JOINT RECEPTION STAGING ONWARD MOVEMENT AND INTEGRATION (JRSOI): THE COMMANDERS ROLE IN INTEGRATION



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REPORT DOCUMENTATION PAGE					Form Approved OMB No. 0704-0188			
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1. REPORT D	DATE (DD-MM-Y)	(YY) 2. REPO	ORT TYPE		3. DATES COVERED (From - To)			
14-06-2019		Maste	er's Thesis		AUG 2018 – JUN 2019 5a. CONTRACT NUMBER			
	00211122							
			ovement and I	ntegration	5b. GRANT NUMBER			
(JRSOI): The Commanders Role in Integration					5c. PROGRAM ELEMENT NUMBER			
6. AUTHOR(5)				5d. PROJECT NUMBER			
Elias M. Isreal, MAJ, US Army					5e. TASK NUMBER			
					5f. WORK UNIT NUMBER			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Command and General Staff College ATTN: ATZL-SWD-GD Fort Leavenworth, KS 66027-2301					8. PERFORMING ORG REPORT NUMBER			
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The US Army's Joint Reception Staging Onward movement and Integration (JRSOI) operations were perfected during World War II and provided Allied Forces the ability to amass overwhelming combat power on Axis Forces during Operation Overlord. The study follows VII Corps and Major General J. Lawton Collins during the winter of 1944 as he prepares the corps for the amphibious assault on Utah Beach in England. Major General Collins conducts multiple iterations of JRSOI throughout the Operation Overlord campaign while simultaneously								
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15. SUBJEC JRSOI, Fo		n, Deployme	ent Operations					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON			
a. REPORT	b. ABSTRACT	c. THIS PAGE			19b. PHONE NUMBER (include area code)			
(U)	(U)	(U)	(U)	123				
					Standard Form 298 (Rev. 8-98) Prescribed by ANSI Std. Z39.18			

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MASTER OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

Name of Candidate: Elias M. Isreal

Thesis Title: Joint Reception Staging Onward Movement and Integration: The Commander's Role in Integration

Approved by:

statement.)

, Thesis Committee Chair Christopher R. Johnson, M.A.

_____, Member James B. Martin, Ph.D.

David G. Cotter, M.A.

Accepted this 14th day of June 2019 by:

, Director, Graduate Degree Programs Robert F. Baumann, Ph.D.

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing

_____, Member

ABSTRACT

JOINT RECEPTION STAGING ONWARD MOVEMENT AND INTEGRATION (JRSOI): THE COMMANDERS ROLE IN INTEGRATION, by MAJ Elias M. Isreal, 123 pages.

The US Army's Joint Reception Staging Onward movement and Integration (JRSOI) operations were perfected during World War II and provided Allied Forces the ability to amass overwhelming combat power on Axis Forces during Operation Overlord. The study follows VII Corps and Major General J. Lawton Collins during the winter of 1944 as he prepares the corps for the amphibious assault on Utah Beach in England. Major General Collins conducts multiple iterations of JRSOI throughout the Operation Overlord campaign while simultaneously conducting tactical operations to meet mission objectives. The case study investigates Major General Collins integrations of VII Corps in England in the winter of 1944 until D-Day and examines the JRSOI operations during the days following D-Day as VII Corps attempts to generate combat power to move inland to capture the city of Cherbourg, France on 26 June 1944.

ACKNOWLEDGMENTS

This thesis was a pursuit for knowledge of how the Army conducts force projection when called on. The use of history helped me understand the problem better. This endeavor was made possible through the assistance of my patient committee, Mr. Christopher Johnson, Department of Military History, Dr. James Martin, Dean of Academic Operations, and Mr. David Cotter, Department Chair of Military History. Their leadership and support of my academic pursuit for knowledge have helped guide me through the thesis process.

Additionally, I thank the Ike Skelton Chair and Art of War staff group advisor, Dr. Dean Nowowiejski for his guidance and access to primary source research. Also, my aunt, Dr. Faith Samples-Smart, who helped to give my words meaning. Finally, I want to thank my family for supporting me throughout the thesis writing process. This thesis is dedicated in honor of Shinane, Sienna, Elias II, and Elijah through your love and support; I was able to realize my dream.

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ACRONYMS

BG	Brigadier General
BUCO	Buildup Control Organization
COSSAC	Chief-of-Staff to the Supreme Allied Commander
GEN	General
ISB	Intermediate Staging Base
JP	Joint Publication
JRSOI	Joint Reception Staging Onward Movement and Integration
LSGCO	Large Scale Ground Combat Operations
LST	Landing Ship Tanks
LTG	Lieutenant General
MG	Major General
MOVCO	Movement Control
NOIC	Naval Officer in Charge
SHAEF	Supreme Headquarters Allied Expeditionary Force
TURNCO	Turn-Round Control

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CHAPTER 1

INTRODUCTION

Personal reconnaissance and observing how the thing was done paid dividends, because no sooner had we gotten ashore, on D+I, we needed some tanks and we had one tank company that was with the assault unit, the 4th Division, and I turned that tank company over to the 8th Infantry and they were able to catch some German light tanks that were coming down from Cherbourg to attack them, and knocked them all out.

— J. Lawton Collins, Commander VII Corps, Lighting Joe: An Autobiography

On 26 June 1944, VII Corps liberated the French city of Cherbourg from German LXXXIV Corps. The Cherbourg liberation was a product of what today's doctrine defines as Joint Reception Staging Onward Movement and Integration (JRSOI). This is "the process of deployment and redeployment and transition between the execution functions of deployment and redeployment."¹ The Commander of VII Corps, Major General (MG) Joseph Lawton Collins, had used integration of all war fighting functions to build enough combat power on Utah Beach 20 days earlier to defeat German defenses to liberate the city. In World War, Collins would have understood this as Mounting Operations—the process of moving large numbers of troops, equipment, and supplies to the European continent—yet his actions 75 years ago have helped to inform today's understanding of how to integrate forces.

During the winter of 1944, the men of VII Corps prepared for the most daring Allied military operation to date. The Supreme Headquarters Allied Expeditionary Forces

¹ Joint Chiefs of Staff, Joint Publicattion (JP) 3-35, *Deployment and Redeployment Operations* (Washington, DC: Government Printing Office, 2018), XIV.

(SHAEF) Commander, General (GEN) Eisenhower, selected MG Joseph Lawton Collins to command and prepare VII Corps to conduct an amphibious attack on the European mainland as a vital part of Operation Overlord to defeat the German Army. Collins took command of VII Corps in February 1944, and he and his staff immediately began planning their attack. They planned Operation Overlord—the Allied Forces' plan to conduct amphibious assault on the European continent and to create a future port of entry for follow-on forces—while simultaneously executing the daunting task of Mounting Operations in VII Corps 'marshalling area in Breamore and Hants, England. Prior to Collins' arrival, VII Corps participated in Operation Bolero, a plan by the European Theater of Operations of the United States Army, that built the American combat power to execute the invasion of Europe.²

Collins, a veteran of amphibious assaults during large-scale combat operations in the Pacific Theater, and VII Corps had roughly three months to prepare for Operation Overlord. To accomplish the mission, VII Corps was assigned six infantry divisions, a mechanized cavalry group, an armored division, and various artillery and logistical support units prior to the D-Day landings at Utah Beach.³ Over the next three and half months, VII Corps and its subordinate divisions planned and prepared for the movement

² Roland G. Ruppenthal, *Logistical Support of the Armies, Volume 1: May 1941-September 1944* (Washington, DC: Center of Military History, 1995), 77-80.

³ United States Army, VII Corps, *Mission Accomplished: The Story of the Campaigns of the VII Corps, United States Army in the War Againsth Germany, 1944-45* (Leipzig, Germany: J. J. Weber, 1945), 1-17.

of 30,000 troops, 3,500 vehicles, and 200 large landing craft to the beaches of Normandy.⁴

Collins met expectations of being a team player and of accomplishing mission objectives placed upon him by 21st Army Group Commander, GEN Barnard Montgomery, and 1st Army Commander, Lieutenant General (LTG) Omar Bradley, and successfully led VII Corps through home station training in England. Collins and the VII Corps staff executed multiple iterations of JRSOI starting in England with Mounting Operations and concluding with the build-up of combat power on Utah Beach after the D-Day landings. His command integrated and synchronized transfer of forces culminating in the successful employment of six tactical divisions converging on LXXXIV German Corps' defense of Cherbourg, France.

The Corps honed skills necessary to project forces during Exercises Tiger and Eagle—the full-scale amphibious assault rehearsals conducted by 4th Infantry Division and night airborne training exercise conducted by the 101st and 82nd Airborne Divisions—which served as final rehearsals for VII Corps' forcible entry into the European continent. The rehearsals served as vital proof of concept in preparing VII Corps for the amphibious assault against the German LXXXIV Corps defenses on Utah Beach. VII Corps' continued preparation for Operation Overlord progressed through various stages in England, culminating in the final preparation of Mounting Operations.

⁴ United States Army, VII Corps, *Mission Accomplished*.

Collins' preparation and command influence proved critical to ensuring VII Corps' future success as it attacked inland against LXXXIV Corps reserves located near the town of Cherbourg, the Corps' key objective during Operation Overlord. The Corps' combat effectiveness during the Overlord campaign, 6 to 26 June 1944, was a direct reflection of Collins' focus on integration of units. His focus proved pivotal in VII Corps success during the late summer of 1944. This chapter outlines the methodology employed to study how Collins used integration during the JRSOI process to ensure battlefield success during Operation Overlord. Relying on both primary and secondary sources, this paper examines Collins' integration of VII Corps' resources, including troop build-up and training in Breamore, England; beach landings at Utah Beach; and the capture of Cherbourg.

Thesis Statement

Collins' actions throughout Operation Overlord challenges portions of today's doctrinal inferences made in Joint Publication 3-35. The publication presents JRSOI as a clean process that ensues once in a controlled environment free of enemy influence. This thesis provides historic evidence that integration is an ongoing process that transpires as units disassemble for movement and are reassembled to a degree that the command is confident they can perform their specified mission. Collins provides unique perspective for deploying units and presents the argument that JRSOI is an ongoing process that concurs consecutively and simultaneously multiple times throughout a campaign as seen in England and the days following the forcible entry. Collins' actions in 1944 translate well into today's principles of JRSOI: unity of command, synchronization, and balance, which VII Corps used in Operation Overlord. Effective integration of units and forces

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contributed to readily available combat power to achieve mission success during largescale ground combat operations, thus proving effective integration of units during JRSOI operations can increase Army corps success under these conditions.

Literature Review

Over the years, military historians have conducted thorough examinations of combat operations during the D-Day landings and subsequent Allied Forces' actions to liberate the European continent from the Nazi Regime. However, there has been little study linking the commander's role in integration as it pertains to unit effectiveness in combat operations during World War II. Secondary sources research relied on works by Dr. Peter R. Mansoor, Dr. Stephen E. Ambrose, Dr. Williamson Murray, and Dr. Allan Millet, which provided operational context for the friction VII Corps faced while on the battlefields of Europe. Their research chronicles VII Corps' activities during Allied combat operations from February through November 1944 and are the mainstay for formulating the thesis argument. Most sources reviewed for this project primarily focused on combined arms maneuver at the operational and tactical level, air-to-ground integration, and theater logistics. There has been little exploration of command integration at a Corps headquarters during the JRSOI process or linkages to subsequent battlefield success. The majority of historians focus on tactical decisions made by tactical commanders or on the structure of logistics and build-up operations. However, research gaps remain as it pertains to linkages between all elements of combat power: leadership, information, mission command, movement and maneuver, intelligence, fires, sustainment, and protection to integration.

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Craig L. Symonds writes a detailed account of the D-Day landings in France in his book, *Operation Neptune: The D-day Landings and the Allied Invasion of Europe*. The book provides an in-depth study of the logistical friction V and VII Corps faced during Operation Neptune and the D-Day landings. Symonds also provides detailed analysis of the confusion both Corps faced as they attempted to integrate forces on the beaches of Normandy while facing German coastal defenses.⁵ Symonds' research of landing crafts is instrumental in describing joint Navy and Army amphibious operations. Nevertheless, Symonds' research falls short of providing a complete picture of Allied Forces' activities during Operation Neptune. Many scholars chose to focus research topics on Omaha Beach and the challenges V Corps faced while attempting to expand the beachhead. As illustrated by Symonds' book, scholarly works have failed to adequately inform the reader of the friction VII Corps faced on Utah Beach in the days following the initial amphibious assault.

Alphonse J. LeMaire III examines the aspects of leadership that prepared Collins to successfully command large-scale combat formations on Utah Beach and throughout the Normandy campaign in his monograph, "Learning to Lead: J. Lawton Collins' Mastery of Large-Unit Command," prepared at the School of Advanced Military Studies at the U.S. Army Command and General Staff College. This work lends additional support for the overall framework of the thesis.⁶

⁵ Craig L. Symonds, *Operation Neptune: The D-Day Landings and the Allied Invasion of Europe* (New York: Oxford University Press, 2014).

⁶ MAJ Alphonse J. LeMaire III, "Learning to Lead: Lawton Collins' Mastery of Large-Unit Command" (Monograph, School of Advanced Military Studies, Fort Leavenworth, KS, 2015), 53.

The use of primary sources to support the project include; The History of VII Corps, VII Corps Operations Memoranda details, VII Corps Mounting Operation in England and progress as the Corps moved inland after the forcible entry on D+1. Moreover, VII Corps Operations Orders and Green Book official versions: Cross Channel Attack, Logistical Support of the Armies, Breakout and Pursuit, serve as primary sources that chronicle events leading to mounting in England and buildup in Europe. VII Corps' Operations Orders provide detail on mission order during the time of Operation Overlord, while data on European Theater Operations provide lessons learned from 1st Army and SHAEF while executing Operation Overlord. European Theater Operations Report 22 is an important primary source document that illustrates the difficulty the Allied Forces faced while attempting to build forces in England. European Theater Operations Report 128 serves as a complementary after-action review to Control of the Build-up of Troops in a Cross-Channel Amphibious Operation: European Theater Operations Report 22 and demonstrates the difficulty of marrying troopers and equipment within the intermediate staging base (ISB). European Theater Operations Report 129 provides a comprehensive account of Mounting Operations and insights into the friction that arose from combining equipment and troops together as VII Corps moved through the mounting process. The United States Air Force Historic Study No. 97 is also critical, insomuch as it describes airborne preparation and execution of the 101st and 82nd Airborne Divisions during Operation Overlord.

The VII Corps' primary sources lay out a chronology of events and depict a clear timeline during the period of February to June 1944. Many of the primary sources chronicle Collins and VII Corps' preparation while in England as the Corps executed Operation Bolero, Exercises Tiger and Eagle, and Mounting Operations. Correspondence between Collins and his subordinate commanders provide a cross-section of accounts and add depth to Corps operations in 1944. Collins' oral interview and book, *Lighting Joe: An Autobiography*, provides rich context to command decisions made during Operation Overlord. His writings offer rare insight into a commander's mind as he executes missions that have occurred infrequently throughout the history of the civilized world. These rich accounts provide the context needed to support the thesis and tie other primary and secondary sources together to make a strong argument for positive command influence during JRSOI operations.

Scope

The US Army has fought the Global War on Terror in Operations Iraqi Freedom, Enduring Freedom, and other contingency operations from 2001 until present day. Counter-insurgency warfare has limited the ability of the United States Army to project forces globally, thereby creating a capability gap which has resulted in the Army's shift in focus to Large Scale Ground Combat Operations (LSGCO).⁷ The 39th Chief of Staff of the Army, GEN Mark Milley, has recognized this gap and directed the Army to prepare for LSGCO in future wars.⁸

The success of Collins and VII Corps during Operation Overlord is an essential case study to display the importance of power projection and the difficulty of

⁷ Association of The United States Army, "Milley: Army not Fully Ready for Large-Scale Combat," 7 April 2016, accessed 1 April 2019, https://www.ausa.org/news/milley-army-not-fully-ready-large-scale-combat.

⁸ Ibid.

aggressively executing efficient JRSOI while conducting offensive operations in two very important ways. First and foremost, the VII Corps' case study presents an example of how to conduct a forcible entry and to begin JRSOI operations as lodgment expands. Secondarily, it creates increased opportunity for dialogue among Army leaders and planners that helps bridge the experiential knowledge gap in building and sustaining combat power while operating in a LSGCO operation. Collins planned, prepared, and executed LSGCO over a 12-month period, in an environment similar to today's Anti-Axis area denial defenses established in the Baltic Region and the South China Sea. The case study provides applicable lessons for US Army land forces, if called upon by the nation to engage in a LSGCO, and it offers a mental model to conceptualize large-scale JRSOI. A review of training conducted in England demonstrates the use of JRSOI in a host nation ISB and highlights challenges associated with building a multi-national force. VII Corps' execution of a forcible entry in the days following the assault on Utah Beach illustrates theater opening and JRSOI operations in an austere environment under enemy influence. The Corps' ability to constantly disassembled subordinate divisions and reassembled them for use during combat operations to project forces for Operation Overlord demonstrates successful buildup operations.

Today's doctrine fails to fully address the constant churns of forces and equipment required to maintain an offensive like that faced by Collins in June 1944. The doctrine assumes deployment integration occurs in an uncontested battle space and is complete once a corps' size unit is fully formed and able to execute its assigned mission.⁹

⁹ Joint Chiefs of Staff, JP 3-35, *Deployment and Redeployment Operations*, 1-150.

Present day doctrine has become a product of wars faced over the past 20 years and has overlooked the possibility that JRSOI may be conducted in a contested environment. The doctrine does not illustrate the need for corps size elements to execute JRSOI operations continuously throughout a campaign until the corps culminates or completes the operation. Collins' actions throughout the Overlord campaign challenges today's doctrinal assertion and provides historical evidence that the integration portion of JRSOI for deploying units is ongoing and occurs multiple times throughout a campaign. This is witnessed by Collins' training and Mounting Operations in England and troop buildup in the days following D-Day. Additional emphasis is placed on the commander's understanding of enhanced combat power to seize the initiative vital to the success of the assigned mission. VII Corps' actions on Utah Beach illustrate the ability of a corps to execute limited objectives during operations while the remaining units continue to build combat power for the commander to integrate as operations progress. Employing these strategies, Collins provides a framework for present day military professionals to conceptualize JRSOI on a large scale for future corps staff members and commanders.

The scholarly body of work that currently exists does not paint a complete picture of the effective command integration of units during JRSOI operations, and present-day doctrine loosely defines the commander's role in integration. Command integration is defined as "the synchronized transfer of capabilities into an operational commander's force prior to mission execution or back to the component/Service."¹⁰ The friction associated with marshalling larger combat units is a difficult task that Collins and

¹⁰ Joint Chiefs of Staff, JP 3-35, Deployment and Redeployment Operations, XIV.

VII Corps mastered over the course of time. This paper will examine JRSOI by analyzing the VII Corps commander's role in integration during Operation Overlord. The desired outcome is to understand how combat operations in Europe began in the winter of 1944 and led to MG Collins evolving into one of the most successful force integrators in the European Theater. The Corps displayed the capacity to execute extensive land campaigns in part because of efficient JRSOI and Collins' focus on integration at every level of command within VII Corps and Department of War sister services. This thesis will also demonstrate valuable lessons learned using principles of JRSOI to relay relevant and applicable examples of force projection during LSGCO. The thesis will examine VII Corps as it built combat power in England and conducted JRSOI operations under duress on the beaches of Normandy following the initial D-Day landings. Corps buildup operations following the assault proved VII Corps gained a marked advantage in its defeat of German defenses around the city of Cherbourg which later led to capture of the city.

This project will help to highlight critical lessons learned post-JRSOI operations and will apply the case study to today's operating environment, possibly serving as a road map to close the capability gap of conducting force projection during LSGCO. Subsequent chapters are intended to answer the primary research question: How did MG J. Lawton Collins, the Commander of VII Corps, integrate his formations to build enough combat power to conduct combat operations in support of Operation Overlord. The chapters will add to the definition of command integration during the JRSOI process during LSGCO, while examining integration through the lens of principles of JRSOI. Moreover, the project will chronologically study Collins' integration of VII Corps over five chapters that explore his actions while the unit was in England, at Utah Beach, and in the Battle of Cherbourg.¹¹ Finally, this work will examine Collins' organizational success throughout Operation Overlord and conclude with analysis and observations gained throughout the project.

Chapter 2 investigates the synchronization portion of JRSOI as Collins integrated his forces into VII Corps in preparation for Operation Overlord. The chapter also explores Collins' hands-on style of leadership and the areas of focus used to form the VII Corps staff while preparing for Operation Overlord. Collins used his influence to coordinate and integrate VII Corps into 1st Army by leveraging relationships with staff and the 1st Army Commander, LTG Bradley. Collins' relationship with Bradley enabled him to understand Bradley's intent, which provided Collins the freedom to quickly begin the planning and preparation for Operation Overlord. While in Breamore and Hants, England, Collins found integration of the Corps to be difficult because his divisions were marshaled in different locations. His decentralized leadership style—a mission-type orders approach to command—in combination with Corps training events during Exercise Tiger helped Collins overcome friction in preparation for D-Day. Exercise Tiger, conducted on 28 April 1941, proved useful because it forced Collins and his staff to coordinate with the Navy Landing Craft Vehicle and Personal Commander to rehearse

¹¹ LTC Charles C. Sperow, "Interview with General J. Lawton Collins, USA Retired" (Senior Officer Oral History Program, Carlisle Barracks, PA, January 1972), Appendix A, 2.

the Utah Beach landings. This training exercise would prove vital to the success VII Corps would experience on the beach and beyond.¹²

Chapter 3 analyzes Mounting Operations before D-Day and explores the friction Collins' faced working with the district commandant of District XIX, Colonel Theodore Wyman Jr, as well as transportation and movement agencies supporting the operation. The analysis focuses on interactions between VII Corps and theater and tactical movement support agencies. The command structure within support agencies added additional friction to VII Corps' Mounting Operations. Each movement agency reported to a different chain of command, each having its own movement priorities and therefore causing confusion at the tactical level. The chapter also explores Collins' role in Mounting Operations and the ways in which Corps staff overcame inefficient command structures. Finally, chapter 3 reviews the difficulty associated with using 5th Armored Division to support Mounting Operations. More specifically, the chapter examines the unique challenge presented by the fact that the division lacked the technical expertise necessary to fully support the operation by ensuring subsequent units, after the initial assault, were properly mounted. The chapter illustrates the manner in which the integration portion of JRSOI occurs at all levels of command.

Chapter 4 focuses on the building of combat power on Utah Beach once VII Corps had gained control of Cherbourg. VII Corps fought synchronization problems while trying to generate enough combat power to remain on the offensive following the initial amphibious assault on Utah Beach. The Corps also overcame challenges within the

¹² General J. Lawton Collins, *Lighting Joe: An Autobiography* (Baton Rouge, LA: Louisiana State University Press, 1979), 188.

Allied Forces, and outside of its control, to meet its mission objectives. Relationships with the Navy and 1st Army played a role in the success of building combat power on Utah Beach.

Operation Overlord began positively in the initial stages; however, LXXIV Corps defenses were well fortified and posed a challenge for VII Corps forces. Additionally, while 4th Infantry Division's landings went relatively as planned, German coastal defenses on Omaha Beach affected the overall tonnage flowing onto Utah Beach.¹³ V Corps' delay on Omaha Beach caused Landing Ship Tanks (LST) to divert forces and equipment to Utah Beach, giving the Corps a simultaneous large cargo clearance mission that they were under resourced to perform.¹⁴ The German LXXIV Corps had formed a defensive belt in an attempt to wrest the initiative away from VII Corps.

Chapter 5 reviews actions on Utah Beach leading up to Collins' decision to conduct the final assault on Cherbourg and to break through German defensive lines to capture the city. The build-up of forces on Utah Beach that provided combat power necessary for defeat of German troops can be partially attributed to Collins' successful command integration of VII Corps throughout the stages of Operation Overlord. The chapter focuses on the result of successful integration conducted at corps level. Operation Overlord reveals the difficulty of continuous integration of forces during JRSOI throughout a campaign. Collins learned to integrate all elements of VII Corps combat power on Utah Beach by assembling divisions on the days following D-Day for

¹³ Ruppehthal, *Logistacal Support of the Armies*, 368.

¹⁴ Ibid.

operational use while dissembled divisions moved out of theater. Operation Overlord links every echelon of tactical command to operations by demonstrating the importance of command integration at all levels. During Operation Overlord, Collins commanded the 79th Infantry Division, 4th Infantry Division, and 9th Infantry Division, to seize the initiative and to continue the attack to defeat German forces surrounding Cherbourg. The significance of Collins' ability to sort out troop build-up on the beach provided VII Corps the opportunity to realize success in the seizure of Cherbourg and to continue combat power generation to eventually remain on the offensive. Collins' experience in the Pacific proved vital as VII Corps attempted to reach the its objective. Furthermore, his actions during troop buildup allowed Allied Forces to march inland to Paris, France and to capture a deep-water port in Cherbourg.

Limitations

The JRSOI is a multifaceted topic that cannot be covered in a single master's thesis. The scope of this thesis limits investigation of all aspects of JRSOI. Instead, this work focuses exclusively on Collins' integration of VII Corps while deployed in a hostile theater of operation. The study of integration is vital to JRSOI because the commander's role in the operation signifies the unit is completely formed and prepared to accomplish its assigned mission. Each area of JRSOI in LSGCO must be studied independently to gain a balanced perspective.

An additional limitation of this project is the fact that it looks primarily at the deployment portion of JRSOI and omits the redeployment of units during LSGCO. Other parts of JRSOI require further investigation and may be addressed in future works to add to the overall JRSOI body of knowledge. Some omissions within the thesis are

intentional, as they offer clarity and ensure the work has the proper depth and breadth dictated by the topic.

Framework

The framework of this paper views JRSOI integration through the principles of JRSOI taken from present-day doctrine. To better understand VII Corps' application to modern LSGCO, the principles of JRSOI provide a relevant lens through which to analyze Collins and VII Corps. Joint Publication (JP) 3-35 Deployment and Redeployment Operations states, "The principles of JRSOI are Unity of Command, Balance, and Synchronization."¹⁵ Collins service in World War II predates JP 3-35 by several decades; however, his actions during Operation Overlord make a strong argument for its correlation with the ideas of modern JRSOI. Collins utilized the three principles of JRSOI to successfully integrate VII Corps during Operation Overlord. In today's doctrine, the U.S. Army is responsible for facilitating JRSOI of land forces. Unit commanders at every level are responsible for integrating their respective units to accomplish the assigned mission. In 1944, US Army JRSOI doctrine did not codify into a single document, which makes it difficult to apply lessons learned to the present operating environment. Our present-day reference to JRSOI would have been understood by Collins to represent Mounting Operations, which in 1944 was the practice of moving large numbers of troops and equipment and combining them in a centralized location for

¹⁵ Joint Chiefs of Staff, JP 3-35, *Deployment and Redeployment Operations*, 1-150.

their assigned mission. The use of JP 3-35 provides clarity and allows this project to ascertain valuable insights to apply to LSGCO in the 21st Century.

CHAPTER 2

OPERATION OVERLORD BUILD-UP

AND PLANNING

I was given the mission of capturing Cherbourg. I personally drew up the plans for that mission. I was at liberty to draft my own plan and that's what I did. Incidentally, we finally had a dress rehearsal of this at St. Paul's School, I guess it was, with Monty conducting this exercise.

— J. Lawton Collins, VII Corps Commander, "Interview with General J. Lawton Collins, USA Retired"

Introduction

Operation Overlord—the Allied plan to invade the European Continent—was the brain child of US Army Chief-of-Staff, GEN George C. Marshall. GEN Marshall authorized the operation in the summer of 1943, choosing GEN Dwight Eisenhower to lead the operation for the Allied Forces, which consisted of United States, United Kingdom, and Canada. Eisenhower's role as the SHAEF Commander was to be equal parts politician and warrior, which meant he was responsible for managing personalities within the coalition, while preparing Allied Forces for the largest amphibious assault ever undertaken. Eisenhower was also responsible for planning Operation Overlord while attempting to nurture the alliance between the United States and United Kingdom.

Although US Forces had performed well in both, the Pacific and the Mediterranean, British Prime Minister, Winston Churchill, and the British Armed Forces still ran the show in the European Theater. While US capacity to project force had been increasing from the beginning of the War in 1941, the maturation process remained incomplete by the winter of 1942. This required US Armed Forces to rely upon the British for an ISB, ports, and logistics support to build combat power on the island. British influence prior to execution of Operation Overlord reduced Eisenhower's ability to install a US Army General to lead the 21st Army Group.¹⁶ The British Prime Minister's influence resulted in the selection of a proven British combat commander from the Mediterranean Theater, GEN B. H. Montgomery. Montgomery's experience working in a multi-national army was valuable in helping maintain the coalition. Churchill wanted a leader who represented British interests within SHAEF and found in Montgomery a capable professional officer unwilling to waste British lives frivolously on an underdeveloped plan that exposed soldiers to unnecessary risk.

Working through Montgomery, Eisenhower strengthened the Anglo—American alliance by emplacing LTG Omar Bradley—a team player who placed the team's needs above his own—to lead 1st Army. Bradley was a proven combat commander whose actions in Northern Africa and Sicily helped raise American forces' stock with its allies. Bradley recognized that Overlord needed Corps commanders who had experience with amphibious operations and chose Collins because of the reputation he had earned while in the Pacific Theater of Operations. Collins had gained a wealth of experience as commander of 25th Infantry Division, as well as through his participation in campaigns at Guadalcanal and New Georgia. Each campaign provided Collins the experience necessary to execute Operation Overlord. Guadalcanal provided Collins the opportunity to learn and understand how to establish interior lines, which allowed for the rapid and complete build-up of combat power. Through the New Georgia Campaign, Collins'

¹⁶ Collins, *Lighting Joe: An Autobiography*, 191.

gained insight into the intrinsic nature of lengthy campaigns and the continued need to generate forces to meet mission objectives.

Collins' experience helped establish trust between Bradley and Eisenhower, giving credence to Collins' counsel. As reward for facilitating trust in this important relationship, Collins was granted the privilege of participating in the selection and retention of all division commanders serving in VII Corps during the planning and execution of Operation Overlord. Prior to Operation Overlord, Montgomery and Eisenhower realized that Allied Forces would require a substantial amount of combat forces, amphibious landing craft, and transportation aircraft. As a result, they instituted Operation Bolero in support of Operation Overlord. Bolero was an operation the Allied Forces established to build 48 combat divisions in England in support of Operation Overlord, the invasion into Europe.¹⁷

Operation Overlord was the Allied Forces' plan to conduct a forcible entry into the European continent to open a second front to relieve pressure on the Soviets on the Eastern Front. The plan was established in two phases: Phase One consisted of the assault and capture of an initial lodgment area on coastal France; Phase Two involved the capture of Cherbourg and the clearing of the German mobile reserve from the peninsula. 1st Army planned for two Corps landings on the beaches of Normandy in Phase One. V Corps was assigned the eastern beach, code named Omaha Beach; VII Corps was assigned the western beach, code named Utah Beach. VII Corps' mission during Operation Overlord was to conduct a forcible entry during Phase One and to transition to

¹⁷ Duncan Anderson, "Remember This is an Invasion," in *The D-Day Companion*, ed. Jane Penrose (New York: Osprey Publishing, 2004), 29-48.

Phase Two, the capture of Cherbourg,¹⁸ Cherbourg was important to Allied Forces because it provided a deep-water port to act as an ISB and sea point of debarkation on the European continent.

Unity of Command

From the moment Collins took command of VII Corps, he understood the importance of building his team and ensuring they shared his vison for building a combat-effective fighting organization. He immediately set to the task of establishing his team with the Corps staff and saw integration of headquarters as an important part of mission success. Collins focused on building relationships with the division commanders—along with the commanders and staff of 1st Army and 21st Army Group—and sister service commanders who would support VII Corps in Operation Overlord. He leveraged these relationships to ensure VII Corps had all the resources necessary to execute Exercises Tiger and Eagle. Both exercises were training rehearsals for the Utah Beach landings. Exercise Tiger was the amphibious assault for 4th Infantry Division and support units, while Exercise Eagle was the 101st and 82nd Airborne Divisions' rehearsal for airborne assault in support of the amphibious landings. Collins used the two training rehearsal exercises to build trust with his subordinate commanders and staffs in preparation Overlord.

The VII Corps arrived in Breamore, England in September 1943. The Corps Commander at the time, MG R. B. Woodruff, was responsible for building the Corps'

¹⁸ Headquarters, COSSAC, *Operation Overlord Selection of Lodgement Area* (Washington, DC: War Department, 1943).

combat power as part of Operation Bolero. VII Crops' specified mission within Operation Overlord was to seize the port of Cherbourg, France.¹⁹ Allied Forces wanted a deep-water port that provided the capacity to conduct JRSOI operations on the European continent. Woodruff was a capable commander but lacked the youth and combat experience Bradley and Eisenhower desired to achieve success during Operation Overlord.²⁰

The Corps departed the port of New York in mid-October and established new command posts in England at Breamore, Rants, near the city of Salisbury, and the military training area on Salisbury Plain.²¹ VII Corps spent four months training and preparing for Operation Overlord prior to Collins' arrival. Its objective was to turn citizen soldiers into a lethal fighting formation capable of achieving future mission objectives. To achieve its objectives, VII Corps would have to overcome the significant challenge of moving large numbers of men, weapons, and equipment into marshalling areas.

While Corps staff had been together since 1941, they did not respond well to challenges presented during the early days of Operation Bolero. The Corps had trained together for large-scale combat operations and had previous LSGCO collective training experience during the Louisiana Maneuvers. Despite this, poor communication would

¹⁹ Headquarters, COSSAC, *Operation Overlord Selection of Lodgement Area*, 1.

²⁰ During Operation Bolero, General Officers were held to a very high standard and were required to meet GEN Eisenhower's criteria for Command; Commanders had to be team players who could work well with in a multinational force and had the capacity to place the organization and mission above themselves. Many of the General Officers leading up to D-Day were comfortable with the status quo.

²¹ United States Army, VII Corps, *Mission Accomplished*.

present ongoing challenges that threatened to hinder VII Corps' efforts to achieve its mission objectives.

By the fall of 1943, VII Corps staff had come to understand two important facts:

- 1. The Allied Forces' intention of mounting an offensive assault on the European continent; and
- Its own responsibility for integrating over eight divisions in less than 18 months.

Despite Corps staffs' awareness of this information, they did not receive the plan for Operation Overlord until the spring of 1944. With time a limited resource and breakdowns in command communication an apparent problem, VII Corps was confronted with the very real challenge of carrying out its mission objectives. Not only did the Corps staff lack rapport with division staffs arriving daily in England,²² it also had limited time in which to integrate newly arriving divisions into its preparations for Operation Overlord.

Collins and Woodruff changed command in February 1944. One of Collins' first challenges was the distance between the Corps headquarters, subordinate divisions, and supporting units. The distance increased the friction for troops to train together and made it difficult to supply troops with proper equipment due to bureaucratic processes used by Chief-of-Staff to the Supreme Allied Commander (COSSAC) and 1st Army. During the

²² VII Corps conducted extensive training prior to deploying to England and built an extensive training relationship with nine divisions. The Corps participated in the Louisiana Maneuvers serving as the opposition force. Upon arriving to England VII Corps had to quickly build relationships with Division staffs who it had never trained or severed as higher command.

early days of Operation Bolero, logistics support remained disorganized at every level of command, specifically at the Army and Theater level. The agencies that supported theater logistics worked for COSSAC, who set logistics priorities for tactical formations with tactical formation input. Oftentimes, equipment arrived from the United States and lingered at ports for months. COSSAC consolidated all logistics in the European Theater of Operations under its command, which made accounting for equipment a constant challenge. Equipment frequently sat in marshalling areas until staff officers were designated to find, recover, and redistribute to the proper division.²³

To further complicate matters, VII Corps lacked key primary staff officers in duty of Chief-of-Staff, G-4, and Artillery Primary Staff Officer.²⁴ Having previously served in VII Corps as the Chief-of-Staff in 1941, Collins had an established relationship with many of the Corps staff officers. While the staff remained unchanged when he took command in 1944, with the exception of the aforementioned vacancies, Collins recognized the need to fill critical shortages with officers whose reputation aligned with his vision for the Corps to use mission-type orders to communicate and fight.²⁵ To this end, Collins sought team players who placed the needs of the organization above their own, as well as those who solved problems at the lowest level possible.

Collins coordinated with Bradley to fill staff positions and found competent officers such as Colonel Richard G. McKee to serve as Chief-of-Staff, Colonel James G.

²³ The General Board, *Logistical Build-up in the British Isles* (Washington, DC: Chief of Military History, 1945), 36.

²⁴ Collins, *Lighting Joe: An Autobiography*, 184.

²⁵ Ibid.

Anding, as the Corps' G-4, and Brigadier General (BG) Charles R. Doran to serve as Corps Artillery Officer. Friction between Collins and G-3, Colonel Peter Bullard, about the use of dominant terrain during offensive operations training, led to Bullard's replacement during preparation for Exercise Tiger.²⁶ Bullard's replacement, Colonel Richard C. Partridge, had previously served as a 1st Army staffer and was a graduate of the German Kriegsakdemie.²⁷ An additional change during early staff integration under Collins' command included BG Doran's replacement with BG Williston B. Palmer due to Doran's refusal to change methods of artillery employment and the location of artillery forward observers while conducting indirect fire support for infantry during Operation Overlord. Collins wanted to integrate forward observers into combat units on the frontline during training to give maneuver units the ability to call for fire and adjust fire within 200 yards of friendly forces.²⁸ He believed the integration of forward observers would provide maneuver units more accurate and responsive fires. Doran refused to buy into Collins' vision during training because, as a World War I veteran, he did not believe there was a need to evolve his techniques to new artillery doctrine. Palmer, Doran's replacement, readily supported Collins' vision of an artillery capability close to friendly forces.

Division commanders in VII Corps responsible for planning during Operation Bolero were older and less experienced and were replaced prior to the winter of 1944

²⁶ Collins, *Lighting Joe: An Autobiography*, 184.

²⁷ Ibid., 185. Kriegsakdemie is the Prussian War Academy.

²⁸ Ibid.

when Collins took command. Collins had the privilege to lead battle-hardened division commanders who had the trust and confidence of Bradley to execute Operation Overlord. The key division commanders of VII Corps consisted of MG Raymond O. Barton and MG Manton S. Eddy. Barton was Commander of 4th Infantry Division, the lead assault element for the Corps during the planned amphibious portions of the Operation. Barton was a rock-solid commander who performed well during the North Carolina Maneuvers in 1942 and was a West Point classmate of Collins. Barton arrived in England in January of 1944 and quickly set to work ensuring his division was prepared for Operation Overlord. MG Eddy, Commander of 9th Infantry Division, had experience leading troops in the Mediterranean Theater of Operations. He earned his reputation with the 9th Infantry in the Battle of Kasserine Pass and maintained a well-trained and disciplined division in England. Eddy, who would become one of VII Corps' most reliable commanders, earned Collins' admiration through consistency and shared vision. Their shared vision on the location of forward observers in relation to artillery guns would result in 9th Infantry Division becoming one of the first to adopt the new practice of placing forward observers with the Infantry to call for fire in support of infantry maneuver.²⁹

The Corps' two airborne divisions, 101st and 82nd Airborne, were staged near the 52nd Wing, in Grantham, England in May 1944. The 101st and 82nd Airborne Divisions developed a close command relationship with transport aviation because of the divisions' dependency on aircraft for transportation. MG Matthew Ridgway was the Commander of

²⁹ Sperow, "Interview with General J. Lawton Collins."

the 82nd Airborne Division and proved himself to be a capable commander for one of the US Army's most elite units. In January 1944, however, the combat effectiveness of the 82nd was severely reduced because of its recent return from combat in the Mediterranean Theater of Operations.³⁰ The division had arrived in England with only three of its four regiments, because the 504th Parachute Infantry Regiment could not fully reconstitute until May of 1944.³¹ Originally, the 82nd Airborne Division was scheduled to conduct its airborne day and night certification training in March 1944, but the 504 Parachute Infantry Regiment's absence caused the 82nd to delay certification training until May 1944.³² The 82nd Airborne Division would not have its entire division ready until VII Corps and IX Troop Carrier Command's combined Exercise Eagle. That meant the 82nd had only one training event to prepare for Operation Overlord. This limited the 82nd's ability to fully integrate for training until the last minute, thereby increasing the risk during execution of the operation.

MG Maxwell Taylor, Commander of the 101st Airborne Division, replaced MG William C. Lee as commander after Lee died of an unexpected heart attack. Taylor became the top pick to succeed Lee because he was Lee's deputy and possessed experience in the Mediterranean Theater of Operations where he served as the 82nd Airborne Division Field Artillery Commander. The 101st Airborne Division arrived in

³⁰ Carl Shilleto, *Battle Ground Europe Utah Beach St Mere Eglise* (Barnsley, South Yorkshire: Leo Cooper, 2001), 18.

³¹ John C. Warren, *Airborne Operations in World War II, European Theater* (Maxwell Air Force Base, AL: Air University Historical Division, 1956), 22.

³² Ibid., 23.
England in September, 1944 and remained untested while the 82nd had come of age in the Mediterranean Theater of Operation. Soldiers in the 101st spent long days conducting airborne operations with the 52nd Airwing in Ireland before moving to England.³³ The 101st Airborne Division remained integrated throughout the course of airborne training and trained all of its regiments before Exercise Eagle. The 101st consisted of three parachute regiments (502nd, 506th, and 501st) and the 327th Glider Regiment. By the time the 101st arrived in England, the division had certified every paratrooper with the required seven airborne jumps for day and night operations. Despite the 101st's preparation, Taylor still confronted the challenge of ensuring integration of the 327th Glider Regiment into the division's plan.

The VII Corps' final two commanders were BG Jay Ward MacKelvie and MG Ira T. Wyche. MacKelvie—a field artilleryman by trade—was Commander of the 90th Infantry Division. MacKelvie took over the division in England after working on Marshall's staff. His tenure was short-lived, however, with MacKelvie fired on the third day of D-Day due to the 90th Infantry Division's poor performance during Operation Overlord. Wyche commanded the 79th Infantry Division, a division attached to V Corps during training and Mounting Operations while in England. The Overlord plan called for the 79th to be attached to VII Corps on D+8. To achieve unity of command for Operation Overlord, Collins visited every command post and observed training of all the divisions attached to VII Corps.³⁴

³³ Warren, Airborne Operation In World War II, European Theater, 21.

³⁴ Collins, *Lighting Joe: An Autobiography*, 187.

Synchronization

MG Collins understood the importance of synchronizing operations toward landing on Utah Beach and of taking the fight to the Germans. Using his experience as 25th Infantry Division Commander in the Pacific Theater, Collins had an immediate impact on VII Corps upon taking command. He spent considerable time during training to ensure VII Corps became a synchronized organization. More specifically, MG Collins synchronized efforts within 1st Army in support of VII Corps' integration during the planning phase for Operation Overlord. To further facilitate VII Corps' integration efforts and to ensure it was well resourced, Collins leveraged relationships built with Bradley and 1st Army staff members. This allowed him to prepare for the amphibious assault on Utah Beach in the summer of 1944. Bradley gave Collins his mission for Overlord, granting him full autonomy to plan and prepare for D-Day.

Three major challenges, as identified by Collins, impeded VII Corps' planning and training for Operation Overlord. The first was an internal challenge, which required synchronization between the Corps staff and divisions' staffs, and the assessment of subordinate divisions to ensure their understanding of the Overlord plan. The second challenge was the location of the VII Corps' Headquarters in relation to division training areas and Task Force V, the naval landing craft fleet that would facilitate the amphibious assault during Operation Overlord. The final challenge lies in synchronizing VII Corps to execute both phases of Operation Overlord.

Naval landing craft allocations remained unclear to Collins and his staff at the beginning of his tenure as VII Corps Commander. Uncertainty surrounding landing craft allocation and prioritization existed across 1st Army in the early planning stages. It hampered staff estimations and planning for assets and flow that would be essential on D-Day and beyond. Similarly, VII Corps' confronted challenges with its subordinate divisions, whose locations were spread across Central and Western England. Divisions established their own training areas prior to the Corps' combined Exercise Tiger. This resulted in the 4th Infantry Division and follow-on forces for the D-Day assault being marshalled near Devonshire and Hampshire, England, while amphibious training for VII Corps was scheduled to take place in Bristol and Slapton Sands.

Collins' first days in command involved traveling to division headquarters, spending time with commanders, and observing preparations and training of newly integrated soldiers and equipment. Collins spent long hours during his visits assessing division training events to determine his soldiers' preparation to enter Europe, as well as to identify any challenges facing the team that required his intervention. For example, while visiting 4th Infantry Division in March 1944, Collins discovered a major risk to the Overlord mission while observing large-scale amphibious maneuvers. Dual drive amphibious tanks (also known as DD tanks) disembarked from Landing Craft Tanks far from shore. As the tanks moved to the shore, sea water crested just below the brim of the waterproof canvas collar. Had the sea water poured over the top of the canvas collar, the tank would have lost its amphibious ability and become submerged beneath the sea likely drowning the crew.³⁵ Upon conclusion of the training exercise, Collins instructed the Navy Landing Craft Tanks to disembark Dual Drive Tanks closer to the shore to ensure crew safety and survivability during the impending D-Day landings. Collins' mandate to

³⁵ Sperow, "Interview with General J. Lawton Collins."

change Naval tactics resulted in better survivability for the Dual Drive Tanks and quicker integration once combat power came ashore to the assembly area.

Due to the distance between his divisional marshalling and training areas, Collins spent hours each day driving to division headquarters to ensure training and planning aligned with his strategy for VII Corps' execution of Operation Overlord. The Corps' area of responsibility consisted of towns and villages near central and western England. Division marshalling area sizes and proximity to towns and villages made JRSOI operations difficult to conceal from the civilian populations, who could desynchronize the operations by sharing build-up intelligence with the enemy. VII Corps reduced intelligence threats by creating distance between division marshalling areas to prevent German surveillance of division JRSOI operations and troop build-up. Each amphibious division established secure training areas in division marshalling areas to prepare for Operation Overlord.³⁶

³⁶ United States Army, VII Corps, *Mission Accomplished*.



Figure 1. VII Corps Division Headquarter Locations Prior to Operation Overlord

Source: United States Army, VII Corps, Mission Accomplished: The Story of the Campaigns of the VII Corps, United States Army in the War Againsth Germany, 1944-45 (Leipzig, Germany: J. J. Weber, 1945), 8-9.

The distance between division marshalling areas limited the amount of face-toface interaction VII Corps staff maintained with other divisions to synchronize their planning efforts. Collins believed the need for operational security necessitated the added burden distance placed upon him and his staff. Collins' staff overcame synchronization challenges by issuing daily operations memoranda to coordinate efforts within the Corps for information not discussed in the Overlord base operations order. Collins provided commander's planning guidance to Corps staff, who disseminated guidance through memoranda as a form of communication between VII Corps and division staffs.



Figure 2. Marshalling Area Within Corps Security Zone

Source: Roland G. Ruppenthal, Logistical Support of the Armies, Volume 1: May 1941-September 1944 (Washington, DC: Center of Military History, 1995), 372.

Operations memoranda served as the primary synchronization tool to coordinate VII Corps' efforts, as JRSOI operations planning and training for Operation Overlord continued. The memoranda served the secondary role of ensuring division integration into the Corps' planning efforts throughout the planning stage. Finally, operations memoranda served the dual purpose of instructing division staffs on ways to coordinate with Naval Officers and the Transportation Corps on the manner in which to load equipment and vehicles onto landing craft.³⁷

³⁷ Headquarters, VII Corps, *OPS Memo 6* (Washington, DC: War Department, 1944), 6.

Recognizing the security risk associated with civilians within the division marshalling areas and the potential for information pertaining to planning and training for Overlord to fall into German hands, VII Corps issued memoranda mitigating the risk. A security memorandum, issued on 21 May 1944, addressed briefing standards within VII Corps and provided instructions on how battalions should conduct briefings to ensure units understood the Overlord mission. The memorandum directed units to disseminate maps and briefings for Overlord to subordinates while ensuring civilians were not present within the marshalling area during briefings.³⁸

While addressing these issues, Collins simultaneously sought to increase the efficiency of VII Corps' headquarters in working with the Navy. Collins did this by moving the Corps' headquarters from Devonshire to Plymouth, England, the location of Task Force V Commander, Rear Admiral Moon's, headquarters. Moon and Collins sought to achieve synergy between the two staffs in planning for the 4th Infantry Division amphibious assault in Operation Overlord.³⁹ Together, VII Corps and Task Force V staffs developed the Corps' training exercises, Tiger and Eagle, which served as full dress rehearsal for the D-Day landings.

Collins' recognition of the poor placement of VII Corps' headquarters, and his decision to relocate it, also facilitated smoother integration and synchronization planning efforts within 1st Army. The relocation of the Corps' headquarters placed Collins farther away from the airborne divisions. Despite this, the move afforded Collins better

³⁸ Headquarters, VII Corps, *OPS Memo 6* (Washington, DC: War Department, 1944), 7.

³⁹ Collins, *Lighting Joe: An Autobiography*, 18.

command and control of the majority of VII Corps. He mitigated the planning risk by integrating his staff into the 52nd Wing and IX Troop Carrier Command to ensure integration of the 101st and 82nd Airborne Divisions into VII Corps' plan for Overlord.

As Collins and VII Corps worked to synchronize integration efforts with 1st Army, a central question remained unanswered by Corps staff: How many and what type of landing craft would be available to VII Corps. The Corps did not receive D-Day assault landing craft allocations until May 1944. The lack of landing craft restricted VII Corps' ability to execute force integration and limited options available to Collins for the forcible entry phase of Overlord. Limited landing craft would further prevent VII Corps from flowing combat power and logistic support onto Utah Beach after 4th Infantry Division secured the location.

Although Collins and his staff received pressure to submit VII Corps' landing craft requirements to 1st Army and 21st Group staffs, they were unable to project exact requirements so far in advance of D-Day. That notwithstanding, the requirement remained and allocations needed to be submitted in March 1944. At the time of the request, VII Corps was not at full strength and relied upon outside factors to ensure accuracy of combat power. More specifically, VII Corps' staff relied upon COSSAC to provide force projection estimates. Unfortunately, COSSAC was not able to provide the Corps staff a complete picture of total combat strength until mid-May 1944. Collins instructed Colonel Peter C. Bullard, G-3, to request the maximum amount of landing craft in accordance with his plan to fight VII Corps.⁴⁰ Bullard and his staff leveraged

⁴⁰ Sperow, "Interview with General J. Lawton Collins," 159.

relationships within 1st Army to coordinate landing craft. Working through the 1st Army engineer, they assigned the maximum amount of landing craft to VII Corps without presenting force projection estimates until late spring of 1944.⁴¹ The Corps' amphibious landing craft plan received approval from 1st Army prior to execution of Overlord despite the absence of accurate force projection estimates. The Corps received over 300 landing crafts to execute the operation (see Appendix A).⁴² Collins and staff circumvented 1st Army and 21st Group staffs' ineffective processes to ensure receipt of the landing craft necessary to integrate VII Corps.

⁴¹ Sperow, "Interview with General J. Lawton Collins," 159.

⁴² Headquarter VII Corps, *VII Corps Landing Craft Plan for Operation Overlord and Neptune*, Eisenhower Research Library, Abilene, KS, 1944. The illustration demonstrates the planned waves of landing crafts broken down by unit and planned time of D-Day arrival. "T" Force depicts the Airborne assault force. "U" shown in three waves for the amphibious landing force. The bottom left of the illustration has analysis of landing needed to execute Operation Overlord for VII Corps.



Figure 3. VII Corps' Amphibious—Airborne Movement Table

Source: Headquarter VII Corps, VII Corps Landing Craft Plan for Operation Overlord and Neptune, Eisenhower Research Library, Abilene, KS, 1944.

On 7 April 1944, Collins briefed the landing plan for first phase of Operation Overlord in St. Paul's School in London.⁴³ The 21st Army Commander, GEN Montgomery, chaired the rehearsal exercise which required Corps commanders and others to brief him on their organization's battle plans. Contrary to his counterparts, who used index cards to brief VII Corps' plans for the Overlord Operation, Collins utilized the briefing style he learned in infantry school, which consisted of briefing from a map

⁴³ Collins, *Lighting Joe: An Autobiography*, 192.

without the benefit of notes.⁴⁴ Cherbourg, which elicited the attention of Gen Montgomery, played a key role in Collins' success on the European Continent after D-Day.

The VII Corps planned to build combat power beginning D+1 and to continue building until 1st Army assumed port operation as the Corps attacked inland. After the combined arms rehearsal, VII Corps executed two simulated training exercises—Tiger and Eagle—to finalize integration of combat power in large scale maneuvers. Collins made an investment in people from the outset as a means of ensuring strong bonds among members of his team. His efforts to synchronize at all levels, in preparation for Operation Overlord, is evidenced by this investment.

<u>Balance</u>

Exercises Tiger and Eagle stressed VII Corps' systems of integration. The exercises were the Corps' last change to train its divisions before executing Mounting Operations. Collins and his staff learned valuable lessons in maintaining balance while trying to integrate VII Corps. On 28 April 1944, VII Corps tested the integration of its divisions with Exercise Tiger, the large-scale amphibious rehearsal for the forcible entry during the first phase of Operation Overlord. The training exercise took place in Slapton Sands, England, and drew the attention of LTG Bradley who was in attendance for the training event.⁴⁵ Exercise Tiger aimed to fine tune the preparation of each division conducted in their individual training areas. The Corps used the Exercise Tiger landing

⁴⁴ Collins, *Lighting Joe: An Autobiography*, 192.

⁴⁵ Ibid., 189.

table as proof of concept for Utah Beach, designating Force "U" as 4th Infantry Division and trail units and Force "T" as Airborne units (see Appendix A). Force U would become the Corps' designation during the Utah Beach assault on D-Day. Exercise Tiger provided VII Corps the opportunity to integrate Naval fires and amphibious landings into the training event and served to simulate conditions the Corps would face during D-Day.

Logistics also played a large role in the training event. Once the assault force moved inland, they left a marshalling party to establish the marshalling area. The Corps practiced loading and off-loading LST on the beaches of Slapton Sands. Although the Corps had yet to receive all required LST, the exercise provided good data to calculate the unloading times of the landing craft. Overall, the exercise succeeded in building confidence in the execution of forcible entry and integration of the Corps' combat forces. During the exercise, VII Corps lost two LST to nine German E boats.⁴⁶ The E boats sank one LST and damaged another causing 700 casualties.⁴⁷ The German attack momentarily reduced VII Corps' ability to conduct amphibious landings due to the LST shortage with 1st Army. The Corps had recovered from the loss by May 1944, in time for D-Day. Following Exercise Tiger, VII Corps implemented increased security around marshalling areas and prohibited civilians from observing training. Attacks by German airplanes led to renewed efforts within VII Corps to secure and camouflage marshalling areas, as troops waited in lockdown until D-Day.

⁴⁶ Gordon A. Harrison, *Cross-Channel Attack (ETO)* (Washington, DC: Center of Military History, 1993), 270.

⁴⁷ Ibid.

Exercise Eagle—a night exercise that took place on 11 and 12 May 1941 demonstrated both strength and weakness within the Corps divisions. While the exercise proved successful for the 101st Airborne Division, it highlighted areas of improvement for the 82nd Airborne Division. Exercise Eagle took place in Berkshire because the terrain resembled the terrain in Normandy.⁴⁸ The 101st, flown by 53rd and 50th wings, consisted of 432 planes and 10 serials.⁴⁹ The training paid dividends to the overall success of the exercise, with all but one serial making it into the drop zone. This resulted in a successful training event for the division.

The same success was not witnessed by the 82nd Airborne Division due to an ongoing coordination issue between the air crews. During Exercise Eagle, weather cancellations persisted and changes in air crews throughout the exercise caused the lesser trained 82nd to update the Airborne Assault Plan. New paratroopers arrived in the division just before the exercise and required qualification jumps right up to D-Day. Additionally, on the night of the Exercise Eagle, 442nd group flew 45 sorties with a mere 16 sorties exiting the plane and only a third of the paratroopers landing in their intended drop zone; many paratroopers landed more than 10 miles away.⁵⁰ The lack of gliders within the 82nd only enabled two sorties, a small percentage of the required number, to execute Operation Overlord.⁵¹ Uncertainties surrounding coordination were clearly

⁴⁸ Collins, *Lighting Joe: An Autobiography*, 189.

⁴⁹ Warren, Airborne Operation In World War II, European Theater, 26.

⁵⁰ Ibid.

⁵¹ Ibid.

visible during the 82nd's portion of the exercise, leading the division to reorganize to meet mission requirements for Overlord and to fight through internal combat power shortages. The after-action review blamed the lack of coordination on the 442nd Wing's inexperience with airborne operations.

Exercise Eagle proved vital in highlighting training gaps within the airborne plan for Operation Overlord,⁵² while both Exercises Tiger and Eagle offered important lessons for VII Corps to understand how to balance planning efforts when integrating forces. VII Corps showed the capacity to analyze the many variables required to ensure its capacity to create combat power and to integrate operations. Systems tests during the exercises allowed VII Corps to adjust the Overlord plan and to fill gaps in personnel or equipment to mitigate risk before actually executing Operation Overlord.

Conclusion

The VII Corps evolved JRSOI operations to meet Collins' vision of how it prepared for Operation Overlord. Although coordination and integration of subordinate formations were problematic until mid-May 1944, which left a small margin for error for preparedness for Overlord, Collins' deft handling of the challenges facing VII Corps JRSOI proved essential to its effective preparations and ultimate performance on the beach at Normandy. Collins improved Corps' integration of forces in three areas: (1) Command relationships; (2) staff synchronization, and (3) training. While in England, VII Corps positioned itself to execute a successful forcible entry onto the beach of Normandy.

⁵² Warren, Airborne Operation In World War II, European Theater, 27.

Collins' focus on unity of command was an essential component of his successful leadership of VII Corps during its JRSOI process. His understanding of personal and professional relationships as part of unity of command made him highly effective while in England. Collins leveraged personal relationships throughout the entire island to ensure VII Corps was integrated down to the soldier level, as well as latterly with other Corps and with 1st Army. The combined trust and confidence of GEN Montgomery and LTG Bradley in Collins' ability facilitated access to resources and added to the effort made within VII Corps' staff channels. The Corps' staff leveraged Collins' access to senior commanders, bypassing inefficient systems to help divisions integrate in a more efficient manner. Collins' focus on building relationships at every level helped to build the trust he and his subordinate leaders would need to execute Operation Overlord. Prior to D-Day, Collins solidified the confidence of his superiors, subordinates, and peers within other military services by building a team of teams. Drawing on his time with Rear Admiral Moon, Collins' approach became the foundation of the Army's reliance on Naval support in the days following D-Day.

The VII Corps staff conformed to Collins' vision for the Corps and asserted themselves in their roles in days leading up to the execution of Operation Overlord. The staff understood the risk associated with the impending mission and worked to mitigate the risk to a level Collins found tolerable. Colonel McKee ran the staff and headquarters while Collins commanded the Corps. The arrangement reduced organizational friction within VII Corps and produced better integrated formations because Collins could influence division training and preparation for Operation Overlord. Memoranda and operations orders synchronized the Corps and division staffs turning VII Corps into a well-oiled machine. In the days leading up to execution of D-Day, the staff felt it fully understood the logistics picture within England and what it would take to execute Operation Overlord. Staff communication between Task Force V and IX Troop Carrier Command improved to the point that each command established liaison officers within the other's headquarters. These efforts produced the unity of command, the synchronization of planning, training, and logistical operations that were vital to VII Corps' readiness when Eisenhower made the final decision to execute Operation Overlord.

Although VII Corps' training regimen resulted in more casualties than the Corps' experienced on D-Day itself, its long-term success was ensured as a function of its preparation. In fact, VII Corps' approach to its preparations and Collins' steady hand leading his Corps though the JRSOI process likely saved lives as VII Corps effectively generated combat power on the beach at Normandy. The decision to move forward observers into infantry units reduced uncertainty between maneuver commanders and artillery. Moreover, the ability to call for fire within maneuver units was a major innovation in the integration of artillery and infantry. This practice, which remains in present day maneuver, provides commanders the ability to rapidly call for fire to suppress known enemy locations more effectively. VII Corps' proof of concept during Exercise Tiger provided infantry additional mobility while executing Operation Overlord. Collins was instrumental in integrating maneuver and artillery forces' ability to support one another through call for fire. The decision increased overall lethality of maneuver forces and ultimately increased survivability of the soldiers of VII Corps. Likewise, Collins' decision to move landing craft disembarkation closer to shore prevented the potential

unnecessary loss of Dual Drive Tanks. The Corps would have the mobile combat power it needed once VII Corps was ashore and when called upon during execution of Overlord.

One critique of VII Corps, and Collins, in particular, is his lack of involvement in airborne planning. Collins delegated authority to IX Troop Carrier Command, a choice that could have been disastrous on D-Day. Collins' lack of experience with airborne operations led to friction not seen in other areas of VII Corps' integration. However, his involvement increased after the 82nd Airborne Division's poor execution of Exercise Eagle and his more focused engagement with MG Ridgway and MG Taylor. VII Corps overcame the challenges of integration and ultimately learned to adapt to the environment presented to meet Collins' desired vision of integration of VII Corps. Collins began his focus of integration with the staff and divisions, then built mutually supporting networks within 1st Army and 21st Army building synergy at each level. He built teams within teams to ensure VII Corps' integration into 1st Army and then looked horizontally to ensure he established connections with the Navy and the Army Air Service. Ultimately, VII Corps' successful preparations and integration during its time in England were extraordinary and directly reflected Collins's experience and intuition for deftly guiding a unit through the steps of JRSOI. Equally important was Collins' understanding of the importance of the commander's role throughout JRSOI. He exercised an exceptional fluency in the intricacies of JRSOI and successfully integrated his forces. Collins' skills in this regard was demonstrated when the first paratrooper jumped into Normandy and the landing craft dropped their ramps on Utah Beach on

6 June 1944.

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CHAPTER 3

MOUNTING OPERATIONS

Every port from Portsmouth to Plymouth was jam-packed with landing craft, and every road for miles back of the ports in staging area—nicknamed "sausages" by the troop, from their appearance on maps and overlays—loaded to the hedgerows with troops, guns, tanks, jeeps, and trucks.

> — General J. Lawton Collins, Lighting Joe: An Autobiography

Introduction

Collins built a cohesive team capable of integrating subordinate divisions into the Overlord plan. Exercise Eagle provided Collins with the experience necessary to effectively integrate two airborne divisions—82nd and 101st—into VII Corps, which remained marshalled near IX Troop Carrier Command.⁵³ The 82nd and 101st Airborne Divisions did not participate in Mounting Operations with the Corps in England after the conclusion of Exercise Eagle. Mounting Operations were the Allied Forces' efforts to move troops, equipment, and supplies to ports in England and to load them onto Naval transport ships in preparation for the amphibious assault in Europe.⁵⁴ The two airborne divisions remained marshalled in central England near IX Carrier Command while the rest of VII Corps conducted Mounting Operations to the south. Exercises Tiger and Eagle provided the Corps with valuable lessons for the Overlord plan, and VII Corps

⁵³ Warren, Airborne Operation In World War II, European Theater, 28.

⁵⁴ The General Board, *Mounting The Operation "Overlord"* (Washington, DC: Chief of Military History, 1945), 4.

immediately applied lessons learned to Mounting Operations during the final preparations and execution of Operation Overlord.

Collins continued to create an atmosphere that allowed his staff to anticipate his intent to meet the requirements expected of VII Corps. The staff's synergy placed the Corps in position to quickly transition into Mounting Operations and to prepare for the upcoming invasion. VII Corps' relationship with the 1st Army staff provided the Corps with priority allocation of landing crafts, which facilitated landing forces and Naval loading support, while 1st Army and VII Corps conducted Mounting Operations at the end of Exercises Tiger and Eagle. 1st Army perceived the German coastal defense and mobile reserve to be heavier in VII Corps' sector, resulting in the Corps' receipt of priority support during the first phase of Operation Overlord.

Collins maintained a limited role in Mounting Operations after initial planning due to the relocation of the Corps' headquarters to Plymouth. The staff and movement agencies coordinated and executed Mounting Operations through their commander's intent. One could argue much of the confusion experienced by the Corps during Mounting Operations was directly related to Collins' absence throughout this period. Collins spent much of his time during VII Corps' Mounting Operations preparing with Rear Admiral Moon and making final plans to coordinate naval gun fire in support of the amphibious assault on Utah Beach.⁵⁵ He understood the mental and physical toll Operation Overlord would have on the Corps and focused his energy on mitigating the risk associated with conducting a forcible entry. He assumed risk by allowing the Corps'

⁵⁵ Collins, Lighting Joe: An Autobiography, 194.

staff to manage friction and sought ways to occupy his time as tensions rose during the divisions' movement through mounting areas. Mounting Operations were intricate and required a large amount of intellectual and physical capital to execute. The VII Corps staff needed to move every division from the northern part of England down to the southeast following Exercise Tiger. After completion of both exercises, movement to the mounting areas began. The island was separated into mounting districts that served as administrative garrisons which assisted the Corps' headquarters with mounting procedures.

The Corps' headquarters remained near Plymouth, England, in XIX District, and was commanded by Colonel Theodore Wyman, Jr. Colonel Wyman assisted the Corps in Mounting Operations for XIX District in the south-central region near Breamore and Hants, (see figure 4). The remainder of the Corps relocated near the headquarters, next to TF 56 in XIX District. XIX District provided administrative support for the Corps, ensuring billeting and life support for troops during Mounting Operations. Wyman worked for COSSAC yet served as a permanent fixture for Mounting Operations, supporting the Corps and everyone in the district.

The Corps' staff coordinated with several movement organizations throughout various stages of Mounting Operations: Buildup Control Organization's (BUCO) Control BUCO (West), and Little BUCO. The other movement agencies consisted of Movement Control (MOVCO) and Turn-Round Control (TURNCO). All parties worked to move massive amounts of equipment and large numbers of soldiers into mounting areas. The entities coordinated, synchronized, and oversaw the movement of troops and equipment for the SHAEF Commander and the Joint-Commanders-in-Chief. BUCO, MOVCO, and TURNCO managed strategic movement of troops' equipment and supplies. BUCO (West) and Little BUCO served dual roles:

- They supported the movement of troops, equipment, and supplies for US Forces; and
- 2. They coordinated US movement requirements with theater level movement agencies.

Early on, Allied commanders and Collins understood that loading soldiers and equipment in concentration areas made easy targets for the Luftwaffe and posed the greatest risk, to the Overlord operation. Before execution of Phase One of Operation Overlord, VII Corps locked all units down in concentration areas in preparation for the D-Day assault and transition into Mounting Operations. The slow, methodical movement of the divisions from marshalling areas to concentration areas presented a large signature of convoys fully equipped to execute large scale mounting. The Corps camouflaged its location and secured all entry and exit points. Additional security was provided by the British, who conducted deception operations against the Germans. One such operation created by the British was the Phantom Army, designed to create the illusion that Allied Forces were marshalling to attack Pas de Calais as the Germans expected. This deception plan "led" the Germans to a conclusion that focused attention away from England, thereby allowing VII Corps and the rest of the D-Day Force to hide in plain sight. VII Corps secured the mounting areas with 5th Armored Division, which provided a large security force to ensure the area remained undiscovered until D-Day.

The 5th Armored Division's security not only consisted of patrolling in and outside of the mounting areas, it also required they be responsible for interacting with local civilians to ensure the civilian population did not compromise Mounting Operations. Once Mounting Operations began, 5th Armor Division built security check points around mounting areas to control traffic and to secure mounting locations. The Armored Division assumed responsibility, assisting the theater Transportation Corps in transporting troops from the marshalling area to the concentration area, and moved fully assembled units to the embarkation area ready for travel to Utah Beach.⁵⁶ The embarkation area stood as the last location of integration, which arranged fully formed combat and support formations loaded on landing crafts. The order of march started with the assault force and ended with forces arriving on Utah Beach on D+10.

The Corps' Overlord plan contained meticulous details on the loading of landing craft; based on the priority of equipment and personnel once the Corps hit Utah Beach. Allied Forces developed the amphibious assaults capacity in both the Pacific and Mediterranean Theater of Operations. The divisions which were not a part of the initial invasion assumed the responsibility of moving classes of supply such as oil, fuel, and medical equipment to landing craft for departure to Utah Beach.⁵⁷ Troops executed the tedious plan of loading landing crafts in order of their anticipated landing on Utah Beach, while also ensuring equipment and supplies received proper markings to reach the intended units upon arrival at their destination across the English Channel. Many soldiers spent hours a day waterproofing equipment, tanks, and vehicles to confirm everything leaving the embarkation area was serviceable and ready for combat operations as soon as

⁵⁶ The General Board, *Mounting The Operation "Overlord"*, 5.

⁵⁷ Ibid.

the landing craft was offloaded. Waterproofing was especially important to troops for amphibious operations because failure of equipment could prove fatal during the landing on Utah Beach.



Figure 4. Corps Districts and D-Day Mounting Positions

Source: Roland G. Ruppenthal, Logistical Support of the Armies, Volume 1: May 1941-September 1944 (Washington, DC: Center of Military History, 1995), 619.

Unity of Command

Once equipment and personnel were prepared to move from the marshalling area,

they entered the embarkation area and were loaded on landing craft for departure.

VII Corps faced the difficult challenge of coordinating movement from each holding

area. The staff required communication in each movement node, as well as in each

marshalling, mounting and embarkation area. During the execution of Mounting

Operations, VII Corps worked tirelessly to integrate forces by coordinating with the BUCO, a joint and multinational staff that coordinated between movement areas and the corps' staffs. BUCO control consisted of appointees representing British 21st Army Group, a US zone staff and BUCO (West).⁵⁸ The appointed BUCO (West) chairman represented the interest of 1st Army, and IX Air Force, along with communication zones.⁵⁹ BUCO did not fall under the direct command of SHAEF but instead was placed under the control of tactical commanders of the Joint-Commanders-in-Chief. The lack of a clearly defined and centralized chain of command limited the organization's ability to effectively and efficiently allocate landing crafts to the tactical headquarters. BUCO (West) acted as a subsidiary of BUCO Control and solely served the needs of the US and the movement of personnel and equipment in a less than ideal subordinate reporting agency relationship.

The BUCO (West) Headquarters consisted of a total of three officers—a chairman, deputy chairman, and an executive assistant—two of whom were enlisted. It functioned with a laughably small staff of 16 officers and 32 soldiers. The chairman supplemented the staff with liaisons from 1st Army, 3rd Army, IX Airforce, and communications zones, adding an additional 16 officers and 22 enlisted soldiers.⁶⁰ The organization acted as a conduit for information pertaining to allocation and prioritization of landing craft for 1st Army and all other US Forces. Liaisons assigned to BUCO (West)

⁵⁸ The General Board, *Controling of the Build-Up of Troop in a Crosschannel Amphibus Operation Study 22* (Washington, DC: Chief of Military History, 1945), 11.

⁵⁹ Ibid., 7.

⁶⁰ Ibid., 12.

supplemented the staff, but their primary objective was to gain information for the command represented within BUCO (West) and to provide updates on Mounting Operations directly to their commands. Liaisons also served as administrators for processing orders for the command to enable units to move to the correct location within the mounting pipeline, ensuring lodging areas could accommodate soldiers preparing to deploy to Europe.⁶¹ During Phase Two of Overlord, BUCO (West) planned to send a small detachment named "Little BUCO" to assist VII Corps and the Navy in organizing and facilitating the build-up of combat power on Utah Beach. Little BUCO consisted of a small contingent of G-4 logistics officers that directly supported 1st Army. BUCO (West) lacked the necessary command structure to make demands on any of the parties involved. However, they overcame the lack of legal authority by using relational influence and by working through the other agencies, such as MOVCO and TRUCO, to meet 1st Army and VII Corps commanders' intent. In so doing, BUCO (West) ensured landing craft were distributed appropriately and prioritized to meet mission requirements.

The SHAEF initially established BUCO to oversee troop and equipment movement tables, while managing all three mounting areas. With the command structure continually changing, SHAEF made the decision to strip the movement portion away from BUCO in lieu of sole responsibility for resourcing the three mounting areas to more effectively manage the large-scale movement of equipment and troops. BUCO was later separated to manage mounting areas and to represent tactical commanders in requests for landing craft allocations.

⁶¹ The General Board, *Controling of the Build-Up of Troop in a Crosschannel Amphibus Operation Study 22*, 14.

The SHAEF established MOVCO—a separate organization—to conduct US movement operations, forecast force loading requirements, and manage movement tables. MOVCO answered directly to the SHAEF transportation chief but relied heavily upon BUCO (West) to meet force loading forecasting needs from tactical commanders in the form of morning calls and telegrams requesting additional landing craft.⁶² BUCO (West) operated within MOVCO's system as an equal agency to ensure troops and equipment arrived according to the Operation Overlord Plan. MOVCO worked in tandem with the Navy's movement agency, TURNCO, which was responsible for resourcing the Army with landing craft. TURNCO acted as the Navy commander's liaison at BUCO (West), which calculated ship allocations and estimated readiness of vessels after they embarked for Europe. TURNCO was responsible for providing 1st Army and VII Corps with the Naval perspective on resourcing and movement problems pertaining to landing crafts. The organization experienced service limitations that prevented Army units from receiving proper allocations of landing crafts. TURNCO used information and decisions made at MOVCO and BUCO (West) to build movement tables and to provide the Navy capacity to give the two agencies technical understanding of the health of the naval fleet and how it could best support Operation Overlord.⁶³

The MOVCO and TURNCO's function was to reduce friction during Mounting Operations at all levels of command. However, the command structure did not clearly state unit priorities, resulting in delays in VII Corps' allocation of landing craft due to

⁶² The General Board, *Controling of the Build-Up of Troop in a Crosschannel Amphibus Operation Study 22*, 11.

⁶³ Ibid.

shifting priorities between SHAEF and tactical commanders. VII Corps' staff worked within the mounting framework established by 1st Army and the movement agencies, which served to further reduce friction within Mounting Operations, even as major failures of communications and ship priorities remained prevalent during VII Corps' attempt to mount forces for embarkation. The mounting area became more condensed as forces moved from the concentration areas to marshalling, and then on to the embarkation points.

Confusion associated with the lack of unity of command became problematic for VII Corps when engaged in Mounting Operations within the mounting areas. Movement priorities continued to change between the agencies and 1st Army, which remained outside the scope of VII Corps' control. The difficulty in projecting landing craft allocations after Exercise Tiger caused friction at all levels of command. The constant shift in priorities was poorly communicated and caused Mounting Operations in England to become disorganized.⁶⁴ VII Corps overcame the effects felt by the disorganization and slowly mounted troops and equipment, finding overall success in mounting both in large numbers.

⁶⁴ Ruppenthal, Logistical Support of the Armies, 365.



Figure 5. Landing Craft Loaded at Embarkation Point

Source: Roland G. Ruppenthal, Logistical Support of the Armies, Volume 1: May 1941-September 1944 (Washington, DC: Center of Military History, 1995), 372.

Synchronization

During the execution of Mounting Operations, VII Corps and movement agencies contended with a large security threat from German mid-range bombers. The Corps mitigated the risk of air bombardment by segregating Mounting Operations into three separate areas. The SHAEF strategic bombing campaign severely restricted the Germans' ability to conduct air raids in England, but the threat still persisted, as German bombers attempted ineffective bombings throughout Mounting Operations.

The VII Corps needed to remain vigilant and array mounting areas in a dispersed manner that would limit German bombers' effectiveness. Mounting Operations areas consisted of the concentration areas, marshalling areas, and embarkation points, which acted as holding areas for units preparing to depart for Utah Beach. Each mounting area served a unique purpose for Mounting Operations and required units to remain in small congested areas anywhere from 15 to 21 days before D-Day.⁶⁵ The mounting areas consisted of a concentration area, which functioned as long-term billeting for VII Corps' divisions waiting to move to the marshalling area. The marshalling area served as a short-term assembly area for mounting to gain accountability of troops and equipment before moving to the embarkation point. The embarkation area was the port locations of ships and landing craft, and the place where the Corps' divisions loaded in preparation for the forcible entry on Utah Beach.

The VII Corps began Mounting Operations in the concentration area in accordance with its movement table. Force U units moved to the concentration areas in mid-May 1944. The forces consisted of VII Corps' headquarters, elements of 4th Infantry Division and headquarters, elements of 9th Infantry Division, and elements of 90th Infantry Division. The forces arriving on Utah after D+3 remained in pre-Mounting Operation locations until the planned embarkation date. The full movement day and briefing seen in Appendix B provided the precise shipment, division ship dates, and briefing timelines. The Corps' movement tables separated divisions into individual movement tables by day. This approach would require divisions to reassemble in the days following D-Day on Utah Beach. Once VII Corps designated units for movement, all troopers and equipment moved to the marshalling area and separated according to landing

⁶⁵ The General Board, *Controling of the Build-Up of Troop in a Crosschannel Amphibus Operation Study 22*, 7.

craft. After troopers received their briefing, they walked to the embarkation point and awaited movement to Utah Beach.⁶⁶



Figure 6. Concept Sketch of Concentration, Marshalling, and Embarkation Areas

Source: The General Board, *Mounting the "Operation Overlord" Study 129* (Washington, DC: Chief of Military History, 1945), 32.

⁶⁶ The General Board, *Controling of the Build-Up of Troop in a Crosschannel Amphibus Operation Study 22*, 6.

The VII Corps Mounting Operations were carefully orchestrated events executed through a complex support of command headquarters. The Corps relied heavily upon external support to ensure all of its divisions moved through mounting areas.

The role of the Corps as a tactical headquarters was to receive movement and mounting support from BUCO (West), MOVECO, and TURNCO. While BUCO (West) primarily supported tactical commanders, to include VII Corps, MOVECO and TURNCO supported SHAEF command. BUCO (West) met its objective to ensure each division received support and space in each marshalling area. In contrast, SHAEF's support for Mounting Operation from MOVECO and TURNCO proved an inflexible, slow, and methodical operation. SHAEF provided MOVECO and TURNCO movement priorities that at times did not align with movement tables submitted by 1st Army and VII Corps. Each movement agency received movement tables from subordinate commands, along with the determined priorities set by each tactical commander. A major source of friction during Mounting Operations resulted when BUCO (West) failed to adjust movement tables to address the tactical situation on Utah Beach. Consequently, the Corps experienced some difficulty building combat power after the D-Day assault. 1st Army did not adjust the movement tables to support buildup efforts on the beach, nor did they have a good situational understanding of Buildup Operations on Utah Beach because movement control entities remained in England until D+14. Although Mounting Operations were disjointed at times, BUCO (West) acted as the spine of Mounting Operations by ensuring 1st Army received Navy vessels. In turn, 1st Army and VII Corps acted as the connective tissue that held the operations together. Collins used relationships established with 1st Army staff to coordinate efforts ensuring the approval and accurate

representation of VII Corps' movement table, while BUCO (West) advocated for 1st Army landing craft.

During Exercise Tiger, mounting areas for both 1st Army and VII Corps served as the location to divide units into landing craft rosters in the order of their arrival at Utah Beach. VII Corps' command relationship became confusing for subordinate divisions during Mounting Operations while in England. The divisions received operation memorandums from the Corps, while receiving mounting movement timelines from the Navy. The issuing of different instructions required VII Corps and divisions' staffs to work through the movement agencies of command to properly prepare soldiers and equipment for departure from England. The movement tables and landing craft distribution worked in theory, but friction emerged as VII Corps executed Mounting Operations and moved troops and equipment onto landing crafts. During Exercise Tiger, planners at the Corps and 1st Army level did not properly account for units loading onto landing crafts, causing further confusion when disembarking. During the exercise, loading and unloading procedures were briefed by chalk assigned to landing crafts prior to embarkation for the training event, making unloading and assembly after disembarkation difficult.⁶⁷ Upon completion of Exercise Tiger, VII Corps ensured complete formations received briefings prior to the embarkation point. This change resulted in the way VII Corps briefed embarkation procedures, which was published in

⁶⁷ The General Board, *Controling of the Build-Up of Troop in a Crosschannel Amphibus Operation Study 22*, 367.

Operations Memo 6, dated 21 May 1944.⁶⁸ The Memo detailing briefing procedures by units was based upon VII Corps' landing tables, which were designed to provide a timeline for arrival by unit. Units arriving on Utah after D+10 received briefings within the assembly area on Utah Beach (see Appendix B).

The VII Corps assigned an embarkation staff officer, accompanied by Navy movement control officers called "Hard Masters," to facilitate the movement of equipment from the marshalling area to the landing crafts at the embarkation point. This ensured the proper tracking of paperwork accounting for all vehicles and equipment that would provide in-transit visibility while moving to the embarkation ports.⁶⁹ VII Corps ordered the divisions to draw ammunition from the Corps' Ammunition Supply Point and to fill ammo supply trucks before embarkation.⁷⁰ The Corps planned to establish ammunition dumps on Utah Beach on D+1, which served as the Corps' ammunition supply point after D-Day. Copies of paperwork remained with the Corps' Embarkation Officer and the person loading the equipment onto the landing craft. Limited access to critical information among a handful of people further exacerbated the friction between units supporting the Corps after the Utah Beach landings.

Overall, VII Corps achieved synchronization by coordinating with the Navy and BUCO (West). The use of operations memos quickly synchronized divisions' efforts as

⁶⁸ Headquarter VII Corps, *OPNS Memo 6* (Washington, DC: War Department, May 1944).

⁶⁹ Headquarter VII Corps, *OPNS Memo 5* (Washington, DC: War Department, May 1944).

⁷⁰ Ibid., 1.

they loaded onto landing crafts in the embarkation area. Throughout the confusion between movement agencies, efforts were made to ensure the efficient movement of troops, equipment, and supplies by establishing a mounting officer to integrate with the Navy Hard Master. This effort helped to reduce friction during Mounting Operations.

Balance

The final areas in which VII Corps achieved balance involved:

1. divisions movement and support tasks by remaining divisions, and

2. limitations to mounting areas and external support.

The movement of divisions during Mounting Operations remained uncertain as movement tables set by 1st Army and BUCO (West) changed in priority almost daily. Division movement from concentration areas to marshalling areas was a short road march for many soldiers and vehicles; however, the movement congested roadways and constricted two-way traffic. VII Corps maintained balance by first moving Utah Beach forces to cramped embarkation areas where 4th Infantry Division, 1st Engineer Brigade, and other units remained aboard landing crafts waiting up to a month before moving to Europe.⁷¹ 9th Infantry, not scheduled to arrive on Utah until D+10, supported Force U at the marshalling and embarkation points. Units like 9th Infantry Division assisted sustainment units ensuring Force U received fully operable equipment and issuing new equipment for damaged or un-serviceable equipment when necessary. Many divisions within VII Corps entered the embarkation areas with more equipment than was able to fit

⁷¹ The General Board, *Controling of the Build-Up of Troop in a Crosschannel Amphibus Operation Study 22*, 365.

on landing crafts and were required to place the equipment in containers to be shipped at a later date. The absence of centralized control over supporting units and BUCO (West) made preparation and movement of excess equipment difficult. Most of the equipment made its way to replacement stock where it was issued to units moving into the embarkation point.⁷²

The use of tactical units to facilitate Mounting Operations for VII Corps' divisions added an additional layer of confusion to units conducting the operation. The Corps used 5th Armored Division to move units to embarkation areas, but this proved difficult due to significant changes in priority from VII Corps, 1st Army, and the movement agencies. This had cascading effects on units entering Mounting Operations, with more units facing friction as they navigated the different movement nodes. The lack of clear priorities regarding order of embarkation made Mounting Operations for sustainment units unusually complex and laborious, causing these units to suffer great difficulty loading landing crafts. During Exercise Tiger, sustainment units were required to support the training event, leaving little time for the units to prepare for Mounting Operations.⁷³ The role of sustainment units in supporting Exercise Tiger also reduced mounting timelines for most sustainment units executing Mounting Operations, only adding to the level of internal confusion. The lack of training and rehearsals by sustainment units created friction at the embarkation point; a situation further compounded once the units reached Utah Beach. As a direct result of these challenges,

⁷² The General Board, *Mounting The Operation "Overlord"*, 13.

⁷³ Ibid., 30.

many of the sustainment units arriving at embarkation points had no detailed understanding of how to execute Mounting Operations.

Inconsistencies in coordination between VII Corps and movement agencies created gaps in communication in the handling of equipment as units boarded landing crafts. To make matters worse, roles reversed as 5th Armored Division took on logistics functions within the mounting areas, although lacking the necessary technical understanding to efficiently support Mounting Operations and to move sustainment tactical units onto landing crafts. 5th Armored Division's role at the embarkation point was to facilitate the issue of new equipment and to load landing craft. Many sustainment units arrived with more equipment and supplies than permitted on landing craft in one movement.⁷⁴ 5th Armored Division issued excess equipment to newly arriving units at the embarkation point instead of loading it on landing crafts to arrive on Utah after D-Day.⁷⁵ Disassembled units at the embarkation point lost accountability of large amounts of equipment and loaded multiple landing crafts with supplies and the equipment of different units without a system to ensure reassembly. Evidence of poor communication at the embarkation point-between VII Corps' Embarkment Officer, BUCO (West), and the Navy Hard Master—could be witnessed in the failure of equipment to reach some tactical sustainment units on Utah Beach.

The Movement agencies provided little assistance in physically coordinating movement during Mounting Operations. BUCO (West) primarily served as just liaisons

⁷⁴ The General Board, *Mounting The Operation "Overlord"*, 12.

⁷⁵ Ibid., 13.
to the 1st Army staff to ensure movement priorities addressed in movement tables. VII Corps lacked access to the tactical movement support entity dedicated to movement of personnel and equipment. The Corps relied upon Army Services of Supply transportation and the Navy Hard Master to facilitate the movement of equipment and personnel to the embarkation point. Once the Army Services of Supply transportation trucks dropped Corps personnel and equipment at the embarkation point, the Hard Master assisted the Corps' quartermaster in loading landing craft, checking availability, and accounting for remaining available landing craft space.⁷⁶ Communication between movement agencies to ensure Force U executed pre-established movement table plans was effective, but communication broke down as the Corps moved to the embarkation point. Changes made to the D-Day tactical plan caused slow dissemination of information to units loading on landing craft at the embarkation point back to marshalling areas.

The decision by SHAEF to place supplies at different embarkation points to prevent German bombers from destroying fuel and ammunition carriers proved effective in minimizing the impact enemy bombers had on Mounting Operations. The decision, however, exposed communication gaps once VII Corps attempted to build combat power on Utah Beach. The gap in communication was visible when realizing the scope of Collins' responsibility did not include the bulk of logistics planning for Mounting Operations, yet the level of planning would inevitably affect his ability to generate combat power once the Corps began reassembling divisions on Utah Beach.

⁷⁶ Headquarter VII Corps, *OPNS Memo 5*, 2.



Figure 7. Vehicle Convoy Moving to Loading Embarkation Point

Source: Roland G. Ruppenthal, Logistical Support of the Armies, Volume 1: May 1941-September 1944 (Washington, DC: Center of Military History, 1995), 143.

Conclusion

The VII Corps' Mounting Operations involved approximately 34,000 troops and 3,500 vehicles for Force U before D-Day.⁷⁷ The lessons learned throughout Mounting Operations were not fully understood until the Corps reached Utah Beach. Much of the dysfunction the Corps endured remain out of its control. The magnitude of the operation required the facilitated efforts of multiple theater levels and 1st Army movement assets. Collins' hands-off approach to Mounting Operations in lieu of a focus on tactical problems of the amphibious landings permitted gaps in the Corps' understanding of problems confronted by units arriving after D-Day. The Corps established the correct

⁷⁷ Ruppenthal, *Logistical Support of the Armies*, 365.

procedures in emplacing movement control officers at embarkation points, yet relied too heavily upon movement agencies to facilitate the Mounting Operations.

Mounting Operations for VII Corps exposed deficiencies within the support relationship to the command between the Corps and the movement agencies. As previously noted, problems confronted by VII Corps were beyond its control, with 1st Army and SHAEF priorities for movement tables continuing to shift until a week before the execution of Operation Overlord. Each movement agency represented the interest of the supported command, placing VII Corps in the peculiar position of navigating a political landscape that impeded the success of its internal Mounting Operations. BUCO (West) and Services of Supply transportation supported 1st Army's priorities to ensure VII Corps overcame the friction associated with loading its divisions in preparation for D-Day by continuously adapting to support the mission as the operation evolved.

The SHAEF's decision to use multiple logistics ports in England was an effective measure to prevent German U Boat interception of supply ships. The decision, however, did not prove nearly as effective when planning the approach for synchronizing the buildup of supplies after the amphibious assault. SHAEF's continued changes to the support command structure created an atmosphere that lacked specificity in orders issued to tactical commanders, thereby allowing each command to develop disjointed movement priorities that failed to nest in the overall Mounting Operations Plan. The strategic decision made pertaining to landing craft allocations and arrival dates within SHAEF command headquarters directly affected Collins' ability to forecast landings of troops and equipment in accordance of the landing schedule published in England. Desynchronized

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landings had the unintended effect of slowing VII Corps' movement, which, in turn, delayed mission success for Operation Overlord.

The Corps' movement throughout Mounting Operations did not come without internal challenges. The Corps' use of organic divisions to support operations caused significant friction as Mounting Operations transitioned to building combat power on Utah Beach. 5th Armor Division did not possess the technical expertise to fully address the needs of the Corps to move through each mounting area. VII Corps attempted to address mounting requirements at the embarkation point by assigning embarkation officers, but it did little to reduce the complexity of marshalling massive quantities of troops and equipment. VII Corps' staff, along with Colonel Wayman, failed to fully integrate and to ease friction during Mounting Operations. These shortcomings impaired Collins' capacity to later build combat power on Utah Beach.

Collins' role in Mounting Operations ceased once VII Corps received its full allocation of landing craft. Collins' focus remained on Overlord and the integration of Naval pre-assault fires and integration of sister service assets into the Overlord beach landing plan. He trusted Corps staff and Wayman to ensure divisions moved through mounting points expeditiously. While assuming risk in delegating authority of Mounting Operations to the Staff and Communication Zone Commander, Collins' was able to achieve Bradley's intent of mounting a division plus enablers in less than 30 days. His lack of involvement in contingency planning for follow-on forces after the D-Day assault meant that it received no command emphasis and contributed to frustrating build-up efforts on Utah Beach. Similarly, the Corps' lack of integration of tactical sustainment units into Mounting Operations and the Overlord plan continued as a constant theme.

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This hampered VII Corps' ability to maintain momentum during offensive operations once on the European Continent. Sustainment support in the days following D-Day were critical to building combat power, yet proved to be one of the most overlooked areas of integration. This oversight ultimately desynchronized the Corps' efforts in capturing Cherbourg.

The abundance of movement agencies with competing priorities created an inefficient atmosphere for VII Corps during Mounting Operations. Many of the agencies supporting VII Corps lacked the authority necessary to support Mounting Operations at the tactical level. This further complicated VII Corps' ability to efficiently execute operations. The chain of command of BUCO (West), MOVECO, and TURNCO initially determined by Allied Forces was an ineffective construct to support VII Corps while in England. This proved to be critical as Allied Forces moved to the European Continent, where Mounting Operations needed to evolve to meet the demands of Buildup on Utah Beach. Instead, as more divisions mounted, coordination efforts became less efficient. This failed to allow for a resilient system, which would permit the expansion of forces on Utah Beach.

CHAPTER 4

UTAH BEACH INTEGRATION TO CHERBOURG

My dear Collins, I would like to congratulate you personally, and all the troops of your Corps, on the success of your operations in "roping off" the peninsula in such good time. I hope you will soon have Cherbourg itself, and 50,000 prisoners. — General B. H. Montgomery, "Montgomery Letter to Collins"

Background

The completion of Mounting Operations in England signified the completion of VII Corps' staging and began the onward movement phase of JRSOI. The days following D-Day required the Corps to undergo another phase of JRSOI or Build-up Operations on Utah Beach to achieve the Corps' mission of capturing Cherbourg. MG Collins' integration of VII Corps provided 1st Army with a force capable of executing its assigned mission of seizing Utah Beach and the capture of Cherbourg. On D-Day and in the days following, VII Corps executed the difficult tasks of conducting forcible entry, assisting in the theater opening on the European Continent, and capturing Cherbourg. To accomplish this mission, the Corps relied heavily upon the joint force to facilitate the initial D-Day amphibious assault on Utah Beach and the airborne assault behind the beach.

The original date for Phase One of Operation Overlord was 5 June 1944, but wind and sea conditions caused GEN Eisenhower to shift D-Day by 24 hours.⁷⁸ The decision had little effect on VII Corps' execution of the landings for Operation Overlord; however, the delayed assault altered all of the intricate timing of the operation. To account for the

⁷⁸ Ruppenthal, *Logistical Support of the Armies*, 375.

delay, Eisenhower gave 101st and 82nd Airborne Divisions approval to execute the airborne assault in the early morning hours of 6 June 1944. Once paratroopers exited the doors of airplanes, Operation Overlord was underway.⁷⁹ A few hours after the airborne assault, VII Corps began its amphibious assault on Utah Beach with the arrival of 4th Infantry Division. The Divisions' beach landings were successful, as they received little resistance from German coastal defenses, and allowed VII Corp to rapidly move into Build-up Operations. In contrast, V Corp received heavy resistance which prevented the expansion of the lodgment and transitioning to Build-up Operations.

Once on Utah Beach, a lack of synchronization during Build-up Operations acted to slow the integration of divisions into the Corps. A breakdown in coordination would prevent VII Corps from maintaining its momentum and, subsequently, delay the capture of Cherbourg. Over the course of the next 20 days, Collins would move inland with several divisions, each performing a specific task. The 101st and 82nd Airborne Divisions seized exits to Utah Beach; the 4th Infantry Division cleared hedge rows, and the 9th Infantry Division captured the city of Cherbourg. VII Corps' determination and forward movement demonstrates Collins' will to find ways of ensuring the Corps achieved the same success it had during the beach landings.

Introduction

Although VII Corps' use of 4th Infantry Division made the D-Day initial assault a resounding success, its efforts to transition from forcible entry to build-up on Utah Beach

⁷⁹ Gordon A. Harrison, *Cross-Channel Attack* (Washington, DC: Center of Military History, 1993), 278.

resulted in mounting tensions. With fewer casualties than in Exercise Tiger back in the United Kingdom, there were clear signs the D-Day amphibious landings had succeeded. Yet, the Corps' efforts to integrate follow-on forces, equipment, and supplies for combat power were complicated by unforeseen failures in Buildup Operations. For instance, facilities used to load landing craft and LST in England did not exist on Utah Beach, nor did the command and infrastructure to assist with the download of ships and landing crafts. These factors slowed the Corps' ability to achieve its Phase Two objective, the capture of Cherbourg.

The completion of amphibious landings marked the second phase of Operation Overlord, the build-up of forces within assembly areas and supply dumps and the movement to capture Cherbourg. The Corps' efforts to integrate follow-on forces, equipment, and supplies began on D+1, followed by Build-up Operations on D+3. These efforts were marked by frustration associated with the LST cargo download. A cascading effect resulted as landing schedules became desynchronized on Utah Beach due to a lack of a higher command to control build-up and to coordinate all aspects of naval ship download. VII Corps and the Navy assumed the difficult task of unloading landing crafts of soldiers, equipment, and supplies for use in Operation Overlord while simultaneously conducting an offensive operation to meet VII Corps' mission objectives.

As integrated forces moved inland, VII Corps continued working through coordination, build-up area management, and road construction challenges confronted on Utah Beach. The arrival of 1st Army and the transfer of control to the higher headquarters of Build-up Operations provided VII Corps with the ability to focus on building combat power in the assembly area and supply dumps on Utah Beach for integration into the Corps.

Unity of Command

The VII Corps' command structure for the first three days of Operation Overlord remained the same as it had been England. However, communication throughout the chain of command started to unravel when the Corps began management of Build-up Operation while simultaneously conducting offensive operations inland. The Corps retained operational control on Utah Beach during Build-up Operations for all forces and equipment disembarking LST and landing craft until D+7.⁸⁰ Build-up Operations, however, lacked a centralized command structure to coordinate expedient assembly of combat power during the first week of Overlord. The headquarters of 1st Army, Navy, and VII Corps were widely dispersed and maintained little effective communication throughout this period. The lack of clear command responsibility between services was evident when considering 1st Army and movement agencies in England maintained movement schedules; Navy ship commanders relayed information of build-up from England to Utah Beach; and VII Corps maintained operational control on Utah Beach.

The absence of 1st Army on Utah Beach during the initial days of Build-up Operations for Overlord had significant effects on the number of troops, equipment, and supplies that reached the build-up area. On D+9, the decision was made for VII Corps to move into defensive positions and wait until the Corps could build combat power.⁸¹ The

⁸⁰ Ruppenthal, *Logistical Support of the Armies*, 401.

⁸¹ Sperow, "Interview with General J. Lawton Collins," 198-206.

command structure while in England remained better understood by all unit commanders prior to executing Overlord Phase One. The lack of clear command responsibility on Utah Beach created friction and prevented VII Corps from synchronizing the unloading of equipment, supplies, and troops once landing craft began arriving.

Similarly, challenges with the Navy left VII Corps without full access to equipment and supplies once LST arrived on Utah Beach. The Navy's role in Build-up Operations was two-fold: to transport and to build-up control on Utah Beach. Navy LST ferried troops and equipment across the English Channel, but the Navy did so without updated situational information of Utah Beach Build-up Operations. The Navy lacked a presence on Utah Beach, leaving a perceptible visible void where a coordination officer was needed to clear, inbound, and direct LST traffic once landing craft were in the vicinity of the beach. The task of directing traffic fell to the Naval Officer in Charge (NOIC) who was assigned to Naval craft and had dual responsibility of coordinating LST movement and the offloading of equipment and supplies onto the beach, along with daily duties on the ship. Since the NOICs remained aboard their respective LST, Utah Beach lacked an onsite coordination agent to direct the flow of traffic for the download of LST.

Even amid the chaos confronted with the breakdown in unity of command, VII Corps continued to push forward toward completion of its mission objective. It utilized integrated forces from Mounting Operations to conduct forcible entry during the first phase of Operation Overlord. Unity of command remained fluid for VII Corps, as communication with the Navy, 1st Army, and assaulting divisions was clear up to the execution of Overlord. The transfer of command authority from VII Corps to the Navy's Task Force V, commanded by Rear Admiral Moon, occurred the evening before D-Day when units began loading landing craft.⁸² Task Force V provided the Corps with 800 vessels for lift and assault support,⁸³ while elements of the assault forces from 4th Infantry Division received lift support from the Western Fleet Commander, Rear Admiral Alan G. Kirk, for transport to Utah Beach.⁸⁴ Task Force V's proximity to the port would make the loading of landing crafts a challenge and create unnecessary organizational issues for VII Corps.

On 5 June 1944, Collins boarded the USS Bayfield accompanied by MG Barton, the 4th Infantry Division Commander, and established his command post alongside Rear Admiral Moon.⁸⁵ Moon was in overall command of the USS Bayfield, while Collins was responsible for tactical operations of landing forces. Barton and 4th Infantry was the first division to land integrated on D-Day, 6 June 1944. Although Corps headquarters regained command of 4th Infantry, it did not land on Utah Beach

until D+1.

The 82nd and 101st Airborne Divisions began their airborne operations the evening of 5 June 1944 behind German lines six hours before D-Day.⁸⁶ Collins remained situationally aware of progress for both airborne divisions' operations in the vicinity of Carentan, the gateway to the Cotentin Peninsula via radio communications. The Bayfield

⁸⁵ Ibid., 203.

⁸⁶ Sperow, "Interview with General J. Lawton Collins," 198.

⁸² Collins, *Lighting Joe: An Autobiography*, 198.

⁸³ Ruppenthal, *Logistical Support of the Armies*, 372.

⁸⁴ Collins, Lighting Joe: An Autobiography, 200.

provided Collins the ability to maintain command and control of the airborne units, as well as the 4th Infantry Division, while reporting the battlefield situation to LTG Bradley as it developed throughout the day. The Task Force established 12 convoys that extended from Cornwall to Poole, England, making synchronizing disembarkation operations difficult for naval forces.⁸⁷ VII Corps did not have reliable communications with 1st Army once ashore and was forced to utilize the 4th Infantry Division Command Post to provide updates to Bradley.⁸⁸ The Corps was able to gain more reliable communication in the days following D-Day, once the Corps command post arrived on LST.

The VII Corps continued to adjust to 1st Army's plan as conditions on the ground evolved. The original landing plan gave priority to landing crafts, but once the landing sequence became disrupted by operations, Corps staff worked directly with the Navy to ensure landings remained continuous. The disorganization of the Navy and the late arrival of landing craft did not allow the NOIC to effectively control incoming LST. Many NOICs remained aboard ships, which required VII Corps personnel to unload landing crafts with knowledge of neither the crafts' contents nor its priority. The situation became so dire on Utah Beach that Collins became personally involved and ordered the NOICs to disembark ashore to control off-loading of landing craft.⁸⁹ Once ashore, NOICs remained ineffective in synchronizing integration efforts for downloading VII Corps' personnel and equipment. Largely, NOICs continued to remain aboard ships serving in

⁸⁷ Sperow, "Interview with General J. Lawton Collins," 372.

⁸⁸ Collins, *Lighting Joe: An Autobiography*, 203.

⁸⁹ Ibid., 400.

their primary role instead of going ashore and coordinating the download of LST. The ineffectiveness of NOICs contributed to the backlog of LST out at sea awaiting download. The Navy remained in charge of landing operations until D+7, at which time responsibility was transferred to 1st Army.

The 1st Army assumed responsibility of Utah Beach from the Navy, but faced challenges establishing radio communication with arriving ships crossing the English Channel. Initially, 1st Army failed to coordinate offloading areas with Navy and Army officers to efficiently move troops, equipment, and supplies, which should have mirrored Mounting Operations. 1st Army continued to use download priorities created in England to download LST on Utah Beach. The situation on the beach changed so rapidly that by the time ships arrived, priorities created in England were no longer relevant to the situation on Utah Beach. Unclear roles within 1st Army initially created confusion about ships from England arriving at Utah Beach. Ships were not provided accurate situational reports of status on the ground until they were within hundreds of meters of the French shoreline, causing a backlog of supplies such as fuel and ammunition.

Once 1st Army began oversight of landing craft unloading and Build-up Operations on Utah Beach, coordination became more organized, thereby allowing VII Corps to build combat power at a faster rate to further integrate into the Corps' plan. The addition of 1st Army onto Utah Beach provided unity of command for Build-up Operations and began to synchronize efforts for downloading LST. However, coordination between forces ashore and the Navy remained cumbersome. This situation provided newly arriving ships little time to adjust course because of the latency of information received ashore or back in England, further hindering Build-up Operations. As planned, 1st Army established a command node controlled by elements of BUCO (West) to coordinate the movement of troops, equipment, and supplies on D+13.⁹⁰

Unity of Command for VII Corps remained problematic throughout the initial phase of Build-up Operations, prohibiting the Corps from accessing the combat power necessary to integrate for the capture of Cherbourg. VII Corps' inability to generate combat power, while simultaneously expanding the lodgment, prevented efficient and coordinated build-up with the Navy. Coordination of Build-up Operations on Utah Beach between VII Corps and the Navy was further desynchronized because of the lack of communication surrounding arriving LSTs' priority of download. 1st Army's lack of support for either entity made early Build-up Operations on Utah Beach difficult and caused the Corps to fall behind build-up goals. The failure of 1st Army to provide oversight and coordination had a profound effect on Collins' ability to generate and integrate combat power.⁹¹ In fact, it impeded VII Corps' ability to continue to move further inland due to insufficient combat power.

Synchronization

The VII Corps and 1st Army's tactical rehearsal of the D-Day landings paid off as soon as the Corps began landing on 6 June 1944. Much of Exercise Tiger focused on the integration of the tactical divisions' maneuver and fire support capabilities to enable movement during the disembarkation of landing craft. However, Exercise Tiger did not place much emphasis on the logistical aspect of the operation and did not hold large scale

⁹⁰ Ruppenthal, *Logistical Support of the Armies*, 393.

⁹¹ Ibid., 390.

logistics rehearsals. The Corps opted to only rehearse beach build-up with one battalion in conjunction with Exercise Tiger.⁹² In the days following D-Day, it became apparent that VII Corps and 1st Army were not prepared to synchronize sustainment efforts to build combat power on Utah Beach. They were not prepared to adjust the Overlord Plan to exploit the successful assault of Utah Beach and the quick transition to Build-up Operations. Many outside forces other than the enemy worked to prevent the quick buildup at Utah Beach, much of which was beyond the Corps' control.

The build-up of the beach itself was slow and prevented newly arriving equipment and troops from reaching their assigned organizations. The construction of the assembly area and the supply dump took longer than anticipated. Natural water ways, called "causeways", behind Utah Beach which made wheeled vehicle trafficability leaving the beach difficult. Most causeways required engineer support to make them crossable. Collins exerted great effort to overcome challenges of synchronization and to visit units on the front line. His purpose for visiting units was to ensure divisions were integrated and gaining a better understanding of the progress of operations.⁹³ Despite Collins' best efforts, VII Corps build-up on Utah Beach remained slow and cumbersome.⁹⁴

The VII Corps executed the D-Day amphibious assault landings with little resistance from the German LXXXIV Corps. The Navy's unreliable navigation desynchronize the movement onto Utah Beach and caused units to arrive out of

⁹² Ruppenthal, *Logistical Support of the Armies*, 351.

⁹³ Collins, *Lighting Joe: An Autobiography*, 204.

⁹⁴ Harrison, Cross-Channel Attack, 423.

sequence.⁹⁵ Ironically, the Navy navigational challenges sometimes worked in the Corps' favor and forced engineers to begin proofing assault lanes beyond the observation of German Artillery. Arriving at the wrong location, in turn, inadvertently placed VII Corps on favorable terrain suitable for Build-up Operations with trafficable lanes exiting the beach. The location favored landing forces because of the flat beaches going inland into the marsh area behind the beach.⁹⁶ German resistance on Omaha Beach caused Allied forces to divert tonnage earmarked for Omaha Beach to Utah Beach. This adjustment pushed additional tonnage to Utah Beach but desynchronized build-up efforts when unexpected landing craft arrived on Utah Beach. The Naval landing crafts scheduled for Utah Beach continued to arrive out of the order planned by the VII Corps staff. With unscheduled lower priority equipment and supplies arriving to further backlogs were created as divisions tried to untangle the disorganized logistics situation on Utah Beach.⁹⁷

⁹⁵ Ruppenthal, *Logistical Support of the Armies*, 386.

⁹⁶ Ibid.

⁹⁷ Ibid., 388.



Figure 8. Utah Beach with Supply Dumps and Maintenance Assembly Area

Source: Roland G. Ruppenthal, Logistical Support of the Armies, Volume 1: May 1941-September 1944 (Washington, DC: Center of Military History, 1995), 385.

The VII Corps used reconnaissance elements and engineers to identify routes on D-Day for the assault force and follow-on forces to use once it secured the beach. They used pre-built roads not flooded by German sabotage efforts leading across the marsh area behind the beach.⁹⁸ The Corps annotated the roads on maps starting north to south. The routes started north near Taret-De-Rovenoville and ended near Pouppeville, France.

⁹⁸ Ruppenthal, *Logistical Support of the Armies*, 386.

Each road was labeled, S3 through V1. Even as coordination friction between VII Corps and the Navy continued to persisted, the Corps was able to used southern routes to build combat power behind the 4th Infantry Division assault, inland opposite of the assembly area. However, engineers needed to improve the routes, and by D+3, VII Corps engineers had improved causeways enough to allow traffic to traverse the build-up area.⁹⁹ As Build-up Operations continued, roadways posed unique challenges of their own, as they were narrow and flooded by the marsh behind Utah Beach. By D+14, the roadway could not handle two-way traffic creating backlogs of vehicles trying to exit the assembly area.¹⁰⁰ The narrow road also prevented newly integrated formations from leaving the build-up area, which prohibited these units from reaching their intended locations on the battlefield. Poor roads caused vehicles backlogs with no way to move combat power from Utah Beach into tactical operations as the Corps attempted to expand the lodgment. Luckily, engineers were able to improve the causeways to allow for the movement of two-way traffic, thereby easing backlogs in the build-up area.

After roadways were established, the initial plan for Build-up Operations on Utah Beach was divided into two phases. Phase One consisted of the creation of dump and maintenance areas; Phase Two involved the creation of the assembly area. Each support area had the capacity to sustain 1st Army as the remainder of its forces arrived on Utah Beach. By D+1, the Corps used Military Police to direct traffic as offload procedures commenced. The Military Police coordinated movement of equipment and personnel to

⁹⁹ Ruppenthal, *Logistical Support of the Armies*, 398.

¹⁰⁰ Ibid., 401.

the assembly area, while sending supplies to the supply dumps in the north of the buildup area.¹⁰¹ The unloading of LST was a slow and arduous task, and by D+3, the Corps found itself well behind the planned discharge goal of 8,000 tons a day.¹⁰² Frustration grew within VII Corps as LST queued off the coast of France, and scheduled arrivals became so unreliable as to prevent efficient generation of combat power to continue the assault on Cherbourg.

The valuable tonnage was used by VII Corps to turn classes of supply and equipment into combat power, VII Corp integrated troopers it met on Utah Beach into combat operations. Collins attempted to facilitate download efforts by ordering LST to float ashore during high tide to "dry out" and conduct unloading operations to expedite the build-up of combat power.¹⁰³ Once the tide receded, vehicles and equipment unloaded the LST as quickly as possible before the next high tide. Not only did mooring landing carriers expedite the unloading process, but it also saved vehicles and equipment unprotected by waterproofing from unloading in deep water.¹⁰⁴ The waterproofing conducted during Mounting Operations failed to protect equipment and vehicles as they drove off the ramp into deeper water offshore toward Utah Beach.¹⁰⁵

¹⁰² Ibid.

¹⁰¹ Ruppenthal, *Logistical Support of the Armies*, 398.

¹⁰³ Ibid., 392.

¹⁰⁴ Ibid., 398.

¹⁰⁵ Ibid., 396. Many of the vehicles driven off LST into deeper water sank to the bottom of the sea. This slowed disembarkment as crews recovered vehicles from the sea floor.



Figure 9. Drying Out on Utah Beach

Source: Roland G. Ruppenthal, Logistical Support of the Armies, Volume 1: May 1941-September 1944 (Washington, DC: Center of Military History, 1995), 395.

Although airborne operations were more organized in reaching their objectives, the 82nd Airborne Division failed to consolidate on the drop zone above the battalion level because troop exits failed to reach their intended drop zones.¹⁰⁶ Despite of the 82nd's set backs on the drop zone, it was able to meet mission objectives within the first two days of landings. Nonetheless, disorganization within the division caused it to take high casualties as they fought to link up with 4th Infantry Division. The 101st saw more success due to better drop zone landings and moved to seal beach exits seized at Ste Mere-Eglise.¹⁰⁷ The difficulty experienced by VII Corps and 1st Army to generate

¹⁰⁶ Sperow, "Interview with General J. Lawton Collins," 168.

¹⁰⁷ Ibid.

enough combat power caused Collins to direct 101st to Carentan on 7 June 1944 to link up with V Corps to prevent German forces from affecting operations on Utah Beach. Collins' decision provided VII Corps and 1st Army the time both needed to generate combat power to continue the offensive march to Cherbourg. The 101st and 82nd Airborne Divisions illustrate positive examples of integration of divisions into VII Corps' tactical plan.

Oversight of logistics continued to plague VII Corps as Build-up Operations prevented the Corps from supporting tactical divisions by ground. While the 101st and 82d Airborne divisions fought to seize their mission objectives of capturing Cherbourg, they did not conduct their airborne jumps with enough ammunition and rations for sustaining operations past 48 hours. The divisions relied upon the 440th Transportation Group for resupply operations to sustain them while they moved to their objectives. On D+1, the 440th Air Transportation Group executed planned resupply drops of 63 tons of ammunition, 10 tons of rations, and 21 tons of combat equipment to the 82nd and 101st over the first two days of Operation Overlord.¹⁰⁸ They provided the sustainment that allowed both airborne divisions to remain synchronized in accordance with the VII Corps' plan as amphibious operations continued on Utah Beach.

By D+14, VII Corps and 1st Army were able to stabilize Build-up Operations by averaging 97 percent of its daily planned goal, to include 5,500 tons of supply, 7,000 troops, and 800 vehicles. VII Corps and 1st Army learned valuable lessons during Buildup Operations, mainly the importance of command and control nodes to navigate

¹⁰⁸ Warren, Airborne Operation In World War II, European Theater, 77.

offloading of landing craft as they reached the beach and the need for effective communication between the ISB and the build-up area with clear offloading priorities in support of VII Corps' attempt to integrate newly developed formations into its operation. Collin involvement in Build-up Operations allowed VII Corps to continue achieving its mission objective, albeit at a slower pace, as integration on Utah Beach was slowly synchronized.¹⁰⁹

<u>Balance</u>

The lack of synchronization of VII Corps Build-up efforts affected VII Corps' overall momentum toward Cherbourg, making the Corps unbalanced as it attempted to expand the lodgment. The slow trickle of combat power required Collins and his staff to rely upon forces readily available to accomplish its mission. The lack of combat power generation significantly degraded the Corps' offensive capabilities and made reinforcing divisions that had sustained heavy casualties, like the 101st and 82nd, difficult. Collins used battlefield circulation to understand unit strength and assess fallout from the slow integration process on Utah Beach.¹¹⁰ By 26 June, VII Corps had worked through buildup friction seen in previous sections to generate enough combat power to capture the city of Cherbourg with 9th Infantry Division.

The VII Corps continued to build combat power in the assembly area while balancing the demands of offensive operations as divisions moved further inland to seal off the peninsula from the German counter attack. The Corps moved the command post

¹⁰⁹ Ruppenthal, Logistical Support of the Armies, 392.

¹¹⁰ Collins, *Lighting Joe: An Autobiography*, 203.

to Audouville-la-Hubert on 7 June 1944 to manage the demands of combat and build-up operations. Collins maintained balance in the Corps by emplacing BG Palmer, a trusted agent, in a key position to maintain the steady flow of forces allowing him to manage the fight as divisions expanded into the peninsula.¹¹¹

On 10 June 1944, Collins directed BG MacKelvie, 90th Infantry Division, to pass through the 82nd Airborne Division to seize the Douve River.¹¹² This task was 90th's first mission since integrating into the Corps on Utah Beach. However, the 90th Infantry Division did not live up to expectations over the two days of fighting and took many casualties. The 90th stopped its advance when faced with an overwhelming German force. Collins later observed that none of the leadership were with their troops on the frontlines, which sapped morale within the 90th Infantry Division.¹¹³ Collins fired MacKelvie on the grounds that his unit was poorly trained and failed to integrate into VII Corps. MacKelvie was replaced with MG Eugene Landrum, who would also be fired later in the campaign. His firing too could be attributed to poor training and integration of 90th into VII Corps.¹¹⁴ Collins used the 9th Infantry Division seize the Douve River and to provide MG Eddy an opportunity to place the 9th Infantry in position to seize the city of Cherbourg on 26 June 1944.

¹¹¹ Sperow, "Interview with General J. Lawton Collins," 166.

¹¹² Collins, *Lighting Joe: An Autobiography*, 208.

¹¹³ Ibid.

¹¹⁴ 90th Infantry Division went on to be one of the most decorated Divisions in WWII under BG Vanfleet.



Figure 10. Utah Beach Build-up Area

Source: Gordon A. Harrison, Cross-Channel Attack (Washington, DC: Center of Military History, 1993), 424.

The Overlord Campaign provided the Corps staff an opportunity to facilitate shared understanding between Collins and subordinated divisions. Collins identified early on, during the D-Day landing, staff members he could depend on to help the Corps maintain a steady flow of forces and equipment. Key staff members facilitated the projection of forces forward to meet the demand of combat operations and helped maintain the balance of forces as offensive and Build-up Operations progressed. BG Palmer, the Corps' fires commander, possessed leadership qualities that he used to incorporate Corps planning actions to support the build-up on Utah Beach. Palmer gained Collins' trust to manage both Corps staff and the command post, giving Collins the ability to circulate and spend most of his time with division commanders integrating formations into operations.¹¹⁵

In essence, Palmer performed the role of deputy commanding general in Collins' absence. The two men met in the mornings in the Corps' command post to discuss command priorities, which then provided Collins with the freedom of maneuver to remain on the front lines commanding the Corps. The dynamic relationship gave Collins' intellectual space to think through the integration of new formations into Operation Overlord as fresh units arrived on Utah Beach.

Palmer managed the dysfunction on the beach that had desynchronized VII Corps-build-up plan. By D+7, the Corps had become dangerously low on ammunition. The Corps planned for each soldier in the division to carry a basic load of ammunition into the amphibious assault. The plan gave 1st Engineer Special Brigade time to establish ammunition dumps on Utah Beach by late afternoon on D-Day.¹¹⁶ Since the landings did not go as the Corps planned, ammunition and supply shortages slowed the tactical divisions' advance on Cherbourg. Without resupply, VII Corps could not remain on the offensive.¹¹⁷ The majority of the Corps' ammunition remained gridlocked at home station ports or aboard LST floating in the English Channel because of

¹¹⁵ Sperow, "Interview with General J. Lawton Collins," 165. This section was taken from MG Collins' oral interview and autobiography and used to build an understanding of how he used key people in the Corps to help him integrate divisons into VII Corps.

¹¹⁶ Headquarters VII Corps, *OPNS Memo 8* (Washington, DC: War Department, May 1944), 1.

¹¹⁷ Ruppenthal, Logistical Support of the Armies, 398.

preestablished movement priorities of LST set by 1st Army. The lack of ammunition grew outside of the Corps' control and required 1st Army to supplement VII Corps' ammunition on 19 June 1944. 1st Army sent critically short types of ammunition by air transport, totaling 1,500 tons over a three-day period.¹¹⁸ The additional ammunition provided 9th Infantry Division with the resources necessary to continue its march onto Cherbourg to begin the siege.

Palmer and Collins' relationship also afforded Collins the flexibility to assess VII Corps' integration while Palmer managed the command post. Collins leveraged expertise within the Corps' staff to establish balance. This enabled Collins to evaluate the progress of Build-up Operations within his divisions as they began to uncoil out of the assembly area on Utah Beach. Collins verified division integration through interaction and observance of divisional actions during combat. Although many aspects of the buildup did not go as planned, Collins' continuous assessments allowed him to quickly apply available combat power for integration to maintain the balance of his fighting formations.

Conclusion

The VII Corps maintained unity of command of Utah Beach under the best conditions during Build-up Operations. Friction points between the Navy and VII Corps' Build-up Operations limited Collins' effectiveness on Utah Beach. Moreover, 1st Army's attempt to manage landings from England made coordination between the beach forces and landing craft difficult, placing both the Navy and VII Corps in unsustainable positions. Neither entity had the capacity to build large-scale combat power for the first

¹¹⁸ Ruppenthal, *Logistical Support of the Armies*, 407.

eight days in June 1944. 1st Army eventually established movement control nodes like the ones used during Mounting Operations in England. With 1st Army taking over beach operations, VII Corps could focus solely on the generation of its own combat power. The lack of a viable command structure cost eight days and prevented the planned capture of Cherbourg on time. It also caused VII Corps to take extensive casualties as it remained in the defense in hedge row country. The plan established by 1st Army to use NOICs to download landing crafts made build-up difficult since NOICs had other duties aboard ships that limited their availability to the Corps as Build-up Operations evolved. Once 1st Army's build-up control element arrived on Utah Beach, Build-up Operations improved. Unfortunately, it took until D+24 to build the tonnage of supplies and combat power necessary to continue forward to Cherbourg due to ineffective command structure within the build-up area.

The VII Corps' synchronization of offensive operations and Build-up Operations improved once 1st Army assumed control of the beach. The Corps continued to adjust its plan on the ground to support Build-up Operations to generate combat power in the assembly area by slowing the rate of march for divisions moving out of the build-up area. VII Corps engineers' use of causeways as roads provided the mobility necessary for wheeled vehicles and supplies to leave the build-up area, thus enabling Collins to integrate forces. Over time, engineers widened the causeways to allow two-way traffic so more vehicles could travel at a given time, thereby decreasing the backlog on Utah Beach.

Collins' recommendation of "drying out" of ships as an *ad hoc* solution to unload ships more quickly gave the Corps additional supplies and vehicles needed to integrate

forces and remain competitive on the battlefield as the Corps expanded lodgment. The work-around assisted in bringing equipment and troopers together faster to be integrated into the Corps. Drying out operations allowed the Corps to download more ships to saving time, but did not solve the larger problem of pre-established download priorities for landing crafts. The lack of download priorities presented VII Corps with the dual dilemma of how best to balance supplies and equipment while continuing offensive operations.

The Navy was the Achilles heel of Build-up Operations. The lack of navigational expertise during D-Day worked in favor of VII Corps, but was not planned. The list of errors the Navy made to desynchronize Build-up Operations were numerous, but poor navigation, sketchy communications and the lack of expert oversight present on Utah Beach were the most significant shortcomings. Poor Naval navigation made a synchronized build-up next to impossible as ships arrived out of sequence. The NOICs did not integrate into shore-to-ship operations and made VII Corps rely on untrained personnel to accomplish the initial download of ships after D+1. Communications between Navy ships and the shores of Utah Beach made Build-up Operations equally difficult as it drew most of Collins and VII Corps' attention away from the fight against the Germans.

Achieving balance was the most important lesson for Collins during Build-up Operations. He could see the direct impact Build-up Operations had on the conduct of battle, and gauged his success by how fast he could generate combat power and integrate it into the Corps to achieve mission success. Most significant was Collins' use of Palmer to help manage Build-up Operations as the mission progressed inland. Their collaboration provided a check and balance system within the Corps. Palmer ensured the necessary combat power reached the front lines, and Collins verified integration during battlefield circulation. The pairing of the two men allowed VII Corps to remain adaptive and to make difficult personnel decisions while integrating a Corps comprised of large numbers of personnel and huge amounts of equipment.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

The VII Corps faced friction in several areas of the JRSOI process—to include in unity of command, synchronization, and balance—throughout the Overlord Campaign. While the Corps faced adversity throughout the creation and integration of combat power, in the final analysis, its efforts were successful. Collins was able to establish a formula of rapid tactical movement of divisions and quick integration of forces ensuring the Corps' success. Over the course of five months, Collins gradually shaped VII Corps to maintain a rapid operational tempo starting with Exercise Tiger and culminating with the capture of Cherbourg. Throughout the Overlord Campaign, VII Corps displayed characteristics that reflect the current doctrinal term of JRSOI. The Corps' Mounting Operations in England and Build-up Operations on Utah Beach followed the principles of JRSOI: Unity of Command, Synchronization, and Balance. These principles support the overall thesis: An effective integration of units and forces contributed to readily available combat power to achieve mission success during large-scale ground combat operations, thus proving that the effective integration of units during JRSOI operations can increase an Army corps' success under these conditions. Collins' integration of VII Corps confirms the principles of JRSOI and adds to doctrinal understanding of a corps commanders' role in the integration of forces during multiple iterations of JRSOI over a long campaign. Each time a unit is configured for movement, it must plan to integrate at its destination.

The integration of VII Corps began in February 1944 when Collins took command of the Corps. Collins approached integration in VII Corps from two distinct perspectives: art and science. He used the art of building relationships horizontally and vertically with subordinates and superiors to start the Corps' integration process. One of his main priorities was to ensure Corps staff focused on training and worked as a team. Collins' effective use of relationships ensured VII Corps integrated into the 1st Army while in England. The importance of relationships up and down the chain of command presented the Corps with additional avenues of support outside the formal operations order channels. Collins leveraged relationships within 1st Army to ensure his resources were prioritized in favor of the unit.

The VII Corps' integration from February through June 1944 gradually progressed as the Corps gained experience in JRSOI and came to understand how combat generation affects tactical operations. The approach Collins' employed to generate teams within teams helped to facilitate VII Corps' integration. He focused on building the Corps staff and division command teams for the integration of VII Corps into the 1st Army. Collins focused on the integration of all formations assigned to his command and headquarters, starting with VII Corps then looking across 1st Army and the movement agencies. Collins shared his vision of the Corps with staff and division headquarters through training and mission orders. These mission orders served as formal documents emphasizing Collins' intent to normalize his expectations for future missions. He believed in the importance of cultivating relationships to overcome deficiencies in planning and encouraging his staff to leverage relationships within the 1st Army and 21st Army Group.

While Collins excelled at integration, cultivating relationships, the rapid building of combat power and training, he experienced difficulty in several other areas. Collins

struggled to integrate airborne and logistics units into Operation Overlord. This was evidenced by challenges confronted VII Corps as it sought to integrate during both Mounting Operation in England and Build-up Operation on Utah Beach. The Corps was significantly hampered by poorly defined the command and control structure of support units in both instances.

Achieving unity of command for VII Corps throughout JRSOI Operations was challenging for the Corps, as well as for the 1st Army. The primary focus of both headquarters was the employment and integration of tactical formations. The planning and preparation for logistics units during Mounting Operations in England, and later the Build-up Operations on Utah Beach, were directed by SHAEF and COSSAC logistics officers who answered to Eisenhower. Corps and Army planners executed plans provided to them by theater staff officers that worked conceptually but lacked the vision required to link logistical and tactical operations together.

None of the established movement organizations were designed to facilitate VII Corps' integration of logistics and tactical units during movement from England to Europe. Seams in the chain of command during Mounting Operations appeared with the disjointed chain of command supporting logistics operations while the Corps mounted divisions through movement areas. Priorities were given to a movement agency depending upon the level of command they supported. For example, BUCO (WEST) supported 1st Army, while BUCO supported 21st Army Group. This resulted in poorly aligned landing craft allocations between the two headquarters. 1st Army and 21st Army Group priorities conflicted the movement of forces, equipment, and supplies in England, generating a ripple effect as VII Corps was left on Utah Beach to coordinate Build-up Operations without the presence of higher command.

The 1st Army's hands-off approach in coordinating movement between VII Corps and the Navy placed Operation Overlord in jeopardy and limited the operational reach of VII Corps as divisions moved further inland. 1st Army's decision to keep movement control agencies in England to coordinate movement of LST while VII Corps conducted Build-up Operations on Utah Beach made communication between the two headquarters negligible in the days following the attack. The level of dysfunction throughout VII Corps build-up was symptomatic of broken communication within the command structure. Collins' use of relationships to work through flaws in build-up plans was key to VII Corps' success in France. Collins personally became involved with the Navy LST download operations, specifying what equipment needed to be downloaded off the ships and insisting upon the placement of NOICs on the beach to facilitate communication.

Collins and his staff learned the art of improvisation as JRSOI evolved during the execution of the operation. On D+9, Collins realized the Corps would not reach Cherbourg as scheduled due to its lack of combat power and its transition to the defense. The delay allowed VII Corps the necessary time to generate combat power through the further integration of forces, a move that allowed the Corps to transition back to the offensive. Unity of command throughout JRSOI proved a constant struggle for VII Corps, beginning in England and continuing on the beaches of Normandy. The Corps' approach to integrating logistical formations into operations never materialized past *ad hoc* integration of emergency resupply. The Corps' lack of focus on the integration of support units into tactical formations affected the overall tactical plan.

Integration of airborne divisions into VII Corps also presented a challenge due to VII Corps' relative unfamiliarity with employing the airborne formations into tactical operations. While in England, Collins deferred readiness and training of the 101st and 82nd to the division commanders and IX Troop Carrier Command. A review of the literature failed to produce any indication of either airborne division conducting ground resupply rehearsals before the airborne assault in Europe. Collins gave the airborne units full autonomy during Operation Overlord, thereby exposing VII Corps to operational risk once the campaign began. Neither airborne division was able to amass the combat power necessary to function above the battalion level, which restricted military options available to Collins for the employment of forces, at least during the opening stages of the invasion.

The VII Corps thoroughly prepared and executed tactical operations during Operation Overlord, beginning with the D-Day landings and ending with the capture of Cherbourg. By D+9, the Corps had extended its support lines farther than Build-up Operations could support. This shortfall slowed its rate of march in order to allow for combat power generation on Utah Beach and to support continued movement. Collins displayed a masterful level of understanding of the battlefield and anticipation of enemy actions.

Most of the primary source documents hailed Collins' efforts to reach Cherbourg before the German counterattack prevented his assault on the city. Even with the Corps' slow build-up on the days following D-Day, the challenges faced on the beach were seen at the time as the friction of war. Upon further review, poor synchronization efforts on Utah Beach significantly affected VII Corps' ability to integrate newly arriving divisions, equipment, and supplies to maintain tempo as the it moved inland. This was the case until D+13, when 1st Army assumed responsibility for build-up efforts and began coordinating LST downloads and build-up area management.

Construction of build-up areas was one of the most interesting aspects of synchronization within the case study. While VII Corps did not face this challenge while in England, it managed to turn the Utah Beach area into a mature ISB to support build-up for follow-on forces as newly arriving divisions, equipment, and supplies arrived daily. The importance of the building of roadways to support the exit and entry of Utah Beach was critical for VII Corps' integration of combat power into tactical operations. The considerations were not explored during Exercise Tiger or Operation Bolero, although VII Corps used trial and error to discover a formula that supported the integration of its divisions. Like roadways, the establishment of sorting areas in both Mounting Operations and Build-up Operations played an integral part in allowing VII Corps to quickly convert the industrial level of troops, equipment, and supplies into combat power. VII Corps' use of engineers and military police to manage the layout of the build-up area further assisted in the Corps' ability to turn chaos into an orderly operation.

Some of the challenges of synchronization were outside VII Corps' control. Among these was the downloading of LST during the early days of build-up. Initially, during Build-up Operations, VII Corps and the Navy shared responsibility for internally coordinating build-up efforts while 1st Army remained in England. The arrangement restricted VII Corps' effectiveness as it marched inland to conduct tactical operations while simultaneously conducting build-up of Utah Beach. Had 1st Army established centralized control of Build-up Operations on Utah Beach as it had in England, many of the events VII Corps faced during the early days of build-up may have been mitigated. Although Mounting Operations presented challenges in England, the model would have been a start to ensure an orderly build-up on Utah Beach. Overall, Collins' proactive approach throughout the Overlord campaign helped to mitigate much of the friction faced while trying to integrate divisions into VII Corps.

The balance of equipment and supplies during a JRSOI operation contributes to mission success or failure. VII Corps demonstrated this very point during Build-up Operations on Utah Beach, where its inability to generate enough combat power directly affected the tactical mission. The planners in Europe had the misfortune of oversight, as they failed to both account for chaos on the beach and ways to prevent Collins from the integration of divisions. The experience of maintaining balance in England did not present pronounced lessons to VII Corps due to the abundance of available resources and the compressed timeline that may have limited creative thinking in addressing the possibility of conducting theater opening operations by a corps.

While in Europe, Collins addressed the Corps' poor balance through battlefield circulation to gain a better situational understanding of the Corps' effectiveness during combat operations throughout the campaign. Collins evolved as a commander when he granted increased responsibility to BG Palmer to assist in ensuring he received the combat power necessary to integrate into VII Corps as combat operations began. His actions in Europe can be directly attributed to how Collins' shaped the Corps in England through training exercises and Mounting Operations. The Corps staff grew significantly following the days of training and mounting in the spring of 1944. By the time 9th

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Infantry Division captured Cherbourg, the Corps' staff had a firm understanding of the combat power needed for VII Corps to maintain the offensive.

The most valuable lesson VII Corps learned while trying to achieve balance was accounting for supplies needed for newly integrated forces. Backlogs of supplies demonstrated the importance to the Corps of proper combat-loading LSTs and the priority order in which they should have arrived on Utah Beach. For example, it was not helpful to VII Corps to have troops arrive on Utah Beach that did not have equipment or supplies needed to begin combat operations. Mounting Operations should have provided a vital lesson for VII Corps once it crossed the English Channel without the tools necessary to integrate properly into combat operations. On one hand, 90th Infantry Division provided a clear example of the cost poorly integrated forces incur when integration occurs haphazardly. This further confirms the need for confirmation between commanders that forces have been integrated and are prepared for combat operations. On the other hand, 90th Infantry Division supports the argument that if forces have been given the proper tools to accomplish their assigned mission, the chances of mission success increase when the commander has a personal stake in certifying the force through training and can confirm that the force has been integrated.

Recommendation

1. As the US Army rethinks LSGCO, it is essential to note the importance of command structure while conducting JRSOI in an immature theater. VII Corps provided relevant examples of command relationships between headquarters while conducting JRSOI in the ISB, as well as in theater opening. The case study highlights the need for unity of command for support units and tactical units because both entities rely on the other for mission success. Commanders must establish clear priorities for movement of troops must first be established in planning and continuously revisit the priorities as operations develop to maintain unity of command.

Much of today's discussion about LSGCO highlights the need for more firepower and tactical formations yet fails to mention the need for logistics elements needed to assist in the integration of those forces into a higher mission. As Collins found out on Utah Beach, integration is not complete until all elements of combat power have combined into a division and it is ready for employment into tactical operations. The command structure within logistics units must match those of tactical formations to ensure the entire formation can attain integration. It was not the case with VII Corps, and logistic units supporting from afar caused near catastrophic tactical failure in the days following the Utah Beach landings.

However, when considering large-scale ground combat operations, planners must consider whether a corps staff can support JRSOI operations and simultaneously conduct offensive operations. VII Corps displayed proficiency in coordinating landing and offloading of ships while moving inland to capture Cherbourg. Upon findings itself consumed by events on Utah Beach, VII Corps staff redirected valuable intellectual energy away from the German threat of counter-attack and focused on untangling the mess accumulating on Utah Beach. It was not until 1st Army arrived that off-loading procedures were normalized, allowing Corps staff to focus on the combat mission.

The need for a higher command to coordinate between Army and Navy is another important lesson learned during Operation Overlord. It should not be overlooked as today's leaders and planners reassess the problem of JRSOI in LSGCO. The temptation will present itself to higher staff to allow lower echelons of command to solve integration problems at their level. The VII Corps case study presents a convincing argument to invest early and often in JRSOI Operations. It clearly demonstrates the cascading effects that may result from miscalculations within the command structure, leaving limited room for adjustment once enemy contact is made.

2. The history of VII Corps during Operation Overlord should be reviewed thoroughly by logistics professionals to inform understanding of its importance in supporting tactical operations. The incorporation and training of logistic support elements was one of the most overlooked areas by VII Corps revealed in this study. Logistics elements played a vital role in generating the combat power necessary to keep VII Corps on the offensive, by moving much-needed equipment, supplies, and troops in and out of build-up or marshalling areas. However, logistic formations received less training and rehearsals before the execution of Operation Overlord, which forced logistics units to learn on Utah Beach.

Key take away points of the study that should be considered today during JRSOI include the following: Industrial-scale logistics is a complicated operation that requires extensive training and rehearsals; integration of tactical formations is not complete until all elements of combat power have been integrated; and logistical sequencing must match the pace of tactical operations. Today's logisticians require the experience to visualize the training needs to sustain a corps in the field. The lesson of VII Corps starts the conversation amongst professionals about the logistical requirements to keep a force that size on the offensive. When considering the training requirements needed to conduct large-scale logistics, one should explore disaster relief efforts globally. The mobilization

logistics units needed to support disasters address the critical point mentioned above and provides valuable training that can quickly be transferred to LSGCO while testing logistics systems in addition to the training received at combat training centers. The assistance in disaster relief provides leaders with problems that have no clear solution like that seen during Operation Overlord. While the solution presented is not entirely the same as the Overlord campaign, leaders gain utility in going through the steps of maintaining the same tempo as the operation to provide logistics for integration at the user level.

3. Leader exposure to LSGCO training early and often throughout an Officer's career is critical. The challenges faced by VII Corps proved that exposure to large scale warfare makes a difference. Collins' experience in the Pacific Theater prepared him to address the challenges VII Corps faced on Utah Beach, and without them, he may not have overcome the challenges with which the Corps was confronted during Build-up Operations. Large Scale warfare is different from wars the Army has faced over the last 15 years, and many of the valuable lessons have been lost to time. A way to reinstitute the experience gained in a campaign such as Operation Overlord is to conduct large-scale exercises that require leaders to think through JRSOI for Corps and above. The problems that arise when attempting to integrate large numbers of soldiers and amounts substantial amounts of equipment present planners with problems that can be adequately addressed in simulations. If leaders can conduct exercises like the Louisiana Maneuvers, Exercise Tiger, and Eagle, they can develop a new-found respect for JRSOI and institute it within today's Army as it moves to implement LSGCO doctrine across the force. The hard-

fought lessons Collins paid for in blood could be incorporated for a far less expensive price tag.

ANNEX NO.2 HEADQUARTERS VII CORPS ANDING TABLES QP TO FIELD ORDER NO. 1 SECRET H NO. 1988, Sec. WD and MD or (D) CHD Mess. May 5, 1973 COPY NO. 22 OF 300

LANDING TABLES CONCEPT SKETCH UTAH BEACH

APPENDIX A

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Source: Headquarter VII Corps, VII Corps Landing Craft Plan for Operation Overlord and Neptune, Eisenhower Research Library, Abilene, KS, 1944.

APPENDIX B

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Source: Headquarter VII Corps, OPNS Memo 6 (Washington, DC: War Department, May 1944), Enclosure 1.

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