. Picking up a trend started before the First World War, the primary means of instruction was the applicatory method. The applicatory method used problem-solving exercises to challenge individuals and groups against a graded school solution. The heart and soul of the entire course was the map exercises, conducted three or four times a week and requiring students spend four hours solving various military problems. While extremely stressful during class, the result was increased confidence in each student's ability to solve

³² Berlin, "U.S. World War II Corps Commanders: A Composite Biography," 10.

³³ LTC Wade randomly selected twenty-five division commanders as the basis of his study based upon available personnel records. Lieutenant Colonel Gary Wade, "World War II Division Commanders, Combat Studies Institute Report #7" (Combat Studies Institute Press, N.D.), 6, Electronic File, Combined Arms Research Library Digital Library, Fort Leavenworth, KS.

³⁴ Hogan, *A Command Post at War: First Army Headquarters in Europe, 1943-1945*, 25.

problems using the same method and achieving similar results to every other student.³⁵ With high quality faculty providing feedback and standardizing methods, these exercises are the experience that stuck with nearly every student. One of those instructors was Lieutenant General Troy Middleton, a future World War II corps commander. Reflecting on his time grading these exercises, he states

I gave some students a better grade when they made a wrong decision but wrote better reasons for the decision and for the execution of it— better than I gave those who came up with 'right' decisions and poor execution. We put the emphasis on logic—and the punch behind it.³⁶

The tie between practical exercises and deployed operations was strong, as reflected in a First Army After Actions Report from April 1945. In a discussion of orders production, the First Army staff stated “Yet it does seem appropriate in this report to point out that in this particular, the imaginative and still utterly practical teachings of our schools have been proven on one of the most critical battlefields in the greatest war the world has seen.”³⁷ When the First Army staff deviated from the school solution for listing unit locations in the operations summaries, they gave an extensive explanation on why their particular situation required changing the standard.³⁸ The applicatory method proved so successful it spread to the branch schools and the War College during the interwar years, typically through graduates of Leavenworth serving on the faculty. As a result, officers at all levels use the same problem solving method and were comfortable with defending their solutions using the specifics of a given problem. With all the key leaders working from a common experience, commanders could trust subordinates to execute within their intent even when the personal relationship did not have time to build. The Leavenworth

³⁵ Schifferle, *America's School for War*, 35, 107–108, 191.

³⁶ Price, *Troy H. Middleton*, 91.

³⁷ “First Army Headquarters - After Actions Report Initial Draft with Comments,” 6 (35).

³⁸ “First Army Headquarters - Summary of Operations September and October 1944,” n.d., 16, U.S. Army, 1st Army Headquarters: Records 1943-1955 (73-19) Box 3, Eisenhower Presidential Library.

experience set a powerful example for commanders and staffs, one that provided a common understanding that facilitated coordination during operations.

The Army War College was the senior level professional school in the system. With only the best students in Command and General Staff School moving on to the War College, the focus shifted from competitive academics to interaction between the students and instructors in order to facilitate the exchange of ideas.³⁹ Because attendance promised service on the General Staff or other senior level command, the course was highly sought after.⁴⁰ As an example of the quality of students, every future World War II army group and army commander and twenty-nine of the thirty-four corps commanders who served in World War II were graduates.⁴¹ Those selected to continue to the War College would find continuity from previous schools with a shift towards army and above operations, albeit in a different academic atmosphere.⁴² Lecture topics covered nearly every staff function at the army and theater of operations level, including intelligence, operations, administration, logistics, hospitalization, engineer functions, and signal communications.⁴³ However, the focus was not staff training. The War College educated students on the art of command and complexity of theater level operations.⁴⁴ The faculty presented exercises designed around actual war plans, supporting the War Plans Division with serious analysis. Instead of a series of short map exercises like at Leavenworth, War College students

³⁹ McGlachlin provides an extensive discussion on selection of students and how they are evaluated to ensure cooperation not competition. McGlachlin, "The Army War College"; Matheny, *Carrying the War to the Enemy*, 57.

⁴⁰ Stiehm, *The U.S. Army War College: Military Education in a Democracy*, 28.

⁴¹ Matheny, *Carrying the War to the Enemy*, 262; Berlin, "U.S. World War II Corps Commanders: A Composite Biography," 12.

⁴² Schifferle, *America's School for War*, 34.

⁴³ "Army War College Command Course Lectures 1940," n.d., Collins, J. Lawton Papers 1896-1975 (A71-19; 80-12; 80-12/1; 80-12/2; 82-6; 86-19) Box 1, Eisenhower Presidential Library.

⁴⁴ McGlachlin, "The Army War College."

typically examined one major war plan per year in detail, from mobilization to campaign design. The students examined more than Army problems. Where the Command and General Staff School focused on combined arms fire and maneuver, the War College focused on higher-level lessons from the First World War. The faculty recognized the importance of national mobilization, trained staffs, and the integration of new specialties (a few examples are airplanes, chemical warfare, and finance). Each school year culminated with large war games and field exercises to test the detailed plans developed by the students.⁴⁵ Many would face similar problems later as generals in combat. Working in conjunction, this system of schools from induction to senior level indoctrinated the best and brightest officers with the concepts of combined arms warfare, staff functions, and command responsibilities.

Just as important as attending schools, officers also sought time as instructors in one of the Army's schools. Possibly the most famous are those who served under Marshall at the Infantry School at Fort Benning, as many future senior leaders first showed up in Marshall's black book or "wicked memory" while he was deputy commandant.⁴⁶ Historian Forest Pogue has linked a hundred and fifty students and another fifty instructors during Marshall's time at Benning who became future World War II generals.⁴⁷ Service as an instructor was considered career enhancing. A statistical analysis of World War II division commanders shows the majority of officers spent between forty-eight and one hundred and eight months in the school system as either faculty or students, averaging at least as much time in the school system as with troops.⁴⁸ In fact, service as an instructor ranked very high in possible assignments

⁴⁵ Stiehm, *The U.S. Army War College: Military Education in a Democracy*, 30–31; McGlachlin, "The Army War College," 305.

⁴⁶ Cray, *General of the Army*, 106.

⁴⁷ Pogue, *George C. Marshall: Education of a General 1880-1939*, 248–249.

⁴⁸ Wade, "World War II Division Commanders, Combat Studies Institute Report #7," 4 and Appendix; Charles E. Kirkpatrick, "'The Very Model of a Modern Major General' Background of World War II American Generals in V Corps," in *The U.S. Army and World War II: Selected Papers*, ed. Judith

throughout the interwar years, especially at the War College or Command and General Staff School.⁴⁹ Service as an instructor was a mark of the officers' demonstrated performance and an opportunity for him to enhance his knowledge, and the selection process was competitive. Unlike today, during the interwar period the faculty initially developed doctrinal manuals as student texts and then validated them in the classroom before publication.⁵⁰ The school system attracted the best and brightest officers, providing time for personal development (best way to learn is to teach) as well as providing students with excellent and capable instructors.

The final role for the Army school system would play out after the decision to expand the army and close the traditional schools. In 1940, the War Department closed down the Command and General Staff College and Army War College to release the officer students for service as cadre officers in the newly activated divisions. Graduates played a major role as the knowledge base for the growing army, with most of them serving as commanders or senior staff officers. The faculty of the Command and General Staff College supported mobilization efforts by rewriting doctrine, teaching short courses, and training new division staffs.⁵¹ Marshall charged the faculty with updating the doctrine, resulting in a number of manuals in 1939 to 1941. In order to increase the number of qualified staff officers, the faculty started an eighteen-week version of the staff school, which eventually graduated 1,080 officers in five and

Bellafaire, United States Army in World War II CMH Publication 68-4 (Washington D.C., USA: Center for Military History, United States Army, 1998), 268.

⁴⁹ For a detailed analysis of selection of instructors during the interwar period, see Criterion 2a from: James D. Sisemore, "Fort Leavenworth and Its Education Legacy; Recommendations for ILE" (Monograph, School of Advanced Military Studies, Command and General Staff College, 2012), 65, Combined Arms Research Library Digital Library, Fort Leavenworth, KS.

⁵⁰ Schifferle, *America's School for War*, 110.

⁵¹ Watson, *The War Department: Chief of Staff Prewar Plans and Preparations*, 187.

a half years.⁵² In October 1940, General Marshall made the decision to bring National Guard division staffs onto active duty a month earlier than the rest of the division and send them to Fort Leavenworth for specialized and collective training.⁵³ Starting in 1942, the “New Divisions Course” would ultimately train forty-five of the total eighty-nine mobilized divisions, focusing on building the command team and instilling the staff with the doctrine and methods developed during the interwar years.⁵⁴ While mobilization turbulence and the effects of the cascading cadre system would disrupt much of the value gained from this course, it was in the end a successful effort to address the problem of creating so many new organizations from scratch. Many of the division commanders who participated in this training would later go on to command larger units, including General Omar Bradley, Brigadier General H. Terrell Jr, and Major General Robert L. Eichelberger.⁵⁵ The faculty at Fort Leavenworth played a major role in the mobilization effort and preparedness of many division staffs for combat.

The Army school system was a critical element in preparing the nation for war and maintaining flexibility in combat. The graduated structure provided multiple opportunities to evaluate students and select the most qualified for the next level. Branch schools generated the technical and tactical skills required to transform citizens into officers. Fort Leavenworth provided high quality staff officers who could solve combined arms problems with a standard method. The Army War College identified the

⁵² Schifferle provides discussion on the role of Leavenworth in training. For a more complete discussion of training new divisions, see Palmer. Schifferle, *America’s School for War*, 150; Robert R Palmer, Bell I. Wiley, and William R. Keast, *The Procurement and Training of Ground Combat Troops*, The United States Is World War II CHM 2-2 (Washington D.C., USA: Center for Military History, United States Army, 1948), 454.

⁵³ Watson, *The War Department: Chief of Staff Prewar Plans and Preparations*, 237.

⁵⁴ Schifferle, *America’s School for War*, 156.

⁵⁵ Bradley commanded 82nd and 28th Divisions during training and would go on to command II Corps, First Army, and 12th Army Group. Terrell commanded 8th Infantry Division, 90th Infantry Division, and finally XXII Corps during World War II. Eichelberger commanded 77th Infantry Division, I Corps, and Eighth United States Army in the Pacific during World War II. *Ibid.*, 157.

absolute brightest officers and prepared them for service as large unit commanders and national leaders. During mobilization, the faculties supported the expansion by helping build new unit systems. Most important might be what the system provided as a whole. It built a common doctrinal foundation based upon the lessons from the First World War, deepened the experience through the applicatory method, and ultimately transferred this knowledge to the expanding army through both the cadre system and wartime courses. The primary source of experience for leaders before World War II was the school system. This common understanding facilitated the efforts of officers to operate in a rapidly changing and challenging environment. Subordinates and superiors approached and solved problems using the methods taught at Leavenworth and elsewhere. Without this common frame of reference, common vocabulary, and problem solving system, commanders and their staff would have to learn how to translate back and forth for each change in task organization. One of the most critical concepts learned in the school system may well have been its advocacy of simple mission type orders.

Mission Type Orders and Five Paragraph Format

The First World War proved to be a break in American military thought process from European emulation to a distinctly American form of warfare. Before the war, the Army officers studied European armies and mimicked their organizational concepts despite America's very different experience along isolated frontiers and with citizen armies. Americans returned from Europe convinced that the British, French, and German tactical concepts were the root cause of trench warfare, which was incompatible with American values.⁵⁶ Instead, an American way of warfare developed and contributed to flexible task organization with the foundational belief that commanders must have maximum flexibility and initiative to accomplish missions. The Army worked to codify this concept in doctrine, developed equipment to

⁵⁶ See Russell F Weigley, *The American Way of War: a History of United States Military Strategy and Policy* (Bloomington: Indiana University Press, 1973), chap. 10; Millett and Maslowski, *For the Common Defense*, chap. 11; Matheny, *Carrying the War to the Enemy*, chap. 2; Schifferle, *America's School for War*, chap. 1; Pogue, *George C. Marshall: Education of a General 1880-1939*, 253.

support it, and selected officers capable to executing it. Short clear mission type orders empowered subordinates by enabling units to respond quickly without the delay necessary for a higher-level staff to develop detailed orders. This allowed subordinates the ability to take advantage of developing situations on the ground without disrupting carefully scripted operations. Short orders were also easy to transmit over limited communications networks, further speeding the action on the ground and avoiding confusion from misunderstanding complex detailed orders.

The embodiment of military doctrine on the battlefield is the operations order, where concepts translate into action. The concept of mission type orders dominated the American way of warfare going into World War II. The underlying philosophy of this concept was that simple, direct plans with an offensive purpose executed promptly would prove decisive in combat.⁵⁷ In 1906, Major Eben Swift, assistant commandant of the United States Staff College, wrote a manual adopted by the War Department that outlined specific formats for orders, messages, and reports, including the five-paragraph operations order which is still in use today. Through a process of evaluating the history of written orders from the Napoleonic Wars, American Civil War, and Franco-Prussian War, Swift argued for the necessity of clear, concise, standard format order that would reduce confusion on the battlefield and better synchronize combat power.⁵⁸ In discussing the value of detailed versus general orders, he recommended that instead of the detailed and prescriptive orders written by Napoleon, which required extraordinary foresight on how a battle will develop, orders should “point out only the object to be gained, leaving the method to the judgment of those who are charged with the execution.”⁵⁹ The second guiding principle of importance is

⁵⁷ *Operations* (1941), 22.

⁵⁸ Eben Swift, *Field Orders, Messages, and Reports* (Washington D.C., USA: Government Printing Office, 1906), 15.

⁵⁹ *Ibid.*, 13.

when writing orders the goal was to “be brief, in short sentences, and clearly expressed.”⁶⁰ These concepts were enshrined over the next thirty years in both the practical exercises in school and the staff manuals. *Field Manual 100-5, Operations* espoused mission type orders, focused on what, not how, subordinate commanders were to execute. Orders were to include everything subordinate commanders needed to know and nothing more.⁶¹ *Field Manual 101-5, Staff Officers Field Manual* warned staffs to avoid excessive details and prescriptive methods, preferring concise orders that allow subordinate units to execute in concert. It did recognize that the level of detail needed would vary based upon the training and competence level of subordinate units, with less detail the more experience a unit gained.⁶² Enabling initiative was extremely important. Commanders operated within their higher headquarters intent, with or without direction or confirmation of their plans. To further simplify and shorten orders, commanders were encouraged to implement standard operating procedures.⁶³ All of this decentralization would seem to make it more difficult for units to change task organization, however, the doctrine provided the framework to combine the common understanding of how to solve problems with standardized formats for orders and reporting. Essentially a standard operating procedure for the entire United States Army, *Field Manual 100-5 Staff Officers Field Manual* was the common reference for staff procedures. Units would receive broad operational mission type guidance in the same format, regardless of who issued them.⁶⁴ Without this common standard, task organization changes would have created unacceptable turmoil as commanders adjusted to changing orders methodology while and staffs constantly relearned reporting and staff processes with each new higher headquarters. Instead, the Army went into World War

⁶⁰ Ibid., 15.

⁶¹ *Operations (1941)*, 31.

⁶² *Staff Officers Field Manual: The Staff and Combat Orders*, Field Manuals 101-5 (Washington D.C., USA: U.S. War Department, 1940), 49.

⁶³ *Operations (1941)*, 24, 33.

⁶⁴ *Staff Officers Field Manual: The Staff and Combat Orders*, 42, 96.

II with a system that enabled commanders to execute mission type orders with a great deal of initiative. With simple mission type orders and standardized staff procedures, they could be flexible in the task organization to meet mission requirements.

The lessons and doctrine from Leavenworth followed students as they started training units and deploying to Europe. Lieutenant General Leslie McNair led the November 1941 force-on-force maneuvers and his comments reflect how these large-scale training events reinforced doctrinal concepts. He notes a large percentage of the field orders issued were clear, concise, and effective, however, a few were excessively long, too detailed, or failed to apply the prescribed format.⁶⁵ McNair's focus on the quality of the orders reflects the effective indoctrination of not only the senior leaders, but also the entire officer corps. Each of the three wartime corps-level standard operating procedures reviewed conformed and supported the doctrinal concept of mission type orders. They each specifically detail the responsibilities of staff sections to construct the base order, relegating details on administrative and logistics tasks to separate, less frequently published administrative orders.⁶⁶ A review of the operations orders used in the European Theater of Operations shows that the basic concepts from doctrine survived and thrived in combat. As an example, the Fourth Infantry Division operations orders from June through August of 1944 all follow the simple five-paragraph format and are extremely concise. Rarely do any of the orders exceed two pages in length, yet the tasks for each of the subordinate elements provides tactical task, line of operation, and objectives. Each order includes a paragraph for each subordinate unit, an intelligence summary, specific coordinating instructions, and location of command posts, with little else.

⁶⁵ Lesley J. McNair, "Comments on the First Phase of the LA Maneuvers," November 21, 1941, Hodges, Courtney Hicks: Papers, 1904-65 (A70-86 - Box 3), Eisenhower Presidential Library.

⁶⁶ "XII Corps Staff Operational Procedures 12 August 1944 to May 1945," October 29, 1945, 76, 127, Gilbert R. Cook Papers 1908-1959 (A91-11 & A92-12) Box 9, Eisenhower Presidential Library; "XIX Corps Standard Operating Procedures," November 1944, N-13681.2, Combined Arms Research Library Digital Library, Fort Leavenworth, KS; "XIII Corps Standard Operating Procedures, Change 1," August 21, 1944, N-13681, Combined Arms Research Library Digital Library, Fort Leavenworth, KS.

A typical order from 4th Infantry Division on June 18, 1944, directs a subordinate regiment: “8th Inf, Co C, 87th Cml Bn atchd, will attack to the northeast making main effort on its right and seize the high ground vicinity TANERVILLE – see overlay. Be prepared to advance on division order.”⁶⁷ It is clear that the former students of the Command and General Staff School and Army War College applied their experience in the classroom writing mission type orders to their operational problems, leveraging their common experience and trust of subordinates to enable a culture of flexibility and initiative.

Commanders used simple mission type orders, knowing his subordinate could execute with flexibility and initiative in line with the intended outcome. Making the orders simple and concise greatly reduced the time required to receive information, determine the proper response, and issue the appropriate orders to execute. Encouraging initiative further quickened the cycle, allowing commanders the freedom to execute without requiring concurrence from a remote headquarters during tactical engagements. Standard operating procedures guided the staff on the formats and processes required to keep a large mechanized force operational. As each of the units based their procedures on the experiences and doctrine from Fort Leavenworth, new units integrated easily. The American philosophy of mission type orders enabled flexible task organization. Importantly, these mission type orders relied upon a deep and stable doctrinal base in combined arms maneuver, fire support, sustainment, and other support functions.

Stability in Concepts

A solid school system and decentralized initiative based command system contributed to common understanding, but doctrine would also have to provide the how to no longer included in orders. Without a set of stable doctrinal concepts, it would have been impossible for units to conduct operations together on short notice. The schooling system taught, and command philosophy relied upon, a few key concepts

⁶⁷ “4th Infantry Division, Operations Orders and Transcripts of Oral Orders June to August 1944,” 1944, sec. 181700 June 1944, U. S. Army, 4th Infantry Division After action reports, 1940-46 (RG 407) (Microfilm), Reel 67, Eisenhower Presidential Library.

that every leader needed to understand: combined arms teams, maneuver, massed fires, higher-to-lower communications, and flexible logistics. These concepts are all rooted in the experience and lessons learned in the First World War. As we have seen, the senior officers of the American Expeditionary Force deliberately collected lessons learned and injected them into the school system. Once in the school system, they were refined and documented, but remained fundamentally stable for twenty-five years. This section will examine the origins, development, and ultimate test of these concepts in combat.

The process of gathering lessons learned with a distinct American slant began before the first United States units engaged in battle. American officers embedded as observers in the Allied armies collected lessons in trench warfare before the first units mobilized. Right from the start, General Pershing was intent that he was going to prepare his forces for maneuver warfare to break the deadlock of trench warfare.⁶⁸ Pershing shared American combat lessons learned with equal vigor, publishing a report from the first American contact in pamphlet format in less than two weeks and distributing it to all the units in training.⁶⁹ The American Expeditionary Force set a process for analyzing what happened and how to learn from it, issuing two general orders specifying format and content for every unit report and history in order to capture lessons learned.⁷⁰ In 1917, Lieutenant General Hugh Drum established a staff school in France modeled after the pre-war Leavenworth staffed by proven combat officers. This school prepared officers with the real time lessons learned for the combat they would immediately face. By November 1918, the American concept of fire and maneuver was realized and showing great success – or possibly more importantly potential – in the Muse-Argonne offensive.⁷¹

⁶⁸ Matheny, *Carrying the War to the Enemy*, 29; Hamburger, “Learning Lessons in the American Expeditionary Forces,” 16.

⁶⁹ Hamburger, “Learning Lessons in the American Expeditionary Forces,” 20.

⁷⁰ G.O. 21 (August 13, 1917) and G.O. 196 (November 5, 1917) *Ibid.*, 21.

⁷¹ Schifferle, *America’s School for War*, 11–13; Matheny, *Carrying the War to the Enemy*, 42.

The sudden and unanticipated end to the First World War created an enormous opportunity. Without the ability to demobilize the American Expeditionary Force, General Pershing had to find something to occupy his army's time. Leaders organized sporting events and competitions like the military Olympics for the soldiers.⁷² General Pershing also organized boards of officers to examine performance in combat and make recommendations on schooling, future doctrine, and organization for the Army. Major General James McAndrew and Major General Edward F. McGlachlin led the effort to reestablish the General Staff College and General Services Schools. They convened a series of boards and meetings in Germany to select staff, develop material, and lay the foundation for the doctrine that would develop over the next thirty years.⁷³ The most important board, the Superior Board on Organization and Tactics, issued its final report in June 1920. Between official reports, boards, and personal memoirs, the veterans of the First World War made a concerted effort to capture their experience with the specific intent of preparing for the next war many of them thought inevitable.⁷⁴

Composed of three major generals, two brigadier generals, and two colonels, the Superior Board was responsible for consolidating reports of all the arms and services into one overall report on organization and tactics. The observations captured in this report drove the United States understanding of warfare for the next three decades. One fundamental conclusion is that the infantry is the decisive arm which all other services support.⁷⁵ The Superior Board Report also outlines, in some detail, the structure

⁷² Source: National World War I Museum, Kansas City, KS display on 1919 Military Olympics.

⁷³ Schifferle, *America's School for War*, 31–32.

⁷⁴ Many veterans viewed the end of the war as incomplete because it ended before the Germans were defeated on the battlefield. Despite the harsh terms, they felt that the German military had not been defeated and would rise again.

⁷⁵ The Superior Board did make some bad recommendations. The clearest mistakes were its recommendations on the roles, organization, and functions of mounted cavalry and use of the airplane. United States Army American Expeditionary Forces; Superior Board on Organization and Tactics, *AEF Report of Superior Board on Organization and Tactics*, 1919, 18, 65, Electronic File, Combined Arms Research Library Digital Library, <http://cgsc.contentdm.oclc.org/cdm/ref/collection/p4013coll7/id/808>.

recommended for field armies, corps, and divisions. With division as the basic fighting unit, it must be as self-sufficient as possible. Everything else is in a supporting role. The corps is a tactical command, responsible for fighting up to four divisions at a time. Field armies are fighting forces, responsible for enabling the divisions. Critically for the topic of this paper, the report states: “Divisions cannot be permanently assigned to a Corps. The tactical situation or requirements of logistics are almost certain to require that a division once withdrawn be sent into the fight again in a new area under a new Corps staff.”⁷⁶ The artillery section highlights how massed fires supports maneuver of infantry forces, and the importance of coordination and training in enabling maneuver. The report recommends the assignment of independent artillery units to division, corps, and armies to foster integrated training while maintaining the ability to mass fires when required. The board recognized the effectiveness of armor forces in supporting the morale of friendly infantry forces and negatively affecting the enemy’s morale, but did not fully anticipate the future role armor would play. The First World War highlighted the critical role of engineers on the modern battlefield. The board recommended assigning general-purpose engineers to combat units to improve coordination and training, while centralizing special purpose engineers at higher levels. Poor performance also generated recommendations. The report acknowledges the technological, manning, and organizational problems that resulted in the inability of the Signal Corps to keep headquarters connected and mobile. The board recommended assigning higher headquarters the responsibility to install communications to subordinate headquarters. The fundamental lesson of the First World War learned by the United States Army was that only the combined application of fire and maneuver would restore mobility to the battlefield, requiring a serious effort to design, train, lead, and organize the future force for this type of battlefield.⁷⁷

⁷⁶ Ibid., 107.

⁷⁷ Ibid., 30, 36, 47–48, 89, 96, 107.

As the American Expeditionary Force demobilized and units returned to the United States, the new center of gravity for intellectual thought and Army doctrine became Fort Leavenworth. Veterans led the effort to translate the lessons learned into classroom instruction, student texts, and official doctrine. The veterans made up the initial faculty at every school, and they immediately integrated the lessons learned into the curriculum. In 1923, the faculty at Fort Leavenworth released *Field Service Regulations*, an all-encompassing doctrinal publication. The 1923 *Field Service Regulation* was a capstone manual, covering not only the broad concepts listed above, but also detailed diagrams on movement of supplies, formats for orders, combat tactics for river crossings, and a hundred and ninety-five other pages of detailed text. Throughout the interwar period, the faculty at both the Command and General Staff College and War College developed student guides for classes, which drew upon the *Field Service Regulations* but provided additional details and concepts refined in the classroom. With war looming, General Marshall directed the Leavenworth faculty to update and publish updated and more extensive set of doctrinal manuals. The Leavenworth faculty responded in 1939, using concepts tested in classrooms and lecture halls, and published three new field manuals: *FM 100-5 Tentative Field Service Regulations, Operations*; *FM 100-10 Field Service Regulation, Administration*; and *FM 100-15 Field Service Regulations, Larger Units*.⁷⁸ The General Staff officially published the *Operations* field manual in 1941, with a revision released in June 1944. Each version refined the older manuals, echoing the lessons taught in the school system. While chapters were added, reordered, and tweaked to reflect changes in technology, the base concepts of how to command American units remained consistent.⁷⁹ Combined with *Field Manual 101-5 Staff Officers Field Manual*, published in 1940, and *Field Manual 100-15, Larger Units*, published in 1942, the base for how American units would operate was set. Where the

⁷⁸ *Operations (Tentative) (1939)*, Cover Letter.

⁷⁹ *Operations (1941)*; *Operations (Tentative) (1939)*; *Field Service Regulation; Operations (1944)*.

Operations manual described how units would fight, the *Staff Officers Field Manual* provided specifics on orders development and staff formats.⁸⁰ The War Department updated these manuals throughout the war, with the latest release published on June 15, 1944, days after the Normandy Landing. Additional branch specific manuals provided details and procedures appropriate to their technical specialties. In total, these doctrinal manuals provided detailed guidance while remaining true to twenty-five years of instruction.

The 1923 *Field Service Regulation* introduction makes it clear that combined arms action is the way the Army will fight.⁸¹ Subsequent field manuals maintain the centrality of this concept, reinforcing that no one arm wins the battle and the successful integration of each arm of service is the key to victory. There is also consistency in the role of the infantry division as the basic combined arms unit and the roles of army groups, armies, and corps in administrative and tactical employment.⁸² In fact, throughout each of the four versions, the basic principles of offensive focus, decisive combat, importance of command, role of security, and reconnaissance remain virtually identical. The 1923 *Field Service Manual* attempts to be comprehensive, while later versions reflect the creation of supporting manuals, shifting details, and allowing the concepts to be further developed. The chapters change order throughout the years, possibly reflecting changing priorities, but the content and wording of the majority of the document remains consistent. Those items that shifted into other doctrinal manuals in the 1940s also remain recognizable from the original version. *Field Manual 101-5 Staff Officers Field Manual* presents the same five-paragraph orders format and development process, although the level of detail has expanded.⁸³ The field

⁸⁰ *Staff Officers Field Manual: The Staff and Combat Orders*.

⁸¹ *Field Service Regulation*, Intro; 11.

⁸² *Operations* (1944), 2–3, 6; *Operations* (1941), 2, 5; *Operations (Tentative)* (1939), 3, 5; *Field Service Regulation*, 1.

⁸³ *Field Service Regulation*, 8; *Staff Officers Field Manual: The Staff and Combat Orders*, 42.

artillery discussion in both the 1923 *Field Service Regulations* and the 1944 *Field Manual 6-20 Field Artillery Tactical Employment* reflect the same concepts of mass and flexibility, with the refinements from Fort Sill enabling better application.⁸⁴ The principles of administration and transportation in the 1923 *Field Service Regulations*, retained in the *Quartermaster Operations Field Manual*, are evident in the concept of support employed in the European Theater of Operations, with the emphasis on flexibility and support to the front lines through a robust support system.⁸⁵ Even the signal section, despite technological advances, maintains the basics concept of higher to lower installation and axes of communications.⁸⁶ Despite changing technology and pressures from early German successes, the American Army entered World War II relying upon twenty-five years of stable military doctrine in which every officer had practiced for years in the school system.

Because lessons learned from the First World War drove doctrine, it failed to anticipate or solve a few significant problems. The first was the role of the airplane. While veterans recognized the airplane was a significant new technology, advocates of airpower and ground combat leaders contested the role it should play. Airpower supporters advocated that it was a game changing technology, which would completely alter war by allowing deep strikes against the industrial, economic, or morale strength of the enemy. Ground leaders adamantly defended the preeminence of the infantryman and wanted the airplane to focus on direct ground support. Because of this disagreement, the tactics and techniques required for

⁸⁴ *Field Artillery Tactical Employment*, Field Manuals 6-20 (Washington D.C., USA: Government Printing Office, 1944), 1; *Field Service Regulation*, 14.

⁸⁵ *Field Service Regulation*, 121; *Quartermaster Field Manual: Quartermaster Operations*, Field Manuals 10-5 (Washington D.C., USA: Government Printing Office, 1945).

⁸⁶ *Signal Operations In Corps and Army*, Field Manuals 11-22 (Washington D.C., USA: U.S. Government Printing Office, 1945); *Signal Corps Field Manual Signal Organizations and Operations in the Armored Division and Armored Corps*, Field Manuals 11-17 (Washington D.C., USA: Government Printing Office, 1941); *Field Service Regulation*, 19.

these two arms to cooperate effectively would not emerge during the interwar period.⁸⁷ Another innovation would suffer a similar fate – the tank. An immature technology during the First World War, the mobility and firepower of the tank would grow exponentially during the interwar period. While some, like General Patton, would see the value of armored vehicles, the Army gave the tank a limited role in supporting the infantry. In good part due to budget constraints, the Army held very few infantry-armor exercises and no one identified the communications and training problems that emerged.⁸⁸ The faculty developing the organizational structure in the interwar years also tended to underestimate the size of staffs or amount of support vehicles required to maintain fast moving armor columns.⁸⁹ Considering the lack of experience with these problems in combat and significant resource constraints during the interwar years, it is understandable that the doctrine was incomplete in some areas.

Despite the intervening technological developments, school lectures and exercises, and feedback from the ongoing war in Europe, the basic concepts identified by the Superior Board remained consistent

⁸⁷ Matheny, *Carrying the War to the Enemy*, chap. 4.

⁸⁸ Mansoor, *The GI Offensive in Europe*, 161; Doubler, *Closing With the Enemy*; Weigley, *Eisenhower's Lieutenants*, 126.

⁸⁹ “General Board Report: Organization, Equipment, and Tactical Employment of the Armored Division, Study Number 48,” n.d., Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 6, Eisenhower Presidential Library; “General Board Reports: Functions, Organization, and Equipment of Army Headquarters and Headquarters Company, Study Number 24,” n.d., Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 3, Eisenhower Presidential Library; “General Board Reports: Functions, Organization, and Equipment of Corps Headquarters and Headquarters Company, Study Number 23,” n.d., Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 3, Eisenhower Presidential Library; “General Board Reports: Mechanics of Supply in Fast Moving Situations, Study 27,” n.d., Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 4, Eisenhower Presidential Library; “General Board Reports: Organization, Functions, and Operations of G3 Sections in Theater Headquarters, Army Groups, Armies, Corps, and Divisions Study Number 25,” n.d., Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 3, Eisenhower Presidential Library; “General Board Reports: Organization, Equipment, and Tactical Employment of the Infantry Division, Study Number 15,” n.d., Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 3, Eisenhower Presidential Library; “General Board Reports: Supply Functions of Corps, Study Number 28,” n.d., Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 4, Eisenhower Presidential Library.

in doctrine. The doctrine improved specificity, clarity, and breadth, mostly through the feedback of the school system. An officer going through Command and General Staff School in 1921 and an officer attending the short course in 1940 would both learn the same basic instruction. This consistency was extremely important, as it ensured that every officer, from general to lieutenant, understood the same concepts, operated from a common understanding of how to fight. These concepts would translate into flexibility for senior leaders on the ground, as can be seen in the reflections captured after the war.

At the end of World War II, senior leaders in the European Theater of Operations implemented a review of lessons learned similar to the Superior Board of 1919. A series of boards run by combat proven leadership, evaluated nearly every facet of combat, administration, and organization of the forces. These General Board Reports are extremely detailed and occasionally critical, but they overwhelmingly support one conclusion – the American way of war worked. The General Board Reports confirm the effectiveness of doctrinal manuals, recommending minor changes but acknowledging the basic principles were successful. Both the infantry and armor division commanders concluded that the basic doctrine was sound and proved successful in combat.⁹⁰ They felt the division organization enabled fire and maneuver, preventing culmination and static warfare. The field artillery concepts for massed fires and centralized units also received confirmation, with only recommendations of minor changes to the doctrine. Engineer, signal corps, medical, administrative, and sustainment reports each reflect that the existing doctrine was successful.⁹¹ The basic conclusions of the 1919 leadership, enshrined in the interwar school system, and

⁹⁰ “General Board Report: Organization, Equipment, and Tactical Employment of the Armored Division, Study Number 48,” 22; “General Board Reports: Organization, Equipment, and Tactical Employment of the Infantry Division, Study Number 15,” 12.

⁹¹ “General Board Reports: Supply Functions of Corps, Study Number 28,” 1; 8; “General Board Reports: Field Artillery Operations, Study Number 61,” n.d., 106–108, Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 7, Eisenhower Presidential Library; “General Board Reports: Signal Corps Personnel, Training, and Command and Administrative Structure, Study Number 112,” n.d., 17, Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 11, Eisenhower Presidential Library.

formalized into doctrine as the country mobilized, provided a solid base of common understanding of how Americans would fight.

Not all the doctrine survived the test of combat. Specifically the doctrine that did not grow out of extensive experience in the First World War suffered the most criticism after the war. The most significant shortcoming in the reports was the tank-infantry cooperation. The doctrine called for concentration of armor forces for exportation and breakthrough.⁹² Instead of embedding tank units into divisions, the General Headquarters and army level maintained pools of units for allocation as necessary. Those developing the tank-infantry doctrine recognized that cooperation between units was necessary, but effective techniques came out too late for stateside training and failed to be widely disseminated. Combat proved that tanks were most effective when paired with infantry troops, but soldiers were not familiar with the methods needed to work together effectively. Simple problems like incompatible radios between dismounted infantry and tank crews was not addressed until units in contact demanded a fix – which in typical American style became the ad hoc wiring of telephones to the back of the tanks. Mobility and protection for the infantry troops was also greatly lacking, reducing the tank to walking pace.⁹³ Tank Destroyers also relied upon pooling, although the additional problem of ineffective equipment made the problems more significant.⁹⁴ The engineer General Board Report is interesting because it recommends that changes made in the middle of the conflict were wrong and the doctrine should return to the

⁹² *Field Service Regulations, Larger Units*, Field Manuals 100-15 (Washington D.C., USA: U.S. War Department, 1942), 93; *Operations (1941)*, 278; *Armored Command Field Manual: The Armored Division*, Field Manuals 17-100 (Washington D.C., USA: U.S. Government Printing Office, 1944), 26.

⁹³ “General Board Reports: Organization, Equipment, and Tactical Employment of the Infantry Division, Study Number 15”; “General Board Reports: Organization, Equipment, and Tactical Employment of Seperate Tank Battalions, Study Number 50,” n.d., Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 6, Eisenhower Presidential Library.

⁹⁴ “General Board Report: Organization, Equipment, and Tactical Employment of Tank Destroyer Units, Study Number 60,” n.d., Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 7, Eisenhower Presidential Library.

principles outlined in pre-war doctrine. The old doctrine assigned dual responsibilities to the senior engineer in a unit as both a staff officer and the commander of engineer troops, while the emerging doctrine removed the command role specifically from the corps and army level. The consensus of the engineers was that this affected the ability of the corps and army senior engineer to employ resources effectively and created a requirement for an additional administrative headquarters.⁹⁵ The General Board Reports in total were very detailed, and this paper will return to them later. Proper training could have solved each of these problems, but with no money to experiment and limited experience in the First World War, soldiers learned the hard way in combat.

There was significant continuity in the concepts from the lessons captured in the aftermath of the First World War, through the interwar doctrine taught in the school, and as proscribed in wartime doctrinal manuals. In a time of austerity, the United States Army was able to evaluate their combat experience and apply lessons that survived the test of time. The stability of these basic concepts resulted in leaders at all levels operating from a common doctrine that had not changed in over twenty years. Combat leaders in the European Theater of Operations understood, implemented, and generally found the doctrine effective in combat. While typically stagnation is a negative trait, in this case it was a huge benefit because Army fought a similar war in the same theater. As has been captured in this section, a stable foundation of doctrine worked with the school system and principle of mission type orders to foster a common understanding on how to fight that was instrumental in enabling flexible task organization.

Summary of Doctrinal Foundations

The interaction between the school system, concept of initiative captured in mission type orders, and the stable doctrine resulted in common understanding that was a key component of the success of the

⁹⁵ “General Board Report: Engineer Organization, Study Number 71,” n.d., 5; 7, Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 8, Eisenhower Presidential Library.

United States Army. The school system provided a means to indoctrinate the officer corps with common concepts and a standardized problem solving method, while at the same time identifying the most capable officers. Mission type orders built upon the American philosophy of initiative and trust, greatly reducing the requirement for detailed command and control systems that would be complicated to change regularly. Finally, with a stable foundation of doctrine, every officer shared a common understanding on how the American army would fight, establishing a very important common understanding. This common understanding should not be underestimated. Along the same lines as the axiom that an eighty percent plan executed violently is better than a hundred percent plan executed too late, having everyone operating on the same concepts made the entire organization more flexible. A quote from the World War II Blitzkrieg practitioner General Gunther Blumentritt seems a good way to end this section:

this scheme, 'presupposes a common outlook based upon a body of professional officers who have received exactly the same training during the long years of peace and with the same tactical education, the same way of thinking, identical speech, hence a body of officers to whom all tactical conceptions were fully clear'. This in turn presupposes 'an officer training institution which allows the subordinate a very great measure of freedom of action and freedom in the manner of executing orders and which primarily calls for independent daring, initiative and sense of responsibility'.⁹⁶

The doctrinal foundation set so effectively in 1919, and kept sharp through a school system focused on producing commanders and staff officers, and practiced through mission type orders, allowed American commanders to shift forces between units to take advantage of tactical and operational opportunities.

LEADERSHIP

The second key factor in the ability to change the task organization quickly was the extremely high quality of the officers leading divisions and corps. None of the United States Army's senior leaders had any experience leading large units before mobilization – the vast majority of future division commanders were captains, majors, and lieutenant colonels in 1939. Of all the Regular Army and

⁹⁶ Frans P. B. Osinga, *Science, Strategy and War: The Strategic Theory of John Boyd* (London; New York: Routledge, 2007), 56, <http://site.ebrary.com/id/10155759>.

National Guard division commanders in 1940, none would command a division in combat and only three went on to command larger combat units. Most active and national guard general officers were simply too old for the rigors of combat. There were of course a few exceptions – National Guard Brigadier General Raymond McLain started as a division artillery commander in 30th Infantry Division and would rise to command 90th Infantry Division and later XIX Corps.⁹⁷ For the most part, General Marshall had to build a system to identify a completely new set of commanders and key staff officers for each of the division and higher units. First, Marshall sought and received authority from Congress to control the quality of the officer corps promotion, selection, and relief process – a tool he used to shape the senior officer corps in line with his vision of combat leadership. One result was the Regular Army dominated key command and staff positions. He also took personal interest and deliberate care in selecting division, corps, and army level commanders – and when they failed to meet the standard, the system quickly relieved them. Finally, the Army implemented staff concept empowering staff officers with a great deal of authority, improving their effectiveness and independence. This focus on leadership resulted in a core of high quality senior officers in Europe who knew each other well from their common experiences in the small peacetime army. This familiarity bred trust and a can do attitude in commanders and staff. These traits were critical in enabling the flexible task organization used in the European Theater.

Ensuring the Quality of the Officer Corps

Confronted with the problem of expanding the Army, General Marshall had a very clear vision of what type of officers he needed. The small size of the standing army would require the induction of huge numbers of National Guard, Reserve, and newly commissioned officers.⁹⁸ While necessary and likely that these officers could fill critical roles as junior leaders or in leading organizations related to their

⁹⁷ Mansoor, *The GI Offensive in Europe*, 58, 71.

⁹⁸ Forrest C. Pogue, *George C. Marshall: Ordeal and Hope 1939-1942* (New York: Viking, 1965), chap. IV.

civilian skills, he did not believe they had the experience necessary to lead combat divisions.⁹⁹ Thus, he drew a disproportionate percentage of the combat senior leadership – both commanders and senior staff – from the Regular Army who had spent years preparing for this mobilization. Not every Regular Army officer was equally capable, so he needed a process for selecting the best. Drawing upon his experience in the schoolhouse and peacetime army, he knew some personally and others by reputation. However, he needed to test their ability to translate theoretical and schoolhouse ability into leadership. The mobilization period provided the first major test, but only combat experience could really identify the best. To aid the process, Marshall sought control over the promotion and separation system in order to move high quality Regular Army officers ahead of their National Guard peers while quickly separating those officers who did not align with his vision of leadership.

Regular Army officers provided the core leadership of the wartime army by design. After the First World War, the United States drew down the active Army significantly. Instead of maintaining a deployable standing force, it opted for a cadre force.¹⁰⁰ Rejecting universal service or large standing armies for both financial and ideological reasons, the National Defense Act of 1920 provided for a small active force, large National Guard, and deep reserve of officers through the Reserve Officer Training Corps.¹⁰¹ A professional officer corps would provide the experienced backbone for the expanding ranks of civilian soldiers in time of war. With far more officers on active duty than troop leading positions,

⁹⁹ Kent Roberts Greenfield, Robert R Palmer, and Bell I. Wiley, *The Organization of Ground Combat Troops*, United States Army in World War II (Washington D.C., USA: Historical Division, Department of the Army, 1947), 49. The Army did directly commission a number of civilians to fill critical roles in mobilization, transportation, personnel management, and research due to their special skill set. Many of the existing general officers were assigned positions in stateside training units or coastal defense instead of being retired. Most served with great distinction and made huge contributions to the success of the entire Army.

¹⁰⁰ Steven E. Clay, *US Army Order of Battle 1919–1941: The Arms: Major Commands and Infantry Organizations, 1919–41*, vol. 1 (Fort Leavenworth, KS: Combat Studies Institute Press, 2010), 199.

¹⁰¹ Millett and Maslowski, *For the Common Defense*, 365–367.

most officers spent more time in schools than with soldiers.¹⁰² This provided them with a theoretical understanding, but little practical experience. As the War Department developed mobilization plans, they realized there were not enough Regular Army officers to fill all of the required positions. Allocation of these officers became a major concern. Spreading them widely would ensure the activated National Guard divisions and newly formed units each had a core of quality officers, but Marshall and McNair deemed it especially critical to concentrate in the combat divisions where quality leadership was most important, at the expense of the support units.¹⁰³ Regular Army officers were key to the forming and training of new units, and every division commander demanded a larger share. For example, the 30th Infantry Division never had more than thirty-one Regular Army officers out of 796 officers, and those were all in key positions. If they proved ineffective, the division leadership got rid of them immediately.¹⁰⁴ Lieutenant General Leslie McNair, commander of Army Ground Forces, was responsible for training new units, and his staff provided detailed training plans for the ten to twelve month period required for a division to be fully capable. The execution relied upon the Regular Army cadres in each unit. As Army Ground Forces formed unit divisions, they would pull cadres out of previously trained divisions further diluting the percentage of Regular Army officers in each unit.¹⁰⁵ Even during combat, managing these officers was critical. The First Army staff had fifty-six Regular Army officers, filling the

¹⁰² Kirkpatrick studied the careers of 22 V Corps General Officers. Their average time with troops was 9.8 years versus 10.58 years in school (3.9 as students and 6.68 as instructors). Kirkpatrick, “‘The Very Model of a Modern Major General’ Background of World War II American Generals in V Corps,” 268; Wade, “World War II Division Commanders, Combat Studies Institute Report #7”; Berlin, “U.S. World War II Corps Commanders: A Composite Biography”; Schifferle, *America’s School for War*.

¹⁰³ Watson, *The War Department: Chief of Staff Prewar Plans and Preparations*, 187.

¹⁰⁴ Mansoor provides information on 30th Infantry Division. Palmer provides officer strength of a fully trained and over-strength infantry division as 796. Bradley gives the officer strength of a 1944 Infantry Division as 781. Mansoor, *The GI Offensive in Europe*, 70–71; Palmer, Wiley, and Keast, *The Procurement and Training of Ground Combat Troops*, 454; Bradley, *A Soldier’s Story*, 564.

¹⁰⁵ Greenfield, Palmer, and Wiley, *The Organization of Ground Combat Troops*, 53–54.

positions of Chief of Staff, operations officer (G3), administrations officer (G1), and other critical jobs.¹⁰⁶ During the Normandy campaign, professionals typically commanded at the division and regimental level, with an even mix of Regular Army, Reserve, and National Guard officers at the battalion level. Few were company commanders, as they typically moved up or out quickly. Typically, graduates of Officer Candidate School commanded two-thirds of the companies in a division (the remainder were a mix of other sources).¹⁰⁷ The number of Regular Army officers filling the most critical command and staff positions is even more remarkable considering they accounted for only one of forty officers at the height of the mobilization.¹⁰⁸ Highly sought after and filling the most important positions, this professional officer corps provided the foundation upon which the United State Army fought in World War II. This close-knit community provided a vital informal link and common experience between units thrown together in combat.

Marshall and McNair recognized that the interwar period provided few opportunities to evaluate the abilities of the active duty officer corps. Command opportunities were very limited, and often with understrength units without any real mission.¹⁰⁹ Thus, the first real opportunity to judge any officer's potential was during the mobilization and early combat operations, not an ideal time for learning, but an opportune time to evaluate effectiveness.¹¹⁰ Peter Mansoor, in his book *The GI Offensive in Europe*, links the leadership ability of commanders during mobilization directly to the units' future performance in

¹⁰⁶ Hogan, *A Command Post at War: First Army Headquarters in Europe, 1943-1945*, 25.

¹⁰⁷ Carafano, *After D-day*, 38; Miller, *Nothing Less Than Full Victory*, 20.

¹⁰⁸ Palmer, Wiley, and Keast, *The Procurement and Training of Ground Combat Troops*, 92.

¹⁰⁹ Kirkpatrick, "'The Very Model of a Modern Major General' Background of World War II American Generals in V Corps," 267.

¹¹⁰ Pogue, *George C. Marshall: Ordeal and Hope 1939-1942*, 89.

combat.¹¹¹ Division commanders who performed well often went on to command larger units – Omar Bradley trained both the 82nd Infantry Division (before airborne designation) and the 28th Infantry Division before being deploying to Africa where he would serve as deputy corps commander and later corps commander.¹¹² George Patton trained 2nd Armored Division before his assignment as the Western Task Force Commander during Torch landings and later command of II Corps.¹¹³ Most commanders did not meet Marshall and McNair’s standards for performance and they reassigned them before their divisions deployed; some because of their age, but often because McNair believed they were not capable.

McNair’s primary forum for evaluating large unit leaders during the mobilization period was force-on-force maneuver exercises. McNair personally led many of the exercises and emplaced observers who he trusted to send detailed reports. McNair’s report on the November 1941 First Army versus IV Army Corp Maneuvers in North Carolina is a detailed criticism of the performance of all units. Evaluated against doctrine, McNair takes units to task for failure to coordinate between echelons, maintain situational awareness, and general failure to apply sound tactics.¹¹⁴ General Courtney Hodges was an observer for an exercise, and his report is even more severe. Hodges cites the failure in small unit tactics as a direct result of the poor performance by senior leaders who assigned excessive frontage per unit and emphasized speed over security and good tactics.¹¹⁵ Senior leaders used these large exercises to evaluate

¹¹¹ Mansoor, *The GI Offensive in Europe*, 23.

¹¹² Bradley, *A Soldier’s Story*.

¹¹³ Patton and Harkins, *War as I Knew It*.

¹¹⁴ McNair, “Comments on the First Phase of the LA Maneuvers.”

¹¹⁵ Courtney H. Hodges, “Comments on Carolina Maneuvers, November 1941,” n.d., 34, Hodges, Courtney Hicks: Papers, 1904-65 (A70-86 - Box 7), Eisenhower Presidential Library. Lawton Collins served as an observer at an earlier, Third Army exercise. His comments are reflective upon the larger organizational and performance issues, as the exercise was intended to evaluate the concepts rather than certify a unit for combat. His base conclusion is that the exercise was very useful in providing lessons learned, the basic doctrine was fundamentally correct although needed refinement, and the Army was not

Army doctrinal concepts as well as individual leadership abilities. In general, these exercises showed that these concepts were sound, but modifications were necessary. More importantly, the exercises reinforced the importance of leadership to translate the theory into practice. They identified and promoted those who were able, and reassigned those who failed to make the leap.

The Regular Army suffered from a very stagnant promotion system during the interwar years, driven completely by seniority rather than competence.¹¹⁶ An immediate problem during mobilization was that National Guard officers were typically senior to their active duty counterparts. Marshall needed a system to select the most capable and move them ahead. Far too many of both component commanders in 1940 and 1941 were deemed unfit for combat leadership.¹¹⁷ Because of the interwar promotion system, the vast majority of senior officers were too old for the rigors of combat duty. Marshall initially used an age-based system to retire or reassign many of the oldest general officers, making room for those that he trusted.¹¹⁸ In a letter to the Senate Military Affairs committee in 1940, Marshall wrote:

Officers with knowledge, initiative, drive, and leadership must be placed in important command and staff positions. We have the officers and they can be so placed, provided authority is granted to select and redistribute them without the normal peacetime restrictions as to seniority. . .

yet prepared to fight German blitzkrieg battle. J. Lawton Collins, "Draft Notes on Comments on Third Army Maneuvers Louisiana," May 28, 1940, Collins, J. Lawton Papers 1896-1975 (A71-19; 80-12; 80-12/1; 80-12/2; 82-6; 86-19) Box 47, Eisenhower Presidential Library.

¹¹⁶ Kirkpatrick, "'The Very Model of a Modern Major General' Background of World War II American Generals in V Corps," 270.

¹¹⁷ Chapter VIII of Watson provides detailed analysis of the considerations, deliberations with Congress, and the policies of officer promotion and selection. Watson, *The War Department: Chief of Staff Prewar Plans and Preparations*, 241–247; Pogue, *George C. Marshall: Ordeal and Hope 1939-1942*, 93.

¹¹⁸ Between June and November 1941, 165 Regular Army Officers (1.3% of the officer corps) were removed under this policy. The National Guard and Reserve officers were also removed, however at a much lower rate and more typically reassigned rather than retired. Watson, *The War Department: Chief of Staff Prewar Plans and Preparations*, 245; Pogue, *George C. Marshall: Ordeal and Hope 1939-1942*, 98.

Leadership in the field, and especially during the hurried organization of the urgently needed new units, must not depend on seniority, meaning age.¹¹⁹

Nevertheless, the morale of the National Guard officer corps was a big concern. Marshall sought the authority to rebalance the officer corps towards combat capable leaders, but simply removing the most senior officers and placing the Regular Army officers he trusted in charge was not feasible. Removing every National Guard senior leader would clearly have a negative effect upon the officer corps, so the official policy had to reflect equal opportunity.¹²⁰ Marshall focused on promoting Regular Army officers to ensure they would hold the most critical leadership positions and reassigned (sometimes by promotion) National Guard and Reserve officers to non-combat jobs or regimental and below positions, while publically supporting equal opportunity.

Under this new authority, Marshall and McNair used the mobilization and training evaluations to remake the officer corps. Through the process of identifying and removing subpar officers, McNair believed that by the summer of 1942 the officer corps had succeed in weeding out many of the most unfit of the activated officers.¹²¹ McNair exhorted his subordinates to critically evaluate and aggressively reassign officers – both Regular Army and National Guard – who did not perform. McNair wrote to Lieutenant General Walter E. Krueger, commander of the Third Army during the Louisiana Maneuvers, that General Marshall had made

crystal-clear that the reclassification of incompetent officers, regardless of grade, was exactly what he was exerting every effort to bring about He made no distinction at all as between the Regular Army and the National Guard—both should be given a thorough overhauling. In short, you certainly are free to handle all cases of this kind on their merits without fear of embarrassing the War Department. I may go further and say that the War Department emphatically urges such action by army commanders.¹²²

¹¹⁹ Watson, *The War Department: Chief of Staff Prewar Plans and Preparations*, 250.

¹²⁰ *Ibid.*, 260–261.

¹²¹ Palmer, Wiley, and Keast, *The Procurement and Training of Ground Combat Troops*, 94.

¹²² Greenfield, Palmer, and Wiley, *The Organization of Ground Combat Troops*, 50.

Instituting this standard of effectiveness rather than the principle of seniority, was a tremendous change in the culture of the officer corps and greatly improved the ability of commanders to recognize and ensure the right personnel filled the right jobs.

The selection of qualified officers and removal of incompetent officers continued once the units arrived in theater. While First Army prepared for the Normandy invasion, the Army personnel section (G1) utilized both a formal and informal process for officers of suspect qualifications. Personnel staff interviewed each unfit officer in an attempt to administratively reassign him within the command, but away from a combat leadership billet into a staff or support job. However, First Army reclassification boards officially evaluated eighty-nine officers before the initial landings in June 1944, recommending forty-two discharges.¹²³ From June 1, 1943, to June 1, 1945, the European Theater of Operations standing evaluation board reviewed an additional 1,366 officers, with 67% being separated, 30% reassigned, and 2.5% other disposition. The reasons for separation, in order given, are:

- lack of personality traits (leadership, force, initiative, aggressiveness, good judgment, common sense)
- lack of professional qualifications (failure in combat)
- classification failure (assigned duties they were not qualified for)
- lack of adaptability (temperament or disposition opposed to service, inability to adapt to restrictions or requirements of service)
- selection failure (complete lack of officer qualities and should never have been commissioned, intelligence, personality, professional qualifications)
- Lack of physical and mental stamina and lack of moral fiber (cowardice, combat exhaustion)
- Psychoneurosis: predisposed to not be qualified mentally for service

¹²³ Reclassification procedures were initiated for 3 colonels, 5 lieutenant colonels, 5 majors, 14 captains, and 62 lieutenants prior to D-Day. Of these, 1 lieutenant colonel, 1 major, 3 captains, and 37 lieutenants received discharges. Hogan, *A Command Post at War: First Army Headquarters in Europe, 1943-1945*, 43.

- Avoidable undesirable characteristics or traits (alcoholism, lazy, indigent, negligent)¹²⁴

These characteristics reflect Marshall's emphasis on the effectiveness of combat leaders. The top reasons for separation was not moral failings or intellectual ability, but rather combat leadership traits.

Considering the number of officers in Europe, 1,366 officers is a small population, and reflects the effectiveness of Marshall and McNair's efforts to shape the officer corps through promotions, reassignment, and retirement. The system ensured that those in the important leadership positions were capable of executing combat operations with a great deal of autonomy, a key component of the decentralized command philosophy and enabler of the task organization flexibility so important in the European Theater. Of the leadership positions, a few drew extra scrutiny.

Quality Commanders

The selection of division and corps commanders was extremely important in the American system. Without quality leadership, the principles of mission type orders, combined arms, and fire and maneuver are impractical for units that constantly change their composition and command relationships. In the American commander-centric system, commanders were responsible for everything their units did or failed to do. With this responsibility came requisite authority. Given time and ample training opportunities, commanders gain a greater understanding of the capabilities, strengths, and weaknesses of their subordinates. Using this knowledge, commanders can properly assign missions, tailor the specificity of their guidance, and emplace appropriate control measures to cover weakness. The battlefields of Europe did not always provide senior leaders with the opportunity to gain this level of understanding. The one constant on the continent in 1944 was that there were nearly always new units arriving, creation of additional large commands, and constant introduction of personnel complexity onto the battlefield.

¹²⁴ "General Board Reports: Reclassification and Demotions of Officers in European Theater of Operations Study Number 7," n.d., 6–10, Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 2, Eisenhower Presidential Library.

The small peacetime Army and tight-knit officer corps ensured that the leaders knew each other well. However, as already highlighted, the peacetime Army was not able to evaluate an officer's fitness to command or gain an understanding of their combat leadership strengths and weaknesses. Yet, General Bradley and his subordinate commanders made decisions on allocation of forces based upon requirements rather than a concern for building strong command team relationships. Bradley, and the other senior leaders, focused on the competence of every division and corps commander, and quickly replaced those who were not capable. The use of selection and relief contributed to the quality of commanders in the field. General Marshall, assisted by Lieutenant General Leslie McNair and later General Eisenhower and General Bradley, personally selected the best officers for division command, and only promoted a proven few to corps, army, and army group command. Commanders had a short window to produce results and prove themselves capable, in a few cases only three or four days before they were relieved. The system leveraged personal connections, proven combat experience, and freedom to reassign those who did not meet the standard to ensure the American commanders were the best available.

The process of selecting division commanders started even before Pearl Harbor, as Marshall implemented policies to mobilize the force. As already addressed, General Marshall's age policies dictated that nearly all of the officers with experience as division commanders or higher would be too old for combat service.¹²⁵ Combined with the massive mobilization, Marshall had many positions to fill, and he wanted "officers with knowledge, initiative, drive, and leadership" to key command and staff positions.¹²⁶ One possible method he could have used was to establish a central selection board to review all personnel files and choose the best-qualified officers. Marshall instead chose a much different system, relying heavily upon his personal knowledge of other active duty combat arms officers and entrusting

¹²⁵ Watson, *The War Department: Chief of Staff Prewar Plans and Preparations*, 247; Greenfield, Palmer, and Wiley, *The Organization of Ground Combat Troops*, 48.

¹²⁶ Watson, *The War Department: Chief of Staff Prewar Plans and Preparations*, 250.

General McNair with the responsibility for screening candidates. Those officers with prior experience serving with Marshall fared well in this process, particularly those from Fort Benning.¹²⁷ As historian Martin Blumenson observed, "there were probably a dozen, perhaps more, who were every bit as good as the ones he listed. The others were simply unfortunate because they had failed to come within Marshall's orbit and ken."¹²⁸ Lieutenant General Mark W. Clark, while serving as the deputy to McNair, was responsible for working with the infantry branch chief to nominate candidates for division commanders and assistant division commanders, while McNair would nominate candidates for division artillery commanders. Clark created his list based upon seniority, efficiency, but also upon their reputation and Clark's personal knowledge of the officers. Marshall would make the final selections from these lists.¹²⁹ Regardless of the actual method, the result was clear – Regular Army officers dominated division command positions, even of National Guard units.

This dominance was clearly controversial at the time. An entire section in *Chief of Staff Prewar Plans and Preparation* is dedicated to discussing memorandums Marshall and his staff generated claiming equal opportunity for National Guard officers while defending Marshall's insistence on the best qualified at the time. These memorandums to army and corps commanders outline Marshall's guidance that if qualified National Guard officers are available for command positions, they are to be favored over Regular Army officers. However, he also strongly stressed that the most important factor was not component but competence. In practice, the Regular Army officers were overwhelmingly selected.¹³⁰ The preference reflected Marshall's belief that the interwar years provided Regular Army officer with the

¹²⁷ Mansoor, *The GI Offensive in Europe*, 22.

¹²⁸ Ibid., 81.

¹²⁹ Mark W. Clark, Senior Officers Debriefing Program: Conversations Between General Mark W. Clark and Lieutenant Colonel Forest S. Rittgers, Jr, interview by Forest S Jr. Rittgers, Tape Transcript, October 27, 1972, sec. I page 120–123, USAMH1; Mansoor, *The GI Offensive in Europe*, 21.

¹³⁰ Watson, *The War Department: Chief of Staff Prewar Plans and Preparations*, 260–261.

experience, training, and most importantly discipline to lead large units. In a letter to Undersecretary of War Robert P. Patterson, Marshall said, "The RA units are not bothered by poor morale because the officers have attained professional knowledge either at schools or through practical exp. NG officers have not had these opportunities, and the morale of their units reflects the deficiency."¹³¹ McNair also believed that selection of National Guard officers would be a mistake because of the increased complexity of combined arms warfare and importance of division commanders. In a letter to Marshall stating his opposition to promoting any of the current National Guard Brigadier Generals to division command, McNair stated that making token selections not based upon capability would only do harm over time. In the end, only one National Guard commander would remain in command from training to the end of the war.¹³² Two studies on World War II division commanders are useful in understanding the profile of those selected by Marshall.

Lieutenant Colonel Gary Wade conducted a statistical analysis of World War II Division commanders and Charles E. Kirkpatrick compiled a profile of major generals assigned to V Corps during the war. While neither is a complete study because of missing personnel files and breadth of the subject, both studies come to similar conclusions and provide interesting statistics that help understand those selected as senior leaders in combat. Of the eighty-nine divisions formed, eighty-seven divisions saw combat in one or the other theater. Forty-six divisions had one commander the entire combat tour and forty-one divisions had multiple commanders, totaling one hundred thirty-four division commanders in combat. Twenty of these commanders would also serve as corps or army commanders during World War II.¹³³ In his study, Wade examines the career background of twenty-five randomly selected division

¹³¹ Mansoor, *The GI Offensive in Europe*, 58.

¹³² Major General Robert S. Beightler, commander of the 37th Infantry Division who served in the Pacific was the only National Guard commander to serve the duration of the war in command. Ibid.

¹³³ Wade, "World War II Division Commanders, Combat Studies Institute Report #7," 2.

commanders who served in combat, all of whom were Regular Army officers.¹³⁴ Kirkpatrick examined the careers of the twenty major generals and two brigadier generals who served in V Corps, all again who were Regular Army officers.¹³⁵ Wade found that these twenty-five officers spent an average of eighteen years as a captain, major, or lieutenant colonel during the interwar years. They spent this time primarily in Army schools as students or instructors, giving them many opportunities to hone their tactical skills.¹³⁶ Kirkpatrick found a similar trend, where none was younger than forty years old when promoted to lieutenant colonel and had spent 10.58 years in school compared to 9.8 years with troops.¹³⁷ Every officer in both studies attended the Command and General Staff School at Fort Leavenworth, with a significant proportion having graduated as distinguished or honor graduates.¹³⁸ Kirkpatrick's study also recognizes that these officers would have known each other well; many had been cadets at West Point when the class sizes were small enough that everyone would have been very familiar with other cadets, even of different

¹³⁴ Officers included in Wade's study: Terry de la Mesa Allen, Edward M. Almond, Clift Andrus, A. V. Arnold, Paul W. Baade, Raymond O. Barton, Harold W. Blakeiey, Alexander R. Bolling, Charles L. Bolte, Withers H. Burrell, C. H. Corlett, Norman D. Cota, John B. Coulter, Louis A. Craig, John E. Dahlquist, Robert T. Frederick, James M. Gavin, Charles H. Gerhardt, William H. Gill, George W. Griner, Jr., Robert W. Grow, George P. Hays, Leland S. Hobbs, Stafford L. Irwin, Walter E. Lauer, Robert C. Macon, Harry J. Malony, William M. Miley, William H. H. Morris, Jr., Verne D. Mudge, Chbarles L. Mullins, John W. O'Daniel, Walter M. Robertson, Maurice Rose, Charles W. Ryder, Albert C. Smith, Donald A. Stroh, Innis P. Swift, Joseph M. Swing, Maxwell D. Taylor, Harry L. Twaddle, Orlando Ward, Issac D. White, John S. Wood, and Ira T. Wyche. *Ibid.*, 12.

¹³⁵ Kirkpatrick's study included the V Corps commander, division commanders assigned to V Corps, commanders of V Corps artillery, and Corps Chief of Staff: Leonard T. Gerow, Clarence R. Huebner, Clift Andrus, Edward H. Brooks, Waller M. Robertson, Raymond O. Barton, Stafford L. Irwin, Lunsford E. Oliver, Robert W. Hasbrouck, Donald A. Stroh, Louis A. Craig, John W. Leonard, Norman D. Cota, Charles H. Gerhardt, Leland S. Hobbs, Paul W. Baade, William W. Eagles, Emil F. Reinhardt, Waller Lauer, William C. Lee, Charles G. Helmick, and Henry J. Malchell. Kirkpatrick, "'The Very Model of a Modern Major General' Background of World War II American Generals in V Corps," 261.

¹³⁶ Wade, "World War II Division Commanders, Combat Studies Institute Report #7," 3, 5.

¹³⁷ Kirkpatrick, "'The Very Model of a Modern Major General' Background of World War II American Generals in V Corps," 261, 268.

¹³⁸ Wade, "World War II Division Commanders, Combat Studies Institute Report #7," 6; Kirkpatrick, "'The Very Model of a Modern Major General' Background of World War II American Generals in V Corps," 264.

year groups. All officers spent significant time in the school systems where they would have met others from every branch and commissioning source.¹³⁹ One of the most interesting statistics found by Wade is that twenty-three of the twenty-five officers he studied were serving in command positions immediately prior to selection for division command.¹⁴⁰ These two studies support the conclusion that Marshall preferred Regular Army officers who he either knew personally or through reputation, who had spent the lean interwar years learning the science of war in the Army school system, and who had demonstrated their competence in combat. The selection pattern for corps and army commanders and causes of relief for senior leaders further supports this conclusion.

Marshall controlled the selection of higher-level commanders even more closely than the selection of division commanders. With fewer headquarters to build, and time to evaluate the effectiveness of combat leadership in action, selection also required less gambling with unproven competence. Robert H. Berlin conducted a study of World War II corps commanders that paralleled Wade's effort with division commanders. Berlin's conclusions on the importance of the interwar period school system, duty as instructors, and personal relationship with Marshall match Wade's conclusions. Twenty-two corps saw combat during World War II, and they were commanded by thirty-four different general officers. Interestingly, considering the age of these officers, only slightly over half of them saw combat in the First World War and non-combat roles during the earlier war did not seem to be a selection criterion for higher-level service in World War II.¹⁴¹ Nor was their commissioning source or performance in those schools a determining factor for success. However, thirty-three were graduates of Command and

¹³⁹ Kirkpatrick, "'The Very Model of a Modern Major General' Background of World War II American Generals in V Corps," 265.

¹⁴⁰ Ten were assistant division commanders, three were division artillery commanders, four were combat command commanders, four were brigade commanders, and one was a regimental commander. The other two came from staff assignments. Wade, "World War II Division Commanders, Combat Studies Institute Report #7," 7.

¹⁴¹ Berlin, "U.S. World War II Corps Commanders: A Composite Biography," 3, 8.

General Staff College, thirteen as honor or distinguished honor graduates, with only two in the bottom half of their class.¹⁴² Twenty-nine of them were also graduates of the Army War College, but every single one of them served as instructors at least one of the Army schools during the interwar years.¹⁴³ Berlin's conclusion is that by 1939 these colonels were "exceptionally well prepared for challenges of high-level command in modern war."¹⁴⁴ Marshall initially looked to fill corps command positions with officers who proved themselves training and preparing divisions – men like Bradley, Oscar Griswold, George S. Patton, Jr., and Innis Swift.¹⁴⁵ As additional corps were created, Marshall was able to select division commanders with proven records in combat. Nevertheless, like division commanders, ultimately a personal relationship with Marshall, Eisenhower, or Bradley meant more than proven combat experience.¹⁴⁶ As a group, these officers were extremely successful in combat, with only seven being relieved from command (four at least marginally due to medical reasons), and four corps commanders promoted to army or army group command.¹⁴⁷ That these officers contributed immensely to the

¹⁴² James A. Van Fleet was the only corps commander who did not attend CGSC, he claimed because he was needed at the University of Florida where he was professor of military science and tactics and the football coach. McLain attended the three-month National Guard course instead of the year long course. Corlett and Griswold graduated in the bottom half of their CGSC class. *Ibid.*, 10.

¹⁴³ Between the two world wars, eleven officers served as instructors at the military academy, fourteen were instructors at the Infantry School, five taught at the Cavalry School, three served at the Field Artillery School, and two were on the faculty of the Coast Artillery School, fourteen were instructors at the Command and General Staff School, fifteen had tours at colleges and universities as R.O.T.C. professors of military science and tactics, and one was an instructor at the Army War College. *Ibid.*, 12.

¹⁴⁴ *Ibid.*, 14.

¹⁴⁵ Griswold commanded the XIV Corps and Swift commanded I Corps in the Pacific. *Ibid.*, 15.

¹⁴⁶ Hogan, *A Command Post at War: First Army Headquarters in Europe, 1943-1945*, 53–56.

¹⁴⁷ The seven relieved from command were: Lloyd R. Fredendall, Ernest J. Dawley, John J. Lucas (possible medical), Gilbert R. Cook (medical), Charles H. Corlett (possible medical), General John Millikin, Manton S. Eddy (medical). The four promoted to higher commander were: Bradley, Eichelberger, Patton, and Truscott. Berlin, "U.S. World War II Corps Commanders: A Composite Biography," 16.

American success is clear and touted in numerous books and articles. What is generally underappreciated is that the corps was responsible for integration and tactical employment of divisions that moved around the battlefield regularly. As Lieutenant General Alvan C. Gillem, explained in a lecture at Fort Benning in 1948, the corps was an amorphous, elastic tactical unit that “expands and contracts according to the allocation of troops from higher headquarters based on the enemy, the terrain and the contemplated missions.”¹⁴⁸ Of any group of officers in the European Theater, the corps commanders were the ones charged with making flexible task organization possible. Putting the very best officers in charge gave the system confidence and ensured that quality leadership countered the friction of constantly changing unit alignment.

Because so much relied upon quality commanders in combat, Marshall, Eisenhower, Bradley, and other senior leaders were quick to replace commanders who failed to perform.¹⁴⁹ Many commanders never made it to combat. Just as the mobilization and training process identified good leaders for higher-level commands, it also identified commanders who were too old, lacked the ability, failed to display drive, or displayed poor leadership. Marshall’s standards and expectations were high, and the process identified many who would serve out the war in staff capacities.¹⁵⁰ The standards were even higher once deployed. In the European theater alone, six corps commanders and twelve division commanders were

¹⁴⁸ Ibid., 2.

¹⁴⁹ Two information papers completed by Dr. Drea from DAMH-RA studied the question of relief of division and corps commanders during and before World War II. His conclusion is that National Guard commanders were relieved at a higher rate than Regular Army counterparts. The driving factor was however not component, but age and educational background. Regular Army officers were younger and had the advantage of the professional school system. However, once in combat, relief was directly related to the performance of the unit, regardless if the circumstances were responsible. A new commander was deemed able to restore the morale and drive of the unit better than any other measure. Drea and Wise, “DAMH-RA Information Paper: Historical Circumstances Surrounding the Relief of National Guard Commanders in World War II Mobilization,” November 1, 1990, U. S. Center for Military History; Drea, “DAMH-RA Information Paper: Relief of Commanders Before and During World War II,” August 14, 1991, U. S. Center for Military History.

¹⁵⁰ Watson, *The War Department: Chief of Staff Prewar Plans and Preparations*, 250.

relieved in combat for one reason or another.¹⁵¹ Two very illustrative examples are the 90th Division and 8th Division. The 90th Division lost two commanders to relief within the unit's first two months on the continent because the division failed to perform as aggressively as other units. The first commander, Brigadier General Jay W. MacKelvie, was relieved shortly after his Normandy landing because Bradley believed he lacked the ability to grasp combined arms maneuver. The second commander, Major General Eugene M. Landrum was relieved when he failed to get out of his command post enough for his superiors.¹⁵² The 8th Division commander, Major General William C. McMahon, was relieved after only four days in command because of his units' lack of cohesion and hesitation under fire. He was replaced by Brigadier General Donald A. Stroh, who served under Major General Manton Eddy of the 9th Division, one of the recognized examples of combat leadership.¹⁵³ From the Normandy landings until August 1, 1944, First Army fired nine commanders.¹⁵⁴ In General Hodge's war diaries, the decision to relieve division commanders was typically the result of consultations between corps commanders, the army commander, and army group commander.¹⁵⁵ Corps commanders were also relieved, although often with medical reasons masking the true cause of combat performance. Major General Charles Corlett was relieved after failing to move quick enough to close the gap and trap the German army at Aachen, even though the official reason given by Eisenhower and Bradley was to provide Corlett with time to rest and

¹⁵¹ Kirkpatrick, "The Very Model of a Modern Major General' Background of World War II American Generals in V Corps," 260.

¹⁵² Hogan, *A Command Post at War: First Army Headquarters in Europe, 1943-1945*, 100–101.

¹⁵³ Weigley, *Eisenhower's Lieutenants*, 134.

¹⁵⁴ Hogan, *A Command Post at War: First Army Headquarters in Europe, 1943-1945*, 101.

¹⁵⁵ Courtney H. Hodges, "First Army War Diary Maintained by His Aides," n.d., sec. 22 July, 11 August, 30 September, Hodges, Courtney Hicks: Papers, 1904-65 (A70-86 - Box 25), Eisenhower Presidential Library.

recuperate.¹⁵⁶ In the end, competence and results counted more than personal relationships or previous performance in decisions to relieve commanders. Reliefs seemed to work, with units like 90th Division turning around to become one of the strongest units in the European Theater by the end of the campaign. With so much responsibility placed upon corps and division commanders, Eisenhower, Bradley, and the Army commander quickly moved those who failed to perform and put in officers that would succeed.

Role of the Staff

As important as commanders were to the success of the American Army, staffs ran the machinery that implemented their commander's orders. The fluid task organization posed special problems to staffs. This section will examine two staff solutions that were instrumental in enabling mobile warfare: the use of liaison officers and the dual hatting and empowering of technical staff officers. The organization section of this paper further addresses the role of sustainment, communications, and fire support. It is important to recognize the role the staff had in implementing the concepts explored in the doctrine section, especially those officers who served as chief of staff coordinating the day-to-day operations of the unit, intelligence officers who provided the information that formed the commander's understanding, and the operations officers who translated their commander's vision into operational plans. Instead of dealing with those functions separately, I will highlight the synergy of doctrine, quality officers, and commanders in the leadership section summary.

Of all the factors examined for this monograph, the one that emerges most often from the doctrine, standard operating procedures, personal papers, and after action reports is the importance of liaison officers. In the fast pace of mobile warfare with limited communications, the liaison officers were given immense responsibility for relaying orders, requesting and clearing fires, coordinating resupply, and most importantly representing their commanders. Liaison officers were not a new concept nor were the

¹⁵⁶ Weigley, *Eisenhower's Lieutenants*, 363.

doctrinal requirements revolutionary in its expectations. What was unique was the importance in facilitating task organization changes. Doctrine dictated that supporting units provide liaison officers to supported units, with the stipulation that the presence of a liaison officer does not relieve a commander from ensuring that his subordinates understand his plan. The 1939 *Field Service Regulation Operations* outlines two areas of responsibility for liaison officers: learn the instructions of the gaining unit's commander and represent the views and concerns of their parent commander during deliberations.¹⁵⁷ The *Staff Officers' Field Manual* assigns responsibility for the gaining command to integrate the liaison officer into the planning process and tasks the parent commander with the responsibility for providing communications assets.¹⁵⁸ Corps and army standard operating procedures echo and expand upon the doctrine with specifics on composition and responsibilities. Corps commanders considered liaison officers critical positions, and the officers selected to serve had to be bright, independent, and friendly in order to be effective. In addition to the higher to lower liaisons, various corps standard operating procedures specified requirements for field artillery, medical, engineer, air support, and logistics officers for corps level liaison, listing the composition by grade for each team.¹⁵⁹ In a time without real time video communications, collaboration tools, or web enabled common operating pictures, the liaison officer was the direct commander-to-commander representative and spokesman.

In practice, the liaison officers proved critical. In the first two issues of *Combat Lessons*, a collection of tactical lessons learned from both theaters published by the War Department, reinforced the importance of liaison officers. A few of the comments from combat reports include:

¹⁵⁷ *Operations (Tentative)* (1939), 34.

¹⁵⁸ *Staff Officers Field Manual: The Staff and Combat Orders*, 34.

¹⁵⁹ "XII Corps Staff Operational Procedures 12 August 1944 to May 1945," 3, 80–82; "XII Corps Artillery in Combat," n.d., 1, Gilbert R. Cook Papers 1908-1959 (A91-11 & A92-12) Box 8, Eisenhower Presidential Library; "XIII Corps Standard Operating Procedures, Change 1," 5, 7; "XIX Corps Standard Operating Procedures," 18, 24–25.

"Select your best officers for liaison officers."

"All units recognized the necessity for assigning competent officers to liaison duties."

"We put our best people on the job as liaison officers."

"Liaison officers must be good officers and must receive special training prior to the time they are detailed if they are going to be of any use in battle."¹⁶⁰

Many operations reports and unit histories note that liaison officers played important support roles, such as keeping field artillery units updated on no-fire lines, directly receiving oral orders, and relaying instructions to their parent commanders.¹⁶¹ The General Board Reports also reflect the importance of the liaison officers, specifically in the reports from field artillery and G3 operations. The G3 Section report lists the necessary skills of the liaison officer to be: pleasant personality, energy, initiative, and fully informed.¹⁶² In the chaos of combat and rapid task organization changes, high quality, personable, and trusted officers were necessarily to link units together, ensuring common understanding of the situation, and process the staff functions required to keep the army running.

Another interesting feature of the staff in World War II was the dual hatting of technical staff officers as commanders of their component. Signal Corps, Engineer, Medical, and other technical

¹⁶⁰ George Marshall, ed., "Combat Lessons Number 1: Rank and File in Combat: What They Are Doing, How They Do It" (U.S. Government Printing Office, 1944), N-14362.1, Combined Arms Research Library Digital Library, Fort Leavenworth, KS; George Marshall, "Combat Lessons 2: Rank and File in Combat: What They Are Doing, How They Do It" (Office, Chief of Staff of the Army, September 30, 1945), N-14362.1, Combined Arms Research Library Digital Library, Fort Leavenworth, KS.

¹⁶¹ "First Army Headquarters - After Actions Report Initial Draft with Comments"; *ibid.*; "First Army Headquarters - Summary of Operations September and October 1944"; LtCol Clarence Beck, "1st Infantry Division Memorandum 'G3 Report of Operations 1 August to 31 August 1944, Inclusive'," September 10, 1944, U. S. Army, 1st Infantry Division: After action reports, 1940-48 (RG 407) (Microfilm), Reel 69, Eisenhower Presidential Library; "4th Infantry Division, Division Artillery Unit History June to October 1944," n.d., U. S. Army, 4th Infantry Division After action reports, 1940-46 (RG 407) (Microfilm), Reel 72, Eisenhower Presidential Library.

¹⁶² "General Board Reports: Field Artillery Operations, Study Number 61"; "General Board Reports: Organization, Functions, and Operations of G3 Sections in Theater Headquarters, Army Groups, Armies, Corps, and Divisions Study Number 25," 2-3.

branches used a system where the division or corps staff officers also served as the troop commander for the branch soldiers assigned to support their unit. This gave the staff officer a great deal more authority and simplified the process of coordination. It also ensured unity of command, as the technical unit would not have to report to multiple bosses. Although a very unorthodox concept for today's military, this system existed before World War II, and was an effective way to empower staff sections. As an example of how well it worked, the General Board Report from the engineers argued a return to that system after doctrine changed halfway through the fighting in Europe.¹⁶³ For those staff sections without the additional command responsibility, First Army commander delegated additional authority to special staff officers. Instead of having to issue all directives and coordination through operations channels, staff officers could direct, control, and coordinate the operations of army units within their specialty. This gave them much more flexibility, allowing more rapid reaction to changing requirements and new task organization needs. If technical troops needed to shift within zones or reallocate supplies, the staff officer could issue orders directly.¹⁶⁴ This devolution of command responsibility, through dual hatted staff officers and special staff with the authority to direct, was a novel solution and kept operations channels clear for the commander to direct large movements. With the increased authority, the support branches were able to make the mechanics of warfighting responsive to rapid changes in task organization.

Summary of Leadership

The American doctrine of combined arms and mission type orders places a great deal of faith in subordinate commanders and staffs to operate in sync with each other without significant controls. Commanders gained the flexibility and responsiveness deemed necessary in maneuver warfare by letting go, a risky proposition for an army that had grown from two hundred thousand to eight million in two

¹⁶³ "General Board Report: Engineer Organization, Study Number 71," 7.

¹⁶⁴ Hogan, *A Command Post at War: First Army Headquarters in Europe, 1943-1945*, 60.

years. They were able to do this in great part because the United States Army was designed for rapid expansion and had dedicated the interwar years to building a cadre of professional Regular Army officers prepared to step up to large unit commands and staff positions. Having typically spent nearly fifty percent of their service in the school system, they shared a common understanding of how to organize and fight maneuver battle. The small size of the officer corps engendered a sense of community. This familiarity allowed the Army leadership to fill key positions based upon their personal assessment of capabilities instead of relying upon blind boards viewing personnel records and inflated evaluation reports. Once selected, senior leaders expected these officers to perform and quickly removed those who failed. Mid-grade and junior Regular Army officers also filled critical roles, becoming a highly sought after asset as regimental commanders and key staff officers. In the American initiative based system, division and corps commanders held a great deal of responsibility. Ensuring high quality leaders at those levels was critical to enabling task organization changes in combat. In order to maintain momentum, commanders had to trust their subordinates to act independently yet in concert with the large operation, only possible with a combination of trust and common doctrinal foundation. All of this was possible because General Marshall sought and received the authority to select, test, and relieve division and corps commanders as he saw fit. However, running the machinery of modern war also required staffs with the authority and flexibility to respond. Through the use of liaison officers, commanders were able to integrate both vertically and horizontally to support the rapid reorganization with trusted surrogates who combined tactical knowledge and personal skills in order to ensure their unit understood the larger operation. The dual-hatting and delegation of significant amount of administrative authority to staff officers allowed the technical and support branches to anticipate requirements, respond quickly, and deliver exceptional support without burdening the command and operations system. The advantages of the Army school system and leadership combine particularly effectively in the positions of chief of staff, operations officers (G3), and intelligence officers (G2). Always filled by highly capable officers, typically drawn from the Regular Army and graduates of the Army school system, these three key

positions were central to the operations of division and corps. Commanders relied upon these key staff officers to translate their vision into orders for subordinates, coordinate operations with higher headquarters, supervise the day-to-day activities of their units, and react to unforeseen opportunities or crisis. These officers needed to know more than just their branch specialty; they had to be experts at combined arms operations, thoroughly understand sustainment, appreciate the technical limitations of every supporting branch, and solve complicated problems. The fact that the United States Army was able to generate sufficient officers with the leadership and doctrinal knowledge to not only fill command positions, but also these critical staff billets in every division and above unit demonstrates the foresight of the interwar system.

The high quality leadership was the critical factor making rapid task organization possible. The best doctrine in the world is only as good as those who can implement it. The challenges of changing task organization on the fly are tremendous. To effectively integrate a new unit and employ it quickly requires a highly competent chain of command, supported by staff officers with initiative and authority. This does not happen in hierarchical organizations that rely upon controls to ensure subordinate compliance. It relies upon a high quality officer corps, with trust that extends both up and down the chain of command bred in common experience and a sense of close community. As Charles Kirkpatrick observed in his study of general officers, it was not the extraordinary few that made the American army successful, but the fact that the system was able to produce so many senior leaders capable of operating far above their experience level under the stress of combat.¹⁶⁵

ORGANIZATION FOR COMBAT

The third influential factor that enabled task organization flexibility was the organizational design that guided the rapidly growing Army. Americans went into the First World War without a clear plan for

¹⁶⁵ Kirkpatrick, “‘The Very Model of a Modern Major General’ Background of World War II American Generals in V Corps,” 260.

large unit organization, and one of the first tasks of mobilization in 1917 was to study the existing British and French systems to model the American Expeditionary Force and its subordinate units.¹⁶⁶ Leaders during the interwar years, including Marshall and McNair, were determined to design an organizational concept to support the distinctly American concepts of warfare for any future conflict. In the same manner as doctrine, the lessons of the First World War drove the initial unit design concepts of the interwar period. Without operational large units, the primary venue for validating these concepts outside the classroom were the large scale force on force exercises, best known as the Louisiana Maneuvers. Those experiences led the Army leadership to standardize unit formations instead of custom building units for specific missions. Mirroring doctrine, the infantry division became the base around which they built the supporting system. The result of this effort was an organizational structure designed to facilitate rapid changes in task organization, particularly the movement and support of infantry divisions. The structure simplified task organization changes by assigning administrative responsibilities to the army headquarters, with corps and army group headquarters solely responsible for tactical control of assigned forces. Each division structure had integrated capability for fires, sustainment, and communications, and the supporting doctrine further facilitated the expected turmoil caused by task organization changes. The use of pooling reduced the footprint of each division, while placing reinforcing capability at higher units.

The concept of pooling is central to understanding the flexibility of task organization. McNair was the driving force in the design of units in the immediate pre-war period, and he strongly believed that it was important that unnecessary forces did not encumber combat divisions. Any capabilities that were not required at all times were a drain on combat power, with the potential to slow down the unit. As combat divisions shrunk, these non-organic troops consolidated into non-divisional support units, available for allocation by armies and corps as the mission dictated.¹⁶⁷ Doctrine captured this concept in

¹⁶⁶ Matheny, *Carrying the War to the Enemy*, 28–30.

¹⁶⁷ Greenfield, Palmer, and Wiley, *The Organization of Ground Combat Troops*, 273–278.

Field Manual 100-5 Operations: “for economy and flexibility in the assignment of tasks, the means not habitually required by a unit are pooled and organically assigned to a higher unit. These means may then be allotted to subordinate units in accordance with their requirements for particular operations.”¹⁶⁸ The effect was that the non-divisional troops outnumbered combat troops in the 1944 Army: 1,541,667 non-divisional soldiers to 1,174,972 soldiers in divisions of all types.¹⁶⁹ This pooling concept had mixed results on the battlefield. Some units became so critical, like tank and tank destroyer units, they were habitually assigned to divisions for the entire campaign. At the tactical level, the habitual relationship greatly enhanced the effectiveness of these units, as many units experienced problems integrating initially.¹⁷⁰ On the other side, for some more specialized units like engineers, the concept worked well and after action reviews recommended expanding the use of groups to control shifting forces.¹⁷¹ While outside the scope of this particular monograph, the concept of pooling takes flexible task organization from the division level down to battalion and smaller units deserves further analysis.

Designed to Fight

Without standing large unit headquarters during the interwar years, the organization and doctrine of these units was in large part theoretical.¹⁷² Students and faculty tested and developed those theories in

¹⁶⁸ *Operations (1941)*, 3; *Field Service Regulations, Larger Units*.

¹⁶⁹ Greenfield, Palmer, and Wiley, *The Organization of Ground Combat Troops*, 278.

¹⁷⁰ Fredrick H. Parkin, “Employment of the Tank Destroyer Battalion in an Infantry Division,” March 12, 1945, N8281, Combined Arms Research Library Digital Library, Fort Leavenworth, KS; Weigley, *Eisenhower’s Lieutenants*, 77, 126; Mansoor, *The GI Offensive in Europe*, 161; “General Board Reports: Organization, Equipment, and Tactical Employment of the Infantry Division, Study Number 15”; “General Board Report: Organization, Equipment, and Tactical Employment of Tank Destroyer Units, Study Number 60”; “General Board Report: Organization, Equipment, and Tactical Employment of the Armored Division, Study Number 48.”

¹⁷¹ “General Board Report: Engineer Organization, Study Number 71.”

¹⁷² While there were divisions and corps structures during the interwar years, they were rarely manned in any significant strength nor did they serve a tactical warfighting role.

the classrooms of Fort Leavenworth and the Army War College. The interwar operations doctrine consistently outlined the roles for various echelons, but in 1942, the Department of War published *Field Manual 100-15 Field Service Regulation Larger Units*. This manual assigned specific roles to the corps, army, and army group headquarters, which would guide the implementation in combat. By assigning administrative responsibility to the army, the corps focused on tactical operation and not the administrative and logistics responsibilities for the rotating set of units under its control. This kept the corps staff small and mobile. The reflections of leaders after the war was that the corps and army organization and doctrine worked well, but the army group suffered from lack of detailed doctrine and too limited responsibility. This allocation responsibility made reallocation of divisions to corps within armies significantly simpler. The system also relied heavily upon pooling of specialized assets that provided corps and army commanders with the ability to weight their main effort with critical enablers.

Army doctrine designed the corps as a tactical headquarters to control mission specific subordinate units. In *Field Manual 100-15 Larger Units*, a corps consists of a headquarters, corps troops, and

a variable number of divisions allotted in accordance with the requirements of situation. The composition of the corps will depend upon its mission, the terrain, and the situation. The flexibility of its organization permits an increase or decrease in the size of the corps, or a change in the type of divisions and other nonorganic elements constituting the corps, by the attachment or detachment of divisions and reinforcing units at any time during the operations.¹⁷³

An army or other higher headquarters allocated these units, yet retained the administrative and tactical responsibilities, freeing the corps to focus on tactical operations. As a tactical command headquarters, the corps staff was designed to be small and mobile, without the infrastructure to sustain the assigned forces. Instead, the corps commander focused on assigning missions and allotting reinforcing assets like tank destroyer, tank, artillery, engineers, and other special troops under his control.¹⁷⁴ This is exactly how

¹⁷³ *Field Service Regulations, Larger Units*, para. 146.

¹⁷⁴ *Ibid.*, para. 146–148; *Operations (1941)*, 2–3.

corps operated in the European Theater of Operations. Bradley assigned VII Corps as the main effort for Operation Cobra and allocated seven divisions and various supporting units to ensure that Major General Lawton Collins had sufficient combat power to exploit the planned breakout.¹⁷⁵ General Patton, as Third Army Commander, made similar allocations to Major General Cook's XIX Corps prior to exploitation operations in late August.¹⁷⁶ General Hodges' First Army war diary records many conferences with the army group, army, and corps commanders in which the main topic was allocation of divisions.¹⁷⁷ Appendix B provides task organization charts that show how senior leaders shaped the force from June to October 1944. The "General Board Report on the Functions, Organization, and Equipment of the Corps Headquarters" concluded the doctrinal functions and organization of the corps headquarters were confirmed by operations in Europe. The only recommendations were to add additional staff functionality, primarily to support civil affairs operations.¹⁷⁸ As with the discussion of the importance of the corps commanders, the corps was the key player in the task organization flexibility of the Army in Europe. As practiced in the school, specified in doctrine, and used on the battlefield, the corps bore the responsibility for receiving and fighting divisions.

If the corps was central to integrating the divisions into the tactical fight, the army's role was to provide the support necessary to keep the divisions effective. Like the corps, the army was not a fixed

¹⁷⁵ "History of VII Corps July 1944-October 1944," n.d., Collins, J. Lawton Papers 1896-1975 (A71-19; 80-12; 80-12/1; 80-12/2; 82-6; 86-19) Box 5, Eisenhower Presidential Library.

¹⁷⁶ Gilbert Cook, "War Diary July 1942-September 1945," n.d., sec. August 12, 1944 Entry, Gilbert R. Cook Papers 1908-1959 (A91-11 & A92-12) Box 4, Eisenhower Presidential Library.

¹⁷⁷ Hodges, "First Army War Diary Maintained by His Aides," sec. Entries for June 13th, June 15th, July 8th, August 1st, August 5th, August 11th, August 12th, August 17th, August 20th, August 24th, September 10th, September 24th.

¹⁷⁸ "General Board Reports: Functions, Organization, and Equipment of Corps Headquarters and Headquarters Company, Study Number 23," 10.

unit, but rather a headquarters to which corps, divisions, and special units could be attached as missions dictated. The verbiage in *Field Manual 100-15 Larger Units* parallels the corps:

It is not desirable that a fixed organization be prescribed for the army. The number and kind of army corps and divisions such as armored, infantry, cavalry, and motorized, and additional combat troops and service elements from the War Department reserve or other sources, will be determined primarily by the mission, the terrain of operations, and the probable hostile forces.¹⁷⁹

Like the corps, the army is a self-contained unit with tactical responsibilities. Unlike the corps, the army is the means for strategic maneuver by the theater commander and has responsibility for territorial and administrative functions.¹⁸⁰ These distinctions are very critical in explaining the flexible task organization employed in Europe. As the element of strategic maneuver, army commanders controlled the pace and direction of the campaign by allocation of divisions to their corps. Allocating sufficient combat power at the decisive points ensured the American forces maintained the tempo advantage and retained the initiative against the German armies. General Patton was the most famous army commander for strategic maneuver in his race across France with Third Army, but all army commanders practiced strategic maneuver. First Army's "After Action Review Initial Draft with Comments" contains a number of examples where strategic maneuver drove a task organization change. In preparation for Operation Cobra, the army had to manage rotating units of out front lines, integration of incoming units, and reallocation of units to newly established corps.¹⁸¹ Flexibility was critical. If the army was reliant upon static division and corps task organization, it would have been significantly more difficult to collect sufficient combat experienced units to lead the breakout operations. In a second example, during the breakout First Army conducted a number of reorganizations to maintain forward momentum. As First Army moved south and southwest in an attempt to encircle German forces, they found the primary battles

¹⁷⁹ *Field Service Regulations, Larger Units*, para. 131.

¹⁸⁰ *Operations (1941)*, 2-3; *Field Service Regulations, Larger Units*, para. 132.

¹⁸¹ "First Army Headquarters - After Actions Report Initial Draft with Comments," sec. IV.E. Operations – 26 June to 24 July.

on their left flank. This caused an odd pattern of fronts and boundaries, where corps ran out of maneuver room and effectively “pinched out” of line. Sometimes this was deliberate to relieve an exhausted division, like the 82nd Airborne Division on the western coast of the Cotentin Peninsula during early July 1944. In other cases, First Army did it to free up forces for use elsewhere. In August, the V Corps was pinched out of the line in order to move it to a different sector.¹⁸² Over the course of the European campaign, First Army would control twenty-six different divisions: fourteen infantry divisions for one tour of service, ten infantry divisions served two separate tours, and three infantry divisions which were in and out of First Army three times.¹⁸³ Third Army also moved divisions around freely. For example, XII Corps reported that fifteen different divisions served under their command, none for the entire period of combat, rather “being freely pulled in or out in accordance with the changing needs of the tactical or strategic situation.”¹⁸⁴ The “General Board Report on The Functions, Organization, and Equipment of Army Headquarters” focuses almost exclusively on the requirement to increase the size of the staff. The dual role of tactical commander and administrative support placed a much greater burden upon the staff than anticipated by the original tables of organization.¹⁸⁵ It is clear that the key commander in making and supporting task organization changes was at the army level. The next section will explore the role armies played in administrative support, but first we must examine the role of the army group in facilitating flexible task organization.

¹⁸² Interestingly, this AAR credits the Command and General Staff School with teaching the “pinch out” maneuver in the classroom exercises, despite the lack of historical examples. At the time, students apparently derided this maneuver as unrealistic, but the AAR gives multiple examples of its use in combat. Ibid., sec. VII – Comments.

¹⁸³ “First Army Combat Operations Data Europe 1944-1945,” n.d., 8, Hodges, Courtney Hicks: Papers, 1904-65 (A70-86 - Box 25), Eisenhower Presidential Library.

¹⁸⁴ George Dyer, *VII Corps Spearhead Patton’s 3rd Army* (VII Corps Historical Association, 1947), iv.

¹⁸⁵ “General Board Reports: Functions, Organization, and Equipment of Army Headquarters and Headquarters Company, Study Number 24.”

The American Army had virtually no experience with army group commands, yet attempted to define the roles and responsibilities of a headquarters well before the advent of the 12th Army Group on the continent of Europe. With only the Sixth Army Group commanded by Lieutenant General Devers as the other United States led army group in the entire war, the doctrine and experience was not very deep. *Field Manual 100-15 Larger Units* assigns the army group a tactical mission, but without territorial or administrative responsibilities is primarily a force provider. Instead of dealing with administrative matters, the focus of the commander was as an operational leader.¹⁸⁶ Army group commanders

prepares plans for the group operations, allots to the armies additional means which have been provided by higher headquarters, assigns zones of action or sectors, and coordinates the movement of his major subordinate elements, such as armies, armored formations, combat aviation, and group reserves. He assigns missions and objectives to the armies or other major subordinate elements, but decentralizes the execution of tasks to his subordinates¹⁸⁷

In reality, Bradley and his staff found themselves as involved in administrative matters as operational ones. The conclusion of the “General Board Report for Administrative Roles of the Army Group Headquarters” was that the lack of experience with Army Group headquarters prior to war led the doctrine to be theoretical, and not very detailed. The doctrinal concept of separating the administrative and tactical responsibilities at this level was flawed. In practice, it was hard to separate administrative functions from command, particularly when the primary function was allocation of forces to subordinate units.¹⁸⁸ While in theory the army group served to pool assets, in practice special units usually were allocated to the armies.¹⁸⁹ The organization and roles of the army group headquarters ensured its role in task organization changes was limited to Bradley’s decision-making authority to allocate forces.

¹⁸⁶ *Field Service Regulations, Larger Units*, para. 127–128.

¹⁸⁷ *Ibid.*, para. 126.

¹⁸⁸ “General Board Reports: Study of the Administrative Functions of the Army Group Headquarters, Study Number 29,” n.d., Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 4, Eisenhower Presidential Library.

¹⁸⁹ *Operations (1941)*, 3.

Corps and army headquarters played a key role in task organization changes. Their organization and fundamentals of employment were enshrined in doctrine and practiced in the classrooms of Command and General Staff School and the Army War College for years. In combat, they proved to be critical to maintaining tempo. Army groups, with much less doctrinal depth and less exposure to the rigors of the classroom became a different animal than intended. Having covered the three large unit organizations that made the decisions on allocation of forces and controlled units, we will now shift our discussion towards the role three supporting systems had on task organization changes.

Supporting the fight

Supporting units and staff face some of the most significant challenges when command relationships change. Fire support innovations during the interwar years resulted in more flexibility to mass fires quickly, freeing static ties between echelons. The centralized sustainment and logistics systems, controlled by army and theater commanders, allowed divisions a great deal of autonomy and improved their ability to operate independently. Tying everything together, communications doctrine supported changing headquarters. Other specialties also contributed to the flexibility, including engineer support, civil affairs, intelligence collection and analysis, or administrative functions. However, focusing on the first three critical functions provides insight into how the Army enabled flexible task organization in how supporting branches developed in the interwar years.

Many authors have addressed fire support in depth, and this monograph is not going to attempt to repeat their work. Instead of a holistic look, the focus is on key interwar period innovations that facilitated the ability to provide accurate fires while limiting the impact of task organization changes. The first innovation was the creation of fire direction centers, which greatly improved the ability to mass fires. With the field artillery battalions connected to the wire communications network, the responsiveness and accuracy of fires improved so that any battery within range of a requested target could respond. This

broke the direct support link and enabled the concept of general and reinforcing support that enabled massed fires.¹⁹⁰ Doctrine recognized this concept as a major enabler of flexibility.

Artillery fire possesses a high degree of flexibility. Field Artillery is capable of intervening over a zone of great width and depth, and of rapidly shifting and concentrating its fire without changing its positions. This characteristic makes it possible to concentrate the fire of large masses of Field Artillery under a common fire direction.¹⁹¹

The second major innovation was the use of pooling of artillery. The previous system of a fixed artillery brigade structure, as used in the First World War, was replaced by a system of pooling assets in the army in artillery groups. The army would assign artillery groups to corps artillery headquarters for each operation, allowing the fire support to match the allocation of infantry divisions and the specific needs of the operation. Instead of a fixed size, the artillery groups could detach or receive additional battalions as needed.¹⁹² This ability to pool resources and link fire support officers at every level to mass fires provided a system where the requesting unit and supporting unit needed no formal ties. The corps standard operating procedures reviewed for this monograph each included extensive sections on fires support and liaison requirements to support this system.¹⁹³ Nearly every major operation relied upon this fire support system. During Operation Cobra, First army reinforced the main effort VII Corps with nine heavy battalions, five medium battalions, seven light battalions for a total of 258 non-divisional guns and more than 1,000 guns in all. In comparison, First Army allocated VIII Corps 108, XIX Corps 100, V Corps 98 non-divisional guns each.¹⁹⁴ The General Board Reports reflect the extraordinary success of

¹⁹⁰ Carafano, *After D-day*, 43; Dastrup, "History of the US Army Field Artillery School from Birth to the Eve of World War II," 10.

¹⁹¹ *Operations (1941)*, 8.

¹⁹² Carafano, *After D-day*, 43.

¹⁹³ "XIX Corps Standard Operating Procedures"; "XIII Corps Standard Operating Procedures, Change 1"; "XII Corps Staff Operational Procedures 12 August 1944 to May 1945."

¹⁹⁴ Weigley, *Eisenhower's Lieutenants*, 151; "General Board Reports: Field Artillery Operations, Study Number 61."

this system, universally claiming the importance of American firepower. The conclusion of the “General Board Report on Field Artillery Operations” states that the field artillery flexibility and ability to mass fires was “quite frequently responsible for success of an operation.”¹⁹⁵ It does criticize doctrine for lack of detail at the corps and army level, resulting in corps commanders developing different tactics. This complicated cross-attachment of field artillery units, since there was not sufficient time for units to relearn systems in combat.¹⁹⁶ This supports the conclusion that effective task organization requires more than just doctrine, quality leaders, or specific organization, but a combination of all three factors. The flexibility gained from these fires innovations ensured front line units received support even during changes of task organization.

Sustaining the massive forces cutting across Europe was one of the biggest challenges to the American forces. With limited port facilities, long lines of communications along limited road networks, and the need to keep the pace as fast as possible to prevent the Germans from forming a new defensive line, logistics was central concern of every senior leader in theater. Both the Command and General Staff School and War College focused heavily on logistics in their courses.¹⁹⁷ Logistics was never a limiting factor in making task organization changes. One of the main reasons was the organizational structure described earlier. The corps and army group headquarters were not responsible for the logistics or administrative support to those units allocated to them.¹⁹⁸ Instead, divisions drew resupply direct from army level or Service of Supply depots in the communication zone.¹⁹⁹ Very shortly after First Army

¹⁹⁵ “General Board Reports: Field Artillery Operations, Study Number 61,” 106.

¹⁹⁶ Ibid., 108.

¹⁹⁷ Matheny, *Carrying the War to the Enemy*, 255; “Army War College Command Course Lectures 1940”; Mansoor, *The GI Offensive in Europe*, 22.

¹⁹⁸ *Field Service Regulations, Larger Units*, 51.

¹⁹⁹ *Quartermaster Field Manual: Quartermaster Operations; Quartermaster Service in Theater Operations*, Quartermaster Field Manuals FM 10-10 (Washington D.C., USA: War Department, 1942);

arrived on the continent, it centralized logistics and relieved the corps of the mission of supporting their divisions.²⁰⁰ During Operation Cobra, the logistics helped the Americans overcome shortcomings and failures in operational leadership by sheer mass. Because divisions had the capability to draw their own sustainment, they were able to tap directly into the theater level system to draw support, greatly simplifying the operational logistics system.²⁰¹ Of course, this system also kept the corps and army group commander out of the loop on sustainment issues, and there is evidence that many of the corps injected themselves into the reporting chain by receiving copies of the reports going to army and sometimes establishing corps supply depots.²⁰² A review of the General Board Reports for logistics units does not reveal discussion of the impact task organization changes on the system, but instead focused their discussion on how to keep up with fast moving units with enough supplies – understandably a more important concern of the logisticians immediately after the war.²⁰³ This very seemingly simple solution of skipping levels of command when assigning logistics responsibility had significant positive impacts in simplifying supply system.

The solution to the communications issues was based upon an even simpler concept than the logistics system. In an era where the primary means of communication for large unit headquarters was wire for telephones and teletypes, maintaining networks between constantly changing units was a massive

Ordnance Service in the Field, Ordnance Field Manual FM 9-5 (Washington D.C., USA: War Department, 1942).

²⁰⁰ Hogan, *A Command Post at War: First Army Headquarters in Europe, 1943-1945*, 27.

²⁰¹ Carafano, *After D-day*, 3.

²⁰² “General Board Reports: Supply Functions of Corps, Study Number 28,” 1; “XII Corps Staff Operational Procedures 12 August 1944 to May 1945”; “XIX Corps Standard Operating Procedures”; “XIII Corps Standard Operating Procedures, Change 1.”

²⁰³ “General Board Reports: Mechanics of Supply in Fast Moving Situations, Study 27”; “General Board Reports: Study of the Administrative Functions of the Army Group Headquarters, Study Number 29”; “General Board Reports: Supply Functions of Corps, Study Number 28.”

problem. Even during the early days of Normandy, units reported that ninety-five percent of their communications went over wire, and divisions and corps were very reluctant to rely upon radio communications.²⁰⁴ Doctrine had a deceptively simple solution – responsibility for establishing communications would be from higher to lower. *Field Manual 100-5 Operations* lays out responsibility for the senior commander to provide the links to his subordinates, identify responsibility for adjacent units, and supporting units to link to supported units. To facilitate this, yet allow subordinate commanders some freedom to select their own headquarters location, the senior commander would designate axis of communications upon which the subordinate would be free to establish, then report, their headquarters location.²⁰⁵ Clearly, this required significant sized signal units at each level, as they built and operated networks across Europe. In a six-week period between August 7, 1944 and September 12, 1944, 59th Signal Battalion supporting VIII Corps installed 7,250 miles of wire. An even more amazing statistic, 32nd Signal Battalion installed a daily average of 3,327 miles per day from June to November 1944 – accomplished by one hundred men.²⁰⁶ Seventh Army reported that during the entire movement north, they were never out of communication with VI Corps.²⁰⁷ In fact, First Army, 4th Infantry Division, and many of the individual commanders reflect in their after action reports that they had few problems with communications.²⁰⁸ The General Board Reports confirm this conclusion, reflecting that the signal doctrine was sound, but communications sections were too small for the tasks

²⁰⁴ “Communications in France,” *Signal Corps Information Letters* (1944): 2, 6.

²⁰⁵ *Operations* (1941), 34–35.

²⁰⁶ “First Army Signal Service,” *Signal Corps Information Letters* (April 1945): 24–25.

²⁰⁷ “Seventh Army Signals,” *Signal Corps Information Letters* (December 1944): 14–15.

²⁰⁸ “First Army Headquarters - After Actions Report Initial Draft with Comments”; “4th Infantry Division, Action Against Enemy After / After Action Reports,” July 22, 1944, U. S. Army, 4th Infantry Division After action reports, 1940-46 (RG 407) (Microfilm), Reel 2, Eisenhower Presidential Library; Collins, *Lightning Joe*; Patton and Harkins, *War as I Knew It*; Bradley, *A Soldier’s Story*.

they accomplished.²⁰⁹ The ability of these soldiers to maintain communications despite the challenges of constant task organization changes is critical for two reasons. First, the loss of communications would have alone been a showstopper for most commanders, and the fact that they knew they could quickly establish communications up, adjacent, and supporting was itself critical. Possibly more important, the solid communications links facilitated every other commander and staff task during these changes. Commanders could pick up the phone and give direct verbal guidance to a new subordinate, intelligence sections could provide updates on the threat in the new area, fire supporters could request fires from general support units, and logisticians could request resupply from army depots. None of the other functions would have been able to respond as effectively if the communications network failed.

Based upon their experience in the First World War, the interwar leaders built organizations, assigned roles, and developed supporting doctrine to enable rapid task organization of divisions. Splitting the responsibility for administrative matters from tactical control at the divisions, corps, and army level allowed greater independence and fewer staff functions to reestablish with each change. The supporting branches developed innovations and doctrinal concepts knowing the challenges they were likely to face. The success of fires, sustainment, and communications in the rapidly changing environment of the European Theater of Operations in 1944 is a testament not only to the soldiers who executed, but the visionaries who forecasted the need well before.

CONCLUSION

Task organization changes at the division and corps level was a common factor of the battlefield of Europe in 1944. The ability to shift forces allowed commanders a great deal of flexibility in application of combat power that contributed to the Allied success against the German Army. This

²⁰⁹ “General Board Reports: Signal Corps Personnel, Training, and Command and Administrative Structure, Study Number 112”; “General Board Report: Organization, Equipment, and Tactical Employment of the Armored Division, Study Number 48”; “General Board Reports: Organization, Equipment, and Tactical Employment of the Infantry Division, Study Number 15.”

monograph proposes that this flexibility was intentionally built into the American way of war and imbedded in the doctrine and training of high quality leaders who led organizations designed to facilitate the rapid reorganization in combat. Without this flexibility, the American forces would not have been able to conduct the breakout from Normandy, the pursuit across France, or set the conditions that ultimately led to the defeat of Nazi Germany.

The American Army operated off a common doctrinal understanding that allowed interoperability between commanders and staffs. The Army built the doctrine upon the lessons of the First World War and it remained relatively stable during the decades between wars. The doctrine stressed the importance of fire and maneuver with combined arms formations. It also promoted the concept of mission type orders. Instead of detailing the movements of subordinate leaders and establishing elaborate controls to make decisions at the highest level, the American system enforced pushing initiative down the chain of command by focusing on subordinates being told what needed to be done and not how to accomplish the mission. With a demanding and progressive school system, the entire officer corps learned and put the doctrine to use in practical exercises designed to push their limits. This school system became a major part of the officer management system, separating those with potential for high command from those without.

In this type of system, the role of officers, especially senior leaders, was critical. The peacetime cadre army had to expand quickly, and choosing the right people for command was a major task. The Regular Army officers became the base upon which the rest of the army was built. Highly sought after, they would fill the vast majority of senior level commands, nearly all critical staff positions above the regimental level, and were responsible for training the influx of National Guard and volunteer officers. General Marshall also sought and received the power to promote and separate officers, allowing him to shape the officer corps toward his mold of combat focused leaders. He personally led the effort to select division and above commanders, reflecting his belief that quality commanders were necessary to maintain the discipline and drive necessary to beat the highly professional German Army. These senior

commanders, nearly all who knew each other from the peacetime army, were able to quickly integrate themselves into new formations because of their tactical competence, leadership ability, and existing personal relationships. This focus on quality of commanders does not however negate the importance of the staff, particularly the liaison officers and dual hatted staff officers who were critical in integrating units as they moved between headquarters.

The final factor that this monograph studied was the organization of the Army itself. The division was a self-contained unit and the primary unit for tactical operations. The corps served as a tactical headquarters, designed to accept attachments of divisions and support units based upon the mission parameters for each operation. Without any administrative responsibilities, the corps became the key fighting organization on the battlefield fully engaged with managing the combined arms fight. The success of task organization lay in the ability of the corps to integrate new divisions rapidly and effectively. Picking up the responsibility for managing the sustainment and allocation of divisions based upon the strategic maneuver plan was the army. Army commanders managed huge systems, concentrated on maintaining momentum and tempo while leaving the tactical fight to the corps commanders. Innovations developed in the interwar years allowed the artillery community to mass fires and allocate firing units in support of the army commander's priorities. Removing administrative responsibility from the corps headquarters simplified the process of moving divisions between units, as the divisions drew from army and theater level support directly. Finally, the ability of the Signal Corps to maintain the wire communications networks between headquarters was a critical enabler of the entire system.

The conclusions of this monograph are based upon a very specific study of American divisions and corps during the first few months of operation on the continent of Europe during World War II. It is possible that the study of different echelons, time periods, or theaters would bring additional factors to light. It was also biased by the sources available at the Eisenhower Presidential Library and the Combined Army Research Library. However, the period studied does offer some unique factors that argue that it may be the best time and location to study. The geography of western France and the

introduction of new divisions into the fight on a regular basis presented the American Army with a situation in which they had to be flexible in their task organization. The other option would have been to stand up new corps with untested divisions and then conduct passage of lines as units culminated or spread out from the narrow breakout point – not a good option for many reasons. While not a complete study, this monograph may serve as the basis for further investigation.

The breakout from France was also one of the most challenging operational problems of the war. How to allocate forces and weight the main effort is a major component of operational art, and this monograph presents the implication that in order for a commander to have options, the institution must build that flexibility into its education, personnel, and organizational plans. Doctrine is only good if those who will implement it understand and can apply it. Constantly changing terms and concepts defeat any efforts to indoctrinate the officer corps. The Army school system must also be the intellectual center of gravity for the institution. Every level of schooling is an opportunity to not only build the skills of the student, but also should serve to identify future leaders. Especially during interwar periods, the schools must be rigorous and competitive. Finally, the Army must design the roles and systems to support rapid task organization, as flexibility in combat is constrained to a great deal by how units are designed.

The Army is currently facing major changes. The past ten years have challenged many traditional beliefs, radically altering our doctrinal foundation, and undergoing a massive transformation in our organization. Some of these changes are very good. The brigade combat team is now a self-contained combined arms team along the lines of the World War II division. The effort to add a third maneuver battalion and additional engineer support will only strengthen this role. There is a clear parallel in doctrine between the flexibility of the World War II corps headquarters and the current divisions. Division headquarters are designed to integrate brigade combat teams allocated for specific missions much like the corps did for divisions and other enablers. The division also lacks the ability to provide direct logistics support – a factor that many today lament, but this study suggests is a positive attribute. The emphasis on mission command philosophy directly reflects the intent behind mission type orders, one

of the key factors driving flexible task organization. However, there are also trends that the Army should seriously examine as we reset. The lack of stability in doctrine threatens the ability of the officer corps to operate with a common understanding. As Combined Arms Center Commander, Lieutenant General David Perkins acknowledged this challenge, and there is an effort with the Army Doctrine 2015 to stabilize the big concepts and get a big information push out to the force.²¹⁰ Ensuring the quality of the officer corps is also a big concern. The decision to return to selective Command and General Staff Course is a good first step, but it must be matched with an effort to raise the standards in that school in order to challenge the students and identify the most capable. Changing the culture of the Army to encourage high quality active duty instructors will be very difficult. Our current organization also fails to allocate sufficient personnel to serve as liaison officers, requiring units to support the job out of hand, typically from whoever is available instead of making a conscious decision on who would be best suited. Another concept worth revisiting is the dual-hatting of staff officers with command responsibility for technical branches.

With the elimination of signal, military intelligence, and military police units at the brigade and division level, this dual-hatting system may offer a solution to the challenges of training and administration of these small specialty units. Assigning both staff and command responsibility to intelligence and signal corps officers may provide the training, readiness, and oversight currently lacking. Our current organization also relies heavily upon the concept of pooling critical resources, a concept that had mixed results in World War II and deserves its own in depth analysis to identify ways to improve our current system. Reducing the capabilities, particularly of engineer, anti-armor, and communications assets at the brigade combat team and division is likely to have negative effects on the next battlefield. The challenges of the Field Artillery community to provide mass fires is a major topic, with many

²¹⁰ David Perkins, "Doctrine 2015" (Presentation to School of Advanced Military Studies, Fort Leavenworth, KS, November 28, 2012).

monographs and articles discussing that problem, yet consensus of the solution eludes us. Finally, the rigidity of our current communications networks does not facilitate the rapid movement and task organization flexibility that is necessary. Designed to support large static headquarters, the Warfighter Information Network – Tactical must undergo significant changes to become the mobile and flexible network needed. In a time of decreasing funding, the research and equipment to make this happen is unlikely. However, just as the Signal Corps overcame the constraints of the wired network, our current Signal Corps soldiers can overcome the technical limitations of their equipment if given the opportunity and incentive to train for the mission. The effect of providing each unit with their own communications assets has greatly improved their capability, but the responsibility of establishing communications links from higher to lower, which remains in doctrine, is in need of reinvigoration. Attacking these challenges should be a major focus of the United States Army in the coming years. Regaining the flexibility that proved dominate in World War II is critical – not only does our doctrine still rely upon it, it is fundamentally what makes our Army more capable than any other force in the world.

APPENDIX A (Task Organization Change Analysis)²¹¹

Corps Task Organization Changes

August 1, 1944	3rd Army Stands Up
August 24, 1944	XV Corps from 3rd Army to 1st Army
August 27, 1944	XIX Arty in support of XV Corps
August 29, 1944	XV Corps in reserve
September 5, 1944	XV Corps from 1st Army to 3rd Army (Protect Flank)
September 5, 1944	VIII Corps attached from 3rd Army to 9th Army
September 29, 1944	XV Corps from 3rd Army to 7th Army
October 10, 1944	VIII Corps from 9th Army to 3rd Army
October 22, 1944	XIX Corps from 1st Army to 3rd Army
October 22, 1944	VIII Corps from 3rd Army to 1st Army

Division Task Organization Changes

1st Infantry Division	
• July 15	from V Corps to VII Corps
2nd Infantry Division	
• August 19	from V Corps to VIII Corps
4th Infantry Division	
• July 15	from VII Corps to VIII Corps
• July 20	from VIII Corps to VII Corps
• August 22	from VII Corps to V Corps
5th Infantry Division	
• July 13	arrived to V Corps
• August 3	from V Corps to XX Corps
9th Infantry Division	
• August 6	12 CT/9 ID to 30 ID
• October 25	from VII Corps to V Corps
26th Infantry Division	
• October 1	new unit to XII Corps
28th Infantry Division	
• July 28	Arrives to XIX Corps
• August 10	CCA/2AD and 109 RG from 28 Infantry Division
• August 28	from XIX Corps to V Corps
29th Infantry Division	
• June 14	from V Corps to XIX Corps
• August 11	from XIX Corps to V Corps
• August 17	from V Corps to VIII Corps
• September 21	from VIII Corps to XIX Corps

²¹¹ This appendix is a computation of the author's, drawn from Official Records, chronologies, operations reports, unit records, and secondary sources. Often there were noted discrepancies and the dates listed reflect when the preponderance of sources record the unit left the previous command.

30th Infantry Division

- June 15 arrive to XIX Corps
- July 15 from XIX Corps to VII Corps
- July 28 from VII Corps to XIX Corps
- August 4 from XIX Corps to V Corps
- August 5 from V Corps to VII Corps
- August 12 CT/9 ID from 9th Infantry Division
- August 13 from VII Corps to XIX Corps
- August 26 from XIX Corps, First Army to XV Corps, Third Army
- August 29 from XV Corps, Third Army to XIX Corps, First Army
- October 22 from XIX Corps, First Army to XIX Corps Ninth Army

35th Infantry Division

- July 8 arrived to XIX Corps
- July 27 from XIX Corps to V Corps
- August 15 from V Corps to XII Corps

44th Infantry Division

- October 17 arrive XV Corps

79th Infantry Division

- June 10 arrive to VII Corps
- July 1 from VII Corps to VIII Corps
- August 8 from VIII Corps to XV Corps, 1st Army
- August 29 from XV Corps, 1st Army to XIX Corps
- September 6 from XIX Corps to XV Corps, 3rd Army

80th Infantry Division

- August 5 arrived to XII Corps, 3rd Army
- August 7 from XII Corps to XX Corps
- August 8 from XX Corps to XV Corps
- August 10 from XV Corps to XX Corps
- August 17 from XX Corps, 3rd Army to V Corps, 1st Army.
- August 26 from V Corps, 1st Army to XII Corps, 3rd Army

82nd Airborne Division

- June 19 from VII Corps to VIII Corps
- July 13 from VIII Corps to England

83rd Infantry Division

- July 2 arrive to VII Corps
- July 15 from VII Corps to VIII Corps
- September 21 from VIII Corps to XX Corps
- October 11 from XX Corps to VIII Corps

90th Infantry Division

- June 19 from VII Corps to VIII Corps
- August 1 from VIII Corps to XV Corps
- August 18 from XV Corps to V Corps
- August 26 from V Corps to XX Corps

94th Infantry Division

- October 9 from 9th Army (Rear) to 12th Army Group

95th Infantry Division

- October 10 new unit to XX Corps

101st Airborne Division

- June 15 from VII to VIII
- June 26 from VIII to 1st Army Reserve
- July 8 from 1st Army Reserve to England

102nd Infantry Division

- October 25 new to XIX Corps

2nd Armored Division

- June 12 arrive to V Corps
- July 18 from V Corps to VII Corps
- August 2 from VII Corps to XIX Corps
- August 7 from XIX Corps to VII Corps
- August 13 from VII Corps to XIX Corps
- August 18 from XIX Corps to V Corps
- August 19 from V Corps to XIX Corps
- August 28 from XIX Corps to XV Corps
- August 29 from XV Corps to XIX Corps
- October 22 from XV Corps, 1st Army to XV Corps, 9th Army

3rd Armored Division

- June 26 arrives to XIX Corps
- June 15 from XIX Corps to VII Corps

4th Armored Division (Wood)

- July 17 arrives to VIII Corps
- August 15 from VIII Corps to XII Corps
- September 6 CCB/4AD from XII Corps to XX Corps

5th Armored Division

- August 28 from XV Corps to V Corps

6th Armored Division

- July 19 arrives to VII Corps
- September 21 from VIII Corps to XII Corps
- September 25 from XII Corps to XX Corps
- September 29 from XX Corps to VI Corps

7th Armored Division

- September 25 from XX Corps to XIX Corps

9th Armored Division

- October 15 from II Corps to VIII Corps

10th Armored Division

- October 10 from VIII Corps to 3rd Army

Allied Units

September 8	2 French Armored Division from V Corps to XV Corps
September 28	1st Belgian Brigade from 2nd British to XIX Corps
October 8	1st Belgian Brigade from XIX Corps to 2nd British Corps

APPENDIX B (Task Organization Charts)

The author created the following task organization charts using the sources listed in Appendix A. Blocks highlighted in grey indicate units who changed task organization during the period covered. Dates in parentheses are the dates a unit was attached (+) or detached (-). All dates are 1944. The callout box highlights key operational events during the period.

Charts

1. US Task Organization for D-Day and Initial Normandy Battles: June 6 – July 13, 1944
2. US Task Organization for Operation Cobra: July 14 – July 30, 1944
3. US Task Organization for Breakout: August 1 – August 23, 1944
4. US Task Organization for Exploitation: August 23 – September 15, 1944
5. US Task Organization for Operation Market Garden: September 15 – September 30, 1944
6. US Task Organization Into Germany: October 1 to October 31, 1944

US Task Organization For D-day and Initial Normandy Battles June 6 – July 13, 1944

1st Army
Bradley

Bradley worked for 21st Army Group lead by Montgomery

Moves

8 JUN
35 ID from V to XIX

10 JUN
79 ID arrives VII

12 JUN
2AD arrive to V

14 JUN
29 ID from V to XIX

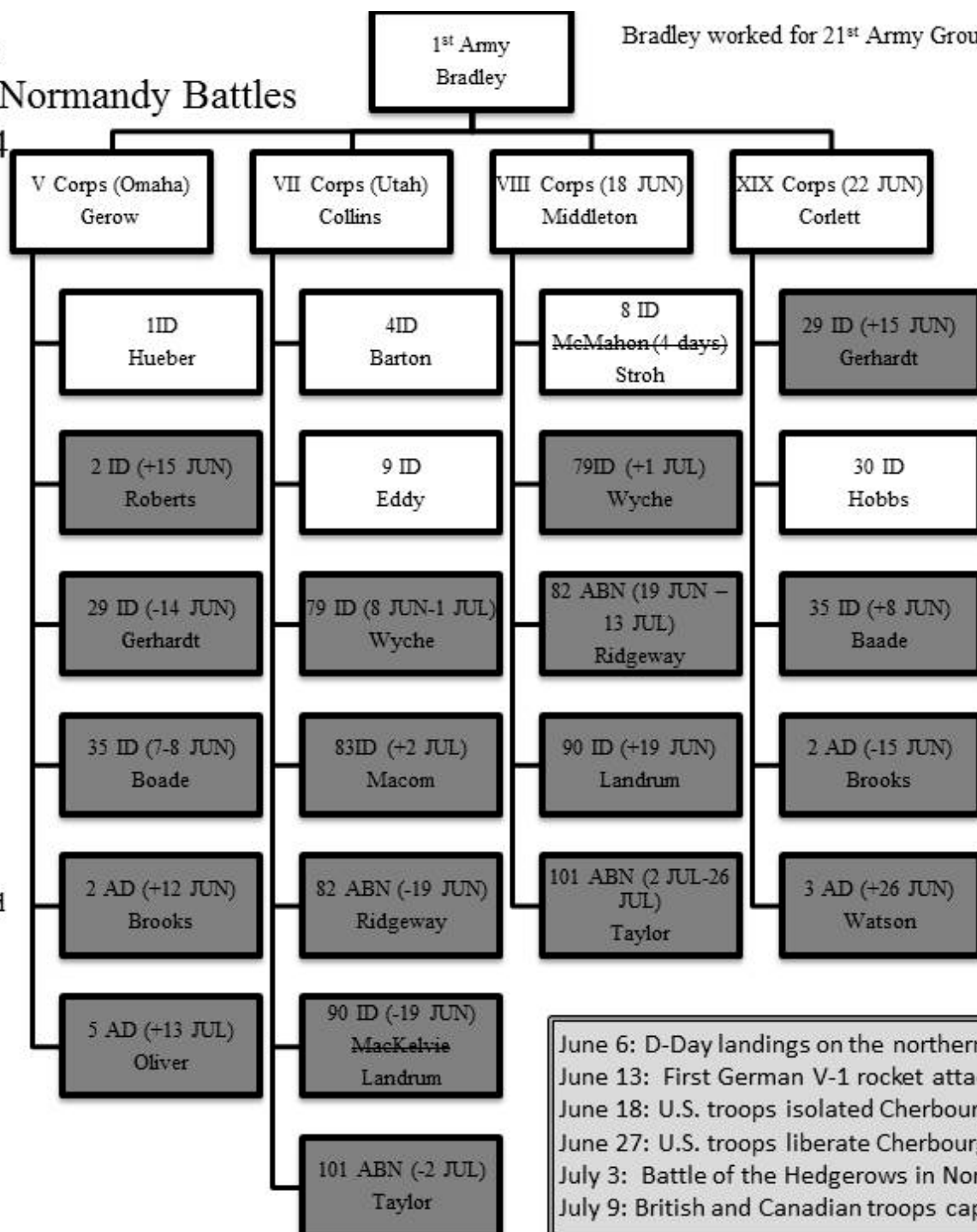
15 JUN
101 ABN from VII to VIII

19 JUN
90 ID from VII to VIII
82 ABN from VII to VIII

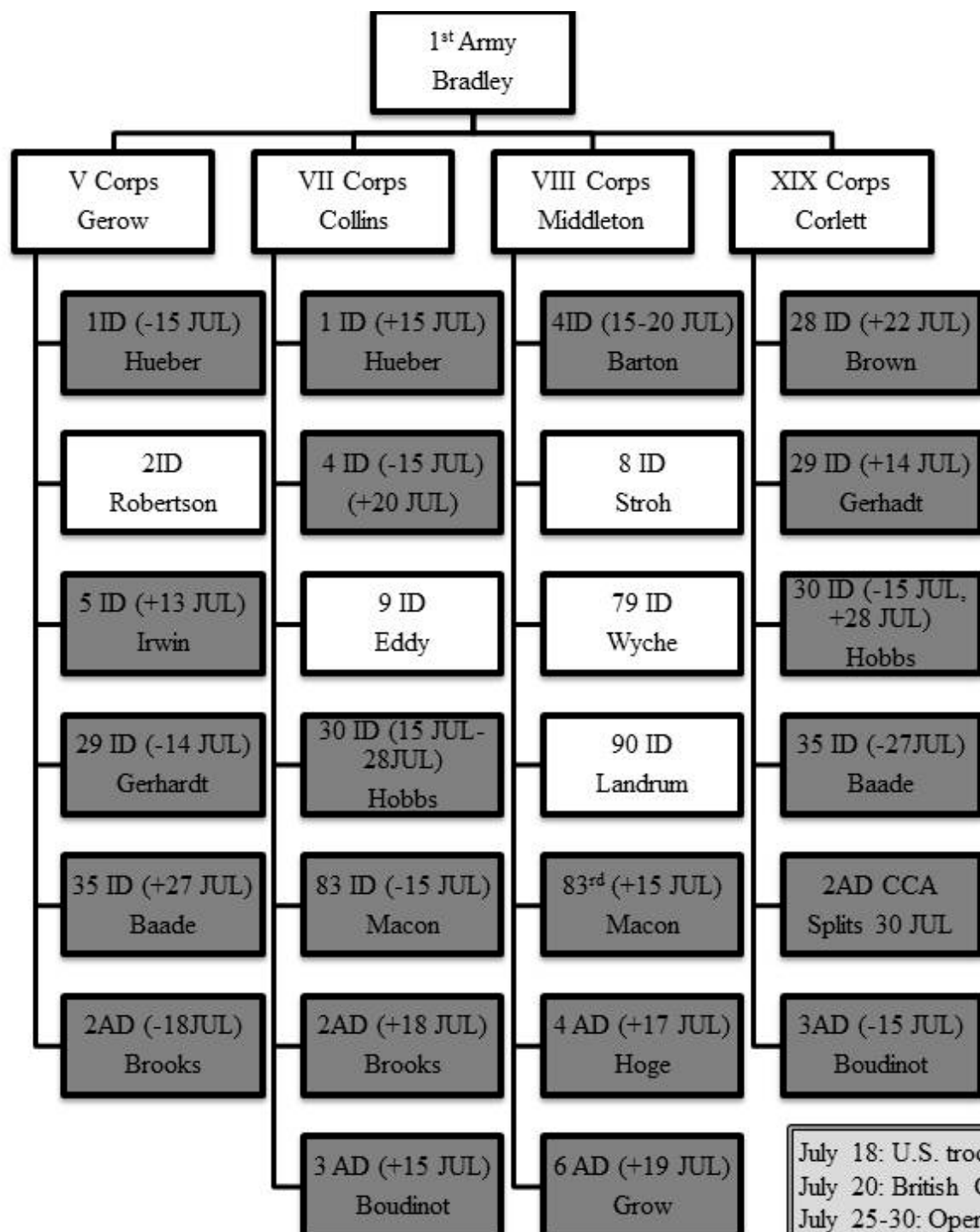
26 JUN
3AD arrives to XIX

8 JUL
35 ID from V to XIX

13 JUL
82 ABN from VIII to England
5ID arrive to V



June 6: D-Day landings on the northern coast of France.
June 13: First German V-1 rocket attack on Britain.
June 18: U.S. troops isolated Cherbourg, France.
June 27: U.S. troops liberate Cherbourg, France.
July 3: Battle of the Hedgerows in Normandy.
July 9: British and Canadian troops capture Caen, France.



US Task Organization Operation Cobra July 14 – July 30 1944

4 US Corps
15 US Divisions

Key Moves

14 JUL
29ID from V to XIX

15 JUL
83 ID from VII to VIII
4 ID from VII to VIII
30 ID from XIX to VII
1ID from V to VII
3AD from XIX to VII

18 JUL
2AD from V to VII

19 JUL
6AD arrives to VIII

20 JUL
4 ID from VIII to VII

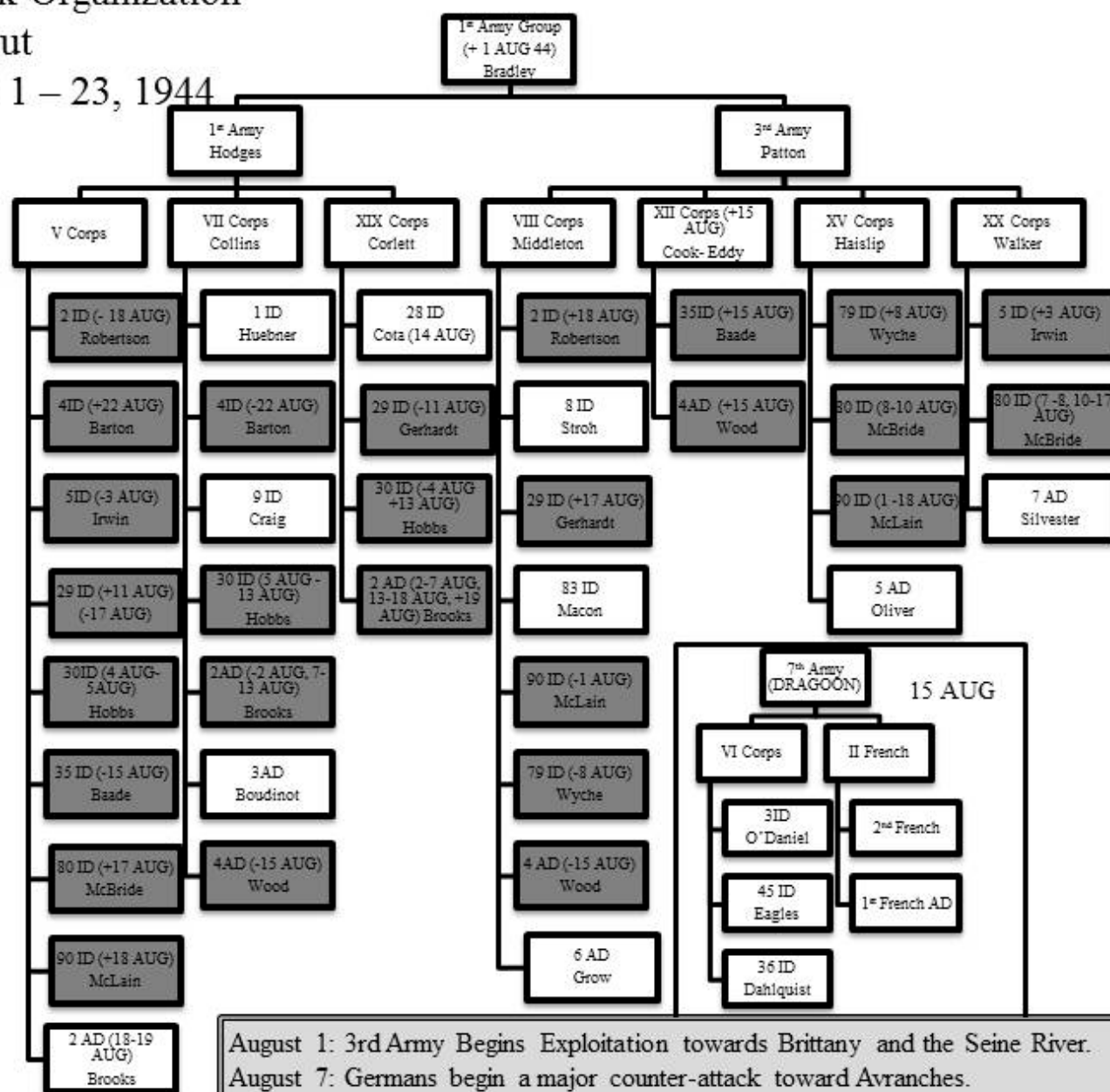
27 JUL
35 ID from XIX to V

28 JUL
28 ID Arrives to XIX
30 ID from VII to XIX

∞

July 18: U.S. troops reach St. Lô, France. British Operation Goodwood.
July 20: British Operation Goodwood ends.
July 25-30: Operation Cobra (U.S. troops break out west of St. Lô).

US Task Organization Breakout August 1 – 23, 1944



August 1: 3rd Army Begins Exploitation towards Brittany and the Seine River.
 August 7: Germans begin a major counter-attack toward Avranches.
 August 15: Operation Dragoon begins (the Allied invasion of Southern France).
 August 19: Resistance uprising in Paris.
 August 20: Allies encircle Germans in the Falaise Pocket.

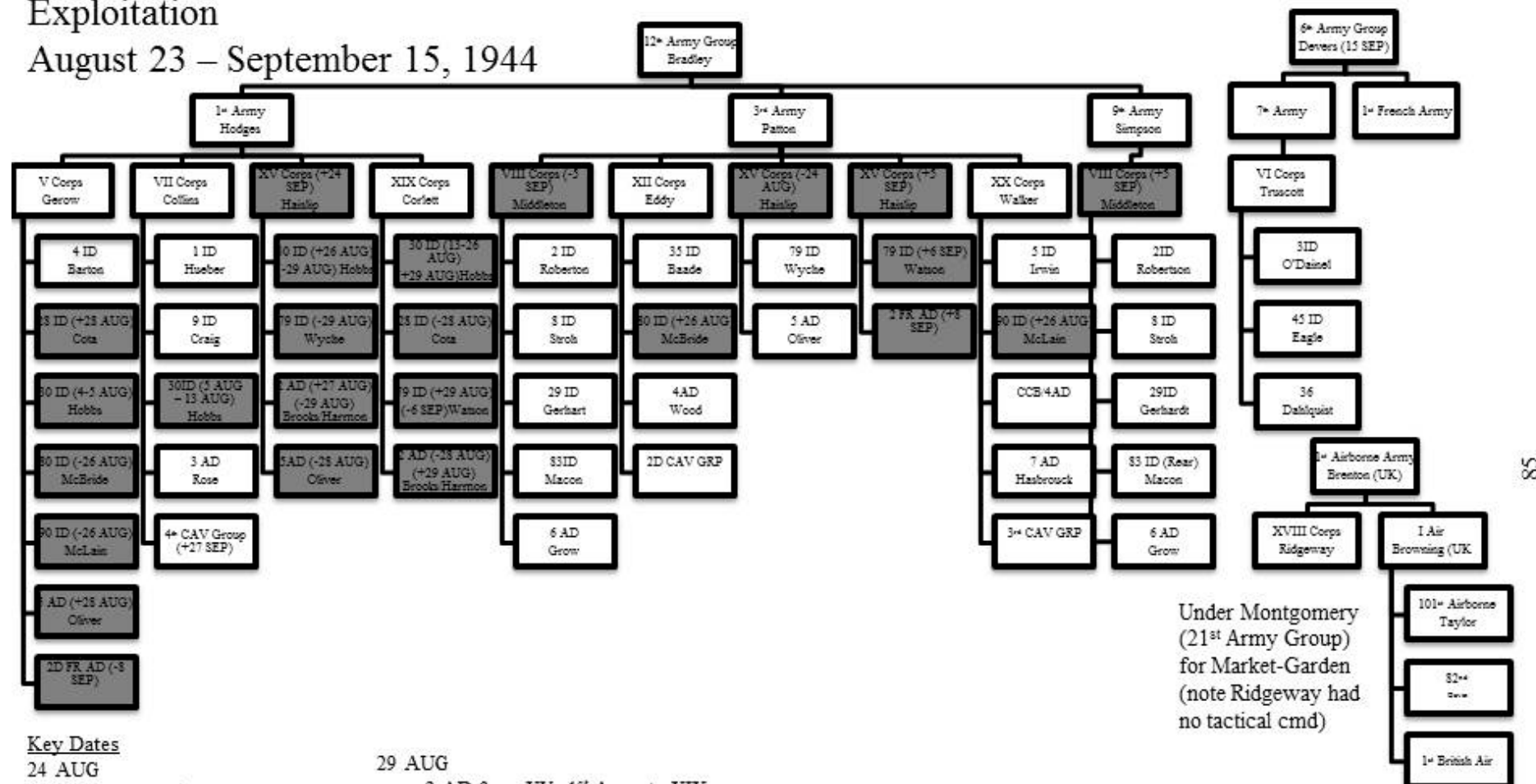
Key Changes

1 AUG
 12th Army Group Activated
 3rd Army Stands Up
 90ID from VIII to XV
 2 AUG
 2AD from VII to XIX
 3 AUG
 5ID from V to XX
 4 AUG
 30 ID from XIX to V
 5 AUG
 30 ID from V to VI
 6 AUG
 12 CT/9 ID to 30 ID
 7 AUG
 80 ID arrive to XX
 2 AD from XIX to VII
 8 AUG
 79ID from VIII to XV
 80 ID from XX to XV
 10 AUG
 80 ID from XV to XX
 11 AUG
 29 ID from XIX to V
 13 AUG
 30 ID from VII to XIX
 2 AD from VII to XIX
 15 AUG
 4 AD from VIII to XII
 35 ID from V to XII
 17 AUG
 29 ID from V to VIII
 80 ID from XX to V, 1st Army
 18 AUG
 2 ID from V to VIII
 90 ID from XV to V
 2 AD from XIX to V
 19 AUG
 2 AD from V to XIX
 22 AUG
 4ID from VII to V

US Task Organization Exploitation

August 23 – September 15, 1944

Coming up on Right Flank from
Southern France



Key Dates

24 AUG

XV from 3rd Army to 1st Army

26 AUG

80 ID from V to XII

90 ID from V to XX

30 ID from XIX to XV

27 AUG

XIX Arty in support of XV

28 AUG

28ID from XIX to V

2 AD from XIX to XV

5AD from XV to V

29 AUG

2 AD from XV, 1st Army to XIX

30 ID from XV, 1st Army to XIX

79 ID from XV, 1st Army to XIX

XV Corp in reserve

5 SEP

9th Army Activated

XV from 1st Army to 3rd Army (Protect Flank)

VIII attached from 3rd Army to 9th Army

6 SEP

79ID from XIX, 1st Army to XV, 3rd Army

CCB/4AD from XII to XX

8 SEP

3 FR AD C to XII, XIX

Under Montgomery
(21st Army Group)
for Market-Garden
(note Ridgeway had
no tactical cmd)

August 25: Liberation of Paris.

Eisenhower Assumes Command on Continent.
Broad Front advance.

August 28: U.S. troops cross the Marne and take Meaux,
September 1-4: Verdun, Dieppe, Artois, Rouen, Abbeville,
Antwerp and Brussels liberated by Allies.

September 5: U.S. 3rd Army crosses the Meuse River.

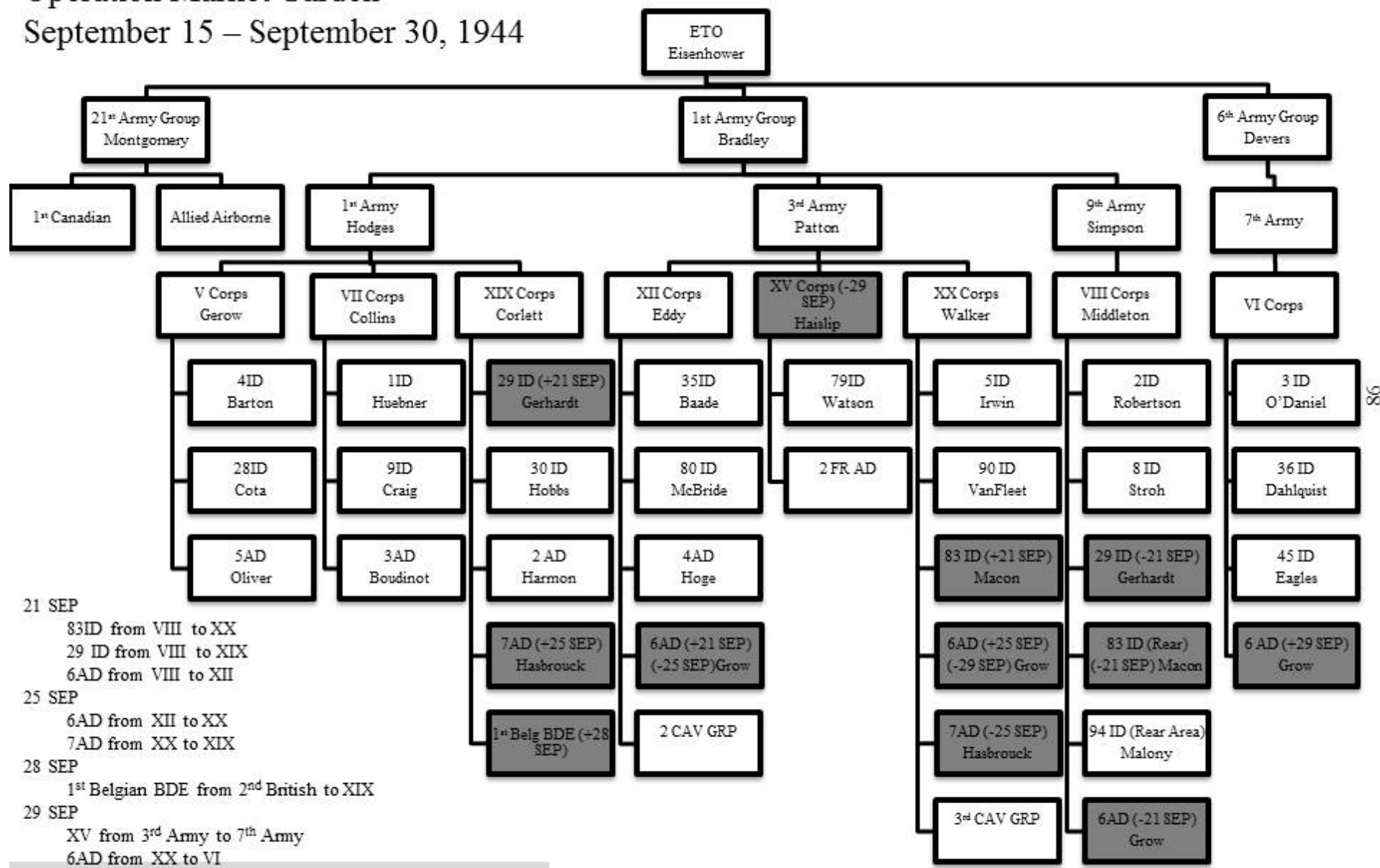
September 7: U.S. Third Army crosses the Moselle River.

September 13: U.S. troops reach the Siegfried Line

US Task Organization

Operation Market Garden

September 15 – September 30, 1944



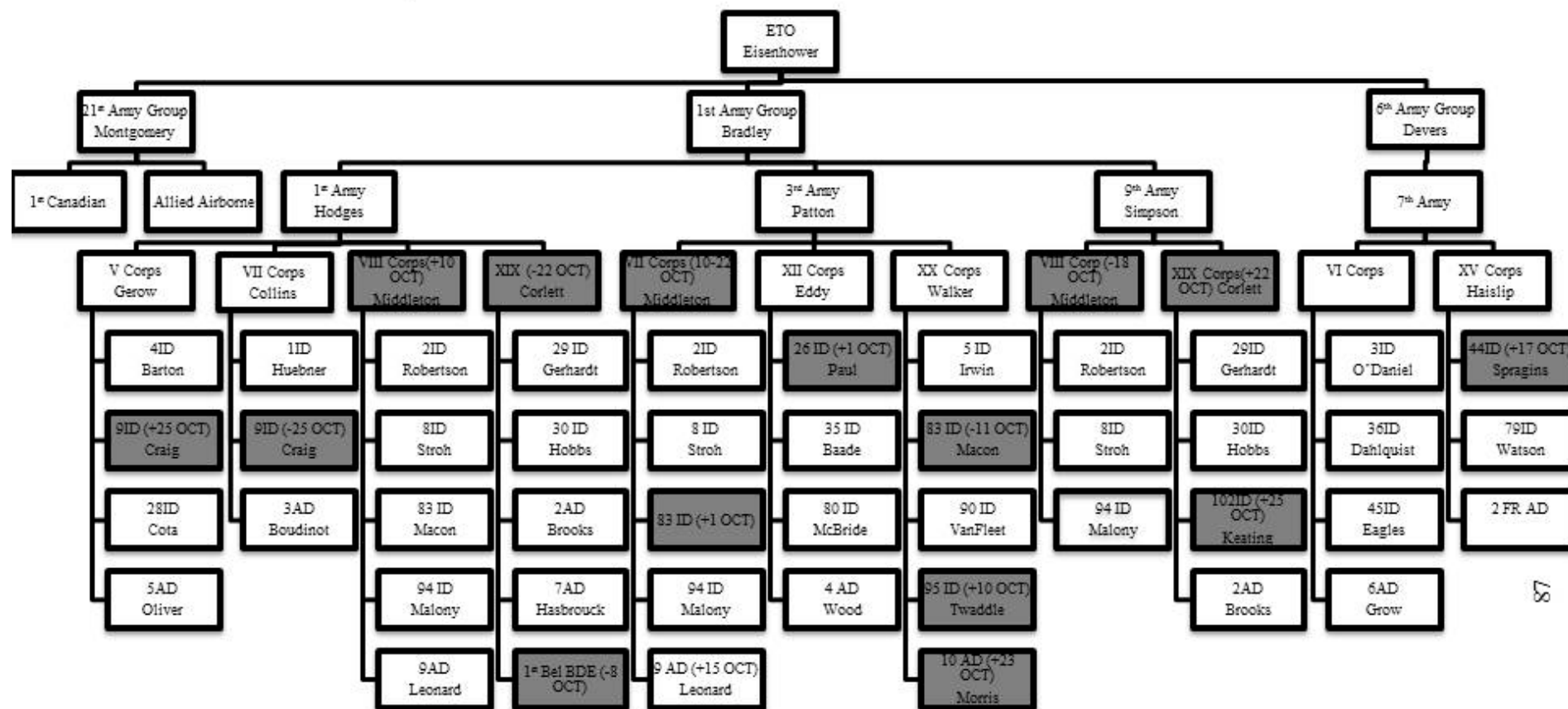
As of 15 SEP, Eisenhower had a total of 3 Army Groups, 8 Field Armies, 55 Divisions. (of which 4 US Armies, 20 US ID, 6 US AD, 2 Airborne Divisions)

September 17-25: Operation Market Garden (Allied airborne assault on Holland).
September 18: The U.S. Ninth Army finally takes Brest.

US Task Organization

Into Germany

October 1 to October 31, 1944



1 OCT

26 ID new unit to XII

8 OCT

1st Belgian BDE from XIX to 2nd British

9 OCT

94ID from 9th Army (Rear) to 12th Army Group)

10 OCT

VIII Corps from 9th Army to 3rd Army

10AD from VIII Corps to 3rd Army

95ID new unit to XX

VIII Corps from 9th Army to 3rd Army

11 OCT

83ID from XX to VIII

15 OCT

9AD from II to VIII

17 OCT

44ID arrive XV Corps

22 OCT

VIII Corps from 3rd Army to 1st Army

XIX Corps from 1st Army to 3rd Army

25 OCT

102ID new to XIX

9ID from VII to V

October 3: The U.S. Third Army resumes its attack on Metz for the next 10 days.
October 21: Massive German surrender at Aachen, Germany.

APPENDIX C (Glossary)

Army (capitalized): The Army of the United States of America, includes the Regular Army, National Guard, and any other federally activated military forces.

army (lowercase): designation for a group of corps under one unit. In World War II, the army had both tactical and administrative responsibilities.

Army group (lowercase): designation for a group of armies under one unit. In World War II, the army group was a tactical unit with no administrative responsibilities

Army War College: The Army's senior formal school, typically focused on training large unit tactics and strategy. Students are drawn from all specialties and typically includes representatives from other branches of service.

corps (lowercase): Group of divisions and other attached units under one units control. In World War II, the corps was a tactical warfighting unit and not a standing organization.

Combined arms: The synchronized and simultaneous application of arms to achieve an effect greater than if each arm was used separately or sequentially. (ADRP 3-0)

Command and General Staff School: The Army's intermediate level formal schooling, typically focused at providing staff officers for divisions and corps.

Doctrine: a set of formal military principles or standards captured in a manual.

General Staff College: Immediate precursor course to the War College, reestablished after the First World War.

General Staff Course: optional section year of instruction at Fort Leavenworth offered in the interwar years.

General Service School: Immediate precursor course to Command and General Staff School.

Interwar period: Period from end of the First World War in November 1918 to the beginning of World War II for American in December 1941.

Massed fires: fire from two or more batteries directed at a single point or target. Doctrine in the 1930s and 1940s referred to massed fires, but did not define the term.

Mission type orders: practice of issuing field orders to subordinates that outline what needs to be done instead of detailing how to accomplish the mission. Intent is to encourage initiative and problem solving at the lowest level.

Pooling: the practice of consolidating specialized equipment, units, or soldiers at a higher headquarters and distributing to subordinate units as needed for particular mission.

Regular Army Officer: those officers who served in the professional standing army, versus officers in the Army of the United States, which included the larger draftee forces and mobilized civilian officers. At this time, all West Point graduates and select Reserve Training Officer Course were

Regular Army officers. Regular Army officers could hold dual ranks – one their permanent rank in the Regular Army and a second, higher, rank in the Army of the United States, which could be revoked at the end of the war.

School of the Line: first year of instruction offered at Fort Leavenworth, later called Command and General Staff Course.

Task organization: task organization – (Army) A temporary grouping of forces designed to accomplish a particular mission. (ADRP 5-0)

BIBLIOGRAPHY

Archive and Primary Sources

- Beck, LtCol Clarence. "1st Infantry Division Memorandum "G3 Report of Operations 1 October to 31 October 1944, Inclusive," November 5, 1944. U. S. Army, 1st Infantry Division: After action reports, 1940-48 (RG 407) (Microfilm), Reel 69. Eisenhower Presidential Library.
- . "1st Infantry Division Memorandum 'G3 Report of Operations 1 August to 31 August 1944, Inclusive'," September 10, 1944. U. S. Army, 1st Infantry Division: After action reports, 1940-48 (RG 407) (Microfilm), Reel 69. Eisenhower Presidential Library.
- . "1st Infantry Division Memorandum 'G3 Report of Operations 1 July to 31 July 1944, Inclusive'," August 5, 1944. U. S. Army, 1st Infantry Division: After action reports, 1940-48 (RG 407) (Microfilm), Reel 69. Eisenhower Presidential Library.
- . "1st Infantry Division Memorandum 'G3 Report of Operations 1 September to 30 September 1944, Inclusive'," October 5, 1944. U. S. Army, 1st Infantry Division: After action reports, 1940-48 (RG 407) (Microfilm), Reel 69. Eisenhower Presidential Library.
- Clark, Mark W. Senior Officers Debriefing Program: Conversations Between General Mark W. Clark and Lieutenant Colonel Forest S. Rittgers, Jr. Interview by Forest S Jr. Rittgers. Tape Transcript, October 27, 1972. USAMH1.
- Collier, BG John H., and BG Bruce Clarke. "Memorandum on Armored Division Organization 1948," 1948. Gilbert R. Cook Papers 1908-1959 (A91-11 & A92-12) Box 1. Eisenhower Presidential Library.
- Collins, J. Lawton. "Draft Notes on Comments on Third Army Maneuvers Louisiana," May 28, 1940. Collins, J. Lawton Papers 1896-1975 (A71-19; 80-12; 80-12/1; 80-12/2; 82-6; 86-19) Box 47. Eisenhower Presidential Library.
- . "Lecture 'The Concentration of Large Forces' Army War College, February 28, 1939," n.d. Collins, J. Lawton Papers 1896-1975 (A71-19; 80-12; 80-12/1; 80-12/2; 82-6; 86-19) Box 42. Eisenhower Presidential Library.
- . *Lightning Joe : An Autobiography*. Novato, CA: Presidio Press, 1994.
- . "Speeches and Statements 1946-1949," n.d. Collins, J. Lawton Papers 1896-1975 (A71-19; 80-12; 80-12/1; 80-12/2; 82-6; 86-19) Box 42. Eisenhower Presidential Library.
- Cook, Gilbert. "Officer Education System," n.d. Gilbert R. Cook Papers 1908-1959 (A91-11 & A92-12) Box 1. Eisenhower Presidential Library.
- . "War Diary July 1942-September 1945," n.d. Gilbert R. Cook Papers 1908-1959 (A91-11 & A92-12) Box 4. Eisenhower Presidential Library.
- Cook, Gilbert, and George S Patton. "Cook-Patton Correspondence," n.d. Gilbert R. Cook Papers 1908-1959 (A91-11 & A92-12) Box 3. Eisenhower Presidential Library.

- . “Cook-Patton Correspondence (part 2),” n.d. Gilbert R. Cook Papers 1908-1959 (A91-11 & A92-12) Box 4. Eisenhower Presidential Library.
- Drea. “DAMH-RA Information Paper: Relief of Commanders Before and During World War II,” August 14, 1991. U. S. Center for Military History.
- Drea, and Wise. “DAMH-RA Information Paper: Historical Circumstances Surrounding the Relief of National Guard Commanders in World War II Mobilization,” November 1, 1990. U. S. Center for Military History.
- Eymer, LtCol C.M. “1st Infantry Division Memorandum ‘Observations on Planning and Execution of Operation “Neptune”’,” July 12, 1944. U. S. Army, 1st Infantry Division: After action reports, 1940-48 (RG 407) (Microfilm), Reel 102. Eisenhower Presidential Library.
- . “1st Infantry Division Memorandum ‘Report of Activities of the G4 Section from 1 to 30 September 1944’,” October 2, 1944. U. S. Army, 1st Infantry Division: After action reports, 1940-48 (RG 407) (Microfilm), Reel 102. Eisenhower Presidential Library.
- . “1st Infantry Division Memorandum ‘Report of Activities of the G4 Section from 1 July to 30 July 1944’,” August 4, 1944. U. S. Army, 1st Infantry Division: After action reports, 1940-48 (RG 407) (Microfilm), Reel 102. Eisenhower Presidential Library.
- . “1st Infantry Division Memorandum ‘Report of Activities of the G4 Section from 1 October to 31 October 1944’,” n.d. U. S. Army, 1st Infantry Division: After action reports, 1940-48 (RG 407) (Microfilm), Reel 102. Eisenhower Presidential Library.
- . “1st Infantry Division Memorandum ‘Report of the Activities of the G4 Section from 1 June to 30 June 1944’,” July 6, 1944. U. S. Army, 1st Infantry Division: After action reports, 1940-48 (RG 407) (Microfilm), Reel 102. Eisenhower Presidential Library.
- Gara, LtCol William. “1st Infantry Division, 1st Engineer Combat Battalion Memorandum ‘Report as Required by Army Regulation 34-105, Period 1 September to 31 September 1944’,” September 5, 1944. U. S. Army, 1st Infantry Division: After action reports, 1940-48 (RG407) (Microfilm), Reel 125. Eisenhower Presidential Library.
- . “1st Infantry Division, 1st Engineer Combat Battalion Memorandum ‘Report as Required by Army Regulation 345-105, Period 1 August to 31 August 1944’,” September 5, 1944. U. S. Army, 1st Infantry Division: After action reports, 1940-48 (RG 407) (Microfilm), Reel 125. Eisenhower Presidential Library.
- Hodges, Courtney H. “Comments on Carolina Maneuvers, November 1941,” n.d. Hodges, Courtney Hicks: Papers, 1904-65 (A70-86 - Box 7). Eisenhower Presidential Library.
- . “First Army War Diary Maintained by His Aides,” n.d. Hodges, Courtney Hicks: Papers, 1904-65 (A70-86 - Box 25). Eisenhower Presidential Library.
- . “War College Lectures 1930-1935,” n.d. Hodges, Courtney Hicks: Papers, 1904-65 (A70-86 - Box 3). Eisenhower Presidential Library.

- Marshall, George. "Combat Lessons 2: Rank and File in Combat: What They Are Doing, How They Do It." Office, Chief of Staff of the Army, September 30, 1945. N-14362.1. Combined Arms Research Library Digital Library , Fort Leavenworth, KS.
- Marshall, George, ed. "Combat Lessons Number 1: Rank and File in Combat: What They Are Doing, How They Do It." U.S. Government Printing Office, 1944. N-14362.1. Combined Arms Research Library Digital Library , Fort Leavenworth, KS.
- Marshall, S.L.A. "S.L.A. Marshall Letter to MG Leland S. Hobbs," March 16, 1946.
http://www.30thinfantry.org/marshall_letter.shtml.
- McNair, Lesley J. "Comments on the First Phase of the LA Maneuvers," November 21, 1941. Hodges, Courtney Hicks: Papers, 1904-65 (A70-86 - Box 3). Eisenhower Presidential Library.
- Montgomery, Bernard. *21st Army Group High Command In War*. Germany: 21st Army Group, 1945.
- Pamp, Frederic E. "XIX Corps: Normady to the Elbe." XIX Corps Public Relations, N.D. Combined Arms Research Library Digital Library , Fort Leavenworth, KS.
- Parkin, Fredrick H. "Employment of the Tank Destroyer Battalion in an Infantry Division," March 12, 1945. N8281. Combined Arms Research Library Digital Library , Fort Leavenworth, KS.
- Perkins, David. "Doctrine 2015." Presentation to School of Advanced Military Studies, Fort Leavenworth, KS, November 28, 2012.
- Swift, Eben. *Field Orders, Messages, and Reports*. Washington D.C., USA: Government Printing Office, 1906.
- United States Army American Expeditionary Forces; Superior Board on Organization and Tactics. *AEF Report of Superior Board on Organization and Tactics*, 1919. Electronic File. Combined Arms Research Library Digital Library.
<http://cgsc.contentdm.oclc.org/cdm/ref/collection/p4013coll7/id/808>.
- Wiggins, Capt Herbert. "1st Infantry Division, 1st Signal Company Memorandum 'Historical Report 1 June to 30 June 1944'," July 3, 1944. U. S. Army, 1st Infantry Division: After action reports, 1940-48 (RG 407) (Microfilm), Reel 175. Eisenhower Presidential Library.
- "1st Infantry Division Historical Report: Statistical Reports Re Organizations 1917-1945," n.d. U. S. Army, 1st Infantry Division: After action reports, 1940-48 (RG 407) (Microfilm), Reel 72. Eisenhower Presidential Library.
- "30th Infantry Division After Action Reports." Accessed October 28, 2012.
<http://www.oldhickory30th.com/index.htm>.
- "30th Signal Company." *Signal Corps Information Letters* (May 1945): 20-22.
- "4th Infantry Division, 4th Engineer Battalion After Action Report June to October 1944," n.d. U. S. Army, 4th Infantry Division After action reports, 1940-46 (RG 407) (Microfilm), Reel 91. Eisenhower Presidential Library.

“4th Infantry Division, 4th Signal Company After Actions Report June to October 1944,” n.d. U. S. Army, 4th Infantry Division After action reports, 1940-46 (RG 407) (Microfilm), Reel 121. Eisenhower Presidential Library.

“4th Infantry Division, Action Against Enemy After / After Action Reports,” July 22, 1944. U. S. Army, 4th Infantry Division After action reports, 1940-46 (RG 407) (Microfilm), Reel 2. Eisenhower Presidential Library.

“4th Infantry Division, Attachments and Detachments,” n.d. U. S. Army, 4th Infantry Division After action reports, 1940-46 (RG 407) (Microfilm), Reel 2. Eisenhower Presidential Library.

“4th Infantry Division, Division Artillery Unit History June to October 1944,” n.d. U. S. Army, 4th Infantry Division After action reports, 1940-46 (RG 407) (Microfilm), Reel 72. Eisenhower Presidential Library.

“4th Infantry Division, Operations Orders and Transcripts of Oral Orders June to August 1944,” 1944. U. S. Army, 4th Infantry Division After action reports, 1940-46 (RG 407) (Microfilm), Reel 67. Eisenhower Presidential Library.

“82nd Signal Company.” *Signal Corps Information Letters* (February 1945): 1–4.

A History of the 90th Division in World War II. The 90th Division Association, 1946.
<http://www.90thdivisionassoc.org/90thDivisionFolders/90thhistorybook/histbkmainframe.htm>.

American Armies and Battlefields in Europe. Center for Military History Publication 23-24. Washington D.C., USA: U.S. Government Printing Office, 1938.

Armored Command Field Manual: The Armored Division. Field Manuals 17-100. Washington D.C., USA: U.S. Government Printing Office, 1944.

“Army War College Command Course Lectures 1940,” n.d. Collins, J. Lawton Papers 1896-1975 (A71-19; 80-12; 80-12/1; 80-12/2; 82-6; 86-19) Box 1. Eisenhower Presidential Library.

Basic Field Manual Signal Communications. Field Manuals 24-5. Washington D.C., USA: Government Printing Office, 1942.

Command and Staff Functions, Special Text No. 12. Fort Riley, KS: Army General School, 1948.

“Communications in France.” *Signal Corps Information Letters* (1944): 1–7.

Communications in the Infantry Division. Field Manuals 7-24. Washington D.C., USA: Government Printing Office, 1944.

Employment of the Armored Division and Separate Armored Units (Tentative). Field Manuals 17-100. Washington D.C., USA: U.S. Armored School, 1943.

Field Artillery Fundamentals Book 30. Fort Sill, OK: Field Artillery School, 1942.

Field Artillery Tactical Employment. Field Manuals 6-20. Washington D.C., USA: Government Printing Office, 1944.

Field Service Regulation. Washington D.C., USA: War Department, 1923.

Field Service Regulations, Larger Units. Field Manuals 100-15. Washington D.C., USA: U.S. War Department, 1942.

“First Army After Actions Reports August to October 1944,” n.d. Hodges, Courtney Hicks: Papers, 1904-65 (A70-86 - Box 28). Eisenhower Presidential Library.

“First Army Combat Operations Data Europe 1944-1945,” n.d. Hodges, Courtney Hicks: Papers, 1904-65 (A70-86 - Box 25). Eisenhower Presidential Library.

“First Army Headquarters - After Actions Report Initial Draft with Comments,” April 15, 1945. U.S. Army, 1st Army Headquarters: Records 1943-1955 (73-19) Box 2. Eisenhower Presidential Library.

“First Army Headquarters - Summary of Operations September and October 1944,” n.d. U.S. Army, 1st Army Headquarters: Records 1943-1955 (73-19) Box 3. Eisenhower Presidential Library.

“First Army Signal Service.” *Signal Corps Information Letters* (April 1945): 24–28.

“General Board Report: Engineer Organization, Study Number 71,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 8. Eisenhower Presidential Library.

“General Board Report: Organization, Equipment, and Tactical Employment of Tank Destroyer Units, Study Number 60,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 7. Eisenhower Presidential Library.

“General Board Report: Organization, Equipment, and Tactical Employment of the Armored Division, Study Number 48,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 6. Eisenhower Presidential Library.

“General Board Report: Signal Corps Operations, Study Number 111,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 11. Eisenhower Presidential Library.

“General Board Report: Study of the Organization of the European Theater of Operations, Study Number 2,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 1. Eisenhower Presidential Library.

“General Board Reports: Appointments and Promotions in European Theater of Operations, Study Number 6,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 1. Eisenhower Presidential Library.

“General Board Reports: Field Artillery Operations, Study Number 61,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 7. Eisenhower Presidential Library.

- “General Board Reports: Functions, Organization, and Equipment of Army Headquarters and Headquarters Company, Study Number 24,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 3. Eisenhower Presidential Library.
- “General Board Reports: Functions, Organization, and Equipment of Corps Headquarters and Headquarters Company, Study Number 23,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 3. Eisenhower Presidential Library.
- “General Board Reports: Mechanics of Supply in Fast Moving Situations, Study 27,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 4. Eisenhower Presidential Library.
- “General Board Reports: Organization and Equipment of Field Artillery Units, Study Number 59,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 7. Eisenhower Presidential Library.
- “General Board Reports: Organization, Functions, and Operations of G3 Sections in Theater Headquarters, Army Groups, Armies, Corps, and Divisions Study Number 25,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 3. Eisenhower Presidential Library.
- “General Board Reports: Reclassification and Demotions of Officers in European Theater of Operations Study Number 7,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 2. Eisenhower Presidential Library.
- “General Board Reports: Signal Corps Personnel, Training, and Command and Administrative Structure, Study Number 112,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 11. Eisenhower Presidential Library.
- “General Board Reports: Study of the Administrative Functions of the Army Group Headquarters, Study Number 29,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 4. Eisenhower Presidential Library.
- “General Board Reports: Tactics, Employment, Techniques, Organization, and Equipment of Mechanized Cavalry Units, Study Number 49,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 6. Eisenhower Presidential Library.
- “General Board Reports: G1 Reports and Reporting Procedures in European Theater of Operations, Study Number 8,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 2. Eisenhower Presidential Library.
- “General Board Reports: Organization, Equipment, and Tactical Employment of Separate Tank Battalions, Study Number 50,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 6. Eisenhower Presidential Library.
- “General Board Reports: Organization, Equipment, and Tactical Employment of the Infantry Division, Study Number 15,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 3. Eisenhower Presidential Library.

“General Board Reports: Supply Functions of Corps, Study Number 28,” n.d. Records of the U.S. Army, Reports of the General Board USFET 1942-1946 (A69-1), Box 4. Eisenhower Presidential Library.

“History of VII Corps July 1944-October 1944,” n.d. Collins, J. Lawton Papers 1896-1975 (A71-19; 80-12; 80-12/1; 80-12/2; 82-6; 86-19) Box 5. Eisenhower Presidential Library.

Infantry In Battle. Second Edition. Richmond, VA: The Infantry Journal, 1939.

Operations (1941). Field Manuals 100-5. Washington D.C., USA: War Department, 1941.

Operations (1944). Field Manuals 100-5. Washington D.C., USA: War Department, 1944.

Operations (Tentative) (1939). Field Manuals 100-5. Washington D.C., USA: War Department, 1939.

Order of Battle of the United States Army World War II: European Theater of Operations: Divisions. Paris, France: Office of the Theater Historian, 1945.

Ordnance Service in the Field. Ordnance Field Manual FM 9-5. Washington D.C., USA: War Department, 1942.

Quartermaster Field Manual: Quartermaster Operations. Field Manuals 10-5. Washington D.C., USA: Government Printing Office, 1945.

Quartermaster Service in Theater Operations. Quartermaster Field Manuals FM 10-10. Washington D.C., USA: War Department, 1942.

“Seventh Army Signals.” *Signal Corps Information Letters* (December 1944): 14–15.

Signal Corps Field Manual Signal Organizations and Operations in the Armored Division and Armored Corps. Field Manuals 11-17. Washington D.C., USA: Government Printing Office, 1941.

Signal Operations In Corps and Army. Field Manuals 11-22. Washington D.C., USA: U.S. Government Printing Office, 1945.

Staff Officers Field Manual: The Staff and Combat Orders. Field Manuals 101-5. Washington D.C., USA: U.S. War Department, 1940.

“Wireheads in France.” *Signal Corps Information Letters* (April 1945): 1–8.

“XII Corps Artillery in Combat,” n.d. Gilbert R. Cook Papers 1908-1959 (A91-11 & A92-12) Box 8. Eisenhower Presidential Library.

“XII Corps Report of Operations August to September 1944,” n.d. Gilbert R. Cook Papers 1908-1959 (A91-11 & A92-12) Box 8. Eisenhower Presidential Library.

“XII Corps Staff Operational Procedures 12 August 1944 to May 1945,” October 29, 1945. Gilbert R. Cook Papers 1908-1959 (A91-11 & A92-12) Box 9. Eisenhower Presidential Library.

“XIII Corps Standard Operating Procedures, Change 1,” August 21, 1944. N-13681. Combined Arms Research Library Digital Library, Fort Leavenworth, KS.

“XIX Corps Standard Operating Procedures,” November 1944. N-13681.2. Combined Arms Research Library Digital Library , Fort Leavenworth, KS.

Journal Articles and Monographs

Berlin, Robert. “U.S. World War II Corps Commanders: A Composite Biography.” *Journal of Military History* 53 (April 1986): 147–167.

Builder, Carl H, Steven C Bankes, Richard Nordin, United States. Dept. of Defense. Office of the Secretary of Defense, and National Defense Research Institute (U.S.). *Command Concepts: A Theory Derived From the Practice of Command and Control*. Santa Monica, Ca.: Rand, 1999.

Dastrup, Boyd L. “History of the US Army Field Artillery School from Birth to the Eve of World War II.” *Fires* (February 2011).

Frank, Benis, and Henry I. Shaw. “Amphibious Doctrine In World War II.” In *Victory and Occupation: History of the U.S. Marine Corps Operations in World War II*, 5:653–658. Quantico, VA: Historical Branch, US Marine Corps, 1968.

Kaune, P.N. “General Troy H. Middleton: Steadfast in Command.” DTIC Document, 2011.

Kirkpatrick, Charles E. “‘The Very Model of a Modern Major General’ Background of World War II American Generals in V Corps.” In *The U.S. Army and World War II: Selected Papers*, edited by Judith Bellafaire. United States Army in World War II CMH Publication 68-4. Washington D.C., USA: Center for Military History, United States Army, 1998.

Kurz, Joseph. “General Matthew B. Ridgeway: A Commander’s Maturation of Operational Art.” SAMS, 2011.

Matliff, Maurice. “The 90 Division Question.” In *Command Decisions*, edited by Kent Roberts Greenfield. United States Army in World War II CMH Publication 70-7-1. Washington D.C., USA: Center for Military History, United States Army, 1987.

McGlachlin, Major General Edward F. “The Army War College.” *The Coast Artillery Journal* 57, no. 4 (October 1922): 287–305.

Sisemore, James D. “Fort Leavenworth and Its Education Legacy; Recommendations for ILE.” Monograph, School of Advanced Military Studies, Command and General Staff College, 2012. Combined Arms Research Library Digital Library , Fort Leavenworth, KS.

Wade, Lieutenant Colonel Gary. “World War II Division Commanders, Combat Studies Institute Report #7.” Combat Studies Institute Press, N.D. Electronic File. Combined Arms Research Library Digital Library , Fort Leavenworth, KS.

Books

Bradley, Omar N. *A Soldier’s Story*. Toronto: Random House, 1951.

Brower, Charles F. *George C. Marshall: Servant of the American Nation*. New York: Palgrave Macmillan, 2011.

- Carafano, James Jay. *After D-Day: Operation Cobra and the Normandy Breakout*. Boulder, Colo.: Lynne Rienner Publishers, 2000.
- Clay, Steven E. *US Army Order of Battle 1919–1941: The Arms: Major Commands and Infantry Organizations, 1919–41*. Vol. 1. Fort Leavenworth, KS: Combat Studies Institute Press, 2010.
- Cray, Ed. *General of the Army: George C. Marshall, Soldier and Statesman*. New York, N.Y.; [Lanham, MD]: Cooper Square Press ; Distributed by National Book Network, 2000.
- Van Creveld, Martin. *Command in War*. Cambridge, Mass.: Harvard University Press, 1985.
- D’Este, Carlo. *Decision in Normandy*. New York: Konecky & Konecky, 1994.
- . *Patton: A Genius for War*. New York: HarperPerennial, 1995.
- Doubler, Michael D. *Closing with the Enemy: How GIs Fought the War in Europe, 1944-1945*. Lawrence, Kan.: University Press of Kansas, 1994.
- Dyer, George. *VII Corps Spearhead Patton’s 3rd Army*. VII Corps Historical Association, 1947.
- Greenfield, Kent Roberts, Robert R Palmer, and Bell I. Wiley. *The Organization of Ground Combat Troops*. United States Army in World War II. Washington D.C., USA: Historical Division, Department of the Army, 1947.
- Grotelueschen, Mark E. *The AEF Way of War: the American Army and Combat in World War I*. Cambridge: Cambridge University Press, 2010.
- Hamburger, Kenneth E. “Learning Lessons in the American Expeditionary Forces.” CMH Publication 24-1. Washington D.C., USA: Center for Military History, United States Army, 1997.
- Hogan, David W. Jr. *A Command Post at War: First Army Headquarters in Europe, 1943-1945*. United States Army in World War II CMH Publication 70-60. Washington D.C., USA: Center for Military History, United States Army, 2000.
- Jeffers, H. Paul. *Command of Honor: General Lucian Truscott’s Path to Victory in World War II*. New York, N.Y.: NAL Caliber, 2008.
- . *Taking command: General J. Lawton Collins from Guadalcanal to Utah beach and victory in Europe*. New York: New American Library, 2009.
- Mansoor, Peter R. *The GI Offensive in Europe: The Triumph of American Infantry Divisions, 1941-1945*. Lawrence, Kan.: University Press of Kansas, 1999.
- Matheny, Michael R. *Carrying the War to the Enemy: American Operational Art to 1945*. Norman: University of Oklahoma Press, 2011.
- Miller, Edward G. *Nothing Less Than Full Victory: Americans at War in Europe, 1944-1945*. Annapolis, Md.: Naval Institute Press, 2007.
- Millett, Allan Reed, and Peter Maslowski. *For the Common Defense: A Military History of the United States of America*. New York; London: Free Press ; Collier Macmillan, 1984.

- Murray, Williamson. *Military Innovation in the Interwar Period*. 1st paperback ed. Cambridge ; New York: Cambridge University Press, 1998.
- Nelsen, John T. III. *General George C. Marshall: Strategic Leadership and the Challenges of Reconstituting the Army 1939-41*. Professional Readings in Military Strategy 7. Carlisle Barracks, Pennsylvania: Strategic Studies Institute, U.S. Army War College, 1993.
- Osinga, Frans P. B. *Science, Strategy and War: The Strategic Theory of John Boyd*. London; New York: Routledge, 2007. <http://site.ebrary.com/id/10155759>.
- Palmer, Robert R, Bell I. Wiley, and William R. Keast. *The Procurement and Training of Ground Combat Troops*. The United States Is World War II CHM 2-2. Washington D.C., USA: Center for Military History, United States Army, 1948.
- Patton, George S, and Paul D Harkins. *War as I Knew It*. Boston: Houghton Mifflin Co., 1995.
- Price, Frank James. *Troy H. Middleton: A Biography*. Baton Rouge: Louisiana State University Press, 1974.
- Pogue, Forrest C. *George C. Marshall: Education of a General 1880-1939*. New York: Viking, 1963.
- . *George C. Marshall: Ordeal and Hope 1939-1942*. New York: Viking, 1965.
- . *George C. Marshall: Organizer of Victory 1943-1945*. New York: Viking, 1973.
- Reardon, Mark J. *Victory at Mortain: Stopping Hitler's Panzer Counteroffensive*. Lawrence, Kan.: University Press of Kansas, 2002.
- Schifferle, Peter J. *America's School for War: Fort Leavenworth, Officer Education, and Victory in World War II*. Lawrence: University Press of Kansas, 2010.
- Smith, R. Elberton. *The Army and Economic Mobilization - CMH Publication 1-7*. United States Army in World War II Publication 1-7. Washington D.C., USA: Center for Military History, United States Army, 1959.
- Stiehm, Judith. *The U.S. Army War College: Military Education in a Democracy*. Philadelphia: Temple University Press, 2002. <http://public.eblib.com/EBLPublic/PublicView.do?ptiID=616015>.
- Sylvan, William C., Francis G. Jr. Smith, Courtney H. Hodges, and John T Greenwood. *Normandy to Victory*. Lexington: University Press of Kentucky, 2008.
- Watson, Mark S. *The War Department: Chief of Staff Prewar Plans and Preparations*. The United States Is World War II CMH Publication 1-1. Washington D.C., USA: Center for Military History, United States Army, 1950.
- Weigley, Russell F. *The American Way of War: a History of United States Military Strategy and Policy*. Bloomington: Indiana University Press, 1973.
- . *Eisenhower's Lieutenants: the Campaign of France and Germany, 1944-1945*. Bloomington: Indiana University Press, 1990.

Army Leadership. Army Doctrinal Reference Publications 6-22. Washington D.C., USA: Department of the Army, 2012.

Commander and Staff Guide. Army Technical and Tactical Publication 5-0.1. Washington D.C., USA: Department of the Army, 2011.

Mission Command. Army Doctrinal Reference Publications 6-0. Washington D.C., USA: Department of the Army, 2012.

The Operations Process. Army Doctrinal Reference Publications 5-0. Washington D.C., USA: Department of the Army, 2012.