

# Multi-Domain Operations: The Historical Case

A Monograph

by

MAJ Matthew W. P. Burgoon  
US Army



School of Advanced Military Studies  
US Army Command and General Staff College  
Fort Leavenworth, KS

2019

Approved for public release, distribution is unlimited

**REPORT DOCUMENTATION PAGE**Form Approved  
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.**

<b>1. REPORT DATE (DD-MM-YYYY)</b> 23-05-2019		<b>2. REPORT TYPE</b> MASTER'S THESIS		<b>3. DATES COVERED (From - To)</b> JUNE 18-MAY 19	
<b>4. TITLE AND SUBTITLE</b> Multi-Domain Operations: The Historical Case				<b>5a. CONTRACT NUMBER</b>	
				<b>5b. GRANT NUMBER</b>	
				<b>5c. PROGRAM ELEMENT NUMBER</b>	
<b>6. AUTHOR(S)</b> MAJ Matthew W P. Burgoon				<b>5d. PROJECT NUMBER</b>	
				<b>5e. TASK NUMBER</b>	
				<b>5f. WORK UNIT NUMBER</b>	
<b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b> U.S. Army Command and General Staff College ATTN: ATZL-SWD-GD Fort Leavenworth, KS 66027-2301				<b>8. PERFORMING ORG REPORT NUMBER</b>	
<b>9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)</b> ADVANCED MILITARY STUDIES PROGRAM				<b>10. SPONSOR/MONITOR'S ACRONYM(S)</b>	
				<b>11. SPONSOR/MONITOR'S REPORT NUMBER(S)</b>	
<b>12. DISTRIBUTION / AVAILABILITY STATEMENT</b> Approved for Public Release; Distribution is Unlimited					
<b>13. SUPPLEMENTARY NOTES</b>					
<b>14. ABSTRACT</b> <p>The US Army's TRADOC Pamphlet 525-3-1, The U.S. Army in Multi-Domain Operations, 2028 defines convergence as "rapid and continuous integration of capabilities in all domains, the electromagnetic spectrum, and information environment that optimizes effects to overmatch the enemy through cross-domain synergy and multiple forms of attack all enabled by mission command and disciplined initiative." This study demonstrates that air superiority, maritime superiority, and favorable political constraints are prerequisite military conditions, serving here as criteria for evaluation of the case studies, that enable convergence and allow the US Army to achieve strategic objectives in the land domain during armed conflict.</p> <p>This study analyzes and compares two historical cases, Operation Overlord (1944) and the Korean War (1950-1951). The cases highlight crucial differences in the achievement of convergence in a war with absolute political aims as in the Second World War, and the wars following 1945 dominated by limited political aims and correspondingly limited military means and strong political constraints. The comparison of the two cases highlights the temporal differences associated with achieving air and maritime superiority and the different political constraints associated with each case. The outcome of the study is analytical support for the thesis that air superiority, maritime superiority, and favorable political constraints are prerequisites to convergence in Multi-Domain Operations. This study confirms that historical cases provide powerful antecedents for modern, emerging, or future military concepts and domains.</p>					
<b>15. SUBJECT TERMS</b> Multi-Domain Operations, MDO, Operation Overlord, Korea, World War II, Convergence, Air Superiority, Maritime Superiority, Political Constraints					
<b>16. SECURITY CLASSIFICATION OF:</b>			<b>17. LIMITATION OF ABSTRACT</b>	<b>18. NUMBER OF PAGES</b>	<b>19a. NAME OF RESPONSIBLE PERSON</b>
<b>a. REPORT</b>	<b>b. ABSTRACT</b>	<b>c. THIS PAGE</b>			<b>19b. PHONE NUMBER (include area code)</b>
(U)	(U)	(U)	(U)	58	391-758-3300

Standard Form 298 (Rev. 8-98)  
Prescribed by ANSI Std. Z39.18

## Monograph Approval Page

Name of Candidate: MAJ Matthew W. P. Burgoon

Monograph Title: Multi-Domain Operations: The Historical Case

Approved by:

\_\_\_\_\_, Monograph Director  
G. Stephen Lauer, PhD

\_\_\_\_\_, Seminar Leader  
Heiko Diehl, COL

\_\_\_\_\_, Director, School of Advanced Military Studies  
Kirk C. Dorr, COL

Accepted this 23rd day of May 2019 by:

\_\_\_\_\_, Director, Graduate Degree Programs  
Robert F. Baumann, PhD

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

Fair use determination or copyright permission has been obtained for the inclusion of pictures, maps, graphics, and any other works incorporated into this manuscript. A work of the US government is not subject to copyright, however further publication or sale of copyrighted images is not permissible.

## Abstract

Multi-Domain Operations: The Historical Case by MAJ Matthew W. P. Burgoon, USA, 57 pages.

The US Army's *TRADOC Pamphlet 525-3-1, The U.S. Army in Multi-Domain Operations, 2028* defines convergence as "rapid and continuous integration of capabilities in all domains, the electromagnetic spectrum, and information environment that optimizes effects to overmatch the enemy through cross-domain synergy and multiple forms of attack all enabled by mission command and disciplined initiative." This study demonstrates that air superiority, maritime superiority, and favorable political constraints are prerequisite military conditions, serving here as criteria for evaluation of the case studies, that enable convergence and allow the US Army to achieve strategic objectives in the land domain during armed conflict.

This study analyzes and compares two historical cases, Operation Overlord (1944) and the Korean War (1950-1951). The cases highlight crucial differences in the achievement of convergence in a war with absolute political aims as in the Second World War, and the wars following 1945 dominated by limited political aims and correspondingly limited military means and strong political constraints. The comparison of the two cases highlights the temporal differences associated with achieving air and maritime superiority and the different political constraints associated with each case. The outcome of the study is analytical support for the thesis that air superiority, maritime superiority, and favorable political constraints are prerequisites to convergence in Multi-Domain Operations. This study confirms that historical cases provide powerful antecedents for modern, emerging, or future military concepts and domains.

## Contents

Abstract .....	iii
Acknowledgements .....	v
Acronyms .....	vi
Section 1: Introduction .....	1
Section 2: Operation Overlord.....	7
Section 3: Korea (1950-1951) .....	24
Section 4: Conclusion.....	45
Bibliography .....	48

## Acknowledgements

I would like to extend a special thanks to all the individuals that aided in the development of this monograph. First and foremost, I would like to thank my amazing wife for her unending support, copious red ink, and time spent reading and revising this paper. Thanks to the Army and the School of Advanced Military Studies for allowing me the opportunity to expand my knowledge base and grow as a leader. Thank you to Dr. Steve Lauer for his assistance, wisdom, and patience. Special thanks to my parents, Greg and Pam, for their unwavering support. Finally, thanks to my classmates who made each day at SAMS valuable.

## Acronyms

ADP	Army Doctrine Publication
ADRP	Army Doctrinal Reference Publication
CBO	Combined Bomber Offensive
COMINT	Communications Intelligence
COMSEC	Communications Security
DPRK	Democratic People’s Republic of Korea (North Korea)
FEAF	Far East Air Forces
FEC	Far East Command
FM	Field Manual
FRUS	Foreign Relations of the United States
HF/DF	High-Frequency Direction Finders
JCS	Joints Chiefs of Staff
MDO	Multi-Domain Operations
NAVFE	Naval Forces Far East
ROK	Republic of Korea (South Korea)
TRADOC	Training and Doctrine Command
UN	United Nations
US	United States

## Section 1: Introduction

In October 2016, General Mark Milley, US Army Chief-of-Staff, presented the keynote address at the Association of the United States Army Eisenhower Luncheon. In his comments, General Milley suggested that warfare is on the verge of a fundamental change where future conflict will be increasingly intense, lethal, and distributed. Furthermore, in contrast to recent conflicts like those in Iraq and Afghanistan, adversaries will contest all domains of military activity. General Milley goes on to describe how the Army's multi-domain battle concept begins to prepare the US Army to fight and win future conflicts. *Multi-Domain Battle: Evolution of Combined Arms for the 21st Century*, published in October 2017, describes the multi-domain battle concept in detail.<sup>1</sup>

Published in October 2018, *Training and Doctrine Command (TRADOC) Pamphlet 525-3-1, The U.S. Army in Multi-Domain Operations, 2028* revises *Multi-Domain Battle* and describes how the US Army supports the Joint Force to execute to achieve the objectives outlined in the *Summary of the 2018 National Defense Strategy of the United States of America*. As an operational level concept, *Multi-Domain Operations, 2028* focuses on deterring and defeating Chinese and Soviet aggression. The document defines convergence as “rapid and continuous integration of capabilities in all domains, the electromagnetic spectrum, and information environment that optimizes effects to overmatch the enemy through cross-domain synergy and multiple forms of attack all enabled by mission command and disciplined initiative.”<sup>2</sup> It is one of

---

<sup>1</sup> Mark M. Milley, “AUSA Eisenhower Luncheon Key Address,” (address, Walter E. Washington Convention Center, Washington DC, October 4, 2016), 18, accessed July 19, 2018, [http://wpswps.org/wp-content/uploads/2016/11/20161004\\_CSA\\_AUSA\\_Eisenhower\\_Transcripts.pdf](http://wpswps.org/wp-content/uploads/2016/11/20161004_CSA_AUSA_Eisenhower_Transcripts.pdf); US Department of the Army, *Multi-Domain Battle: Evolution of Combined Arms for the 21st Century: 2025-2040* (Washington, DC: Government Printing Office, October 2017), accessed September 10, 2018, [http://www.arcic.army.mil/App\\_Documents/Multi-Domain-Battle-Evolution-of-Combined-Arms.pdf](http://www.arcic.army.mil/App_Documents/Multi-Domain-Battle-Evolution-of-Combined-Arms.pdf).

<sup>2</sup> US Department of the Army, *Training and Doctrine Command (TRADOC) Pamphlet 525-3-1, The U.S. Army in Multi-Domain Operations, 2028* (Washington, DC: Government Printing Office, December 2018), GL-2.



three interrelated components of the multi-domain operations concept which also includes calibrated force posture and multi-domain formations.<sup>3</sup>

While the space and cyberspace domains have emerged only recently, military forces have contested the three classic domains (land, maritime, and air) for the past century. *The U.S. Army in Multi-Domain Operations, 2028* implicitly recognizes that belligerents who achieved convergence prevailed over those who were unable to do so. However, *The U.S. Army in Multi-Domain Operations, 2028* begs the question: What are the prerequisite military conditions that enable convergence?

This project aims to demonstrate that air superiority, maritime superiority, and favorable political constraints are prerequisite military conditions that enable convergence and allow the US Army to achieve strategic objectives in the land domain during armed conflict. US military doctrine defines air superiority as “that degree of control of the air by one force that permits the conduct of its operations at a given time and place without prohibitive interference from air and missile threats.”<sup>4</sup> Similarly, maritime superiority is “that degree of dominance of one force over another that permits the conduct of maritime operations by the former and its related land, maritime, and air forces at a given time and place without prohibitive interference by the opposing force.”<sup>5</sup> Doctrine offers similar definitions for cyberspace superiority, space superiority, information superiority, and full-spectrum superiority. However, there is no doctrinal definition that defines either superiority in the land domain or the effects of these additional domains on any form of superiority discussed here. For historical cases, the air, maritime, and land domains

---

<sup>3</sup> US Department of Defense, *Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military’s Competitive Edge* (Washington, DC: Government Printing Office, 2018), 1-4, accessed September 10, 2018, <https://www.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>; US Army, *TRADOC Pamphlet 525-3-1*, iv, 69 and GL-2.

<sup>4</sup> US Department of Defense, Joint Staff, *DOD Dictionary of Military and Associated Terms* (Washington, DC: Government Printing Office, August 2017), 13.

<sup>5</sup> *Ibid.*, 147.

include the historical antecedents of the cyber domain, space domain, electromagnetic spectrum, and information environment, which also have the potential to enable convergence. This project defines political constraints as the constraint of ends, ways, and/or means available to the military to achieve strategic objectives as directed by political leaders.

This project analyzes and compares two historical cases, Operation Overlord (1944) and the Korean War (1950-1951). Criteria for interpreting these cases are air superiority, maritime superiority, and favorable political constraints. Both cases illustrate the importance of air and maritime superiority in achieving convergence, which allowed the land forces to achieve strategic objectives. The comparison of the two cases highlights the temporal differences associated with achieving air and maritime superiority and the different political constraints associated with each case.

During Operation Overlord, the United States and its allies converged capabilities in the land, maritime, and air domains in an attack across the English Channel to establish an Allied lodgment in Northwest Europe. In doing so, the Allies reintroduced contest of the land domain to western Europe. However, convergence during Operation Overlord came only after the United States and its allies fought protracted campaigns for air and maritime superiority. As such, Operation Overlord approximates what is a worst-case scenario in terms of *TRADOC Pamphlet 525-3-1*. Operation Overlord also offers as an example of the United States and its allies prosecuting a war of absolute political aim, in which political leaders allowed the military to employ a broad range of ways and means to achieve decisive and final military victory. Clear military ends, consonant with absolute political aims and constraints, and appropriately resourced means all enabled convergence.<sup>6</sup>

---

<sup>6</sup> Marc Milner, "The Battle That Had to Be Won," *Naval History Magazine* 22, no. 3 (June 2008), [no page numbers], accessed September 18, 2018, <https://www.usni.org/magazines/navalhistory/2008-06/battle-had-be-won>; Christopher R. Gabel, "The Combined Bomber Offensive, 1943," *Military Review* 73 (June 1993), 74-75; US Army, *TRADOC Pamphlet 525-3-1*, 24.

The Korean War case offers several contrasts to the Overlord Case. First, the Korean War approximates the situation that *TRADOC Pamphlet 525-3-1* anticipates, an attempt to deny an enemy *fait accompli* attack by employing a mixture of forward presence, expeditionary and national-level forces. Second, in the Korean War, the United States and its allies achieved air and maritime superiority without protracted campaigns to do so. Third, the Korean War offers an example of a war prosecuted for changing military and political aims that alternated between the limited and absolute. Air superiority, maritime superiority, and favorable political constraints enabled convergence at the Pusan Perimeter and Inchon-Seoul, defeating North Korea's initial offensive and achieving the United Nations' initially limited military and political aims. However, as the military and political aims shifted towards the absolute and then back to the limited, political constraints prevented United Nations (UN) forces from exploiting air and maritime superiority to overcome Communist Chinese land force intervention.<sup>7</sup>

This project references primary sources, including contemporary and historical US military doctrine and concepts as principle sources that offer a lens through which this project analyzes the historical case studies. *The U.S. Army in Multi-Domain Operations, 2028*, as introduced above, provides that lens. *The DoD Dictionary* provides official definitions of this project's criteria and other key terms which are especially important in assessing each case.<sup>8</sup>

For the Operation Overlord case, the depth and breadth of available historical manuscripts were prohibitive to the aim of this project. However, in March 1942, President Roosevelt had the foresight to direct that each service prepare accounts of their war experiences. To comply, each service published a series of histories. *The US Army in World War II* series (the "Green Books") is an extensive collection of seventy-eight volumes. Of interest here are the volumes titled *Cross-Channel Attack*, by Gordon A. Harrison, and *The Supreme Command*, by

---

<sup>7</sup> US Army, *TRADOC Pamphlet 525-3-1*, 30.

<sup>8</sup> US Army, *TRADOC Pamphlet 525-3-1*, ii-xii; US Joint Staff, *DoD Dictionary*, i-ii.

Forrest C. Pogue. Together, these two volumes provide a detailed description and assessment of the Army's strategic and operational actions related to Operation Overlord. The seven volumes of *Army Air Forces in World War II*, edited by Wesley F. Craven and James L. Cate, provide a similar treatment on behalf of what is now the United States Air Force. Specifically, *Volume II – Europe Torch to Pointblank (August 1942 to December 1943)* and *Volume III – Europe: Argument to V-E Day (January 1944 to May 1945)* address the events leading up to and including Operation Overlord. Both the Army and Air Force series serve as official histories of those services. The fifteen-volume *History of United States Naval Operations in World War II*, by Samuel Elliot Morison, satisfied the Navy's task from Roosevelt. However, the Navy chose not to retain the series as official history. None the less, *Volume I – The Battle of the Atlantic*, *Volume X – The Atlantic Battle Won*, and *Volume XI – The Invasion of France and Germany* offer accounts analogous to the official histories of the other services as related to Operation Overlord.<sup>9</sup>

For the Korea case study, the official histories of the services serve as primary sources. Two volumes of the *U.S. Army in the Korean War* series provide the general context of the case at large. Taken together, *Policy and Direction The First Year*, by James F. Schnabel, and *South to the Naktong, North to the Yalu*, by Roy E. Appleman, are the Army's account of the first year of the conflict. Similarly, *United States Naval Operations Korea*, by James A Field, Jr., and *The*

---

<sup>9</sup> Wesley F. Craven and James L. Cate, eds., *The Army Air Forces in World War II*, vol. 3, *Europe: Argument to V-E Day, January 1944 to May 1945* (Washington, DC: Office of Air Force History, 1983), iii-xxx; Richard D. Adamczyk and Morris J. MacGregor, eds. *United States Army in World War II: Reader's Guide* (Washington, DC: Center of Military History, 1992), accessed November 30, 2018, [https://history.army.mil/html/books/011/11-9/CMH\\_Pub\\_11-9.pdf](https://history.army.mil/html/books/011/11-9/CMH_Pub_11-9.pdf), iii; Gordon A. Harrison, *Cross-Channel Attack* (Washington, DC: Center of Military History, 1995), vii-xi; Forrest C. Pogue, *The Supreme Command* (Washington, DC: Center of Military History, 1996), ix-xiv; Wesley F. Craven and James L. Cate, eds., *The Army Air Forces in World War II*, vol. 2, *Europe: Torch to Pointblank, August 1942 to December 1943* (Washington, DC: Office of Air Force History, 1983), v-xiv; Samuel E. Morison, *History of the United States Naval Operations in World War II*, vol. 1, *The Battle of the Atlantic, September 1939 – May 1943* (Boston: Little, Brown and Company, 1947), ix-xvi; Samuel E. Morison, *History of the United States Naval Operations in World War II*, vol. 10, *Atlantic Battle Won, May 1943 – May 1945* (Boston: Little, Brown and Company, 1947), ix-xvi; Samuel E. Morison, *History of the United States Naval Operations in World War II*, vol. 11, *The Invasion of France and Germany, 1944-1945* (Boston: Little, Brown and Company, 1947), ix-xvi.

*United States Air Force in Korea: 1950-1953*, by Robert F. Futrell, provide additional details as related to the other services. Taken together, these volumes offer a complete picture of the strategic and operational aspects of the Korea conflict. Finally, the US Department of State's *Foreign Relations of the United States (FRUS)* series offers a comprehensive collection of official US government documents related to the Korean War with *FRUS, 1950, Volume VII*, and *FRUS, 1951, Volume VII, Part I*, covering the relevant period of the Korean War.<sup>10</sup>

The sections that follow analyze and compare two historical cases. Section two analyzes Operation Overlord. Section three analyzes the first twelve months of the Korean War and compares it to the Operation Overlord case. Section four offers concluding thoughts related to both cases studies in consideration of US Army, *TRADOC Pamphlet 525-3-1*.

---

<sup>10</sup> James F. Schnabel, *Policy and Direction the First Year* (Washington, DC: Center of Military History, 1992), accessed August 26, 2018, [https://history.army.mil/html/books/020/20-1/CMH\\_Pub\\_20-1.pdf](https://history.army.mil/html/books/020/20-1/CMH_Pub_20-1.pdf), ix-x; Roy E. Appleman, *South to the Naktong, North to the Yalu* (Washington, DC: Center of Military History, 1992), accessed August 26, 2018, <https://history.army.mil/html/books/020/202/index.html>, ix-xiv; James A. Field, Jr., *History of United States Naval Operations: Korea* (Washington, DC: US Government Printing Office, 1962), ix-x; Robert F. Futrell, *The United States Air Force in Korea, 1950-1953*, rev. ed. (Washington, DC: Office of Air Force History, 1983), vii-x; John P. Glennon, ed., *Foreign Relations of the United States, 1950*, vol. 7, *Korea* (Washington, DC: US Government Printing Office, 1976), accessed December 9, 2018, <https://history.state.gov/historicaldocuments/frus1950v07>, Preface; John P. Glennon, Harriet D. Schwar, and Paul Claussen, eds., *Foreign Relations of the United States, 1951*, vol. 7, part 1, *Korea and China* (Washington, DC: US Government Printing Office, 1983), accessed December 9, 2018, <https://history.state.gov/historicaldocuments/frus1951v07p1>, Preface.

## Section 2: Operation Overlord

Soldiers, Sailors and Airmen of the Allied Expeditionary Force!

You are about to embark upon the Great Crusade, toward which we have striven these many months. The eyes of the world are upon you. The hopes and prayers of liberty-loving people everywhere march with you. In company with our brave Allies and brothers-in-arms on other Fronts, you will bring about the destruction of the German war machine, the elimination of Nazi tyranny over the oppressed peoples of Europe, and security for ourselves in a free world.

Your task will not be an easy one. Your enemy is well trained, well equipped and battle-hardened. He will fight savagely.

But this is the year 1944! Much has happened since the Nazi triumphs of 1940-41. The UN have inflicted upon the Germans great defeats, in open battle, man-to-man. Our air offensive has seriously reduced their strength in the air and their capacity to wage war on the ground. Our Home Fronts have given us an overwhelming superiority in weapons and munitions of war, and placed at our disposal great reserves of trained fighting men. The tide has turned! The free men of the world are marching together to Victory!

I have full confidence in your courage, devotion to duty and skill in battle. We will accept nothing less than full Victory!

Good Luck! And let us all beseech the blessing of Almighty God upon this great and noble undertaking.

—Dwight D. Eisenhower, Message to the Allied Expeditionary Force (June 1944)

US Military doctrine defines D-Day as “the unnamed day on which a particular operation commences or is to commence.”<sup>11</sup> Therefore, there have been an uncountable number of D-Days with many more to come. However, a cursory internet search of “D-Day” reveals that the first forty-nine returns all refer to a single example of D-Day: 6 June 1944. Why is that that “D-Day” is in contemporary culture synonymous with 6 June 1944?<sup>12</sup>

6 June 1944 marked the beginning of Operation Overlord’s climax, the Allied invasion of northwest Europe which serves as a quintessential example of convergence. The general events of 6 June 1944 D-Day and the days that followed are well known. The day began with

---

<sup>11</sup> US Joint Staff, *DoD Dictionary*, 59.

<sup>12</sup> Google, Search “D-Day”, accessed November 20, 2018, [https://www.google.com/search?q=D-day&client=firefox-b-1-ab&ei=tPrZW\\_2wOoKRsgHio7XgBA&start=0&sa=N&ved=0ahUKEwj92u7Nr bHeAhWCiCwKHeJRDUw4KBDy0wMIdA&biw=1702&bih=872](https://www.google.com/search?q=D-day&client=firefox-b-1-ab&ei=tPrZW_2wOoKRsgHio7XgBA&start=0&sa=N&ved=0ahUKEwj92u7Nr bHeAhWCiCwKHeJRDUw4KBDy0wMIdA&biw=1702&bih=872).

approximately 13,000 US paratroopers landing behind German lines and ended with more than 160,000 Allied troops on French soil. Over the next month, Allied forces converged maritime, air, and land capabilities of 929,000 Soldiers, 177,000 vehicles, 5,000 ships, and 13,000 aircraft to overwhelm German defenses in Normandy. By 5 July 1944 (D+27), with the Allied lodgment on Continental Europe secure, Allied forces were poised to execute a successful land campaign to decisively defeat Nazi Germany.<sup>13</sup>

However, the story of Operation Overlord did not begin on 6 June 1944. Rather, the roots of Operation Overlord are found in the United Kingdom's 1941 invasion concepts and US-UK agreements in early 1941 to defeat Germany before Japan. Iterations of what would eventually be the plan for Operation Overlord acknowledged that there were several conditions to a large-scale invasion of northwestern Europe by way of the English Channel.<sup>14</sup>

The principal condition to the execution of Operation Overlord was the concentration of enough military means (personnel and equipment) in and around the British Isles to conduct the invasion. However, to do so required the Allies to meet three subordinate conditions. First, to ensure the safe transit of shipping between the United States and the United Kingdom (UK), Allied forces had to defeat the German naval threat in the Atlantic. Second, as military means concentrated in the United Kingdom, Allied forces had to protect those means from German air attack. Third, Allied planners were subject to political constraints imposed by national governments. Although united in their desired end state, Allied governments often disagreed in the ways and means to meet the end. As such, Overlord planners shaped military operations to conform to political constraints even when there was universal agreement to the absolute political aim sought. In short, for Operation Overlord to succeed, the Allies required maritime superiority in the North Atlantic, air superiority over portions of northwestern Europe, and consonance

---

<sup>13</sup> Harrison, *Cross-Channel Attack*, 279, 447, and 449; US Army, "D-Day".

<sup>14</sup> Harrison, *Cross-Channel Attack*, 68.

between operations and accepted political constraints. The remainder of this section investigates those three conditions in detail.<sup>15</sup>

The year of 1942 marked a dark period in the war for the Allies. One reason for Allied concern was the effectiveness of German submarines in destroying Allied shipping, particularly in the North Atlantic. Allied shipping was of vital importance to the effort because it allowed the US military to reach the various theaters of war. Allied shipping was key and essential in preparation for any amphibious assaults against Continental Europe. However, in 1942 the Allies lost 1,027 ships to submarine attack. Total Allied shipping losses for the year “exceeded new construction by about one million tons.”<sup>16</sup> At the Casablanca Conference in January 1943, Allied strategic leaders and planners agreed that countering the submarine threat was vital to continuing offensive operations and to prioritize the effort to do so.<sup>17</sup>

By January 1943, the campaign to achieve maritime superiority of the Atlantic Ocean had raged for over two years. However, after the Casablanca Conference, the Allies saw a dramatic shift in their favor for several reasons. First, the Allies reorganized the Atlantic convoy system to assign either US escorts or UK-Canadian escorts to convoys, versus a combination of both. Second, the Allies increased the number of long-range aircraft assigned to anti-submarine patrols. Third, the United States augmented land-based aircraft with carrier-based aircraft operating from several new escort carrier groups assigned to the Atlantic. Fourth, the Allies equipped their ships and aircraft with state-of-the-art radar sets to find and target German submarines to which the Germans had no counter-measure.<sup>18</sup>

---

<sup>15</sup> Harrison, *Cross-Channel Attack*, 63-70, 75-76, 83-86; 94-105, 118-127; Pogue, *Supreme Command*, 104.

<sup>16</sup> Harrison, *Cross-Channel Attack*, 38.

<sup>17</sup> Ibid.

<sup>18</sup> Morison, *Atlantic Battle Won*, 20; Harrison, *Cross-Channel Attack*, 84.



Finally, the Allies expanded an already capable network of high-frequency direction-finders (HF/DF). HF/DF allowed the Allies to triangulate the position of German submarines at extremely long range based on German radio transmissions. This is an early example of belligerents contesting control of the electromagnetic spectrum and the convergence of this domain with the physical destruction of the German submarine threat. Much improved technology allowed the Allies to mount HF/DF on escort ships, extending both the range and flexibility of the combined network.<sup>19</sup>

The Allies committed extensive resources to counter the German submarine threat, and by the end of 1943, saw significant and decisive gains against the German submarine fleet. First, Allied shipping losses were only three million tons in 1943 versus eight million tons in 1942. Second, new construction in 1943 exceeded losses for “a net gain of almost eleven million [tons].”<sup>20</sup> Third, the Allies sunk an estimated 237 German submarines in 1943, compared to an estimated 85 the previous year. While German submarines remained a threat, the German navy lost the initiative in the Atlantic and the Allies gained maritime superiority in the Atlantic.<sup>21</sup>

Three facts support the latter assessment. First, the Allied anti-submarine effort in 1943 was so successful, that the US Navy authorized independent sailings in coastal waters of the Western Atlantic. Second, for the remainder of the war, monthly allied shipping losses in the Atlantic were roughly ten-percent of the monthly losses sustained in 1942. Third, Allied military means postured in the United Kingdom rose sharply through 1943. These three facts suggest that beginning in 1943 the Allies conducted maritime operations without prohibitive interference by Germany, therefore having achieved maritime superiority in the Atlantic.<sup>22</sup>

---

<sup>19</sup> Morison, *Battle of the Atlantic*, 226-228; Morison, *Atlantic Battle Won*, 20 and 53-54.

<sup>20</sup> Harrison, *Cross-Channel Attack*, 86.

<sup>21</sup> Harrison, *Cross-Channel Attack*, 86; Morison, *Battle of the Atlantic*, 409.

<sup>22</sup> Harrison, *Cross-Channel Attack*, 86; Morison, *Battle of the Atlantic*, 410; Morison, *Atlantic Battle Won*, 365; Craven and Cate, *Torch to Pointblank*, 631-664; Ronald G. Ruppenthal, *Logistical*

Allied maritime superiority enabled Operation Overlord in three ways. First, maritime superiority enabled Operation Bolero – “the build-up of troops and supplies in the United Kingdom for a cross-Channel attack.”<sup>23</sup> The Allies agreed to initiate Operation Bolero at a conference in April 1942 and began implementation shortly thereafter, prioritizing the build-up of air forces and service troops, themselves supporting the build-up. At the end of May 1943, there were only sixteen air force groups, of which 10 were bombers. By the end of 1943, that number almost tripled to nearly forty-six, and would more than double again by July 1944, nearly half being comprised of smaller aircraft. Most of the aircraft deployed through mid-1943 were larger aircraft (bombers) for the 8th Air Force which were flown to the United Kingdom via the North Atlantic air route. However, smaller aircraft, fuel, motorized equipment, supplies, and support troops shipped via sea transport with considerable difficulty until after spring 1943.<sup>24</sup>

Having prioritized air force and support personnel, beginning in the fall of 1943, the United States began deploying combat troops and associated equipment to the United Kingdom at a rate of about two divisions per month. Converted passenger ships, capable of steaming faster than German submarines could engage them, were enough to meet trans-Atlantic troop transport requirements through most of 1943. As Operation Bolero accelerated, the Allies transitioned to using troop convoys comprised of troopships, general transports, and powerful combat escorts. By virtue of maritime superiority, the troop convoy crossings were largely uneventful. By January 1944, there were nearly a million US troops in the United Kingdom. These troops comprised the better part of eleven combat divisions and a commensurate number of supporting units.<sup>25</sup>

---

*Support of the Armies*, vol. 1, *May 1941-September 1944* (Washington, DC: Center of Military History, 1995), 129, 135; Morison, *Invasion of France*, 51.

<sup>23</sup> Harrison, *Cross-Channel Attack*, 485.

<sup>24</sup> Harrison, *Cross-Channel Attack*, 19, 156, and 485; Craven and Cate, *Torch to Pointblank*, 639 and 651-654.

<sup>25</sup> Harrison, *Cross-Channel Attack*, 158; Morison, *Invasion of France*, 51.

Finally, Operation Bolero saw the build-up of a massive armada to support the invasion. The armada included over 100 warships, over 3600 landing craft of various sorts to convey troops and equipment, and numerous supporting craft, minesweepers, tug boats, cutters, and tankers. While many of these vessels originated and homeported in the United Kingdom, approximately half originated in the United States and crossed the Atlantic, courtesy of Allied maritime superiority.<sup>26</sup>

In addition to enabling Operation Bolero, maritime superiority enabled the invasion force to cross the English Channel largely unscathed. Certainly, Germany had the capability to challenge the crossing with forces available near the English Channel, which may have included up to sixty patrol craft, one hundred-thirty ocean-going submarines, and midget submarines and human torpedoes. Allied planners expected Germany to employ these capabilities to the fullest extent in the event of an invasion. The events of Exercise Tiger, an amphibious exercise in Lyme Bay, illustrated the potential threat of such forces to the invasion force. On the night of 27-28 April, E-boats attacked an amphibious convoy participating in the exercise. The E-boats sank landing ships, damaged another, and killed approximately 700. Despite E-boat and submarine threats, the principal threat to vessels transiting the English Channel was mines laid to protect the Normandy beaches.<sup>27</sup>

However, Allied forces demonstrated their maritime superiority to counter each of the above threats. Over 250 Allied mine-sweepers swept channels in the days leading up to the amphibious landings. To the west of the landings, a powerful US screening force defeated German attempts to penetrate towards the amphibious force. A similar British screening force to the east, supported by air forces, performed a similar role against a much more determined

---

<sup>26</sup> Morison, *Invasion of France*, 56-57, 333-37.

<sup>27</sup> E-Boats were the Allied designation for the German *S-Boot* which were small torpedo boats; Harrison, *Cross-Channel Attack*, 179, 270, and 480; Morison, *Invasion of France*, 65-66 and 155.

opponent. As a result, the initial landings on all five beachheads went uncontested by the German Navy. Furthermore, over the course of the operation, the Allies lost only a handful of vessels, aside from small landing craft.<sup>28</sup>

Finally, maritime superiority enabled the Allies to leverage naval gun support to directly support the amphibious landings and subsequent actions to expand the beachheads. For example, in the Utah Beach sector, naval vessels provided counter-battery fire against forty-six known German coastal and field artillery batteries. Shore fire control parties, embedded with assault forces, and fighter aircraft acting as spotters improved both the accuracy and responsiveness of naval gunfire. The effect in the Utah sector was devastating and much lauded by ground forces. In the Omaha sector, naval gunfire silenced artillery batteries, destroyed obstacles, and isolated the beach from German reinforcement. In total, although naval gun support was imperfect, it effectively reduced the volume and effectiveness of German artillery fire throughout the operation.<sup>29</sup>

The contest for air superiority over northwest Europe traced its roots to early US-UK agreements that the Allies would first concentrate their war efforts against Germany and then Japan. As such, the United States activated the 8th Air Force in early 1942 which began to build air combat power in the United Kingdom and initiated the hallmark daylight strategic bombing campaign that summer. General Eisenhower defined the 8th Air Force's purpose in July 1942 to "achieve air superiority in western France and prepare to support ground operations."<sup>30</sup> Working in conjunction with the Royal Air Force, the 8th Air Force embarked on the Combined Bomber Offensive (CBO) with general target priorities being submarine-related infrastructure, aircraft production facilities, and lines of communication. In this manner, the CBO nested with the theater priorities to establish maritime and air superiority in support of what would become Operation

---

<sup>28</sup> Morison, *Invasion of France*, 78-79, 83-84, 94, 116, 170-176, and 190-194.

<sup>29</sup> Morison, *Invasion of France*, 94-109 and 142-148.

<sup>30</sup> Craven and Cate, *Torch to Pointblank*, 213.

Overlord. However, as Allied priorities shifted, so did the resources available to the 8th Air Force. As a result, the effectiveness and efficiency of the CBO from its onset to mid-1943 was arguable. However, during that period the 8th Air Force established the organizational systems, procedures, and practices that enabled later successes.<sup>31</sup>

As the Casablanca Conference had clarified the prioritization of maritime effort, so too did it clarify the prioritization of air effort stating that “the maximum combined air offensive will be conducted against Germany from the United Kingdom.”<sup>32</sup> The subsequent Washington Conference in May 1943 and associated Combined Chiefs of Staff directive of 10 June 1942 made official the task and purpose of the CBO. The principle CBO task was to destroy the German Air Force in order to gain air superiority over Europe as a shaping operation subordinate to Operation Overlord – Operation Pointblank.<sup>33</sup>

Allied planners identified seventy-six precision targets associated with six German industries for Pointblank. In general, those targets were prioritized as: “(1) submarine construction yards, (2) aircraft industry, (3) transportation, (4) oil plants, (5) other enemy war industries.”<sup>34</sup> With maritime lanes open to the Allies, Operation Bolero quickly built out the 8th Air Force. Through mid-1943 to early-1944, the 8th Air Force fielded its full complement of bombers, radar sets to enable bombing through cloud cover, new long-range fighters, and drop fuel tanks. Having the resources required for the mission, the 8th Air Force went to work with considerable effect and by early 1944 the Allies assessed that they had defeated the German Air Force. The campaign was so decisive that allied bombers “had virtually free reign of the skies and could bomb strategic targets at will.”<sup>35</sup> Not only were Allied strategic bombers able to operate

---

<sup>31</sup> Craven and Cate, *Torch to Pointblank*, 209 and 213-241; Harrison, *Cross-Channel Attack*, 19.

<sup>32</sup> Harrison, *Cross-Channel Attack*, 45.

<sup>33</sup> Harrison, *Cross-Channel Attack*, 207-217; Craven and Cate, *Torch to Pointblank*, 665.

<sup>34</sup> Harrison, *Cross-Channel Attack*, 208.

<sup>35</sup> *Ibid.*, 214.

with impunity, Allied tactical air forces were able to do so as well, enhancing the assets available to bear against German forces. With the German Air Force incapable of threatening Allied operations, the Allies had established air superiority, meeting a key prerequisite for Operation Overlord.<sup>36</sup>

Air superiority enabled the Allied Air Forces to execute two shaping operations that directly enabled the D-Day amphibious assault. First, was Operation Crossbow, the operation to counter Germany's V-weapons program. Germany's V-weapons were missiles capable of ranging the United Kingdom from Continental Europe. As such, V-weapons presented a meaningful threat to the Allied forces marshalling in support of Operation Overlord. In the months leading up to D-Day, Allied air forces targeted and neutralized approximately half of all v-weapons sites. An official assessment later concluded that Crossbow had delayed Germany from launching V-weapons for three to four months. Indeed, Germany did not launch the first V-1 missiles until after D-Day, nor did V-weapons have an appreciable effect on the outcome of Operation Overlord. Specifically, the effort had protected the invasion's marshalling areas.<sup>37</sup>

Second, air superiority allowed Allied air forces to conduct a series of pre-invasion bombing operations across France. These included campaigns against the rail network, German air bases, and coastal defenses. The campaign against the rail network reduced rail traffic in France by up to seventy-five percent in some areas. Deprived of rail transport, German forces staged supplies and reinforcing divisions closer to the coast in the months leading up to the invasion. They also tried to enhance the mobility of infantry and artillery forces by other means. However, the Germans remained limited in their ability to sustain and reposition forces in France.<sup>38</sup>

---

<sup>36</sup> Harrison, *Cross-Channel Attack*, 180 and 207-214; Craven and Cate, *Argument to V-E Day*, 9-26; Craven and Cate, *Torch to Pointblank*, 631-706.

<sup>37</sup> Pogue, *Supreme Command*, 134-137; Craven and Cate, *Argument to V-E Day*, 84-106; Harrison, *Cross-Channel Attack*, 215-17.

<sup>38</sup> Harrison, *Cross-Channel Attack*, 217-230; Craven and Cate, *Argument to V-E Day*, 149-162

The bombing campaign against German airfields in France aimed to maintain Allied air superiority by denying Germany the ability to reposition aircraft within 350 miles of the lodgment area. In the three weeks leading up to D-Day, elements of both tactical and strategic air forces targeted a hundred or so airfields and achieved the effects desired. To the credit of this effort and Allied air superiority in general, there were no daylight air attacks against Allied invasion forces on D-Day.<sup>39</sup>

The bombing campaign against German coastal defenses, known as the Atlantic Wall, was perhaps the most challenging. While the Allies wanted to degrade the shore batteries and radar sites defending the lodgment area, they did not want to compromise their element of surprise. Therefore, the Allies struck two targets outside the lodgment area for every one inside. History disputes the efficacy of the effort against the coastal batteries. However, the results against the radar system were conclusive in that when combined with radar countermeasures, bombing reduced the effectiveness of German radar along the Atlantic Wall to five percent. As a result, German forces were not able to detect or track Allied air or naval forces approaching the Atlantic Wall.<sup>40</sup>

Finally, like maritime superiority, air superiority resulted in several important tactical effects during the amphibious operation. First, the Allies were able to insert three airborne infantry divisions via transport aircraft in the hours before the amphibious assault. The airborne divisions isolated the assault beaches from German counterattack, buying critical hours for landing forces to gain a foothold. Second, tactical air forces provided close air support to the invasion forces. This was most valuable in support of the US Army's V Corps which landed at Omaha Beach. There, supporting fighter-bombers acting under the direction of forward air

---

<sup>39</sup> Craven and Cate, *Argument to V-E Day*, 162-166

<sup>40</sup> *Ibid.*, 166-172.

controllers, and based on their own initiative-based reconnaissance, neutralized artillery batteries, armored forces, and German troop movements.<sup>41</sup>

To enhance the effects of operations in the traditional domains, the Allies also exploited the electromagnetic spectrum, the information environment, and unconventional warfare. Allied efforts to exploit the electromagnetic spectrum include the previously mentioned employment of state-of-the-art radar sets, employment of radar countermeasures, and an effort to degrade German radar capabilities. Further, the operation the Allies called Ultra married exploitation of both the electromagnetic spectrum and the information environment. Ultra was the Allied operation to intercept, decipher, analyze, and exploit German signals as a result of Allied successes in deciphering the codes of the German Enigma machine.<sup>42</sup>

Ultra contributed to the success of Overlord in several ways. First, Ultra enabled planning by precisely identifying the German order of battle and dispositions along the Atlantic wall, in Denmark, and in Norway. Second, Ultra provided intelligence on German submarine dispositions that helped bring the innovations mentioned above to bear at the right time and in the right place to defeat the submarine threat in the Atlantic. Similarly, Ultra enabled the Allies to destroy, damage, or isolate Germany's capital ships operating in the Baltic and North Seas, rendering them unable to threaten Overlord's invasion fleet. Also, Ultra provided detailed information on German naval minefields protecting the Normandy coast and precise coordinates for German submarines sent to counter the invasion fleet. In doing so, Ultra enabled the Allies to maintain local maritime superiority through the duration of Overlord. Finally, Ultra informed and enabled the extensive deception operation of the imaginary First US Army Group, which fixed substantial

---

<sup>41</sup> Pogue, *Supreme Command*, 171-173; Craven and Cate, *Argument to V-E Day*, 196-198.

<sup>42</sup> Ronald Lewin *Ultra Goes to War* (New York: McGraw-Hill Book Company, 1978), 20, 51-72.



German forces west of the Seine, preventing those forces from concentrating on the Normandy invasion.<sup>43</sup>

While Ultra provided valuable intelligence in support of Overlord, the various elements that comprised the French Resistance enabled Overlord by providing an unconventional capability that complemented the conventional Allied capabilities. The concept for Operation Overlord included operations by French Resistance forces to deny German use of French railways, interrupt telecommunications, aid allied paratroopers, impair movement of German armored divisions, preserve key infrastructure, and conduct guerilla warfare in general. Appraising the total contributions of the Resistance is challenging. However, several examples highlight how Resistance efforts complemented the conventional efforts discussed above. First, resistance locomotive sabotage efforts enhanced the air effort against French railroads, accounting for about one-third of the approximately three-thousand rail locomotives damaged in France from January through May 1944. Similarly, on 7 June 1944 (D+1), resistance efforts rendered twenty-six major rail lines leading to the lodgment area unusable, effectively “delaying the movement of the *2d SS Panzer Division*” toward the invasion forces.<sup>44</sup> Further, resistance efforts against rail capabilities fixed between 20,000 and 50,000 uniformed Germans to maintain and secure French railroads and locomotives.<sup>45</sup>

Military theorist Carl von Clausewitz argued that “war is merely the continuation of policy by other means” and that “war springs from some political purpose.”<sup>46</sup> Clausewitz also

---

<sup>43</sup> Harold C. Deutsch, “The Influence of Ultra on World War II,” *Parameters* 8, no. 4 (January 1978): 2-15, accessed December 20, 2018, <https://apps.dtic.mil/dtic/tr/fulltext/u2/a512228.pdf>, 10; Lewin, 208-232; Deutsch, 10.

<sup>44</sup> Harrison, *Cross-Channel Attack*, 206

<sup>45</sup> Pogue, *Supreme Command*, 152-157; Chief of Staff to the Supreme Allied Command (COSSAC), *Operation ‘Overlord’: Appendices, COSSAC Report* 43, no. 28 (1944), accessed August 26, 2018, <http://cgsc.contentdm.oclc.org/cdm/singleitem/collection/p4013coll8/id/4543/rec/20>, Appendix P; Harrison, *Cross-Channel Attack*, 206-207.

<sup>46</sup> Carl von Clausewitz, *On War*, ed. and trans. Peter Paret and Michael Howard (Princeton: Princeton University Press, 1984), 87.

argued that the military aim of war is always “the defeat of the enemy” which he defines as the destruction of the enemy’s military, seizure of the enemy’s capital, and/or “an effective blow against” an enemy’s more powerful ally.<sup>47</sup> However, Clausewitz acknowledges that a nation’s political aim may not coincide with the military aim. When military and political aims coincide, Clausewitz argued that war trended towards the absolute. However, Clausewitz notes that at times political aims are more limited than those natural aims of the military. In such cases, where military and political aims diverge, conflicts “appear to be more political.”<sup>48</sup>

On 8 December 1941, the US Congress formally declared war on German and Japan. In doing so, Congress pledged “all the resources of the country” to “bring the conflict to a successful termination.”<sup>49</sup> At the end of the Casablanca Conference, President Franklin D. Roosevelt and Prime Minister Churchill hosted a press conference which clarified that termination of the conflict would come only with “the total elimination of German and Japanese war power.”<sup>50</sup> They further stated that the only mechanism to that end would be “the unconditional surrender by Germany, Italy, and Japan.”<sup>51</sup> Roosevelt and Churchill’s comments articulated a clear Allied political objective.<sup>52</sup>

Subsequently, the Combined Chiefs of Staff derived the military objective as final victory. In the European Theater of Operations, that objective was “the liberation of Europe from the Germans” which the military would accomplish by destroying the armed forces of

---

<sup>47</sup> Clausewitz, *On War*, 594 and 596.

<sup>48</sup> Clausewitz, *On War*, 87-88, 594, 596, and 606-607.

<sup>49</sup> US Congress, “Joint Resolution of December 11, 1941, Public Law 77-331,” 11 December 1941, National Archives Identifier: 299851, accessed November 20, 2018, <https://www.archives.gov/historical-docs/todays-doc/index.html?dod-date=1211>.

<sup>50</sup> Fredrick Aandahl, William M. Franklin, and William Slany, eds., *Foreign Relations of the United States (FRUS), The Conferences at Washington, 1941-1942, and Casablanca, 1943* (Washington: Government Printing Office, 1958), 727

<sup>51</sup> *Ibid.*

<sup>52</sup> *Ibid.*, 726-731.

Germany.<sup>53</sup> This was the “full Victory” Eisenhower referenced in the epigraph above. As such, the political aims and military aims closely matched Clausewitz’s theoretical military aim. World War II took the form of a conflict of absolute political aims, rather than limited aims, because the full resources of the country were leveraged against closely aligned political and military objectives.<sup>54</sup>

Despite being a conflict of absolute aim, neither World War II at large nor Operation Overlord were without political constraints. Political constraints influenced not only the course of the conflict, but its scope and scale. The key political consideration involving the military conduct of Operation Overlord related to its prioritization. As early as 1941, Allied political leaders agreed to prioritize the war effort in Europe. In accordance with these agreements, early planning efforts prioritized building up forces in the United Kingdom for a cross-Channel attack. However, various subsequent decisions by political leaders invariably delayed that build up but continued to acknowledge its primacy. Ultimately, the Allied Sextant Conferences at Cairo and Tehran in late-1943 would confirm the primacy of Operation Overlord and it would receive priority of resources. In this case, the political constraint, an allied agreement to prioritize Overlord, ultimately furthered the operation.<sup>55</sup>

Although Operation Overlord was the priority, it did not receive resources exclusively, as the Allies were obligated for both political and military reason to support the other theaters of war. As a result, resource allocation remained a political constraint on Operation Overlord. For example, during Sextant, the Allies agreed to support Bolero-Overlord by shipping an additional 755,200 US Army personnel to the United Kingdom through the first six months of 1944. At the

---

<sup>53</sup> Pogue, *Supreme Command*, 53.

<sup>54</sup> *Ibid.*, 52-55.

<sup>55</sup> Dwight D. Eisenhower, *Crusade in Europe* (Baltimore: The Johns Hopkins Press, 1997), 27; Harrison, *Cross-Channel Attack*, 8-9, 21-45, and 83-94; Maurice Matloff, *Strategic Planning for Coalition Warfare - 1943-1944* (Washington, DC: Center of Military History), 211-223, and 378.

same time, the United States augmented the other theaters with 477,000 additional Army personnel.<sup>56</sup>

The US cargo shipping budget for 1944 also illustrates that Overlord was but one of many requirements in the global Allied effort. For example, while UK – European military operations (Bolero-Overlord) received the preponderance of US cargo shipping allocations (677 sailings) during the first six months of 1944, South and Southwest Pacific Theater military operations received nearly as much (589 sailings). In fact, during that six-month period, the United States allocated less than thirty-percent of its military operations shipping budget to UK - European military operations.<sup>57</sup>

US Army troop distributions and US cargo shipping allocations demonstrate that global Allied obligations constrained the allocation of resources available to support Overlord. However, the historical record makes clear that the availability of assault landing craft was Overlord's limiting resource. In this regard, lower than required production capacity and global obligations threatened to constrain the number of assault landing craft available to Overlord. As of September 1943, allied planners projected that Overlord was short nearly 400 landing craft for a four-division assault. Over the next months, coordination at the highest political levels narrowed the deficit of landing craft for Overlord. First, the United States increased landing ship production and canceled the production of other similarly sized ships. Second, Overlord planners reduced the assault landing craft requirement by substituting other types of shipping. Third, despite associated political implications related to China, the United States withdrew its long-held support of an amphibious operation in the China-Burma-India theater. Doing so released several landing craft allocated to China-Burma-India to support Operation Anvil, an amphibious operation against southern France to be conducted simultaneously with Overlord. Finally, having expanded

---

<sup>56</sup> Robert W. Coakley and Richard M. Leighton, *Global Logistics and Strategy 1943-1945* (Washington, DC: Center of Military History, 1989), 271-296 and 299.

<sup>57</sup> *Ibid.*, 305.

Overlord to a five-division assault, the Allies canceled Anvil and transferred the Anvil landing craft to Overlord. In summary, the political decision to prioritize Overlord resourced it accordingly, but just sufficiently that it would be successful. Furthermore, the relative lack of political constraints in prioritization is further proof of the absolute political aim.<sup>58</sup>

Another political constraint associated with Operation Overlord related to bombing targets in occupied countries, specifically France. Eisenhower notes in his memoirs that the military “scheme for employing the air force [in the occupied countries] in preparation for the great assault encountered very earnest and sincere opposition, especially on the political level.”<sup>59</sup> Eisenhower noted that Prime Minister Churchill and his cabinet feared that air attacks on French targets would cost at least 80,000 civilian lives which would “embitter the French Nation.”<sup>60</sup> Eventually, Churchill approved of the bombings, but with measures to mitigate the risk to French civilians. Historian Stephen Bourque demonstrated that Allied air forces were responsible for 60,000 to 70,000 of the approximately 150,000 French civilian deaths during the war, which he points out is more than the British civilians killed by Germans. Political authorities required no such provisions for similar attacks on German targets. Relaxation of this political constraint reinforces that the Allies executed Operation Overlord in line with the nature of a war of final victory and an absolute political aim – the complete overthrow of another nation.<sup>61</sup>

On 6 June 1944, the Allied forces, in consonance with political constraints, exploited maritime superiority and air superiority enhanced by the convergence of superiority in the electromagnetic spectrum and the support of the resistance movement in France, launching a massive invasion across the English Channel into northern France. Over the next three weeks, the

---

<sup>58</sup> Harrison, *Cross-Channel Attack*, 103-104 and 164-173; Matloff, *Strategic Planning*, 272; Pogue, *Supreme Command*, 108-117.

<sup>59</sup> Eisenhower, *Crusade*, 232.

<sup>60</sup> *Ibid.*

<sup>61</sup> Eisenhower, *Crusade*, 232-233; Stephen A. Bourque, *Beyond the Beach: The Allied War Against France* (Annapolis, MD: Naval Institute Press, 2018), 15.

Allies employed multiple forms of attack across the maritime, air, and land domains, to overmatch defending German forces and establish a lodgment. On D-Day, over 160,000 troops landed in Normandy by air and sea and succeeded in establishing footholds. Naval gunfire and tactical air forces supported the landings and the subsequent attack inland. Naval vessels ferried follow-on forces across the English Channel. Air forces continued the CBO against German industry, degrading its capability to support the German response to the invasion. Equipment and supplies continued to flow across the Atlantic from the United States. In addition, capabilities in the electromagnetic spectrum, the information environment, and unconventional forces enabled operations in the three traditional domains. By 1 July 1944, the Allies had landed 929,000 men, 586,000 tons of supplies, and 177,000 vehicles in France and had irreversibly established the lodgment. In total, the Allies optimized capabilities across all domains, the electromagnetic spectrum, the information environment, and capabilities of unconventional forces to overmatch German forces in Normandy. The Allies had achieved convergence.<sup>62</sup>

---

<sup>62</sup> US Department of the Army, “D-Day”; Harrison, *Cross-Channel Attack*, 269-449.

### Section 3: Korea (1950-1951)

And of course, there was the war in Korea, a war around which there had grown up such a political situation that military victory, at least a decisive military victory, was no longer in the cards.

—Dwight D. Eisenhower, Radio and Television Address to the American People on the Achievements of the 83rd Congress, 23 August 1954

As World War II concluded, the Allies occupied the territories formerly claimed by the Axis powers. In Europe, the Western allies (United States, United Kingdom, and France) and the Soviet Union split the former territory of Nazi Germany into west and east spheres of influence, respectively. In the Pacific, the United States occupied Japan while the Soviet Union expanded its sphere of influence to the Communist Chinese in their ongoing civil war. Western and Soviet spheres of influence met on the Korean Peninsula where the Allies established north and south zones of influence demarcated by the thirty-eighth parallel of latitude (38 Parallel), an arbitrary boundary that followed no meaningful geographical or political boundary. The Soviet Union established control of the area north of the 38 Parallel, while the United States did the same south of the 38 Parallel.<sup>63</sup>

The United Nations (UN), led by the United States and without Soviet participation, established a democratically elected government, the Republic of Korea (ROK), with the intent of unifying Korea under that government. However, the Soviet Union backed a communist government based in northern Korea, the Democratic People's Republic of Korea (DPRK). Having a greater appreciation for the strategic value of Korea in the Far East region, the Soviet Union was far more aggressive in establishing a DPRK military force than the United States was in the south. At the end of 1948, the United States and the Soviet Union withdrew their forces from Korea leaving both the Republic of Korea and North Korea to claim sovereignty over the entire peninsula.<sup>64</sup>

---

<sup>63</sup> Schnabel, *Policy and Direction*, 11-12.

<sup>64</sup> Schnabel, *Policy and Direction*, 13-25; Appleman, *South to the Naktong*, 5 and 7-18.

DPRK actions to unify the peninsula escalated through the first half of 1950. On 25 June 1950, North Korea, backed by the Soviet Union, invaded the Republic of Korea. The UN Security Council, which the Soviet Union boycotted on the day of the vote, quickly passed a resolution that, among other points, called for a cessation of hostilities, the restoration of the 38 Parallel, and for member nations to assist in enforcing those terms. The United States agreed to support the ROK and committed military forces to do so. Less than five years after the Allied victory in World War II, the United States found itself again at war, this time on the Korean Peninsula. The following paragraphs establish the DPRK, ROK, and US force postures in June 1950.<sup>65</sup>

Front line DPRK ground forces consisted of approximately 89,000 combat troops organized into seven assault divisions, a separate brigade, a motorcycle regiment, and an armored brigade. Supporting the front-line infantry were approximately 150 medium tanks, approximately 330 anti-tank guns of various types, and approximately 420 artillery pieces of various types. Another 32,000 trained or partially trained troops comprised three reserve divisions and five Border Constabulary brigades. The DPRK air force consisted of about 132 fighter aircraft. The small DPRK navy consisted of between fifteen and forty-five small patrol craft.<sup>66</sup>

Front line ROK ground forces consisted of approximately 65,000 combat troops organized into eight divisions. Supporting the front-line infantry were eighty-one 105-mm artillery pieces and approximately 140 anti-tank guns of various types. The ROK had no tanks or combat aircraft. The small ROK navy consisted principally of four patrol craft, one landing ship, tank (LST), fifteen minesweepers, ten minelayers.<sup>67</sup>

The US Far East Command (FEC), commanded by General of the Armies Douglas MacArthur, represented the military force immediately available to support operations in Korea.

---

<sup>65</sup> Schnabel, *Policy and Direction*, 1 and 66-70.

<sup>66</sup> Appleman, *South to the Naktong*, 7-12, 17-18; Field, *Korea*, 19 and 31.

<sup>67</sup> Appleman, *South to the Naktong*, 12-18; The United States gave the ROK ten P-51 mustangs on 26 June 1950, but the ROK had no pilots to fly them.



The command included services components representing the three US military services – Army Forces Far East, Far East Air Forces (FEAF), and Naval Forces Far East (NAVFE). Ground combat forces available to FEC included 47,000 combat troops organized in four divisions of Eighth Army. Supporting the infantry divisions were approximately eighty-eight M-24 light tanks, that could not compete with DPRK T-34 medium tanks (Soviet-made), and approximately 216 artillery pieces of various sizes. However, it is worth noting that Eighth Army was not manned or equipped to their total war-time authorization. In total, Eighth Army was short two corps headquarters, eleven battalion headquarters, approximately 29,000 troops, 132 heavy tanks, 400 anti-tank guns, and seventy-two artillery pieces. None of these forces were stationed in Korea, although an element of approximately 500 served as advisors and liaisons to the ROK military. Available to FEAF were over 500 combat aircraft including 397 fighters of various types, twenty-six light bombers, twenty-two medium bombers, and twenty-six transports. Again, none of these forces were stationed in Korea, but rather across the FEAF area of responsibility, namely Japan, the Philippines, and Guam. Available to NAVFE were twenty combat ships including one aircraft carrier, two cruisers, twelve destroyers, a frigate, five submarines, ten minesweepers, and eighteen patrol aircraft. The aircraft carrier *Valley Forge* carried eighty-six aircraft of various types.<sup>68</sup>

The Korean War was to be a very different undertaking for the United States. First, in World War II, Germany's early successes in Western Europe represented a *fait accompli*. The Overlord case illustrates that much of the US effort in the first few years of World War II aimed to establish air and maritime superiority as conditions to re-contest the land domain of Western Europe and reverse Germany's gain. This protracted method represents the least preferred of the three methods to defeat an adversary that the multi-domain operations concept outlines, after

---

<sup>68</sup> Clay Blair, *The Forgotten War: America in Korea 1950-1953* (New York: Anchor Books, 1989), 48; Schnabel, *Policy and Direction*, 53-54; Appleman, *South to the Naktong*, 49-50; Futrell, *Air Force in Korea*, 58; Field, *Korea*, 45-49.

deterrence and denying enemy objectives early in the conflict. When deterrence failed in Korea, the United States intervened to counter DPRK aggression and prevent the DPRK military from defeating the Republic of Korea.<sup>69</sup>

In multi-domain operations, the US Army relies on the tenet of calibrated force posture, “the combination of capacity, capability, position, and the ability to maneuver across strategic distances,” to prevent a *fait accompli*.<sup>70</sup> Components of calibrated force posture include forward presence forces, expeditionary forces, national-level capabilities, and authorities. Forward presence forces are those friendly forces (US, allied, and partner) immediately available to theater commanders at the onset of conflict. The ROK, FEAF, and NAVFE forces described above were forward presence forces at the onset of the Korean War. Expeditionary forces are friendly forces that must deploy from the United States or other regions. The time from notification to employment of expeditionary forces by theater commanders can range from days to months. In the Korean War, expeditionary forces augmented forward presence forces in the days, weeks, and months following the onset of hostilities. The four divisions of the 8<sup>th</sup> US Army stationed in Japan described above were among the first expeditionary forces deployed to Korea.<sup>71</sup>

National-level capabilities are those capabilities controlled above the theater level. For example, on 29 June 1950, the Joint Chiefs of Staff (JCS), provided the US Seventh Fleet, a national asset, to the operational control of the Far East Command. In another example, one national asset potentially available to the Korea theater, but withheld, was the 82<sup>nd</sup> Airborne Division. Finally, authorities refers to the authority, at each echelon, to employ capabilities to meet military objectives. The 29 June directive clarified MacArthur’s authorities as they

---

<sup>69</sup> US Army, *TRADOC Pamphlet 525-3-1*, 11 and 24; *TRADOC Pamphlet 525-3-1* states: “A *fait accompli* attack is intended to achieve military and political objectives rapidly and then to quickly consolidate those gains so that any attempt to reverse the action by the U.S. would entail unacceptable cost and risk.”

<sup>70</sup> US Army, *TRADOC Pamphlet 525-3-1*, 24.

<sup>71</sup> US Army, *TRADOC Pamphlet 525-3-1*, 17; Schnabel, *Policy and Direction*, 80-99.

pertained to the conflict in Korea. Specifically, the directive authorized MacArthur to employ air and maritime capabilities against DPRK forces anywhere on the peninsula and to resupply the ROK. Simultaneously, the directive restricted MacArthur from conducting operations in the vicinity of the “frontiers of Manchuria or the Soviet Union” and limited the use of force against intervening Soviet forces to only self-defense.<sup>72</sup>

When North Korea invaded the Republic of Korea, its ground and air forces were superior to those of the ROK divisions defending along the 38 Parallel, finding themselves outnumbered by about two-to-one, outgunned by about four-to-one, and facing armored forces to which they had no equivalent. By 4 July 1950, DPRK forces had defeated all initial ROK defensive positions and seized Seoul. As DPRK forces continued to attack along all major avenues of approach down the Korean Peninsula, remnants of the ROK Army struggled to mount an effective defense. Meanwhile, Eighth Army began deploying forces to Korea from Japan. Rather than deploying complete divisions, or even regiments, Eighth Army deployed forces as companies and battalions were available and as transportation capabilities allowed. As a result, Eighth Army forces deployed piecemeal into the fight, fighting a series of delaying actions to buy time for Eighth Army to build combat power. Engagements between DPRK and US Army forces highlighted the combat capabilities and readiness mismatch between the two. However, as additional US combat forces and enablers joined the fight and DPRK lines of communication extended, the DPRK advance began to slow. By 4 August 1950, US and ROK forces had largely stopped the DPRK advance at the Pusan Perimeter.<sup>73</sup>

While US ground forces took some time to become effective in slowing the DPRK attack, FEC brought FEAF and NAVFE forces to bear almost immediately. Doing so achieved

---

<sup>72</sup> US Army, Message, JCS 84681, 29 June 1950, accessed February 10, 2019, [https://www.trumanlibrary.org/whistlestop/study\\_collections/koreanwar/documents/index.php?documentdate=1950-06-29&documentid=ki-3-19&pagenumber=1](https://www.trumanlibrary.org/whistlestop/study_collections/koreanwar/documents/index.php?documentdate=1950-06-29&documentid=ki-3-19&pagenumber=1); Schnabel, *Policy and Direction*, 90; US Army, *TRADOC Pamphlet 525-3-1*, 17-18.

<sup>73</sup> Schnabel, *Policy and Direction*, 59-127; Appleman, *South to the Naktong*, 19-265.

several effects in the first days of the conflict. First, a combination of air and maritime assets evacuated all non-essential US personnel from Korea. Second, air and maritime assets transported thousands of tons of ammunition and replacement equipment from Japan to Korea to replenish ROK stocks. These supplies enabled the ROK forces to defend against continued DPRK attacks. The United States achieved each of these effects while the air and maritime domains remained contested and without clearly established superiority in either. For example, North Korea contested the evacuation on several occasions using aircraft which US aircraft either chased off or shot down.<sup>74</sup>

As FEAF and NAVFE brought their assigned assets, or forward presence forces, to bear, they quickly established air and maritime superiority. Maritime superiority was almost a foregone conclusion given the disparity in naval combat power between the United States and North Korea. While the DPRK and ROK naval forces were arguably comparable, neither force included any ship larger than a patrol boat. In contrast, NAVFE immediately brought to bear twenty large combatants and an aircraft carrier. The United States and its UN allies went on to quadruple its naval force in the first four months of the war. By October 1950, the allied naval force included eight aircraft carriers, a battleship, nine cruisers, fifty-four destroyers, six submarines, and various other supporting craft. As further evidence of US and Allied maritime superiority, not a single allied ship was damaged, let alone sunk, by enemy air or naval craft during the entirety of the war. In effect, NAVFE established maritime superiority simply by its presence.<sup>75</sup>

However, establishing air superiority required more than just presence as North Korea contested US and Allied air forces with both fighter aircraft and anti-aircraft guns. While FEAF effectively established local air superiority, supporting evacuations and resupply operations,

---

<sup>74</sup> Futrell, *Air Force in Korea*, 8-12 and 77; Field, *Korea*, 50-52; Schnabel, *Policy and Direction*, 71; Appleman, *South to the Naktong*, 55-56.

<sup>75</sup> Field, *Korea*, 365; Malcom W. Cagle and Frank A. Manson, *The Sea War in Korea* (Annapolis, MD: US Navy Institute, 1957), 527-531.

establishing broader air superiority required striking DPRK airfields and infrastructure in North Korea. President Truman authorized attacks on strictly military targets on 29 June 1950. AEAFF bombers attacked the main DPRK airfield in Pyongyang that day destroying key facilities and twenty-six aircraft. Subsequent AEAFF attacks on DPRK airfields destroyed another forty-three aircraft. Beginning 3 July 1950, carrier-based aircraft began striking targets north of the 38 Parallel. In the month of July, naval aviators claimed thirty-eight destroyed enemy aircraft. In total, by the end of July 1950, DPRK air forces lost over 100 aircraft or seventy-five percent of their initial combat strength.<sup>76</sup>

Carrier-based air attacks provided a distinct advantage over land-based attacks in these early days of the conflict. While AEAFF bombers could deliver more ordinance, they were based in Japan which placed many targets in North Korea outside the range of AEAFF jet fighters. However, naval aircraft launched from carriers at much closer ranges allowing naval fighter jets to accompany propeller-driven fighter-bombers on attacks. At least one US senior leader at the time credited the shock-value of US jets with contributing to US air superiority. In support of this claim, the historical record observes that after 20 July 1950, North Korea launched no further air offensives. By the end of July 1950, the United States controlled the skies over Korea, the water around it, and had complete control of the lines of communication across the Pacific Ocean. So one-sided was the United States' air and maritime superiority that the terms air supremacy and, if a corresponding doctrinal term existed, maritime supremacy, best described the air and maritime military achievement to this date.<sup>77</sup>

Second, in the Overlord case, political and military aims of the United States were identical, consistent from the beginning of the war, and the war effort was the government's clear

---

<sup>76</sup> Cagle and Manson, *Sea War*, 37-39; Field, *Korea*, 61-65; Futrell, *Air Force in Korea*, 98-103.

<sup>77</sup> Futrell, *Air Force in Korea*, 101; Field, *Korea*, 62; Cagle and Manson, *Sea War*, 37-39; US Joint Staff, *DoD Dictionary*, 14; The *DoD Dictionary* defines air supremacy as "that degree of control of the air wherein the opposing force is incapable of effective interference within the operational area using air and missile threats."

priority. In contrast, while the long-term political aim of the United States (a unified Korean Peninsula under a democratic government) remained constant through the war, the immediate political aim and the directed military aim would change several times. Moreover, the Korean conflict remained second in priority to US commitments to the defense of western Europe against potential Soviet aggression. The remainder of this section analyzes how maritime superiority, air superiority, and political constraints enabled or hindered convergence to achieve the directed military aim in Korea.<sup>78</sup>

The 25 June 1950 resolution of the UN Security Council established the political aim of both the United States and the UN as “the immediate cessation of hostilities [on the Korean Peninsula]” and for “North Korea to withdraw forthwith their armed forces to the 38 parallel.”<sup>79</sup> President Truman’s statement on 27 June and a telegram from the US Secretary of State to the US Embassy in the Soviet Union reinforced that this was the political aim. The Secretary of State telegram highlighted that the immediate political aim established in the resolution was “without prejudice” to the US view that the Korean Peninsula should be unified.<sup>80</sup>

Having established a political aim and noting that North Korea did not abide by the 25 June resolution, the UN Security Council outlined its military aim in a resolution on 27 June which recommended that “members of the UN furnish such assistance to the Republic of Korea as may be necessary to repel the armed attack and restore international peace and security to [Korea].”<sup>81</sup> A series of directives from the JCS directed MacArthur to employ military means to support the resolutions of the UN and invested in him the authorities to do so. A subsequent resolution of the UN Security Council on 7 July authorized the United States to establish a unified military command for forces provided by members of the UN. President Truman designated

---

<sup>78</sup> Schnabel, *Policy and Direction*, 13-42, 286-287, 316, and 344.

<sup>79</sup> Glennon, *FRUS, 1950*, 155-156.

<sup>80</sup> Glennon, *FRUS, 1950*, 202-03 and 227.

<sup>81</sup> Glennon, *FRUS, 1950*, 211.

MacArthur the commander of that unified command on 10 July. At this point, two observations become clear. One, the political and military aims of the United States and the UN were limited aims and aligned such that the military aim supported the political aim and was resourced accordingly. Second, those limited aims did not envision the dissolution of North Korea, simply the restoration of the 38 Parallel. In the following months, two instances of convergence at the operational level enabled military means to achieve both the military and political aim as outlined above. Those instances were: 1) successful defense of the Pusan Perimeter and 2) an audacious amphibious counter-attack at Inchon with Operation Chromite. Maritime superiority, air superiority, and favorable political constraints enabled the US Army to achieve convergence in both instances.<sup>82</sup>

In the defense and break out of the Pusan Perimeter, air and maritime superiority provided several distinct effects that enabled the US Army to achieve operational success. First, combined air and maritime superiority enabled the United States' uncontested ability to exploit air and maritime lines of communication to build land combat power in Korea. By mid-July 1950, the FEC's organic air and maritime transports deployed three infantry divisions, an infantry regiment, and those units' organic enablers from Japan to Korea. Further, in the month of July 1950, over 300,000 tons of supplies passed through Pusan's port with critical supplies being airlifted directly to combat units. As these first US forces entered the fight, they executed several desperate delaying actions like those at Osan, between Pyongtaek, and Chochiwon, at Taejon, at Chinju, and near Masan. These delaying actions allowed US and ROK forces to consolidate on strong defensive lines defined generally by the Naktong River on the West and mountainous terrain along the north. Having blunted the DPRK attack, Eighth Army continued to build combat power as three Army infantry regiments, a Marine brigade, dozens of tanks, and replacement

---

<sup>82</sup> Glennon, *FRUS, 1950*, 211, 240-241, 263, 271, and 329; US Army, Message, JCS 85370, 10 July 1950, accessed February 10, 2019, [https://www.trumanlibrary.org/whistlestop/study\\_collections/koreanwar/documents/index.php?documentdate=1950-07-10&documentid=ki-21-8&pagenumber=1](https://www.trumanlibrary.org/whistlestop/study_collections/koreanwar/documents/index.php?documentdate=1950-07-10&documentid=ki-21-8&pagenumber=1).

personnel all arrived via maritime transport from Hawaii and the Continental United States. The scale of the US build-up in Korea during July 1950 required air and maritime superiority.<sup>83</sup>

Second, air and maritime superiority enabled FEAF and NAVFE aircraft to provide much needed firepower across the depth of Eighth Army battlefield. Without threat of enemy air attack beginning in late July 1950, FEAF and NAVFE commanders did not require fighter escorts on their missions. Further, aircraft carriers and surface ships decreased their standoff, increasing sortie rates, fire accuracy, and fire coverage. The Army's official historian remarks that "by the end of July, the U.N. ground forces in Korea were receiving proportionately more air support than had General Bradley's Twelfth Army Group in World War II."<sup>84</sup> In the close fight, robust close air support enabled outnumbered, outgunned, and effectively reserve-less Eighth Army units to stop enemy advances and cover friendly withdrawals. In the deep maneuver area, FEAF and NAVFE firepower interdicted DPRK troop movements, destroyed bridges, and harassed logistics columns, effectively denying DPRK movements during the day. In the operational and strategic deep fires area, air and naval fires destroyed railroad lines, bridges, airfields, supply depots, and troop concentrations. The convergence of firepower demonstrated in air and maritime superiority enabled Eighth Army to deny a DPRK *fait accompli*, setting the conditions for a powerful counter-attack out of the Pusan Perimeter.<sup>85</sup>

As Eighth Army fought to maintain the Pusan Perimeter, FEC gathered strength in preparation for an audacious counter-attack. By the middle of September 1950, MacArthur had gathered two substantial ground forces. One force was X Corps (US), composed of the 1 Marine Division (complete with three Marine regiments and Marine air wing) and the 7 Infantry Division augmented with over 8,000 ROK soldiers. In total, X Corps numbered approximately 55,000

---

<sup>83</sup> Field, *Korea*, 71-74; Appleman, *South to the Naktong*, 59-76, 77-96, 146-179, 227-234, 235-237, 252-523, and 259-260.

<sup>84</sup> Appleman, *South to the Naktong*, 256.

<sup>85</sup> Futrell, *Air Force in Korea*, 53, 103, 125-136; Appleman, *South to the Naktong*, 256; Cagle and Manson, *Sea War*, 39-74; Field, *Korea*, 90-170.



combat troops. This force would land at Inchon, seize Seoul and Kimpo Airfield, and cut DPRK supply lines across the Korean Peninsula. The second force was the combined Eighth Army and ROK Army with approximately 140,000 troops organized into four US and six ROK divisions in Korea. Six tank battalions and four separate tank companies supported this force with over 500 medium tanks. As X Corps attacked at Inchon, this supporting attack along the entire Pusan front intended to drive DPRK forces either back across the 38 Parallel or into X Corps. Opposing FEC were approximately 6,500 DPRK troops in the Inchon-Seoul area and approximate 70,000 DPRK troops opposite the Pusan Perimeter. Supporting the ground forces were FEAF and NAVFE, both of which were much reinforced compared to June 1950.<sup>86</sup>

On 15 September 1950, X Corps executed its amphibious landing at Inchon and the next day, Eighth Army attacked out of its perimeter. Over the next fifteen days, the effects of the land, maritime, and air domains converged to decisively defeat DPRK forces in South Korea. At Inchon, the 1 Marine Division fought ashore supported by naval gunfire and close air support from the Marine Air Wing to seize both the beachhead and Kimpo Airfield. The 7 Infantry Division landed unopposed at Inchon and came alongside the Marine division to seize Seoul on 27 September 1950.<sup>87</sup>

Meanwhile, Eighth Army and ROK, supported by the 5 Air Force and naval fire support, attacked up and across the Korean Peninsula, forcing the DPRK Army to retreat across the 38 Parallel. Those DPRK forces left remaining in South Korea were scattered, isolated, and no longer posed a threat. Having achieved convergence at the operational level in early August to stop the DPRK offensive at the Pusan Perimeter, the United States achieved convergence at the strategic level. As a result, by the end of September, the United States and its allies achieved its initial political and military aim.<sup>88</sup>

---

<sup>86</sup> Field, *Korea*, 171-173; Appleman, *South to the Naktong*, 381-385, 488-500, and 547.

<sup>87</sup> Appleman, *South to the Naktong*, 502-514 and 524-536.

<sup>88</sup> Appleman, *South to the Naktong*, 542-606.

To enhance the effects operations in the traditional domains, the UN forces exploited the information environment and the electromagnetic spectrum during the first several months of the war. For example, a series of deception efforts preceded the Inchon attack. First, MacArthur activated the X Corps headquarters in relative secrecy and formed it largely from his own staff. In doing so, MacArthur not only alleviated having to wait for a corps staff to train up in the United States and deploy, he set the conditions for a corps headquarters, previously unknown to his adversaries to lead the attack. Second, at numerous points in Korea, NAVFE elements executed operations to deceive DPRK forces as to the location of the amphibious assault. For example, across the peninsula from Inchon, a naval task force executed a demonstration near Wonsan, a potential landing site. Similarly, the naval force executing the landings executed strikes and diversionary landings along the west coast to deceive the enemy as to the precise location of the main attack. Third, although not explicitly discussed in the historical record as an element of deception, the selection of Inchon as the landing site included an element of deception given its treacherous approaches and extreme tides. In any case, the absence of major DPRK forces in and around the Inchon-Seoul area suggests that North Korea discounted the possibility of a landing there or overestimated their capability to defend against such an attack.<sup>89</sup>

Also, UN forces exploited technological advances in communications intelligence (COMINT) and communications security (COMSEC) to control the electromagnetic spectrum and information environment like Ultra pioneered several years earlier. For example, COMINT provided advance warning of DPRK attacks against the Pusan Perimeter. This vital intelligence allowed Eighth Army to reposition its limited forces along the thinly stretched line of defense to defeat DPRK attacks. Similarly, as DPRK forces withdrew after the Inchon attack, COMINT enabled Eighth Army to pursue and exploit that withdrawal. In the reverse, COMSEC protected

---

<sup>89</sup> Appleman, *South to the Naktong*, 489-495; Robert Schmidt et al., *CSI Battlebook 2-D: Operation Chromite (Inchon)* (Leavenworth, KS: Combat Studies Institute, May 1984), 20-26, 34 and 52; Field, *Korea*, 189 and 212; Schnabel, *Policy and Direction*, 139-154.

US strategic and tactical radio communication from exploitation by its adversaries, an essential advantage given the vast distance that separated Korea from strategic decision makers in the United States. In sum, the deception effort related to Inchon and US domination of COMINT and COMSEC serves as a historical antecedent to modern efforts to control and dominate the information environment and the electromagnetic spectrum and while engaging adversaries across multiple domains to achieve convergence.<sup>90</sup>

At the onset of hostilities on 25 June 1950, the national command authority burdened MacArthur with several political constraints. However, as these began to interfere with achieving the agreed upon military aim, MacArthur negotiated with the national command authority to relax those constraints. For example, air and naval forces were initially restricted to only defensive actions as part of evacuation efforts. As the South Korean defenses crumbled, that constraint relaxed on 27 June 1950 to allow air and naval forces to support ROK combat operations, but only south of the 38 Parallel. This constraint relaxed again on 29 June 1950 to allow air operations in North Korea, but only against military targets with the intent to convey to North Koreans that the US intent was only to restore the status quo.<sup>91</sup>

Similarly, assigned forces served as an overarching political constraint for the means available to FEC to accomplish its mission, in consonance with the overarching political understanding that the main political and military effort for the United States remained centered

---

<sup>90</sup> David A. Hatch and Robert Louis Benson, *United States Cryptologic History*, series 5, *The Early Postwar Period, 1945-1952*, vol. 3, *The Korean War: The SIGINT Background* (Center for Cryptologic History, National Security Agency, 2000), accessed March 24, 2019, <https://www.nsa.gov/Portals/70/documents/about/cryptologic-heritage/historical-figures-publications/publications/korean-war/korean-war-sigint-background.pdf>, 9; Patrick D. Weadon, "SIGINT and COMSEC Help Save the Day at Pusan," National Security Agency | Central Security Service, accessed March 24, 2019, <https://www.nsa.gov/about/cryptologic-heritage/historical-figures-publications/publications/korean-war/sigint-comsec-save-day/>.

<sup>91</sup> G. Stephen Lauer, "Blue Whales and Tiger Sharks: Politics, Policy, and the Military Operational Artist," *The Strategy Bridge* (20 February 2018), accessed March 2, 2019, <https://thestategybridge.org/the-bridge/2018/2/20/blue-whales-and-tiger-sharks-politics-policy-and-the-military-operational-artist>; Schnabel, *Policy and Direction*, 70, 73, and 75.

in Europe throughout the conflict in Korea. As the various FEC service components requested additional forces, the national command authority approved those forces within its capability and approved the accompanying political actions to support the deployment or raising of those forces. For example, on 7 July 1950, President Truman approved releasing the 2<sup>nd</sup> Infantry Division and several smaller units from the Active Army's General Reserve to FEC, but he did not approve releasing the 82<sup>nd</sup> Airborne Division.<sup>92</sup>

To place the Army on a war footing and to backfill the general reserve, Truman twice approved increases to the Army's authorized strength increasing it from 630,000 to 834,000 by 19 July 1950. Coupled with Congressional action to authorize activating reserve forces, Truman's political actions set the conditions for the military to resource the limited war effort in accordance with the overall strategic intent of the United States in the defense of Europe. An example of the value of these evolving constraints is that the Marine Corps drew approximately one-third of its newly activated 7 Marine Regiment, 1 Marine Division's third regiment, from the Marine Corps Reserves.<sup>93</sup>

In summary, during the first several months of the Korean War, Far East Command's political constraints were largely guideposts that could be changed via negotiation with the national command authority so long as those changes supported the military aim and did not compromise larger national objectives. However, those negotiations could only go so far considering the Nation's other priorities: 1) defending Europe and 2) defending Japan. No matter the situation in Korea, neither the sovereignty of the United States nor the sovereignty of its Western European allies were at stake. As such, the means available to the Korean theater would never be increased at the expense of requirements to defend Europe and Japan.

---

<sup>92</sup> Schnabel, *Policy and Direction*, 94.

<sup>93</sup> Schnabel, *Policy and Direction*, 119-120; Field, *Korea*, 172.

Next, the United States shifted its military aim while retaining the limited, political aim described above. On 27 September 1950, President Truman, via the JCS, instructed MacArthur that “your military objective is the destruction of the North Korean Armed Forces.”<sup>94</sup> The directive also authorized a full range of military operations north of the 38 Parallel including, ground, amphibious, and airborne landings. However, this new directive came with five political constraints aimed to mitigate the risk of Communist China or the Soviet Union entering the conflict. First, MacArthur could only initiate operations in the absence of major Communist Chinese or Soviet intervention. Second, MacArthur could not employ forces in Manchuria or the Soviet Union. Third, MacArthur was to only employ Korean troops in the provinces bordering Manchuria and the Soviet Union. Fourth, MacArthur was to immediately assume a defensive posture upon major Soviet intervention. The JCS left it to MacArthur’s judgment how to proceed against a Communist Chinese intervention, subject to further guidance from Washington. Finally, the directive clarified that the political aim of the war effort remained to enforce the UN resolutions of June 1950.<sup>95</sup>

Overall, the five political constraints in the JCS directive were more favorable than previous political constraints in that they allowed MacArthur wider initiative to prosecute the war effort as opposed to requiring him to stop his offensive at the 38 Parallel. However, at this point, the military aim and the political aim were unaligned. On the one hand, the military aim closely resembled Eisenhower’s “full victory” aim of World War II, while the political aim stopped short of eradication of North Korea.<sup>96</sup>

None the less, enabled by a broader military aim, favorable political constraints, maritime superiority, and air superiority, UN forces nearly destroyed the DPRK military and extended UN control over most of the Korean Peninsula. During October 1950, Eighth Army, supported by the

---

<sup>94</sup> Glennon, *FRUS, 1950*, 781.

<sup>95</sup> Glennon, *FRUS, 1950*, 792-93, 781, 785.

<sup>96</sup> Schnabel, *Policy and Direction*, 182.

5 Air Force, attacked up the western side of Korea seizing Pyongyang and driving to the Yalu River. By virtue of air superiority, the 187 Airborne Regimental Combat Team parachuted in north of Pyongyang to isolate the city and cut off retreating DPRK forces. Further, with Eighth Army advancing faster than its ground supply lines could support, 5 Air Force provided over 1000 tons of supply daily to army forces in North Korea. Meanwhile, the ROK Army's I Corps continued to attack up the east side of Korea, seizing Wonsan on 10 October 1950. Supported by naval aviation and the Marine Air Wing, the US X Corps repositioned from Seoul and landed the 1 Marine Division at Wonsan and the 7 Infantry Division at Iwan on 25 and 29 October respectively. From Wonsan, I Corps (ROK) continued to attack up the coast and X Corps (US) began its attack up the eastern interior toward the Yalu River. At this point in time, the DPRK Army was effectively defeated offering little resistance to Allied forces. Yet again, the month of October 1950 saw Allied forces converge effects in all three domains into tactical and operational victories.<sup>97</sup>

As UN Forces continued to demonstrate progress towards the directed military aim, the political aim shifted for both the UN and the United States. On 4 October 1950, the UN General Assembly resolved to establish the UN Commission for the Unification and Rehabilitation of Korea with the clear aim to establish “a unified, independent, and democratic government of all Korea.”<sup>98</sup> Echoing the UN, the United States adopted a similar political aim in a directive to General MacArthur on 29 October 1950, directing him to “dissolve the democratic peoples [sic] Republic of Korea”<sup>99</sup> and clearly stating his mission:

---

<sup>97</sup> Futrell, *Air Force in Korea*, 207-211; Cagle and Manson, *Sea War*, 147-150; Appleman, *South to the Naktong*, 654-673.

<sup>98</sup> The Problem of the Independence of Korea, General Assembly Res. 376(V), United Nations General Assembly, 5th sess., 7 October 1950, accessed February 10, 2019, <https://documents-dds-ny.un.org/doc/RESOLUTION/GEN/NR0/059/74/IMG/NR005974.pdf?OpenElement>.

<sup>99</sup> US Army, Message, JCS 95328, 20 October 1950, accessed February 10, 2019, [https://www.trumanlibrary.org/whistlestop/study\\_collections/koreanwar/index.php?action=pdf&documentid=ki-22-10](https://www.trumanlibrary.org/whistlestop/study_collections/koreanwar/index.php?action=pdf&documentid=ki-22-10)

You will occupy North Korea in the name of and on behalf of the UN. It shall be your primary duty to so administer your occupation as to facilitate public order, economic rehabilitation and the democratic mode of life in the area and to prepare the way for the reunification of a free and independent Korea.<sup>100</sup>

As such, by the end of October 1950, the military and political aims of the United States and the UN were again aligned. However, while expanding the political aim towards the absolute, the US government did not relieve MacArthur of the political constraints detailed above. In general, those political constraints did not hinder military efforts. However, MacArthur violated the third of the five political constraints described above by “ordering all of his forces north to the border instead of using only ROK forces in that area.”<sup>101</sup>

As the UN and the United States shifted their political aim to reflect the military success of September and early-October, late-October saw Allied fortunes begin to change again as Communist Chinese Forces intervened directly in North Korea. Beginning on 26 October 1950 and climaxing on 01-02 November, a Chinese field army launched a counter-attack against Eighth Army, forcing it to consolidate on defensible terrain. Three weeks later, on 27 November 1950, two Chinese army groups of approximately 200,000 soldiers counterattacked both Eighth Army and X Corps (US). Over the next two months, Communist Chinese Forces pushed Allied forces back down the Korean peninsula, south of the 38 Parallel and south of Seoul. While the Chinese brought aircraft to support their ground forces, they never made a concerted effort to contest Allied air superiority. Similarly, the Chinese never contested Allied maritime superiority.<sup>102</sup>

After Communist Chinese Forces intervened, Korean War settled into a stalemate. Despite maintaining overwhelming air and maritime superiority, UN forces could not converge

---

<sup>100</sup> Ibid.

<sup>101</sup> Schnabel, *Policy and Direction*, 371

<sup>102</sup> Appleman, *South to the Naktong*, 667-716; Schnabel *Policy and Direction*, 233-239 and 274-312; Futrell, *Air Force in Korea*, 220-221 and 694-699; Cagle and Manson, *The Sea War in Korea* (Annapolis, MD: US Navy Institute, 1957), 490-494.

those capabilities to achieve a decisive military victory in the land domain due to political constraints. Whereas North Korea and now China were prosecuting the war with what seemed to be unlimited resources the United States did not. Recognizing that Communist Chinese forces brought with them the capability, if they so desired, of ejecting UN forces from Korea, the JCS amended their instructions to MacArthur on 29 December 1950. In doing so they directed MacArthur to defeat the Communist Chinese offensive and defend the Republic of Korea, if possible. The directive also clarified that the MacArthur would not receive any additional forces nor was the United States prepared to fight a general war with China. It also authorized MacArthur to evacuate his forces to Japan if the situation required. In short, the 29 December directive reverted both the military and political aims to those of July 1950.<sup>103</sup>

MacArthur made several recommendations to the command authority to exploit his advantages in the air and maritime domains to achieve the military aim:

The first was to blockade the China coast; the second, to destroy Communist China's war industries through naval gunfire and air bombardment; the third, to reinforce the troops in Korea with part of the Chinese Nationalist garrison on Formosa; and the fourth, to allow diversionary operations by the Nationalist troops against vulnerable areas of the Chinese mainland. These measures, he was certain, could not only relieve the pressure on UN forces in Korea but could indeed severely cripple Communist China's war-making potential.<sup>104</sup>

The national command authority denied MacArthur's requests. In doing so, the national command authority also made clear that it would allocate no additional ground forces, beyond replacement personnel. The United States simply did not want to risk a broader confrontation with China and the Soviet Union nor did the United States desire to operate outside the bounds of UN mandates. Furthermore, continued conflict in Korea risked US efforts to deter Soviet aggression in western Europe by bleeding off military resources required for that cause. The national command authority feared that a general conflict with China might invite Soviet aggression

---

<sup>103</sup> Glennon, *FRUS, 1950*, 1625-26.

<sup>104</sup> Schnabel, *Policy and Direction*, 315.



against western Europe, the United States' principle security concern. The resulting tension between MacArthur and the national command authority increased as MacArthur began to criticize publicly US policy and the political constraints it placed upon his command. That tension resolved only when President Truman relieved MacArthur on 11 April 1951, replacing him with General Matthew Ridgway.<sup>105</sup>

Like MacArthur, Ridgway recognized that political constraints prevented him from exploiting air superiority and maritime superiority to achieve the overmatch against Communist Chinese land forces required to achieve the desired political aim. As such, on 27 April 1951, Ridgway requested authorization to reconnoiter Communist Chinese airbases outside of Korea and to launch retaliatory air and naval attacks against those airbases should Chinese forces use them as a base from which to launch major attacks against UN forces.<sup>106</sup> The national command authority approved Ridgway's request the next day but rescinded that authority in an extensive directive four days later. The later directive established the military aim to "destroy the armed forces of North Korea and Communist China operating within the geographic boundaries of Korea and waters adjacent thereto."<sup>107</sup> However, the directive placed extensive political constraints on Ridgway's actions. Most significantly, Ridgway was not to advance north of defensible lines of terrain immediately north of the 38 Parallel nor were any of his forces to "cross Manchurian or [Soviet Union] borders of Korea."<sup>108</sup> A subsequent directive on 31 May 1951 repeated much of the 1 May directive, but settled on the military aim to "inflict maximum personnel and material losses on the forces of North Korea and Communist China operating within the geographic boundaries of Korea and waters adjacent thereto, in order to create

---

<sup>105</sup> Glennon, *FRUS, 1950*, 1630-33; Schnabel, *Policy and Direction*, 315-325, 286-288; Glennon, *FRUS, 1951*, 41-42.

<sup>106</sup> Glennon, *FRUS, 1951*, 385-386.

<sup>107</sup> Glennon, *FRUS, 1951*, 395.

<sup>108</sup> *Ibid.*, 396.

conditions favorable to a settlement of the Korean conflict.”<sup>109</sup> In short, the military aim of the Korean War was to set the most favorable conditions for a political solution.<sup>110</sup>

Thus, the national command authority left Ridgeway without the means to stem the near limitless reinforcement, replacement, and replenishment of Chinese forces in North Korea. While he retained maritime superiority and air superiority, political constraints prevented Ridgeway from converging those capabilities to achieve anything more than tactical successes against an enemy whose base of operation and center of gravity was outside his influence. General Mark Clark succinctly assessed later that:

The Air Force and the Navy carriers may have kept us from losing the war, but they were denied the opportunity of influencing the outcome decisively in our favor. They gained complete mastery of the skies, gave magnificent support to the infantry, destroyed every worthwhile target in North Korea, and took a costly toll of enemy personnel and supplies. But as in Italy, where we learned the same bitter lesson in the same kind of rugged country, our airpower could not keep a steady stream of enemy supplies and reinforcements from reaching the battle line. Air could not isolate the front.<sup>111</sup>

In summary, the Korean War saw three distinct phases related to political and military aims where air superiority, maritime superiority, and political constraints influenced convergence to achieve the desired political outcome. Early in the war, political and military aims, while limited, were closely aligned. During this phase, MacArthur negotiated appropriate political constraints, such that he was able to exploit air and maritime superiority to achieve convergence at the Pusan Perimeter and at Inchon. In doing so, he achieved both the directed political and military aims.

Next, based on the success of the military campaign, the political and military aims widened to near absolute in the geopolitical context of the Korean peninsula. The national command authority relieved MacArthur of some political constraints and MacArthur disregarded

---

<sup>109</sup> Glennon, *FRUS, 1951*, 489.

<sup>110</sup> Glennon, *FRUS, 1951*, 386-387, 394-398 and 487-493; Schnabel, *Policy and Direction*, 396.

<sup>111</sup> Cagle and Manson, *Sea War*, 277.

those remaining political constraints as he saw fit. As a result, MacArthur to exploited air and maritime superiority to drive North Korea to the brink of defeat.

Finally, The Communist Chinese intervention defeated MacArthur's offensive and resulted in the United States' reversion to its limited political and military aims of July 1950. However, MacArthur's vision of victory, exploiting air superiority and maritime superiority to achieve convergence and a decisive victory in the land domain over North Korea and its Communist Chinese allies, remained unchanged. MacArthur was unable to negotiate further relaxation of political constraints to achieve his vision for three reasons. First, MacArthur's vision was no longer in consonance with the limited aims of the United States and the UN in Korea. Second, his vision risked general war with China. Third, and most importantly, the United States' principal national security concern remained deterring Soviet aggression in Europe. MacArthur's insubordinate actions as he clung to his vision resulted in his relief from command. Subsequently, the national command authority articulated to Ridgway very clear political constraints that left him with limited means that enabled only limited ways to achieve convergence. As a result, the Korean War settled into a back and forth stalemate with both sides attempting to set the most favorable military conditions for an armistice.

## Section 4: Conclusion

The Overlord and Korea cases demonstrate that the US military aim to integrate capabilities in all domains and to optimize those effects to overmatch adversaries “through cross-domain synergy and multiple forms of attack” (i.e. convergence) is a historical solution to military problems.<sup>112</sup> Additionally, both cases offer examples of how the United States military “defeats aggression by optimizing effects from across multiple domains at decisive spaces to penetrate the enemy’s strategic and operational anti-access and area denial systems, dis-integrate the components of the enemy’s military system, and exploit freedom of maneuver necessary to achieve strategic and operational objectives that create conditions favorable to a political outcome.”<sup>113</sup> These cases suggest that air superiority, maritime superiority, and favorable political constraints are prerequisite conditions to the US military’s efforts to achieve convergence at the strategic level in order to achieve a decisive military victory. Finally, the Korea case suggests that three criteria are inextricably linked in that even with two criteria unquestionably established, convergence is not possible without all three.

These conclusions have several implications related to the US Army’s multi-domain operations concept. First, taken together both case studies support the emphasis *TRADOC Pamphlet 525-3-1* places on preventing an adversaries *fait accompli* attack. The Overlord case illustrates the time, resources, and military effort required to reverse an adversaries *fait accompli* military operation. In a complementary way, the Korean case illustrates the challenge of denying the *fait accompli* in the face of a superior opposing land force. Even against the air and maritime superiority of UN forces, North Korea nearly accomplished its objectives. A North Korea with the capability to meaningfully contest the air and maritime domains for even a few days or even weeks may have won the day. In the future, the US military should continue to empathize the

---

<sup>112</sup> US Army, *TRADOC Pamphlet 525-3-1*, 20.

<sup>113</sup> US Army, *TRADOC Pamphlet 525-3-1*, viii.

importance of denying the *fait accompli* and develop concepts that account for and defend against adversaries' efforts to do.

Second, this study suggests that superiority in the four, modern, non-terrestrial domains (i.e. air superiority, maritime superiority, space superiority, and cyber superiority) may be prerequisites for strategic convergence in future wars. By extension, the US military success in preventing a *fait accompli* and seizing the initiative on land depends on superiority in the non-terrestrial domains. The Korea case illustrates that convergence is certainly possible at the tactical and operational levels even with prohibitive political constraints. It is imaginable that even with a non-terrestrial domain contested and with significant political constraints, the US military could, for brief periods, converge effects from contested domains to achieve tactical or operational success. In this view, *TRADOC Pamphlet 525-3-1* provides a useful concept in setting the appropriate conditions for those brief periods.

However, it is difficult to imagine rapid and continuous effects emanating from contested domains. Therefore, the United States fought for air and maritime superiority as part of Operation Overlord. In doing so, the efforts of the US Army Air Corps and the US Navy were more than just self-serving. How effective is close-air support if the aircraft providing it are evading or engaging enemy air threats? How effective is an amphibious assault if it comes under enemy attack the moment it disembarks? How effective is the US capability to project combat power if military sealift vessels and airborne tankers are destroyed in port or on the ground at the beginning of a conflict?

The implications to the US military's effort to penetrate, disintegrate, and destroy during offensive operations are clear. The effectiveness of convergence during these operations and their success or failure will depend on the degree to which those domains are contested at any given time. However, the cases explored in this paper also suggest that the United States military only executes major operations under conditions that are favorable and when the US retains the initiative.

Third, historical examples of actions to dominate the electromagnetic spectrum and information environment suggest that the belligerent with overmatch in those two areas holds a distinct advantage. In both case studies, the United States and its allies established a clear asymmetry over the electromagnetic spectrum and the information environment. In the Overlord case, that asymmetry helped set the conditions required to establish air superiority, maritime superiority, and by extension, convergence. In the Korea case, asymmetry in the electromagnetic spectrum and information environment allowed UN forces to seize the initiative and return to the offensive. Future US military concepts and doctrine should place an abundance of emphasis on detailing why and how the United States will dominate the electromagnetic spectrum and information environments in future wars.

Finally, while this study's two cases are now over sixty-five years old, they both offer examples of historical antecedents of modern, emerging, or future domains. This runs counter to the argument that historical cases do not account for technological and cultural changes. Neither case directly provides the opportunity to assess the importance of the space and cyber domains to convergence nor their relationship to political constraints. Operation Desert Storm, Operation Iraqi Freedom, the recent Ukrainian conflict, and Operation Inherent Resolve are some recent cases that may prove useful in identifying the prerequisites to convergence on the modern and future battlefield. However, instances of actions to dominate the information environment and the electromagnetic spectrum in the Overlord and Korea cases correlate to the cyber domain and space domain. The cyber domain is by Army definition "a global domain within the information environment."<sup>114</sup> The space domain is tethered to the land domain by the electromagnetic spectrum. As a result, future iterations of the multi-domain operations concept should include historical examples that link doctrine to historical lessons.

---

<sup>114</sup> US Army, *TRADOC Pamphlet 525-3-1*, GL-3

## Bibliography

### Primary sources

Aandahl, Fredrick, William M. Franklin, and William Slany, eds. *Foreign Relations of the United States, The Conferences at Washington, 1941-1942, and Casablanca, 1943*. Washington: Government Printing Office, 1958.

Appleman, Roy E. *South to the Naktong, North to the Yalu*. Washington, DC: Center of Military History, 1992. Accessed August 26, 2018. <https://history.army.mil/html/books/020/20-2/index.html>.

Chief of Staff to the Supreme Allied Commander. *Digest of Operation 'Overlord'*. *COSSAC Report* 43, no. 32 (7 July 1943). Accessed August 26, 2018. <http://cgsc.cdmhost.com/cdm/singleitem/collection/p4013coll8/id/1246>.

———. *Operation 'Overlord': Appendices*. *COSSAC Report* 43, no. 28 (1944). Accessed August 26, 2018. <http://cgsc.contentdm.oclc.org/cdm/singleitem/collection/p4013coll8/id/4543/rec/20>.

Coakley, Robert W., and Richard M. Leighton. *Global Logistics and Strategy 1943-1945*. Washington, DC: Center of Military History, 1989.

Craven, Wesley F., and James L. Cate, eds. *The Army Air Forces in World War II*. Vol. 2, *Europe: Torch to Pointblank, August 1942 to December 1943*. Washington, DC: Office of Air Force History, 1983.

———. *The Army Air Forces in World War II*. Vol. 3, *Europe: Argument to V-E Day, January 1944 to May 1945*. Washington, DC: Office of Air Force History, 1983.

Deutsch, Harold C. "The Influence of Ultra on World War II." *Parameters* 8, no. 4 (January 1978): 2-15. Accessed December 20, 2018. <https://apps.dtic.mil/dtic/tr/fulltext/u2/a512228.pdf>

Eisenhower, Dwight D. *Crusade in Europe*. Baltimore: The Johns Hopkins Press, 1997.

———. "D-Day Statement to Soldiers, Sailors, and Airmen of the Allied Expeditionary Force" (June 1944). US National Archives Identifier: 186473. Accessed November 20, 2018. <https://catalog.archives.gov/id/186473>.

———. Quote from "Radio and Television Address to the American People on the Achievements of the 83rd Congress," 23 August 1954. Dwight D. Eisenhower Presidential Library, Museum and Boyhood Home. Accessed December 10, 2018. [https://www.eisenhower.archives.gov/all\\_about\\_ike/quotes.html#koreanwar](https://www.eisenhower.archives.gov/all_about_ike/quotes.html#koreanwar).

Field, James A., Jr. *History of United States Naval Operations: Korea*. Washington, DC: US Government Printing Office, 1962.

Glennon, John P., ed. *Foreign Relations of the United States, 1950*. Vol. 7, *Korea*. Washington, DC: US Government Printing Office, 1976. Accessed December 9, 2018. <https://history.state.gov/historicaldocuments/frus1950v07>.

- Glennon, John P., Harriet D. Schwar, and Paul Claussen, eds. *Foreign Relations of the United States*, 1951. Vol. 7, Part 1, *Korea and China*. Washington, DC: US Government Printing Office, 1983. Accessed December 9, 2018. <https://history.state.gov/historicaldocuments/frus1951v07p1>.
- . *Foreign Relations of the United States*, 1951. Vol. 7, Part 2, *Korea and China*. Washington, DC: US Government Printing Office, 1983. Accessed December 9, 2018. <https://history.state.gov/historicaldocuments/frus1951v07p2>.
- Harrison, Gordon A. *Cross-Channel Attack*. Washington, DC: Center of Military History, 1995.
- Matloff, Maurice. *Strategic Planning for Coalition Warfare – 1943-1944*. Washington, DC: Center of Military History, 1994.
- Milley, Mark M. “AUSA Eisenhower Luncheon Key Address.” Walter E. Washington Convention Center, Washington DC, October 4, 2016. Accessed July 19, 2018. [http://wpswps.org/wp-content/uploads/2016/11/20161004\\_CSA\\_AUSA\\_Eisenhower\\_Transcripts.pdf](http://wpswps.org/wp-content/uploads/2016/11/20161004_CSA_AUSA_Eisenhower_Transcripts.pdf).
- Pogue, Forrest C. *The Supreme Command*. Washington, DC: Center of Military History, 1996.
- Ruppenthal, Ronald G. *Logistical Support of the Armies*. Vol. 1, *May 1941-September 1944*. Washington, DC: Center of Military History, 1995.
- Schnabel, James F. *Policy and Direction the First Year*. Washington, DC: Center of Military History, 1992. Accessed August 26, 2019. [https://history.army.mil/html/books/020/20-1/CMH\\_Pub\\_20-1.pdf](https://history.army.mil/html/books/020/20-1/CMH_Pub_20-1.pdf).
- UN General Assembly. The Problem of the Independence of Korea. Res. 376(V). United Nations General Assembly, 5 sess., 7 October 1950. Accessed February 10, 2019. <https://documents-dds-ny.un.org/doc/RESOLUTION/GEN/NR0/059/74/IMG/NR005974.pdf?OpenElement>.
- US Congress. “Joint Resolution of December 11, 1941, Public Law 77-331,” 11 December 1941. National Archives Identifier: 299851. Accessed November 20, 2018. <https://www.archives.gov/historical-docs/todays-doc/index.html?dod-date=1211>.
- US Department of Defense. *Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military’s Competitive Edge*. Washington, DC: Government Printing Office, 2018. Accessed September 10, 2018. <https://www.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>2018 NDS.
- US Department of Defense, Joint Staff. *Joint Publication (JP) 5-0, Joint Planning*. Washington, DC: Government Printing Office, 2017.
- . *DoD Dictionary of Military and Associated Terms*. Washington, DC: Government Printing Office, 2017.
- US Department of the Army. *Army Doctrine Reference Publication (ADRP) 3-0, Operations*. Washington, DC: Government Printing Office, 2017.



- . “D-Day: June 6, 1944.” Army.mil Features. Accessed November 20, 2018. <https://www.army.mil/D-Day/index.html>.
- . *Field Manual (FM) 3-0, Operations*. Washington, DC: Government Printing Office, 2017.
- . *Korea 1950*. Washington, DC: Government Printing Office, 1952. Accessed August 26, 2018. <https://history.army.mil/html/books/021/21-1/index.html>.
- . Message. JCS 84681 (29 June 1950). Accessed February 10, 2019. [https://www.trumanlibrary.org/whistlestop/study\\_collections/koreanwar/documents/index.php?documentdate=1950-07-10&documentid=ki-21-8&pagenumber=1](https://www.trumanlibrary.org/whistlestop/study_collections/koreanwar/documents/index.php?documentdate=1950-07-10&documentid=ki-21-8&pagenumber=1).
- . Message. JCS 85370 (10 July 1950). Accessed February 10, 2019. [https://www.trumanlibrary.org/whistlestop/study\\_collections/koreanwar/documents/index.php?documentdate=1950-07-10&documentid=ki-21-8&pagenumber=1](https://www.trumanlibrary.org/whistlestop/study_collections/koreanwar/documents/index.php?documentdate=1950-07-10&documentid=ki-21-8&pagenumber=1).
- . Message, JCS 95328 (29 October 1950). Accessed February 10, 2019. [https://www.trumanlibrary.org/whistlestop/study\\_collections/koreanwar/documents/index.php?documentdate=1950-07-10&documentid=ki-21-8&pagenumber=1](https://www.trumanlibrary.org/whistlestop/study_collections/koreanwar/documents/index.php?documentdate=1950-07-10&documentid=ki-21-8&pagenumber=1).
- . *Multi-Domain Battle: Evolution of Combined Arms for the 21st Century: 2025-2040*. Washington, DC: Government Printing Office, 2017. Accessed September 10, 2018. [http://www.arcic.army.mil/App\\_Documents/Multi-Domain-Battle-Evolution-of-Combined-Arms.pdf](http://www.arcic.army.mil/App_Documents/Multi-Domain-Battle-Evolution-of-Combined-Arms.pdf).
- . *Training and Doctrine Command (TRADOC) Pamphlet 525-3-1, The U.S. Army in Multi-Domain Operations 2028*. Washington, DC: Government Printing Office, December 2018.

## Secondary sources

- Adamczyk, Richard D., and Morris J. MacGregor, eds. *United States Army in World War II: Readers Guide*. Washington, DC: Center of Military History, 1992. Accessed November 30, 2018. [https://history.army.mil/html/books/011/11-9/CMH\\_Pub\\_11-9.pdf](https://history.army.mil/html/books/011/11-9/CMH_Pub_11-9.pdf).
- Blair, Clay. *The Forgotten War: America in Korea 1950-1953*. New York: Anchor Books, 1989.
- Bourque, Stephen A. *Beyond the Beach: The Allied War Against France*. Annapolis, MD: Naval Institute Press, 2018.
- Bruce, George. *Second Front Now!: The Road to D-Day*. London: Macdonald and Jane's Publishers Limited, 1979.
- Cagle, Malcom W., and Frank A. Manson. *The Sea War in Korea*. Annapolis, MD: US Navy Institute, 1957.
- Chambard, Claude. *The Maquis: A History of the French Resistance Movement*. Translated by Elaine P. Halperin. Indianapolis: The Bobbs-Merrill Company, Inc., 1976.
- Clausewitz, Carl von. *On War*. Translated and edited by Michael Howard and Peter Paret. Princeton, NJ: Princeton University Press, 1984.

- Futrell, Robert F. *The United States Air Force in Korea 1950-1953*. Rev. ed. Washington, DC: Office of Air Force History, 1983.
- Gabel, Christopher R. "The Combined Bomber Offensive, 1943." *Military Review* 73 (June 1993): 73–77.
- Gough, Terrence J. *U.S. Army Mobilization and Logistics in the Korean War: A Research Approach*. Washington, DC: Center of Military History, 1987.
- Hatch, David A., and Robert Louis Benson. *United States Cryptologic History*, series 5, *The Early Postwar Period, 1945-1952*. Vol. 3, *The Korean War: The SIGINT Background*. Center for Cryptologic History, National Security Agency, 2000.
- Hoyt, Edwin P. *The Day the Chinese Attacked, Korea 1950: The Story of the Failure of America's China Policy*. New York: Paragon House, 1993.
- Kozaczuk, Wladyslaw. *Enigma: How the German Machine Cipher Was Broken, and How It Was Read by the Allies in World War Two*. Edited and translated by Christopher Kasparek. Frederick, MD: University Publications of America, Inc., 1984.
- Lauer, G. Stephen. "Blue Whales and Tiger Sharks: Politics, Policy, and the Military Operational Artist." *The Strategy Bridge*, 20 February 2018. Accessed March 2, 2019. <https://thestategybridge.org/the-bridge/2018/2/20/blue-whales-and-tiger-sharks-politics-policy-and-the-military-operational-artist>.
- Lewin, Ronald. *Ultra Goes to War*. New York: McGraw-Hill Book Company, 1978.
- Milner, Marc. "The Battle That Had to Be Won." *Naval History Magazine* 22, no. 3 (June 2008). Accessed September 18, 2018. <https://www.usni.org/magazines/navalhistory/2008-06/battle-had-be-won>.
- Montagu, Ewen. *Beyond Top Secret Ultra*. New York: Coward, Mc Cann & Geohegan, Inc., 1978.
- Morison, Samuel E. *History of the United States Naval Operations in World War II*. Vol. 1, *The Battle of the Atlantic, September 1939 – May 1943*. Boston: Little, Brown and Company, 1947.
- . *History of the United States Naval Operations in World War II*. Vol. 10, *The Atlantic Battle Won, May 1943 – May 1945*. Boston: Little, Brown and Company, 1957.
- . *History of the United States Naval Operations in World War II*. Vol. 11, *The Invasion of France and Germany, 1944-1945*. Boston: Little, Brown and Company, 1975.
- Schmidt, Robert, Ronald Armstrong, Warner Ferguson, Kait Gan, Frank Hosek, Lloyd McCammon, Henry Shirah, Wayne Boy, George Franklin, Angel Hernandez, John Kidder, David Nicholson, and Dorene Steklasa. *CSI Battlebook 2-D: Operation Chromite (Inchon)*. Leavenworth, KS: Combat Studies Institute, May 1984.
- Thomas, R.C.W. *The War in Korea 1950-1953: A Military Study of the War in Korea up to the Signing of the Cease Fire*. Aldershot, Great Britain: Gale and Polden Limited, 1954.

Weadon, Patrick D. "SIGINT and COMSEC Help Save the Day at Pusan." National Security Agency | Central Security Service. Accessed March 24, 2019. <https://www.nsa.gov/about/cryptologic-heritage/historical-figures-publications/publications/korean-war/sigint-comsec-save-day/>.