

Operational Art and the Campaigns for Mobile, 1864–65: A Staff Ride Handbook



Daniel W. Jordan III



**Combat Studies Institute Press
US Army Combined Arms Center
Fort Leavenworth, Kansas**

Cover image: Rear Adm. David Glasgow Farragut (left) and Maj. Gen. Gordon Granger photographed after the 1864 Battle of Mobile Bay. (Courtesy of Naval History and Heritage Command.)

Operational Art and the Campaigns for Mobile, 1864–65: A Staff Ride Handbook

Daniel W. Jordan III



Combat Studies Institute Press
Fort Leavenworth, Kansas

An imprint of The Army University Press



Library of Congress Cataloging-in-Publication Data

Names: Jordan, Daniel W., 1953- author. | Combat Studies Institute (U.S.) Press, publisher.

Title: Operational Art and the Campaigns for Mobile, 1864–65: A Staff Ride Handbook / Daniel W. Jordan.

Description: 1st edition. | Fort Leavenworth, Kansas : Combat Studies Institute Press, 2019 | Includes bibliographical references and index.

Identifiers: ISBN 9781940804545

Subjects: LCSH: Mobile Campaign, 1865. | Mobile Bay, Battle of, Ala., 1864. | Staff rides--Alabama--Mobile. | Mobile (Ala.)--Tours. | Unified operations (Military science) | LCGFT: Guidebooks.

Classification: LCC E477.94 (ebook) | LCC E477.94 .J67 2019 (print) | DDC 973.737--dc23 | SUDOC D 110.17:M 71.

LC record available at <https://lcn.loc.gov/2019000685>.

2019



Combat Studies Institute Press publications cover a wide variety of military topics. The views expressed in this CSI Press publication are those of the author(s) and not necessarily those of the Department of the Army or the Department of Defense. A full list of digital CSI Press publications is available at <http://usacac.army.mil/organizations/lde/csi/pubs>.

The seal of the Combat Studies Institute authenticates this document as an official publication of the CSI Press. It is prohibited to use the CSI's official seal on any republication without the express written permission of the Director of CSI.

Editor
Diane R. Walker

Foreword

The Army University Press (AUP) and the Combat Studies Institute (CSI) are proud to publish *Operational Art and the Campaigns for Mobile, 1864–1865: A Staff Ride Handbook*. This work continues the extensive portfolio of publications by Army University Press and the Combat Studies Institute to educate officers, noncommissioned officers (NCOs), and soldiers in the history of our service and the tenets and principles of current Army and Joint doctrine.

Unlike previous staff ride handbooks, however, this particular work encompasses two separate campaigns in the area of operations around Mobile Bay, Alabama. Both campaigns include the elements of what we now call joint operations. The first campaign, navy-led and supported by modest ground operations, took place in August 1864. In this campaign, Rear Admiral David Farragut led a joint operation whose objective was to control access into and within Mobile Bay. The main effort was a naval operation, but Army ground forces took part in seizing two separate fortifications, including the mighty Fort Morgan at the mouth of the Bay.

The second campaign took place the following spring of 1865. In this joint operation, conducted on the east side of Mobile Bay, the service roles were reversed: army-led with naval support. Notably, the 1865 campaign could not have been conducted without Farragut's success in August 1864, thus bringing to life the idea that a campaign is a series of joint, sequenced, and related operations "aimed at achieving strategic and operational objectives within a given time and space" (Army Doctrine Reference Publication 3-0, *Unified Land Operations*). The lessons of operational art and campaign planning were just as relevant in 1864–65 as they are today. Throughout this handbook, the lessons from the operations around Mobile Bay are juxtaposed with these current concepts.

The author also paid particular attention to the roles of the African-American soldier in these two campaigns. Quotations are historically correct, and the book uses the historical unit designation of "US Colored Troops" or USCT. However, when discussed in the narrative, African-American soldiers are treated with dignity and respect using modern terminology. Thus, the text within reflects the evolution of Black America, from breaking racist barriers during the Civil War to its historical representation today.

This handbook also incorporates a variety of themes that touch on our understanding of the levels of war, from the strategic through the oper-

ational to the tactical. These themes include leadership, small-unit tactics, appreciation for the terrain, time and space, Army and Joint doctrinal principles, as well as the principles of the operational art. Followed diligently, the directions within will take you from stand to stand (or stops), allow you to present information pertinent to that stand, and introduce modern doctrinal principals using historical examples.

Feel free to modify and adjust the staff ride within to reflect your particular unit or personal training objectives. However, please remain cognizant of the courage and bravery of the individual sailor, marine, and soldier in the course of these two campaigns, for that is what binds us across the ages as a profession of arms.

Donald P. Wright
Combat Studies Institute

Contents

page

Foreword.....	iii
Introduction.....	xi
I. Armed Forces in the American Civil War—Organization of	
Ground and Naval Forces	1
The US Army in 1864–1865.....	1
Raising the Armies.....	2
The Commanders and Civil War Staffs	7
Army Weapons	9
Tactics	16
Logistics.....	23
Engineer Support.....	27
Communications Support	28
Medical Services.....	30
The Opposing Forces at Mobile Bay: 1864 and 1865	32
Naval Operations in the Mobile Campaigns of 1864 and 1865	33
II. Overview of the Campaigns	41
Overview of the Campaign for Mobile Bay, 1864 (Battle of Mobile Bay).....	41
Overview of the 1865 Campaign for Mobile.....	44
Implications for the Operational Art.....	45
III. Suggested Stands and Vignettes.....	51
Stand List and Proposed Itinerary	52
Stand 1: Overview—The Strategic and Operational Setting.....	56
Stand 2: The Seacoast Fortification System	76
Stand 3: The Naval Battle of 1864	81
Stand 4: Defeating Forts Gaines and Powell	96
Stand 5: The Siege of Fort Morgan, Siege Guns and Naval Gunfire ..	104
Stand 6: 1865 Campaign Overview and the Movement to Spanish Fort.....	112
Stand 7: Initial Siege Operations at Spanish Fort.....	133
Stand 8: The Confederate Defenses at Spanish Fort	139
Stand 9: The Union Siege at Spanish Fort.....	145
Stand 10: The Union Attack on 8 April 1865 (13th Day of the Siege).	156
Stand 11: (Driving) Confederate Lines.....	160

Stand 12: Retrograde Ops and Naval Support to Army Operations	162
Stand 13: The Union Investment of Fort Blakeley.....	175
Stand 14: The Defenses at Fort Blakeley	182
Stand 15: The Attack on Fort Blakeley: “Feel the Enemy”.....	185
Stand 16: The Fall of Fort Blakeley	193
Stand 17: The Fall of Mobile and Integration	197
IV. Integration Phase.....	211
Suggested Questions and Discussion for the Staff Ride.....	211
V. Support for a Staff Ride to Mobile Bay.....	217
Information and Assistance	217
Logistics.....	218
Medical	219
Other Considerations	219
Handout for Bus and/or Van Drivers	220
Appendix A. Orders of Battle	221
Appendix B. Medal of Honor Recipients	237
Appendix C. Annotated Bibliography.....	243
Bibliography	247
About the Author.....	249

Figures	<i>page</i>
Figure 1. War Department Bureaus as of 1861.	1
Figure 2. Federal and Confederate Organized Forces.....	6
Figure 3. Typical Staff Positions at Army Level.....	8
Figure 4. Comparison of Artillery Data.	13
Figure 5. Siege and Garrison Artillery.	16
Figure 6. Ground Forces in Theater for the 1864 Battle of Mobile Bay..	32
Figure 7. Naval Forces in Theater for the 1864 Battle of Mobile Bay. ..	33
Figure 8. Naval Guns.	39
Figure 9. Day 1 Stand List.	53
Figure 10. Day 2 Stand List.	54
Figure 11. Overview of Fort Morgan Stand Locations.	57
Figure 12. Fort Morgan Defenses, 1864.	62
Figure 13. Singer’s Torpedo.....	64
Figure 14. CSS <i>Tennessee</i>	65
Figure 15. CSS <i>Selma</i>	66
Figure 16. CSS <i>Gaines</i>	66
Figure 17. CSS <i>Hartford</i>	69
Figure 18. First, Second, and Third System Forts.	78
Figure 19. The Sinking of the USS <i>Tecumseh</i>	84
Figure 20. USS <i>Metacomet</i>	87
Figure 21. USS <i>Chickasaw</i>	92
Figure 22. Fort Powell Defenses.....	97
Figure 23. Fort Gaines Defenses.....	99
Figure 24. Images of Union and Confederate Guns.	105
Figure 25. Detail of Union and Confederate Guns.	105
Figure 26. Detail of Union and Confederate Mortars.	106
Figure 27. Images of Union and Confederate Mortars.	106
Figure 28. Fort Morgan Artillery.....	107

Figure 29. Elements of Operational Art in Farragut’s 1864 Campaign ... 111

Figure 30. Union Ground Order of Battle for the Mobile Campaign, January–May 1865..... 121

Figure 31. Movement Matrix for Canby’s Forces. 127

Figure 32. Spanish Fort Defenses. 141

Figure 33. The Campaign for Mobile, 1865 Confederate Effective Strengths. 142

Figure 34. Armament at Batteries Huger and Tracy. 143

Figure 35. Spanish Fort Confederate Order of Battle. 144

Figure 36. Confederate Strength—Spanish Fort, 7 April 1865. 154

Figure 37. CSS *Nashville*..... 165

Figure 38. Union Naval Order of Battle 1865, Ironclads and Gunboats. 168

Figure 39. Union Naval Gunfire Support..... 169

Figure 40. Battle of Blakeley Missouri Monument..... 177

Figure 41. Fort Blakeley Confederate Artillery. 183

Figure 42. Elements of Operational Art from Army and Joint Doctrine. 200

Figure 43. Union Naval Forces, 1864..... 221

Figure 44. Union Naval Forces, 1864, continued. 222

Figure 45. Confederate Naval Forces, 1864. 223

Figure 46. Union Naval Forces, 1865..... 234

Figure 47. Confederate Naval Forces, 1865. 235

Figure 48. Medal of Honor Recipients for the Battles at Spanish Fort and Fort Blakely. 240

Figure 49. Complete list of Medal of Honor recipients for the Mobile Campaign. 241

Maps	<i>page</i>
Map 1. Map of Stands.....	55
Map 2. Route to Stand 1.	56
Map 3. The Union Blockade.....	58
Map 4. Mobile Defenses.....	61
Map 5. Farragut’s Plan.....	73
Map 6. Stands 2 and 3.....	76
Map 7. Route from Stand 2 to Stand 3.....	81
Map 8. The Battle of Mobile Bay, 5 August 1864, 0545–0740.....	85
Map 9. The Battle of Mobile Bay, 5 August 1864, 0740–0830.....	88
Map 10. Defeat of CSS <i>Tennessee</i> , 5 August 1864, 0900–1000.....	91
Map 11. Route from Stand 3 to Stand 4.....	96
Map 12. Operations at Fort Powell and Gaines, 3–8 August 1864.....	98
Map 13. Directions to Stand 5.	104
Map 14. Siege of Fort Morgan, 9–23 August 1864.	108
Map 15. Directions to Stand 6.	112
Map 16. Map for Option 1 and Option 2.	113
Map 17. Northern Defenses of Mobile, March 1865.....	117
Map 18. Movement to Spanish Fort, 17 March–9 April 1865.....	126
Map 19. Operational Movement XVI Corps, February–March 1865. .	128
Map 20. Directions to May Day Park, Daphne, Alabama.	133
Map 21. Stand 7.	134
Map 22. Blakeley River and Starke’s Landing.	135
Map 23. Directions to Stand 8.	139
Map 24. Stand 8.	140
Map 25. Route to Stand 9.	145
Map 26. Stands 9 and 10.....	146
Map 27. Initial Operations against Spanish Fort, 26 March–8 April...	147
Map 28. Carr’s Division Attacks, 8 April 1865.	159

Map 29. Directions for Stand 11.....	160
Map 30. Directions to Stand 12.	162
Map 31. Stand 12 and Significant Points on the Blakeley River.	163
Map 32. Route from Stand 12 to Stand 13.....	175
Map 33. Route from Park Kiosk to Stand 13.....	176
Map 34. Stands 13 through 17.	178
Map 35. Column from Pensacola.....	179
Map 36. Investment of Fort Blakeley.	182
Map 37. Directions to Stand 15.	185
Map 38. Stand 16 and Redoubt #4.....	191

Introduction

Welcome to the US Army's staff ride for Mobile Bay.

The US Army has employed the staff ride at every echelon of command from cadet to non-commissioned officer to general officer, from Reserve Officer Training Corps (ROTC) battalion to major command headquarters. Continuing that mission, Army University Press and the Combat Studies Institute have developed staff rides that encompass battles from the American Revolution to our most recent conflicts in Iraq and Afghanistan. Our portfolio of historical scenarios has included tactical case studies from the platoon level to the full-spectrum operations of divisions, corps, and joint task forces. At the Army War College, Command and General Staff College, School of Advanced Military Studies, ROTC battalions, and operational units throughout the world, US Army officers, NCOs, soldiers, and cadets are vicariously studying war by walking hallowed ground and analyzing the decisions that ultimately led to victory or defeat.

The staff ride concept is neither a tour nor a show-and-tell, but rather a walking seminar on the battlefield. Its methodology of in-depth preliminary study, rigorous field analysis, and integration of the two, expects the staff rider to be familiar with the historical scenario BEFORE setting foot on the battlefield. By the same token, the staff ride need not be tied to a formal schoolhouse environment. All units stationed near historic battlefields can experience the intellectual and emotional stimulation provided by standing where soldiers (and sometimes sailors, marines, and airmen) once contended for their respective causes.

Not surprisingly, units will often find themselves without sources of information on a specific battle or campaign, sources normally available in an academic environment. For that reason, the Combat Studies Institute and Army University Press have published a series of handbooks that provide practical information on how to conduct staff rides for specific campaigns and battles.

These organizations never intended staff ride handbooks as a substitute for serious study. Instead, staff ride handbooks are designed to aid project officers in finding sources, identifying teaching points, and designing meaningful field phases apropos to the unit's desired training and learning outcomes. As such, staff ride handbooks are a starting point from which a more rigorous professional development experience might be crafted.

This handbook, *Operational Art and the Campaigns for Mobile, 1864–65: A Staff Ride Handbook*, represents the most recent effort in a

distinguished list of publications from the Combat Studies Institute. The Campaign for Mobile Bay (1864) and the subsequent Campaign for Mobile (1865) illustrate in dramatic ways the synergy between land and naval forces and how outstanding operational leadership can overcome the absence of overarching doctrinal principals. In 1864, we can see a series of battles and engagements that were navy-led with army forces in a supporting role. The following year, the roles were reversed, as the Union ground commander's scheme of maneuver was supported by a large flotilla of Union transports and gunboats in pursuit of the strategic objective: the seizure of Mobile, Alabama. Without a doubt, the success of either campaign was completely dependent on the tactical success of individual tactical commanders in cooperation with other commanders, regardless of whether they wore a navy or an army uniform.

Operations in the Mobile Bay area in 1864 and 1865 introduce lessons at the operational and tactical levels of war that any student at any rank or position can learn from. Not only do these campaigns provide examples of tactical engagements by Union and Confederate combat units, but they also offer examples of maneuver and maneuver support activities that future operational commanders and staff officers are expected to understand in today's current operating environments.

In the Profession of Arms, as with any profession, words and terminology are vitally important. They define the profession and provide a common language and framework for understanding and critical analysis. Sometimes, the doctrinal terms do not match the way historians have presented historical events. Military history is replete with examples such as the Battle of Vicksburg, which should be more accurately designated as the "Vicksburg Campaign"—a series of battles and engagements focused in space and time on a specific operational objective: seizing the river town of Vicksburg, Mississippi.

Similarly, historians have characterized Rear Admiral David Farragut's victory in Mobile Bay in 1864 as the "Battle of Mobile Bay," implying that his brilliant victory was exclusively a naval engagement. In point of fact, it was a series of army and naval engagements fought over a period of three weeks toward a common operational objective, control of Mobile Bay. The "Battle of Mobile Bay," then, is more appropriately thought of as the "Campaign for Mobile Bay." That is, the Battle of Mobile Bay was a *joint campaign*, a planned series of battles and engagements in a well-defined space and time, with the navy in the lead and the army providing support.

For the same reasons, historians and even local historical societies often characterize the “1865 Campaign for Mobile” not as a planned series of maneuvers, battles, and engagements focused in time and space but as independent events such as the Battle of Spanish Fort and the Battle of Fort Blakeley.¹ The reality is that these events were simultaneous battles against fortifications located only a few miles from each other under the same force commander. In this case, though, the army led and navy supported a series of movements, maneuvers, and engagements conducted in pursuit of a common operational objective, the seizure of Mobile.

Chester Hearn tries to ameliorate this issue in the title of his excellent book: *Mobile Bay and the Mobile Campaign*, but he conflates the question by adding the subtitle: *The Last Great Battles of the Civil War*. At AUP, we have chosen to consider both operations around the Mobile Bay area in 1864 and 1865 as campaigns that are worthy of review as case studies in tactics, leadership, operational art, and joint campaign planning.

In that vein, this handbook uses a systematic approach to analyze two independent, but interrelated, Civil War campaigns. Part I describes the organization of the Union and Confederate armies and details their weapons, tactics, logistical, engineer, communications, and medical support. It also includes a description of the naval elements on both sides that featured so prominently in both campaigns.

Part II is an overview of both campaigns. It provides a broad context for individual actions by commanders and shows the linkage between battles and engagements in pursuit of higher strategic and operational goals. By the end of Day One, the staff rider will understand how the Union ground commander, Major General Edward Canby, used Mobile Bay to support his operation—a condition not possible without Rear Admiral David Farragut’s astounding victory in 1864. By the spring of 1865, Canby had the freedom of maneuver to proceed up the EAST side of the Bay on the way to Mobile. Indeed, this 1865 campaign—as a case study in operational art—illustrates Canby’s indirect approach, one that created the conditions for the eventual surrender and seizure of Mobile on the WEST side of the Bay.

Part III consists of a suggested itinerary of stops, or “stands,” as the AUP/Staff Ride Team calls them. The stands are organized over a two-day period in a way that illustrates the events of both campaigns in chronological and thematic ways. If desired, the staff ride leader could focus only on the 1864 Campaign for Mobile Bay, thus reducing the number of stands to only five. By focusing merely on the 1864 campaign, a unit can create

a staff ride experience that lasts about a half-day and travels to only one location, Fort Morgan, Alabama.

On the other hand, readers who want to focus only on the Campaign for Mobile in 1865 will experience a staff ride that lasts a day and a half. Regardless of your unit objectives, this staff ride can be completed in fewer stands and less time, and we encourage you to modify the structure of the staff ride to fit your needs and satisfy your learning objectives.

Each stand is organized in five parts: travel directions and special instructions that will facilitate access, an orientation of the stand in space and time, and a discussion of the combat or combat support activities that occurred at that location or in the general area. Interspersed throughout the handbook are vignettes by participants in the campaign that further explain the actions and allow the staff rider to appreciate the human “face of battle” and the challenges of command. I have liberally used modern terminology to illustrate how current doctrinal concepts might have applied in this historical context.

Each stand is also sprinkled with suggested teaching points [Teaching Point:] and analytical questions that can be used to further your group’s understanding of doctrinal concepts and Civil War history, while also developing individual analytical skills. The teaching points are specifically chosen to highlight Army and Joint doctrinal principles, while the questions draw together the lessons of one or both campaigns and suggest opportunities for further discussion and analysis.

Chapter V provides practical information on conducting a staff ride in the Mobile Bay area, including sources of assistance and logistical considerations. Many of the stand locations require some coordination before arriving, and AUP highly recommends that anyone using this handbook adhere to these special instructions.

Appendix A outlines the order of battle for the significant actions in the campaigns. Appendix B is an overview of Medal of Honor conferees during both campaigns. Finally, an annotated bibliography suggests sources for preliminary or in-depth study as desired.

Compared to other battles and campaigns in the American Civil War, there has been surprisingly little written about the Campaigns for Mobile. Of the two campaigns, the Battle of Mobile Bay in 1864 is the most familiar in the American consciousness, if only because of Farragut’s famous command in the heat of the battle: “Damn the torpedoes! Full speed ahead!” The best primary references are Robert N. Scott’s *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies*

Official Records of the War, also known as the *Official Records*. Also, C.C. Andrews's 1867 work, *History of the Campaign for Mobile (1865)*, is an excellent report by one of the Union division commanders. The most recent work on both campaigns, published more than 20 years ago, is Chester Hearn's *Mobile Bay and the Mobile Campaign: The Last Great Battles of the Civil War*. It is an excellent overview of both campaigns.²

No matter how you use this handbook or structure your staff ride, the Staff Ride Team at Army University Press and the Combat Studies Institute stands ready to help every unit experience the Campaigns for Mobile to their best possible advantage. Please do not hesitate to ask for help.

Notes

1. The name of this town was also spelled “Blakely” without the extra “e” during the Civil War. To avoid confusion, the more modern spelling of “Blakeley” will be used in this book.
2. Robert N. Scott, *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies* (US War Department, Washington, DC: 1880–1901; repr., Gettysburg, PA: National Historical Society, 1971); US Naval War Records Office, US Office of Naval Records and Library, and National Historical Society, *Official Records of the Union and Confederate Navies in the War of the Rebellion*, 1987; C.C. Andrews, *History of the Campaign of Mobile: Including the Cooperative Operations of Gen. Wilson’s Cavalry in Alabama* (New York: D. Van Nostrand, 1867); Chester G. Hearn, *Mobile Bay and the Mobile Campaign: The Last Great Battles of the Civil War* (Jefferson, NC: McFarland, 1993).

I. Armed Forces in the American Civil War— Organization of Ground and Naval Forces

The US Army in 1864–1865

On the eve of the Civil War, the Regular Army of the United States was essentially a frontier constabulary whose 16,000 officers and men were organized into 198 companies at 79 different posts across the nation. In 1861, 183 of these companies were either on frontier duty or in transit, while the remaining 15—mostly coastal artillery batteries—guarded the Canadian border, the Atlantic coast, or one of 23 arsenals. This Army was under the command of Lt. Gen. Winfield Scott, the 75-year-old hero of the Mexican-American War. His position as general-in-chief was traditional, not statutory, because secretaries of war since 1821 had designated a general to oversee the field forces without formal Congressional approval. The field forces themselves were controlled through a series of geographic departments, whose commanders reported directly to the general-in-chief. This department system, frequently modified, would be used by both sides throughout the Civil War for administering regions under army control.

War Department Bureaus, 1861	
Quartermaster	Medical
Ordnance	Adjutant General
Subsistence	Paymaster
Engineer	Inspector General
Topographic Engineer*	Judge Advocate General

* Merged with the Engineer Bureau in 1863.

Figure 1. War Department Bureaus as of 1861. (Created by Army University Press.)

The information in this chapter is a compilation of the collective work of the Combat Studies Institute as published in earlier staff ride handbooks on the American Civil War.

During this period, army administration was handled by a system of bureaus whose senior officers were at the twilight of long careers in their technical fields. Six of the 10 bureau chiefs were more than 70 years old. These bureaus, modeled after the British system, answered directly to the War Department and did not report to the general-in-chief. By 1861, the War Department Bureaus were organized as noted in the chart. These bureaus were the historical antecedent of many maneuver, maneuver support, and sustainment branches in today's US Army.

This system of bureaus and geographic commands provided adequate civilian control and administrative support to the small field army prior to 1861. Ultimately, the bureau system would respond effectively, if not always efficiently, to the mass mobilization required over the next four years. As the war progressed, Congress elevated the Office of the Provost Marshal and the Signal Corps to bureau status and created a new Cavalry Bureau. It is important to note that no operational planning or intelligence staff existed; commanders before the Civil War had never required such a structure. These functions lay entirely with the commander in the field and would not change significantly until the early twentieth century.

The Confederate government, the other hand, forced to create an army and support organization from scratch, established a parallel structure to that of the Union Army. In fact, many important figures in Confederate bureaus had previously served in pre-war Union bureaus.

Raising the Armies

When the war broke out in April 1861, both sides faced the monumental task of organizing and equipping armies out of all proportion to their pre-war experiences. Almost immediately, the North lost many of its officers to the South, including some of exceptional quality. Of 1,108 Regular officers serving as of 1 January 1861, 270 resigned to join the South. Notably, only a few hundred of the 15,135 enlisted men left Union ranks for the South.

The Federal government had two basic options for the mobilization of the much-expanded Union Army. It could be divided and dispersed into training and leadership cadres for newly formed volunteer regiments or retained in units to provide a reliable nucleus for the Federal Army in coming battles. From the start, Union General-in-Chief Winfield Scott envisioned a relatively small force to defeat the rebellion and, therefore, insisted that the Regulars fight as units. Although some Regular units fought well at the First Battle of Bull Run and in other battles, Scott's decision ultimately limited the impact of regular units upon the war. Battle losses and disease soon thinned the ranks of the Regulars, and Federal officials could never

recruit sufficient replacements in the face of stiff competition from states that were forming volunteer regiments. By November 1864, many Regular units had been so depleted that they were withdrawn from frontline service. The war, therefore, was fought primarily with volunteer officers and men, most of whom had no previous military training or experience.

Initially, neither side had difficulty recruiting the numbers required to fill the expanding ranks. In April 1861, President Abraham Lincoln called for 75,000 men from the states' militias for a three-month period. This figure probably represented Lincoln's informed assessment as to how many troops would be needed to quickly quell the rebellion. Almost 92,000 men responded and filled the states' "organized" militia companies. As a general rule, though, early in the war these ill-trained and poorly equipped soldiers generally fought much better than they were led. Later as the war began to require more manpower, the Federal government set enlisted quotas through various "calls," which local districts struggled to fill.

Similarly, the Confederate Congress authorized the acceptance of 100,000 volunteers for one-year terms in March 1861. One-third of these men were under arms within a month. The southern spirit of voluntarism was so strong that possibly twice that number could have enlisted, but sufficient arms and equipment were not available at the time.

As the war continued and casualty lists grew, the glory of volunteering faded, and both sides ultimately resorted to conscription to help fill the ranks. The Confederates enacted the first conscription law in American history in April 1862, followed by the Federal government's own law in March 1863.

Throughout these first experiments in American conscription, neither side administered their programs fairly or efficiently. Conscription laws tended to exempt wealthier citizens; thus draftees could hire substitutes or pay commutation fees. Inevitably, this meant the health, morale, and general capabilities of the average conscript were poor. On the other hand, many eligible men, particularly in the South, enlisted to avoid being labeled a conscript. Nevertheless, conscription or the threat of conscription ultimately provided a sufficient quantity of soldiers for both sides.

The North tried several approaches to increase the number of volunteers and limit conscription requirements. These efforts included offering lucrative bonuses, bounties, or fees paid to induce volunteers to fill required quotas. To maintain a trained and battle-hardened army, the Federals also offered a series of reenlistment bonuses, thirty-day furloughs, and the opportunity for experienced regiments to maintain their colors and be designated as "veteran" volunteer infantry regiments. The Federals also

created an Invalid Corps (later renamed the Veteran Reserve Corps) of men unfit for front-line service who performed essential rear-area duties.

The Union also recruited almost 179,000 blacks, mostly in federally organized volunteer regiments. Some of the first engagements by Union African-American units occurred at the June 1863 Battle of Milliken's Bend during the Vicksburg Campaign, followed a few weeks later at Charleston's Fort Wagner. Regiments of US Colored Troops (USCT) also suffered heavy casualties at the July 1864 Battle of the Crater during the Siege of Petersburg. By the Battle of Fort Blakeley during the 1865 Mobile Campaign, the Union was employing well-trained units of African-American soldiers in divisional strength.¹ On the other hand, recruiting or conscripting slaves in the South was so politically sensitive that it was not attempted until March 1865, far too late to influence the war.

Whatever the faults of the manpower mobilization, it was an impressive achievement on a scale never seen before in American history. Various enlistment figures exist, but the best estimates are that approximately two million men enlisted in the Federal Army between 1861 and 1865. Of that number, 1 million were under arms at the end of the war. Because Confederate records are incomplete or lost, estimates of their enlistments vary from 600,000 to more than 1.5 million. Most likely, between 750,000 and 800,000 men served the Confederacy during the war, with a peak strength never exceeding 460,000. Perhaps the greatest legacy of the manpower mobilization efforts of both sides was the improved Selective Service system that created the armies of World Wars I and II.

The unit structure into which the expanding armies were organized was generally the same for Federals and Confederates and reflected the common roots of both armies. The Federals began the war with a Regular Army organized into an essentially Napoleonic musket-equipped structure. Each of the ten pre-war infantry regiments consisted of ten 87-man companies with a maximum authorized strength of 878.

At the beginning of the war, the Federals added nine Regular infantry regiments with a newer "French Model" organizational structure. The new regiments contained three battalions, with a maximum authorized strength of 2,452. The new Regular battalion with eight 100-man companies was, in effect, equivalent to the pre-war regiment. Essentially an effort to reduce staff officer slots, the new structure was unfamiliar to most commanders, and both sides used a variant of the old structure for newly formed volunteer regiments.

The Federal War Department established a volunteer infantry regimental organization with a strength that could range from 866 to 1,046 (varying in authorized strength by up to 180 infantry privates). The Confederate Congress fixed its ten-company infantry regiment at 1,045 men. Combat strength in battle, however, was always much lower because of casualties, sickness, leaves, details, desertions, and straggling.

The battery remained the basic artillery unit; however, in the Eastern Theater, battalion and larger units of artillery emerged later in the war. Four understrength Regular artillery regiments existed in the US Army at the start of the war and one Regular regiment was added in 1861, for a total of sixty batteries. Most batteries, however, were volunteer organizations. A Federal battery usually consisted of six guns and had an authorized strength of 80 to 156 men. A battery of six 12-pounder Napoleons usually included 130 horses. If organized as “horse” or “flying artillery,” cannoneers were provided individual mounts, and more horses than men could be assigned to the battery. Their Confederate counterparts, plagued by limited ordnance and available manpower, usually operated with a four-gun battery, often with guns of mixed types and calibers. Confederate batteries seldom reached their initially authorized manning level of eighty soldiers.

Pre-war mounted units in the north were organized into five Regular regiments (two dragoons, two cavalry, and one mounted rifle).² One Regular cavalry regiment was added in May 1861. Originally ten companies comprised a regiment, but congressional legislation in July 1862 officially reorganized the Regular mounted units into standard regiments of twelve “companies or troops” of seventy-nine to ninety-five men each. Although the term “troop” was officially introduced, most cavalrymen continued to use the more familiar term “company” to describe their units throughout the war. The Federals grouped two companies or troops into squadrons, with four to six squadrons forming a regiment. Confederate cavalry units—organized in the pre-war model—were authorized ten seventy-six-man companies per regiment. Some volunteer cavalry units on both sides also formed into smaller cavalry battalions. Later in the war, both sides began to merge their cavalry regiments and brigades into division and corps organizations.

For both sides, unit structures above regimental level were similar to today’s structure, with a brigade controlling three to five regiments and a division controlling two or more brigades. Federal brigades generally contained regiments from more than one state, while Confederate brigades often had several regiments from the same state. In the Confederate Army, a brigadier general usually commanded a brigade and a major general

commanded a division. The Federal Army, with no rank higher than major general until 1864, often had colonels commanding brigades and brigadier generals commanding divisions.

As illustrated below, the large numbers of organizations reflected the politics of the times. The War Department in 1861 considered making recruiting a federal responsibility, but this proposal seemed to be an unnecessary expense for the short war initially envisioned; therefore, responsibility

Federal and Confederate Organized Forces				
	Federal		Confederate	
Infantry	19	Regular Regiments	642	Regiments
	2,125	Volunteer Regiments	9	Legions ¹
	60	Volunteer Battalions	163	Separate Battalions
	351	Separate Companies	62	Separate Companies
Artillery	5	Regular Regiments	16	Regiments
	61	Volunteer Regiments	25	Battalions
	17	Volunteer Battalions		
	408	Separate Batteries	227	Batteries
Cavalry	6	Regular Regiments	137	Regiments
	266	Volunteer Regiments	1	Legion
	45	Battalions	143	Separate Battalions
	78	Separate companies	101	Separate Companies

1. Legions were a form of combined arms team composed of artillery, cavalry, and infantry. They were approximately the strength of a large regiment. Long before the end of the war, legions lost their combined arms organization.

Figure 2. Federal and Confederate Organized Forces. (Created by Army University Press.)

for recruiting remained with the states. For their part, state governors on both sides continually encouraged local constituents to form new volunteer regiments. This practice served to strengthen support for local, state, and national politicians and offered an opportunity for glory and high rank for ambitious men. Unfortunately, while local recruiting created regiments with strong bonds among the men, it also interfered with the essential task of filling the ranks of existing battle-weary regiments with new replacements.

As the war progressed, the Confederates tried to funnel replacements into units from their same state or region while the Federals continued to create new regiments. Existing Federal regiments detailed men back home to recruit replacements, but these efforts could never successfully compete for men joining new local regiments. The newly formed regiments thus had no seasoned veterans to train the recruits, and the battle-tested regiments lost men faster than they could recruit replacements. Seasoned regiments were often disbanded or consolidated, usually against the wishes of the men assigned. Consequently, many regiments on both sides became combat ineffective as the war progressed.

The Commanders and Civil War Staffs

Because the organization, equipment, tactics, and training of the Confederate and Federal armies were similar, the performance of units in battle often depended on the quality and performance of individual officers and commanders. Each central government appointed general officers. At the start of the war, most but certainly not all the more senior officers had West Point or other military school experience. In 1861, Lincoln appointed 126 general officers, of which eighty-two were or had been professional officers. Sixteen Union generals had no previous military experience. Jefferson Davis appointed eighty-nine; forty-four had professional training and seven Confederate generals had no previous military experience at all.

Of the volunteer officers who comprised the preponderance of leadership for both armies, colonels were normally appointed by state governors as regimental commanders. Other field-grade officers were also appointed by their states, although many were initially elected within their units. In contrast, company-grade officers were usually chosen by their men. This long-established militia tradition rarely made aptitude for military leadership a criterion for election, but it did sustain political patronage on both sides.

Much has been made of the West Point backgrounds of the men who eventually dominated the senior leadership positions of both armies. However, it is important to note that no graduate of a military college at that time was prepared to command large-scale units on the order of divisions,

corps, or armies. As striking as this statement might sound, even though many Union and Confederate leaders had combat experience from the Mexican War era, very few had experience above the company or battery level. The surprising result was that, initially, the war was not conducted at any level by what we now know as “professionally trained” officers. Leaders became more professional through experience, often at the cost of thousands of lives. Gen. William T. Sherman would later note that the war did not enter its “professional stage” until 1863.

In the Civil War, as today, the success of large military organizations often depended on the effectiveness of a commander’s staff. Modern staff procedures have evolved only gradually with the increasing complexity of military operations into the twentieth century. By 1861, this evolution in staff practices had barely begun, with commanders personally handling the two most important staff functions, operations and intelligence.

Typical Staffs	
General Staff	Staff Corps
Chief of Staff	Engineer
Aides	Ordnance
Assistant Adjutant General	Quartermaster
Assistant Inspector General	Subsistence
	Medical
	Pay
	Signal
	Provost Marshal
	Chief of Artillery

Figure 3. Typical Staff Positions at Army Level. (Created by Army University Press.)

Civil War staffs were divided into a “general staff” and a “staff corps.” This terminology, initially defined by Winfield Scott in 1855, differs from modern definitions of the terms. The chart lists typical staff positions at army level, although key functions existed down to regimental level. Staffs contained representatives of the various bureaus, with logistical areas being best represented. The commander’s personal staff, usually the chief of staff and aides-de-camp, would often leave when a commander was reassigned. Later in the war, some truly effective staffs began to emerge, but this was the result of the increased experience of the officers serving in those positions, rather than a comprehensive development of standard staff procedures or guidelines.

George B. McClellan first used the chief-of-staff title when he officially appointed his father-in-law to the position. Even though many senior commanders had a chief of staff, they did not use the position in any uniform way, and seldom did the man in this role achieve the central coordinating authority of the chief of staff in a modern headquarters. This position along with most other staff positions was used as an individual commander saw fit, making staff responsibilities somewhat different under each commander. The inconsistent use of the chief-of-staff position illustrates some of the most important shortcomings of staffs during the Civil War.

Army Weapons

Infantry

During the 1850s, a major technological revolution in both Europe and America occurred as the rifle-musket began to replace the relatively inaccurate smoothbore musket in ever-increasing numbers. This process, accelerated by the American Civil War, ensured that the rifled shoulder weapon would be the basic weapon used by infantrymen in both the Federal and Confederate armies.

Thus, the standard and most common shoulder weapon used in the American Civil War was the Springfield .58-caliber rifle-musket models 1855, 1861, and 1863. In 1855, the US Army adopted this weapon to replace the .69-caliber smoothbore musket and the .54-caliber rifle. In appearance, the rifle-musket was like the smoothbore musket. Both were single-shot muzzle-loaders, but the rifled bore of the new weapon substantially increased its range and accuracy.

The rifling system chosen by the United States was designed by Claude Minié, a French Army officer. Whereas earlier rifles fired a round non-expanding ball, the Minié system used a hollow-based cylindro-conoidal

projectile slightly smaller than the bore that could be dropped easily into the barrel. When the powder charge was ignited by a fulminate of mercury percussion cap, the released propellant gases expanded the base of the bullet into the rifled grooves, giving the projectile a ballistic spin.

The Model 1855 Springfield rifle-musket was the first regulation arm to use the hollow-base .58-caliber Minié bullet. The slightly modified Model 1861 was the principal infantry weapon of the Civil War, although two subsequent models were produced in about equal quantities. The Model 1861 was fifty-six inches long overall, had a forty-inch barrel, and weighed 8.75 pounds. It could be fitted with a twenty-one-inch socket bayonet (with an eighteen-inch blade and a three-inch socket) and had a rear sight graduated to 500 yards. While the maximum effective range of the Springfield rifle-musket was approximately 500 yards, it was lethal out to 1,000 yards. The round could penetrate eleven inches of white-pine board at 200 yards and 3¼ inches at 1,000 yards; a penetration of one inch was considered the equivalent of disabling a human being. Range and accuracy were increased using the new weapon, but the soldier's vision was still obscured by the dense clouds of smoke produced by its black powder propellant. The average rate of fire was three rounds per minute. A well-trained soldier could possibly load and fire four times per minute, but in the confusion of battle, the rate of fire was probably slowed at two to three rounds per minute.

In addition to the Springfields, more than 100 types of muskets, rifles, and rifle-muskets—ranging up to .79-caliber—were used during the American Civil War. The numerous American-made weapons were supplemented early in the conflict by a wide variety of imported models. The best, most popular, and most numerous of the foreign weapons was the British .577-caliber Enfield rifle, Model 1853, which was fifty-four inches long (with a thirty-nine-inch barrel), weighed 8.7 pounds (9.2 with the bayonet), could be fitted with a socket bayonet with an eighteen-inch blade, and had a rear sight graduated to a range of 800 yards. The Enfield design was produced in a variety of forms, both long and short barreled, by several British manufacturers and at least one American company. Of all the foreign designs, the Enfield most closely resembled the Springfield in characteristics and capabilities. The United States purchased more than 436,000 Enfield weapons during the war. Statistics on Confederate purchases are more difficult to ascertain, but a report dated February 1863 indicates that 70,980 long Enfields and 9,715 short Enfields had been delivered by that time, with another 23,000 awaiting delivery.

The United States purchased about 1,165,000 European rifles and muskets during the war. Of these, 110,853 were smoothbores. The remainder

consisted of primarily the French Minié rifles (44,250), Austrian Model 1854s (266,294), Prussian rifles (59,918), Austrian Jägers (29,850), and Austrian Bokers (187,533). Estimates of total Confederate purchases range from 340,000 to 400,000. Besides the Enfields, the Confederacy received 27,000 Austrian rifles; 21,040 British muskets; and 2,020 Brunswick rifles, with another 30,000 Austrian rifles awaiting shipment at war's end.

Breech-loaders and repeating rifles were available by 1861 and initially purchased in limited quantities, often by individual soldiers. Generally, however, they were not issued to troops in large numbers because of their cost, technical problems (poor breech seals and faulty ammunition), and the Ordnance Department's fear that the troops would waste ammunition. The most famous of the breechloaders was the single-shot Sharps, produced in both carbine and rifle models. The Model 1859 rifle was .52 caliber, 47 $\frac{1}{8}$ inches long, and weighed 8 $\frac{3}{4}$ pounds. The carbine was .52 caliber, 39 $\frac{1}{8}$ inches long, and weighed 7 $\frac{3}{4}$ pounds. Both weapons used a linen cartridge and a pellet primer feed mechanism. Most Sharps carbines were issued to Federal cavalry units.

The best known of the repeaters was probably the seven-shot Spencer, .52 caliber, which also came in both rifle and carbine models. The rifle was forty-seven inches long and weighed ten pounds, while the carbine was thirty-nine inches long and weighed 8 $\frac{1}{4}$ pounds. The first mounted infantry unit to use Spencer repeating rifles in combat was Col. John T. Wilder's "Lighting Brigade" on 24 June 1863 at Hoover's Gap, Tennessee. The Spencer was also the first weapon adopted by the US Army that fired a metallic rim-fire, self-contained cartridge. Soldiers loaded rounds through an opening in the butt of the stock, which fed into the chamber through a tubular magazine by the action of the trigger guard. The hammer still had to be cocked manually before each shot.

Better than either the Sharps or the Spencer was the Henry rifle. Never adopted by the US Army in large quantity, it was purchased privately by soldiers during the war. The Henry was a sixteen-shot, .44-caliber rim fire cartridge repeater. It was 43 $\frac{1}{2}$ inches long and weighed 9 $\frac{1}{4}$ pounds. The tubular magazine located directly beneath the barrel had a fifteen-round capacity with an additional round in the chamber. Of the approximate 13,500 Henrys produced, probably 10,000 saw limited service. The government purchased only 1,731.

The Colt repeating rifle (or revolving carbine), Model 1855, was also available to Civil War soldiers in limited numbers. The weapon was produced in several lengths and calibers; the lengths varied from thirty-two

inches to 42½ inches, with calibers from .36 and .44 to .56. The .36 and .44-calibers were made to chamber six shots, while the .56-caliber had five chambers. The Colt Firearms Company was also the primary supplier of revolvers; its .44-caliber Army revolver and the .36-caliber Navy revolver were the most popular (more than 146,000 purchased) because they were simple, sturdy, and reliable.

Because of the South's limited industrial capacity, Confederate cavalymen had a more difficult time arming themselves. Nevertheless, they too embraced the firepower revolution, choosing shotguns and muzzle-loading carbines as their primary weapons. In addition, Confederate cavalymen made extensive use of battlefield salvage by recovering Federal weapons. However, the South had difficulty producing the metal-rimmed cartridges required by many of these recovered weapons, which limited their usefulness.

Field Artillery

In the Civil War era, artillery consisted of four general types of weapons—guns, howitzers, mortars, and Columbiads. Guns were long-barreled cannon that delivered high-velocity, flat-trajectory, long-range fire. Howitzers were lighter and shorter than guns and used a smaller powder charge to fire explosive projectiles at shorter distances. Mortars, the shortest pieces, used a small powder charge to lob a large projectile at a very high angle. Columbiads combined characteristics of all three. They were generally of large caliber, possessed relatively long barrels, and used a large powder charge to fire heavy projectiles great distances.

Artillery was also categorized by the method of employment—field, siege (officially classified as “siege and garrison”), and seacoast. Field artillery, the lightest and most mobile, operated within tactical units as part of the standard combined arms team. Siege and seacoast artillery generally operated independently of other combat arms. Siege artillery units normally formed siege trains that were called to the front only under special circumstances, as with Totten's Siege Train used at Fort Blakeley and Spanish Fort in April 1865. Seacoast artillery, the heaviest Civil War ordnance, was emplaced in fixed positions.

In 1841, the US Army adopted a new system of field artillery that incorporated new weapons and a new organization to field them. The 1841 field artillery system consisted entirely of smoothbore muzzle-loaders: 6- and 12-pounder guns; 12-, 24-, and 32-pounder howitzers; and 12-pounder mountain howitzers. A pre-Civil War battery usually consisted of six fieldpieces—four guns and two howitzers. A 6-pounder battery contained

four 6-pounder guns and two 12-pounder howitzers, while a 12-pounder battery had four 12-pounder guns and two 24-pounder howitzers. The guns fired solid shot, shell, spherical case, grapeshot, and canister rounds while howitzers fired shell, spherical case, grapeshot, and canister rounds.

The 6-pounder gun (effective range 1,523 yards) was the primary field piece used from the time of Mexican War until the Civil War. In 1857, a new and more versatile fieldpiece, the 12-pounder gun-howitzer (Napoleon) Model 1857, appeared on the scene. Designed as a multipurpose piece to replace existing guns and howitzers, the Napoleon fired canister and shell, like the 12-pounder howitzer, and solid shot at ranges comparable to the 12-pounder gun. The Napoleon was a bronze, muzzle-loading smoothbore with an effective range of 1,619 yards using solid shot. Served by a nine-man crew, the piece could fire at a sustained rate of two aimed shots per minute.

Field Artillery						
Type	Model	Bore Diameter (inches)	Tube Length Overall (inches)	Tube Weights (pounds)	Carriage Weight (pounds)	Range (yards)/ Degrees Elevation
Smoothbore						
6-pounder	Gun	3.67	65.60	884	900	1,523/5°
12-pounder Napoleon	Gun-Howitzer	4.62	72.15	1,227	1,128	1,680/5°
12-pounder	Howitzer	4.62	58.60	788	900	1,072/5°
24-pounder	Howitzer	5.82	71.20	1,318	1,128	1,322/5°
Rifle						
10-pounder	Parrott	3.00	78.00	890	900	2,970/10°
3-inch	Ordnance	3.00	73.30	820	900	2,788/10°
20-pounder	Parrott	3.67	89.50	1,750	2,650 ¹	4,400/15°

1. Includes limber.

Figure 4. Comparison of Artillery Data. (Created by Army University Press.)

As with the rifled musket, the most significant new development in field artillery was the introduction of rifling. Although rifled guns provided greater range and accuracy, they were somewhat less reliable and slower to load than smoothbores. This was because rifled ammunition was semi-fixed, so the charge and the projectile had to be loaded separately. Moreover, the canister load of the artillery rifle did not perform as well as that of the smoothbore. Most rifled artillery was either wrought iron or cast iron with a wrought iron reinforcing band.

The most common rifled guns were the 10-pounder Parrott and the Rodman, or 3-inch ordnance rifle. The Parrott rifle was a cast-iron piece, easily identified by the wrought-iron band reinforcing the breech. The 10-pounder Parrott was made in two models: the Model 1861 had a 2.9-inch rifled bore with three lands and grooves and a slight muzzle swell, while the Model 1863 had a three-inch bore and no muzzle swell. The Rodman or Ordnance rifle was a long-tubed, wrought-iron piece that had a three-inch bore with seven lands and grooves. Ordnance rifles were sturdier than the 10-pounder Parrott and displayed superior accuracy and reliability.

By 1860, the ammunition for both smoothbores and rifled field artillery consisted of four types: solid shot, shell, case, and canister. Solid shot for smoothbores was a round cast-iron projectile. With its smashing or battering effect, solid shot was used in a counterbattery role or against buildings and massed troop formations. Rifled guns shot an elongated projectile known as a bolt. This conical-shaped bolt lacked the effectiveness of the smoothbore's cannonball against troop formations because it tended to bury itself upon impact instead of bounding along the ground like round shot.

Shell—also known as common or explosive shell, whether spherical or conical—was a hollow projectile filled with an explosive charge of black powder detonated by a fuse. Shell was designed to break into jagged pieces, producing an antipersonnel effect, but the low-order detonation seldom produced more than three to five fragments. On the other hand, shell had a psychological impact when it exploded over the heads of troops. It was also used against field fortifications and in a counterbattery role.

Case or case shot for both smoothbore and rifled guns was a hollow projectile with thinner walls than shell. This type of round was invented by Henry Shrapnel, a British artillery officer, hence the term “shrapnel.” The projectile was filled with round lead or iron balls set in a matrix of sulfur that surrounded a small bursting charge. Case was primarily used in an antipersonnel role.

Canister was probably the most effective round and the round of choice at close range (400 yards or less) against massed troops. A canister was essentially a tin can filled with iron balls packed in sawdust with no internal explosive charge. When fired, the can disintegrated and the balls followed their own paths to the target. The canister round for the 12-pounder Napoleon consisted of twenty-seven 1½-inch iron balls packed inside an elongated tin cylinder. At extremely close ranges, artillerymen often loaded double charges of canister.

Heavy Artillery—Siege and Seacoast

The principal siege weapons in 1861 were the 4.5-inch rifle, 18- and 24-pounder guns, a 24-pounder howitzer, two types of eight-inch howitzers, and several types of eight- and ten-inch mortars. The normal rate of fire for siege guns and mortars was about twelve rounds per hour, but with a well-drilled crew this could probably be increased to about twenty rounds per hour. The rate of fire for siege howitzers was somewhat lower at about eight shots per hour.

The carriages for siege guns and howitzers were longer and heavier than field artillery carriages but were similar in construction. The 24-pounder Model 1839 was the heaviest piece that could be moved over the roads of the day. Alternate means of transport, such as railroad or watercraft, were required to move larger pieces any significant distance.

The rounds fired by siege artillery were generally the same as those fired by field artillery except that siege artillery continued to use grapeshot after it was discontinued in the field artillery (1841). Depending on gun caliber, a “stand of grape” consisted of nine iron balls ranging from 2 to about 3.5 inches.

The largest and heaviest artillery pieces in the Civil War era belonged to the seacoast artillery. Seacoast artillery fired the same projectiles as siege artillery, but with one addition—hot shot. As its name implies, hot shot was solid shot heated in special ovens until red-hot, then *carefully* loaded and fired as an incendiary round against wooden naval vessels.

Seacoast artillery was normally mounted in fixed positions. The 1861 system included four types of Columbiads developed by Ordnance Lt. Thomas J. Rodman. These guns ranged in size from eight to twenty inches, as well as mortars of ten and thirteen inches. Wartime additions to the Federal seacoast artillery inventory included Parrott rifles ranging from 6.4-inch to 10-inch (300-pounders).

Siege and Garrison Artillery						
Type	Model	Bore Diameter (inches)	Tube Length Overall (inches)	Tube Weights (pounds)	Projectile Weight (pounds)	Range (yards)/ Degrees Elevation
8-inch	Howitzer	8.00	61.50	2,614	50.5 shell	2,280/12°
10-inch	Mortar	10.00	28.00	1,852	87.5 shell	2,028/45°
12-pounder Napoleon	Gun	4.62	66.00	3,590	12.3 shot	1,600/5°
24-pounder	Gun	5.82	124.00	5,790	24.4 shot	1,901/5°
18-pounder ¹	Gun (Rifled)	5.30	123.25	4,500	18.5 shell	6,525/16°
30-pounder	Parrott	4.20	132.50	4,200	29.0 shell	6,700/25°

1. The Confederate "Whistling Dick," an obsolete smoothbore siege gun, rifled and banded.

Figure 5. Siege and Garrison Artillery. (Created by Army University Press.)

The Confederates produced some new seacoast artillery of their own—Brooke rifles in 6.4- and 7-inch versions. They also imported weapons from England, including 7- and 8-inch Armstrong rifles, 6.3- to 12.5-inch Blakeley rifles, and 5-inch Whitworth rifles.

Tactics

Tactical Doctrine in 1861

The Napoleonic Wars and the Mexican War (1846–1848) were the major influences on American thinking at the beginning of the Civil War. The campaigns of Napoleon and Wellington provided ample lessons in battle strategy, weapons employment, and logistics while American tactical doctrine reflected lessons learned in Mexico. However, the tactical lessons of the Mexican War were misleading as relatively small armies fought only seven pitched battles. These battles were so small that almost all the tactical lessons learned during the war focused at the regimental and battalion levels. Future Civil War leaders learned very little, if anything, about brigade, division, and corps operational maneuver, yet these larger units were the basic fighting elements of the opposing armies in 1861–65.

In Mexico, tactics did not differ greatly from Napoleonic principles of the early nineteenth century. Infantry marched in column and deployed into line formations to fight. Once deployed, an infantry regiment might send one or two companies forward as skirmishers, as security against surprise or to soften the enemy's line. After identifying the enemy's position, a regiment advanced in closely ordered lines to within 100 yards. There, it delivered a devastating volley followed by a charge with bayonets. Both sides used this basic tactic in the first battles of the Civil War.

In Mexico, the American Army employed artillery and cavalry in both offensive and defensive roles. In the offense, artillery moved as near to the enemy lines as possible—normally just outside musket range—in order to blow gaps in the enemy's line that the infantry might exploit with a determined charge. In the defense, artillery pummeled advancing enemy lines with canister and withdrew if the enemy attack got within musket range. Cavalry guarded the army's flanks and rear but were ready to charge if enemy infantry became disorganized or began to withdraw.

These tactics worked perfectly well with the weapons technology of the Napoleonic and Mexican wars. The infantry musket was accurate up to 100 yards but ineffective against even massed targets beyond that range. Rifles were specialized weapons with excellent accuracy and range but slow to load and therefore not usually issued to line troops. Artillerists worked their guns with little fear of infantry muskets. Smoothbore cannon had a range up to one mile with solid shot but were most effective against infantry when firing canister at ranges under 400 yards. The cavalry of the time continued to use sabers and lances as shock weapons.

American troops suffered light losses when they successfully took the tactical offensive in most Mexican War battles. Unfortunately because of a major technological innovation fielded in the 1850s, these tactics proved to be obsolete if not completely disastrous. The new rifle-musket loaded as fast as a musket and also greatly increased the infantry's range and accuracy. It was the weapon of choice in both the Union and Confederate armies during the war. By 1862, large numbers of troops on both sides had rifle-muskets of good quality.

Official tactical doctrine prior to the beginning of the Civil War did not clearly recognize the potential of the new rifle-musket. Prior to 1855, the most influential tactical guide was General Winfield Scott's three-volume work, *Infantry Tactics* (1835), based on French tactical models of the Napoleonic Wars. It stressed close-order linear formations in two or three ranks advancing at "quick time" of 110 steps (eighty-six yards) per

minute. To accompany the 1855 introduction of the new rifle-musket, Major William J. Hardee published a two-volume tactical manual, *Rifle and Light Infantry Tactics*. Hardee's work contained few significant revisions of Scott's manual. His major innovation was to increase the speed of the advance to a "double-quick time" of 165 steps (151 yards) per minute. Unfortunately, Hardee failed to appreciate the impact of the rifle-musket on combined arms tactics and the essential shift this weapon made in favor of the defense. Nevertheless, Hardee's *Tactics* was the standard infantry manual used by both sides at the outbreak of war in 1861.

If Scott's and Hardee's works lagged behind technological innovations, at least the infantry had manuals to establish a doctrinal basis for training. Cavalry and artillery fell even further behind in recognizing the potential tactical shift in favor of rifle-armed infantry. The cavalry's manual, published in 1841, was based on French sources that focused on close-order offensive tactics. It favored the traditional cavalry attack in two ranks of horsemen armed with sabers or lances. The manual took no notice of the rifle-musket's potential, nor did it give much attention to dismounted operations.

Similarly, the artillery had a basic drill book delineating individual crew actions, but it had no tactical manual. Like their brothers in the cavalry, artillerymen showed no concern for the potential tactical changes that the rifle-musket implied. As the first volunteers drilled and readied themselves for the battles of 1861, officers and noncommissioned officers taught the lessons learned from the Napoleonic Wars and validated in Mexico. Thus, the two armies entered the Civil War with a good understanding of Mexican War tactics but had little understanding of how the rifle-musket might upset their carefully practiced lessons.

Early War Tactics

Throughout 1861 and 1862, both sides employed these outdated tactics and found that the tactical offensive could still be successful—but only at great cost. Men wielding rifled weapons in the defense generally ripped frontal assaults to shreds, and if the attackers paused to exchange fire, the slaughter was even greater. Rifles also increased the relative numbers of defenders since flanking units now engaged assaulting troops with a murderous enfilading fire. Defenders usually crippled the first assault line before a second line of attackers could come forward in support. This caused successive attacking lines to intermingle with survivors to their front, thereby destroying formations and complicating command and control. Although

both sides favored the bayonet throughout the war, they quickly discovered that rifle-musket fire made successful bayonet attacks almost impossible.

Similarly, as the infantry found the bayonet charge to be of little value, the cavalry and artillery made troubling discoveries of their own. The cavalry soon learned that the old-style saber charge did not work against infantry armed with rifle-muskets. It did, however, retain its traditional intelligence gathering and screening roles whenever commanders chose to make the horsemen the “eyes and ears” of the army. Artillery, for its part, found that it could not maneuver freely to canister range as it had in Mexico because the rifle-musket was accurate beyond that distance. Worse yet, where gunners were safe from rifle fire, artillery shot, shell, and case were far less effective than close-range canister. In other words, rifled cannon did not give the equivalent boost to artillery effectiveness that the rifle-musket gave to the infantry. In the broken and wooded terrain over which so many Civil War battles were fought, the increased range of cannon proved of little advantage.

There are several possible reasons why Civil War commanders continued to employ the tactical offensive long after it was clear that the defensive was superior. Most commanders, still refighting the Napoleonic and Mexican-American wars, believed the offensive was the decisive form of battle. Commanders who chose the tactical offensive usually retained the initiative over defenders. Similarly, the tactical defensive depended heavily on the enemy choosing to attack at a point convenient to the defender and continuing to attack until badly defeated. Although this situation occurred often in the Civil War, a prudent commander could hardly count on it for victory. Consequently, few commanders chose to exploit the defensive form of battle if they had the option to attack.

The offensive may have been the decisive form of battle, but it was very hard to coordinate and even harder to control. The better generals often tried to attack the enemy’s flanks and rear but seldom achieved success because of the difficulty involved. Not only did the commander have to identify the enemy’s flank or rear correctly, he also had to move his force into position to attack concurrent with attacks made by other friendly units.

In hindsight, the command and control necessary to conduct such coordinated attacks was often beyond the ability of most Civil War commanders. Therefore because it was the easiest way to conduct offensive operations, Civil War armies repeatedly attacked each other frontally, with a corresponding level of unacceptable casualties. When attacking frontally, a commander had to choose between attacking on a broad or a narrow

front. Attacking on a broad front rarely succeeded except against weak and scattered defenders. Attacking on a narrow front promised greater success but required immediate reinforcing attacks to achieve decisive results. As the war dragged on, attacking on narrow fronts against specific objectives became a standard tactic and fed the ever-growing casualty lists.

Emerging Tactics at the End of the War

Clearly, the failure to adjust tactics to new weapons technology contributed to high casualty rates. Poor training may have also contributed to high casualty rates early in the war, but casualties remained high and even increased long after the armies became experienced. Few commanders understood how the rifle-musket strengthened the tactical defensive.

However, some commanders did make offensive innovations that met with varying success. When an increase in attack speed did not overcome the defender's firepower (as Hardee suggested it would), some units tried advancing in more open order. But this sort of formation lacked the appropriate mass to assault and carry prepared positions. It also exaggerated command and control problems beyond the ability of Civil War leaders to resolve.

Later in the war, when the difficulty of attacking field fortifications under heavy fire became apparent, other tactical expedients were employed. Attacking solidly entrenched defenders often required whole brigades and divisions moving in dense masses to rapidly cover intervening ground, seize the objective, and prepare for the inevitable counterattack. Seldom successful against alert and prepared defenses, these attacks were generally accompanied by tremendous casualties and foreshadowed the massed infantry assaults of World War I.

Sometimes, large formations attempted mass charges over short distances without halting to fire. At Spotsylvania Court House in May 1864, a Union division attacked and captured an exposed portion of the Confederate line. The attack enjoyed limited success because the Union troops quickly crossed the intervening ground without artillery preparation and without stopping to fire their rifles. Once inside the Confederate defenses, the Union troops attempted to exploit their success by continuing their advance, but loss of command and control made them little better than a mob. Counterattacking Confederate units in conventional formations eventually forced the Federals to relinquish much of the ground gained.

As the war dragged on, tactical maneuver focused more on larger formations—brigade, division, and corps. In most of the major battles fought after 1861, brigades were employed as the primary maneuver formations,

but this was the upper limit of capable and efficient command and control for most Civil War commanders. Brigades might be able to retain coherent formations if the terrain were suitably open, but more often, brigade attacks degenerated into a series of poorly coordinated regimental lunges through broken and wooded terrain. Thus, brigade commanders were often on the main battle line trying to influence regimental fights.

Typically, defending brigades stood in line of battle and blazed away at attackers as rapidly as possible. Volley fire usually did not continue beyond the first round. Most of the time, soldiers fired as soon as they were ready; it was common for two soldiers to work together, one loading for the other to fire. Brigades were generally invulnerable to attacks on their front and flanks if units to the left and right held their ground or if reinforcements came up to defeat the threat.

Two or more brigades constituted a division. When a division attacked, its brigades often advanced in sequence—from left to right or vice versa depending on terrain, suspected enemy location, and number of brigades available to attack. At times, divisions attacked with two or more brigades leading, followed by one or more brigades ready to reinforce the lead brigades or maneuver to the flanks. More often, groups of divisions attacked under the control of a corps-level commander. Division and corps commanders generally took a position to the rear of the main effort to better control the flow of reinforcements into the battle, but they also often rode forward into the battle to influence the action personally.

Of the three basic branches, cavalry made the greatest adaptation during the war. Initially at the disadvantage against infantry in the defense armed with rifle muskets, it regained a useful battlefield role after repeating and breech-loading rifles gave it the firepower to contend with enemy infantry. Now it could use its horses for mobility then dismount to fight on foot like infantry. Cavalry also found a role off the battlefield as a reconnaissance force and in long-range raids that interdicted enemy supply lines and diverted enemy troops in a manner that foreshadowed air interdiction in the twentieth century.

The campaign for Vicksburg included two excellent examples of this function. The first of these was a December 1862 Confederate raid led by Maj. Gen. Earl Van Dorn on the Union supply depot at Holly Springs. This raid effectively thwarted Grant's first offensive effort into Mississippi. The second was a Union raid from Tennessee to Baton Rouge, Louisiana, led by Col. Benjamin H. Grierson. This April 1863 raid diverted Confederate attention away from Grant's main effort around Vicksburg.

In contrast to the cavalry, which reasserted itself as an offensive arm, artillery found that it could best add its firepower to the rifle-musket and tip the balance even more in favor of the tactical defensive. If artillery had developed an indirect firing system as it did prior to World War I, it might have been able to contribute more to offensive tactics. Still, both sides employed artillery decisively in defensive situations throughout the war.

In light of the heavy cost of the tactical offensive, the most significant tactical innovation in the Civil War was the widespread use of field fortifications. It did not take long for the deadly firepower of the rifle-musket to convince soldiers to entrench every time they halted. Eventually, armies dug complete trenches within an hour of halting in a position. Within twenty-four hours, armies could create defensive works that were nearly impregnable to frontal assaults. This development was a clear forerunner of the kind of warfare that came to dominate World War I.

In summary, the tactical defense dominated the tactical offense during the Civil War because assault formations proved inferior to the defender's firepower. The rifle-musket, in its many forms, provided this firepower and caused the following specific alterations in tactics during the war:

- Forced artillery to abandon its basic offensive maneuver of moving forward to within canister range of defending infantry.
- Required the attacker, in his initial dispositions, to deploy farther away from the defender, thereby increasing the distance over which the attacker had to pass.
- Increased the number of defenders who could engage attackers (with the addition of effective enfilading fire).
- Reduced the density of both attacking and defending formations.
- Created a shift of emphasis in infantry battles toward firefights rather than shock attacks.
- Caused battles to last longer. Units could not close with each other in a decisive tactical battle.
- Encouraged widespread use of field fortifications. The habitual use of field fortifications by armies was a major American innovation in nineteenth century warfare.
- Forced cavalry to the battlefield's fringes until cavalrymen acquired equivalent weapons and tactics.

Tactics in the Mobile Campaigns of 1864 and 1865

Although Maj. Gen. Gordon Granger, Rear Adm. David Farragut's ground force commander, used only a reinforced brigade at the 1864 Battle of Mobile Bay, the Union in the 1865 Campaign for Mobile used three corps—the XIII, XVI, and the “Column from Pensacola”—as major maneuver units. On the other hand, except for French's Division in 1865, the Confederates never organized into units bigger than a brigade.

Throughout both Mobile campaigns, Union ground and naval forces held the initiative at the operational level of war. Just as Napoleon did at Waterloo and Grant at Vicksburg, Union corps deployed on separate routes (or lines of operations) to facilitate movement, yet close enough to support each other should the enemy be encountered in force. Napoleon referred to this practice as the *bataillon carrée*, which can best be summarized as “march dispersed, fight massed.” Major General Canby's 1865 movement to Spanish Fort and Fort Blakeley was a good example of this concept.

When the campaigns of maneuver ended and the sieges of Fort Morgan, Fort Gaines, Spanish Fort, and Fort Blakeley began, an entirely new set of tactics came into play. Whereas there had been little formal doctrine for battlefield tactics in the Civil War (and none for operational maneuver), the sciences of fortification and siege craft were well-established and understood by any military engineer trained at West Point. In keeping with the principles of fortification, the Confederates had erected strong masonry (Forts Morgan and Gaines) and earthwork fortifications that afforded interlocking fields of fire commanding the approaches into Mobile. Trenches or “rifle pits” connected the major fortifications.

By the 1865 Campaign for Mobile, the role of cavalry had been replaced by naval reconnaissance, the importance of fortifications had replaced the need for infantry to fight on open ground, and the need to blindly assault prepared works—as at Fredericksburg—had been replaced by the concerted efforts of Union commanders to employ sappers, engineers, and artillery against Confederate forces in prepared fortifications. The Siege at Vicksburg lasted forty-eight days. The Siege at Petersburg lasted almost eleven months (290 days), but the siege at Fort Morgan lasted fifteen days and at Spanish Fort, seven months later, a mere thirteen days. The ways and means of warfare had changed. The commanders were smarter and more experienced, much to the good of the soldier. By the Battles of Spanish Fort and Fort Blakeley, the sieges ended with a final assault from prepared positions into the Confederate fortifications with very few casualties.

Logistics

Victory on Civil War battlefields seldom hinged on the quality or quantity of tactical logistics. At the operational and strategic level, however, logistical capabilities and concerns always shaped the plans and sometimes the outcomes of campaigns. Notably, as the war continued, the logistical advantage shifted inevitably to the North. The Federals controlled most of the nation's financial and industrial resources; with their ability to import any needed materials, the Federals ultimately created the best-supplied army the world had yet to see.

Both sides initially relied on the states and local districts to provide some equipment, supplies, animals, and foodstuffs. As the war progressed, more centralized control over production and purchasing emerged under both governments. Still, embezzlement and fraud were common problems for both sides throughout the war. The North, with its preponderance of railroads and developed waterways, had ample supply and adequate distribution systems.

On the other hand, the South's major supply problem was subsistence. Arguably, the south produced enough food during the war to provide for both military and civilian needs, but mismanagement, parochial local interests, and the relatively underdeveloped transportation network often created havoc with distribution.

These problems also applied to the South's shortages of raw materials. The Confederates produced adequate ordnance supplies, but they gradually faltered in their ability to acquire other war materiel. The state of supply within field armies on both sides depended more on the caliber of the people managing the depots and distribution networks than on the constraints of available materiel.

One of the most pressing needs at the start of the war was for sufficient infantry and artillery weapons. Large quantities of outmoded muskets were on hand for both sides—either in arsenals or private hands—but the Federals initially had only 35,000 modern rifle-muskets, while the Confederates had seized about 10,000. Purchasing agents rushed to Europe to buy existing stocks or contract for future production. This led to an influx of outmoded weapons, which resulted in many soldiers going into battle with Mexican War-era smoothbore muskets. As late as the fall of 1863, soldiers on both sides in the western theater were armed with muskets; several of Grant's regiments in the Vicksburg campaign exchanged their muskets for captured Confederate Enfields. Modern artillery pieces were generally available in adequate quantities, though the Confederates usu-

ally were outgunned. Although breech-loading technology was available and the Confederates had imported some Whitworth rifles from England, muzzle-loading smoothbore or rifled cannon were the standard pieces used by both armies.

With most of the government arsenals and private manufacturing capability located in the North, the Federals ultimately produced sufficient modern firearms for their armies, but the Confederates also accumulated adequate quantities—either from battlefield captures or through the blockade. In addition, exceptional management within the Confederate Ordnance Bureau led to the creation of a series of arsenals throughout the South that produced large quantities of munitions and weapons.

The Northern manufacturing capability eventually permitted the Federals to produce and outfit their forces with repeating arms, the best of which had been patented before 1861. Initially, however, the North's conservative Ordnance Bureau would not risk switching to a new, unproven standard weapon that could lead to soldiers wasting huge quantities of ammunition amid an expanding war. By 1864, after the retirement of Chief of Ordnance James Ripley and with President Lincoln's urging, Federal cavalry received seven-shot Spencer repeating carbines, which greatly increased its combat capabilities.

In both armies, the Quartermaster, Ordnance, Subsistence, and Medical bureaus procured and distributed equipment, food, and supplies. The items for which these bureaus were responsible are not dissimilar to the classes of supply used today. Some needs overlapped, such as the Quartermaster Bureau's procurement of wagons for medical ambulances, but conflicts of interest usually were manageable. Department and army commanders requested needed resources directly from the bureaus, and bureau chiefs wielded considerable power as they parceled out occasionally limited resources.

Typically, materiel flowed from the factory to base depots as directed by the responsible bureaus. During campaigns, the armies established temporary advanced depots served by rail or river transportation. From these points, wagons carried the supplies forward to the field units. This principle is similar to contemporary theater sustainment organizations.

Clearly, the management of this logistical system was crucial, albeit complex. The difficulty of terrain, weather, and road conditions exacerbated the challenges for corps wagon trains made up of tens and sometimes hundreds of two-ton wagons drawn by standard six-mule teams. These corps trains could often extend five to eight miles. The wagons, which

were capable of hauling 4,000 pounds in optimal conditions, could carry only half that load in difficult terrain.

Sustenance for the animals was a major logistical constraint in campaign planning. Each animal required up to twenty-six pounds of hay and grain a day to stay healthy and productive. Wagons delivering supplies more than one day's distance from the depot would often carry large amounts of fodder—bulky and hard to handle. If providing 100 percent of the animal fodder was necessary—i.e. foraging in the field was not possible—the required numbers of wagons to support a corps increased dramatically with each additional day's distance from a forward depot.

Another problem was created by herds of beef that often accompanied the trains or were appropriated en route. The herds provided fresh meat for the troops but slowed and complicated movement. The bulk-supply problems were alleviated somewhat by the practice of foraging, which in the proper season, supplied much of the food for animals and men of both sides. Foraging was practiced with and without command sanction wherever an army went.

Logistics in the Mobile Campaigns

Without a doubt, the most significant factor in the Mobile Campaigns was the ability to move logistics via transport ships from New Orleans or from the East Coast to Mobile Bay. The Union had already learned the lessons of waterborne logistics during the Vicksburg Campaign of 1863. In January that year, Grant established an impressive logistics system running from his depots at Cairo, Illinois, and Memphis, Tennessee, to advance bases established along the levees at Lake Providence, Milliken's Bend, and Young's Point—the latter being just ten river miles from Vicksburg. Supplies as well as troops moved downriver on a sizeable fleet of Army-contracted riverboats. These transports varied considerably in size; many could carry 300,000 pounds of supplies—the equivalent of 150 wagonloads.

Union land forces in both Mobile campaigns were rarely left to their own devices without access to nearby transport boats to resupply them. The one exception was Steele's "Column from Pensacola" when it moved north from Pensacola to the Alabama state line and then turned west toward Fort Blakeley. This area was difficult foraging country, and the column was almost out of food until Canby sent a relief column north to meet it.

The Confederate logistical situation in the Mobile campaigns had its own challenges. True, the Confederates were conducting defensive operations and had access to resources in the deep south, but the area they were defending was crisscrossed with significant bodies of water, thus forcing

resupply of the Confederate eastern shore only by boat. Their problems were further complicated when they lost freedom of action in the bay in 1864; Mobile now relied on a limited transportation network from Montgomery. In modern doctrinal terms, the single railroad from Montgomery and the water network in the North Bay were “critical vulnerabilities” to be taken advantage of by Union forces. By the 1865 Campaign for Mobile, the Confederate commander, Maj. Gen. Dabney Maury, found it difficult to keep Spanish Fort and Fort Blakeley resupplied in the face of the strong Union naval and ground artillery around the Blakeley and Tensaw Rivers.

Engineer Support

Engineers trained at West Point were at a premium; thus many civil engineers, commissioned as volunteers, supplemented the work done by Regular engineer officers. The Confederates, in particular, relied on civilian expertise because many of their trained engineer officers sought line duties. For example, state, or even local, civil engineers planned and supervised much of the work done on local fortifications.

In the prewar US Army, the Corps of Engineers contained a handful of staff officers and one company of trained engineer troops. This cadre expanded to a four-company Regular engineer battalion. Congress also created a single company of topographic engineers, which merged with the Regular battalion when the bureaus merged in 1863. In addition, several volunteer pioneer regiments, some containing up to 2,000 men, supported the various field armies. The Corps of Engineers also initially controlled the fledgling Balloon Corps, which provided aerial reconnaissance. The Confederate Corps of Engineers—formed in 1861 as a small staff and a single company of sappers, miners, and pontoniers—grew more slowly and generally relied on details and contracted labor rather than established professional units.

Engineer missions for both sides performed many essential tasks, including construction and repair of fortifications, roads, bridges, and railroads. They also conducted demolition, limited construction of obstacles, and construction or reduction of siege works. The Federal Topographic Engineers, a separate prewar bureau, performed reconnaissance and produced maps. Because qualified engineer officers tended to perform all related functions, the Federals quickly decided that all engineer functions should be merged under a single corps; the Topographic Engineers merged with the Corps of Engineers in March 1863. The Confederates, however, never separated these functions in creating their Corps of Engineers.

In 1861, maps for both sides were also in short supply; for many areas in the interior, they were non-existent. As the war progressed, the Federals

developed a highly sophisticated mapping capability. Federal topographic engineers performed personal reconnaissance to develop base maps, reproduced them by several processes, and distributed them to field commanders. Photography, lithographic presses, and eventually photochemical processes gave the Federals the ability to reproduce maps quickly. Western armies, which usually operated far from base cities, carried equipment to reproduce maps on campaigns with their army headquarters. By 1864, annual map production exceeded 21,000 copies. Confederate topographic work never approached the Federal effort in quantity or quality. Confederate topographers initially used tracing paper to reproduce maps. Not until 1864 did the use of photographic methods become widespread in the South.

Bridging assets included wagon-mounted pontoon trains that carried wooden, canvas-covered, or inflatable rubber pontoon boats. Using this equipment, trained engineer troops could bridge even large rivers in a matter of hours. The most remarkable pontoon bridge of the war was the 2,200-foot bridge built by Army of the Potomac engineers in 1864 over the James River. This bridge was one of more than three dozen pontoon bridges built in support of campaigns in the East that year. In 1862, the Confederates began developing pontoon trains after they had observed their effectiveness. In fact, during the 1864 Atlanta campaign, General Joseph Johnston had four pontoon trains available to support his army.

In every campaign of the war, both armies traveled over roads and bridges built or repaired by their engineers. Federal engineers also helped clear waterways by dredging, removing trees, or digging canals. Fixed fortifications laid out under engineer supervision played critical roles in the Vicksburg campaign and in actions around Richmond and Petersburg. Engineers also supervised the construction of siege works to reduce those fortifications.

While the Federal engineer effort expanded in both men and materiel as the war progressed, the Confederate efforts continued to be hampered by major problems. The relatively small number of organized engineer units available forced Confederate engineers to rely heavily on details or contracted labor. Finding adequate manpower, however, was often difficult because of competing demands. Local slave owners were reluctant to provide labor details when labor was crucial to their economic survival. Despite congressional authorization to conscript 20,000 slaves as a labor force, state and local opposition continually hindered efforts to draft slave labor.

Communications Support

Communications systems used during the Civil War consisted of line-of-sight signaling, telegraphic systems, and time-honored courier meth-

ods. While line-of-sight signaling offered operational benefits and some tactical means of communications, the telegraph principally provided a viable strategic and operational communications system. In contrast, couriers were primarily used for tactical communications.

The US Army Signal Corps was in its infancy during the Civil War. Its first signal chief, Maj. Albert C. Myer, was appointed in 1860, but his nascent organization was not officially recognized as the Signal Corps until March 1863. Nor did it achieve bureau status until November of that year. As one might expect, the Federal Signal Corps remained small, with a maximum strength of just 1,500 officers and men.

One of the early innovations of the Signal Corps was the wigwag system. Patented in 1858, it used five separate numbered movements of a single flag. Four number groups represented letters of the alphabet and a few simple words and phrases. The system could also be employed at night using kerosene torches.

Coincidentally, Myer also indirectly influenced the formation of the Confederate Signal Service. Among the men who assisted Myer in prewar testing of his wigwag signaling system was Lt. E.P. Alexander. Alexander used wigwag signals to the Confederate's advantage during the First Battle of Bull Run and later organized the Confederate Signal Corps. Officially established in April 1862, the Confederate Signal Corps was attached to the Adjutant and Inspector General Department. As with its Federal counterpart, the Confederate Signal Service remained small, with only 1,500 men detailed for service.

Although the Confederate Signal Corps' visual communications capabilities were roughly equal to those of the Federals, Confederate field telegraph operations remained too limited to be of operational significance. The existing Confederate telegraph lines provided strategic communications capabilities similar to those of the Federals, but the lack of resources and factories in the South for producing wire precluded extending telegraph networks much beyond prewar levels.

Short of commanders meeting face to face on the battlefield, a courier system that used mounted staff officers or soldiers to deliver orders and messages remained the most viable tactical communications option. Although often effective, this system was fraught with difficulties, as couriers were often captured, killed, or delayed en route. Commanders sometimes misinterpreted or ignored messages, and situations often changed by the time messages were delivered, which compounded their errors and misjudgments during Civil War campaigns and battles.

Communications in the Mobile Campaigns

Despite the water obstacles, Major General Maury in Mobile did have telegraph wire to Fort Morgan in 1864 and to Spanish Fort and Fort Blakeley in 1865. His alternate means of communications, of course, was by waterborne messages, which became more critical as the sieges reached their conclusions in April 1865. At the operational level of war, then, Maury could communicate with his major commanders. On the other hand, the Union relied on the Union Navy to ferry messages to operational and strategic level headquarters in New Orleans and Washington, D.C. This was true of both campaigns.

Union tactical communications between ground and naval forces were uniquely efficient in both campaigns. In 1864, Rear Admiral Farragut—following the example of Rear Adm. David Porter at Vicksburg—saw the value of the army's signal system. On the Mississippi River in 1863, Porter could maintain a link with the army as long as the gunboats operated within visual range of army signal stations ashore. Similarly, when Farragut brought Union signal officers on board his ships at the Battle of Mobile, he was not so much creating a new joint communications system but following in the footsteps of his stepbrother the year prior. Farragut's intent was to use the signal officers to communicate with the shore, but in the heat of battle he quickly realized that the semaphore system was more efficient than his own flag system and switched to army semaphore between ships to help control the naval battle in Mobile Bay.

Thus, Farragut's communications was multimodal: by sea to New Orleans and on to the nearest Union telegraph post on the Mississippi River. Similarly, the 1865 line of communications from Canby's forces on the eastern shore was multimodal. Canby maintained communications with his naval commander, Rear Adm. Henry Knox Thatcher, via semaphore stations on the eastern shore; those messages were then ferried on to New Orleans as required.

Medical Services

Federal and Confederate medical systems followed similar patterns. Surgeons General and medical directors for both sides had served many years in the prewar Medical Department but were hampered by the initial lack of experience in handling large numbers of casualties, not to mention the state of medical science in the mid-nineteenth century. Administrative procedures improved with experience, but throughout the war, the simple lack of knowledge about the true causes of disease and infection led to many more deaths than direct battlefield action.

After the disaster at the Battle of First Bull Run, the Federal Medical Department established an evacuation and treatment system developed by Surgeon Jonathan Letterman. At the heart of the system were three precepts: consolidate field hospitals at division level, decentralize medical supplies down to regimental level, and centralize medical control of ambulances at all levels. A battle casualty evacuated from the front line normally received treatment at a regimental holding area immediately to the rear. Then wagons or ambulances carried wounded men to a division field hospital, normally within a mile of the battle lines. Seriously wounded men could then be further evacuated by wagon, rail, or watercraft to general hospitals located usually in towns along lines of communication in the armies' rear areas.

By the Campaigns for Mobile, medical evacuation had progressed to the point that it would be recognizable today, albeit using different modes of transportation. Each division had its own hospital situated about two miles to its rear. Seriously injured were evacuated by train to the operational rear. In the 1865 Campaign, seriously injured patients accompanied by surgeons were sent by steamers converted into hospital ships to New Orleans.³

Although the Confederate system followed the same general principles, Confederate field hospitals were often consolidated at brigade rather than division level. A second difference lay in the established span of control of medical activities. Unlike their Federal counterparts, who had control over all medical activities within an army area, a Confederate army medical director had no control of activities beyond his own brigade or division field hospitals. A separate medical director for large hospitals was responsible for evacuation and control. In practice, both sets of medical directors resolved potential problems through close cooperation. By 1863, the Confederacy had also introduced rear area "wayside hospitals," which were intended to handle convalescents en route home.

Procedures, medical techniques, and medical problems for both sides were virtually identical. Commanders discouraged soldiers from leaving the battle lines to escort wounded back to the rear, but such practice was common, especially in less-disciplined units. The established technique for casualty evacuation was to detail men for litter and ambulance duty. Both armies used bandsmen, among others, for this task. Casualties would move or be assisted back from the battle line, where litter bearers evacuated them to field hospitals using ambulances or supply wagons. Ambulances were specially designed two- or four-wheel carts with springs to limit jolts, but rough roads made even short trips agonizing for wounded men.

Most operations performed at field hospitals in the aftermath of battle were amputations. Approximately 70 percent of Civil War wounds occurred in the extremities, and the soft Minié ball shattered any bones that it hit. Amputation was the best technique then available to limit the chance of serious infection. The Federals were generally well-supplied with chloroform, morphine, and other drugs, though shortages did occur on the battlefield. Confederate surgeons, however, often lacked critical drugs and medical supplies.

The Opposing Forces at Mobile Bay: 1864 and 1865

In the 1864 Campaign, the ground forces were relatively equal in size, but the Union artillery and the large advantage in naval gunfire support suggests that the advantage was asymmetrically in the Union’s favor. The chart below compares ground forces in Farragut’s campaign.

The artillery total for the Confederates is the total of cannon and mortars at all three forts. The numbers, however, do not show the disparity in numbers when the Union navy contributed its naval gunfire. For example, there was no infantry or field artillery on Tower Island to help seize Fort Powell; yet the fort surrendered in the face of superior gunfire from a flotilla of Union gunboats.

Similarly, the Confederates outnumbered the Union in total artillery at Fort Morgan, but only half its guns were available to fight the Union artillery or gunboats, i.e., positioned facing the correct directions (east and north) to counter the ground and naval threat. Since the Union sequenced its operations to mass fires on one fort at a time, it achieved a numerical and qualitative superiority in space and time.

The Battle of Mobile Bay, 1864 Ground Forces in Theater (Numbers Approximate)		
	Union	Confederate
Personnel	2,400	1,380
Artillery (pieces)	34	91

Figure 6. Ground Forces in Theater for the 1864 Battle of Mobile Bay.
 (Created by Army University Press.)

The Battle of Mobile Bay, 1864 Naval Forces in Theater		
	Union	Confederate
Combatants	18	4
Guns	174	22

Figure 7. Naval Forces in Theater for the 1864 Battle of Mobile Bay.
(Created by Army University Press.)

The same analysis can be applied to the naval forces in 1864, but with caution. The chart clearly shows that in Mobile Bay, the Union outnumbered the Confederacy in combat ships four to one and eight to one in naval guns. The progress of the battle, however, would also show that the CSS *Tennessee's* superiority in defensive armament—while fighting outnumbered thirteen to one—more than made up for the Union superiority in ships and guns. It was not until the *Tennessee's* steering gear was put out of commission that she finally surrendered.⁴

The comparison of forces and guns during the Campaign of 1865 can also be problematic. Union forces outnumbered Confederate forces at least four to one, sometimes as much as eight to one, but the Confederate forces in Spanish Fort and Fort Blakeley were solidly entrenched in prepared fortifications.⁵

Naval Operations in the Mobile Campaigns of 1864 and 1865

Military Significance of Mobile Bay and its Estuaries

Naval power was clearly a decisive element in the western campaigns of the Civil War through August 1864. Given the enormous size of the western theater of operations (680 miles in a straight line from Cairo, Illinois, to New Orleans) and the relative austerity of the road and rail nets, navigable waterways were the preferred method and often the only method of movement for both commercial enterprises and military operations. Thus, analogous to twentieth century concepts of “air superiority,” control of the western estuaries—and of course Mobile Bay itself—conferred the freedom of action that came with such control, especially mobility and fire support. Winning Mobile Bay gave the Federals access to the very heart of the Confederacy.

By the 1864 Battle of Mobile Bay, the US Navy had already secured the Gulf of Mexico, Mississippi Sound, and the Mississippi River for the Union. With their loss inside of Mobile Bay, the Confederates' ability to sustain their economy and wage war at the strategic level also suffered. Farragut's victory left the Confederacy with only one port—Wilmington, North Carolina—still open to international trade and the import of essential war supplies. Farragut's victory had one other benefit: even without seizing Mobile, the Union could now launch and sustain a major offensive toward Montgomery or Atlanta if it chose to do so.

If the bay and the estuaries in the North Bay gave the Union access into the heart of the Confederacy, it was the steam-powered riverboat that made large-scale operational movements possible between New Orleans and Mobile Bay. Cargo capacity ranged from 250 tons for the smaller boats and up to 1,700 for the largest. By contrast, a horse-drawn military wagon could move about one ton of supplies, depending on the conditions of the roads. A Civil War-era freight train of ten cars might carry 100 tons of goods, but rail lines were few and difficult to maintain—and completely unavailable to Union forces in the Mobile area of operations. However, if camped on the banks of a navigable body of water such as Mobile Bay, a field army of 40,000 men and 18,000 horses could subsist handily on the daily deliveries of one large 500-ton steamboat.

Moreover, a riverboat could not only sustain an army; it could move it. One riverboat could transport a regiment; ten could move an entire infantry division. Troop movements could be operational in nature, such as the movement in the space of three weeks of the Union's XVI Corps in February 1865 from the upper Tennessee River all the way to Fort Gaines. Or they could be tactical, as with the exchange of Confederate brigades between Spanish Fort and Fort Blakeley at the end of March.

The bay and the rivers that moved supplies for the Army also carried the Navy's guns—big guns, and lots of them. Farragut's West Gulf Blockading Squadron had 174 guns at the Battle of Mobile Bay, and Acting Rear Admiral Henry Thatcher's Mobile Bay Squadron in support of land operations around Spanish Fort had about thirty large naval guns available for naval gunfire support.

Confederate Naval Power up to August 1864

After the combined 1862 Mississippi River operations by Farragut and Flag Officer David Porter, Confederate naval power in the west was essentially wiped out. Two full-scale naval battles—one fought downriver from New Orleans and the other upstream from Memphis—broke the back of

Confederate naval power on the Mississippi. Every one of the fourteen rams of the River Defense Fleet was either destroyed in battle, captured, or burned to prevent capture. Only five of twenty-five gunboats survived into 1863—mostly by hiding upstream in the Red, Arkansas, White, and Yazoo rivers; only one would remain by 1864.

The seven Confederate river ironclads fared little better. One was lost at the battle below New Orleans. Five were never commissioned, being captured or destroyed to prevent capture. Just one, the CSS *Arkansas*, saw action. Although its combat career lasted only three weeks, the *Arkansas* demonstrated that even one Confederate ironclad set loose on the Mississippi posed an intolerable threat to Union naval superiority. Measuring 165 feet in length, armed with a bow ram and eight guns, and protected by wood and iron armor up to 18 inches thick, the ship's Achilles heel proved to be the power plant driving its twin screws. The crew scuttled the *Arkansas* on 5 August 1862 near Baton Rouge, Louisiana, after its steam engines failed. Ironically, this "engineering casualty" was similar to the plight of the CSS *Tennessee* on 5 August 1864 when it was defeated and captured in Mobile Bay.

With the loss of the CSS *Arkansas*, Confederate naval forces essentially ceased to exist along the Gulf Coast. By 1864, the Confederates lacked the means, for all intents and purposes, to challenge Union naval superiority in the Gulf—even though they continued to maintain control of Mobile Bay. The Confederacy could still run the Union blockade out of Mobile Bay on a regular basis, but not with sufficient frequency to satisfy the Confederacy's needs. The Confederacy controlled the bay but only with a small naval squadron and a series of coastal defenses established at its mouth.

That squadron, commanded by Admiral Franklin Buchanan, could only muster twenty-two guns for Mobile's defenses. In hindsight, it seemed more appropriate as a "show-of-force" operation than a serious defensive force. The bulk of the squadron—the CSS *Selma*, *Morgan*, and *Gaines*—had only sixteen guns between them. Were it not for the ironclad ram, CSS *Tennessee*, the Battle of Mobile Bay would have been over in the first hour. Yet, it was the *Tennessee* that gave Farragut the most concern.

The water approaches to the bay were also of great concern to Farragut. Mobile Bay was protected by three forts, numerous smaller batteries, and canalizing obstructions as well as a relatively new innovation, floating minefields, or torpedoes as they were called at the time.⁶ To prevent shallow draft vessels from running into the bay, the Confederates installed pilings from Fort Gaines to a point only 500 yards from Fort Morgan. By

July 1864, they had also laid 180 torpedoes in three rows adjacent to the pilings, narrowing even further the available shipping channel and controlling traffic under the watchful guns of Fort Morgan.⁷

Fort Morgan, a masonry fort built in 1834, was the most important of the three forts guarding the entrance to the bay. By the summer of 1864, there were more than 46 guns inside the fort or in the water batteries at the base of the western face. The guns consisted of seven- and eight-inch Brooke Rifles, ten-inch Columbiads, and 32-pounders. Interestingly, only seven guns were oriented toward the shipping channel, a deficiency that had significant effect on the coming naval battle.⁸

On Dauphin Island directly across the channel from Fort Morgan, the Confederates armed Fort Gaines with twenty-six guns. Their guns, however, were too far away from the main shipping channel abeam Fort Morgan to give any mutual support—conveniently simplifying Farragut’s tactical problem. If Farragut stayed away from the piles and the torpedoes that lay in the mouth of the bay, he would not have to worry about the guns at Fort Gaines.

A few miles north of Fort Gaines was Fort Powell, a potentially more significant tactical problem than Fort Gaines. So long as Fort Morgan guarded the shipping channel into Mobile Bay, Union reinforcements or supplies through that avenue would be at risk. Therefore, once he was established in Mobile Bay, Farragut’s more logical resupply route was from the west through Mississippi Sound, the protected body of coastal waters that extended west from Dauphin Island and Grant’s Pass almost to New Orleans. However, if Fort Powell could successfully protect Grant’s Pass, Farragut’s line of communications into the bay would still be at risk. Farragut would have to seize or destroy Fort Powell.

Unfortunately for the Confederate commander in Mobile, Maj. Gen. Dabney Maury in Mobile, building up and arming Fort Powell was a case of too little too late. Never envisioned to be anything more than temporary earthworks, it only contained twelve guns, some of which were still not mounted in time for Farragut’s attack. Of those that were mounted and ready, only three guns were pointed on a westerly arc toward Grant’s Pass and Mississippi Sound; the remainder were oriented toward the bay.⁹

Farragut’s West Gulf Blockading Squadron

By the Battle of Mobile Bay, the West Gulf Blockading Squadron under Farragut numbered twenty-nine combat vessels with assorted transport vessels. These included ironclads, rams, light draughts (commonly called “tinclads”), and “timberclads.” By March 1865, Farragut’s successor, Act-

ing Rear Adm. Henry Thatcher, commanded an equivalent flotilla of 32 ships, but only six of those could be used in the shallow waters abeam Maj. Gen. Edward Canby's operations on the eastern shore. The variety of vessel types reflects the diversity of missions that the squadron executed.¹⁰

For heavy combat against the *Tennessee*, Farragut relied upon his ironclads. Their firepower and armor protection allowed them to trade blows with any enemy, ashore or afloat. The ironclads' primary mission during the Mobile campaign was to defeat the *Tennessee* and silence Fort Morgan's fortified batteries ashore.

The conventional tactic for bombarding a fort was to fight it head-on from the downstream side of the fort; head-on to take advantage of the ironclad's heaviest armor (located on the forward surfaces) and downstream because the boats handled better with their bows facing the current. Moreover, by approaching the fort from downstream, any vessel disabled by enemy fire would drift to safety, away from the enemy guns. The range of engagement could be quite long, sometimes out to 5,000 yards, or as close as 100 yards from the fortification, blasting with grape and exploding shell to break down the earthen parapet (front wall) of the fort and disable its guns.

Naval Ordnance

Like the Army, the US Navy in the Civil War possessed an artillery establishment that produced a spectrum of light to heavy naval guns. Naturally, most naval artillery was designed for ship-killing. A variety of 32-pounder guns (6.4-inch bore), produced from the 1820s through the 1840s, remained in service during the Civil War. These venerable smoothbores, direct descendants of the broadside guns used in the Napoleonic Wars, fired solid shot and were effective not only in ship-to-ship combat but also in a shore-bombardment role.

A more modern class of naval artillery was the weapons known as "shell guns." These were large-caliber smoothbores designed to shoot massive exploding shells capable of dealing catastrophic damage to a wooden-hulled vessel. Shell guns could be found both in broadside batteries and in upper-deck pivot-mounts, which allowed a wide traverse. An early example of the shell gun, designed in 1845 but still in service during the Civil War, was an eight-inch model that fired a fifty-one-pound shell.

The Union Navy's premier ordnance expert and wartime Chief of Ordnance was John A. Dahlgren. Dahlgren's design came to typify the shell gun class of weapons. All his shell guns shared an unmistakable "beer-bot-

tle” shape. The most successful Dahlgren shell guns were a nine-inch model (72.5-pound shell or 90-pound solid shot), an eleven-inch (136-pound shell or 170-pound solid shot), and a fifteen-inch gun, which fired a 330-pound shell or 440-pound solid shot. A pivot-mounted eleven-inch shell gun proved to be the decisive weapon in the USS *Kearsarge’s* 1864 victory over the CSS *Alabama*. The famous US Navy ironclad *Monitor* mounted two eleven-inch Dahlgrens in its rotating turret. Later monitors carried fifteen-inch shell guns.¹¹

A series of light boat guns and howitzers corresponded to the Army’s field artillery. Designed for service on small boats and launches, this class of weapons included 12- and 24-pounder pieces, both smoothbore and rifled. The most successful boat gun was a 12-pounder smoothbore howitzer (4.62-inch bore) designed by Dahlgren. Typically mounted in the bow of a small craft, the Dahlgren 12-pounder could be transferred in a matter of minutes to an iron field carriage for use on shore. This versatile weapon fired shell and case rounds.

The US Navy also made wide use of rifled artillery. These high-velocity weapons became increasingly important with the advent of ironclad warships, especially because the ironclad was virtually imprenable to smoothbore guns. Some Navy rifles were essentially identical to Army models. For instance, the Navy procured Parrott rifles in 4.2-, 6.4-, 8-, and 10-inch versions, each of which had a counterpart in the Army as either siege or seacoast artillery.

The Confederacy relied heavily on British imports for its naval armament. Naval variants of Armstrong, Whitworth, and Blakeley weapons all saw service. The Confederate Navy also used Brooke rifles and a nine-inch version of the Dahlgren shell gun. Both were manufactured in the South and used afloat and ashore.

Naval Guns						
Type	Model	Bore Diameter (inches)	Tube Length Overall (inches)	Tube Weights (pounds)	Projectile Weight (pounds)	Range (yards)/ Degrees Elevation
8-inch	Dahlgren	8.00	115.50	6,500	51 shell	1,657/5°
9-inch	Dahlgren	9.00	131.50	9,000	72.5 shell	1,710/5°
11-inch	Dahlgren	11.00	161.00	15,700	136 shell	1,712/5°
12-pounder	Howitzer	4.62	63.50	760	10 shell	1,085/5°
24-pounder	Howitzer	5.82	67.00	1,310	20 shell	1,270/5°
32-pounder	Gun	6.40	108.00	4,704	32 shot	1,756/5°
64-pounder	Gun	8.00	140.95	11,872		
Rifle						
30-pounder	Parrott	4.20	112.00	3,550	29 shell	2,200/5°
42-pounder ¹	Gun (rifled)	7.00	121.00	7,870	42 shot	
50-pounder	Dahlgren	5.10	107.00	6,000	50 shot	
100-pounder	Parrott	6.40	155.00	9,700	100 shot	2,200/5°
Mortar						
13-inch	Mortar	13.00	54.50	17,120	200 shell	4,200/45°

1. Converted smoothbore.

Figure 8. Naval Guns. (Created by Army University Press.)

Notes

1. The name of this town was also spelled “Blakely” without the extra “e” during the Civil War. To avoid confusion, the more modern spelling of “Blakeley” will be used in this book.

2. In general, the difference between the Mounted Infantry (Dragoons) and Mounted Rifles was the weapons and formations used after the soldier dismounted. The Mounted Rifleman carried a rifled musket. The Dragoon carried a carbine. All three of these regiments eventually were consolidated into new cavalry regiments during the war.

3. C.C. Andrews, *History of the Campaign of Mobile: Including the Co-operative Operations of Gen. Wilson's Cavalry in Alabama* (New York: D. Van Nostrand, 1867), 147.

4. While not used at the time, the conventions for United States Ship (USS) and Confederate States Ship (CSS) are used in this volume to help the reader differentiate between the opposing sides.

5. Hearn, 176, 179. After Spanish Fort collapsed, Canby sent two divisions to Fort Blakeley. Union strength from Canby's Report in Scott, *The War of the Rebellion*, vol. 49, Part I, 91–100, 313–18, 1045.

6. Hearn, 39.

7. Robert M. Browning, “Go Ahead, Go Ahead,” *Naval History Magazine* 23, no. 6 (2009): 2.

8. Browning, 2.

9. Accounts vary from 12 to 18 for the number of guns at Fort Powell. Here preference is given to the report of Acting Master G.P. Pomeroy of the USS *Estrella* after taking control of Fort Powell on 6 August; US Naval War Records Office, US Office of Naval Records and Library, and National Historical Society, *Official Records of the Union and Confederate Navies in the War of the Rebellion* (US Naval War Records Office, Washington, DC: 1884–1922), Series I, vol. 21, 504–05, hereinafter cited as ORN.

10. Statistics are as of 1 April 1865; ORN, vol. 22 (Harrisburg, PA: National Historical Society, 1987), 120–21.

11. Statistics are as of 1 April 1865; ORN, 120–21.

II. Overview of the Campaigns

Overview of the Campaign for Mobile Bay, 1864 (Battle of Mobile Bay)

While today most scholars view the Battle of Mobile Bay as primarily a naval battle, few understand the importance of Rear Adm. David Farragut's mission to secure the bay or the significance of using army forces to secure the three forts guarding its entrance. The Battle of Mobile Bay occurred on 5 August 1864. In point of fact, the preparations for the campaign, which consisted of two land battles and two separate naval engagements, were a year in the making. More importantly, the 1864 Campaign for Mobile Bay set the stage for a second land campaign supported by naval forces in the Mobile area of operations seven months later.

Farragut's original objective was to seize Mobile and secure the bay, but Union army commanders in New Orleans were reticent to free up the troops necessary to seize Mobile, particularly with its well-developed defenses. For his part, Farragut came to realize that he did not need to seize Mobile to achieve the strategic objective; controlling the bay was all that was necessary to control the blockade runners that routinely slipped through the Union blockade.

Farragut assembled a formidable task force to seize the bay: 17 men-of-war and a reinforced brigade task force from the army to capture the three forts around the entrance: Forts Morgan, Gaines, and Powell. The Confederate squadron in the bay completely dominated the bay and defined Farragut's sequencing of his operation. If left alone, that squadron could completely interfere with Union amphibious operations. Thus, Farragut focused his operational main effort, his West Gulf Blockading Squadron, on destroying Buchanan's ships. Once he dealt with the enemy's ships, Farragut could then destroy Fort Powell at the entrance to Grant's Pass and support Brig. Gen. Gordon Granger's ground force as it invested Fort Gaines on the western side of Mobile Pass.

The plan started like clockwork. At 0700 on 5 August 1864, as Farragut entered the shipping channel with four ironclads and fourteen screw sloops and side-wheelers, the flotilla in Mississippi Sound and Granger's artillery on Dauphin Island simultaneously opened fire on Forts Powell and Gaines. The small Confederate force quickly abandoned Fort Powell, leaving the Union Navy to secure it by the afternoon of the 5th. Granger's artillery also pressured Fort Gaines while naval gunfire attacked from the bay side, causing it to surrender on the 8th.

The naval battle, however, was nearly a disaster. On the advice of his captains, Farragut had delegated the lead of the formation to Capt. James Alden of the USS *Brooklyn* with the flagship USS *Hartford* in the number two position. Unlike the other ships, the *Brooklyn* had two tactical advantages in the bow that the other Union ships did not have—a device to sweep mines away from her and four cannon oriented forward (the other ships had only two). On the surface, this made sense. What could not be measured nor predicted, however, was Captain Alden's tactical leadership at the critical moment of the battle.

At exactly 0700, the double line of Union ships penetrated the shipping channel as Fort Morgan opened fire. The USS *Tecumseh* led the right-hand column of ironclads. The *Brooklyn* led the left-hand column of lashed screw sloops and side-wheelers. All was proceeding in Farragut's favor. As the tide pushed the Union squadron into the bay, the gulf winds masked the squadron by blowing the smoke from its collective gunfire back into the fort. Then, just as everything seemed to be going well, Capt. Tunis Craven of the USS *Tecumseh* saw the CSS *Tennessee* and made a beeline for her. Unfortunately, this action put the ships of both columns on converging lines, forcing the *Brooklyn* and the western column into an awkward situation.

Craven was new to Farragut's command having only arrived the day before from the east coast, but he certainly understood that the column to his left was comprised of unmaneuverable sloops and side-wheelers lashed to each other. He was also very aware of the feared Confederate torpedo field to the *Brooklyn's* left. Yet he could not temper his zeal to intercept the *Tennessee*.

In the moment, Craven's move toward the *Tennessee* was putting Captain Alden on the *Brooklyn* in a difficult position. From Alden's point of view if he stayed on his intended attack axis, he would interfere with the *Tecumseh* as it drifted into his line. If he swerved to the west, however, he would lead the Union squadron straight into the torpedo field. His solution was to slow to a crawl and do nothing.

Unfortunately, the tactical problem became even more complicated as Alden slowed the *Brooklyn*. To the horror of the entire fleet, the *Tecumseh* hit a torpedo, possibly the only functioning torpedo in the whole field. She went down with 114 souls; all but twenty-one hands were lost, the biggest loss of life on a US naval vessel until World War II.

Meanwhile, in a move that ensured his command and control of the battle, Rear Admiral Farragut climbed into the rigging of the *Hartford* to

see above the smoke of his cannon. The tactical situation did not look good. To his front, the leading *Brooklyn* was slowing to a crawl in the channel as the *Tecumseh* was rolling on her back and sinking. To his rear, the rest of his attack column was beginning to bunch up behind the *Hartford*. The slower his ships got, the less steerage, or maneuverability, they could maintain—all while the tide was pushing the ships into the bay. If allowed to continue, the entire column would stagger behind each other with no headway and float through the channel at the complete mercy of Fort Morgan's guns.

At that moment, historical myth suggests that Farragut yelled for his flag captain, Percival Drayton, to steer to the west of the *Brooklyn*—into the minefield—and “Damn the torpedoes, full speed ahead!” Other accounts have him calmly directing his flagship, the *Hartford*, through the minefield using much more judicious language. Regardless, Farragut led his squadron through an active minefield with only the loss of the *Tecumseh*.

Entering the bay, Farragut could now focus on Buchanan's Confederate squadron. After unlashng his gunboats from the bigger ships, the *Selma*, *Morgan*, and *Gaines* were quickly put out of action. This left the lone Confederate ironclad, the *Tennessee*, to deal with the Union squadron. Outnumbered sixteen to one, Buchanan felt he could still deal a serious blow to the Union. Instead of prudently escaping back to Mobile or out to the Gulf, he had the *Tennessee* build up steam and head directly for the Union squadron inside the bay.

By 1000, the battle was over. The ironclad *Tennessee* gave more than it took, damaging the *Hartford* and other ships when they tried to ram it. By the time the Union ironclads joined the engagement, however, the *Tennessee* was nearly spent. Two Union ironclads, the USS *Chickasaw* and USS *Manhattan* relentlessly attacked the *Tennessee*. But it was not until the ship's smokestack was damaged, preventing it from building steam, and its exposed rudder chains were damaged, preventing it from steering, that the *Tennessee* finally surrendered.

With the surrender of the Confederate squadron in the bay, the seizure of Fort Powell, and the surrender of Fort Gaines two days later, Farragut now had the freedom to conduct joint operations against Fort Morgan. On 9 August, Granger's brigade moved from Fort Gaines to Navy Cove on the bay side of Mobile Point, an undefended landing zone that allowed Union ground forces to deploy within a few hundred yards of Fort Morgan's eastern wall.

Granger very cautiously and deliberately built trench lines and saps that brought his forces, including his artillery, closer to Fort Morgan. While Granger was digging, Farragut's ironclads and gunboats stood off Mobile Point and conducted harassing fires into the heavily fortified bastion.

By 22 August, Granger was ready. After moving more gunboats into position, both naval gunfire and land artillery bombarded Fort Morgan for more than 24 hours. The Union cannon fire came so close to the magazines that Brig. Gen. Richard Page, Fort Morgan's commander, decided to sacrifice all his gunpowder by pouring it into the cisterns. By the morning of the 23rd, Page did what he had chastised the commanders of Fort Gaines and Powell for doing, raising the white flag of surrender.

Using modern doctrinal terminology, the Battle of Mobile Bay was a campaign composed of several battles and engagements using joint forces. The navy led this campaign with army forces in support. The naval battle, in and of itself, would not have accomplished Farragut's operational objective: complete control of Mobile Bay. To gain complete control, Farragut needed to secure the forts at the southern entrance. However, securing those forts required ground forces—thus linking joint operations in time and space in pursuit of the operational objective.

Overview of the 1865 Campaign for Mobile

Looking back, the 1864 Campaign for Mobile Bay was a navy-led operation with ground forces providing essential support. Rear Admiral Farragut was undoubtedly in charge of the planning and execution of the overall plan. In that capacity, we would have designated Farragut as the joint task force commander as well as the commander of the naval component. Similarly, Major General Granger acted in a subordinate role as a ground component commander. He maneuvered his forces in complete synchronization with Farragut's scheme of maneuver and used naval transport and naval gunfire support to carry out his tactical aims.

In contrast, the 1865 Campaign for Mobile was army-led with extensive naval support. While not designated as such, Maj. Gen. Edward Canby served as the Union joint task force commander and as his own ground component commander. The naval component commander, Acting Rear Adm. Henry Thatcher, commanded a large squadron of transport and gunboats whose function was to completely support Canby's scheme of maneuver.

Canby's 1865 campaign took place over a three-month period. He used four different lines of operations (three by land via Mobile Point, Weeks Bay, and Pensacola, Florida, and one by sea in support) to approach

the Mobile defenses in the eastern Bay. By moving up the east side of the bay, Canby was taking advantage of a weakness in the otherwise strong defenses around Mobile. Surrounded by triple barricades and entrenchments to the west and the south, Mobile seemed to be impregnable from those directions. There was only a single line of entrenchments to the north of Mobile, but a Union attack from that direction meant an extremely difficult operational maneuver vulnerable to Confederate attack from the Selma-Montgomery axis.

Instead, using excellent intelligence reports, Canby intended to defeat the Confederate forts on the east side of the bay in order to secure his freedom of action on the water approaches to Mobile. If successful, he would be able to use the joint forces of his naval and ground units to invest Mobile, Alabama, from the east—a position that was completely unprotected.

Thus, while Canby's campaign objective was the seizure of the City of Mobile, this campaign was marked by a significant quirk: not one battle or engagement occurred on the west side of the bay or in the vicinity of Mobile. Canby's 1865 campaign consisted entirely of numerous small engagements on the east side of the bay that culminated in set-piece battles at Spanish Fort and Fort Blakeley between 2 and 9 April 1865.¹ By the 9th, Mobile's commander, Maj. Gen. Dabney Maury—realizing his precarious situation—chose to abandon Mobile to the Union forces and escaped to the north. The mayor of Mobile surrendered the city to Canby on 12 April 1865.

Implications for the Operational Art

The Campaigns for Mobile offer the staff rider a unique opportunity to explore the principles of operational art in a single cohesive staff ride. Rarely does history offer two unique campaigns that played out in the same area of operations. Besides exploring the tactics of the times, these two different but interrelated campaigns—conducted seven months apart—help us compare and contrast operational planning, joint operations, command and control, and leadership.

Because two separate services operated in the same area of operations with the same tasks and purpose, modern doctrinal terminology would characterize these two campaigns as “joint.” Neither Rear Adm. David Farragut in 1864 nor Maj. Gen. Edward R.S. Canby in 1865 had the doctrinal—much less the statutory—authorities of a joint commander. Yet their cooperation with supporting commanders in pursuit of common operational goals is a model for modern-day students of joint planning and the operational art. This cooperation and interaction is a continuing theme through both campaigns, and thus, throughout this staff ride.

Joint US doctrine defines operational art as “the use of creative thinking by commanders and staffs to design strategies, campaigns, and major operations and organize and employ military forces.”² US Army doctrine goes on to define operational art by integrating the concepts of ends (the objectives), ways (the methodology to achieve the ends), and means (the resources necessary):

For Army forces, operational art is the pursuit of strategic objectives, in whole or in part, through the arrangement of tactical actions in time, space, and purpose. . . . Operational art applies to all aspects of operations and integrates ends, ways, and means, while accounting for risk. Operational art is applicable at all levels of war, not just to the operational level of war.³

This handbook on the Campaigns for Mobile touches every aspect of operational art. Each campaign had a joint commander—Farragut in 1864 and Canby in 1865—who led operations and synchronized forces in “time, space, and purpose.” Both commanders were cognizant of their operations with respect to “interior and exterior lines.” They each conducted a “center of gravity” analysis to shape their campaigns. They each understood the importance of “basing” from which to launch and sustain their various “lines of operations.” They both understood the concept of “culminating point” and avoided making their forces vulnerable at the worst possible time and place.

Certainly, the question of whether to capture Mobile was a central question in the context of operational art: was seizing Mobile important to the task of stopping the Confederate blockade-runners, or would Union control of the bay be sufficient? Was the city of Mobile a center of gravity that needed controlling or was the bay truly a Clausewitzian “hub of all power and movement?”⁴ The historical evidence certainly shows that Farragut did not struggle with this question. He recognized that he did not need Mobile to achieve his strategic objective: to prevent Confederate blockade-running into Mobile Bay. Indeed, for that objective, he needed only to secure the interior waters and the entrances to the bay.

To be sure, operational art and campaign planning are about sequencing operations, battles, and engagements in a cohesive way in pursuit of a strategic objective. Both Farragut and Canby were excellent at doing this. They phased their campaigns in ways that highlighted a concept not normally emphasized in current doctrine but which is nonetheless essential to understanding operational art: freedom of action/freedom of maneuver.

In 1864, Farragut phased his campaign into short, but distinctive, major operations. A synchronization matrix (a modern construct) would show that the navy's operation focused on three separate tactical tasks: destruction of the Confederate Navy, neutralizing the forts, and blockading the bay. As his subordinate commander, Granger conducted two operations to carry out two tactical tasks: seize Forts Gaines and Morgan. Except for defeating Buchanan's Confederate squadron, neither Farragut nor Granger could accomplish their seizing tasks without the aid of the other—supporting—commander.

In 1865, Canby and Thatcher, Farragut's replacement, synchronized their operations in similar ways. Canby sequenced a series of battles and engagements to accomplish three different tactical objectives: destroy Confederate forces, secure the north bay, and seize Mobile. Naval operations focused on tactical tasks that supported Canby's land operations: destroy the remaining Confederate combatants, suppress/neutralize Confederate forts on the eastern shore, and transport/sustain army forces in the field.

In hindsight, each commander synchronized his operation in ways that achieved an overarching condition of operational art: freedom of action and freedom of maneuver. Farragut did not have "freedom of maneuver" inside of Mobile Bay until he had defeated Buchanan's small squadron. Nor did he have "freedom of action" into and out of the bay until he defeated the outer forts. Similarly, Major General Canby could not have conducted his 1865 ground campaign on either side of the bay without Union maritime superiority gained by Farragut seven months earlier. The 1864 Campaign for Mobile Bay set the operational conditions that gave Canby freedom of action to transport, reinforce, and sustain his three-manuever corps in 1865.

The reader might argue that the 1864 Campaign of Mobile Bay was but a major operation in a larger campaign concept. If the operational goal of this 1864 operation was to secure the bay, then it set the conditions for the follow-on phase to conduct joint operations to capture Mobile itself. This second major operation, however, could never begin without the benefits that the first phase provided: the complete freedom of action for the Union to operate inside of the bay. It is, indeed, very realistic to treat each major operation as parts of a single campaign. However, because the objectives were different in each campaign, and because the forces were significantly different, this handbook treats the combination of military operations in the Mobile Bay area in 1864 and 1865 as two separate and distinct campaigns.

Finally, the 1865 Campaign for Mobile consisted of the longest, if not the largest, operational movement in the American Civil War. Despite controlling access into and around Mobile Bay, Major General Canby needed a large ground force if he was to successfully seize Mobile and then move north toward Selma/Montgomery. Troops were already flowing into the area of operations. Major General Granger, the ground commander in the 1864 Campaign, commanded XIII Corps. Maj. Gen. Frederick Steele commanded a corps out of Pensacola that became the Union right flank at Spanish Fort/Fort Blakeley. However, Canby needed one more corps to ensure success.

That corps was Maj. Gen. A.J. Steele's XVI Corps. XVI Corps had a colorful battle history, having fought in Missouri and Tennessee but rarely as a unified corps under a single commander. At various times, the Corps was known as the Right Wing-XVI Corps and later as the "Detachment-Army of the Tennessee." When Steele received deployment orders for his divisions from Eastport, Mississippi, to Fort Gaines, Alabama, he did not have a numbered designation for his corps.

Nevertheless, the deployment of XVI Corps from Eastport to the Mobile Bay area of operations must stand as the longest operational maneuver of Union forces in the war. Using more than 40 transport boats, Smith's entire command sailed north up the Tennessee River, down the Ohio and Mississippi rivers, and eventually into Week's Bay on the east side of Mobile Bay. The corps moved more than 1,300 miles in six weeks and was ready for combat by the beginning of Canby's campaign on 17 March 1865. Because of the nature of the deployment and the ability of XVI Corps to flow seamlessly into Canby's scheme of maneuver, we can describe this as an operational—vice strategic—movement that successfully weighted the Union forces in its favor. The success of the maneuver foreshadows the logistical planning necessary to move units of such size in later successful operational movements during World War II and in Korea.

Notes

1. The name of this town was also spelled “Blakely” without the extra “e” during the Civil War. To avoid confusion, the more modern spelling of “Blakeley” will be used in this book.

2. Department of the Army, Army Doctrine Reference Publication (ADRP) 3-0, *Unified Land Operations* (Washington, DC: November 2016), xii.

3. Department of the Army, 4-1.

4. Carl von Clausewitz, Michael Howard, and Peter Paret, *On War* (Princeton, NJ: Princeton University Press, 1984), 595–96; the classic definition of Clausewitz’s “center of gravity” is used here.

III. Suggested Stands and Vignettes

Designed to take two days, this staff ride covers the Campaigns in the Mobile Bay area of operations from June 1864 to April 1865. We will travel across an operational area that spans 50 by 50 miles, or roughly 2,500 square miles. Bounded in space and time, these campaigns included one major naval battle (the Battle of Mobile Bay), four land battles with naval support against prepared fortifications (Fort Gaines, Fort Morgan, Spanish Fort, and Fort Blakeley), one naval engagement against a prepared fortification (Fort Powell) and many other skirmishes and engagements, often involving joint forces.¹

Because of the wide chronological and geographical span of the two campaigns, it has been necessary to package this staff ride in ways that highlight historically noteworthy events within a reasonable and cost-effective timeframe. While planned for two days, the unit can tailor the stands to accommodate the time available. The unit might also focus on aspects of either campaign that are of particular interest: army or naval operations or logistics, for example.

Those unfamiliar with military operations in the Mobile Bay area might also be surprised by what is not included in this handbook. For example, while the entirety of this project was focused on the strategic objective to seize the City of Mobile, this handbook does not guide the staff rider into the City of Mobile or the fortifications proximate to that city. The astute student of military history might consider this an historical oddity. The student of operational art and joint planning, however, would recognize the defenses around Mobile as clearly important—even affecting the operational plans to seize the city—but also recognize that those same defenses had a significant effect on Maj. Gen. Edward Canby's scheme of maneuver. The April 1865 victories at Spanish Fort and Fort Blakeley on the east side of the bay resulted in the Confederate army abandoning the city on the west side—all without firing a shot. The Campaigns for Mobile were classic Napoleonic maneuvers that left the city exposed to its enemy.

In like manner, the impressive 1,300-mile operational movement of the Union's XVI Corps was critical to Union operations in March and April 1865. However, in the interest of time, we have chosen not to visit the XVI Corps staging areas around Eastport, Mississippi; New Orleans; or Fort Gaines, Alabama.

As you follow the recommended itinerary, be aware that not all stands (or stops) are marked by signs or monuments. As of the date of publica-

tion, the directions are as correct as possible, but roads and landmarks may change over time. For this reason, directions are as specific as possible in terms of mileages, road names, and visible landmarks.

This caution is particularly apropos for the stands in the Spanish Fort area, as all the stands there are in the middle of privately owned developments. The instructions within will keep you off private property; however, a thorough map study and coordination with city and neighborhood officials is critical to preserving the training goals of your unit while respecting and protecting the rights of the property owners.

Important: The Combat Studies Institute (CSI) staff NEVER conducts a staff ride without conducting a reconnaissance of the route beforehand. We suggest that you do the same, especially if you are leading a large group. A set of topographic maps (see Bibliography for suggested sources) as well as route advice from park personnel and/or the CSI Staff Ride Team will help prevent unintentional detours. See Appendix A for suggested contact information.

Stand List and Proposed Itinerary

The proposed schedules in figures 9 and 10 presume that groups will billet in the vicinity of Spanish Fort, Alabama. If your staff ride begins from a different location, please plan accordingly.

Stand List			
Stand	Duration	Scheduled Time	Notes
Day 1			
Travel (bus)	90 min	0800–0930	Depart Spanish Fort
Stand 1: Fort Morgan Picnic Area	45 min	0930–1015	
Travel (walk or bus)	15 min	1015–1030	
Stand 2: SW Corner of Fort Morgan	45 min	1030–1115	
Travel (walk)	10 min	1115–1125	
Stand 3: Top of Battery Thomas	20 min	1125–1145	
Travel (walk)	10 min	1145–1155	
Stand 4: Gun Site NE of Battery Thomas	20 min	1155–1215	
Travel (walk)	15 min	1215–1230	
Stand 5: SW End of Union Line	15 min	1230–1245	
Travel (walk)	15 min	1245–1300	
Lunch	30 min	1300–1330	Picnic Area at Fort Morgan
Travel (bus)	60 min	1330–1430	
Stand 6: Mouth of the Fish River	30 min	1430–1500	
Travel (bus and walk)	30 min	1530–1600	
Stand 7: May Day Park, Daphne, AL	30 min	1600–1630	
Travel (bus)	30 min	1630–1700	Return to Hotel

Figure 9. Day 1 Stand List. (Created by Army University Press.)

Stand List			
Stand	Duration	Scheduled Time	Notes
Day 2			
Travel (bus)	15 min	0800–0815	Depart Spanish Fort
Stand 8: Fort McDermott	30 min	0815–0845	
Travel (bus)	20 min	0845–0905	
Stand 9: End of Cora Slocomb Drive	20 min	0905–0925	
Travel (walk)	5 min	0925–0930	
Stand 10: Union SAP Location in Woods	20 min	0930–0950	
Travel (walk)	5 min	0950–0955	
Stand 11: Driving Stand through Estates (bus)	25 min	0955–1020	Ends at Five Rivers Center
Stand 12: Picnic Area at Five Rivers Center	40 min	1020–1100	
Lunch	30 min	1100–1130	At Five Rivers Center
Travel (bus)	35 min	1130–1205	
Stand 13: Missouri Monument at Fort Blakeley	25 min	1205–1230	Lunch option at Fort Blakeley
Travel (walk)	5 min	1230–1235	
Stand 14: Redoubt 6	25 min	1235–1300	
Travel (bus and walk)	20 min	1300–1320	If walking to Stand 15, add 30 min to itinerary
Stand 15: Union Lines at Fort Blakeley	25 min	1320–1345	
Travel (walk)	25 min	1345–1410	
Stand 16: Redoubt 4	25 min	1410–1435	
Travel (bus)	10 min	1435–1445	
Stand 17: Picnic Area at Fort Blakeley	60 min	1445–1545	
Travel (bus)	15 min	1545–1600	Return to Hotel

Figure 10. Day 2 Stand List. (Created by Army University Press.)



Map 1. Map of Stands. (Created by Army University Press.)

The map above illustrates the locations of the stands for the Campaigns for Mobile. Stands 1–5 cover the 1864 Campaign for Mobile Bay. The remaining stands cover the 1865 Campaign for Mobile.

Stand 1: Overview—The Strategic and Operational Setting

Important: The prudent staff ride leader will check the web site at www.Fort-Morgan.org and/or contact the director of Fort Morgan at 251-540-7202 for the latest park information.

Directions (from Spanish Fort, Alabama): Follow US-98 E and AL-59 S to Fort Morgan Road (1 hour 33 minutes). Head west on Spanish Fort Boulevard toward Westminster Drive. Use the left two lanes to turn left onto US-98 E/Old Spanish Trail. Continue to follow US-98 E for 17.5



Map 2. Route to Stand 1. (Created by Army University Press.)



Figure 11. Overview of Fort Morgan Stand Locations.
(Created by Army University Press.)

miles. Turn right onto S McKenzie Street and continue straight onto AL-59 S for 9.7 miles.

Turn right onto West Fort Morgan Road (AL 180). Continue onto Fort Morgan Road for 19.7 miles. Park on the right in the Ferry Parking Lot before you reach the park ticket booth. Use the picnic area across the street (to the west). This stand begins outside the park proper.

Alternate Route (from Dauphin Island, Alabama): There is no staff ride stand on Dauphin Island at Fort Gaines, but you might want to visit the fort and then take the ferry to Fort Morgan. Fort Gaines is a one-hour drive from Spanish Fort travelling on the west side of the bay. The Mobile Bay Ferry leaves from the end of Fort Morgan Road and travels to and from Dauphin Island approximately every 90 minutes. Taking the ferry will add at least one hour to your itinerary. The first ferry run is at 0800 from Dauphin Island arriving at Fort Morgan at 0845. The last trip leaves Dauphin Island at 1830. Check <http://mobilebayferry.com> for latest fares and weather advisories. *Note: Buses are not allowed on the ferry.*

Orientation: The year is 1864. You are standing at the picnic area just east of Fort Morgan, one of the most heavily defended coastal forts of the Civil War era. From your location and 32 miles to your north is the water expanse of Mobile Bay. Spanish Fort, Alabama, is 32 miles to the northeast. Pensacola, Florida, where Maj. Gen. Frederick Steele began his movement toward Fort Blakeley in 1865, is 43 miles to the east. New

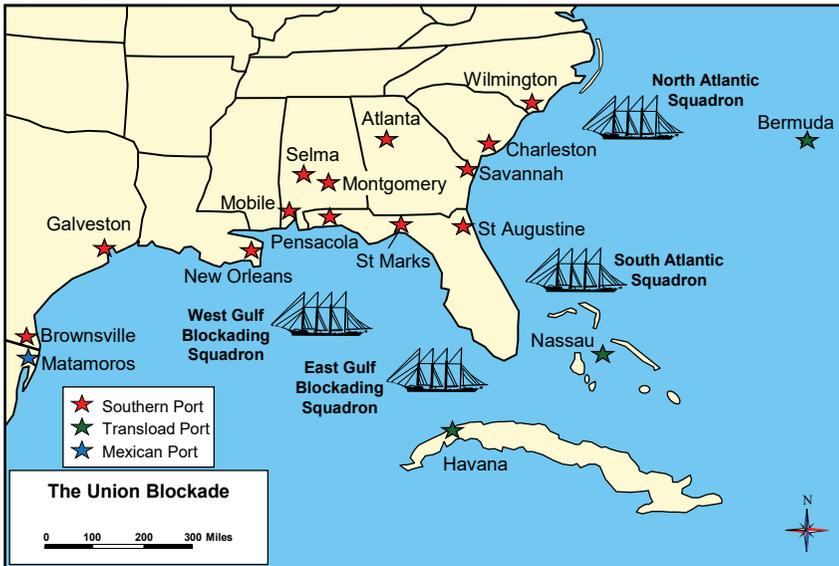
Orleans, a major Union supply center for both campaigns, is approximately 120 miles to the southwest.

Description

Strategic Background: When President Abraham Lincoln was searching for a strategy to defeat the Confederacy at the beginning of the American Civil War, US General-in-Chief Winfield Scott famously proposed his Anaconda Plan. Scott called for the blockade of all Southern ports that would isolate the South from international support while making a strong thrust down the Mississippi River to secure trade for farm products from the Union Midwest, thus dividing the Confederacy in two.

Lincoln did not approve the Anaconda Plan but, over the course of the war, he accomplished the objectives of the Anaconda Plan. On 19 April 1861, he ordered a far-reaching blockade of the Confederacy from Virginia to Texas. The task was formidable and fell to Union Secretary of the Navy Gideon Welles. The Union Navy had to blockade 3,500 miles of southern coastline with only 90 ships, most of which were only suitable for operations on coastal and inland waterways. By the end of the Civil War, Welles had successfully expanded the Navy to more than 650 fighting vessels and improved its technology in armament, protection, and speed.²

Operationally, the Union organized the blockading force into four squadrons (originally three). Welles placed Capt. David Farragut in com-



Map 3. The Union Blockade. (Created by Army University Press.)

mand of the West Gulf Blockading Squadron with responsibility from Pensacola, Florida, to Brownsville, Texas. He also ordered Farragut to seize New Orleans and the lower Mississippi River, which he did in April 1862. While the Mississippi River was still not completely opened until July 1863, Union control of New Orleans and Baton Rouge closed off the Mississippi River to the South's cotton industry while giving a base of operations to the West Gulf Blockading Squadron. Farragut's immensely successful effort to seize New Orleans made him a household name, so much so that Congress promoted him to be the US Navy's first rear admiral on 16 July 1862.

The Road to Mobile 1864: As it turns out, the City of Mobile proved to be very difficult to capture. This was not just because of its geography, but because of where Mobile stood in Lincoln's strategic priorities. The fall of New Orleans made Mobile the leading cultural and economic center and a favorite base for blockade-runners on the Gulf. Called the "Paris of the Confederacy" because of its fashionable homes and nightlife, Mobile had a population of 30,000 people and was the Gulf's second largest port and the Confederacy's third largest exporter. It was also a key medical center with twelve hospitals for Confederate soldiers and sailors.

While the "end" or objective to seize Mobile seemed obvious to everyone, the "means," or the resources, were still a problem. Lincoln and Gideon Welles obviously believed that Mobile was strategically important. Certainly the Union Navy could muster enough combatants (barely) to defeat the Confederate squadron in the bay; but the Union regional commander in New Orleans, Maj. Gen. Nathaniel P. Banks, never felt he had sufficient ground forces to seize Mobile in 1863.

More importantly, in his operational analysis of the mission, the newly promoted Farragut never considered the City of Mobile to be strategically significant.³ In Farragut's analysis of the operational center-of-gravity, Mobile in and of itself was less important strategically than the bay itself. In fact, Mobile did not become operationally significant until Maj. Gen. William Tecumseh Sherman started his Atlanta Campaign in May 1864. Sherman wanted an aggressive campaign for Mobile that would draw Confederate forces away from Atlanta. If successful, Mobile could then serve as a Union base of operations in the Confederate southeast. Notably in contrast to Farragut, Maj. Gen. Dabney Maury, the commander of the Confederate Department of the Gulf (also known as the "Gulf District"), did believe that Mobile was strategically important to the Union.

Confederate Strategic and Operational Goals: Confederate Major General Maury's strategic objective was simple: maintain Mobile as a southern gateway into the Confederacy by protecting Mobile and the free flow of trade in and out of Mobile Bay. Not only did this include trade through Cuba and on to Europe, but also the free flow of arms and munitions up the bay and into the heart of the Confederacy.⁴ While the volume of goods did not approach what was necessary to sustain the Confederacy, it was enough to keep hopes alive.

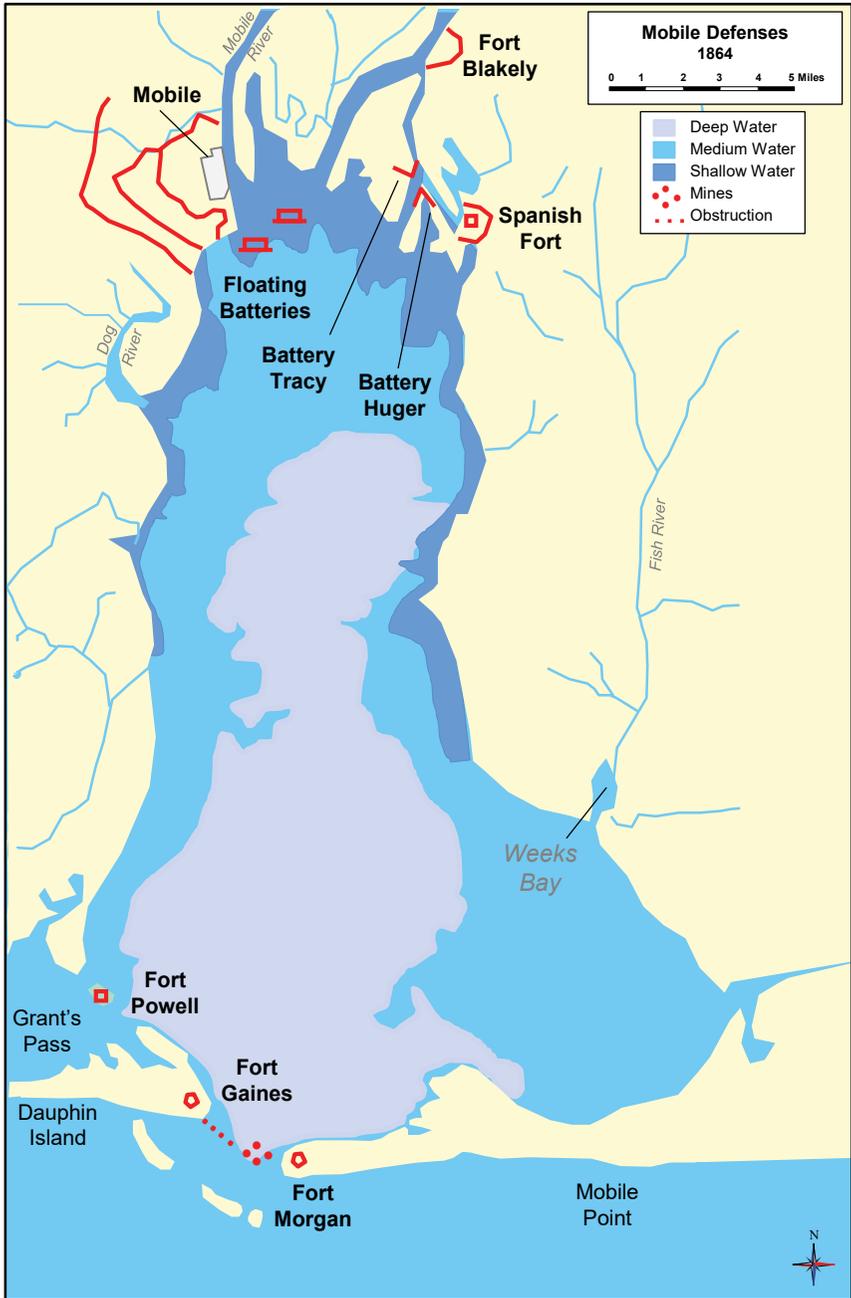
Keeping the southern gateway open, however, was easier said than done. Operationally, Maury had to maintain freedom of navigation in the bay while sustaining the surrounding transportation network. This required a joint effort by Confederate ground and naval forces to defend Mobile and its essential sea line of communication out of the bay into the Gulf.

Defenses in the Mobile Area of Operations (AO): Maury made great strides preparing the defenses of Mobile between January and August 1864. Using slave labor, he built three lines of fortifications, with redoubts every 500 yards, to the south and west of Mobile. He placed more than 300 artillery pieces around Mobile. Extensive earthworks also guarded the northern approaches, but as Maury considered the north the least likely avenue of approach, he had only one trench line built.⁵

Maury also defended the water approaches east of the city with a series of obstructions, shore batteries, and island batteries (floating artillery batteries). For all intents and purposes, the city was impregnable; indeed, some believed that Mobile was the most heavily fortified city in the South.

The geography of the South Bay obviously determined the placement of its defenses. There were two entrances to the bay: the 500-foot-wide shipping channel abeam Mobile Point and the shallow Grant's Pass in the southwest corner leading west to Mississippi Sound. The most significant fortification was at the western end of Mobile Point. Begun in 1819 but not completed until 1834, Fort Morgan was named after General Daniel Morgan, a Revolutionary War hero. In 1841, the US withdrew the garrison and placed it in caretaker status. When Alabama seceded in 1861, it seized the fort from the Federal caretakers and used it for its own purposes. After Maury assumed command of the Confederate Department of the Gulf in 1863, he continued to improve the defenses at Fort Morgan. By June 1864, he had equipped Fort Morgan with the guns depicted in figure 12.

Across the deep shipping channel from Fort Morgan was Fort Gaines, a smaller yet just as important coastal fortification. Constructed in 1821, its mission was to guard the western half of the channel between Mo-



Map 4. Mobile Defenses. (Created by Army University Press.)

Fort Morgan Defenses, 1864	
Type	Number
Principal Works	
10-inch Smoothbore Gun	7
8-inch Smoothbore Gun	3
32 pounder Smoothbore Gun	22
6.4-inch Rifle	2
5.8-inch Rifle	4
Water Batteries	
10-inch Columbiad	4
8-inch Rifle	1
32-pounder Rifle	2

Figure 12. Fort Morgan Defenses, 1864. (Created by Army University Press.)

bile Point and Dauphin Island. Maury insisted that Fort Gaines be mission ready by the summer of 1864.

While Fort Gaines was smaller than Morgan, its armament was still formidable: four 32-pounder rifles, three 10-inch Columbiads, and nineteen smoothbores categorized as 32-, 24-, and 18-pounders. Of the total guns, fourteen covered the land approach from the west and twelve covered the shipping channel to the east. As large as its armament appears on paper, it is important to note that Gaines's smoothbore cannon were practically useless against ironclad ships. More importantly, none of the weapons could range the principal shipping channel in front of Fort Morgan. Therefore, there were no overlapping fires or mutual support between the forts.

Since the deep-draft shipping channel was on the eastern side of the entrance (as it is today), there was still a large segment of the entrance that

was deep enough to allow shallow-draft vessels to enter. To counter that threat, Maury had a line of piles placed across the entrance between Fort Gaines and the shipping channel, a distance of more than a mile.⁶ At the eastern end of the piles, the Confederates also placed 180 torpedoes (or mines) in three rows to form an underwater minefield abeam the western boundary of the shipping channel. Between the piles from Fort Gaines and the torpedoes west of the shipping channel, the Confederates effectively reduced the width of the entrance by 80 percent and forced all shipping traffic to pass within 800 feet of the water batteries at Fort Morgan.

The torpedo, or water mine, was a ground-breaking technology for the time. The original intent of the torpedoes was to foul the propellers of the sloops and the paddles of the side-wheelers of the Union Fleet. No one could have imagined the effect a single torpedo would have on the USS *Tecumseh* in 1864 when it was blown out of the water and sank in just minutes. While the *Tecumseh* was the only loss to torpedoes in the 1864 campaign, the Confederates, using torpedoes released into the Blakeley River, sank seven Union vessels in the vicinity of Spanish Fort in March–April 1865.

Torpedoes were innovative, but not without their unique technological problems. The Confederate Navy discovered that many of the early sheet iron mines tended to wash away or become fouled by seawater. As the war progressed, improved models were made of copper, and were not laid in the water unless the Confederates anticipated a Federal attack.⁷

Torpedoes were, of course, a nineteenth century precursor to twenty-first century concepts of asymmetric warfare. Like land mines, improvised explosive devices (IED), and shoulder-fired surface-to-air missiles (SAMs) of the modern age, torpedoes forced the opponent to develop new and innovative tactics. Of course, as the Confederates intended, avoiding one threat (the torpedo) channeled Farragut's fleet and exposed it to a quite different threat: intense artillery from the fort. As we will see, Farragut mitigated the artillery threat by "damning the torpedoes" and did the unexpected, turning his fleet into the feared minefield.

To the southwest of the bay, the alternate entrance into Mobile Bay, Grant's Pass, also caused some concern for Maury and his naval counterpart, Adm. Franklin Buchanan. Located north of Dauphin Island, Grant's Pass (now known as Grants Pass) was accessible to shallow vessels entering the bay from the west. While Farragut's deep-draft vessels were not of concern, his resupply ships and transports from New Orleans would have easy access if Grant's Pass was not secured. Consequently, Maury had Fort

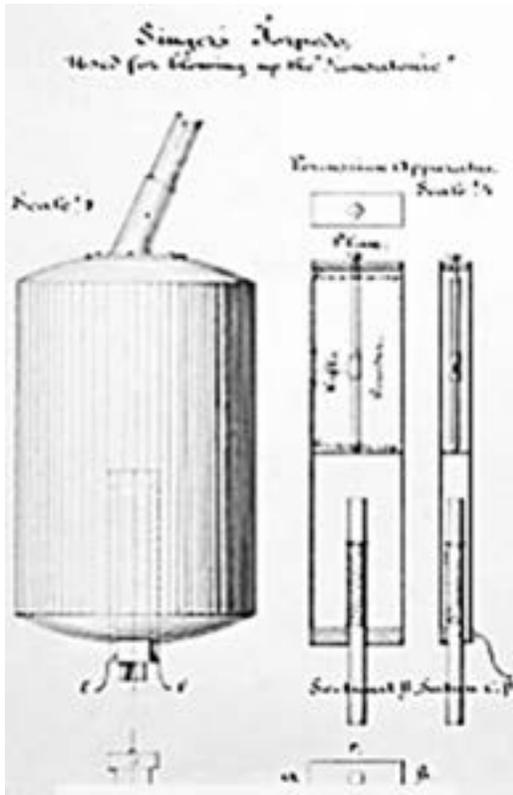


Figure 13. Singer's Torpedo. (Courtesy of Naval History and Heritage Command.)

Powell built on Tower Island, a small sand bank to the north of Dauphin Island. Fort Powell was an earthen fortification that was not finished by the summer of 1864. It did, however, have sufficient defenses to give pause: a 10-inch Columbiad, an 8-inch Columbiad, three 7-inch rifles, and one 6.4-inch rifle. Like the obstructions between Forts Morgan and Gaines, the Confederates also placed piles and other obstructions in Grant's Pass.

Maury was not a "joint commander" in the sense that we understand the term today, but he did cooperate extensively with his naval counterpart in the bay, Adm. Franklin Buchanan. Maury handled the defense of Mobile, which included the coastal forts at the south end of the bay. Buchanan's responsibility was the defense of the interior Bay.

Unfortunately for the Confederacy, the small number of ships in Buchanan's squadron reflected a strategic industrial effort plagued by shortages of equipment and materials, particularly engines, guns, and iron plating. He had only a small squadron: the ironclad CSS *Tennessee* (six

guns) and three smaller gunboats: CSS *Morgan* (six guns), CSS *Gaines* (six guns) and the CSS *Selma* (four guns).

The Confederates had shipyards in Mobile as well as up the Alabama River in Montgomery and Selma, Alabama. The shipyard at Montgomery built the ironclad CSS *Nashville*. The shipyard at Selma completed the *Huntsville* and *Tuscaloosa* in June 1863. However, these two boats could only make 2½ knots because of their underpowered engines, so Buchanan anchored them in the North Bay near the city and used them as floating batteries. As floating batteries, 150-foot-long and protected with four inches of iron plating, they were quite useful. Each battery had a 6-inch Brooke rifle and three 32-pounders.⁸ The batteries, when combined with the shallow depths of the bay surrounding Mobile, made the approach waters to Mobile the naval equivalent of restricted or “slow-go” terrain and greatly affected the operational and tactical planning of Farragut in 1864 and Maj. Gen. E.R.S. Canby in 1865.⁹

Buchanan’s main combatant was the ironclad CSS *Tennessee*, which was ready for action in the bay by January 1864. The ship was 209 feet long with a 48-foot beam and armed with a ram, two 7-inch Brooke Rifles, and four 6.4-inch Brooke Rifles in the broadside. The foundation of its armor was the twenty-five inches of oak and pine that was the backbone of the casemate, or fortified gun chamber. Covering the wooden foundation were six inches of iron plate at the front of the casemate with five inches of plate covering the sides and rear. For added protection, the iron plates ran two feet below the waterline. To reduce the possibility of penetration with a direct hit, the builders inclined the sides of the casemate at a forty-five-degree angle.

The side-wheel gunboats *Selma*, *Morgan*, and *Gaines* made up the rest of Buchanan’s small squadron. Together, they brought sixteen guns to the fight in Mobile Bay, but their lack of armor and trained crews did nothing



Figure 14. CSS *Tennessee*. (Courtesy of Naval History and Heritage Command.)

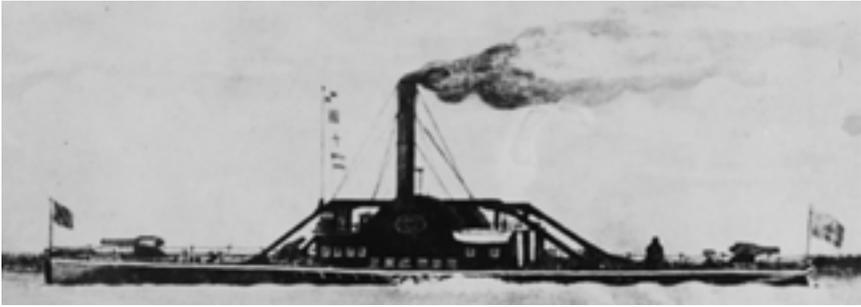


Figure 15. CSS *Selma*. (Courtesy of Naval History and Heritage Command.)

to improve their combat effectiveness. As it turned out, none of these ships acquitted themselves well on 5 August.

Union Strategic and Operational Goals: The Union strategic objective to deny Mobile access to the outside world was completely logical. By 1864, the fate of Mobile was inevitably tied to its key role as a base for Confederate blockade-runners. Nevertheless, Mobile was not the highest priority strategic goal of the Union. Much higher on the list of priorities were protecting Washington, defeating Robert E. Lee's Army of Northern Virginia, seizing Richmond as the political capital of the South, and keeping control the Mississippi River.

Despite these other priorities, Lincoln and Secretary of the Navy Gideon Wells still expected some sort of action in the Gulf of Mexico. Farragut's experiences in the lower Mississippi Valley in 1862 had already proven to him the importance of inter-service cooperation between naval and ground forces. He knew that holding the forts at the south end of Mobile Bay would be essential to the success of any plan he might devise.

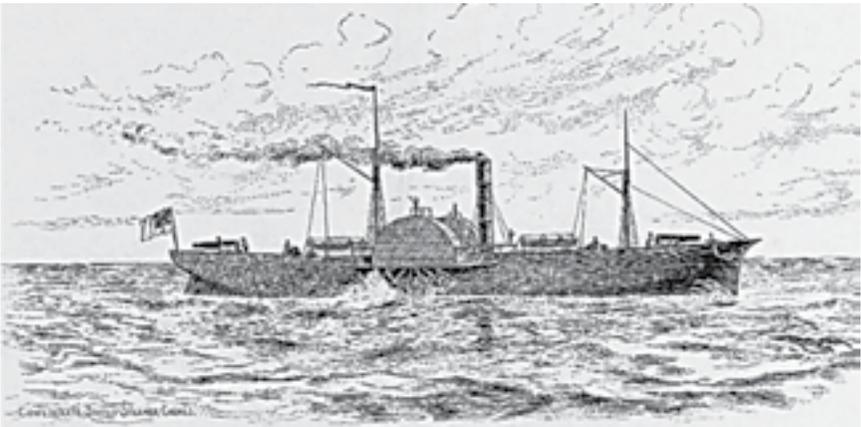


Figure 16. CSS *Gaines*. (Courtesy of Naval History and Heritage Command.)

Unfortunately, Maj. Gen. Benjamin Butler, commander of the Army's Department of the Gulf and Farragut's counterpart, proved obstinate and would not provide the troops necessary for such an operation.

Then on 4 October 1862, Farragut changed his focus to Galveston, Texas, a much easier port to close. However, again, Butler remained stubborn and would not send any troops to occupy the garrison there. This allowed the Confederates to reclaim Galveston on 1 January 1863—freedom of action having been handed right back to the Confederates by Union inaction.

This lack of army-navy cooperation troubled Farragut. He went to New Orleans to see Butler and discovered that the Union's Department of the Gulf appeared to be in complete disarray. Farragut duly reported the situation to Secretary of the Navy Wells. Thus, in December 1862, Washington removed Butler and replaced him with Maj. Gen. Nathaniel Banks. Despite Banks's embarrassing defeats in the Shenandoah Valley the previous spring, Lincoln believed assigning Banks to the Gulf was a good move.

The change in army commanders in New Orleans did improve inter-service communications between the army and the navy, but did not increase the number of troops available for a Mobile operation. Without a ground force large enough to capture and occupy Mobile, Farragut saw no benefit to capturing the city itself. In his view, denying the bay to Confederate use while giving his fleet a safe anchorage was sufficient to accomplish the strategic objective: stopping Confederate blockade runners in Mobile Bay. It was not until the winter of 1864–65 that the new commander of the army, Lt. Gen. Ulysses S. Grant, could free enough Union troops to make seizing Mobile an operational priority.

At this juncture, however, it is important to recognize that controlling the bay in 1864 set the conditions for a follow-on operation to capture the city in 1865. Without Mobile Bay as a Union lake, any operation around the bay would have been operationally prohibitive.

In the meantime by 1864, Farragut knew that he needed to realize two interrelated tactical objectives to control the bay. First, he had to defeat the Confederate naval squadron in the bay, i.e., achieve maritime superiority. As small as this squadron was, only four ships, the most lethal threat was the CSS *Tennessee*. The *Tennessee* was the pride of the Confederate fleet, and the natural evolution of ironclad technology. If Farragut could not sink it, the *Tennessee* would completely dominate any wooden ships that might penetrate the passes. He expressed this concern to Secretary of the

Navy Welles in a 9 May 1864 letter—only three months before the critical confrontation in the bay:

Thus you perceive that I am in hourly expectation of being attacked by almost an equal number of vessels, ironclads against wooden vessels, and a most unequal contest it will be, as the *Tennessee* is represented as impervious to all their experiments at Mobile, so that our only hope is to run her down, which we shall certainly do all in our power to accomplish; but should we be unsuccessful the panic in this part of the country will be beyond all control.¹⁰

Thus, an operational analysis of Confederate capabilities would point to *Tennessee* as the enemy's "critical resource" for the defense of Mobile Bay that could only be defeated with a strong Union naval force.¹¹ This premise was proven correct in the subsequent naval battle.

Another "critical resource" of Confederate defenses became the Union's second tactical objective, the ground defenses around the entrances to the bay. Farragut's could not solve his operational problem if he defeated Buchanan's squadron, including the *Tennessee*, but ignored the forts. Left alone, the forts could deny him free and unencumbered access, or freedom of action, in and out of the bay. Farragut would have to seize the forts.

Farragut's Operational Planning: Two tactical objectives, defeating the Confederate squadron and seizing or destroying the three forts, formed the basis of Farragut's operational planning. Nevertheless, he had to deal with other problems before he was ready to begin combat operations.

First, Farragut recognized he did not have enough combat-ready ships to perform the task. Many of his ships were badly in need of repair after non-stop service in the Gulf. Consequently, Farragut sailed his entire squadron north to shipyards in New York, Baltimore, and Philadelphia for repair. [Teaching Point: operational basing] While supervising repairs in New York, Farragut met Capt. Percival Drayton. Drayton so impressed Farragut that becoming the commander of his flagship, the USS *Hartford*, seemed a foregone conclusion.

Farragut did not return to the Gulf with his squadron until January 1864. Anticipating future operations, he then sailed to Mobile Bay between 18 and 29 February to test its defenses. He shelled Fort Powell with negligible effect, reinforcing his belief that he needed a ground force to support his operation.

Notwithstanding repairs and refit, Farragut had other problems to solve. The depth of the water in the bay, especially the shallow water around the city of Mobile, was a considerable operational constraint. In fact, the deep-draft wooden vessels that made up Farragut's fleet could not approach within a dozen miles of the city. Nor could they maneuver close to the shores of the bay if Buchanan chose to fight it out in the shallower waters. It was obvious to Farragut that he needed more ironclads and gunboats with shallower draft.

While Farragut was "old-school" and much lamented the demise of the wooden sailing navy, he had to recognize the threat the *Tennessee* posed. The CSS *Tennessee* was considered the strongest naval vessel built to that time, but surprisingly in the spring of 1864, Farragut had no iron-



Figure 17. CSS *Hartford*. (Courtesy of Naval History and Heritage Command.)

clads to match her. The *Tennessee* could withstand Union naval gunfire while directly threatening Farragut's own wooden ships, even if outnumbered. Farragut now had plenty of wooden ships that could rain fire on the *Tennessee* and other Union ships, but most of their efforts would be useless without ironclads that could take a pounding and chase the Confederate squadron into shallower waters.

Of necessity, Farragut strongly requested ironclads for his Mobile operation. His concerns could not be stated more clearly in a 25 May 1864 letter to Secretary Welles:

As I have before informed the department, if I had the military force . . . and one or two ironclads, I would not hesitate to run in and attack him; but if I were to run in, and in doing so get my vessels crippled, it would be in his power to retire to the shoal [shallow] water with his ironclads (in fact, all their vessels draw much less water than ours), and thus destroy us without our being able to get at him. But, if he takes the offensive and comes out of port, I hope to be able to contend with him. The Department [of the Navy] has not yet responded to my call for the ironclads in the Mississippi, which I was led to believe were intended for this squadron.¹²

An even more striking change in Farragut's attitude toward new technologies concerned torpedoes (or waterborne mines). Having scorned torpedoes for several years, Farragut acknowledged their worth in that same letter to Welles: "I have always deemed it unworthy of a chivalrous nation; but it does not do to give your enemy such a decided superiority over you."¹³

In response, Welles ordered Commodore David Porter on the Mississippi River to send two twin-turreted ironclads, the USS *Chickasaw* and the USS *Winnebago*, to Farragut. The *Chickasaw* and the *Winnebago* were armed with four 11-inch Dahlgren smoothbores and protected with eight inches of armor. Another ironclad monitor of the *Canonicus* class, the USS *Manhattan*, arrived on 7 July 1864 with a promise that another monitor, the single-turreted ocean ironclad USS *Tecumseh*, would arrive by 1 August from the East Coast. The *Tecumseh* and the *Manhattan* were essential to Farragut's planning, as he did not believe he could defeat the *Tennessee* without them. They were armed with two 15-inch Dahlgren smoothbore guns and protected with 10-inch armor.

Along with the ironclads, the final component of Farragut's joint operation came together. On 17 June, Major General Canby, the new commander of the Army of West Mississippi, arrived in New Orleans and met

Farragut. They agreed on a “joint,” albeit limited, operation into Mobile Bay. Canby scraped together a brigade-sized force of 2,000 troops (1,500 infantry with supporting cavalry and artillery) that would support Farragut and placed Maj. Gen. Gordon Granger in command. Farragut now had his small ground force.

In the meantime, Farragut was already preparing his force for combat. On 12 July, he issued General Order No. 10:

Strip your vessels and prepare for the conflict. Send down all of your superfluous spars and rigging. Trice up and remove the whiskers. Put up the splinter nets on the starboard side, and barricade the wheel and steersmen with sails and hammocks. Lay chains or sand bags on the deck over the machinery, to resist a plunging [cannon] fire. Hang the sheet chains over the side, or make any arrangement for security that your ingenuity may suggest. . . . The vessels will run past the forts in couples, lashed side by side. . . . It will be the object of the admiral to get as close to the fort as possible before opening fire. The ships, however, will open fire the moment the enemy opens upon us, with their chase [fore and aft guns] and other guns, as fast as they can be brought to bear. Use short fuses for the shell and shrapnel, and as soon as within 300 or 400 yards, give them grape.¹⁴ [Teaching Point: commander’s intent]

Having conducted an armed reconnaissance of Fort Powell, and about to receive his ironclads as promised, Farragut now issued his final plan of attack, a combination of brute force and elegance. He envisioned a joint navy-army operation to suppress and/or seize tactical objectives in support of his main effort: the penetration of Mobile Bay by a large attack squadron to defeat Buchanan. He planned to use four ironclads (two of them double-turreted monitors, the *Tecumseh* (yet to arrive) and the *Manhattan*, seven Screw Sloops, and seven smaller gunboats for the main attack.¹⁵

Farragut knew that even if he had made it past Fort Morgan, its guns would still be a threat to his communications. Therefore, Mississippi Sound and Grant’s Pass would default as his preferred line of communication; seizing Gaines and Powell now became essential tactical tasks in his planning. Once Fort Powell and Fort Gaines surrendered and he had destroyed the Confederate fleet, Farragut then planned to land Granger’s ground forces on Mobile Point to seize Fort Morgan. [Teaching Point: sequential operations]

Preparatory to the battle, Major General Granger would land his brigade-sized force of 2,000 troops on Dauphin Island. His goal would be to invest and seize Fort Gaines. At the same time, the Mississippi Sound Flotilla with five ships under the command of Lt. Cmdr. J.C.P. De Kraft would enter Grant's Pass from the west and destroy Fort Powell. South of Mobile Point, the Gulf Flotilla of six ships, under the command of Lt. Cmdr. Edward C. Grafton, would lay suppressive fire on Fort Morgan.

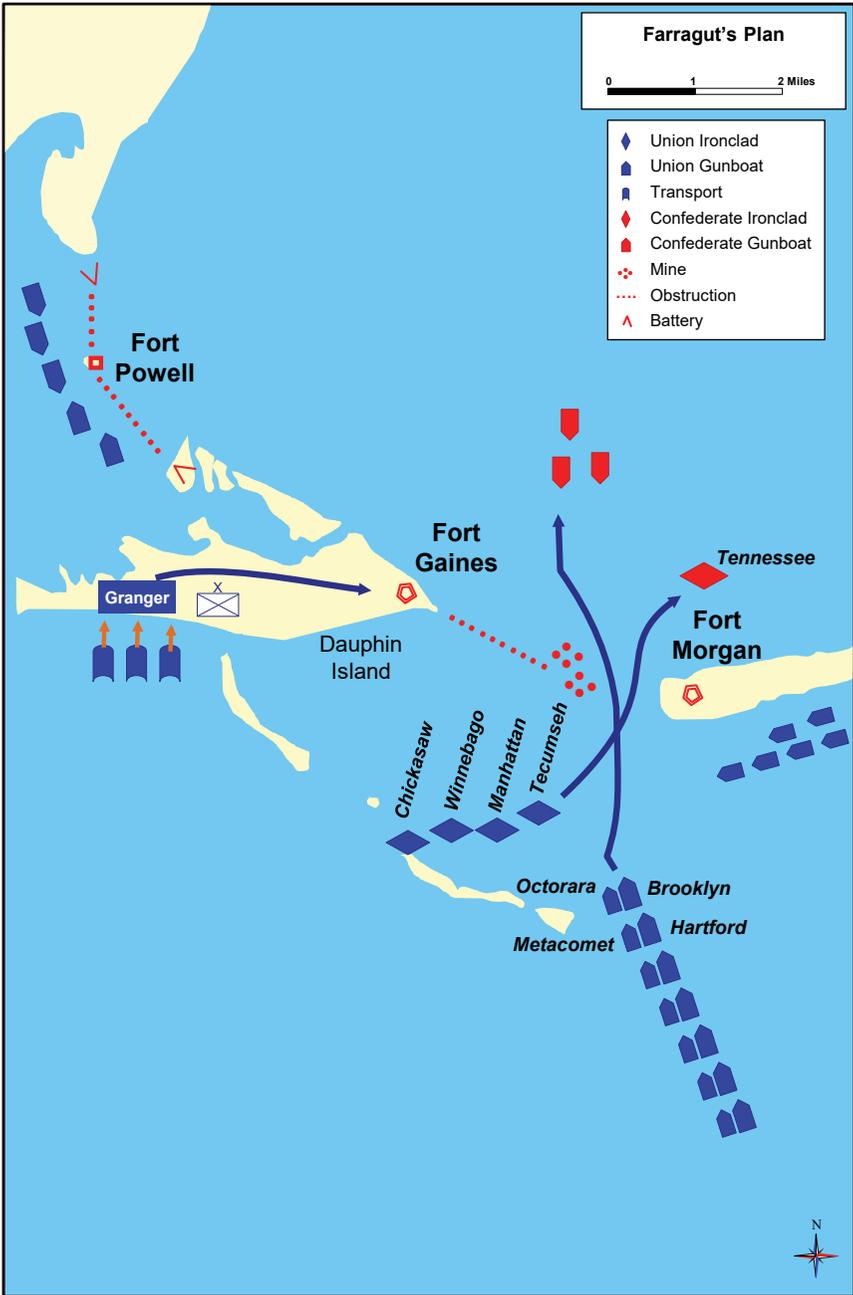
Farragut was a master of planning. He understood the capabilities of his forces and used them in ways that optimized their strengths and minimized their weaknesses. While developing his plan, Farragut had his carpenter create miniature boats out of wood. He drew the entrance of Mobile Bay on a table, and war-gamed his plan until he was satisfied of success. He also had his flag lieutenant, John C. Watson, reconnoiter the minefield and the shipping channel in the nights before the attack.

Two columns of ships would penetrate Mobile Pass at the same time. The eastern column of four ironclads—the *Tecumseh*, *Manhattan*, *Winnebago*, and *Chickasaw*—would engage Fort Morgan with suppressive fire. Once in the bay, the *Tecumseh* and *Manhattan* would attack the *Tennessee* while *Chickasaw* and *Winnebago* lagged to suppress the water batteries at Fort Morgan with shot until the fleet had completed its run into the bay.¹⁶ [Teaching Point: maritime supremacy and counter-battery fire]

The rest of the attack squadron in the western column would pass between the ironclads and the torpedo field to the west. Using a trick he had learned on the Mississippi River, seven of Farragut's large ships would each tie a smaller ship to their port (left or west) side, thus protecting the smaller ships from Fort Morgan's guns.¹⁷ In the case of the first three pairs of the western column, the boats on the port side were side-wheel gunboats that could continue to power their lashed sloop through the pass in the event the larger ship was damaged. This group would enter the bay and then unleash from each other to destroy the remaining Confederate gunboats. [Teaching Point: maritime superiority]

In General Order No. 11 of 29 July 1864, Farragut clearly demonstrated his mastery of the technical means of war that informed his naval tactics:

Should any vessel be disabled to such a degree that her consort is unable to keep her in her station, she will drop out of line to the westward [toward the torpedo field] and not embarrass [hinder] the vessels next astern by attempting to regain her station. . . . There are certain black buoys placed by the enemy from the



Map 5. Farragut's Plan. (Created by Army University Press.)

piles on the west side of the channel across it to Fort Morgan. It being understood that there are torpedoes and other obstructions between the buoys, the vessels will take care to pass to the eastward of the easternmost buoy, which is clear of all obstructions. So [sic] soon as the vessels arrive opposite the end of the piles, it will be best to stop the propeller of the ship and let her drift the distance past by her headway [momentum or progress] and the tide, and those having side-wheel gunboats will continue on by the aid of their paddle wheels, which are not likely to foul with the enemy's drag ropes.¹⁸

Altogether, Farragut was taking 188 guns into the harbor.

Notably, Farragut's command style allowed for suggestions from his tactical commanders. For example, on the advice of his captains, Farragut moved the USS *Brooklyn* to the front of the western column because it had a new device installed that could sweep torpedoes out of the way. This decision was completely out of character for Farragut. By allowing this adjustment in the attack order, Farragut's flagship, the *Hartford*, would not lead, but rather be second in the line of attack. It is in this small decision, no doubt made late after a long discussion in a smoky wardroom, that we see Farragut's unique brand of leadership and courage:

It was only at the urgent request of the captains and commanding officers that I yielded to the *Brooklyn* being the leading ship of the line, as she had four chase guns and an ingenious arrangement for picking up torpedoes, and because, in their judgment, the flagship ought not be too much exposed. This I believe to be an error, for apart from the fact that exposure is one of the penalties of rank in the Navy, it will always be the aim of the enemy to destroy the flagship, and, as it will appear in the sequel [sic], such attempt was very persistently made, but Providence did not permit it to be successful.¹⁹ [Teaching Point: operational leadership]

Farragut also had the foresight to request army signal officers on each ship to coordinate with Union ground forces. It was a stroke of luck that these men also signaled between Farragut's ships in the heat of the battle.²⁰

On 3 August, Farragut met with his commanders on the *Hartford* for one last meeting before the attack. Farragut had hoped to attack the next day, but when the *Tecumseh* failed to arrive as expected, Farragut postponed the operation to 5 August.

This delay in the attack is most significant. Major General Granger had already landed his ground forces on Dauphin Island on 3 August, much to Farragut's chagrin. He had just lost operational surprise and the Confederates now knew that the Union would attack soon. More importantly, the captain from the *Tecumseh*, Cmdr. Tunis Craven, was also missing from this critical commander's meeting. What impact this might have had on the battle will be discussed in the next stand.

Analysis

1. What were the strategic objectives of both sides and how did those objectives drive operational and tactical planning?

2. Why does Farragut need Mississippi Sound as a line of communication?

3. Did the commander of the Confederate Gulf District, Major General Maury prioritize his defensive efforts around Mobile appropriately?

4. What was the purpose of firing short-fused shell, shrapnel, and grape at a Third System masonry fort?

- Suppression of the fort's guns, especially against the water battery at the base of the western face of the fort.

Please continue inside Fort Morgan to discuss coastal fortifications and the 1864 Naval Battle.

Stand 2: The Seacoast Fortification System

Directions: This stand will be conducted on top of the southwest corner of the fort. If not already coordinated, purchase tickets at the ticket booth (\$7 per person, FREE for active/retired military, group rates available) and drive into the fort.

Take a moment to discuss the cannon in front of the fort.

Enter the fort by foot through the postern. Pause in the archway to point out the inner and outer walls of the fortifications. Proceed through the parade ground just inside the fort and climb the stairs directly to your front to the highest level. Proceed to the platform on the southwestern corner of the fort.

Orientation: You are standing in the southwest corner of a “third system” fort. The citadel that surrounds you is from the Civil War. The modern cement battery that you are standing on is Battery DuPortail from the Endicott era of coastal fortifications. It was added to the fort in 1898.



Map 6. Stands 2 and 3. (Created by Army University Press.)

North of you is Mobile Bay and Mobile, Alabama. On a clear day, you might be able to see the skyscrapers of Mobile from high points around the Fort. To your east is Mobile Point (the long peninsula you are standing on). To your south is the Gulf of Mexico. The Sand Island Lighthouse is 3 miles to your southwest and defines the western side of the shipping channel. It is the point around which Farragut sequenced his ships into Mobile Bay on 5 August.

Looking 3.5 miles to the west, you will see Dauphin Island and Fort Gaines. Beyond Dauphin Island to the northwest is Mississippi Sound, a major line of communication (LOC) from New Orleans to Farragut's fleet inside of Mobile Bay.

Description

History of Fort Morgan: Concerned with the European conflicts in the 1790s, President George Washington urged Congress to raise monies to protect the nation's seaports. On 20 March 1794, Congress authorized funds for the construction of a series of forts for this purpose. Secretary of War Henry Knox issued general guidance but left the specifics of individual designs to the on-site engineer assigned to each project. Because of a short timeline and lack of funds, Knox's guidance was that the forts should be simple and inexpensive. The resulting forts would be known as the First American System of Fortifications.

Most First System forts were open works with earthen parapets. Some of the forts were reinforced with timber and a few were hardened with stone. They were armed with an assortment of brass and iron cannon left over from the Revolutionary War—American or foreign-made—and even weapons captured from the British. Some forts had 42-pounders, but most forts had 24-pounders. In the 1800s, these forts received newly founded American cannon.

By European standards, these First System forts were weak, primitive, and beginning to collapse. Very few First System forts exist today. In 1798, Congress authorized appropriations for repairs or replacement. Most were razed to build Second and Third System forts. Fort McHenry (of Star Spangled Banner fame) and Fort Mifflin (in Philadelphia) retain their original form, but they were improved during the construction of Second and Third System Forts.

In November 1807, Congress authorized more than \$3 million for new forts over the next five years. The Army placed graduates of the newly created engineering school at West Point in charge of constructing these

forts; but there was limited coordination between projects, which resulted in variations between designs.

There were three basic types of Second System forts: open batteries, masonry-faced earth forts, and all-masonry forts. The open batteries were small, low works built in a variety of shapes. None exist today. The majority of Second System forts were masonry-faced earth works. These were not a lot different than the forts built during the last part of the First System but differed in that they were round or elliptical. Most of these forts were destroyed in the process of creating Third System forts.

The all-masonry forts radically changed fort construction in the United States. These forts now had high walls and casemated guns. This allowed a fort to have numerous guns firing from the same relative position (one gun on top and one or more in the wall). Many of these forts were circular but “star” forts started appearing for the first time. Second System forts were primarily armed with American-built cannon, including updated smoothbores of the 42-pounder and 50-pounder classes.

The Army built thirty-six Second System forts during this period. Examples of Second System masonry forts include Castle Williams in New York and Fort Wood in New York Harbor (the base of the Statue of Liberty).

In 1816, the government created the Bernard Board, named after the board’s head, Brig. Gen. Simon Bernard. Bernard was a French officer

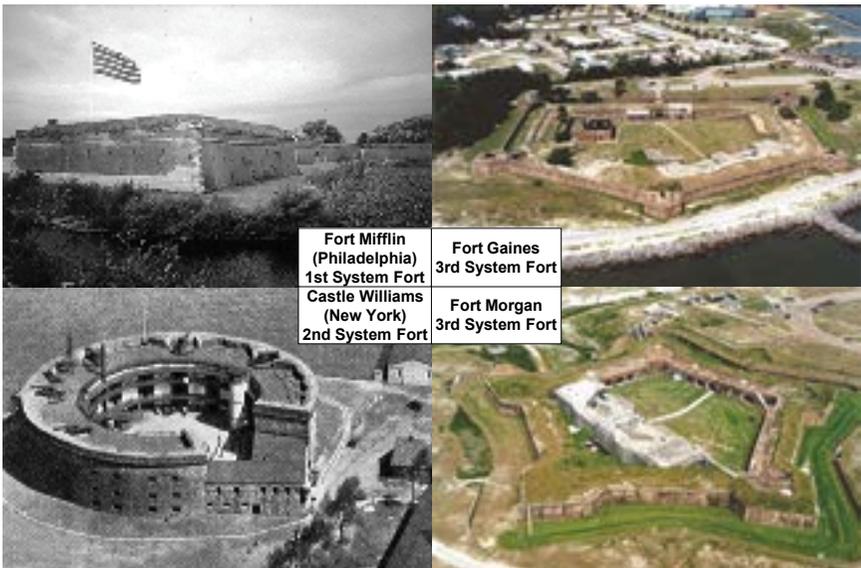


Figure 18. First, Second, and Third System Forts. (Courtesy of the Center for Military History, the National Park Service, Library of Congress, and Wikicommons.)

who had served under Napoleon and came to the United States to supervise the construction of a permanent integrated system of forts, now called Third System forts. The Bernard Board designated positions needing fortification, prioritized the work, determined general design characteristics, and reviewed specific plans for each fort. After conducting a thorough reconnaissance of the coasts, the board submitted its first report in 1821.

The smallest Third System fort had 50 guns; the largest had 400. The larger forts were normally hexagonal-shaped with bastions. Depending on their locations, these forts were customarily made from brick or stone. They had multiple levels, so cannon could be massed from one location to a single target. The forts were also built low to the water to expose passing ships to its direct-fire weapons.

Other improvements in technology followed. Up to this time, for example, gunners fired their seacoast weapons on a flat trajectory, usually no higher than five to ten degrees of elevation. By the early 1840s, however, George Bomford invented 8- and 10-inch Columbiads that could fire up to forty degrees of elevation, dramatically increasing the range of the weapon.

Thomas Rodman and John Dahlgren also improved methods to cast cannon of ever-increasing capability. By cooling the cast weapon from the inside out, greater internal pressure was possible, thus allowing for greater velocity out the barrel. This discovery allowed for larger weapons (fifteen and twenty inches) with longer ranges and larger throw-weight. Commensurate with the improvements in metallurgy, ordnance factories also produced better carriages, which significantly improved accuracy.

Congress built thirty Third System forts. Many still exist today, including Fort Sumter, Fort Monroe, and the fort where you are standing today, Fort Morgan. Construction on Fort Morgan began in 1819 by the US Army Corps of Engineers using mostly African-American slaves. Brick and mortar were the only local materials. Other essential construction materials such as finished granite, sandstone, ironwork, and cement were shipped by water from New York. Until April 1833, the fort was known as the "Work on Mobile Point." It was named to honor Revolutionary War Hero General Daniel Morgan at its completion in 1834.

The State of Alabama seized Fort Morgan on 3 January 1861, eight days before it seceded from the Union. The Confederate Army assumed control in March 1861. Fort Morgan served as the first line of defense for the City of Mobile, provided protection for blockade runners, and prevented Union warships from entering Mobile Bay.

In 1895, the US Army Corps of Engineers began construction of a new fortification system at Fort Morgan. Reinforced concrete batteries replaced the old brick fort as the main fortification protecting Mobile Bay. In time of war, electrically detonated underwater mines protected the entrance.

During World War I, the Army stationed 2,000 troops at Fort Morgan. After the war, the fort continued as the largest permanent military base in Alabama, albeit with a garrison of only 400 Coast Artillery soldiers. The US Army Quartermaster Department built more than 100 wooden structures outside the fort to support the coast defense mission. The structures by the ticket kiosk for the park are examples of the buildings extant at the time.

The War Department steadily reduced and completely closed Fort Morgan in 1923. Its role as a coast defense installation was not over, however. In November 1941, the US Navy reoccupied the post, and units of the 50th Coast Artillery Regiment arrived to renew the fort's coast defense mission in April 1942. In July 1944, the War Department again closed Fort Morgan, for the last time, and its role in America's coast defense officially ended.²¹

Analysis: None at this stand.

Please proceed to Stand 3, Battery Thomas, to discuss the 1864 naval battle.

Stand 3: The Naval Battle of 1864

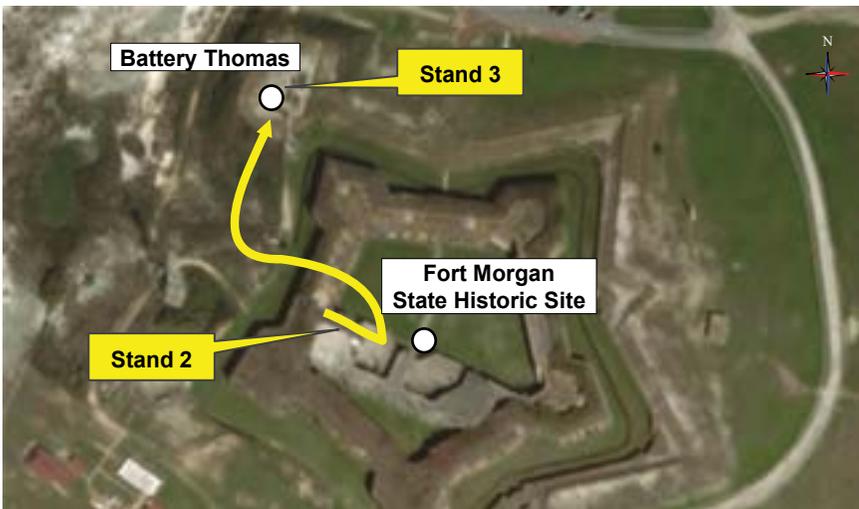
Directions: Descend to the floor of the fort and move through the west portal toward Battery Thomas. Take the stairs to the top of the battery.

Orientation: You are standing on Battery Thomas, an Endicott Era Battery. This gun emplacement was added to Fort Morgan in 1898. The large yellow buoy in the water to your front marks the wreckage of the USS *Tecumseh*, which has never been recovered. To your north are two oil rigs. One is .5 miles north and the other is 5 miles to the north-northwest (toward Mobile). The space between these two oil rigs approximates the location of the naval battle on the morning of 5 August 1864. Directly across the shipping channel are Dauphin Island and Fort Gaines. Fort Powell was located approximately where the bridge across Grant's Pass meets the northern tip of Little Dauphin Island.

Description

The USS *Tecumseh* finally joined Farragut's squadron on the afternoon of 4 August. Farragut had his major combat forces, but he had also lost operational surprise. Major General Granger had landed his forces on Dauphin Island the day before and was moving on Fort Gaines from the west. He was unaware that Farragut had delayed the initial assault by a day. Nevertheless, Farragut issued his final orders.

In the meantime, Admiral Buchanan and his small squadron in the bay north of Fort Morgan waited for Farragut. Buchanan's tactical plan



Map 7. Route from Stand 2 to Stand 3. (Created by Army University Press.)

was simple: use the smaller gunboats to provide supporting fires while he rammed the screw sloops with the *Tennessee*.

The Attack: On the morning of 5 August 1864, conditions were perfect for the Union Navy. A stiff breeze from the west would blow smoke from Confederate cannon at Fort Morgan back into fort, making the job of the Confederate gunners even more complicated. Conveniently, the water was also at flood tide as it flowed from the gulf into the bay. This was particularly advantageous because disabled vessels would be pushed away from the fires of Fort Morgan and into the bay.²²

At 0400 on the 5th, the Union started forming their lines and lashed the smaller ships to the larger hulls. The sailors ate sandwiches and coffee; the ships would serve a full breakfast in Mobile Bay later that morning. At 0530, Farragut, with a cup of coffee in his hand, looked at his flag captain, Percival Drayton, and said: “Well, Drayton, we might as well get underway.”²³

At 0600, the Mississippi Sound and Gulf Flotillas opened fire on Forts Powell and Morgan as the ironclads passed Sand Island into the shipping channel. As expected, the faster Union gunboats caught up with their companion ironclads across from Fort Morgan and started to pass them to the west.

Fort Morgan’s gunners opened fire on the USS *Brooklyn*, the lead ship in the western column, at “precisely 0700.”²⁴ As the Union Navy penetrated the pass and returned fire on Fort Morgan, Admiral Buchanan moved his four ships into position and fired on the Union fleet. Due to the relative position of the Union boats, only a few of their bow guns could answer Buchanan’s cannon. If they maneuvered to give a broadside, the Union ships would either enter the minefield to their west or interfere with the line of ironclads to their east. This was to the disadvantage of the Union fleet—it had to completely penetrate the bottleneck of the shipping channel to bring their broadsides to bear against the Confederate fleet.

By 0715, the battle was fully developed, but the situation was going badly. Farragut’s fleet was now at its most vulnerable as it absorbed the combined fires of Fort Morgan and Buchanan’s squadron. There was so much smoke that Farragut could not see, so he climbed up the rigging about fifty feet above the deck of the *Hartford* to get a better view. From this precarious perch, he shouted instructions down to Drayton. Drayton, for his part, was so concerned that the admiral would fall he sent a sailor up to tie Farragut to the rigging.

Meanwhile, the lead ship in the Union line, the *Brooklyn*, was slowing because the *Tecumseh* had inadvertently drifted into its line of advance. *Tecumseh*'s Capt. Tunis A.M. Craven was angling away from his briefed approach azimuth and turning to engage the *Tennessee*. At this point, his pilot, John Collins, objected; Craven was turning into the torpedo field (and disregarding the column of boats to his west). Craven yelled back at his pilot: "Damn the torpedoes, I am after that fellow [the *Tennessee*]; take me alongside."²⁵

While Craven was showing his aggressiveness, his change of azimuth was ill-advised. In fact, the bigger threat to the Union attack was the *Tecumseh* drifting into the approach vector of the lead cruiser, the *Brooklyn*. For his part, the *Brooklyn*'s Capt. James Alden faced a serious dilemma. If he stayed on his line, Alden would interfere with the *Tecumseh*. If *Brooklyn* turned east to avoid the *Tecumseh*, the ship would interfere with the *Manhattan* and the other ironclads. However, if the *Brooklyn* turned west, it could avoid the *Tecumseh* but would also penetrate the feared torpedo field. At this point, Alden made the worst possible decision: he stayed on-line and slowed down; i.e., he did nothing.

Clearly, none of Alden's options were good, but the effects his indecision caused were altogether worse; slowing down was endangering the entire attack. As the *Brooklyn* slowed, the tethered ships behind it started to stack up. While the ships in trail were supposed to follow "close aboard," the lashed ships became more difficult to control as their speed slowed. The strong tide also threatened to carry many of the vessels within range of Fort Morgan's guns.

Farragut could see the entire situation develop from his perch in the rigging of the *Hartford*, second-in-line behind the *Brooklyn*. Within seconds, the whole attack could turn into a Union disaster. Farragut signaled to the *Brooklyn*: "Go ahead." Then, the tactical situation became magnified out of all proportion to expectations.

Just after Farragut signaled *Brooklyn* at 0730, the *Tecumseh* hit a mine in the northeast corner of the minefield. The mine blew a hole in the bottom of the hull more than twenty yards square. While the fleet watched in horror, the *Tecumseh* sank inside of two minutes with its captain and ninety-three crew members. One account described the *Tecumseh* as "sinking like a stone."²⁶

As the *Tecumseh* hit the mine, Captain Craven and Pilot Collins "met at a small hatchway in the floor of the pilothouse leading down into the turret. Only one man could pass through at a time, and the hatchway was



Figure 19. The Sinking of the USS *Tecumseh*.
(Courtesy of Naval History and Heritage Command.)

the only exit from the pilothouse to the outside. The pilot stepped aside and said: ‘Go ahead, Captain.’ ‘No, sir,’ replied Craven. ‘After you, pilot. I leave my ship last.’”²⁷ Collins reached the turret and escaped through one of the top hatches. Later he related: “There was nothing left after me. When I reached the upmost round of the ladder, the vessel seemed to drop from under me [sic].”²⁸ Rescued by the USS *Metacomet*, Collins later learned that his captain had gone down with the ship. Only twenty-one men survived.

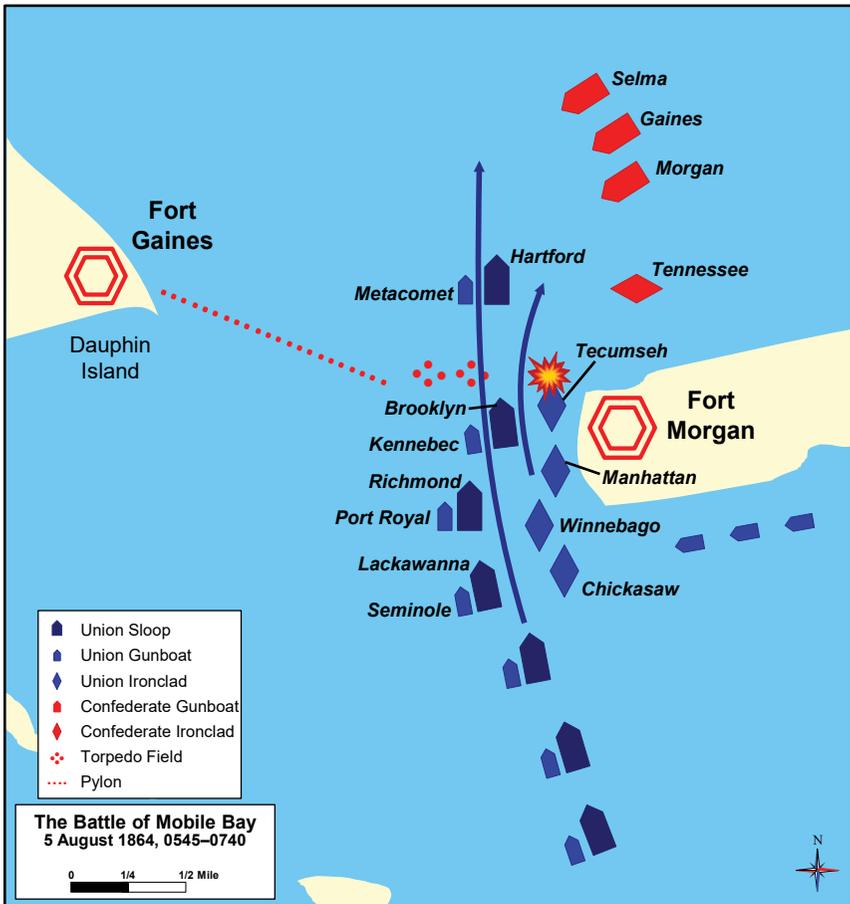
Aboard the *Brooklyn*, Captain Alden became altogether flustered when he saw the *Tecumseh* sink. He then reversed his engines to avoid a collision and began to cut the *Octorara* loose from his portside gunwale.²⁹ At 0740, Farragut again signaled Alden to continue, but Alden seemed paralyzed by indecision.³⁰

Farragut, alone in his perch in the rigging, realized the severity of the situation. With the *Brooklyn* essentially stopped in the shipping channel, the trailing ships—exacerbated by the flood tide into the bay—were losing maneuver room and would not be able to stop in time. Worse, if the ships became entangled to the front of Fort Morgan, they would become even more vulnerable to its deadly fires. The leading ships were already beginning to feel those effects.

Farragut’s tactical dilemma was obvious: pass to the east of the *Brooklyn* and become more exposed to the fires of the fort, or pass to the west and be exposed to a minefield that had already put one Union monitor at the bottom of the sea. No matter what, Farragut knew that stopping in front of Fort Morgan was the worst possible option.

Farragut told Drayton to pass the *Brooklyn* to the west—through the edge of the minefield—and again signaled the ironclads and the *Brooklyn*: “Go ahead.” As the *Hartford* passed the *Brooklyn* to the west, Captain Drayton yelled there were mines ahead. Farragut is famously said to have replied: “Damn the torpedoes! Full speed ahead!”³¹

Historians, however, have proffered an alternative scenario. For example, Hearn reports that when the *Brooklyn* stopped its forward progress,



Map 8. The Battle of Mobile Bay, 5 August 1864, 0545–0740.
(Created by Army University Press.)

Farragut turned to God for guidance. At that moment, Farragut decided to take the lead for the attack and from the rigging yelled down to Captain Drayton: “I will take the lead; full speed ahead.”³²

As the *Hartford* passed the *Brooklyn* to its port side, Captain Alden—now dead in the water—yelled the obvious at Farragut in the rigging: “There is a heavy line of torpedoes across the channel!” Farragut responded: “Damn the torpedoes.” He then ordered the *Hartford*’s Drayton: “Four bells! Captain Drayton, go ahead!” (Other accounts have Farragut holding up four fingers to signal four bells, or full power.) To the captain of the *Metacomet*, still lashed to the gunwales of the *Hartford*, Farragut directed: “Jouett, full speed!”³³

The rest of the Union fleet followed the *Hartford* into Mobile Bay. Officers and sailors alike heard mine fuses snapping as the ships penetrated the heart of the minefield. An inspection of the mines after the battle found that nine of every ten mines had become water-logged and, therefore, inoperative.³⁴ Still, Farragut—in a case study of the difference between RISK and GAMBLE—was truly lucky to have lost only one ship to mines, the *Tecumseh*, and none to the ravages of Fort Morgan’s artillery.

The Confederate Response to Farragut’s Main Effort: The Union fleet passed within 300 to 400 yards of Fort Morgan’s deafening barrage. More than 491 shells were fired from the fort—all with little effect. Many of Farragut’s ships were damaged, some severely, but none save the *Tecumseh* were sunk or out of commission.

Per Buchanan’s plan, the Confederate gunboats concentrated their fires on the first ship through the pass, the *Hartford*. Buchanan tried to ram the *Hartford* with the *Tennessee*, but *Hartford*’s speed allowed the ship to avoid the collision. Buchanan then attempted to ram the *Brooklyn*, the *Richmond*, and the *Lackawanna*, but again the superior speed of the Union sloops over the sluggish *Tennessee* allowed them to escape the attack. Indeed, Buchanan made many runs on the Union ships, but every attempt failed.

Union firepower clearly overwhelmed the remaining Confederate gunboats. The CSS *Selma* closed on the *Hartford* and fired into its side. The USS *Metacomet* then unlashd from the side of the *Hartford* and chased the *Selma*. *Selma* attempted to run, but the much faster *Metacomet* caught up and fired—killing or wounding thirteen sailors; at that point, the *Selma*’s captain decided to surrender rather than risk sinking.

Multiple Union ships struck the CSS *Gaines* as they entered the bay. When the *Gaines* started to sink, its captain beached the ship on the bay

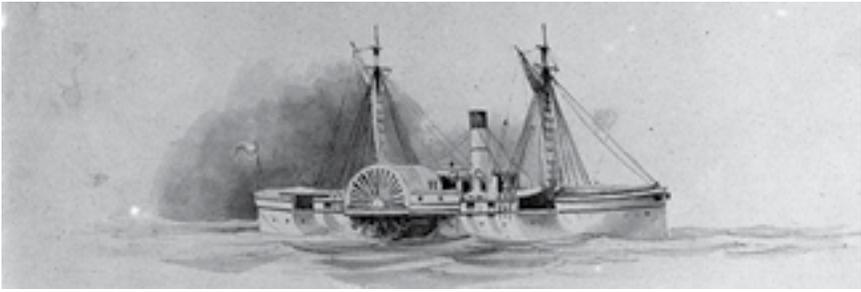


Figure 20. USS *Metacomet*. (Courtesy of Naval History and Heritage Command.)

side of Mobile Point near Fort Morgan and abandoned ship. On the other hand, the *Morgan*'s captain chose to leave the battle to the east and escape to Mobile.

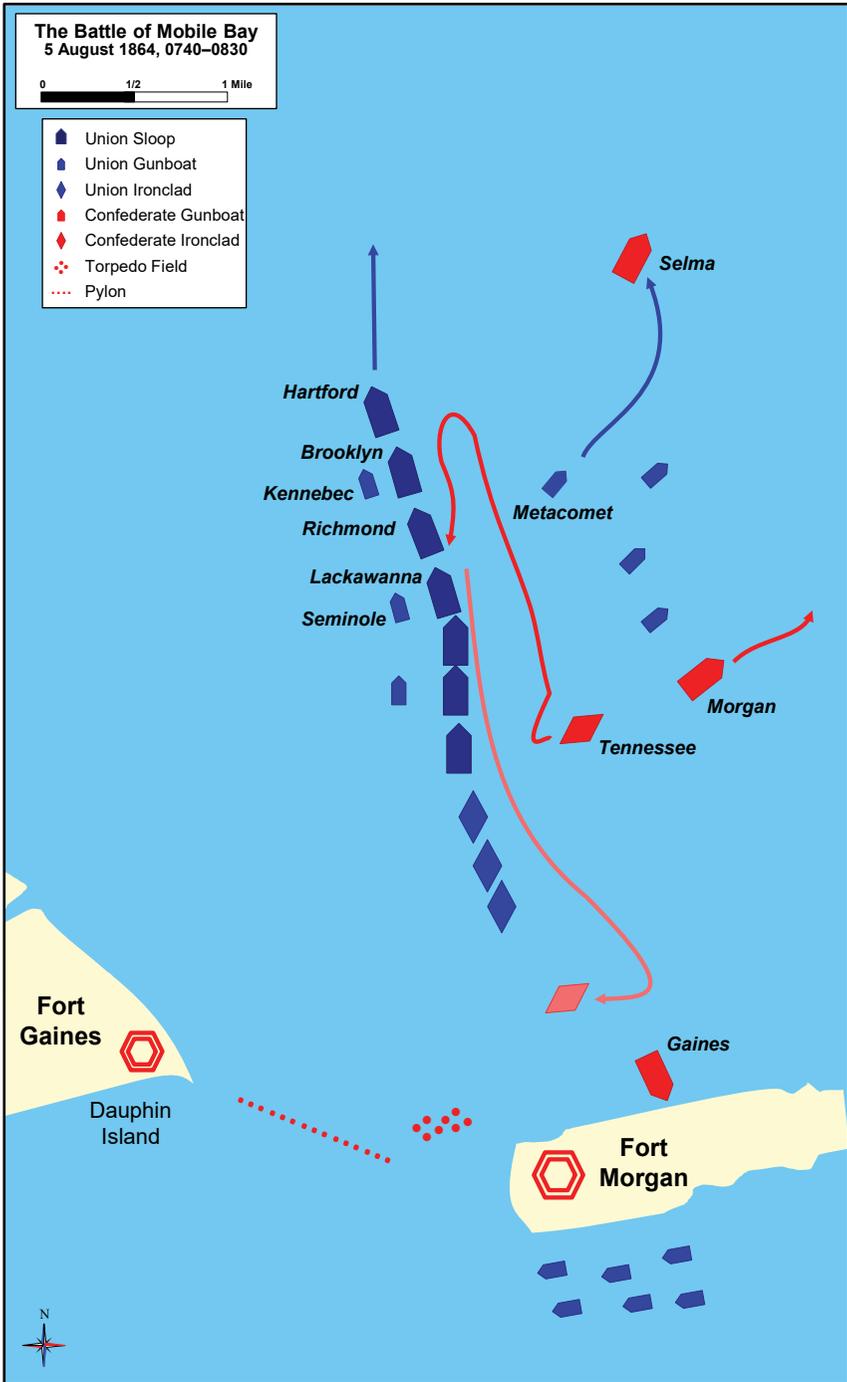
Buchanan was not happy with this obvious cowardice by the *Morgan*'s captain. In his official report, he condemned *Morgan*'s Capt. George Harrison for abandoning the squadron. As for the *Tennessee*, the lone survivor of the Confederate squadron, Buchanan anchored the ship inside the bay under the protection of Fort Morgan's guns.

The Last Battle of the CSS Tennessee: By 0830, Farragut's fleet had completed the penetration of Mobile Bay. The only Confederate boat left to threaten him was the *Tennessee*. At this auspicious moment, as he ordered the fleet to drop anchor and feed the sailors breakfast, Farragut had much to consider.

Farragut knew he was on the cusp of a complete tactical victory, but he still had to consider his options. The monitor, USS *Tecumseh*, had been sunk by a torpedo/mine abeam Fort Morgan. USS *Oneida* had a boiler destroyed and was being towed by the *Galena*. More than half the Union ships had been hit during the run past the fort or in the surface engagement with the Confederate squadron. Nevertheless, the squadron was completely combat-effective.

For his part, Admiral Buchanan also had a decision to make. The *Tennessee* was anchored under the protection of Fort Morgan. The rest of his squadron was sunk, captured, or out of action. Under these conditions, Buchanan could wait under the guns of Fort Morgan, even though he was still vulnerable. Certainly, he realized he would eventually lose the ship, especially if Fort Morgan was captured.

On the other hand, Buchanan could take advantage of the tactical situation and make a run for Mobile and safe waters. Like the CSS *Morgan*, the *Tennessee* could easily hug the shoreline and make its way back to



Map 9. The Battle of Mobile Bay, 5 August 1864, 0740–0830.
(Created by Army University Press.)

Mobile. He could also try to escape through the shipping channel into the Gulf. From there he could turn west for Galveston or south through the Florida Straits, fighting his way through three Union blockading squadrons to a safe harbor on the east coast. North, south, east, or west—any direction was fraught with danger and a serious gamble at best.

Buchanan's third, and almost certainly suicidal, option was to attack. If he could damage or destroy some of the Union fleet, then in Buchanan's mind, it was worth the effort: "No, I will be killed or taken prisoner, and now I am in the humor I will have it out at once."³⁵ Buchanan in a single ironclad, albeit the mighty *Tennessee*, decided to singlehandedly attack a Union fleet of thirteen wooden vessels and three ironclads.

At 0845, a Union lookout reported the *Tennessee* was underway. Thinking that Buchanan was sailing the *Tennessee* out of the bay, Farragut ordered the fleet to raise anchor and pursue. Very quickly he realized, however, that the *Tennessee* was not leaving but had turned to attack the *Hartford*. As Farragut remembered the battle to Secretary Welles: "Then began one of the fiercest naval combats on record."³⁶

While he rushed to get his speed up, Farragut ordered the *Monongahela*, armed with an iron prow, to ram the *Tennessee*. The *Monongahela* successfully engaged the *Tennessee*, striking the ironclad at top speed and causing the ship to completely rotate "as on a pivot." While the *Monongahela* suffered extensive damage below the waterline, the *Tennessee* remained unharmed. The captain of the *Lackawanna* also rammed the *Tennessee* at right angles but failed to damage the Confederate ironclad while being holed below the waterline for its efforts. One shot from the *Lackawanna* did damage the *Tennessee* and severely injured Buchanan with a broken leg.

During each attack and subsequent collision, the *Tennessee* continued to rain fire on the surrounding Union ships. They, in turn, returned fire with all their guns that could bear.

Only a few minutes into this second engagement, the *Hartford* was closing on the *Tennessee* at speed. Farragut again climbed up into the rigging, and again Drayton sent a man to secure him from falling. By climbing only a few feet up above the main decks, Farragut had gained a perspective that few commanders ever achieve during a tactical battle.

The two flagships were closing head-on at full speed. Naval historians agree that had the two ships directly collided, the masts of the *Hartford* would have collapsed with Farragut lashed to them. There is also general agreement that if the two ships had hit square on the bows, they both

would have sunk: the *Tennessee* would have been dragged down with the sinking *Hartford*. However, Buchanan—commanding the last Rebel ship and having more to lose if he was sunk—flinched at the last second. Both ships struck just off their port bows and scraped their sides together.

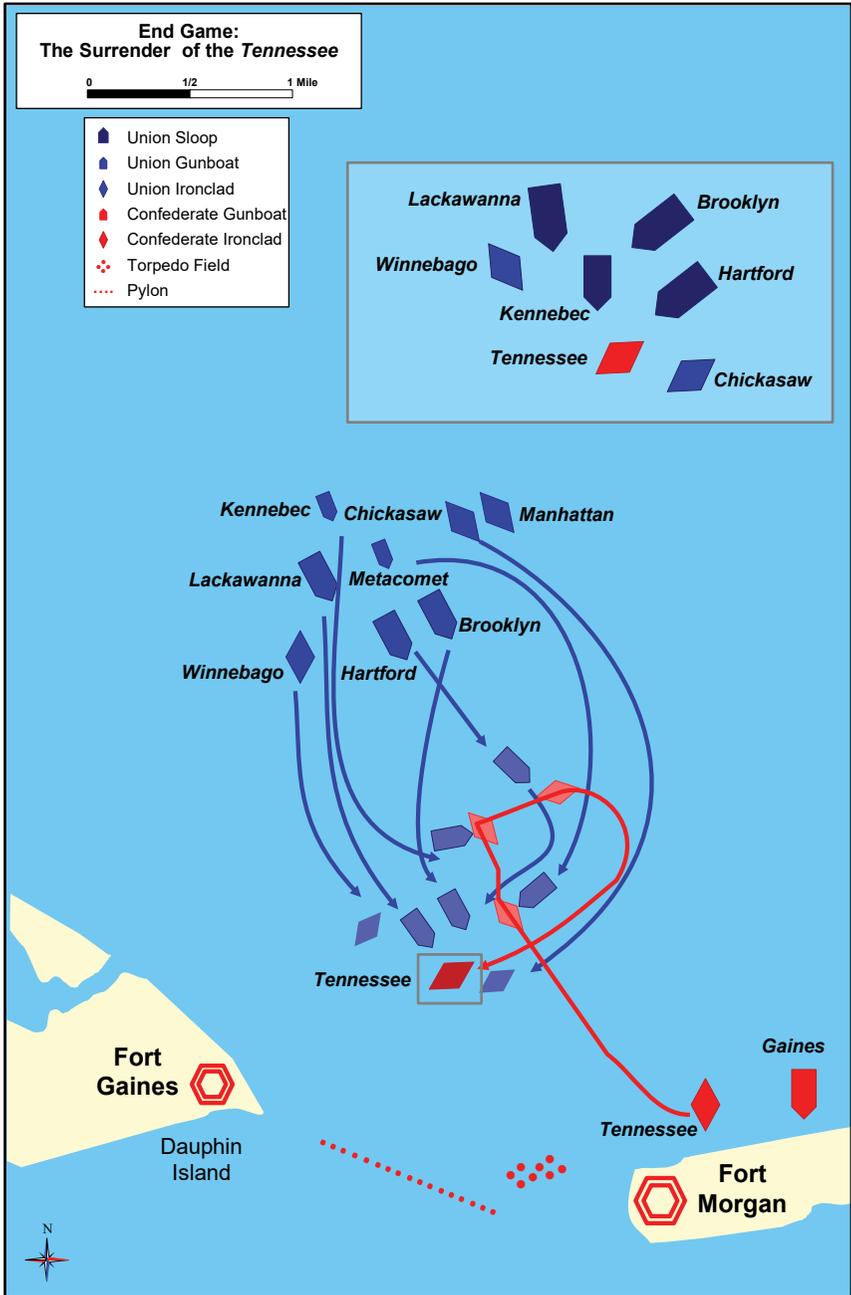
The battle now became a fight at point blank range between the *Hartford* and the *Tennessee*. Farragut and Buchanan, friends before the war, were only yards apart. The *Tennessee* fired its own broadsides, but with mixed success. Faulty friction primers prevented one cannon from firing, but the other operational gun holed the *Hartford* and killed an entire gun crew. The two ships were so close that the powder from the *Tennessee*'s shot blackened the side of the *Hartford*. In turn, the *Hartford*'s close-in shots simply bounced off the *Tennessee*'s armor.

More Union ships, including two of the ironclads, now joined the pursuit. The USS *Manhattan*, the *Tecumseh*'s sister ship, came abreast of the *Tennessee* and fired a broadside into the ship. The gunnery officer on the *Tennessee* had a unique perspective as the *Manhattan* pulled alongside:

[A] hideous looking monster came creeping up our port side, whose [sic] slowly revolving turret revealed the cavernous depth of a mammoth gun. "Stand clear of the port side!" I shouted. A moment after, a thundering report shook us all, while a blast of dense, sulphurous smoke covered our portholes, and 440 punts of iron, impelled by 60 pounds of powder, admitted daylight through our side where, before it struck us, there had been over two feet of solid wood, covered with five inches of solid iron. This was the only 15-inch shot which hit us fairly. It did not come through; the inside netting caught the splinters, and there were no casualties from it.³⁷

Meanwhile, the *Chickasaw* maneuvered astern of the *Tennessee*. Keeping within fifty yards of its target, the ironclad's forward 11-inch guns fired fifty-two rounds at close range against the *Tennessee*'s casemate, eventually jamming the after-gunport shutter and destroying its smokestack. However, the final blow did not come until the *Chickasaw* shot away the *Tennessee*'s steering chains in their exposed deck channel. The *Tennessee*, filling with smoke, could neither defend itself nor maneuver.³⁸ Buchanan had already instructed the captain to surrender when he could no longer inflict damage. At 1000 hours, the *Tennessee* struck its colors and ran up the white flag.

Aftermath: The damage to the Union vessels was extensive. The *Tecumseh* was sunk, and the remaining ships were damaged except for the *Port*



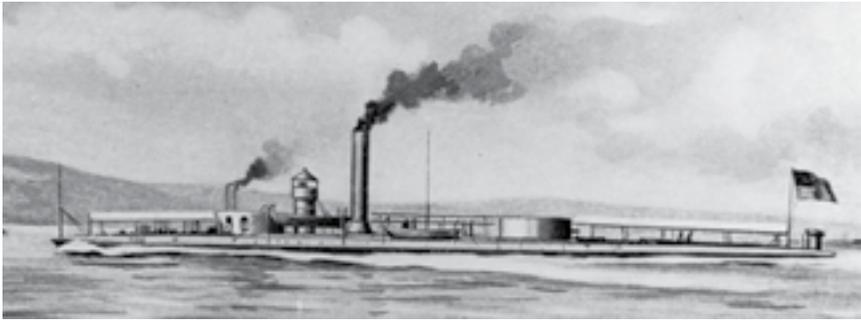


Figure 21. USS *Chickasaw*. (Courtesy of Naval History and Heritage Command.)

Royal, Seminole, Itasca and the three ironclads: *Manhattan, Winnebago, and Chickasaw*.³⁹

For obvious reasons, the damage aboard the *Hartford* was particularly bad. When the *Tennessee*'s surgeon boarded the *Hartford* after the battle, he saw a scene of carnage that he was unprepared for:

The spar deck was covered and littered with gun carriages, shattered bolts, disabled guns, and a long line of grim corpses dressed in blue lying side by side. The officer accompanying me told me that these men—two whole gun crews—were all killed by splinters, and, pointing with his hand to a piece of weather-boarding ten feet long and four inches wide, I received my first vivid idea of what “a splinter” was.⁴⁰

In total, the Union lost 315 killed or wounded sailors. Ninety-three men went down with *Tecumseh*. The *Hartford* had 25 KIA and 28 WIA.⁴¹

Brig. Gen. Richard Page, Fort Morgan's commander, was very disappointed that his guns did not have more success. There may be two reasons for this. First, Farragut had all his ships protect their vital machinery with heavy chains and splinter nets to dissipate any potential kill-shot. Second, the favorable wind off the water that morning favored Farragut and helped blow the smoke from his naval cannon toward the fort, thus creating a “natural smokescreen.”⁴²

By all accounts, Farragut was unflappable before, during, and after the battle. His understated approach to the whole affair is obvious in this 5 August 1864 communique to his land force commander, Major General Granger:

We have had our free fight with the forts, as you perhaps saw. One of the monitors, the *Tecumseh*, was sunk by a torpedo, and nearly all hands perished. We had all anchored when I saw Buchanan making up for me [sic]. I knew full well his design was for me.

So we had a free fight. We all ran at him and punished him with shot and heavy charges until he struck his flag and became my prisoner, and we have the *Tennessee* with the Stars and Stripes flying [above it].

Then, signaling he was ready to execute the next phase of the operation against Fort Morgan, he confirmed: "I will now place gunboats down at Pilot Town [on Mobile Point] to protect your army so soon as you are ready to land."⁴³

The Confederates suffered thirty-one killed or wounded in this naval engagement. They had one ship destroyed, the *Gaines*, and two captured, the *Tennessee* and the *Selma*. The *Morgan* managed to make it to the protection of Mobile that night.⁴⁴ Buchanan was severely injured in a leg, but he did recover. He remained a Union prisoner until he was paroled in February 1865.

Farragut remained in his area of operations until November 1864. Secretary of the Navy Welles wanted him to command the North Atlantic Squadron for operations against North Carolina, but Farragut was exhausted and requested leave. Farragut, in the end, would see no more active campaigning during the war. Lincoln appointed Farragut as the Navy's first vice admiral shortly after Congress authorized the rank and was promoted again in 1866 to be the Navy's first full admiral.

Analysis

1. Evaluate the actions of the *Tecumseh* as it entered the mouth of the bay. Why did Captain Craven's decision to engage the *Tennessee* threaten the success of the entire Union operation?

2. Evaluate Farragut's tactical leadership. How did his actions contribute to the Union success on 5 August? How do commanders lead today? Should a senior commander lead from the front?

- Here is where Farragut's tactical leadership shines. Farragut signaled his ships to bypass the shipping channel and enter the torpedo field. What would have been the result if he had not made that decision?

3. What tactical error did Farragut make after successfully running the pass in front of Fort Morgan?

- He failed to block the escape route into the Gulf and keep any Confederate ships inside the bay.

4. In Army doctrine, what is the difference between a RISK and a GAMBLE? What risk did Farragut assume by pushing his squadron through the minefield? (Keep in mind that he didn't know the mines were faulty.) In what ways did Farragut mitigate the risk that he assumed?

- Farragut lost only one monitor the day he penetrated the pass into Mobile Bay. He lost another vessel a few days later while conducting anti-mining operations in the bay. The following year during the Mobile Campaign, the Union Navy lost eight more vessels to mines.⁴⁵

5. Why did Farragut lash his ships together as he breeched the entrance to the bay? [Teaching Point: tactical ingenuity] What tactical and technical advantage did he gain?

- Lashing a side-wheel to a screw diminished the chances of fouling (losing) the screw with ropes and other debris.⁴⁶

6. What are your thoughts about the following quote from Hearn: “The Battle of Mobile Bay was the last major naval engagement in which wooden gunboats fought an enemy squadron in open combat. The era of Wood had ended.”⁴⁷ [Teaching Point: evolution of technology in warfare]

7. Analyze Farragut's leadership, particularly under fire.

- First Lt. John Kinney, an Army signal officer assigned to Farragut's flagship, observed Farragut in this regard:

[I]t would have been considered a foolhardy experiment for wooden vessels to attempt to pass so close to one of the strongest forts on the coast; but when to the forts were added the knowledge of the strength of the ram [the CSS *Tennessee*] and the supposed deadly character of the torpedoes, it may be imagined that the coming event impressed [the author] as decidedly hazardous and unpleasant. So daring an attempt was never made in any country but ours, and was never successfully made by any commander except Farragut, who . . . proved himself one of the greatest naval commanders the world has ever seen.⁴⁸

- Major General Canby, Gordon Granger's superior in New Orleans, expressed similar thoughts about the results of the battle in a 6 August 1864 message to Admiral Farragut:

Permit me to congratulate you upon the brilliant results of your operations of yesterday, the success of which no one

doubted, but which we all feared would be attended with much greater losses than you have sustained.⁴⁹

Please proceed to the next stand to discuss the engagements at Forts Powell and Gaines.

Stand 4: Defeating Forts Gaines and Powell

Directions: Descend from Battery Thomas and move to the east and north around the battery to the adjacent cement gun emplacement.

Orientation: You are standing on a “modern” gun emplacement from 1899, Battery Schenk. Your orientation is the same as Stand 3.

Description

Contrary to the way that Americans remember the Battle of Mobile Bay as a naval battle, it was in fact a joint operation that required cooperating naval and ground forces to accomplish the operational objective. By noon on 5 August, Farragut’s squadron had defeated the Confederate squadron and was safely inside of the bay. However, it did not have a safe line of communication—much less freedom of action—between the bay, the Gulf, or Mississippi Sound if Forts Powell, Gaines, and Morgan continued to guard the entrances. Fort Morgan would be addressed in due



Map 11. Route from Stand 3 to Stand 4. (Created by Army University Press.)

time.⁵⁰ On the other hand, while Forts Gaines and Powell had NO influence over the naval engagement in the shipping channel, securing these smaller forts was essential to sustaining future land and naval operations in the bay. Logically, Farragut’s concept of operations required the reduction of Forts Powell and Gaines as the next phase in the Campaign for Mobile Bay. [Teaching Point: sequential operations]

Operations at Fort Powell: The Confederate defenses at Fort Powell were light yet strong enough to prevent Union transports from entering the bay from Mississippi Sound. Lt. Col. James Williams commanded a small detachment of two companies from the 21st Alabama Infantry and a section of Culpepper’s South Carolina Battery for a total of 140 men.

On the other hand, Fort Powell was very vulnerable to naval gunfire. This vulnerability led to Farragut and Granger deciding to defeat Fort Powell first. [Teaching Point: lines of operations/effort and indirect approach] At 0600 on 5 August, the Mississippi Sound Flotilla commanded by Lt. Cmdr. J.C.P. De Kraft, with USS *Stockdale*, *Estrella*, *Narcissus*, *J.P. Jackson* and *Conemaugh*, opened fire on Fort Powell from the Mississippi Sound; i.e., from the western approaches. By mid-morning, the demise of the *Tennessee* also permitted Farragut to release the ironclad river monitor USS *Chickasaw* to engage Fort Powell from the east (the bay side). The Union gunboats completely dominated the hard-pressed and ill-prepared defenders of Fort Powell with their fires. [Teaching Point: naval gunfire support]

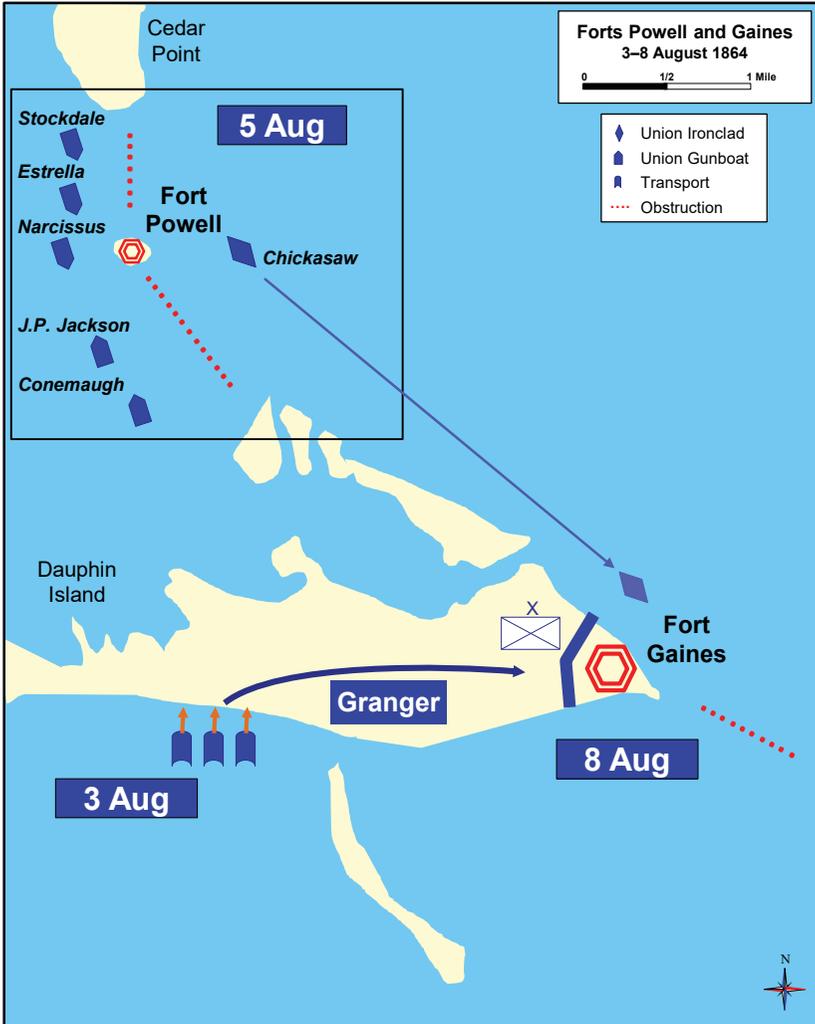
Seeking relief, Williams telegraphed the commander of Fort Gaines, Col. Charles Anderson, and asked for instructions. Anderson replied: “Save your garrison when your fort is no longer tenable. Hold on as long

Fort Powell Defenses	
Type	Number
10-inch Columbiad	1
8-inch Columbiad	1
7-inch Brooke Rifle	3
6.4-inch Rifle	1

Figure 22. Fort Powell Defenses. (Created by Army University Press.)

as you can.”⁵¹ A larger, more resolute, and better prepared force might have hung on at Fort Powell, but Lieutenant Colonel Williams and his beleaguered defenders were none of that. Late on 5 August, in the face of unrelenting Union fires, Williams blew up the fort and evacuated his men by walking north across Grant’s Pass to Cedar Point at low tide.

Having just returned to Mobile from another assignment, Major General Maury strongly objected to the evacuation of Fort Powell. No doubt still reeling from the naval defeat inside the bay, Maury’s outrage had



Map 12. Operations at Fort Powell and Gaines, 3–8 August 1864.
(Created by Army University Press.)

some merit—there had been few casualties and no serious damage to Fort Gaines or its guns. Justified or not, Maury lashed out against Williams:

This report is unsatisfactory. Colonel Williams should have fought his guns. They were not more exposed than those in every wooden ship, and vigorously served would probably have compelled the monitor [the Chickasaw in the bay] to haul off. Fort Powell should not have surrendered. Colonel Williams is relieved from command until full investigation can be held.⁵²

Fort Powell was the second objective in Farragut’s campaign plan to fall on 5 August.

Operations at Fort Gaines: The defenses at Fort Gaines were a bit more resolute. Col. Charles Anderson’s command included six companies of the 21st Alabama Infantry Regiment and two companies of the 1st Alabama Artillery Battalion. On 3 August, after Granger landed his brigade on Dauphin Island, Maury transferred 216 soldiers from Mobile, which brought the fort’s strength up to 818 men.

Anderson’s substantial arsenal of 28 guns is outlined in the table. Despite the number of cannon, though, not one piece of artillery could range into the shipping channel. More importantly, none of his smoothbores would have any effect on the Union ironclads, especially the USS *Chickasaw* when it supported Granger’s operation.

As for the Union ground forces, Major General Granger had initially planned to land against both Forts Morgan and Gaines simultaneously. When Canby had to reduce the ground forces from a Corps-sized unit

Fort Gaines Defenses	
Type	Number
10-inch Columbiad	3
32-pounder Rifle	4
32/24/18-pounder Smoothbore	20
6.4-inch Rifle	1

Figure 23. Fort Gaines Defenses. (Created by Army University Press.)

down to a brigade, he made the reasonable decision to attack one fort at a time. [Teaching Point: simultaneous versus sequential operations]

On 3 August, Granger landed 2,000 men on Dauphin Island to the west of Fort Gaines. Compared to the immense amphibious operations the previous year at Vicksburg, this was indeed a small operation. Granger needed only five transports and two barges to carry his assault troops and artillery. Another transport carried supplies and still another served as his headquarters.

The landing was not resisted by Anderson, which allowed Granger to edge closer to the fort all day on the 4th. By midnight, Union forces were within 1,200 yards and his artillery was in place. As Farragut's fleet entered the bay on the morning of the 5th, Granger's forces opened fire on Fort Gaines.⁵³ [Teaching Point: synchronization]

In Mobile, Maury had been overly optimistic that all three of his outer forts could hold out. Before noon, he wired Secretary of War J.A. Seddon: "Gaines is under attack by land and water. . . . Forces at Morgan and Gaines seem resolved. [My] Engineer officer [Victor von Sheliha] reports damage to Gaines and Morgan slight and thinks their resistance will be stubborn."⁵⁴

Anderson, who was under fire from the landward side of Dauphin Island, was less optimistic. Anderson telegraphed his commander at Fort Morgan, Brigadier General Page, and requested instructions. By virtue of his rank, Page indirectly supervised the commanders of both Fort Gaines and Fort Powell. Page directed Anderson to hold out.

Later that day, having already given Fort Powell permission to evacuate, Anderson again telegraphed Page for instructions. Predictably, Page again told Anderson to hold out, although Anderson's understanding of Page's guidance is debatable. Page later sent two staff officers to Fort Gaines to assess the situation. After some discussion, the staff officers left with the impression that Anderson understood his duty to hold.⁵⁵

Meanwhile, Fort Gaines was not only receiving artillery fire from Granger's batteries but also from the USS *Chickasaw*, which had moved down to Gaines after successfully supporting the engagement at Fort Powell. The combined naval and land fires had a demoralizing effect on the soldiers defending Fort Gaines. So much so, that on the evening of 6 August, Colonel Anderson found himself besieged from without and within. Anderson later wrote his wife about the impossible situation:

When, however, the officers came to me after midnight, while I was hard at work, and expressed themselves so decidedly in favor

of surrender, and assured me that their men concurred with them, I saw at once that nothing more could be done.⁵⁶

Fort Gaines had held out against a combined land and naval bombardment for two days. Then on 7 August, Anderson ran up the white flag and sent a message to Farragut asking for terms. Over at Fort Morgan, Page also saw the flag of truce over Fort Gaines and signaled Anderson to hold out. Anderson, however, believed he could not respond to Page while conducting surrender negotiations and ignored his commander's signals; he met Granger and Farragut on the *Hartford* to negotiate terms.

True to form, Farragut's terms were unconditional. When Anderson objected, Farragut's reply was straightforward:

Gentlemen, if hard fighting could save that fort, I would advise you to fight to the death; but by all the laws of war, surrounded on three sides by my vessels and on the fourth by the army, you have not even a chance of saving it.⁵⁷

Anderson, against the wishes of Page at Fort Morgan and Maury in Mobile, surrendered Fort Gaines to the Union at 0800 on 8 August. He surrendered 818 men, 27 cannon, a large store of ordnance, and a 12-month supply of rations.

From the Union point of view, Anderson's decisions to evacuate Fort Powell and surrender Fort Gaines were logical. However, from the Confederate point of view, they were controversial, if not treasonous.

Brigadier General Page reported the surrender of Fort Gaines to Maury as follows:

Yesterday morning at daylight Colonel Anderson communicated with enemy by flag of truce without my sanction. I immediately asked him by signal purpose of it. He made no acknowledgment, though I fired signal guns to gain his attention and telegraphed repeatedly in case he was on lookout, but unable to make signal "Hold on to your fort!" I went there last night [7 August] and was greatly surprised to find Colonel Anderson absent in the [Union] fleet, making terms of surrender. I gave peremptory orders, on his return, if the enemy did not return with him, all terms were annulled and he was relieved from command. . . . At 9:30 o'clock [8 August] enemy's flag hoisted on Fort Gaines. Colonel Anderson's conduct inexplicable and disgraceful.⁵⁸

Maury agreed with Page's harsh criticism of his fellow officer. Indeed, sitting in Mobile, Maury could do nothing but cast fault for the

losses of Powell and Gaines. What reason could the two forts, otherwise well-provisioned, have fallen save for poor leadership and a lack of fortitude? Maury commented:

I think constant croaking and discussion of the weakness of that line had greatly prepared the minds of the commanders to give it up, and when the tremendous fleet placed itself between them and the city, the garrisons were overwhelmed by dismay.⁵⁹

In retrospect, Farragut had defeated Buchanan's squadron inside of the bay, which left Forts Morgan and Gaines in precarious positions. Anderson plainly told his commander that Gaines could not hold if attacked from both land and sea. Anderson explained his actions in a letter to his wife in October 1864:

I was compelled to surrender Fort Gaines through feelings of mercy for my officers and men, who earnestly appealed to me. The position was utterly untenable, the [Union] fleet having passed and an overwhelming force [Granger's Brigade] besieging by land, the only three guns with which I could have responded to the fleet disabled, my picked [sic] line driven back to the last notch, the ditches and swept from every direction by the shell, no safe shelter in the miserable apology for a fortification, two sick men having been killed in what was considered the best casemate, threatened with a tremendous conflagration from the buildings within, and the magazine in great danger of being blown up, and all hope of escapes, or of accomplishing the slightest good by holding out, gone.⁶⁰

As for Page, he would have only a few more weeks to withstand the joint ground and naval forces of the Union before he surrendered his own command at Fort Morgan.

Operational Effects of the Defeats of Forts Powell and Gaines:

While the tactical results of the victories at Powell and Gaines are obvious, the operational effects are even more significant. In less than a week, Farragut and Granger had executed a small but masterful joint operation that destroyed the Confederate fleet in Mobile Bay, destroyed Fort Powell, and captured Fort Gaines. The Union also captured 818 prisoners (including 46 officers) and 26 guns. All that remained was to seize Fort Morgan to completely close Mobile Bay to the Confederacy and ensure Union dominance within.⁶¹ [Teaching Point: sequential operations]

With the destruction of Fort Powell, Farragut had also secured Grant's Pass as a Union line of communication. The Union could now freely supply both naval and ground forces in the South Bay as it prepared to seize Fort

Morgan. Later in the spring of 1865, Major General Canby would use Forts Gaines and Morgan as staging bases for his operations in the East Bay.

The Union victories between the 5th and the 8th had also completely changed Maury's defensive calculus. First, he could no longer resupply Fort Morgan by water. The loss of Buchanan's squadron had completely denied Maury freedom of action within this new Union lake. Now, Confederate supplies and reinforcements required another week to move east and south down the eastern shore to Fort Morgan.

Secondly, with Fort Powell and Gaines now in Union hands and Mississippi Sound completely open to the Union, Maury could no longer ignore the possibility that the Union could land ground forces north of Cedar Point and invest Mobile from the south. [Teaching Point: freedom of action] Perhaps the best indicator that Maury was fearful of this option can be seen in his missive to the Confederate Secretary of War, J.A. Seddon, the day Anderson surrendered Fort Gaines: "Forts Powell and Gaines surrendered. Can you spare any good infantry?"⁶²

Analysis

1. Evaluate Anderson's decision to surrender. Explain how this happened. What were the operational effects of this defeat for the Confederacy? Had the Confederates reached their culminating point?

2. Evaluate this operation using modern joint doctrine. Was this a joint operation or two independent forces cooperating in the same space and time? [Teaching Point: joint operations]

3. Discuss the sequencing of joint operations necessary to gain the operational objective: "Union Control of Mobile Bay." [Teaching Point: sequential operations]

Now proceed to Stand 5, the approximate location of the Union lines at Fort Morgan.

Stand 5: The Siege of Fort Morgan, Siege Guns and Naval Gunfire

Directions: Turn east past the Fort Morgan Museum and Gift Shop and then south to follow the perimeter road around the fort. Walk toward the sea wall. Stop at the end of the Union position.

Orientation: You are standing in the center of the approximate position of the Union siege lines. Per the park director, the original siege lines were demolished immediately after the battle to deny their use in a possible Confederate counterattack. Later, the Army Corps of Engineers completely erased all remaining evidence when they built the existing sea wall on the Gulf side of the peninsula. The siege lines before you are interpretations by the park to help visitors visualize the siege.

In map 13 below and map 14 on page 108, you can see that the lines extended past the sea wall to the south and west. Some 650 feet southwest of your current location at the far end of the line in the underbrush south of the seawall, the Union had its most advanced artillery position, a two-gun section of Napoleons. *Caution: Do not walk south of the seawall without approval of the park rangers.*



Map 13. Directions to Stand 5. (Created by Army University Press.)

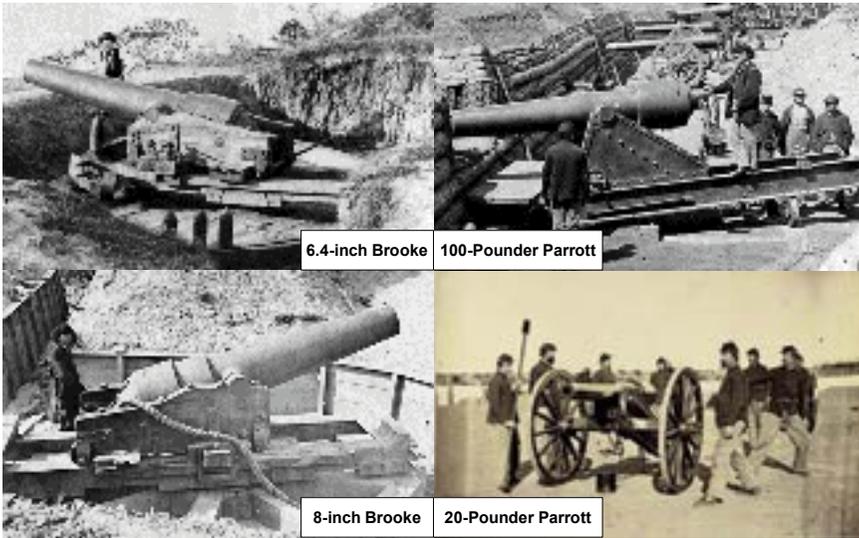


Figure 24. Images of Union and Confederate Guns. (Courtesy of Library of Congress.)

Union and Confederate Artillery					
Type	Material	Bore Diameter (inches)	Type	Throw Weight (pounds)	Range (yards)
6.4-inch Brooke Rifle ¹	Iron	6.40	Rifled	80	6,800
8-inch Columbiad	Iron	8.00	Smoothbore	65	4,800
20-pounder Parrott ²	Iron	3.67	Rifled	20	2,100
30-pounder Parrott ³	Iron	4.20	Rifled	30	2,200
100-pounder Parrott	Iron	6.40	Rifled	100	6,820

1. The Brooke rifle was produced by the Confederates.
2. Some field artillery units were also armed with this weapon.
3. Naval ordnance used the same specifications.

Figure 25. Detail of Union and Confederate Guns. (Created by Army University Press.)

Mortars				
Type	Material	Bore Diameter (inches)	Throw Weight (pounds)	Range (yards)
13-inch	Iron	13.00	208	4,325
10-inch	Iron	10.00	88	2,100
8-inch	Iron	8.00	44	1,200
Coehorn	Bronze	5.80	17	1,200

Figure 26. Detail of Union and Confederate Mortars. (Created by Army University Press.)



Figure 27. Images of Union and Confederate Mortars. (Courtesy of Library of Congress.)

Description

At this stand, you will discuss the artillery in use in 1864–65, as well as the Union operation to defeat Fort Morgan in 1864.

Artillery in the Campaigns for Mobile: Both armies had “field guns” and “heavy” or “siege” artillery. Field artillery was smaller (6- to 12-pound

shells), lighter (1,200 to 1,500 pounds), and were pulled around the battlefield by six-horse teams. On the other hand, heavy artillery usually followed a campaigning army and was only brought forward during sieges. These pieces were so heavy they had to be disassembled into components and moved by large teams of horses, boats, or by rail. Both field guns and siege artillery were “direct fire” weapons; that is, the target had to be seen for the fires to be effective.

Notably, there was one battery of four 9-inch naval guns deployed into the lines around Fort Morgan. The battery used gun crews from the *Hartford*, *Brooklyn*, *Lackawanna*, and the *Richmond*.

Mortars were designed to fire high-angle trajectories onto their targets. These weapons could avoid exposure to the enemy’s fires by positioning behind hills, ridges, and revetments. They were a true indirect fire weapon that could fire over enemy fortifications. Since most mortars had fixed elevations, the crew adjusted the range of the shell by adjusting the size of the powder charge. One of the newest mortars on the battlefield, and most prevalent in the Mobile Campaigns, was the Coehorn Mortar. It was the first true “trench” mortar and surprisingly lightweight at 164 pounds. Thus, it was easier to be moved around the battlefield by just a few men.

Fort Morgan’s Defenses: Fort Morgan was one of the most heavily defended fortifications of the American Civil War. Brigadier General Page commanded a garrison of 500 men composed of five companies of the 1st

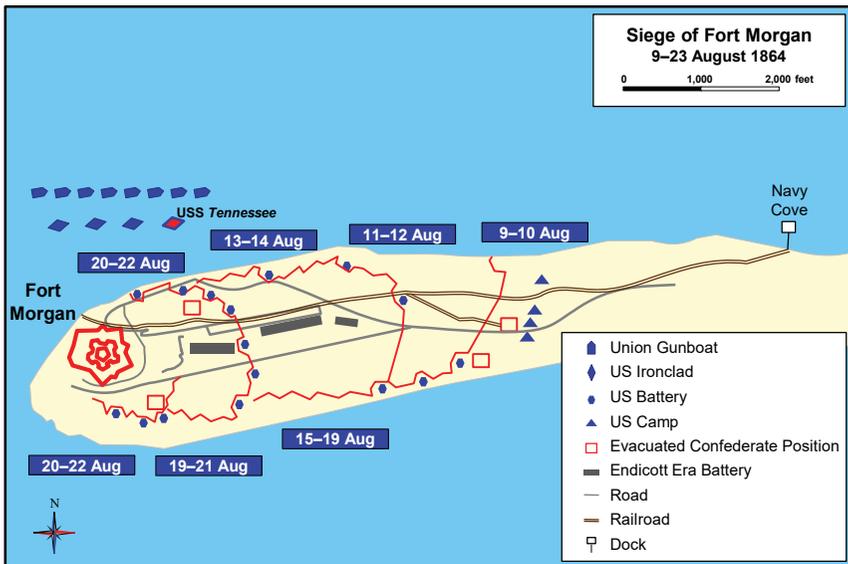
Fort Morgan Artillery	
Type	Number
10-inch	7
8-inch	3
32-pounder	22
6.4-inch Rifle	2
5.8-inch Rifle	4

Figure 28. Fort Morgan Artillery. (Created by Army University Press.)

Alabama Artillery Battalion, two companies of the 1st Tennessee Heavy Artillery (commanded by Col. Andrew Jackson III, the grandson of the president), and one company of the 21st Alabama Infantry. As depicted in the chart on the previous page, Fort Morgan’s armament included a variety of smoothbores and rifles.

By the time Major General Granger was investing Fort Morgan from the east, Page had abandoned all of the fort’s outer works and moved his forces into the fort. He had also burned every building around the outside of the fort to clear his fields of fire.

Union Army Siege Operations at Fort Morgan: On 9 August, the day after Fort Gaines capitulated, Major General Granger started landing his ground forces at Navy Cove—on the bay side and just two miles to the east of Fort Morgan. Farragut’s 5 August victory in the bay had given Granger complete freedom to move his forces from Fort Gaines to Navy Cove without Confederate naval interference. In this classic envelopment maneuver, Brigadier General Page was now forced to turn away from the naval threat in the shipping channel to the west and defend Fort Morgan on two axes, east from the land and north from the bay.⁶³ Since he had also been reinforced with additional troops from New Orleans, Granger could leave a regiment behind to secure his rear area at Fort Gaines while concentrating against Fort Morgan.



Map 14. Siege of Fort Morgan, 9–23 August 1864. (Created by Army University Press.)

Starting at the outermost of abandoned Confederate lines, the Union Army dug their own works using the 96th US Colored Troops (USCT) as pioneers.⁶⁴ By 14 August, the Union lines had advanced enough for Union sharpshooters to suppress Confederate gun crews on the northern and eastern sides of Fort Morgan.⁶⁵

The terrain significantly helped the Union invest Fort Morgan. Without having to dig sapper trenches, Union ground forces could approach within 500 yards of the citadel while protected by the sand-hills on the north and south shores.⁶⁶ This proved to be particularly useful on 17 August when Brevet Maj. Gen. Richard Arnold, Canby's Chief of Artillery and attached to Granger for this operation, landed his big siege guns at Navy Cove. He then transferred the artillery pieces onto barges and floated them up the north side of the peninsula to positions within 800 yards of Fort Morgan. By 20 August, thirty-four guns and mortars were in place with enough munitions for a twenty-four-hour bombardment.⁶⁷ By 21 August, the Union works were within 200 yards of the fort.

Naval Operations in Support of Granger: By this phase of the campaign, Farragut was still hoping for a quick victory. When the army began its movement into Navy Cove on 9 August, he sent a staff officer under a flag of truce to Fort Morgan to ask for its surrender. Based on his responses to the fall of Forts Gaines and Powell, Brigadier General Page's response was completely predictable: "I am prepared to sacrifice life and will only surrender when I have no means of defense."⁶⁸

Page's response triggered the beginning of the Navy's harassing fires against Fort Morgan. Farragut used three ironclads plus the newly captured and reflagged but still damaged USS *Tennessee* to shell Fort Morgan. Since the steering chains were still inoperative from the 5 August battle, the navy towed the *Tennessee* into position and used it as a powerful gun platform. Together, this small squadron fired a round into Fort Morgan every fifteen to twenty minutes from a range of 1,000 to 1,400 yards. Or, as Rear Admiral Farragut so casually put in a note to Major General Canby in New Orleans: "I continue to amuse the fort [Morgan] with a shell every fifteen or twenty minutes, night and day."⁶⁹ The fort replied, but their shells bounced off the Union ironclads.

By 21 August, land and naval operations were converging. Granger was now in position with his artillery and infantry, and Farragut added eight more gunboats to the ironclads already in the South Bay. Farragut and Granger planned for an all-out sea/land bombardment the next day.

Final Operations against Fort Morgan: At 0500 on 22 August, the Union began its bombardment. A total of twelve Union ships and thirty-four land-based guns pelted Fort Morgan for the next twenty-five hours. The Confederate forces endured merciless artillery fire that disabled all the heavy guns facing landward and all but two facing the bay. Fires broke out all over the fort, the most dangerous being near the magazine where the garrison had stored 80,000 pounds of powder.

Page was obviously in a precarious situation. Union gunners had disabled almost all his guns, and his powder was ruined. Secondary fires destroyed his quartermaster and commissary stores. Page finally made the difficult decision to surrender Fort Morgan for the very same reasons that Forts Powell and Gaines had also surrendered; his fort could no longer fight with the resources at hand. On 23 August 1864, he wrote to General Maury:

I held the fort as long as it was tenable. The parallels of the enemy had reached the glacis, the walls were breached, all the guns save two were disabled. The woodwork of the citadel, being repeatedly fired by the shells of the enemy, endangered the magazines. All my powder was destroyed, every gun effectually spiked and otherwise damaged, and indeed the whole fort . . . is now a mass of debris. I turn [sic] this over to their forces at 2 o'clock today. The garrison behaved gallantly and gained honor for themselves and country.⁷⁰

At 0630 on 23 August, Page ran up the white flag. By 1415 that day, the American flag was flying over Fort Morgan.

Tactical and Operational Results of the Siege of Fort Morgan: Surprisingly, despite receiving more than 3,000 Union rounds, the Confederates lost only one killed and three wounded. Page surrendered 400 prisoners of war (POWs) and forty-five guns (of which fifteen were spiked).⁷¹ Casualties for the Union were also surprisingly light. The Union Army reported only one killed and seven wounded, while the Union Navy suffered no casualties.

Mobile Bay was now completely closed to Confederate sea traffic. While the City of Mobile was still in Confederate hands, Farragut had achieved his operational goals: controlling Mobile Bay by defeating the Confederate naval squadron and seizing the forts in the South Bay.

Analysis

1. Using the elements of Operational Art from Army and Joint Doctrine (Joint Publication 5-0, xxi–xxiii and Army Doctrine Reference Publication 3-0, 4-3) shown on the next page, analyze Farragut's 1864 campaign.

Elements of Operational Art In Farragut's 1864 Campaign		
Objective	Effects	Center of Gravity
Decisive Points	Lines of Operation/ Lines of Effort	Direct and Indirect Approach
Anticipation	Operational Reach	Culmination
Forces and Functions	Arranging Operations	Military End State
	Termination	

Figure 29. Elements of Operational Art in Farragut's 1864 Campaign.
(Created by Army University Press.)

2. Was Fort Morgan untenable after the fall of Forts Gaines and Powell? What about after the defeat of the Confederate naval squadron?

3. In the end, was the surrender of Fort Morgan inevitable? Should Page have evacuated and moved to Spanish Fort, or even back to Mobile?

4. Rear Admiral Farragut did not try to seize the City of Mobile. Why not?

- Lack of adequate ground forces to take Mobile.
- Analysis of the strategic objective.

5. At the strategic and operational levels of war, what were the results of the 1864 Battle for Mobile Bay?

- Left only Charleston and Wilmington open to Southern trade.
- Netted 1,700 POWs.
- Exposed Mobile to encirclement.
- Secured freedom of action inside the bay for the Union while denying that freedom to the Confederate forces.
- Set the stage for the 1865 Campaign for Mobile the following spring.

Note: The Staff Ride now transitions to 1865, the Campaign for Mobile, and the last campaign of the American Civil War. If desired, consider lunch as close to Fort Morgan as possible before proceeding to the next stand.

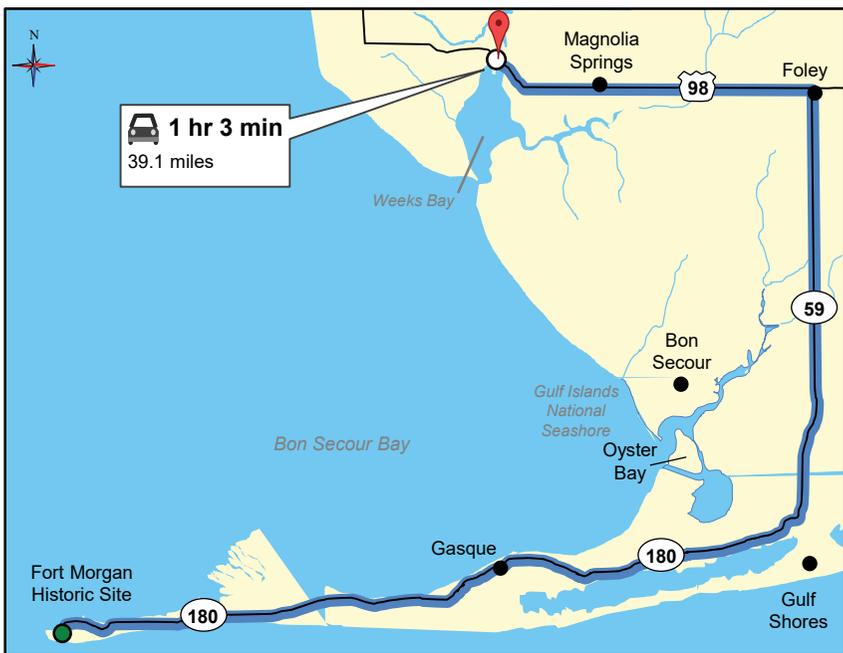
Stand 6: 1865 Campaign Overview and the Movement to Spanish Fort

Directions: From your lunch location, drive to the mouth of the Fish River as it drains into Weeks Bay. Go east on Route 180 for 20.6 miles. Turn left (north) on Route 59 for 9.8 miles to the town of Foley. Turn left (west) on Route 98 for 8.4 miles.

You have two options to conduct this stand. The first (shown in map 16 on page 113) is at the public dock on the east side of the Fish River. It offers ready access next to the Fish River and offers a view of Weeks Bay. However, there are neither facilities nor cover in the event of inclement weather.

The second possibility is across the river at the *Weeks Bay Reserve Tonsmeire Resource Center*. This non-profit organization supports the Weeks Bay National Estuarine Research Reserve “in its efforts to protect the pristine coastal area of Baldwin County, Alabama.” It offers protection from the elements under the main building, a picnic facility, and other facilities (if coordinated ahead of time). Contact the Weeks Bay Foundation to make arrangements:

Weeks Bay Foundation
11401 US Highway 98
Fairhope, AL 36532



Map 15. Directions to Stand 6. (Created by Army University Press.)



Map 16. Map for Option 1 and Option 2.
(Created by Army University Press.)

251-990-5004

Fax: 251-990-9273

<http://weeksBay.org/contact.htm>

To use Option 1: Turn right onto Grounds Lane 0.2 miles before the bridge and then immediately turn left and drive to the parking area near the water.

To use Option 2 at the Weeks Bay Resource Center: Continue west on Route 98 and cross the Fish River Bridge. Follow the sign to turn RIGHT 1,500 feet past the bridge. Follow the road back under the overpass to the facility.

Orientation: The year is 1865 (applies to either Stand location). To your front is the Fish River. Immediately to the south is Weeks Bay through which the Union Navy transported XVI Corps from Fort Gaines, saving several days of marching down Mobile Point. The point of debarkation for XVI Corps is 2.6 miles upriver as the crow flies. The Fish River is no wider today than it was in 1865 and, therefore, only wide enough to handle one river boat at a time. This meant that Union transports had to

navigate a series of boats in column until they could reverse direction in turning basins upriver.

From this point, Spanish Fort is only 18.5 miles away. The Union base of operations at Fort Gaines and Fort Monroe is 18 miles to the southwest. A second base of operations for the “Column from Pensacola” is near Pensacola, Florida, some 32 miles to the southeast. Mobile, Alabama, the ultimate objective of this 1865 campaign, is northwest across the bay, a relatively short 23 miles.

Description

Strategic Setting: After the 1864 Campaign for Mobile Bay, Farragut considered further operations against Mobile unwise. It was already too late in the campaign season to mount operations against the city; but even if the seasonal weather cooperated, an operation against the City of Mobile took second priority to other campaigns considered more important, including Atlanta, Nashville, and Virginia. Nevertheless, the bay was still a Union lake; the Confederates could not use it while the Union had complete freedom to mount any operation at a time and place of its choosing.

Through the winter of 1865, the operational problem of seizing Mobile was still on the minds of Union commanders in the theater. Farragut had struggled with the issue and even felt some guilt at not being able to take the City of Mobile. On 5 September, a month after the decisive Battle of Mobile Bay, Farragut wrote Major General Canby in New Orleans: “I never was in favor of taking Mobile, except for the moral effect.”⁷² Farragut was convinced that Mobile would require between 20,000 to 30,000 men, but his land forces commander, Granger, had only 5,500 infantry available.⁷³ The force was far too small to take the heavily defended works around Mobile, much less conduct extended operations north of Mobile along the Mobile River as Sherman would suggest. Besides, even if he had the requisite forces, Farragut’s health was failing and he was eventually relieved that winter by the Secretary of the Navy.⁷⁴

To the north, Major General Sherman, who was about to complete his Atlanta Campaign, felt the urgency of protecting his southern flank. Writing from the field on 17 August 1864, after the naval battle but before the fall of Fort Morgan, Sherman offered Canby this advice:

To reduce Mobile I would pass a force up the Tensas [Tensaw] and across to old Fort Stoddard [aka Fort Stoddert, near the confluence of the Tombigbee and Alabama rivers], and operate in the direction of Citronelle [Alabama]. The Mobile and Ohio [rail]road broken and the river occupied, Mobile will be untenable to the

rebels. If possible, the Alabama River should be possessed by us in connection with my movement.⁷⁵

Despite Sherman's desire for a supporting operation, Farragut's failing health and Granger's limited ground forces certainly contributed to Canby's initial recommendation to Major General Halleck in Washington:

Farragut coincides with me in the opinion that it will be unwise to make any direct attempt upon Mobile until the co-operating land force can be largely increased. This cannot be done now, but such demonstrations will be made from the bay and from the Mississippi as will keep up the state of uneasiness now felt there, and operating in favor of General Sherman.⁷⁶

Indeed, ten days later after weighing the benefits of sustaining an operational pause in the Mobile AO, Sherman seemed to have second thoughts about seizing Mobile. Halleck relayed Sherman's concern to the general of the army, Lieutenant General Grant, at the end of August:

In a letter just received from General Sherman he advises that Granger should not attack Mobile, but move directly up the Alabama River to Selma or Montgomery. He says the capture of Mobile will only weaken our active forces by the garrison required to hold it, whereas garrisoned by the enemy and threatened by our gunboats, Hood's forces are weakened to the amount of that garrison.

I think Sherman has entirely overestimated Granger's forces and underestimated the difficulty of passing Mobile and ascending the Alabama some 150 or 200 miles. . . . General Canby and Admiral Farragut both understand that the main object of their operations is to assist Sherman, and I think it will be better to let them work out the problem.⁷⁷

From Sherman's perspective, a Union attack against Mobile, and its subsequent occupation, would tie down Union forces to the extent that they could not directly support the operational main effort around Atlanta. On the other hand, going into an "operational pause" and simply harassing Mobile from land and sea would occupy Confederate forces that might otherwise be repositioned to confront Sherman. Sherman was now in favor of waiting and, thus, Mobile became a supporting operation to Sherman's Atlanta Campaign. It was not until February 1865 that the Union Army was strong enough to mount operations against Mobile. Canby's original operational estimate of the situation had proved correct.

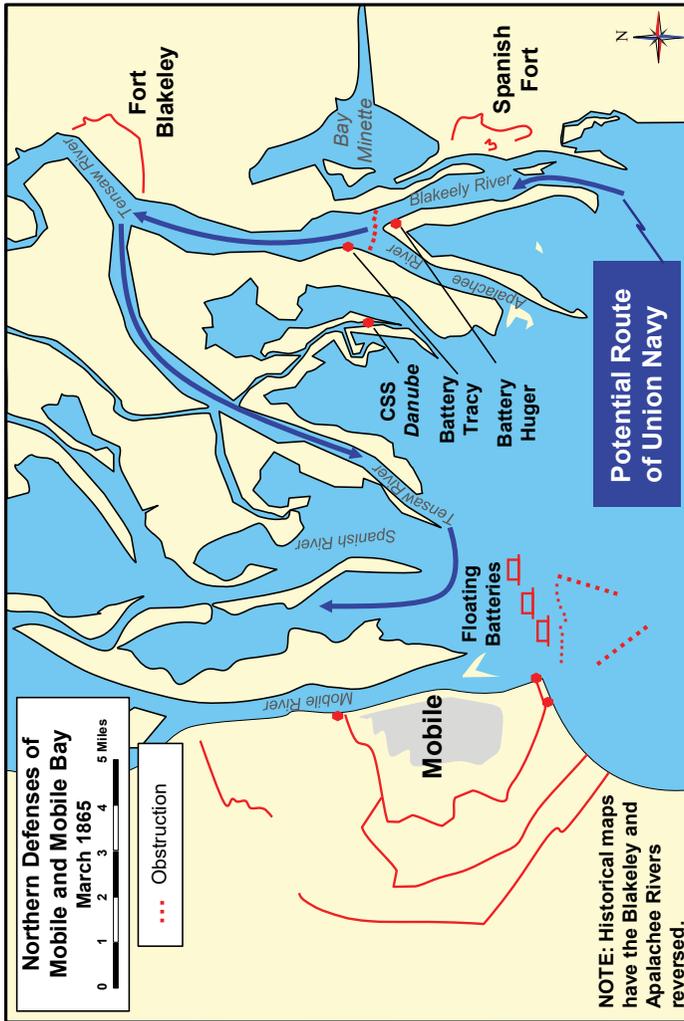
As the final campaign was shaping up, there had been a few changes in the senior command of Union and Confederate forces in the Mobile area of operations. For the Confederates, Major General Maury still commanded land forces around the bay. He gave responsibility for the Confederate defenses on the eastern shore to Brig. Gen. St. John R. Liddell. Liddell directly commanded Fort Blakeley and assigned Col. Randall Gibson to be the commander at Spanish Fort. The commander of the meager Confederate naval squadron in the North Bay was Commodore Ebenezer Farrand. All told, Maury's forces totaled about 12,000, of which 6,000 reported to Brigadier General Liddell on the eastern shore.⁷⁸

Major General Canby still commanded Union land forces around the bay. By February 1865, Canby had three strong corps commanders reporting to him: Maj. Gen. Gordon Granger (XIII Corps and a veteran of the 1864 campaign), Maj. Gen. Andrew J. Smith (XVI Corps), and Maj. Gen. Frederick Steele ("Steele's Column from Pensacola"). Reliably replacing Rear Admiral Farragut in February 1865 was Acting Rear Adm. Henry K. Thatcher. By the middle of March 1865, Canby had more than 45,000 troops assigned.

In the meantime, Sherman had captured Atlanta in early September 1864 and began his "March to the Sea" in November 1864. On 16 December, Maj. Gen. George H. Thomas defeated Lt. Gen. John Bell Hood in Tennessee. On 21 December—giving Lincoln his "Christmas present," Sherman marched unopposed into Savannah, Georgia. In Virginia, the Siege of Petersburg continued unabated from June 1864 to March 1865. By the time operations against Mobile began in February 1865, Lieutenant General Grant was only a few weeks from the final Appomattox Campaign.

Confederate Preparations for the Defense of Mobile: Still in command of the Mobile district, Maj. Gen. Dabney Maury fully understood the challenge of defending Mobile. With Mobile Bay now a Union lake, Maury's only lines of communications with the Confederacy were upriver on the Mobile and Alabama rivers, a small road network, and two vulnerable railroads: the Mobile and Ohio Railroad and the Alabama and Florida Railroad that terminated on the Tensaw River.

Reclaiming Mobile Bay was never a possibility. By fall 1864, the Confederate Navy in Mobile Bay was almost nonexistent—there was a single gunboat and a couple of "floating batteries" able to offer gunfire support to the defenses around Mobile. Over the following winter, the navy under the command of Commodore Ebenezer Farrand had managed to reconstitute itself, though only to the extent that it could conduct limited operations in the shallow waters of the North Bay or in the river network between Mobile and Spanish Fort.



Map 17. Northern Defenses of Mobile, March 1865. (Created by Army University Press.)

After Buchanan’s defeat in the bay, Maury had fully expected the Union to advance up the West Bay to invest Mobile. However, the Union’s failure to reinforce success and continue the campaign in that direction gave Maury the opportunity to improve his defenses. While he did not have the forces to mount a counter-offensive, he did have the forces to conduct a stalwart defense of the city: 12,000 soldiers, but he desperately needed reinforcements. Unfortunately, after Lieutenant General Hood’s defeat at the Battle of Nashville, the Confederates could spare only 700 men from Brig. Gen. Randall L. Gibson’s Brigade.

Just as in 1864, the shallow waters southeast of Mobile—together with the coastal batteries, obstacles, and floating batteries in the near waters—

prevented an amphibious operation from that direction. The trenchworks also offered a solid defense against attacks from the south, west, and north. Nevertheless, Mobile had one significant weakness: despite the shallow waters, Mobile was still vulnerable to attack from the east. If the Federals could make their way up the Blakeley River, they could turn the corner at the Tensaw and sail downriver toward Mobile; Canby could then invest the islands east of the city and hold Mobile at hazard.

To prevent this possibility, Maury constructed batteries, forts, and obstacles that extended from the land defenses around Mobile, across the North Bay and its water defenses, to Spanish Fort in the East Bay. Granted, the guns in the East Bay could not protect Mobile directly, but they could make any Union attempt to move up the Blakeley River extremely risky.

Brigadier General Liddell commanded the defenses on the eastern shore. His defensive anchor was Old Spanish Fort, covered with railroad iron, initially mounted with six 10-inch Columbiads, and surrounded with extensive defensive lines. Across from Spanish Fort and Bay Minette, Liddell built Battery Tracy and Battery Huger on piles driven into the marsh and covered with earthworks. About five miles north of Old Spanish Fort, where the Apalachee River met the Tensaw River, the Confederates also built Fort Blakeley. Blakeley's sole purpose was to prevent the Union Navy from turning the corner onto the Tensaw. If the Union Navy successfully passed Spanish Fort and the two water batteries, it would still have to contend with Fort Blakeley. By the time Canby started his 1865 Campaign for Mobile, the defenses at Spanish Fort, Fort Blakeley, Battery Tracy, and Battery Huger were complete. From Maury's point of view, he could defend against any Union operation in the North Bay.

Union Assessment of Mobile's Defenses: The key to understanding Canby's "intent" as he developed his campaign plan is to understand the intelligence available to him. In retrospect, it appears that Canby had access to higher fidelity intelligence than Maury had. For example, on 2 February, Canby received the following intelligence report from S.M. Eaton, chief signal officer of the Military Division of West Mississippi:

Mr. Ross, late a lieutenant of engineers at Mobile, left that city January 15, 1865. States that there are three lines of fortifications around the city. The outer line will not be defended. The second line is a substantial, strong, and scientific work [i.e., well-designed] extending from a point near Fort Buchanan, on the bay, in a semicircle, to Three-Mile Marsh, near the Mobile and Ohio Railroad. The redoubts, lunettes, and works of the inner line cover

the second. As an engineer, Mr. Ross pronounces Mobile almost impregnable to an assault. . . . General Maury, commanding, is described as a timid, irresolute, and excitable officer. Informant represents the gunboats, especially the *Nashville*, as less powerful and effective than the earlier refugees have asserted.⁷⁹

Similarly, a 16 February report from an informant, Perry Ryales, assesses the poor quality of troops around Mobile, noting that the city was garrisoned by “one brigade of infantry from Hood’s army . . . a city battalion of home guards . . . a regiment of boys called the First Alabama Reserves . . . and a battalion of the First Louisiana Heavy Artillery.” Three ironclads including the *Nashville* and *Huntsville* as well as three small blockade runners were also located outside the city above the obstructions.⁸⁰ Ryales goes on to describe the defenses on the eastern shore:

[B]elow the batteries [Huger and Tracy] are obstructions from shore to shore. The forts on Blakeley River are not finished, and no guns mounted [sic]. . . . If the batteries on the Apalachee River are reduced, boats of four-feet draft can ascend to the Tensas [Tensaw], and coming down that river in rear of the Spanish Fort, ascend the Spanish River, enter the Mobile River, and descend to the city without meeting any land batteries[sic].⁸¹

If Canby had not already considered the idea, Ryales had certainly confirmed that maneuvering along the East Bay presented significant advantages as an indirect approach to Mobile. A sequential operation in the east would set the conditions for an amphibious attack directly into the city from the Mobile River, its unprotected eastern flank. [Teaching Point: indirect approach and sequential operations]

Not that such an operation would be easy. Other reports emphasized the difficulty of seizing the East Bay and conducting an operational movement by boat through the confluence of the Blakeley, Apalachee, and Tensas rivers:

George Mader, late of the C.S. Army Engineers, states that the best way to take Mobile is to take Spanish Fort [and] Batteries Huger and Tracy, first. Spanish Fort can be approached within 300 yards under cover of dense woods. . . . Battery Huger [between the Blakeley and Apalachee rivers] can be easily shelled from Spanish Fort, being one mile distant and much lower [down the river from Battery Tracy]; cannot be held long after Spanish Fort surrenders. . . . There are ten rows of spiles [piles] across Blakeley River, opposite Battery Huger, and seven rows across Apalachee

River; 150 yards below these is a line of torpedoes across both rivers, the torpedoes two feet apart secured to the ends of a log, the other end being sunk by a weight so that the torpedoes rise and fall with the tide. [There are] no obstructions or batteries on the Mobile River above Mobile.⁸²

Canby also used Rear Admiral Thatcher's gunboats to conduct armed reconnaissance in the North Bay. He wrote to Rear Admiral Thatcher on 8 March 1865:

I have received information that is regarded as very reliable that the rebels have torn up about thirty miles of the Montgomery and Mobile Railroad in the neighborhood of Pollard. . . . this looks very much like an actual or contemplated evacuation of Mobile. It would materially advance our arrangements if this fact can be ascertained by a reconnaissance in force by the gunboats and monitors, which will draw the fire of the batteries and determine whether the guns have been removed from them.

Rear Admiral Thatcher replied two days later that he would go with his "light draft" boats to "feel the enemy."⁸³

Orders of Battle

The war was winding down. Union victories in other theaters facilitated a large reinforcement of his Campaign for Mobile. In 1864, Canby could only muster 5,000 men in the lower Bay. For this 1865 Campaign, however, Canby would have 45,000 men available. Maj. Gen. Gordon Granger at Mobile Point assumed command of XIII Corps, formally the "Reserve Corps of the Military Division of the West Mississippi." XIII Corps included the 1st and 3rd Divisions as well as the 1st Brigade of Maj. Gen. C.C. Andrews's 2nd Division for a total strength of 13,000 men.

The XVI Corps, under the command of Maj. Gen. Andrew J. Smith, was to be Canby's second corps. Newly reactivated after moving from Eastport, Mississippi, XVI Corps had a total strength of 16,000 with its three divisions. The units in this corps had just taken part in the Battle of Nashville and the pursuit of Hood's army. Now they were staging at Fort Gaines in preparation for the campaign.

Canby also had a significant force that would march out of Fort Barrancas, Florida, about forty-five miles east of Fort Morgan. Maj. Gen. Frederick Steele commanded this "Column from Pensacola," as Canby referred to it. It was composed of two brigades of Maj. Gen. C.C. Andrews's 2nd Division (-) (XIII Corps), Brig. Gen. J.P. Hawkins's 1st Division of

Union Ground Order of Battle Mobile Campaign January–May 1895		
Unit	Commander	Strength
Union Army	Maj. Gen. E.R.S. Canby	
Engineer Brigade	Brig. Gen. J. Bailey	1,500
Siege Train (Fort Gaines)	Brig. Gen. J. Totten	1,200
XIII Corps (Fort Morgan)	Maj. Gen. G. Granger	13,200
Mortar Batteries		
1st Division	Brig. Gen. J. Veatch	
1st Brigade/2nd Division	Col. H. Bertram	
3rd Division	Brig. Gen. W. Benton	
XVI Corps (Fort Gaines)	Maj. Gen. A.J. Smith	16,000
1st Division	Brig. Gen. J. McArthur	
2nd Division	Brig. Gen. K. Garrard	
3rd Division	Brig. Gen. E.A. Carr	
“Column from Pensacola Bay” (Fort Barrancas)	Maj. Gen. F. Steele	13,200 ¹
1st Division (USCT)	Brig. Gen. J.P. Hawkins	5,500
Lucas’ Division (Cavalry)	Brig. Gen. T.J. Lucas	2,500
1st Division (Cavalry)	Brig. Gen. J.F. Knipe	
2nd Division- (XIII)	Brig. Gen. C.C. Andrews	5,200
Total		45,200 ²
Supporting Operations		
Wilson’s Cavalry Corps (Northern Alabama)	Maj. Gen. J. H. Wilson	13,000
Dauphin Island	Lt. Col. B. Kirby	
Mobile Point	Lt. Col. C.E. Clarke	

1. Includes attached brigades from Andrews’s Division.

2. Total strength of Canby’s force in the Mobile Bay area of operations.

Figure 30. Union Ground Order of Battle for the Mobile Campaign.
January–May 1865. (Created by Army University Press.)

USCT (US Colored Troops), and Brig. Gen. T.J. Lucas's Cavalry for a total of 13,000. Staging out of New Orleans and East Pascagoula, Mississippi, these units gave Canby a credible right wing that could deceive the Confederates as to his ultimate aim, yet provide a decisive force on the eastern shore if needed.

To the north, Maj. Gen. James Wilson's Cavalry Division from the Military Division of the Mississippi operated in central Alabama. While not assigned to Canby, Wilson operated in such a way as to prevent Confederate reinforcements from turning south to aid Maury in Mobile. Wilson captured Selma, Alabama, on 2 April then turned east toward Montgomery, which effectively denied Confederate forces in Alabama and western Georgia the opportunity to threaten Canby's operation.⁸⁴

Altogether, Canby's force totaled 45,000. In contrast, by early March Maury had only 12,000 men available for the defense of Mobile. Of those, only 3,000 occupied the fortifications around Mobile; the rest, including about 1,000 African-American slaves, Maury assigned to the new commander of the Eastern Division of Mobile, Brigadier General Liddell. Liddell's forces included French's Division of four brigades commanded by Brig. Gen. Francis Cockrell. In addition, there were three independent brigades commanded by Brig. Gen. James Holtzclaw, Brig. Gen. Bryan Thomas, and Brig. Gen. Randall Gibson. Unlike the young boys and reservists who manned Mobile, most of the troops in the East Bay had fought under Hood and were well-seasoned.⁸⁵

Canby's Operational Plan for Mobile: On 3 February, Canby received instructions for his upcoming campaign from the commander of the armies, Lieutenant General Grant. Grant assigned Canby the objectives of seizing "Selma or Montgomery, including the capture of Mobile or not, as you may deem best." In other words, Mobile was merely a means to an end; Canby's operational goal was to secure the interior of Alabama as part of Grant's larger strategic plan. Canby could seize Mobile at his discretion.⁸⁶ Now he had his operational orders.

Canby had several courses of action available to him. The closest lodgment area and line of communication would have been from New Orleans and East Pascagoula, Mississippi, directly toward Mobile; but even if they could have overcome the swampy terrain southwest of Mobile, Union ground forces would have had to deal with the heavy fortifications west and south of Mobile. For the same reasons, Canby discounted an amphibious assault along the Dog River tributary south of the city.

Certainly, the trench works around Mobile could be seized, but at what cost? Union commanders in the latter half of the war had tried sieges at other fortified cities, with varying success—Petersburg and Vicksburg being two prominent examples. Understandably, Canby was reticent to seize Mobile's siege works if it was not necessary.

As with modern commanders who must plan complex operations, the geography of the bay also served to constrain Canby's planning in significant ways. First, there would be little or no naval gunfire (NGF) support available to him in the North Bay. As Farragut already understood, the water was simply not deep enough to allow extensive gunboat operations southeast of the city. Nor could the Navy stand off in deeper water to bombard the city and force a surrender. Union ships would have had to get within one mile to be effective; but Confederate mortars in the city could range out to three miles, making a water approach through shallow and well-defended waters impractical.

The depth and defenses in the East Bay also constrained Canby's options; Confederate torpedoes, obstacles, and batteries threatened the Union Navy's ability to sail at will around Spanish Fort. While it could protect the Union left flank as it marched up the eastern shore, the shallow hydrology would dictate Thatcher's naval tactics and Canby's land deployments in early April.

A 17 February 1865 message from his XIII Corps commander, Maj. Gen. Gordon Granger, may have also influenced Canby's thinking:

Abundant evidence seems to be accumulating to prove that every effort will be made possible to defend Mobile. . . . The eastern bank from Great Point Clear up to the batteries on the Blakeley River is thickly picketed, and there are some few pieces of light artillery displayed whenever our reconnoitering boats approach the shore. The last reconnaissance by the navy found seven feet [of depth] on Blakeley Bar, hence the vigilance and precaution by the rebs on that side. However, I apprehend no difficulty in outgeneraling them, capturing everything, or forcing a hasty evacuation. The only drawback is the interminable delay of A.J. Smith and our quartermasters in hurrying over the troops, batteries &c. [abbreviation for etc.] from New Orleans.⁸⁷

These three factors—the strength of the defenses around Mobile's southern and western flanks, the hydrology of the bay at its northern end, and the difficulty of negotiating waters dominated by water batteries, piles, obstacles,

and torpedoes—dictated Canby’s mission analysis. His final plan was the epitome of the “indirect approach” and a case study of the operational art.

Based on Grant’s original guidance, the “sequel” to any operations in the Mobile area of operations (AO) would have been a subsequent move into central Alabama. Such a movement, however, required that Mobile be seized to protect Canby’s rear, or leave enough forces behind to hold the Confederate forces in check within the City of Mobile. Canby chose a variation on the option that Sherman had suggested the previous August: operations up the east shore to seize Confederate bases there. Then, once the eastern forts and batteries were secure as a base of operations, use naval transport to move north up the Blakeley River, down the Tensaw, and invest Mobile from the north and east (see map 17 on page 117). This would not only take advantage of the available rivers to quickly move forces and logistics, but would also bypass the land fortifications, water defenses, and the shallows southeast of Mobile. There was only one problem: Spanish Fort and Fort Blakeley were significant obstacles that could not be bypassed and would need both land and naval forces working in cooperation to seize them. [Teaching Point: branches and sequels]

It is now clear that by September 1864, Canby had already formed the basis for his concept of operations for Mobile. While Farragut was still commanding the West Gulf Blockading Squadron, Canby shared his thoughts in a 15 September 1864 message to Rear Admiral Farragut:

If the present troubles in Arkansas should be soon settled, I propose to send a force back to Mobile Bay for the purpose of operating up the Alabama River, directing the first operations against the works on Spanish and Tensas [Tensaw] rivers, with the expectation of getting control of these rivers and effecting a lodgment on the Alabama or near Old Fort Stoddard. This I think, will force the rebels to abandon Mobile, or at least will enable us to cut off their communication with the interior and give us very great advantage in the attack upon the city.⁸⁸

Canby’s concept of operations matured with time. Conceptually, just as in 1864, this campaign would be a “joint operation.” There was, however, a single significant difference between the two campaigns. Unlike 1864, Union ground forces would be the “main effort,” with naval forces in support. Smith’s XVI Corps would move by boat from Dauphin Island to Dannelly’s Mills on the Fish River (aka the Fish River Landing). As a diversion, Canby had A.J. Smith send one brigade up the west side of the bay toward Mobile. Once Confederate forces spotted them, they were to

board steamers and move across the bay to the Fish River Landing. Granger's XIII Corps would move overland from Mobile Point to Dannelly's Mills and link up with Smith.⁸⁹ See Canby's Movement to Spanish Fort on the next page.

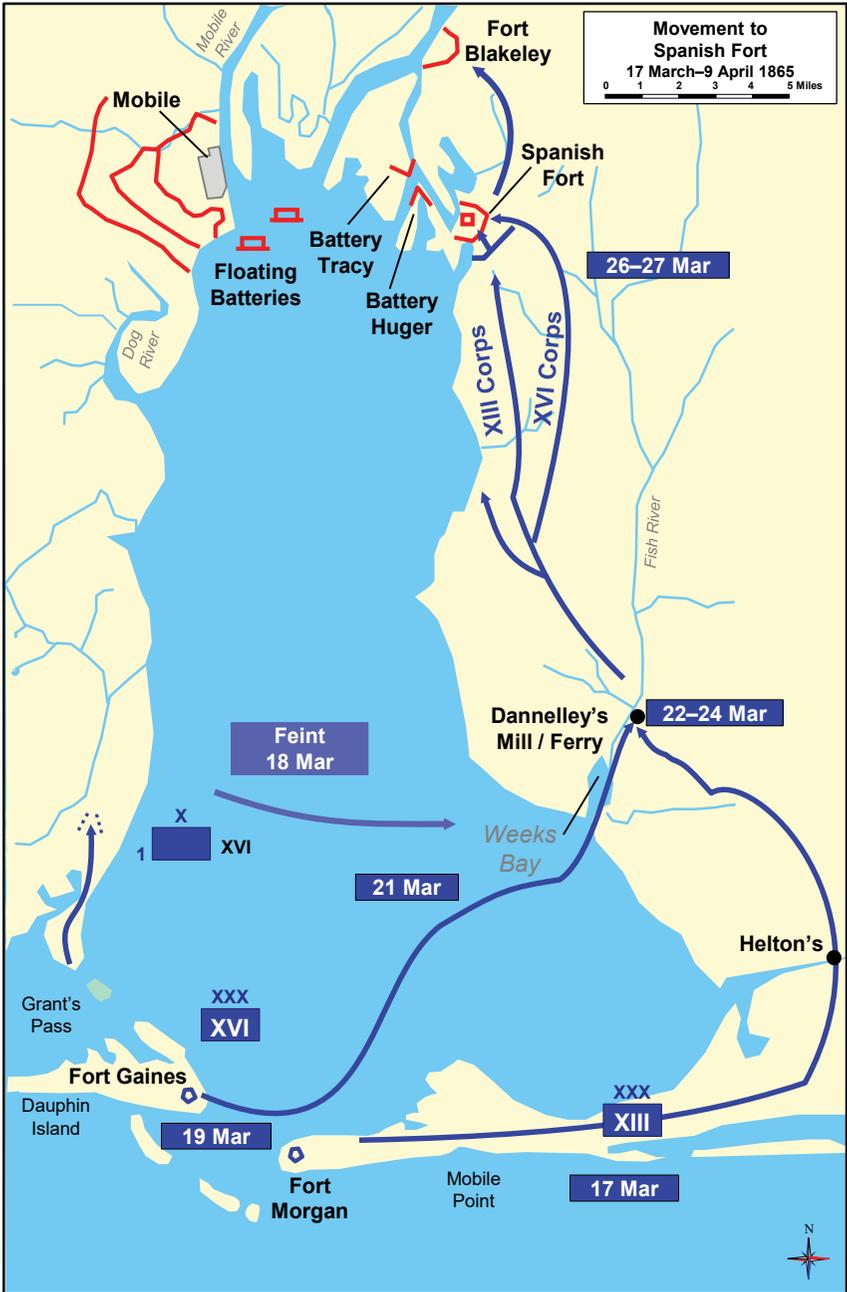
Perhaps Canby's intent can best be understood in his initial 16 March 1865 message to Rear Admiral Thatcher, Farragut's replacement as commander of the West Coast Blockading Squadron:

I propose to move a column of 9,000 men tomorrow morning up the coast [Mobile Point], crossing or turning Bon Secours Creek at the most favorable points, crossing the East Branch of Fish River as low down as practicable, and striking the North Branch near Dannelly's Mills, where the crossing will be made. Another column of 10,000 men will move by water thorough Bon Secours and Fish River Bays, debarking at a point about 1 mile below Dannelly's Mills. In this movement, we shall need the cooperation of the navy. . . . I design to make a demonstration on the west side of the bay by landing a brigade of about 2,000 men on Cedar Point on Saturday, but this will be limited to a demonstration that will have the effect of drawing off the attention of the enemy from the movement on the east side of the bay.⁹⁰

In the meantime, Steele's "Column from Pensacola" would depart Pensacola for Pollard, Alabama; feint toward Montgomery to fix Confederate cavalry; and destroy railroad communications between Montgomery and Mobile. Once Steele completed this task, he would continue north to Montgomery, or at Canby's discretion, turn west to support XIII and XVI Corps at Spanish Fort/Fort Blakeley. The entire purpose of a separate line of operation from Barrancas to Pollard was to signal a thrust to Montgomery, a move that completely deceived Maury in Mobile.⁹¹

Canby's thinking is completely in line with current doctrine. Current Army and Joint doctrine specifies the necessity to develop "branches" and "sequels" to "lines of effort" or "lines of operations." "Branches" are developed to adjust to changing circumstances. "Sequels" are what happens next. Branches and sequels are one way the commander can control the ebb and flow of his campaign—shifting from one line of operation/effort to another offers operational flexibility.⁹²

Canby's operational design for the 1865 Campaign for Mobile included all these elements. In this case, if the eastern forts or Mobile itself became obstinate, then Canby could abandon those objectives and move north to Montgomery; in modern doctrinal parlance, this was a "branch"



Map 18. Movement to Spanish Fort, 17 March–9 April 1865.
(Created by Army University Press.)

to the main effort. This was, of course, Grant’s original intent as discussed earlier and was clearly illustrated by Canby’s orders to Steele.⁹³

Canby selected two sustainment bases on the eastern shore to support his plan. The first would be the Fish River Landing above Weeks Bay. The Fish River would be the initial line of communication (LOC) for the Union operations at Spanish Fort and Fort Blakeley. The landing was within twenty miles of Spanish Fort and could easily sustain all three corps. Thus, the lines of communication for Canby’s corps were by transport boats from New Orleans, Fort Gaines, or Fort Morgan and then by wagon. Later, as Spanish Fort became invested, Canby would move his logistics base from the Fish River Landing to Starke’s Landing on the eastern shore, a mere 3.5 miles from the southern flank of Spanish Fort.

Forty miles east of Mobile Bay was the location of the second base: Fort Barrancas near Pensacola, Florida. This would be the initial lodgment for Steele’s deception operation to the north and east of Mobile, although after Steele’s Column left Barrancas, it would break the tether and forage for supplies on the way to Spanish Fort.

Execution: The positioning of forces in preparation for the 1865 Campaign was not simple by any means. Unlike many campaigns in the Eastern Theater, Canby absolutely relied on naval support for operational movements and sustainment. As can be seen in the chart below, two corps—XVI and “Steele’s Column from Pensacola”—were already en route to the theater before Canby completed his operational planning.

The chart illustrates the lead time necessary to position forces in preparation for the maneuver phases of Canby’s campaign, or in today’s doctrine, what might be referred to as “Phase II: Seizing the Initiative.”⁹⁴

Movement Matrix Canby’s Forces				
Unit	Departure Date (1865)	POE	POD	Arrival Date (1865)
Steele’s Column	24 January	New Orleans, LA	Fort Barrancas, FL	7 March
XIII Corps	In Place	–	Fort Morgan, AL	In Place
XVI Corps	5 February	Eastport, MS	Fort Gaines, AL	7 March

Figure 31. Movement Matrix for Canby’s Forces. (Created by Army University Press.)



Map 19. Operational Movement XVI Corps, February–March 1865.
(Created by Army University Press.)

XVI Corps Operational Movement: The movement of XVI Corps is particularly illustrative of the advantages that river transportation offered Union forces. Smith had to move his three divisions using forty-three river steamers and seven towboats in a matter of weeks. His route would be circuitous—from Eastport, Mississippi, up the Tennessee and down the Ohio River, and then onto the Union’s superhighway, the Mississippi River.⁹⁵ Smith received his warning order on 26 January and embarked two divisions from Eastport, Tennessee, on 5 and 6 February. The 3rd Division departed Eastport on 8 February.

As unlikely as it sounds, by the time he arrived at Cairo, Illinois, Smith had no concept of Grant’s plans for his force. Nor did the corps he commanded have a designation, which caused some consternation on his part. Not being a shy fellow by any stretch, Smith sent an 8 February message from Cairo, Illinois, to Secretary of War Edwin M. Stanton asking for the particulars of his assignment:

I arrived at 1 p.m. with two divisions of my command and leave for my destination. My other command follows me. I am now without a heading or identity for my command. Unless I receive a number, or a name, for my command, I must style myself the

Wandering Tribe of Israel. Please telegraph me immediately and give me a number.⁹⁶

Henry Halleck, now Grant's chief of staff, replied that evening: "Continue on your exodus as the Wandering Tribe of Israel. On reaching the land of Canby, you will have a number and name."⁹⁷ Halleck assigned Smith the XVI Corps on 18 February.

XVI Corps continued its journey through the wilderness. It arrived at Memphis, Tennessee, on 11 February then continued to Vicksburg, Mississippi, arriving on 13 February. There was a three- to four-day delay at Vicksburg because Smith was confused about his orders. It could have been avoided but to Smith's credit, the moment he realized his mistake, he re-embarked his corps on the same boats and arrived in New Orleans between 20 and 22 February.⁹⁸ The XVI Corps then encamped for two weeks at what is now the Chalmette Battlefield and National Cemetery, the battleground of the 1815 Battle of New Orleans.⁹⁹ So far, XVI Corps had travelled 1,250 miles.¹⁰⁰

This movement, however, was not yet complete. On 28 February, the 1st Brigade of the 1st Division left New Orleans for Dauphin Island. Its route was through Lake Ponchartrain into the Gulf and then through Mississippi Sound. The remaining brigades embarked around 7 March and staged for a short period at Fort Gaines. On 19 March, XVI Corps started its movement from Fort Gaines on navy transports to Dannelly's Mills and the Fish River Landing. Requiring two lifts of transports, Smith closed his corps by 24 March. In the middle of this movement, Carr's Division was sent to demonstrate as if they were landing on the main shore, and then turned east to land on the Fish River.¹⁰¹

Canby also assigned a deception operation to Smith as he moved to Dannelly's Mills—a feint on the west side of the bay to deceive Maury as to Canby's true intent. Smith had a brigade from his 1st Division (1,700 infantry and two Rodman guns) land on Cedar Point and march past Alabama Point (now Alabama Port, Alabama) north to the Fowle (now Fowl) River on 18 March.

This deception effort was very successful. The brigade commander, Col. Jonathan Moore, discovered that the locals thought he had landed a force three times as large as was actually on the western shore. "Mission accomplished" in his mind, Moore's brigade reloaded and joined their division at Dannelly's Mills on 23 March.¹⁰² [Teaching Point: deception operation]

This deception operation had a significant impact on the decisions of Confederate commanders around the bay. A day after Moore repositioned to

the eastern shore, a raiding party from the Confederate Cavalry succeeded in capturing Union prisoners from the 29th Wisconsin of Veatch's 1st Division, XIII Corps. Under interrogation, the Union soldiers said that Smith's XVI Corps was on the west side of the bay. The Cavalry reported this back to Brigadier General Liddell at Fort Blakeley, and then on to Maury in Mobile.¹⁰³ Thus, Colonel Moore's two-day deception near the Fowle River was magnified and reinforced with reports from both sides of the bay.

This was not the only time that Confederate intelligence inflated estimates of the enemy. Maury became aware of Union efforts near Pensacola, for example. Notably, a 12 March reconnaissance report to Maury overstated the strength of Steele's "Column from Pensacola" by a factor of four.¹⁰⁴

Intelligence reports also incorrectly estimated that Steele had 500 wagons and 500 pieces of artillery moving through the swamp-infested land between Pensacola, Pollard, and Fort Blakeley. Accounts vary, but Steele had only four batteries of light artillery.¹⁰⁵

It took five days for XVI Corps to move from Fort Gaines to the Fish River Landing. By the time it closed, Smith's XVI Corps had completed a truly significant operational movement. Since 5 February, XVI Corps had moved 16,000 fully equipped infantry, artillery, and cavalry with its associated logistics by water and foot more than 1,500 miles in forty-nine days. If you discount the delays at Vicksburg, New Orleans, and Fort Gaines, the en route time would have been just twenty days—one of the largest and longest operational troop movements of the Civil War.¹⁰⁶ [Teaching Point: operational movement]

Steele's Movement to Fort Barrancas: On 24 January, regiments from Canby's "Reserve Corps of the Military Division of West Mississippi" arrived in New Orleans. The 24th Indiana boarded the USS *Corinthian* and landed at East Pascagoula, Mississippi, on 25 January. At the same time, the 34th Iowa and the 114th Ohio transferred from a river steamer at New Orleans and rode the rails to Lake Pontchartrain. They then boarded steamers at night in stormy weather and sailed to East Pascagoula. There, Major General Granger put both regiments back on steamers bound for Barrancas, Florida (now Fort Barrancas, near the site of Pensacola Naval Air Station). For the next six weeks, other regiments followed and were consolidated into brigades for Steele's "Column from Pensacola." The final units closed by the first week of March, including Brig. Gen. Thomas Lucas's Cavalry Division of 2,500 troopers, Brigadier General Hawkins's 1st Division of US Colored Troops (nine regiments of 5,500 infantry), and two brigades from Brig. Gen. C.C. Andrews's Division of XIII Corps.

This heavy influx of Union forces required a vast improvement of the port facilities around Barrancas. On 11 March, two brigades under Brig. Gen. C.C. Andrews began repairs to a long wharf, about seven miles up Pensacola Bay from Barrancas. The soldiers constructed the new 500-foot wharf by placing “270 fresh-cut pole, trimmed, and sharpened at one end, upright in the mud, and by swaying the pole backward and forward with ropes, inched it into the mud until it stuck tight [sic].”¹⁰⁷ Steele’s men then rerouted a spur of the Pensacola-Montgomery Railroad 600 yards through the middle of town to the new wharf. The first ship began offloading ammunition and supplies on 16 March.

XIII Corps Movement from Fort Morgan: While Steele was staging at Barrancas and Smith’s Corps was refitting in New Orleans and Fort Gaines, Granger’s XIII Corps was training and reorganizing at Fort Morgan. On 17 to 18 March, the same time that Smith moved by water to the Fish River Landing, XIII Corps began its movement east up Mobile Point to the Fish River. The weather was fine, but the swampy terrain made the going extremely slow. Progress became slower when torrents of rain began to fall on 20 March. The heavy rains turned roads into mud and slowed the columns—and then the roads became quagmires.

What should have been a perfunctory movement by XIII Corps became a herculean effort. Soldiers had to corduroy roads and build bridges through muddy swamps. When the mules sank into the mud and would not continue, the soldiers pulled both the mules and the wagons out of the mud.¹⁰⁸ Private Carl Bernhardt of the 35th Wisconsin described the superhuman efforts of his fellow soldiers:

Then we pull the donkeys, mud up to our knees, but those long-eared weren’t dumb. When things didn’t move, they layed down [sic]. The drivers, standing in the mud, waited for relief to come. That arrived soon because we two-legged ones with the back pack and the three-day ration on our backs had to pull the carts out of the mud and, again, the long rope came out. . . . We had 28 wagons and pulled these, one at a time, through 24 miles of mud . . . 125 men per team, up to their knees or body [sic] in water and mud, the wagons up to their axles, but it worked.¹⁰⁹

On 22 March, five days after leaving Fort Morgan, the first XIII Corps units arrived at Dannelly’s Mills. When Benton’s 1st Brigade arrived, the corps bands played: “Oh, Ain’t You Glad You’re Out of the Wilderness.” The last units did not arrive for another four days.¹¹⁰

Analysis

1. With respect to economy-of-force operations, how did the perceptions of these three commanders—Sherman, Farragut, and Canby—differ?

2. What advantages did Canby see in an indirect approach up the eastern shore of the bay rather than directly up the western shore? Evaluate the geography of the northern Bay and explain why the Confederates believed that Fort Blakeley and Spanish Fort were important to the defense of Mobile.

3. Could the XIII Corps's laborious movement across Mobile Point have been avoided? Would early reconnaissance of the route have helped? Would it have been smarter to wait and move by water after XVI Corps had closed?

4. Evaluate the movement of XVI Corps from Eastport, Mississippi, to the Fish River Landing. Was there any other option?

5. What operations or campaigns in the two years before the 1865 Campaign enabled Canby's operational movement to Spanish Fort?

- The Vicksburg Campaign in 1863 opened the Mississippi River and gave the Union freedom of movement for its forces. Without a clear and unencumbered Mississippi River, it would have been impossible to move XVI Corps from the Tennessee River to Mobile except by penetrating enemy-held territory overland.

- The 1864 Battle of Mobile Bay secured freedom of action inside the bay for Canby's forces. Without the effects of this battle, Canby would not have been able to sail XVI Corps through Weeks Bay into the Fish River.

6. Evaluate the use of demonstrations and feints to this point in the 1865 operation.

Stand 7: Initial Siege Operations at Spanish Fort

Directions: Drive back onto US-98 westbound for 4.1 miles. Turn right to stay on US-98 W for 12.3 miles. Turn left onto Van Ave and drive west. After 0.3 miles, turn right onto Eastern Shore Trail/Main Street for 0.1 miles. Turn left onto College Ave. Your destination, May Day Park, will be on the left 0.6 miles (May Day Park, College Avenue, Daphne, Alabama 36526).



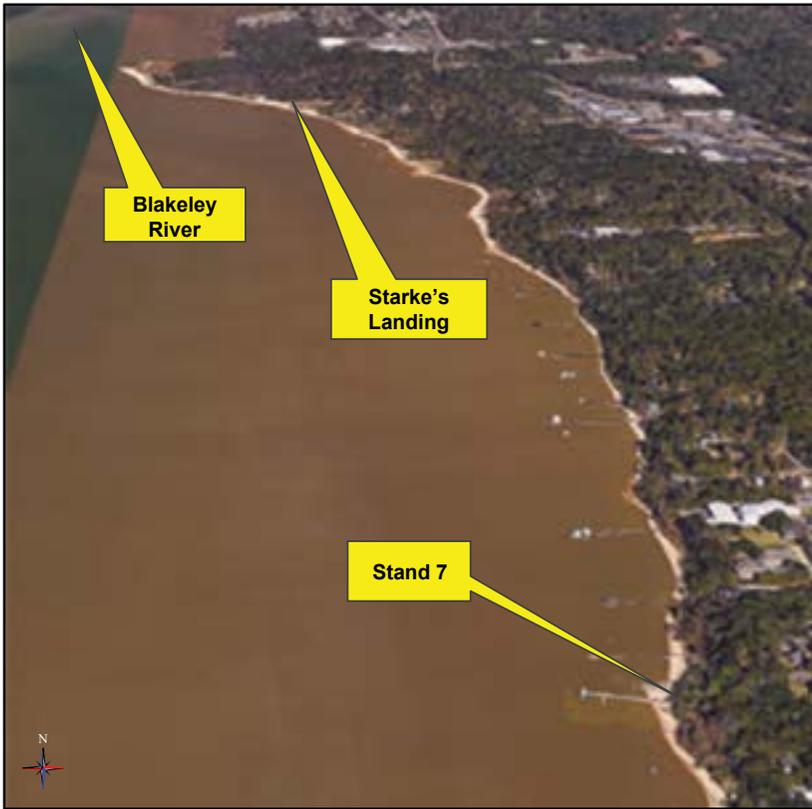
Park the bus at the entrance to the park and walk west (downhill) toward the piers. Walk out on the long fishing pier far enough to look north and see Starke's Landing. Since the pier is a popular location, after getting oriented to the bay and to Starke's Landing to the north, CSI recommends that the stand be conducted at the picnic tables at the foot of the long fishing pier. The tables are on a first-come basis. For more information, call the Daphne (Alabama) Parks and Recreation Department at 251-621-3703.



Map 21. Stand 7. (Created by Army University Press.)

Orientation: You are standing on or near the fishing piers at May Day Park, Daphne, Alabama. Five miles across the bay you can clearly see Mobile. East of your position are the routes XIII and XVI Corps took toward Spanish Fort (see map 20). To the south-southwest is Gulf Shores and Fort Morgan (26.5 miles), on a line just to the right of Point Clear. Farther to the southwest is Fort Gaines (26 miles). On a clear day, you should be able to see the oil rigs in the southern half of the bay and the overpass over Grant's Pass leading to Fort Gaines as well.

Across the cove to the north for 1.8 miles is Village Point, the location of Starke's Landing. Almost on a line with Starke's Landing and 5 miles to the north is Spanish Fort. Fort McDermott on the southern flank of Spanish Fort is 5,000 yards north of Village Point. At the end of March 1864, you would have been able to look west of Village Point and see Rear Ad-



Map 22. Blakeley River and Starke's Landing.
(Created by Army University Press.)

miral Thatcher's Gulf Coast Blockading Squadron as it stood off Spanish Fort at the mouth of the Blakeley River.

Description

Between 17 and 23 March, Canby marched or floated two corps with 30,000 men up the eastern shore to the Fish River Landing at Dannelly's Mills. On 25 March, the lead divisions from both Corps moved north toward Spanish Fort, only 20 miles away. At that point, XIII Corps was on the left flank near the eastern shore, and XVI Corps was on the right (see map 17 on page 126).

The naval squadron commanded by Acting Rear Adm. Henry K. Thatcher protected Canby's left flank. In northern Alabama, Brig. Gen. James H. Wilson with 10,000 cavalry was about to conduct a supporting operation in the vicinity of Selma and Montgomery, and stood ready to come south to Mobile if Canby needed him.¹¹¹

Farther to the east, Steele's "Column from Pensacola" was marching north from Pensacola with 12,000 men. Canby had not yet heard from Major General Steele but assumed that he was in the vicinity of Pollard. Totten's Siege Train was at Fort Gaines. Canby was still not sure whether, or even where, he would employ the big guns.¹¹²

In a fruitless attempt to stop Canby, the Confederate commander on the eastern shore, Brigadier General Liddell, placed Brig. Gen. Randall L. Gibson's reinforced brigade and Brig. Gen. Francis M. Cockrell's division on a defensive line 8 miles to the south of Spanish Fort. Gibson's Brigade had six infantry regiments (two attached) and one cavalry regiment deployed on the high ground north of D'Olieve's Creek (also spelled D'Olive's Creek). However, before Cockrell's Division could take position on the left flank, Liddell was shocked to learn that the fast-approaching XVI Corps was outflanking him.

Liddell's defenses on the eastern shore were strong, but not enough to stop Canby in the open field; he had only 9,000 effectives and needed good fortifications to offset his numerical disadvantage. When he realized that the Union XVI Corps was about to outflank him, Liddell pulled Gibson back into Spanish Fort while Cockrell took position at Fort Blakeley. Liddell also had the lower bridge at Bayou Minette destroyed, which hindered Union operations between the two forts but also cut off land communications between his flanks. Now, Liddell and Gibson could only communicate via the Blakeley River.¹¹³

By 27 March, Canby had still not heard from Steele to his east, but his corps had closed and prepared to invest Spanish Fort. Both corps had also outrun their supplies, which caused a short operational pause.¹¹⁴ [Teaching Point: operational pause/culminating point]

Operational Basing and Starke's Landing: By investing Spanish Fort, Canby had successfully bottled up the Confederate land forces in the East Bay. In doing so, he had given himself freedom of action to put his supply base wherever he wanted. The base at Fish River Landing was adequate, but Union trains would have had to haul supplies more than 20 miles across swampy terrain to Spanish Fort. Thatcher was also protecting Canby's left flank by keeping the powerless Confederate squadron in the Blakeley River. These two factors made the choice of Starke's Landing as a logistics base—even though only a few miles south of Spanish Fort—as a logical evolution of Canby's campaign plan. [Teaching Point: sustainment and basing]

Brig. Gen. Joseph Bailey, Canby's Engineer Brigade commander, discussed the benefits of Starke's Landing in his 28 April 1865 After-Action Report:

Starke's Landing was made the base of the army. All supplies were landed there, and all shipments of sick and wounded and of prisoners of war made from there, and it was made the business of the command to facilitate in every possible way the landing of supplies, etc., and their transmission to this army Until wharves could be built the bridges were used as such, and proved indispensable, but six wharves from 300–500 feet in length were constructed in five days' time, and another repaired for the use of the sick and wounded. Besides this, all supplies, ordnance, commissary, quartermasters, etc., were handled, moved, and mostly loaded upon wagons by the command.¹¹⁵

The shift to Starke's Landing was significant. Union logistics, under the protection of Thatcher's gunboats, would save up to two days of road transport by moving the base twenty miles up the shore. The Confederates had given up a critical point on their southern flank and allowed the Union to resupply itself in their own backyard.

Steele's "Column from Pensacola:" While Canby continued to invest Spanish Fort, Steele continued his deception operation near Pollard, Alabama. On 19 March, two days after XIII and XVI Corps departed their staging areas, Steele's "Column from Pensacola" departed Pensacola for Pollard. He arrived six days later on 26 March and after some small skirmishes arrived on 31 March at Stockton, Alabama, nearly out of food.¹¹⁶

Steele's 12,000-man column had clearly faced some significant challenges on its way to Stockton. It traveled over wetlands and swollen creeks and through thick virgin forests. The storm that had slowed XIII Corps's progress on Mobile Point now impeded Steele's progress. On some days, its 270 wagons could only make three miles per day.

Worse, Steele grew alarmed at the consumption of rations. He had counted on foraging through the country, but that proved impossible in the lowlands through which they travelled. By the time the column turned west to Stockton, it subsisted on dwindling supplies and limited provisions found along the route. Steele had to ask Canby for a relief column.

Analysis

1. What is the purpose of Steele's "Column from Pensacola?" How does it shape the decisive operation?

2. Fort Gaines, Fort Morgan, Barrancas, Dannelly's Mills, and Starke's Landing are variously used as lodgment, staging, and logistics supply areas. Evaluate their use. How were these bases staged in ways that best supported Canby's scheme of maneuver? [Teaching Point: basing and operational reach]

3. While Canby is moving up the eastern shore, what is Rear Admiral Thatcher doing with his squadron? Does he, or does he not, shape the decisive operation?

This is the end of Day 1. Tomorrow's Stand 8 begins at Fort McDermott in Spanish Fort.

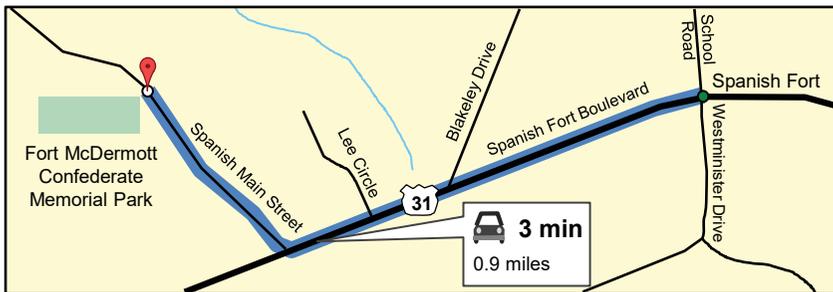
DAY TWO

Stand 8: The Confederate Defenses at Spanish Fort

Before leaving the bus or other conveyance, please recognize that this is a private park maintained by the Fort McDermott Confederate Memorial Park, a private neighborhood association. Please be respectful of the property and its neighbors.

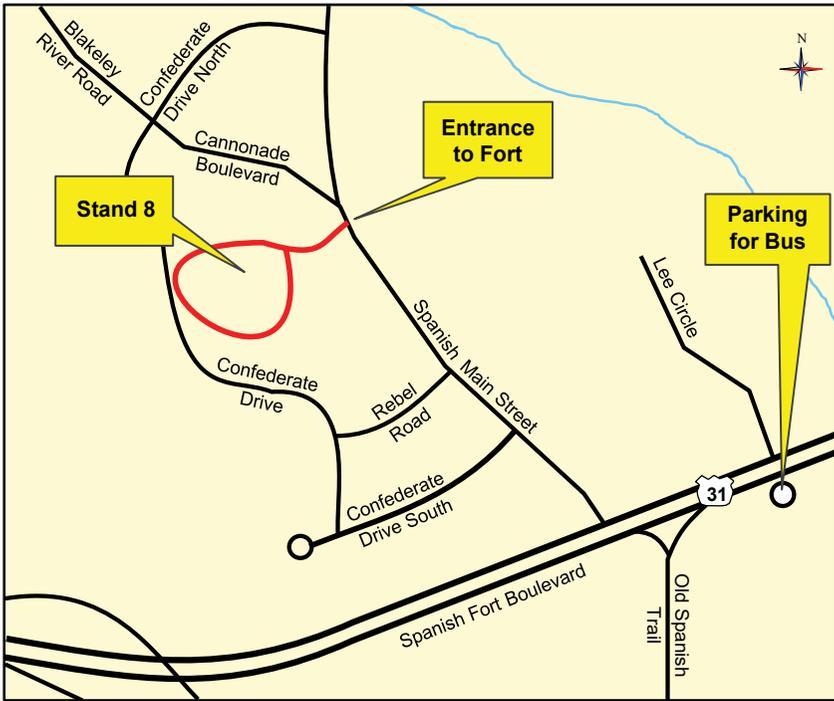
Directions (from downtown Spanish Fort): Head west on Spanish Fort Boulevard toward Westminster Drive for 0.6 mile. Turn right onto Spanish Main Street and proceed 0.3 mile. Pull over to the right as Spanish Main splits with Cannonade Boulevard. The park is on your left where the interpretive signs are. Your destination is 118–120 Spanish Main Street, Spanish Fort, Alabama 36527. Find the contact information for this park at <http://scvsemmes.org/index.html>.

If travelling by bus, the group should dismount at this location. Have your driver follow a route around to a prearranged parking site in the vicinity of the shopping mall at the bottom of the hill (near the corner of Spanish Fort Boulevard and Spanish Main). The driver should stand by with a cell phone then return back up the hill when your group is ready. See page 220 in Chapter V for detailed driving instructions to the mall.



Map 23. Directions to Stand 8. (Created by Army University Press.)

Orientation: You are standing at Fort McDermott on the southern end of the Confederate line at Spanish Fort. One and a half miles to the north is Bay Minette. To the northwest, 2.25 miles across the swamp and the Blakeley River is Battery Huger. The center of the lines at Fort Blakeley is only 5 miles to your north. Additionally, 50 miles to the east is Pollard, the far eastern extent of Steele’s “Column from Pensacola.” In the opposite direction, the City of Mobile is only 7 miles across the North Bay.



Map 24. Stand 8. (Created by Army University Press.)

Note that development in Fort McDermott, as well as all other historically significant sites in the town of Spanish Fort, has overtaken the remnants of the battlefield. While interpretive signs abound, there are only two places in the Spanish Fort area with public access to the fortifications: where you now stand and at the next stand at the northern end of the Union lines. These are the “last remnants” of Old Spanish Fort.¹¹⁷

The fortifications at Spanish Fort were 1.5 miles of trench lines interspersed with batteries. The Confederates tied their defenses to the impassable swamps on both flanks of the lines, although the defenses were incomplete on the northern end. A moat five feet deep and eight feet wide surrounded the trench lines. Fifty feet in front of the lines, the Confederates built a line of abatis fifteen feet deep. In front of the abatis was a line of *chevaux de frise*.¹¹⁸ The Confederates cleared the wooded land in front of the lines for 1,400 yards; the green space and development that now surrounds you was not present. Sharpshooters could fire from detached positions to the front of the trenches. The defenders also buried land torpedoes (or mines) throughout the glacis in front of the trenches.



Figure 32. Spanish Fort Defenses. (From *The Official Military Atlas of the Civil War.*)

Description

Confederate Order of Battle: After the fall of Fort Morgan in 1864, Major General Maury chose Brigadier General Liddell to command the Eastern Division of Mobile. While Maury retained only 3,000 men in the defenses directly around Mobile, and a few more for associated missions, Liddell received the remaining 6,000, plus 1,000 African-Americans who worked for Liddell's engineer.¹¹⁹

Commanding the Blakeley River were Batteries Huger and Tracy.¹²⁰ They were both built on piles driven into the swamp. Only 1.5 miles to the northern end of the Union lines, Huger was close enough to provide

**The Campaign for Mobile, 1865
Confederate Effective Strengths
(Numbers Approximate)**

Ground Forces

Confederate Army	Maj. Gen. D.H. Maury	12,000
Eastern Shore		6,000
French's Division	Brig. Gen. F.M. Cockrell	
Thomas's Brigade	Brig. Gen. B.M. Thomas	
Gibson's Brigade	Brig. Gen. R.L. Gibson	674
Taylor's Command	Col. T.H. Taylor	
Holtzclaw's Brigade	Brig. Gen. J.T. Holtzclaw	988
Ector's Brigade	Col. J.A. Andrews	659
Sappers and Miners	Capt. L. Hutchinson	
Mobile		3,000
Left Wing Defense	Col. C.A. Fuller	
Right Wing Defense	Col. M. Smith	
Artillery Batteries	Col. W.E. Burnet	

Figure 33. The Campaign for Mobile, 1865 Confederate Effective Strengths.
(Created by Army University Press.)

Guns at Spanish Fort		
Type	Number	Notes
8-inch Columbiad	1	Battery Huger
6-inch Brooks Rifle	2	Battery Huger
7-inch Rifle	2	Battery Huger
10-inch Smoothbore	1	
10-inch Rifle	1	Battery Huger
12-pounder Mortar	2	Battery Huger
12-pounder Smoothbore	2	Battery Huger
7-inch Gun	5	Battery Tracy

Figure 34. Armament at Batteries Huger and Tracy. (Created by Army University Press.)

supporting fires to Spanish Fort if needed. Just up the river, the defenders positioned Tracy to protect the river bend from Spanish Fort north toward the Tensaw elbow. Commanded by Brig. Gen. Randall L. Gibson, the primary mission of Spanish Fort was to protect Batteries Huger and Tracy.¹²¹ By the time Canby had invested Spanish Fort, Gibson had a force of from 2,700 to 3,400 men, which included the units manning Batteries Tracy and Huger.¹²² Other reports have the Confederate strength at Spanish Fort as strong as 4,000.¹²³

Gibson had fifty-seven guns at Spanish Fort, including twenty-seven heavy pieces.¹²⁴ The 22nd Louisiana Heavy Artillery (Col. Isaac Patton) provided the artillery gunners for Spanish Fort and Batteries Tracy and Huger. Altogether, 350 gunners were at Spanish Fort, 200 at Battery Huger, and another 120 at Battery Tracy.

Fort McDermott (also known as Battery McDermott) anchored the Confederate right. Its guns faced both the bay and the land approaches.

Spanish Fort Confederate Order of Battle				
Unit	Commander	Strength	Guns	Notes
Gibson's Brigade	COL Francis Campbell	674		
Thomas's Brigade (AL Reserves)	BG Bryan Thomas	950		Moved to Fort Blakeley on 30 March 1865 (Mostly Teenagers)
Ector's Brigade	COL David Coleman	659		Transferred on 30 March 1865
22nd LA Heavy Artillery	COL Isaac W. Patton	670	57	Including 27 Heavy Pieces
Total		2,700– 3,400		

Note: Strength totals are inconsistent on the Confederate side.

Figure 35. Spanish Fort Confederate Order of Battle.
(Created by Army University Press.)

Capt. C.H. Slocum commanded the artillery battery at Red Fort (Redoubt #3). By the end of the war, Slocum's Battery had marched more than 6,000 miles. Redoubts #4 and #5 were to the north of the center, with Redoubt #5 anchoring the incomplete northern end of Spanish Fort.

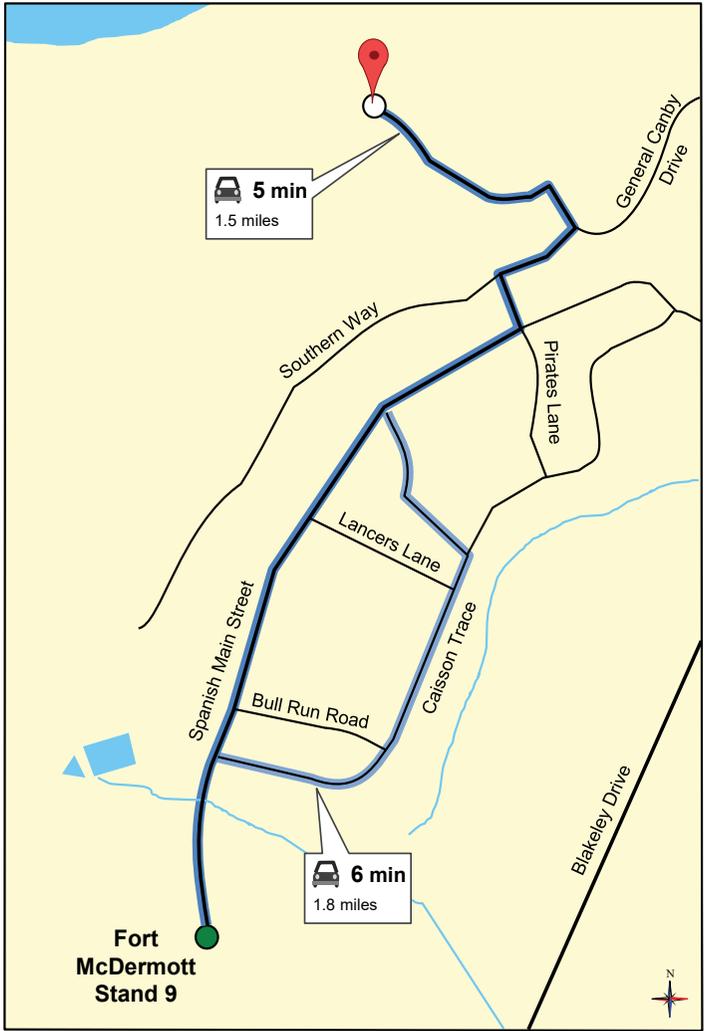
Analysis

1. Analyze Gibson's defensive plans at Spanish Fort. What are its strengths and weaknesses?

Now reboard the bus and continue to Stand 9 on the far northern end of the Union lines at Spanish Fort.

Stand 9: The Union Siege at Spanish Fort

Directions: From Fort McDermott, take a right at the fork to stay on Spanish Main Street. Head north on Spanish Main for 1 mile. Turn left onto Pirates Lane. Take your next right onto Southern Way and drive 0.1 miles. Turn left onto General Canby Drive. Next left onto Cora Slocomb Drive after 0.3 miles. Continue to the roundabout at the end of Cora Slocomb Drive [21 Cora Slocomb Drive].



Map 25. Route to Stand 9. (Created by Army University Press.)

Note: A reconnaissance of this stand is highly encouraged. Please remind your group not to drift onto private property on the outskirts of the green belt.

Orientation: The next map depicts both Stands 9 and 10. You are standing at the northern end of the Union lines at Spanish Fort. This position is where the 1st and 3rd Brigades sectors of Carr's Division met on the first parallel.

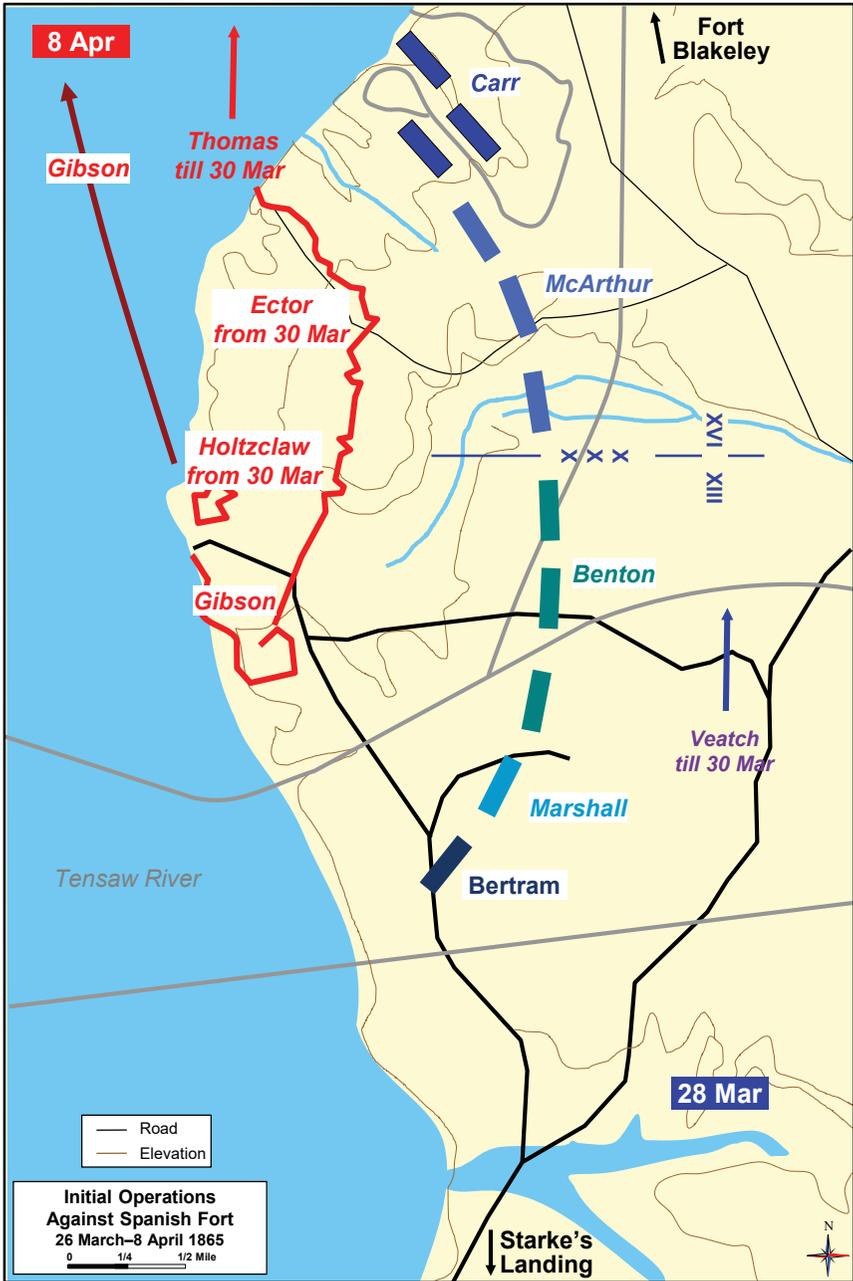
The creek below you drains into Bay Minette about 1,400 feet to the northwest. The center of the lines at Fort Blakeley is 3.8 miles north of your position. The closest Union logistics base is at Starke's Landing 4.2 miles to the south. To your west, the Confederate lines are 100 yards away.



Map 26. Stands 9 and 10. (Created by Army University Press.)

Description

26–27 March 1865: The initial Union investment of Spanish Fort began on 26 March. After the skirmish at D'Olive's Creek, XVI Corps initially bypassed Spanish Fort, continued north, and camped ten miles northeast of Spanish Fort at Sibley's Mill. For whatever reason, Major General Smith had been under the impression he was to head for Fort Blakeley, but that evening he changed direction toward Spanish Fort after learning of his mistake.



Map 27. Initial Operations against Spanish Fort, 26 March–8 April.
(Created by Army University Press.)

Smith left Brig. Gen. Kenner Garrard's 2nd Division at Sibley's Mill to guard the army's rear from Fort Blakeley and had Brig. Gen. Eugene A. Carr's 3rd Division lead XVI Corps into position around Spanish Fort. En route to Spanish Fort, Carr's lead brigade was ambushed, but after a spirited firefight, the Confederates fell back to Spanish Fort.

Now approaching from the northeast, A.J. Smith formed his remaining two divisions on the northern end of the Confederate lines at Spanish Fort. Brigadier General Carr was on the right (3rd Brigade up, and the 1st and 2nd Brigades behind) and Brig. Gen. John McArthur's division formed to the left with all his brigades on line. Smith's first instinct was to press forward in a "movement to contact," but when Carr's 1st Brigade bogged down, his other two brigades came forward and started digging trench lines about 800 to 1,000 yards from the Confederates. Carr, now established on the far right of the Union lines, deployed from left to right: 3rd Brigade, 1st Brigade, and 2nd Brigade.

In the meantime, the lead element of XIII Corps, Brig. Gen. James Veatch's 1st Division, had maneuvered into the Union line on the far left and spent the night preparing positions. By 0900 on the 27th, Brig. Gen. William P. Benton's 3rd Division had also moved up to fill the gap between Veatch's Division and XVI Corps. Canby now had four divisions arrayed against Brigadier General Gibson's two undermanned brigades (Thomas and Gibson's).

At 1000, the Union advanced along the line. The Confederates allowed them to move 200 yards into a cleared area before opening fire with their artillery and mortars. The Union troops continued their advance, but the attack slowed all along the line when the Federals reached the Confederate obstacles. The Confederates lost 49 killed and wounded while the Union lost 168 killed and wounded. Union losses included Major General Granger's orderly, killed while standing next to Granger holding the corps colors. As the attack stalled, the soldiers in the lead took cover and returned fire as best they could.

When nightfall arrived, the Union infantry immediately prepared the first line of entrenchments and protected them with gabions.¹²⁵ Using the protection of ridges in front of the Confederate lines, Carr's men quickly dug saps (zig-zag trenches used to get close to fortifications) to a new second parallel. As they dug, the field artillery continued to move their guns into more favorable positions.

Understandably, the commander of Spanish Fort's defenses, Brigadier General Gibson, grew more concerned by the hour. He was not yet desperate, but knew he needed immediate help to successfully defend his position. The messages archived in the *Official Records* verify that he became more strident and anxious as the battle unfolded. Surprisingly, one of the biggest deficiencies on the eastern shore was the simplest of weapons: spades and pick axes. Requesting more aid from Liddell at Fort Blakeley, Gibson pleaded: "We require more tools. . . . Enemy has established himself in heavy force from the extreme left to the right, has heavy batteries along his whole line. The works are not complete on the left."¹²⁶

By 28 March, Canby could have attacked Spanish Fort as soon as he had enough forces, but his instincts kept him from ordering a full-fledged attack. First, and most important, he did not know the quality of the defenses inside Spanish Fort. Some of the works were "quite elaborate" and the veterans behind them very experienced. When Canby asked one of his division commanders, Brig. Gen. John McArthur, whether he could carry the works, McArthur's replied: "My division will go in there if ordered, but if the rebels stay by their guns, it will cost the lives of half my men."¹²⁷

Given McArthur's reply, the rush to contact was set aside for the moment. In Canby's mind, it was prudent to have at least one line of works dug in the event the enemy repulsed an assault. Furthermore, as Brig. Gen. C.C. Andrews points out in his 1866 memoir of the campaign, there was no pressing need to rush the attack. Canby acknowledged that he did not have the supplies necessary to sustain an assault and recognized that he had reached a culminating point in the campaign. The wise move was to shorten his land LOC and resupply his forces before he ordered any further offensive efforts.¹²⁸ Thus, he closed the supply base at the Fish River and moved his depot, under naval protection, to Starke's Landing. While the Confederates at Spanish Fort were dependent on tenuous supply lines threatened by land and naval gunfire, Canby had a robust line of communication unencumbered by Confederate land or naval forces. [Teaching Point: culminating point and sequencing]

As Canby waited on sustainment for his force, his soldiers continued to improve their positions with gabions and fascines to strengthen their earthworks.¹²⁹ Union artillerymen placed their field artillery into protected positions. Commanders and engineers conducted extensive reconnaissance to locate new positions for the siege artillery that was coming.

When the sun set on the 28th, XVI Corps troops had siege lines within 200 yards of the Confederates. The lines around Spanish Fort began to stabilize, but the Confederates continued to harass the Federals with artillery fire and small unit raids. Both sides continued to improve their positions.

29–30 March 1865: From the 29th through the 30th, small arms and artillery fire caused light casualties on both sides. Canby's sustainment efforts at Starke's Landing were beginning to show promise, and he was now ready to land Totten's Siege Artillery and move it into position.

However, soldiers on both sides were discovering that the lines were not necessarily as developed as they expected. On the evening of 29 March, Capt. L.K. Myers (29th Iowa), was the designated "Officer of the Day" in the Union forward trenches. Myers was leading men from his own company forward to resupply the front lines with ammunition. Unfortunately, Myers and his small detail of eight men got lost and encountered a larger Confederate patrol of one officer and twelve armed men. Since they did not recognize each other in the darkness, a polite conversation ensued between the officers: "Do you know where you are; do you belong to?" said the Confederate. "Of course we belong to you; ain't you Confederate soldiers?" Myers responded.¹³⁰ Myers then said that his patrol was bringing ammunition to Spanish Fort, had gotten lost, and needed help getting back into the lines. Both parties now proceeded into Red Fort. Captain Myers's story continued:

I had feared that some of my boys would run and the rest of us would be fired on, but they all stood quiet, trusting me to manage affairs. . . . We had only gone a few steps when one of the rebs . . . said, "Hold on, these are not our men." The Confederate officer then became alarmed and sang out, "Retreat!" Most of the Confederate patrol discharged their guns at me before running. The balls passed close on both sides of me. I called out, "Fire on them, boys, fire on them!"

[I] was about to run on to their [Confederate] advance sentinel . . . who raised and fired, when I was within two or three feet of the muzzle of his gun. [He] hit me in the right hip, the ball hitting the bone, glancing round, and coming out about five inches from where it went in. . . . I fell beside him, and as he turned to run, I gave him the two remaining shots from my revolver; he fell within a few steps of me and lay quiet.¹³¹

Despite his wound, Myers managed to crawl back to his lines that night.

The next morning Major General Maury visited Spanish Fort. He decided to withdraw the youngsters of Thomas's Reserve Brigade on Gibson's left flank and moved Brig. Gen. James T. Holtzclaw's Alabama Brigade and Ector's Brigade (under Col. David Coleman while Ector recovered after losing a leg at the Battle of Atlanta) from Blakeley to replace them.¹³² Holtzclaw's Brigade and Ector's Brigade then boarded steamers and under the cover of darkness moved to Spanish Fort the night of 30 March. They relieved Thomas's Brigade, which then boarded the transports and repositioned to Fort Blakeley.¹³³ Gibson now had three brigades at Spanish Fort: Ector on the left, Holtzclaw in the center, and Gibson's Brigade on the right for a total of 2,800 men. Liddell now had two brigades defending Fort Blakeley: Thomas's Brigade of Alabama Reserves and Sears's Brigade of Mississippi Infantry commanded by Col. Thomas Adair.

As the Union surrounded Spanish Fort and Steele's Column approached Fort Blakeley from the northeast, Maury had ordered a shuffle of frontline units at the last minute. Such an action on the eve of battle gravely concerned Liddell. In a 30 March message to Gibson at Spanish Fort, Liddell wrote:

General Maury has again ordered me to relieve the reserve brigade. I send Holtzclaw's Brigade to relieve them, and you must have the reserves ready to be placed on the boat as soon as Holtzclaw arrives. This must be done under cover of darkness without fail.¹³⁴

On the Union side, Canby ordered Veatch to pull out from Spanish Fort and escort a badly needed supply train north to rendezvous with Steele's Column out of Stockton. Marshall's brigade of McArthur's division (XVI Corps) then occupied the line vacated by Veatch's division.¹³⁵

Union Artillery against Spanish Fort: As with the Siege of Fort Morgan in August 1864, Union forces enjoyed a large advantage in artillery on the eastern shore. Every division in Canby's main body, except for Garrard's, had assigned or attached field artillery. Together, Canby had thirty-seven field guns.

Canby also had Brig. Gen. James Totten's Siege Train, which was waiting at Fort Gaines. It was composed of seven companies of the 1st Indiana Heavy Artillery (mortars or siege guns) and the 18th Battery, New York Light Artillery (20-pound Parrotts). All told, Totten would deploy fifty-nine siege guns and mortars around Spanish Fort and Fort Blakeley.¹³⁶

The US Navy also contributed some cannon for the siege, as it had the year before at Fort Morgan. After the USS *Milwaukee* sank, its captain,

Lt. Cmdr. James Gillis, formed a naval battery of 3x30-pound Parrott rifles manned by Navy crews. At Canby's request, the Navy also located a carriage for a 100-pound Parrott rifle and added this to the Navy Battery at Spanish Fort.

While Union soldiers improved their positions, the combined enfilading fires of Batteries Huger and Tracy and available gunboats continued to threaten the right flank of XVI Corps and cause numerous casualties.¹³⁷ Canby's solution was to place a section of Whitworth rifles and eight 30-pound Parrots from the First Indiana Heavy Artillery on the eastern bluffs of Bay Minette (Canby later placed another section on the northern bluffs of the bay). The guns at Bay Minette enjoyed remarkable success; even the Confederates admired the Union's effectiveness.¹³⁸

The Union guns around Bay Minette also harassed Confederate transports and gunboats as they approached the wharf at Spanish Fort: "Enemy opens a Parrott battery across Bay Minette on Batteries Huger and Tracy, and on boats attempting to land at those points, thus stopping our steamboat communications with these points today."¹³⁹ In coordination with the naval gunfire from Thatcher's gunboats, the operational effect of this joint action was to interfere with Confederate communications between Spanish Fort, the batteries, Fort Blakeley, and their logistics base in Mobile. [Teaching Point: sea denial]

31 March–4 April 1865: Totten's Siege Train started moving from Fort Gaines on 30 March.¹⁴⁰ Canby's priority was to get the heavy artillery into position and move the lines forward. Union infantrymen continued digging saps to move their lines forward while Battery B and C, 1st Indiana Heavy Artillery, arrived with 8-inch mortars. In the meantime, the sharpshooters and field artillery continued to cause Confederate casualties with every foot of progress in the Union lines.

Liddell was completely aware of the enemy situation. He had been receiving regular intelligence reports of Canby's progress, including Steele's large force approaching from the east. On 1 April, Liddell wrote Maury in Mobile: "In view of the fact that Steele with his negroes may assault our works please send me 150 small arms to place in the hands of all surplus artillerists [sic]."¹⁴¹

By 4 April, the Confederates inside Spanish Fort were looking more and more beleaguered. The Confederates concentrated on improving their positions and repairing damage caused by the increasing volume of artillery and mortar fire. Federal troops had completed the second parallel and were working on the third.

As a signal that their artillery was in place and preparing for the final assault, the Union opened fire from 1700 to 1900 that day. The guns fired a round every three minutes from their thirty-eight siege guns and thirty-seven field pieces. Mack's Battery of the 18th New York (Totten's Siege Trains) alone fired 360 rounds while absorbing 17 rounds from Confederate guns throughout the day.¹⁴² Despite the volume of artillery, though, casualties were light on both sides—especially for the Confederates, who had greatly improved their bombproofs (bomb shelters). Nevertheless, Gibson and his commanders realized they were in a precarious position.

5–7 April 1865: As Union forces invested the Confederate fortifications, communicating with Mobile became more difficult. Both fortifications were dependent on naval transport for resupply; but now because of the Union artillery in Bay Minette and the Union Navy, the Confederate navy could no longer resupply Spanish Fort directly. Battery Tracy became a transshipment point; under cover of darkness, the transports transferred supplies offloaded at Battery Tracy into rowboats for delivery to Spanish Fort. The result was predictable. Artillery stocks were so depleted that batteries could only requisition what they needed for the next day. Moreover, commanders directed that batteries restrain from “answering Union artillery.” They could only fire if they saw the enemy.

The situation was becoming quite desperate for the Confederates. They continued to lay land torpedoes/mines to their front when they were able, but morale was plummeting. Union troops moved their lines forward and continued to fire into the fort. Union heavy artillery was causing mounting damage to the Confederate positions and their artillery. The soldiers in Spanish Fort could count on only one small relief, the small boats that snuck into Spanish Fort at night to deliver supplies and evacuate the wounded.¹⁴³

Recognizing his plight, Gibson sent a 5 April message to Maury in Mobile just four days before the final evacuation:

Enemy sweeps my flanks with heavy batteries, and presses on all points. Can't you send me a little craft under my orders [sic]. My line is extended now to the water and in it. My men are worked [attacked] all the time, and I don't believe I can possibly do the work necessary in the dense flats on the flanks. Can't you look at the situation tomorrow?¹⁴⁴

Gibson knew he was outnumbered and would have great difficulty holding if attacked:

I really can't spare any more men for launches [for resupply]. My men are wider apart [spread out] than they ever were under Gen-

Confederate Strength Spanish Fort 7 April 1865

Gibson's Brigade	674
Ector's Brigade	659
Holtzclaw's Brigade	988
Artillerymen	506
Total Personnel	2,827
Number of Small Arms	2,047

Figure 36. Confederate Strength—Spanish Fort, 7 April 1865.
(Created by Army University Press.)

erals Johnston and Hood. The works not so well managed nor so strong, and the enemy in larger force, more active, and closer. Can't you send me the detachments belonging to Ector and Holtzclaw?¹⁴⁵

Then, in an act of desperation, Gibson resorted to asking for black laborers that he could train into soldiers: "Can't you send a force of negroes, with axes. I can make good soldiers of the negroes."¹⁴⁶ By 7 April, Confederate strength was down to 2,000.¹⁴⁷

As Gibson was telegraphing Maury regarding the desperate situation, his forces began constructing a wooden treadway (or footway) on the east side of the river through the swamp to a point opposite Battery Tracy. In the absence of reinforcements from Mobile—which Maury could ill afford—or a robust naval force that could have protected his line of communication, Gibson knew it was only a matter of time before Spanish Fort fell. The treadway was originally intended to make the resupply of Spanish Fort more efficient, but Gibson was beginning to formulate a retrograde plan if needed.

In contrast to Gibson's anxiety, Canby was using his time well; the investment of both forts was measured and deliberate. In twelve days, Canby had maneuvered 3½ divisions, 37 field pieces, and 53 siege guns in well-built lines around Spanish Fort. One Union artillery officer noted

how different the siege works were going up at Spanish Fort compared to other campaigns:

The siege progresses splendidly. How different from ____ [sic]. There it was Charge! Charge! Charge! Here a little more good sense is shown, and a regard had for human life; and the end approaches much more rapidly.¹⁴⁸

Analysis

1. The obstructions across the fields of Spanish Fort and Fort Blakeley were intended to prevent a mass assault into the fortifications. To what end did Major General Canby use these obstructions to his advantage?

- The obstructions also provided protection from Confederate sharpshooters as Union soldiers dug parallels and sap lines.

2. Evaluate the interaction between Canby and Thatcher to this point. Are there any problems that could be solved together?

3. Evaluate the status of Steele's "Column from Pensacola." Are you concerned about his location and ability to come to Canby's aid in a timely manner? Is Steele still supporting the decisive operation?

Let's move farther down the Union lines to discuss the Union operations against Spanish Fort on 8 and 9 April.

Stand 10: The Union Attack on 8 April 1865 (13th Day of the Siege)

Note: Depending on the growth of the underbrush, you might need to stay in the cul-de-sac to complete this stand.

Directions: See the map on page 146. From the cul-de-sac, follow the trail south about twenty meters until you come to a burned-out display frame. Follow the path to the west approximately twenty meters until you come to a pair of mortar pits. The sap line runs south from there into the creek bed below. The Staff Ride Team does not recommend continuing farther south past the creek bed. The property lines are not defined up the hill.

Orientation: You are standing on the far right of the Union trench lines at Fort McDermott. Bay Minette is 400 yards to your northwest. Company A, 6th Michigan Heavy Artillery manned the position where you stand with 8-inch Mortars. The 8th Iowa started their attack from behind this location. The Confederate lines are across the creek bed on the ridgeline above.

Description: By 8 April, the constant Union bombardment had Gibson and his subordinate commanders seriously considering an evacuation of Spanish Fort. They were trying to hold on, but they knew they had a serious deficiency in their incomplete defenses as the northern end intersected the southern shoreline of Bay Minette.

At this place in the line, Brig. Gen. Eugene A. Carr's 3rd Division was arrayed opposite Ector's Brigade (commanded by Col. David Coleman). The fact that Ector's Brigade was still online at Spanish Fort is a bit of historical curiosity. On 1 April, Maury—claiming he was “anticipating pressure on Fort Blakeley”—apparently directed that Ector's Brigade be moved from Spanish Fort *back* to Fort Blakeley. Gibson pleaded with Maury to keep Ector's Brigade for a few more days but lost the argument. As the Union was successfully investing Spanish Fort, Gibson felt that he would be unable to hold his position. Liddell passed on Gibson's 1 April message to General Maury:

The following dispatch just received from General Gibson: “In the opinion of Gen. Holtzclaw and myself, the withdrawal of Ector's Brigade renders Spanish Fort untenable, with the small force, left against the large force, now pressing at every point.” Please decide this matter at once; the boats have gone to Spanish Fort.¹⁴⁹

Still, Maury was adamant, “I decided this matter.” The *Official Records* are very clear on this point, yet surprisingly, there is no evidence to indicate why Ector's Brigade remained at Spanish Fort through 8 April.

Gibson was probably successful in his argument; by the 5th, all Confederate commanders would have understood the difficulty of transferring a brigade force by water to Fort Blakeley. Nonetheless, Ector's Brigade of Texans never moved to Fort Blakeley, and later absorbed the brunt of the attack by the 8th Iowa on the evening of 8 April.¹⁵⁰

In the meantime, Canby decided that he was ready to begin a general assault the next morning. Both corps had dug saps within 200 yards of the Confederate lines. His lodgment at Starke's Landing was established and the sustainment of Union forces was proceeding smoothly. His siege and field artillery had been pounding Spanish Fort for several days. Steele's Column had dug in at Fort Blakeley, which served to "fix" Confederate forces there and prevent them from coming to Gibson's aid at Spanish Fort. [Teaching Point: main effort/supporting effort]

From 1730 to 1930 on the 8th, the Union fired extensive preparatory fires in anticipation of the assault the next morning. Every Union gun in range—fifty-three total—fired their sustained rate into Spanish Fort, including the 100-pound Parrott on the *Octorara* and the six guns positioned around Bay Minette.¹⁵¹

Maj. Gen. Eugene Carr, on the Union right flank, commanded three infantry brigades and an artillery brigade. In preparation for the main attack, he ordered his 3rd Brigade commander, Col. James Geddes, to send two companies up the far right to a ridge in front of the Confederate positions. Carr had personally picked this objective; it held a commanding position for a battery and supporting infantry that would prove invaluable the following morning.¹⁵²

For this preliminary attack, Geddes selected his old unit, the veteran 8th Iowa. The 8th Iowa had fought valiantly at the Hornet's Nest at Shiloh, but the Confederates had captured them. Once paroled and exchanged, they rejoined the army and fought at Vicksburg for Ulysses S. Grant as well as in the Red River Campaign for Nathaniel Banks. Now they were at Spanish Fort and about to take part in one of the last great assaults of the war.

The 8th Iowa's commander, Lt. Col. William Bell, selected Companies A and G for the mission. At 1810 in the middle of the preliminary bombardment, the two companies climbed out of their entrenchments, crossed some marshy low ground covered with downed trees, and slowly made their way up to the Confederate positions at the top of the ridge. As a diversion, Carr had his 1st and 2nd Brigades yell a cheer to make the Confederates think the entire division was advancing. Acting as skirmishers, Company A moved forward, but progress was slow. The companies

had trouble negotiating the swampy terrain while under fire from Ector's Brigade above them.¹⁵³

As both companies were bogged down, Bell ordered his H Company to their aid. Unfortunately, that made the situation worse—now three companies of the 8th were pinned down. At that point, fearing that his lead companies would be pushed back, or worse, annihilated, Bell ordered the entire regiment forward.¹⁵⁴ He hoped to extricate his three leading companies, but when the rest of the regiment arrived, Bell realized the whole regiment would be wiped out if it retreated. In a quandary between sitting still or retreating, Bell decided his only recourse was to continue the attack. [Teaching Point: risk/tactical leadership]

Bell and the 8th Iowa sprang up and over the breastworks, successfully engaging Ector's men in a terrific fight. The 8th planted its colors at the top of the breastworks so the Union artillery would not fire on them. Then Bell sent word of his success back to his brigade commander, hoping for more support.

After dark, Colonel Geddes succeeded in moving the rest of his Brigade forward (124th Illinois, 81st Illinois, and 108th Illinois) and formed a strong line within the Confederate fortifications. The 8th Iowa then climbed out of the works and maneuvered north and west around the right of the line as they prepared supporting fires for the expected enemy counterattack.¹⁵⁵

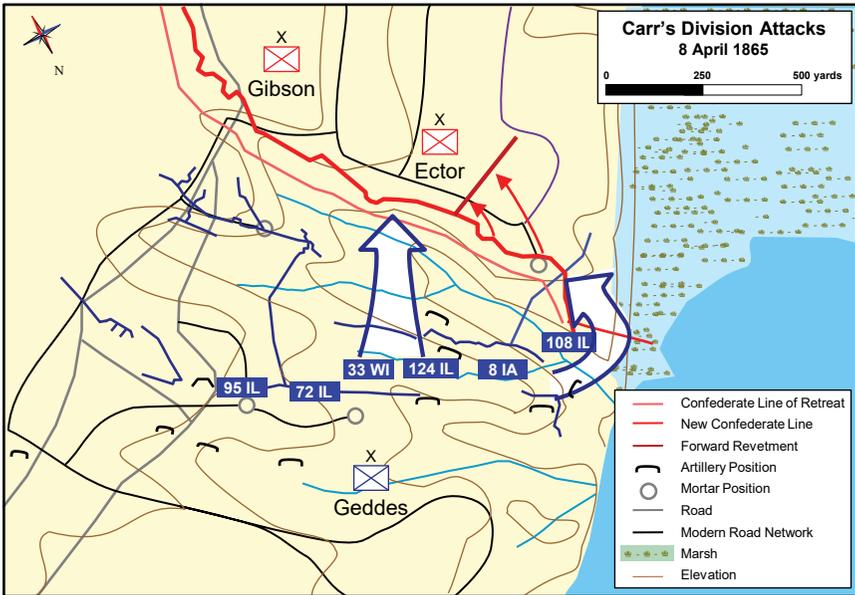
Clearly, the Confederate situation was getting worse by the minute. With his left turned, Gibson had no choice but to evacuate. Ector's Brigade supported that effort by counterattacking into the 8th Iowa to cover the retrograde operation. The Confederates attacked twice, but the Iowans repulsed them both times. The 8th continued to hold its tenuous position and captured approximately 300 yards of Confederate works, three stand of colors, and more than 300 prisoners.¹⁵⁶

Meanwhile, Colonel Geddes brought his brigade up to the crest of the fortifications and discovered there was no resistance to their front. He used his brigade to sweep down to the river only to discover the Confederates had successfully retreated from Spanish Fort.¹⁵⁷

Analysis

1. Evaluate Lieutenant Colonel Bell's tactical decision to commit his full regiment without orders on 8 April? What if he failed? [Teaching Point: initiative versus risk]

- This should elicit a discussion about risk and gambles in warfare and US Army doctrine.



Map 28. Carr's Division Attacks, 8 April 1865. (Created by Army University Press.)

Note about side trip opportunity: Feel free to explore the trench works here if you have time. If you continue to follow the trench down (it will lean toward the north) to the creek bed and cross over, you will come to another trench line. This is the location where the 8th Iowa started their attack. If you decide to wander, be cognizant of property lines.

Now board the bus and explore the Confederate lines at the top of the ridgeline. Notice how many property owners have preserved remnants of the battlefield. On the other hand, also notice what happens to battlefields and hallowed ground when commercial development takes over.

Stand 11: (Driving) Confederate Lines

Directions: This is a moving stand conducted on the way to Stand 12. From the circle on Cora Slocomb Drive, reverse your direction toward General Canby Drive for 0.3 miles. Turn right onto General Canby Drive and drive about 350 feet. Turn right onto Southern Way and go 0.4 miles. Turn right onto Yankee Trove for 0.1 miles. Turn right onto Artillery Range Street and go 0.2 mile. Turn right onto Watch Tower Street.



Map 29. Directions for Stand 11. (Created by Army University Press.)

Observe the interpretive signs for Ector's Brigade along Artillery Range Street. This area marks the advance of the Confederate counter-attack against the 8th Iowa. Note other interpretive signs as you drive through the neighborhoods.

As you drive from Cora Slocomb Drive to Artillery Range Street, you will cross the Union lines as they faced west and southwest. You may be able to see a zig-zag trench at the end of the Confederate trenches on the east side of the cul-de-sac.

From the cul-de-sac, continue to the Five Rivers Delta Resource Center. Directions are in Stand 12.

Orientation: Same as Stands 9 and 10.

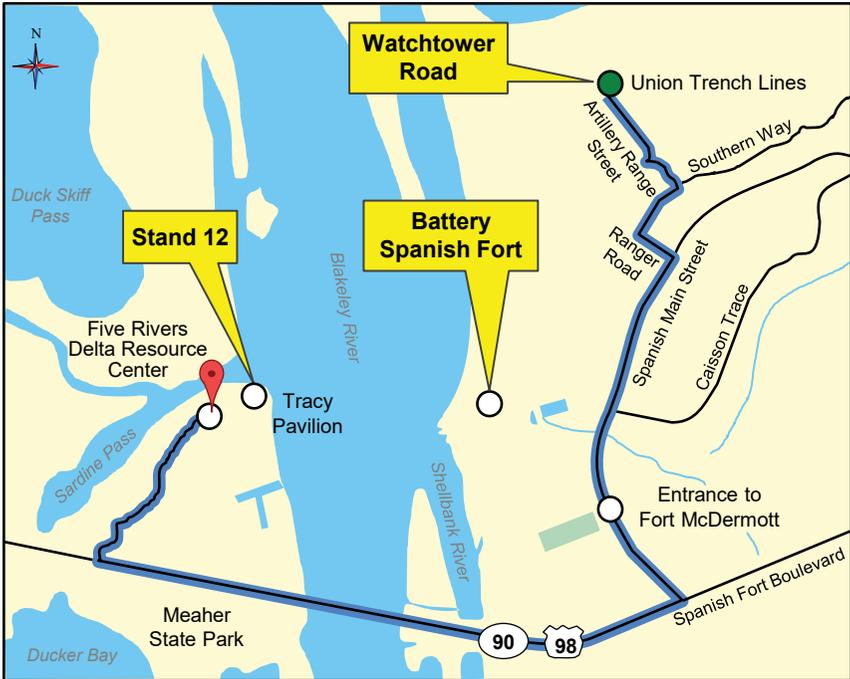
Description: Same as Stand 10.

Analysis: None for this Stand

Note: Now continue across the Blakeley River and explore Gibson's Retrograde Operation and Union naval operations in 1865.

Stand 12: Retrograde Ops and Naval Support to Army Operations

Directions: You will drive from Watchtower Road to the picnic shelters at Five Rivers Delta Resource Center. From 2 Watchtower Road, use Artillery Range Street to Southern Way, then Ranger Road to Spanish Main. Head west 1.1 miles on Spanish Fort Boulevard toward Westminster Drive. Continue onto Battleship Parkway and drive 1 mile. Turn right to enter the Five Rivers Delta Resource Center on Five Rivers Boulevard. Turn left to stay on Five Rivers Boulevard and proceed 0.4 miles to 30841 Five Rivers Boulevard, Spanish Fort, Alabama 36527. Park across from the Five Rivers Delta Center and walk east to the point on the Blakeley River. There are two picnic verandas there: Tracy and Huger. Contact the Five Rivers Staff to reserve a picnic area on the Blakeley River: 251-625-0814 or <http://www.outdooralabama.com/5-rivers-alabamas-delta-resource-center>.



Map 30. Directions to Stand 12. (Created by Army University Press.)

Orientation: You are standing on the east side of Five Rivers Delta Resource Center. Battery Huger was located on the north tip of this island 1.5 miles to the north. Battery Tracy would have been another 2,500 feet farther north across the Apalachee River; 4 to 5 miles north-northeast is the center of the Confederate lines at Fort Blakeley State Park.

The town of Spanish Fort is across the river to your east; 3,000 feet east of your position across the river near the water's edge is the Spanish Fort Battery, the anchor for the defenses at that fortification. Starke's Landing, the new Union logistics base, is 5 to 6 miles to the south. The entrance to the bay and Fort Morgan is 31 miles to the southwest. Behind you and 7 miles to your west is your operational objective: Mobile, Alabama.



Map 31. Stand 12 and Significant Points on the Blakeley River.
(Created by Army University Press.)

Description

Retrograde Operations from Spanish Fort: Maury had committed to sending boats to Battery Tracy if Gibson needed them. Up to this point, Gibson had kept telegraph contact with Maury in Mobile. After the 8th Iowa turned his lines, Gibson had no choice but to order an evacuation.

Gibson's soldiers had already built a wooden "treadway" across the marshes and swamps to help resupply the fort. Now, the Confederates

withdrew down the same treadway to safety. To reduce the noise, the men removed their shoes and socks. Once they reached a point opposite Battery Tracy, they boarded small boats to cross the river. From there, they boarded transports and moved to Mobile.¹⁵⁸

The treadway was not a panacea, however. It was only eighteen to twenty-four inches wide; at the end abeam Battery Tracy, the only transportation across the river was by rowboat. A bottleneck on the treadway inevitably occurred. Gibson's chief engineer, Col. Samuel Lockett, suggested he relieve the backup by leading 1,000 men through the swamp to Fort Blakeley. The remaining soldiers and officers (approximately 1,000, including Gibson) made it to Battery Tracy in the dead of night, transferred to transports, and moved to Mobile to take part in its defense.

For those continuing to Fort Blakeley, the trip was fraught with perils: "The route lay through mud and water, through marsh grass, canebrakes, or thick underbrush, and over bayous. The men often sank down in the swamps, and sometimes had to be pulled out by their comrades."¹⁵⁹ Surprisingly, those who made Fort Blakeley did not stay to aid in its defense, but were transported to Mobile the following morning.

The Union lost 52 killed, 575 wounded, and 30 missing at Spanish Fort. The Confederates did not report actual losses, but reasonable assessments put their losses at 500 killed and wounded. Five hundred Confederates surrendered along with 20 field guns and 27 heavy cannon, most of which were spiked or the carriages rendered unserviceable.¹⁶⁰

Under the circumstances, Gibson's defense of Spanish Fort could be considered exemplary. With only 3,000 men, Gibson resisted ten times that much in infantry and heavy artillery. Then after thirteen days, all while facing a land and waterborne threat, he successfully evacuated most of his force—including all of his sick and wounded.¹⁶¹ One historian's criticism of Canby's generalship could also be considered a compliment to Gibson's tenacity and leadership:

Canby had not considered the resolve of General Gibson to hold out at all costs, fight his guns beyond the point of hope, maintain a high level of morale under constant bombardment, and breathe life into the harried Confederate forces defending Mobile by holding onto the fort with exemplary courage.¹⁶²

Naval Support of the 1865 Campaign: The struggle at Spanish Fort, and its successful evacuation, raises interesting questions about the effectiveness of Canby's naval support. It also illustrates the importance of a

collective understanding of joint capabilities between commanders. On Day 1, we discussed the synchronization of naval gunfire support with the maneuver of land forces in Farragut's Campaign. In the 1865 Campaign for Mobile, however, we discover that Rear Admiral Thatcher's Squadron did not have the freedom of action in the Blakeley River that Farragut had in the South Bay the year before.

Confederate Naval Order of Battle: Union naval operations in the Blakeley River were a struggle for freedom of action. The Union out-gunned, even overwhelmed, the Confederacy in gunboats yet could not operate freely around Spanish Fort. In point of fact, more Confederate boats were damaged by land artillery than by Union gunboats in the 1865 Campaign. This clear dichotomy was because the Confederacy compensated for its deficiencies in gunboats by improving the technical and tactical effects of its water obstacles and torpedoes. These simple improvements in asymmetric warfare enabled the Confederate Navy to hold Thatcher's squadron in the bay for more than eight days.

Nonetheless, while Confederate army commanders welcomed holding Thatcher back, they were very disappointed with the naval fire support they received. Gibson's messages to Maury and Liddell pleaded for more naval gunfire support on his northern flank, support that Commodore Ebenezer Farrand, commander of Confederate naval forces in the North Bay, simply could not provide.¹⁶³ In comparison to Thatcher's Flotilla, Farrand's forces were extremely limited—only four confederate gunboats to Thatcher's six ironclads and paddlewheels in the North Bay.¹⁶⁴ More importantly, Farrand's boats suffered from serious technical deficiencies. Two, the CSS *Huntsville* and *Tuscaloosa*, were so underpowered and slow they were converted into floating batteries. Because of the ship's poor condition, Farrand had the CSS *Baltic* dismantled and its armor transferred to the CSS *Nashville*.¹⁶⁵ This left only two operational gunboats: the *Nash-*

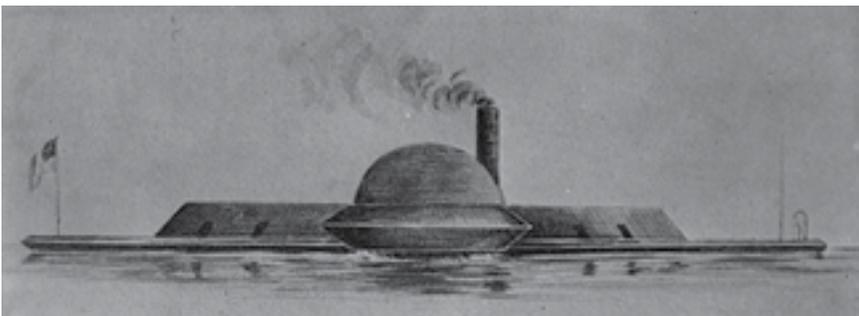


Figure 37. CSS *Nashville*. (Courtesy of Naval History and Heritage Command.)

ville, armed with three 7-inch Brooke rifles and one 24-pounder and the six-gun CSS *Morgan*, the survivor of the 1864 Battle of Mobile Bay.

Unfortunately, even this tiny force could give very little support to the defenders of Spanish Fort. While they could lie protected behind the torpedo obstacles in the Blakeley River, these hapless vessels were still vulnerable to the long-range guns of the USS *Octorara* and a stout artillery battery on the Union's northern flank.¹⁶⁶

Notably, the effectiveness of the torpedo against Union riverine operations was dramatic. Recall that in the 1864 Battle of Mobile Bay, Farragut lost only one combatant, the USS *Tecumseh*, to torpedoes. With so few losses in 1864, the relevant question might be why Thatcher could not operate freely in the Blakeley River. Farragut's 1864 Campaign suggests the answer: the torpedo was an inexpensive defensive weapon yet its ability to sink Union vessels, even ironclads, was a threat that Thatcher was unwilling to ignore. More importantly unlike 1864, torpedoes in the confined waters of the Blakeley River accentuated their effects. By 1865, the Confederates had also improved on their torpedo design, so much so that the mere threat of a torpedo held Thatcher's squadron at the mouth of the Blakeley like pent-up bulls waiting to be unleashed into the ring. The events of 28 March proved that Thatcher's concerns were spot-on.

Union Naval Operations and Order of Battle: Acting Rear Adm. Henry K. Thatcher took command of the West Gulf Blockading Squadron in February 1865 after Farragut returned to Washington. Like Farragut, Thatcher's mission was to seize Galveston, Texas, and Mobile. Galveston did not capitulate until the surrender of the Army of the Trans-Mississippi on 2 June 1865, nearly two months after Lee's surrender at Appomattox. With regard to future operations against Mobile, however, he was told to "put yourself in communication with Major General Canby."¹⁶⁷

For his part, Canby had specific operational tasks he needed from Thatcher and his squadron: intelligence, transportation, logistics support, operational communications, naval gunfire support, and river control operations. To accomplish these tasks, Thatcher had a respectable squadron of combatants available to him.

As with all "joint operations" between the army and the navy in the Civil War, the relationships between senior army and naval commanders were what ensured operational success. Ulysses S. Grant and David Porter had that relationship at Vicksburg in 1863; Rear Admiral Farragut and Major General Granger also had an excellent working relationship in the 1864 Campaign for Mobile Bay. It should be no surprise that Canby

and Thatcher had the same quality relationship, focused on the mission and defeating the Confederates. Many aspects of their relationship mimic operational principles in the Army's Mission Command doctrine and US Joint doctrine.

Signals and communications was one of the first, and possibly the most important, aspect of this cooperation. As with Farragut and Granger, Canby and Thatcher communicated by messenger and semaphore flag station along the eastern shoreline. The two commanders also exchanged liaison officers and intelligence. The *Official Records* are ripe with shared intelligence reports between the two commanders.

Perhaps the best examples of these relationships can be seen through the lens of their communications. American commanders of the nineteenth century operated with small staffs and had to cooperate, for the most part, by the clarity and persuasive nature of their messages. For example, Canby sent a 16 March message to the newly arrived Thatcher asking for as much naval support as he could get to support his upcoming campaign across the bay: "Will you do me the favor to give such aid as you can from your squadron, and I shall be pleased to receive any suggestions that you think proper to make in relation to the cooperation of the two arms." The next day, Thatcher replied: "I shall be with you all speed, your communication having been received, 11 PM. The fleet will cooperate as you desire."¹⁶⁸ The next day, Steele's XVI Corps sailed into Weeks Bay from Fort Gaines.

Union Naval Gunfire Support: At Canby's request, Thatcher also agreed to use his boats to support Union ground forces along the eastern shore. There were, however, several technical and tactical challenges that Thatcher had to overcome. The first was the problem of hydrography in and around the entrance to the Blakeley River. The currents at the mouth of the river tended to shift the sand bars and alter the depth. Since the river only averaged 8 feet deep at its mouth, the number of Union vessels that could pass the mouth and operate freely was limited.

In addition to the natural barriers, the Confederates laid tactical obstacles in the waters around Spanish Fort. There were nets, piles, strings of torpedoes anchored to the shores, and floating torpedoes that denied freedom of maneuver to Union gunboats. The natural obstacles were known; the manmade obstructions and torpedoes, however, proved to be a tougher nut to crack—particularly on 28 March.

Through 27 March, Thatcher had successfully given close support to Canby's ground forces as they moved up the east side of Mobile Bay. On 28 March, hoping to support Canby as he was investing Spanish Fort,

Union Naval Order of Battle, 1865 (Ironclads and Gunboats)			
Ship	Weapons	Tons	Notes
<i>Kickapoo</i>	4 x 11-inch Smoothbore	970	Milwaukee Class Ironclad Lt. Cmdr. M.P. Jones
<i>Milwaukee</i>	4 x 11-inch Smoothbore	970	Milwaukee Class Ironclad Lt. Cmdr. J.H. Gillis
<i>Winnebago</i>	4 x 11-inch Smoothbore	970	Milwaukee Class Ironclad Lt. Cmdr. W.A. Kirkland
<i>Chickasaw</i>	4 x 11-inch Smoothbore	970	Milwaukee Class Ironclad Lt. Cmdr. G.H. Perkins
<i>Octorara</i>	2 x 32-pounder 4 x 24-pounder 100-pounder Parrott	829	Sidewheel Gunboat Lt. Cmdr. W.W. Low
<i>Genesee</i>	100-pounder Rifle 10-inch Smoothbore 4 x 9-inch Smoothbore 2 x 24-pounder Howitzer	803	Sidewheel Gunboat Lt. Cmdr. J. Irwin
Total	31		

Figure 38. Union Naval Order of Battle 1865, Ironclads and Gunboats.
(Created by Army University Press.)

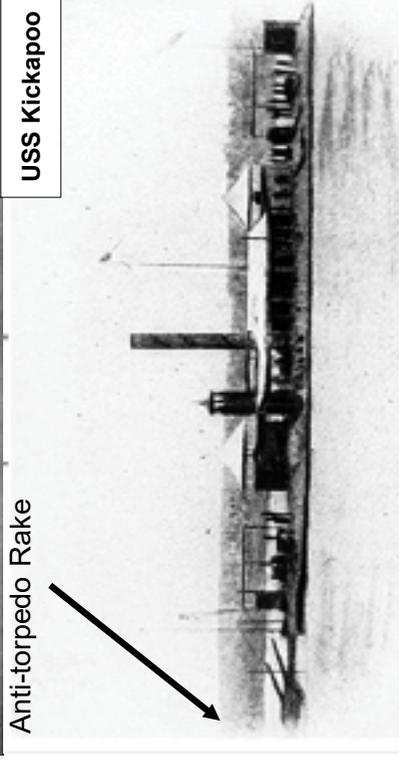
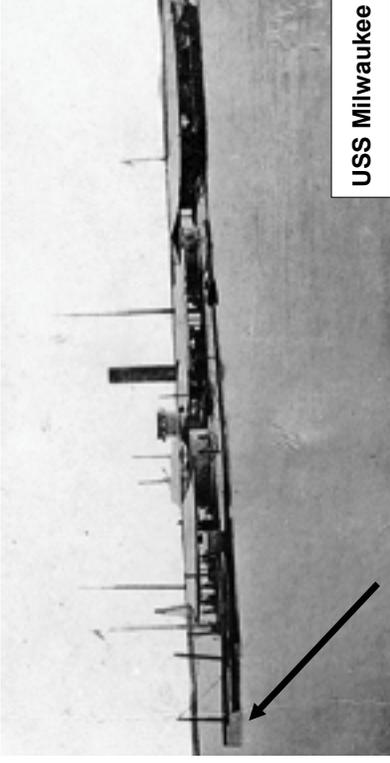
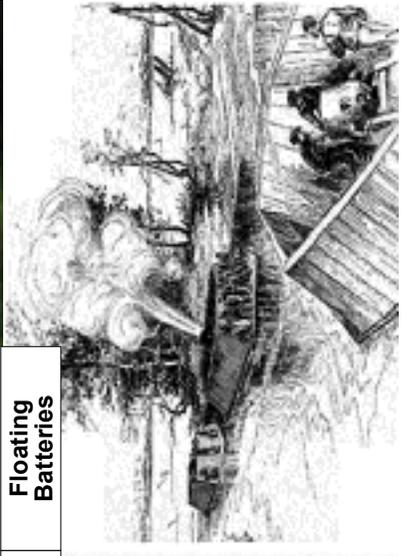
Thatcher sent the ironclads *Kickapoo*, *Milwaukee*, *Winnebago*, and *Chickasaw* with the gunboats *Octorara* and *Genesee* across the sandbar at the mouth of the Blakeley River.

Unfortunately, this movement started a chain reaction of events that would seriously degrade the naval gunfire support Canby desperately needed. The *Octorara* became grounded and burst a steam pipe in the starboard boiler while trying to extract itself off the bar.¹⁶⁹ The *Winnebago* and the *Chickasaw* moved upriver and tried to fire on Spanish Fort but were not effective. The boats could get close enough, but their guns were limited to an elevation of only twenty degrees—insufficient to overcome the upper reaches of Spanish Fort on the bluff (a similar problem to Flag Officer David Porter’s at Vicksburg). They did, however, drive off a Confederate supply transport heading to Spanish Fort.¹⁷⁰

Unfortunately, as Thatcher’s boats floated back toward the bay, the *Milwaukee* hit a mine in shallow water and quickly went down. She sank



USS Milwaukee	USS Octorara
USS Kickapoo	Floating Batteries



Anti-torpedo Rake

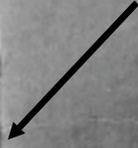


Figure 39. Union Naval Gunfire Support. (Courtesy of Naval History and Heritage Museum..)

in waters that had just been “swept” for torpedoes, proving to Thatcher that this underwater menace would be a constant danger.

Such was the case on the 29th, when four of Thatcher’s vessels anchored inside the Blakeley Bar. Intense winds blew the *Winnebago* close to the *Osage*. As the *Osage* repositioned out of the *Winnebago*’s way, however, the ship hit a mine and sank, killing four sailors. The *Osage*’s captain, Lt. Cmdr. William Gamble, believed a submerged torpedo struck the ship in waters that had already been swept.

Then on 1 April, the six-gun tin-clad USS *Rodolph*—moving to the wreck of the *Milwaukee* in the hopes of raising her—also hit a mine and sank.¹⁷¹ In the space of three days, Thatcher lost three gunboats, all to torpedoes.¹⁷² These incidents essentially set the tone for the struggle for freedom of action on the Blakeley: the Union could not use it because of Confederate torpedoes, and the Confederates could not use the river to resupply Spanish Fort because of the Union’s mastery of naval gunnery.

In the meantime, the *Octorara* had repaired its boiler and steamed back just inside the sandbar. Fully armed, including an additional 100-pounder Parrot, the *Octorara* was able to fire on Spanish Fort on the afternoon of 30 March. Firing into Spanish Fort, however, was not as easy as it sounded. The Blakeley sandbar began abeam Starke’s Landing, or about 5,700 yards from Spanish Fort. This was as close as the *Octorara*’s captain (Lt. Cmdr. William Low) could get between the Blakeley Bar and the torpedo threat. The distance ensured the *Octorara* was safe, but it also caused another problem: Low had no idea where his rounds were landing—they could be overshooting into Canby’s lines and creating an unacceptable fratricide risk.¹⁷³ Also fearing fratricide, Canby provided Thatcher with maps and drawings of his positions so the gunboats could fire without fear.¹⁷⁴ The *Octorara* was the only ship to fire on Spanish Fort until 7 April, when Thatcher and his captains believed the river to be finally clear of torpedoes.

Much to Canby’s chagrin, it was not Confederate artillery but torpedoes that took a toll on Thatcher’s squadron and prevented effective naval gunfire support. The Confederates had planted an effective minefield; while Thatcher thought he had cleared it, he was now convinced that the Confederates were floating more mines downriver. He would not only have to contend with shore-based gunfire from Spanish Fort and from the batteries on the west side of the river, but also with this unseen and very dangerous threat by the Confederates. For the moment, the Confederates

had effectively denied Thatcher freedom of action in the Blakeley River. [Teaching Point: freedom of action/maneuver]

Nevertheless, the eight losses (including two monitors) that Thatcher experienced on the Blakeley River demonstrated the risks he was willing to take to support Canby. Considering his losses, Thatcher had a difficult decision to make: should he seek freedom of action in the river by clearing the river? Or should he “damn the torpedoes,” throw caution to the wind, and sail upriver to support Canby’s ground forces? Thatcher’s priority was clearly to preserve a critical resource, his boats. The war was not over, and there still existed a follow-on mission from Grant to move upriver toward Selma and Montgomery. Of course, Canby’s preference was for Thatcher to sail upriver and support his land operation. [Teaching Point: risk versus force protection]

Thatcher, as a functioning naval component commander, thought it best to preserve his force and first reduce the mine threat. From 1–7 April, he used most of his small boats to clear the mines. Andrews describes the process:

[E]ach [boat] taking the end of a line, to the center of which were attached light weights, and small ropes in loops, so they might attach themselves to anything brought in contact with them up the bottom. The boats separated a short distance, and then pulled in parallel lines up or down the channel, dragging the line with its center up the bottom.¹⁷⁵

They also erected several protective nets across the Blakeley; the first was installed on 3 April. The nets not only prevented torpedoes from floating downriver; they also secured a position from which Thatcher could shell Spanish Fort. By the end of this operation, Thatcher’s minesweepers had cleared more than 150 torpedoes from the river.¹⁷⁶ [Teaching Point: mine-sweeping = freedom of action]

Naval Operations against Spanish Fort: In hindsight, while Thatcher’s boats offered limited naval gunfire support to Canby’s forces, his naval force still had significant operational effects on the campaign. For example, on 3 April, the *Octorara* fired and hit the transport ship CSS *Jefferson Davis* as it was about to dock at Spanish Fort. While the *Jefferson Davis* was only hit once, it turned immediately north to the safety of the waters around Fort Blakeley and the Tensaw River. After this incident, the Confederates never again tried to resupply Spanish Fort with large

transports. The Confederates had to resupply Spanish Fort and evacuate casualties using small boats to and from Battery Tracy.¹⁷⁷ [Teaching Point: denied freedom of action/riverine control]

The Union batteries on the shore of Bay Minette also contributed to this operational effect. Canby was totally mindful of the problems Thatcher was having on the Blakeley River:

I had anticipated that the investment of Spanish Fort by water would have been effected [sic] by the navy, but the shoal water and obstructions on Blakeley Bar prevented this. Every exertion was therefore made to secure the control of the Blakeley River by the army and complete the isolation of the fort.¹⁷⁸

Since the Navy was unable to sail up the Blakeley River beyond Spanish Fort, Canby positioned batteries of siege artillery around Bay Minette to suppress Batteries Huger and Tracy across the river. Canby also used these batteries to deny Confederate boats access to the river around Spanish Fort. Thus, these batteries could not only successfully range Battery Tracy but also threaten any transports or gunboats that waited at the Confederates' new transfer point for supplies and wounded. Canby had proved that the power of joint operations is in the synergy of complimentary weapons systems.

Brig. Gen. Randall Gibson also noted that the combined effects of Union naval cannon and heavy artillery around Bay Minette forced him to open the previously discussed "treadway" from Spanish Fort. He described "making a treadway to the rear of Battery Tracy for communication with the city, owing to the danger and difficulty of landing in steamers either by night or day at the wharf of Tracy."¹⁷⁹

An even better example of joint firepower against Confederate riverine operations occurred at Fort Blakeley. The Confederate gunboats had been harassing the northern end of the Union lines. In response, the Union successfully installed a hidden battery of four 30 pounders on the northern bluff overlooking the river. On 8 April, it made its appearance in dramatic fashion and drove off the Confederate gunboats. All the Confederate ships were damaged and retreated, never to venture up the Tensaw again.¹⁸⁰ [Teaching Point: army support of naval operations]

Analysis

1. Evaluate Gibson's defense of Spanish Fort. What were its pros and cons?

2. Spanish Fort was intended to protect Batteries Huger and Tracy. To what effect?

- Simply by placing batteries on the eastern and northern shores of Bay Minette, the Union effectively negated the purpose of Spanish Fort.

- For the Union, a more interesting option would have been for Union forces to bypass the eastern fortifications and march to the confluence of the Tombigbee and Alabama rivers. If they could accomplish this operational objective, then the argument would be that they could have invested Mobile from the east and north with naval and land forces.

3. If the Union's plan was to bypass the eastern fortifications and cross the upper delta to Mobile, what would have been its major disadvantage?

- Bypassing the forts would have rendered them immaterial, but the forts would still have protected the rivers from Union gunboats moving up river in support, gunboats which Canby needed. The Union would have extended their lines of communication without a commensurate logistics base available to them north of Fort Blakeley.

4. Evaluate the works at Spanish Fort on the part of the Confederates.

- The weakest sector of the Spanish Fort defenses was on their left where the works intersected the swamp. This is the point where the works were assaulted, where they were disconnected from other defenses, and where its occupants were captured in detail.¹⁸¹

5. The escape from Spanish Fort by Gibson's forces is an excellent example of retrograde operations. What key elements were present that made Gibson's evacuation of Spanish Fort successful? Could the Union have prevented the majority of the Confederates from escaping?

6. After 5 August 1864, the Union Navy had complete freedom of action/maneuver inside Mobile Bay. Yet, freedom of action was denied the US Navy around Mobile and the Blakeley River? Why, and what actions did the naval commander take to mitigate his risks?

7. What did Major General Canby and Rear Admiral Thatcher do to improve their cooperation in this joint operation?

- Exchanged liaison officers, shared information, and intelligence provided gunfire support to the other, as well as ensuring good signals and communication.

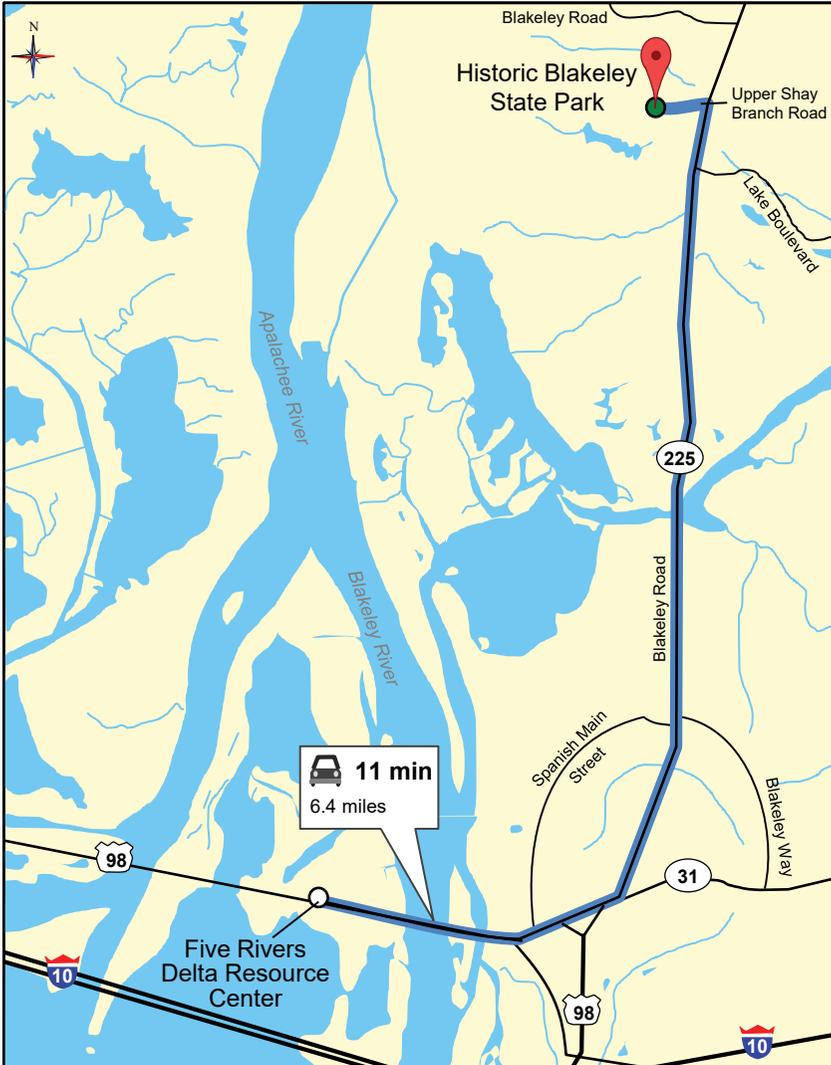
8. Was Rear Admiral Thatcher right to clear the mines at the expense of providing robust naval gunfire operations? What principle of Joint Operations today applies to this situation?

- Force Protection.

Note: This would be a good time to break for lunch. If you choose not to use your current location, one of the picnic areas at Fort Blakeley State Park might work as an alternate location. After lunch, proceed five miles north to Fort Blakeley, the other Confederate fortification used in the defense of Mobile.

Stand 13: The Union Investment of Fort Blakeley

Directions: Depart 5 Rivers Boulevard toward US-98 and turn east on US-98 where convenient. Keep straight/merge onto Spanish Fort Boulevard heading east. Bear left onto AL-225/Blakeley Drive and head north for 4.4 miles. Turn left at Upper Shay Branch Road and follow the sign into “Historic Blakeley State Park.” After stopping at the ticket kiosk, turn right and follow Upper Shay Branch Road/Old Blakeley Road for 1.2 miles.



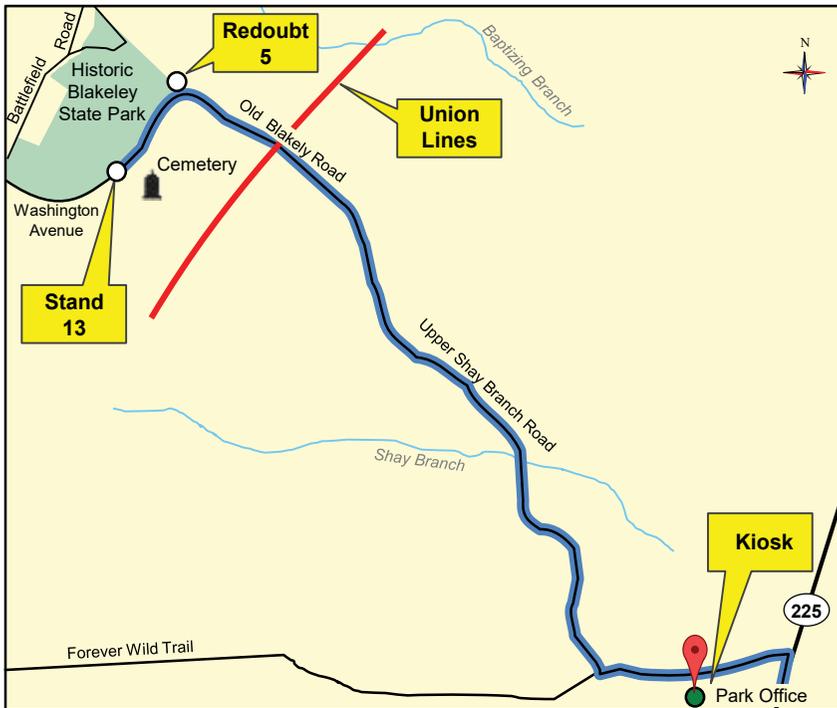
Map 32. Route from Stand 12 to Stand 13. (Created by Army University Press.)

Note: One mile after turning north on Upper Shay Branch Road, look for the Union lines that cross the road. If the underbrush has not been cut back, the lines may not be easy to see. Ask your students to observe the distance from that point to the next stop at Redoubt #5 and Redoubt #6.

Turn left onto Washington Avenue. After 0.1 mile, arrive at the Missouri and Alabama monuments on your right. Park across the street near the cemetery.

Orientation: The remainder of this staff ride will be conducted here at Fort Blakeley. You are standing at Stand 13 near the Missouri State Monument. The map above depicts the stands at Fort Blakeley.

The date is now 20 March 1865. While the sieges at Spanish Fort and Fort Blakeley occurred nearly simultaneously, we are going back in time to consider the operational movement of Steele’s “Column from Pensacola” and the investment of Fort Blakeley. On this date, Major General Steele, hoping to convince the Confederates that he was heading to Montgomery, departed Pensacola for Pollard, Alabama. He would continue to Spanish Fort unless Canby directed him to proceed north to Montgomery. [Teaching Point: branches and sequels]



Map 33. Route from Park Kiosk to Stand 13. (Created by Army University Press.)

You are standing next to the Missouri Monument and about sixty yards in front of Redoubt #6, in the center of the Confederate lines. Eighteen miles to your north is Stockton, Alabama, which Steele passed through on the way to Fort Blakeley. Spanish Fort is five miles to the south. Less than a mile to the west is the mouth of the Tensaw River and the northern extension of the Apalachee River; 3.5 miles across the river to the south-southwest are Battery Huger and Battery Tracy. A mere 8.5 miles to your southwest is Mobile.



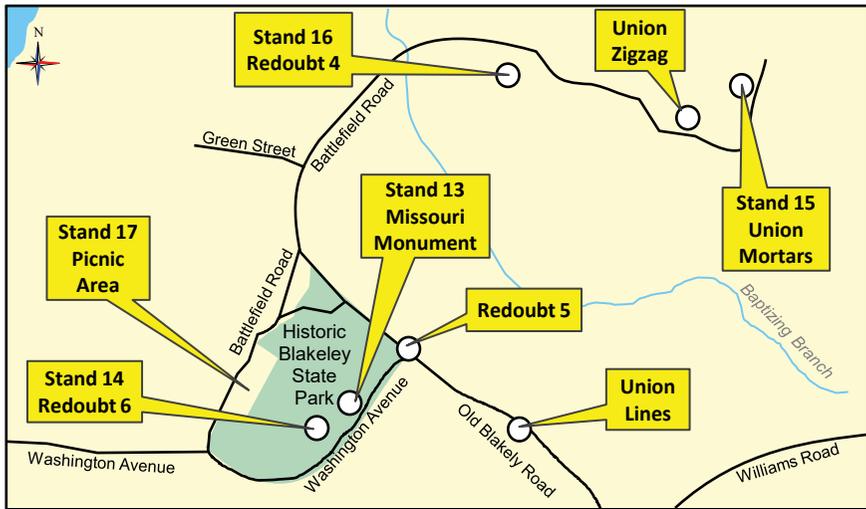
Figure 40. Battle of Blakeley Missouri Monument. (Photo by Author.)

In and of itself, the town of Blakeley had no military significance. At one time, the town had a population of 3,000 and was a vital economic center on the bay. When property values and taxes climbed, many residents left to resettle in Mobile. By the beginning of the war, despite being the county seat, the population of Blakeley had decreased to around 100.¹⁸²

Control of this river intersection was essential for two reasons. First, since the Union Navy dominated the bay, the Tensaw River was the only safe line of communication between Mobile and the eastern forts. Second, if the Union controlled this intersection, it would be able to threaten Mobile from its unprotected eastern flanks along the Spanish and Mobile rivers. In modern doctrinal parlance, Fort Blakeley, as the protector of the intersection between the Tensaw and Apalachee rivers, was KEY terrain. See Map 17 Northern Defenses on page 117.

Description

Steele's Column From Pensacola: Major General Frederick Steele arrived to take command of his forces in Barrancas, Florida, on 28 February. Two brigades from Andrews's 2nd Division of Major General Granger's XIII Corps were already at Barrancas and ready for combat. In early March, Brig. Gen. John P. Hawkins's 1st Division also arrived at



Map 34. Stands 13 through 17. (Created by Army University Press.)

Barrancas. Hawkins's division was composed of more than 5,000 troops organized in three brigades of US Colored Troops (USCT). By the middle of March, Brig. Gen. Thomas J. Lucas and Brig. Gen. Joseph Knipe arrived with four brigades of cavalry. Steele's "Column from Pensacola" had grown to 13,000 strong.¹⁸³

Steele's initial mission was operational deception. He was to move on Pollard, Alabama, as a diversion to fix Confederate troops in the Selma/Montgomery area. Once he reached Pollard, he would feint toward the Selma/Montgomery axis and join Union forces on the eastern shore of Mobile Bay, unless Canby ordered him to continue north.

Steele's main body departed Barrancas on 19 March and Pensacola on 20 March. Not surprisingly, the terrain proved difficult to march through. There were more than 270 wagons in the column, all slowed by the same soggy storm that slowed Granger's XIII Corps on Mobile Point the day before.¹⁸⁴ As mentioned earlier, Steele was not in communications with Canby during this period.¹⁸⁵

After pushing aside two small Confederate brigades in sharp but brief encounters, Steele entered Pollard on the 26th. He was then joined by the 2nd Maine Cavalry under Lt. Col. Andrew Spurling. Spurling had been moving parallel to Steele to his east. His tactical objective was to cut the railroad north of Pollard, near Evergreen, which he successfully did with no losses.¹⁸⁶

On 27 March, the “Column” departed Pollard heading for Stockton, Alabama. As he moved west parallel to the Mobile and Montgomery Railroad, Steele still had to contend with impassable roads that slowed the column and forced his soldiers to build more than twenty-five miles of corduroy.¹⁸⁷ The bigger problem, however, was not the roads or the enemy, but their own lack of supplies. While the “Column” had departed Pensacola with ten days’ rations, foraging parties failed to replenish their stocks in the swampland of southern Alabama. By the time they left Pollard, Steele’s forces had only four days’ rations to sustain themselves until they arrived at Mobile Bay. At that point, Steele had no other option than to order half-rations. Two days later, he ordered one-third rations.¹⁸⁸

As Steele struggled through the forests of eastern Alabama, the Confederate commander of the Department of Alabama and Mississippi, Lt.



Map 35. Column from Pensacola. (Created by Army University Press.)

Gen. Richard Taylor, wanted to intercept and disrupt Steele's progress toward Spanish Fort. He initially sent Brig. Gen. Abraham Buford's brigade of cavalry to intercept Steele's "Column;" but on 28 March, Buford had to turn and address a Union cavalry incursion out of the north commanded by Maj. Gen. James H. Wilson (more commonly known as Wilson's Raid). This was the same cavalry that Canby had counted on to distract Confederate forces in Montgomery. As it turned out, Wilson defeated Buford, captured Selma on 2 April, and then turned toward Montgomery.¹⁸⁹

Steele's "Column" passed through Weatherford on the 29th, at which point he communicated his position and his dire supply situation to Canby. The "Column" left Stockton on 31 March and met Brig. Gen. James Veatch's relief column of seventy-five wagons on 2 April while en route to Fort Blakeley.¹⁹⁰

As Steele's "Column" moved through the forests and swamps of Florida and Alabama, his intentions were still an open question in the minds of Confederate commanders. In Liddell's mind, the question of intent was whether Steele would unite with Canby—which would endanger the security of Spanish Fort—or move west across the Tensaw and Mobile rivers to threaten Mobile from the north, an area the Union Navy did not yet control.

Complicating this question was the great tendency by Confederate intelligence to overestimate Union strength. For example, when Steele left Pensacola, he had a strength of 12,000.¹⁹¹ Yet, in a 22 March dispatch to Maury's chief of staff in Mobile, Liddell reported:

Lieutenant Sibley's report, in a great measure, confirms that sent yesterday from Colonel Armistead from Canoe Station—the enemy's strength . . . **now estimated as 30,000** [author's emphasis]. . . . I now think there can be no longer any doubt upon the subject. It is sad to think of the desolation that will follow the traces of these devastating columns of Yankees. I have nothing late from the force coming by Fish River [XIII and XVI Corps]. I can only conjecture that if sufficiently large it will attempt to get possession of Spanish Fort for a base, whence occupation can be given to the fleet in the bay. In carrying through the movement on Selma the use of the Alabama River is of the utmost importance to the enemy, hence I don't think we will be permitted to remain in quiet long [sic].¹⁹²

Regardless, if Spanish Fort and Fort Blakeley fell, Maury still hoped to be able to evacuate those forces. Even though the Union Navy denied the Confederates freedom of action in the bay, evacuation was still a via-

ble option because Confederate boats could still travel freely to and from Mobile using the Tensaw.

The Investment of Fort Blakeley: On 2 April, Hawkins's and Andrews's Division formed on line about a mile from the outer works at Fort Blakeley. The ground was favorable on two counts: they were in wooded terrain, and there was good running water available.¹⁹³ On the other hand, the terrain to their front was, to coin a modern term, "restricted terrain." Ravines and deep depressions crisscrossed the Union front. Some ravines were as much as sixty feet deep as they flowed down toward the Tensaw River.¹⁹⁴

On the right, Hawkins's Division proceeded slowly with skirmishers leading the way. The ground to their front sloped down toward the Confederate line. About 1,500 yards from the fort, the Union troops entered a cleared area exposed to cannon fire and sharpshooters. Through sheer willpower, it seems, Hawkins's men were able to advance as far as the first line of Confederate abatis. About two hours later, Andrews's Division followed on the left. Both divisions started digging trenches.

On 3–4 April, Canby reinforced Steele's forces at Fort Blakeley by assigning his relief column, Veatch's First Division from the XIII Corps, and Garrard's 2nd Division (XVI Corps) to the Fort Blakeley investment, placing them on the left of the line. Canby had deployed all his forces at both forts.

Analysis

1. What benefit, if any, was there to having "Steele's Column" embark from the Pensacola AO as opposed to landing at Fish River or Starke's Landing?

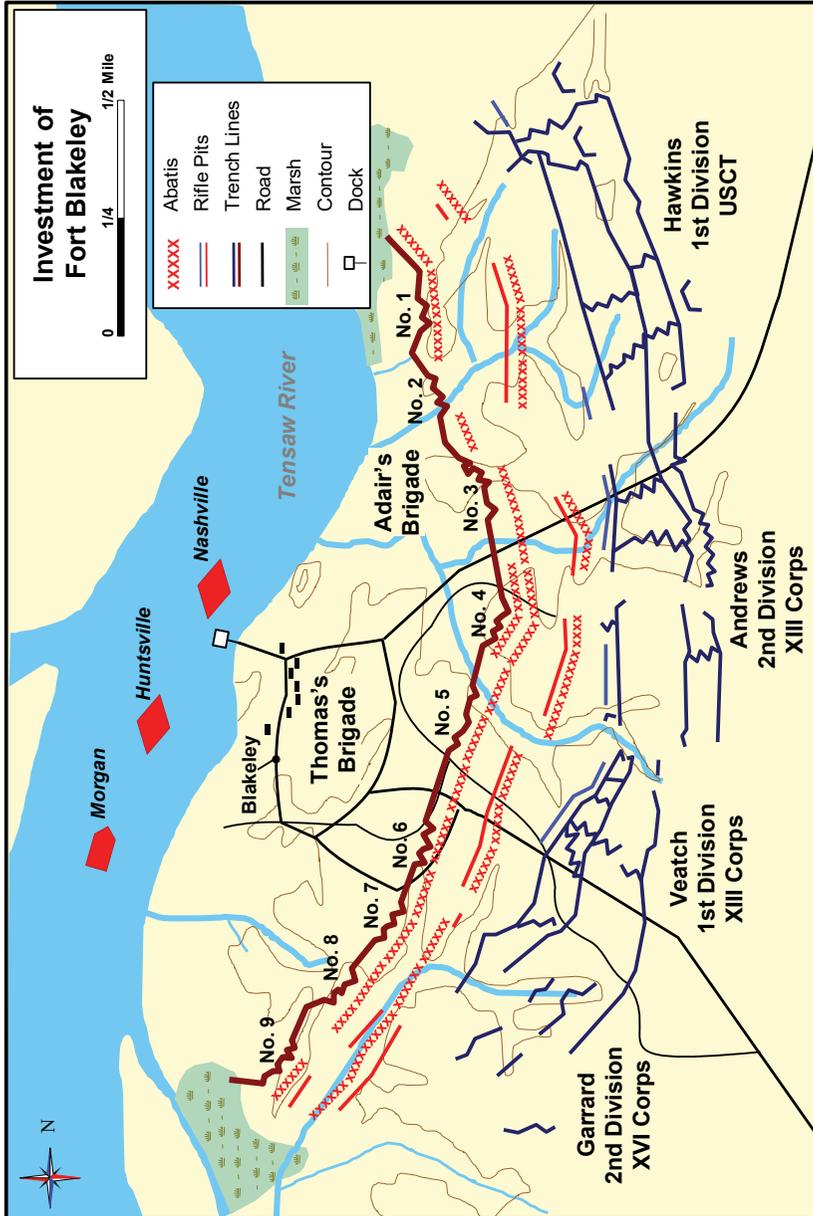
2. Discuss the merits of moving on multiple axes and converging on a single objective.

Note: Walk into the woods to the west and examine the defenses of Fort Blakeley at Redoubt #6.

Stand 14: The Defenses at Fort Blakeley

Directions: Proceed west 200 feet into the woods to Redoubt #6 (it is clearly marked).

Orientation: We are standing at Redoubt #6, just right of the center of the Confederate lines.



Map 36. Investment of Fort Blakeley. (Created by Army University Press.)

Description: Brigadier General Liddell commanded the fort and its 3,500 men.¹⁹⁵ French's Division, commanded by Brig. Gen. Francis Cockrell, was on the left while Brig. Gen. Bryan Thomas's Reserve Brigade was on the right. Recall this was the same brigade Maury had sent to Fort Blakeley from Spanish Fort a few days before.

The Confederate lines at Fort Blakeley ran uninterrupted for about three miles. There were nine well-prepared redoubts containing thirty-five artillery pieces. A five-foot trench ran in front of the trenches. All vegetation for 600 to 1,000 yards in front of the lines had been removed. Two rows of abatis ran 50 yards and 300 yards in front of the lines. Forward of the abatis lines, the Confederates had buried hundreds of torpedoes (now known as land mines). Between the lines of abatis, Liddell's soldiers dug rifle pits for sharpshooters.

Fort Blakeley Confederate Artillery	
Type	Number
12-pound Howitzer	12
6-pound Gun	6
10-pound Parrott	2
30-pound Parrott	1
4.5-inch Rifle	1
7-inch Brooke's Rifle	1
8-inch Gun	2
24-pound Howitzer	2
Coehorn Mortar	6

Figure 41. Fort Blakeley Confederate Artillery. (Created by Army University Press.)

Analysis

1. Why was Fort Blakeley important to Mobile's defense?

- Politically and economically insignificant.
- Strategically insignificant.
- Operationally significant because it protected Mobile's outer gate, the Tensaw River to Mobile.

Note: Now proceed by bus or by foot to the Union lines in front of Redoubt #4. If you move by foot, add thirty extra minutes to your itinerary.

Stand 15: The Attack on Fort Blakeley: “Feel the Enemy”

Directions: Head southwest on Washington Ave toward Battlefield Road 0.2 miles. Turn right onto Battlefield Road for 0.2 miles. Take a slight left to stay on Battlefield Road for 1 mile. Arrive at the Union Lines and the 15th Massachusetts Battery.



Map 37. Directions to Stand 15. (Created by Army University Press.)

Note: New construction by the park may require buses to park 0.25 miles short of the 15th Massachusetts Battery in a designated parking area. Please pay attention to signage.

Orientation: The date is 2 April 1865, the seventh day of the siege of Spanish Fort and the first day of the investment of Fort Blakeley.

The 15th Massachusetts Battery occupied this position. We are 4,000 feet northeast of our last stand at Redoubt #6. This location is the third parallel of the 3rd Brigade (Col. Frederick Moore), 2nd Division (Brig. Gen. Christopher Andrews) of XIII Corps. The Union lines continued to the south approximately 1.25 miles and extended to the north and west approximately 3,000 feet. The main Confederate lines and Redoubt #4 were 1,600 feet to the west of your position; Confederate rifle pits and obstacles extended out from that front for 400 to 500 feet.

Together, the lines at Fort Blakeley were 4 miles wide, the lines at Spanish Fort were 3.5 miles. The total length of the Union lines was 8.5 miles, including the width of Bay Minette. The depot at Starke’s landing was about 12 miles from the center of the Union lines at Fort Blakeley.

Canby described the terrain: “The country embraced in these lines was broken and rolling, intersected by streams and ravines with abrupt banks, and obstructed by large tracts of impracticable marsh.”¹⁹⁶

Description

2–3 April 1865: As Union forces invested Fort Blakeley, its commander, Brigadier General Liddell, became a bit anxious. At 0830 on 2 April, he wrote to Maury:

The enemy camped apparently in large force, one mile above us, last night, on the Stockton road, and is now engaged skirmishing on the left flank, preparing, I think, for an assault or demonstration in force. I need additional artillery, temporarily, if it can be spared.¹⁹⁷

Later that day, Liddell again wrote Maury: “I believe the enemy are [sic] preparing to assault my line today. Please spare me some light artillery temporarily, and if possible, send it over immediately.”¹⁹⁸

Given the progress of the Union forces, and the relative surprise that Steele’s “Column” presented, Liddell fully expected Steele to attack at once and seize Fort Blakeley. Canby, however, had only given orders to “invest” Fort Blakeley—choosing to delay an attack until all his forces were consolidated and the fate of Spanish Fort was determined. Canby had always envisioned sequential tactical operations on the eastern shore in pursuit of his operational objective: the City of Mobile. Canby’s certitude was Liddell’s doubt, however, as “Liddell was still uncertain of the enemy’s intentions.”¹⁹⁹ [Teaching Point: sequential operations]

Liddell’s faulty analysis notwithstanding, Hawkins’s and Andrews’s Divisions had made good progress toward Fort Blakeley. On their left, Veatch’s Division, having already resupplied Steele, dug in.²⁰⁰ Brig. Gen. Kenner Garrard’s 2nd Division (XVI Corps) arrived shortly thereafter and went into position on Veatch’s left. From left to right, four divisions from three different corps completed the investment of Fort Blakeley: Garrard’s from the XVI, Veatch’s from the XIII, and Andrews’s and Hawkins’s from the “Column.”

Meanwhile, the Confederates’ half-hearted attempt at naval gunfire support made an appearance. The Confederate gunboats *Morgan*, *Nashville*, and *Huntsville* arrived on 3 April and began firing on the Union line. Recall that the Confederate Navy in this area of operations was on its last legs, with only a few gunboats still able to navigate the Tensaw River, much less lay persistent artillery fire on the Union lines at Fort Blakeley.

While this floating artillery force was weak, Hawkins's Division on the Union right still felt the brunt of its surprisingly effective enfilading fire.²⁰¹

At this point in the battle, the Confederates, including their naval guns, had the advantage of artillery at Fort Blakeley. Canby had been unwilling to ease the pressure on Spanish Fort by sending heavy artillery to his right at Fort Blakeley. Instead, he had a pontoon bridge built across Bay Minette on 4 April in case Steele needed reinforcement.²⁰²

4–6 April 1865: The pontoon bridge across Bay Minette ensured that both wings of the Union investment were in communication. Union troops continued to dig parallels and saps toward the Confederate lines. Field artillery began to arrive and shell the fort on the 5th. Steele conducted limited reconnaissance patrols of the Confederate lines while the Confederates, in turn, conducted small trench raids.

Liddell grew increasingly concerned at the progress of the Union forces to his front and pleaded with Maury for help. His rear was also becoming increasingly threatened. Union gunboats, as yet, could not position close enough to threaten Fort Blakeley, but Union sharpshooters were now threatening the logistics activities at the Blakeley wharf. On 5 April, Liddell wrote to Brigadier General Gibson:

I am much in need of sharpshooters. Send me the Whitworth riflemen, or half of them, if you cannot spare all. The enemy are very near you [at Spanish Fort], and here they are at some distance, but with their sharpshooters kill and wound men at the Blakeley wharf [author's note: 3,700 feet from the northern end of the Union lines].²⁰³

Liddell tried everything to disturb the Union advances. For example, he asked for fireballs for his mortars, so that he could light up the glacis in front of his works.²⁰⁴ Unfortunately, his ordnance officer could not obtain enough to have any effect. He also used small unit infantry probes to slow the Union advance, also with little effect. The Union continued to dig closer to the Confederate lines.

7–8 April 1865: On the 7th and 8th, the Confederates continued their harassing attacks against the Union lines. Each time, the Union repelled the attacks well before the Confederates could reach the working parties in the entrenchments. In most Union sectors, 2nd parallels were complete and connected to the first parallels by saps.

Confederate gunboats continued to operate in the confluence of the Apalachee and Tensaw rivers. Along with Liddell's artillery fire, the gun-

boats continued to harass Union operations. On the right wing, Hawkins's division of African-American soldiers felt the brunt of these barrages. The Union's response to this threat was innovative and surprisingly effective.

On 8 April, the Union constructed a battery of four 30-pounder Parrotts on the far right of the line.²⁰⁵ Elements of the 1st Indiana Heavy Artillery and Hawkins's 1st Division worked "behind the brow of the bluff" and out of sight of the Confederates. Once preparations were complete, work parties started cutting trees to clear the battery's line of fire to the river. To the great surprise of the Confederate squadron, the heavy artillery battery opened fire from a well-protected position they had not known existed.

The Confederates responded, but the Union guns were in an extremely strong position. Both CSS *Morgan* (wooden, eight guns) and CSS *Nashville* (six inches of iron, six guns) were badly damaged and had to withdraw. The Union guns now concentrated on the extremely slow CSS *Huntsville* (ironclad, four 8-inch guns). The ship escaped but was not out of range of the Union guns until after dark.²⁰⁶

Hawkins's 1st Division, which had received the brunt of the gunboats cannonade, was ecstatic at the results.²⁰⁷ Once the gunboats were driven away, it seemed almost perfunctory to drive a Confederate steamboat away from the Blakeley dock, which further served to isolate Liddell from Mobile.²⁰⁸ Like the guns around Bay Minette, field artillery had successfully driven off enemy gunboats—yet another example of ground forces supporting naval operations.

That night at Fort Blakeley, the Union finished its third parallel and was only 600 yards from the Confederate lines.

9 April 1865 Preparations for the Final Attack: By the 9th, the men on both sides were anxious. They had heard the fighting at Spanish Fort the night before but were not quite sure of its meaning. Gibson had successfully executed his retrograde operation out of Spanish Fort, but Liddell was still determined to defend Fort Blakeley even though he had to put 1,000 of Gibson's soldiers—newly escaped from Spanish Fort—on transports back to Mobile.

Having successfully captured Spanish Fort the night before, Canby reinforced Steele at Fort Blakeley. New artillery units, including heavy artillery from Totten's Siege Train, arrived and began shelling Fort Blakeley.²⁰⁹ Captain Mack's Battery of 18-pounders from the 18th New York left Spanish Fort at 0400 on the 9th and arrived at Fort Blakeley at 0900, eventually moving into firing position behind Garrard by 1700.²¹⁰

Cockrell's Missouri Brigade held the position 1,600 feet in front of where you now stand. This brigade had a great reputation but was a shell of its original self. Col. James McCown commanded the brigade after Francis Cockrell moved up to divisional command.

The Confederates at Redoubt #4, had four field guns, a 7-inch rifle, and a Coehorn mortar. In front of their lines, the Confederates had strung telegraph wire between the stumps as "tangle foot." They had also built two abatis lines 200 to 400 yards to their front.

The movement of the Federals from Spanish Fort to Fort Blakeley did not go unnoticed. Liddell sent this note to his subordinate commanders on the morning of the 9th:

Colonel Patton signals the following from Battery Tracy: "Wagon trains and heavy columns of infantry have been crossing Bay Minette bridge all the morning." In view of the above, General Liddell directs that you hold your command in readiness for an assault at any moment.²¹¹

By noon, observers on the Union left saw transports full of troops leaving Blakeley. Word quickly spread that the Confederates were evacuating Blakeley, but what they actually saw was Spanish Fort evacuees boarding transports for Mobile. The entire Blakeley garrison was still present—and still holding their positions. Unaware of this fact, Canby received the report of evacuation and ordered a general assault by all divisions for 1730.

The Union Attack Plan: At this juncture, the Union had three lines of entrenchments, the closest being less than 600 yards from the Confederate battlements. Skirmishers to the front of Moore's brigade were within 140 yards of the Confederate rifle pits.²¹² Yet, despite the successful progress of the siege lines and Canby's hasty reinforcement of artillery, neither Steele—nor Canby for that matter—apparently had a cohesive plan to assault Fort Blakeley. Short of having all four divisions rise at the appointed hour (1730) and overwhelm the remaining (but still manned) defenses, the synchronization of the attack with supporting fires—the unity of effort by all four divisions—was in doubt.

In the absence of a coordinated plan by Steele or Canby, much less a unit designated as the main effort, each individual division commander started to make his own plans for a final assault. Hawkins planned a general advance using an advanced position captured by a party of seventy men from the 73rd and 86th USCT. When Confederate sharpshooters to their front became quiet, this company-sized unit captured advance rifle pits but

could go no farther. Five more companies then went forward and started entrenching in front of the first abatis line.

Andrews planned to have Moore's brigade lead the attack in his division sector. The 83rd Ohio would lead in skirmish formation and once they had cleared the first abatis line, the remainder of the brigade (the 37th Illinois, 20th Iowa, 34th Iowa, and 114th Ohio) would continue the attack. Some men from the 83rd Ohio would advance with axes to clear the obstacles.

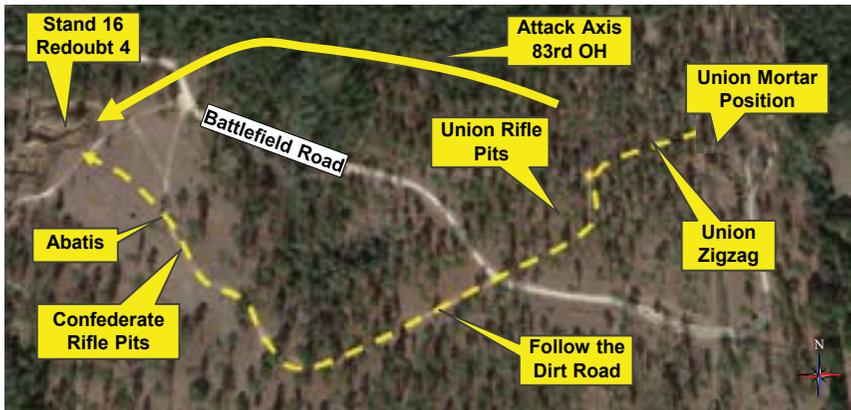
Veatch, who was not advised of the attack until 1700, planned to lead with Dennis's brigade and followed by one brigade in reserve. He did not plan to use his 3rd Brigade because it was resting from duty the night before.

Left to its own devices, Garrard's 2nd Division on the Union left was about to become the Union main effort—but without Steele's knowledge. On the morning of the 9th, Kenner Garrard, the commander of the 2nd Division (XVI Corps), received instructions from "his corps commander" to assault the works to his front "at the earliest practicable moment." In this case, however, those orders did not come from the officer in tactical command at Fort Blakeley, Major General Steele; they came from Maj. Gen. A.J. Smith, his XVI Corps commander. Smith promised Garrard that his other two divisions (still positioned at Spanish Fort) would "be along" and that Garrard would have "all the artillery he wanted."²¹³

In hindsight, A.J. Smith had committed to pulling his other two divisions at Spanish Fort—John McArthur's 1st and Eugene Carr's 3rd—off the line after a night of combat and march them into the assault at Fort Blakeley. Apparently, this would be done without Canby's knowledge. Based on that assurance, and fearful that the Confederates would escape as they had at Spanish Fort, Garrard planned to attack with three brigades on line at the appointed hour. To clear obstacles, each brigade would lead with two lines of skirmishers followed by the main force. Whether this plan had been approved by Steele is an open question. [Teaching Point: unity of command]

Moore's Brigade Attacks: By 7 April, the 15th Massachusetts Battery of Andrews's division had completed the position where you stand and commenced its fires against Fort Blakeley. The Confederates returned surprisingly accurate fire and silenced the Union guns. It took all day on 8 April for the gun crews to repair the damage and be ready for action on the 9th.

Note: Depart the battery location by going around the right side. Follow the zig-zag trench.



Map 38. Stand 16 and Redoubt #4. (Created by Army University Press.)

The general Union attack started on the far left and continued to the right. The 83rd Ohio occupied the sap while the rest of the Brigade was in the third parallel to your left and right. At 1745, the 83rd Ohio sprang from the sap and moved forward.

Note: Exit the sap and move on a 240-degree azimuth to the Union rifle pits. Notice that the size of the rifle pits is more exaggerated than what existed at the time.

Moore had positioned the 83rd Ohio forward in these detached rifle pits. Four or five men occupied each pit, harassed the enemy, and provided security for the rest of the brigade. As the rest of the 83rd Ohio reached these pits, the men rose up and joined the attack.

Note: Continue on a 240-degree azimuth to Park Sign #14 at a road/trail intersection. Follow the dirt road to the southwest and on to the Confederate rifle pits, skirting a tree stand and walking toward the glacis of Redoubt #4.

The 83rd Ohio's actual attack axis against Redoubt #4 was 200 yards to your right, on the other side of the stand of trees. The approach you are using, however, more closely approximates the interpretive rifle pits, obstacles, and clear glacis that exist today.

The 83rd Ohio reached the first abatis line and started chopping holes in it. As the Union troops began coming through the obstacle, Confederates in the rifle pits started retreating. As soon as the 83rd Ohio cleared the abatis, the soldiers entered the ravine and continued the attack. Meanwhile, the rest of Moore's brigade started their attack.

Note: Follow the road/trail to the next set of Confederate rifle pits.

The 83rd Ohio rose out of the ravine and started hacking through the next abatis. In the face of the onslaught, Confederates in the forward rifle pits started retreating; but now the men in Redoubt #4, fearing fratricide, could not return fire. Once the Confederate skirmishers were safe within their lines, the main Confederate line opened fire, but too late. The 83rd Ohio, followed by the rest of Moore's brigade, entered the redoubt. After a short struggle, the Confederates retreated or surrendered.

Note: Continue into Redoubt #4. Please observe park signs.

One of the first men to leap inside the redoubt was the 83rd's regimental commander, Lt. Col. William Baldwin. When he landed in the Confederate lines, he shouted: "Surrender!" A Confederate officer replied: "To whom do we surrender?" Baldwin replied: "To the 83rd Ohio." The Confederate officer answered: "I believe we did that once before." Cockrell's Missouri Brigade had, ironically, surrendered to the 83rd Ohio at Vicksburg.²¹⁴

Analysis

1. Throughout 9 April, an attack plan developed that—until the last moment of the attack—seemed random and disorganized. In hindsight, Major General Canby seemed to be responding to the desires of his division commanders to attack. Garrard and Hawkins appeared to be in communication, even though they were at opposite ends of the line. On the other hand, Veatch—located in the middle between the two—appeared to be left out of the planning. Is this a fair assessment? Why or why not?

2. Canby did not order Totten's Siege Train forward from Fort Gaines until 28 March. What advantage did Canby gain by waiting as long as he did?

- Canby's initial plans did not include the Siege Train for Spanish Fort; however by delaying as long as he did, he actually improved the speed and ease of transporting the heavy guns. The Union logistics base was now at Starke's Landing, only four miles from Spanish Fort vice the eighteen miles from the Fish River Landing farther south.

Stand 16: The Fall of Fort Blakeley

Directions: You are standing at Redoubt #4.

Orientation: Same as Stand 15.

Description

Hawkins's 1st Division (on the right): On the right of the line, Hawkins keyed off the dins from Moore's brigade (Andrews's Division) to begin his attack. As his soldiers chopped their way through the obstacles, a torpedo exploded and killed or wounded thirteen men. After a short delay, the division continued toward the Confederate lines.

Throughout the line, African-American soldiers from Hawkins's Division jumped over the breastworks and started to capture Rebel prisoners. Some of the Confederates, dreading capture by Hawkins's African-American soldiers, ran off to surrender to white soldiers. Others fought to the death rather than surrender to African-American troops.

As Scofield's Brigade advanced, they heard one Confederate officer behind the works shout: "Lay low and mow the ground—the damned _____ are coming!"²¹⁵ One soldier in the 50th USCT was helping to round up prisoners when he recognized a young man among the prisoners who had been the owner of his former plantation. The two men, formerly slave and master, shared a canteen of water.²¹⁶

Hawkins's Division captured Redoubts #1 and #2, 9 cannon, and 223 prisoners. The unit suffered 32 killed and 147 wounded in the siege and final attack.

Andrews's 2nd Division: Andrews's Division attacked fifteen minutes late because a land torpedo exploded and killed three men just as the attack began. The division captured Redoubts #3 and #4, 12 cannon, and 1,300 prisoners (including Brigadier General Cockrell). The skirmish regiments led the attack, cleared the rifle pits, and opened holes in the abatis and other obstacles. The rest of Andrew's brigades followed when the obstacles were clear.

Cockrell's Missouri Brigade, the favorite sons of Missouri, defended Redoubt #4. "One of the most famous fighting brigades of the Confederate Army" lost 41 killed and 192 wounded.²¹⁷ Many of the prisoners were from the positions captured by Hawkins's USCT division.

Veatch's 1st Division: Dennis's Brigade led the division. It used one regiment as skirmishers and two followed in the main body. Dennis's men

were able to reach the Confederate lines quickly and captured Redoubt #5 with 300 prisoners and 5 cannon. Kinsey's Brigade was in reserve and not employed until after the division overran the Confederate lines. All told, the division lost 13 killed and 64 wounded.

Garrard's 2nd Division: As Garrard had planned, all three brigades attacked on line with two lines of skirmishers leading each brigade. His men quickly penetrated the obstacles and entered the Confederate lines. Garrard's men captured Redoubts #6, #7, #8, and #9 and helped to capture Redoubt #5. They also captured 14 cannon and mortars, as well as 1,600 prisoners (including Brigadier General Liddell and Brigadier General Thomas). They suffered 41 killed and 124 wounded.

The front of Fort Blakeley was three miles long. The ground that the besiegers had to cross was rough, cut by ravines and covered with obstructions. The existence of land-torpedoes made the assault all the riskier. Yet 35 regiments, comprised of 16,000 troops, attacked nearly simultaneously against Liddell's meager 4,000. More importantly, unlike the battle at Spanish Fort, not one of Liddell's soldiers escaped to Mobile. Brig. Gen. C.C. Andrews described the scene a few years later:

The scene was picturesque and grand. From different points of view the assaulting lines could be seen for a mile or two, as far even as the forms of men could be distinguished moving over the broken ground. The regimental colors, though not in perfect line, were steadily advancing, and the troops were dashing on over and through the obstructions like a stormy wave. It was at a moment when the shock of battle was the fiercest. In the clamor, could be heard the voices of the assaulting troops. Nothing could exceed their enthusiasm. If then they could have known the great event that had occurred a few hours before—that Lee had surrendered—and that their contest would probably be the last important struggle of the war, they could hardly have experienced more exulting emotions, or pressed forward with more dauntless step.²¹⁸

Cooperation against Batteries Tracy and Huger: With the fall of Fort Blakeley and Spanish Fort, Canby's priorities now turned to clearing Batteries Huger and Tracy. He used the shore batteries at Bay Minette, captured rebel guns from the two defeated forts, and the naval guns of the USS *Octorara* and other Union gunboats in support.

Canby decided to attack Battery Huger on 11 April and asked Thatcher to assist the landings with gunboat support. By the time Fort Blakeley fell,

the Union Navy had cleared the Blakeley River of more than 150 mines. The reduction of that threat, and the water batteries at Spanish Fort, enabled Thatcher to move his ironclads and the USS *Octorara* within range of Battery Huger.

Despite the accuracy of the federal cannon, Battery Huger returned fire against the Union positions at Spanish Fort and the persistent Union gunboats; 11 April became a battle of artillery across the water. All available Union guns—from Spanish Fort, to Bay Minette, to the *Octorara*—focused on Huger and Tracy. Union artillerymen also unspiked the larger guns in Spanish Fort and began firing at Battery Huger. Standing below a wide net across the river to catch more floating mines, the *Octorara* opened fire on Huger from a range of 5,400 yards, a bit over three miles, with its 100-pounder Parrott. Amazingly, it took only three rounds to bracket the battery and hit the embrasure dead-on.²¹⁹ When the guns grew silent that evening, the last artillery battle of the American Civil War was over.

In case the artillery battle was not successful, Smith had already received the mission to carry Batteries Huger and Tracy by assault. However, before preparations could unfold, a Union skiff sweeping for torpedoes captured a Confederate boat in the vicinity. Formerly from Battery Huger, the men claimed that the crews had already abandoned both batteries without destroying the guns and stores. Shortly thereafter, Union sailors captured the abandoned batteries.²²⁰

Analysis

1. McArthur's 2nd Brigade spent 169,000 rounds of musket ammunition, yet this brigade only lost 5 killed and 94 wounded. Why?

- By now, commanders had learned how to attack strong fortifications without excessive bloodshed. The brigade excavated 7,000 cubic yards of dirt. As Hearn succinctly argued: "Dirt had replaced death. . . . Four years of fighting had taught the men how to protect themselves, and they no longer took unnecessary risks with their lives."²²¹

2. By comparison, after months of digging and preparation, the final assault was "over in the blink of an eye."²²² Why?

- Deliberate attack after days of preparation.
- Overwhelming mass of the attacking forces.
- Loss of tactical freedom of action by the Confederates. The Union had successfully closed the resupply and evacuation routes out of Blakeley.

3. Are siege operations relevant today? Why? How would we defeat an entrenched enemy today?

4. Unlike Gibson at Spanish Fort, Brigadier General Liddell had no escape planned from Blakeley. Contrast Liddell's operational planning with Gibson's at Spanish Fort. [Teaching Point: branches and sequels]

Note: Now move to a picnic area in the park. Discuss the Fall of Mobile and conduct your integration session.

Stand 17: The Fall of Mobile and Integration

Directions: Drive to a previously reserved picnic area at Fort Blakeley State Park, preferably covered.

Orientation: Not required.

Description

The City Surrenders: It was never Canby's intent to attack Mobile from the landward side. If the city had stubbornly held on, he would have taken advantage of his position and freedom of action to seize the estuary of the bay and harass the city from the islands east of the Mobile River.²²³ Indeed, by 12 April, the *Octorara* had proven the concept, having cleared the waters abeam Battery Tracy and Fort Blakeley, turned down the Tensaw River, and anchored off Mobile that evening.

Canby, as it turns out, did not need to carry out that particular "sequel" of his campaign plan. After the fall of Fort Blakeley on 9 April, the Confederates were left with only 4,500 troops to defend Mobile. Maury knew that was not enough and ordered the evacuation of Mobile, hoping to link up with Lt. Gen. Richard Taylor farther north. On 11 April 1865, Maury's small Confederate force retreated north as Canby moved troops to Starke's Landing and prepared to transport them across the bay.

On 12 April, with the USS *Octorara* standing off Mobile, the Union Navy started to transport a sizeable ground force from Starke's Landing to Mobile. The Union transports and gunboats were aligned "majestically across the bay" when a single gunboat broke away and fired a single shot "to challenge the shore." When there was no response, Thatcher signaled Major General Granger, the commander of the landing force on the steamer *General Banks*: "I propose to shell the shore." Granger, inspecting the shore with a glass, replied: "By xxx, you'll shell a flag of truce if you do [sic]."²²⁴

As the troops disembarked at Codfish Landing to the south of the City of Mobile, Mobile's mayor, Robert H. Slough, met them carrying a flag of truce. Slough reported that the Confederate forces had abandoned Mobile. He then offered a letter to Thatcher and Granger that pleaded the case for lenient treatment of Mobile's citizens:

The city has been evacuated by the military authorities, and its municipal authority is now under my control. Your demand has been granted, and I trust, gentlemen, for the sake of humanity, all the safeguards which you can throw around our people will be secured to them.²²⁵

Slough then surrendered the city, and Union troops began marching into town with bands playing.

The timing of Maury's withdrawal was very close. When the Union forces entered Mobile, the rear guard of Major General Maury's forces was only thirty miles north.²²⁶ Maury's escape had little spirit, however. Abandoning Mobile, together with the knowledge that Lee had already surrendered, convinced many Confederates to simply desert and go home. XVI Corps marched rapidly north toward Montgomery and Selma in pursuit.

The End of the War and Final Surrender: Robert E. Lee had surrendered the Army of Northern Virginia at Appomattox Court House on 9 April, but there were still several Confederate field armies that needed to be dealt with. On 26 April, Gen. Joseph E. Johnston surrendered to Major General Sherman near Durham, North Carolina. In all, 80,000 soldiers laid down arms, making this the largest surrender of the war. Except for Major General Taylor's department, all Confederate forces east of the Mississippi had surrendered.

On 4 May 1865, Taylor and Canby met in Citronelle, Alabama (forty miles north of Mobile). Taylor surrendered his command, including the survivors of Mobile. The only forces left in the Confederacy were in Texas, which Maj. Gen. Kirby Smith surrendered to Canby on 26 May 1865. The war was over.

The Cost: The surrender of Fort Blakeley was the last major battle of the Civil War. Both General Liddell at Fort Blakeley and General Lee at Appomattox surrendered on 9 April, but General Lee's surrender was two hours before the final surrender at Fort Blakeley.

Compared to other Civil War battles, the losses in the Campaign for Mobile were surprisingly light. Canby reported losses for his campaign at 177 killed; 1,295 wounded; and 36 captured or missing.²²⁷ Dysentery and malaria were larger causes of deaths than bullets and shot. By comparison, the losses in the 1864 joint operations around Forts Powell, Gaines, and Morgan were negligible.

There are almost no records of Confederate losses in the 1865 campaign; 500 casualties is a generally accepted figure. The Union captured about 4,924 Confederates, along with all their weapons and supplies, including four generals and 304 officers.²²⁸ Many rebel prisoners expressed surprise at seeing so many blue coats in the Union rear. At least at the tactical level of war, the Confederate soldiers had no idea how many Union forces they faced.²²⁹

The Union Navy lost 145 killed and 170 wounded. The Navy lost seven ships (including two ironclads), all to torpedoes/mines around Spanish Fort.²³⁰

As the guns fell silent at Fort Blakeley, men started looking for their comrades who had fallen. Unfortunately, the glacis had been seeded with subterranean torpedoes, or land mines.²³¹ For decades after the war, the grounds around these battlefields continued to kill or maim citizens wandering through flowering fields, unaware of the danger that lay below.

It would be fair to say that by the end of the war, the generals and soldiers of both sides were experienced, competent, and brave men. Major General Maury's farewell message to his troops poignantly complimented their pride, duty, and performance:

Conscious that we have played our part like men, confident of the righteousness of our cause, without regret for our past action and without despair of the future, let us tomorrow, with the dignity of the veterans who are the last to surrender, perform the duty which has been assigned to us.²³²

Secretary of War Stanton's 16 May 1865 congratulatory letter to Major General Canby and his command also reflected this sense of duty and pride:

Suitable acknowledgement of the great services rendered to the country by your command has been delayed because when the intelligence reached Washington the public mind was overwhelmed with grief for the loss of their great and good President, Abraham Lincoln, and filled with horror at the atrocity of the crime that cut him off.

Now that your work is consummated by the surrender of General Taylor and his forces, it is my pleasing duty to present to you, and to your gallant officers and brave army, the thanks of the President, of the people, and of this Department, for the valor, energy, and military skill displayed in the siege and reduction of the city of Mobile, the pursuit and capture of the enemy's army, and in all the operations of your campaign. . . . [I]t gives me pleasure to say that no officer enjoyed more highly than yourself the personal esteem and confidence of the late President, Mr. Lincoln, and that to his latest moment he watched the operations of your army with great interest.²³³

Congress awarded 106 Congressional Medals of Honor for operations around Mobile in 1864 and 1865. A list of CMH awardees is in Appendix C.

The Campaigns for Mobile also reflect the climatic end to the contributions of African-American soldier during the American Civil War—from laborer to sapper to infantry man. The bravery and professionalism of the African-American units were never in doubt. After the battle, a Union engineer brigade commander was effusive in his praise for their performance:

No troops during this war have labored more severely or arduously, but those to whom most credit is due are the Ninety-sixth and Ninety-seventh US Colored Engineer Regiments. Night and day without complaint those regiments worked, and it is difficult to comprehend how they endured through it. The regiments manifest very great care and ability in their organization and discipline. . . . Of none of them can I do other than speak in the highest terms.²³⁴

Analysis

1. Using the following Elements of Operational Art from Army Doctrine Reference Publication (ADRP) 3-0, *Unified Land Operations*, analyze Canby’s 1865 campaign.

Elements of Operational Art In Farragut’s 1864 Campaign		
Objective	Effects	Center of Gravity
Decisive Points	Lines of Operation/ Lines of Effort	Direct and Indirect Approach
Anticipation	Operational Reach	Culmination
Forces and Functions	Arranging Operations	Military End State
	Termination	

Figure 42. Elements of Operational Art. (Created by Army University Press.)

2. Evaluate the command relationship between Major General Canby and Rear Admiral Thatcher.

3. After the fall of Blakeley, Major General Maury had only 4,500 troops left, too few to defend Mobile. Gen. Pierre G.T. Beauregard considered it a mistake for Major General Maury to have garrisoned any part

of the eastern shore. He believed that Huger and Tracy should have been self-sustaining forts and that Maury could have put up stiff resistance if he had concentrated his forces at Mobile.²³⁵ Do you agree or disagree? Why?

4. The Civil War in America was a story of horrific battles with horrific losses, many after direct attacks against prepared fortifications. Why do you think the losses in the Mobile campaigns were so small?

- The soldiers had learned to protect themselves while officers no longer insisted on “frontal attacks against heavily fortified positions.”²³⁶

Notes

1. The name of this town was also spelled “Blakely” without the extra “e” during the Civil War. To avoid confusion, the more modern spelling of “Blakeley” will be used in this book.

2. Spencer Tucker, *Blue & Gray Navies: The Civil War Afloat* (Annapolis, MD: Naval Institute Press, 2006), 1.

3. Chester G. Hearn, *Mobile Bay and the Mobile Campaign: The Last Great Battles of the Civil War* (Jefferson, NC: McFarland, 1993), 127.

4. Hearn, 102.

5. Hearn, 48.

6. A *pile* is a vertical pole inserted into the earth to provide a foundation for a bridge or a land structure. In this context, the Confederates drove poles into the shallow waters east of Fort Gaines so they would obstruct and funnel traffic into the Main Shipping Channel.

7. Hearn, *Mobile Bay and the Mobile Campaign*, 39, 48.

8. Tony Gibbons, *Warships and Naval Battles of the Civil War* (New York: Gallery Books, 1989), 34.

9. Farragut reported that his larger draft vessels, such as the *Hartford*, could not approach within twelve to fifteen miles of Mobile because of the shallow waters; US Naval War Records Office, US Office of Naval Records and Library, and National Historical Society, *Official Records of the Union and Confederate Navies in the War of the Rebellion* (US Naval War Records Office, Washington, DC: 1884–1922), Series I, vol. 21, 612, hereinafter cited as ORN.

10. ORN, 267–68.

11. Note: The center-of-gravity analysis of the defenses around Mobile Bay in 1864 was completely different from Major General Canby’s center-of-gravity analysis in 1865.

12. ORN, vol. 21, 298; “Farragut to Welles,” 25 May 1864; “Farragut at Mobile Bay,” Harold Holzer et al., *Hearts Touched by Fire: The Best of Battles and Leaders of the Civil War*, 1st ed. (New York: Modern Library, 2011), 930.

13. “Farragut to Welles;” ORN, 298; Hearn, *Mobile Bay and the Mobile Campaign*, 39.

14. Farragut is describing procedures designed to reduce death or injury. A “splinter net” was a cargo net intended to catch the wooden splinters spalling from the impact of a cannon ball into a wooden ship. ORN, 397–98; Hearn, 72.

15. A “screw sloop” was a term used to differentiate a steam-powered warship with a propeller from those driven by paddlewheels.

16. A “water battery” was always part of the coastal fortifications but positioned low enough to the water line to be able to engage close-in ships in a broadside. This effectively made a third, and lowest, tier of artillery in front of the walls of Fort Morgan.

17. This tactic had already been successfully attempted by Farragut at Baton Rouge and Port Hudson and by Rear Adm. David Porter when he ran the guns at Vicksburg in 1863.

18. Hearn, *Mobile Bay and the Mobile Campaign*, 75; ORN, vol. 21, 398.

19. Chase guns were positioned in the bow and allowed a ship to fire to its front without having to turn broadside; ORN, vol. 21, 415–23.

20. “Report of Maj. Frank W. Marston, Signal Corps, US Army, Chief Signal Officer,” 10 August 1864; Robert N. Scott, *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies*, vol. 39, Part I (US War Department, Washington, DC: 1880–1901), 416.

21. “History of Fort Morgan,” Fort Morgan State Historical Site, accessed September 2018, <http://www.fort-morgan.org/history>.

22. Robert M. Browning, “Go Ahead, Go Ahead,” *Naval History Magazine* 23, no. 6 (December 2009): 3.

23. As quoted in Browning: “Go Ahead, Go Ahead,” 2/10, and “Abstract Log of the USS *Hartford*, Commodore James S. Palmer, US Navy, commanding,” Excerpt 5 August 1864, US Naval War Records Office, US Office of Naval Records and Library, and National Historical Society *Official Records of the Union and Confederate Navies in the War of the Rebellion*, 1, 21, 799. Note: Commodore Palmer became acting commander during Farragut’s absence from November 1864 to February 1865.

24. John F. Slinkman, *Duel to the Death: Eyewitness Accounts of Great Battles at Sea*, 1st ed. (New York: Harcourt, 1969), 65.

25. Browning, “Go Ahead, Go Ahead,” 3.

26. Slinkman, *Duel to the Death*, 68.

27. Hearn, *Mobile Bay and the Mobile Campaign*, 89.

28. Hearn, 89.

29. A *gunwale*, pronounced *guh-n-l*, is the top edge of a side of a boat.

30. Hearn, *Mobile Bay and the Mobile Campaign*, 90.

31. Hearn, 91.

32. Hearn, 91.

33. Hearn, 91; Browning, “Go Ahead, Go Ahead,” 4.

34. Hearn, 92.

35. Hearn, 100.

36. ORN, vol. 21, 418; Hearn, 102.

37. Hearn, 107; ORN, vol. 21, 418.

38. Browning, “Go Ahead, Go Ahead,” 7; ORN, vol. 21, 500–01.

39. Hearn, *Mobile Bay and the Mobile Campaign*, 117.

40. Hearn, 114.

41. Browning, “Go Ahead, Go Ahead,” 7; Hearn, 117; ORN, vol. 21, 406–07, 425–28, 491–93.

42. Hearn, 99.

43. ORN, vol. 21, 518–19.

44. Browning, "Go Ahead, Go Ahead," 7.
45. Hearn, *Mobile Bay and the Mobile Campaign*, 39.
46. Scott, *The War of the Rebellion*, vol. 39, Part I, 406.
47. Hearn, *Mobile Bay and the Mobile Campaign*, 211.
48. Holzer et al., *Hearts Touched by Fire*, 930.
49. Scott, *The War of the Rebellion*, vol. 39, Part I, 404.
50. Hearn, *Mobile Bay and the Mobile Campaign*, 125.
51. Hearn, 122.
52. Hearn; Report of Lieutenant Colonel Williams, CS Army, late commanding Fort Powell, 7 August 1864; ORN, vol. 21, 560–61; Negative Endorsement of Maj. Gen. Maury to Lt. Col. William's Report of 7 August 1864; Scott, *The War of the Rebellion*, vol. 39, Part I, 441–42.
53. Scott, 402.
54. ORN, vol. 21, 559.
55. Brig. Gen. R.L. Page to Maj. Gen. D.H. Maury reporting the surrender of Fort Gaines (8 Aug 1864); Scott, *The War of the Rebellion*, vol. 39, Part I, 436–37.
56. Col. C.D. Anderson, "Letter from Col CD Anderson to His Wife, Oct 1 1864" *The Daily Dispatch* (1864).
57. Hearn, *Mobile Bay and the Mobile Campaign*, 126.
58. Hearn, 124; R.L. Page to Maj. Gen. Dabney H. Maury (8 August 1864); ORN, vol. 21, 561; Scott, *The War of the Rebellion*, vol. 39, Part I, 436–37.
59. As quoted in Arthur W. Bergeron, *Confederate Mobile* (Baton Rouge: Louisiana State University Press, 2000), 147; "Maj. Gen. Maury to General Braxton Bragg," 14 August 1864, William P Palmer Collection of Braxton Bragg Papers, Western Reserve Historical Society, Cleveland, OH.
60. Note: Confederate units often were named after their commander (e.g. Granger's Brigade). Anderson, "Letter from Col CD Anderson to His Wife."
61. Hearn, *Mobile Bay and the Mobile Campaign*, 127.
62. Maury to Seddon (8 August 1864); Scott, *The War of the Rebellion*, vol. 39, Part I, 426.
63. Joint doctrine defines Movement and Maneuver as the function that "encompasses the disposition of joint forces to conduct operations by securing positional advantages before or during combat operations and by exploiting tactical success to achieve operational and strategic objectives. This function includes moving or deploying forces into an operational area and maneuvering them to operational depths for offensive and defensive purposes. It also includes assuring the mobility of friendly forces." Joint Chiefs of Staff, Joint Publication (JP) 3-0, *Joint Operations* (Washington, DC: 2011), III-27.
64. Scott, *The War of the Rebellion*, vol. 39, Part II, 257.
65. Scott, 252.
66. Report from the Chief Engineer of the Military Division of West Mississippi, Captain M.D. McAlester to Brig. Gen. R. Delafield, Chief Engineer, Washington, DC; Scott, 415.
67. Hearn, *Mobile Bay and the Mobile Campaign*, 130.

68. R.L. Page After-Action Report of the Surrender of Fort Morgan to D.H. Maury (30 August 1864); Scott, *The War of the Rebellion*, vol. 39, Part I, 439.
69. D.G. Farragut to Maj. Gen. E.R.S. Canby, 14 August 1864; Farragut also mentions in a message to Gideon Welles on 13 August 1864; Scott, 251.
70. ORN, vol. 21, 571.
71. Hearn, *Mobile Bay and the Mobile Campaign*, 131.
72. Hearn, 135; Farragut to Canby, 5 September 1862; ORN, vol. 21, 626.
73. Hearn, 133; Farragut to Welles, 27 August 1862; ORN, 612.
74. Hearn, 133–35.
75. Scott, *The War of the Rebellion*, Vol. 39, Part II, 264.
76. E.R.S. Canby to Maj. Gen. Halleck (17 August 1864); Scott, vol. 39, Part I, 403.
77. H.W. Halleck to U.S. Grant, City Point (27 August 1864); Scott, vol. 39, Part II, 306–07.
78. Hearn, *Mobile Bay and the Mobile Campaign*, 221.
79. S.M. Eaton to Assistant Adjutant General Lt. Col. C.T. Christensen (2 February 1865); Scott, *The War of the Rebellion*, vol. 49, Part I, 636.
80. Statement of Perry Ryales from Mobile, Alabama (16 February 1864); Scott, 830–31.
81. Statement of Perry Ryales; Scott, 830–31.
82. Addendum to Intelligence Report of George W. Mader (8 March 1864); Scott, 864–65.
83. E.R.S. Canby to Rear Adm. H.K. Thatcher (9 March 1865); Scott, 876; ORN, vol. 22, 63–64.
84. Hearn, *Mobile Bay and the Mobile Campaign*, 205–06.
85. Hearn, 147.
86. Andrews, *History of the Campaign of Mobile*, 21; Scott, *The War of the Rebellion*, vol. 49, Part I, 91–93, 593.
87. G. Granger to Maj. Gen. Canby (17 February 1865); Scott, 739.
88. ORN, vol. 21, 647.
89. Hearn, *Mobile Bay and the Mobile Campaign*, 155.
90. ORN, vol. 22, 65.
91. Andrews, *History of the Campaign of Mobile*, 31.
92. Department of the Army, Army Doctrine Reference Publication (ADRP) 3-0, *Unified Land Operations* (Washington, DC: 2016), 4-8; Joint Chiefs of Staff, Joint Publication (JP) 5-0, *Joint Planning* (Washington, DC: 2011): III-36-37.
93. Scott, *The War of the Rebellion*, vol. 49, Part I, 593.
94. Joint Chiefs of Staff, JP 5-0, V-6.
95. Hearn, *Mobile Bay and the Mobile Campaign*, 148.
96. Maj. Gen. A.J. Smith to Secretary of War Edwin M. Stanton (8 February 1865); Scott, *The War of the Rebellion*, vol. 49, Part I, 132, 668–69.
97. Maj. Gen. A.J. Smith to Secretary of War Edwin M. Stanton; Scott.
98. Scott, 729.
99. Hearn, *Mobile Bay and the Mobile Campaign*, 149.

100. Andrews, *History of the Campaign of Mobile*, 26; Hearn reports that it took eleven days for this operational movement, Hearn, 148; other reports suggest that the distance was as great as 1,350 miles: Scott, *The War of the Rebellion*, vol. 49, Part I, 131.
101. Andrews, *History of the Campaign of Mobile*, 37.
102. Andrews, 36–37; Hearn, *Mobile Bay and the Mobile Campaign*, 156.
103. Andrews, 35–36.
104. Hearn, *Mobile Bay and the Mobile Campaign*, 150; Andrews, 97–98; Scott, *The War of the Rebellion*, vol. 49, Part I, 119, 1052.
105. C.C. Andrews, *History of the Campaign of Mobile: Including the Co-operative Operations of Gen. Wilson's Cavalry in Alabama* (New York: D. Van Nostrand Co., 1867), 106.
106. Hearn, 155.
107. Hearn, 150.
108. Andrews, *History of the Campaign of Mobile*, 34.
109. Hearn, *Mobile Bay and the Mobile Campaign*, 155.
110. Hearn, 155.
111. Hearn, 157.
112. Hearn, 156.
113. Scott, *The War of the Rebellion*, vol. 49, Part I, 93.
114. Hearn, *Mobile Bay and the Mobile Campaign*, 166.
115. Scott, *The War of the Rebellion*, vol. 49, Part I, 140.
116. Hearn, *Mobile Bay and the Mobile Campaign*, 156.
117. “Exploring Off the Beaten Path,” n.d., accessed September 2018, <http://www.exploringoffthebeatenpath.com/battlefields/fortblakeley/index.html>.
118. The *cheval de frise* (plural: *chevaux de frise*) was a portable frame covered in projecting iron or long wooden spikes. It was an anti-cavalry obstacle that could also be used to fill breaches in defensive lines. An *abatis* is an obstacle composed of trees laid in a row with the sharpened tops pointing at the enemy. The trees, or any modern equivalent, would be tied together with wire.
119. St. John Richardson Liddell and Nathaniel Cheairs Hughes, *Liddell's Record* (Baton Rouge, LA: Louisiana State University Press, 1997), 1045–48; as quoted in Hearn, *Mobile Bay and the Mobile Campaign*, 147.
120. Andrews, 70–71.
121. Andrews, 49.
122. Hearn, *Mobile Bay and the Mobile Campaign*, 165.
123. Andrews, *History of the Campaign of Mobile*, 60; Hearn, 176.
124. Andrews, 72.
125. In this context, a gabion is a wicker basket, without top or bottom, filled with dirt to form earthwork fortifications; today's modern equivalent of a gabion would be a wire cage filled with dirt and rock called a “HESCO bastion,” manufactured by the firm HESCO and used extensively in Iraq and Afghanistan.
126. Andrews, *History of the Campaign of Mobile*, 59; Scott, *The War of the Rebellion*, vol. 49, Part II, 1162.

127. As quoted in Andrews, *History of the Campaign of Mobile*, 164; David W. Reed, “Campaigns and Battles of the Twelfth Regiment Iowa Veteran Volunteer Infantry,” 228.

128. Andrews, 59.

129. In the nineteenth century, fascines were bundles of brushwood tied together to support earthen defense works or for crossing marshy areas. In modern warfare, combat engineers build fascines with more modern materials, such as plastic piping.

130. Hearn, *Mobile Bay and the Mobile Campaign*, 171–72; Andrews, *History of the Campaign of Mobile*, 74–76.

131. Hearn, 171–72; Andrews, 74–76.

132. Hearn, 174; Report of Brig. Gen. Randall L. Gibson CSA Commanding (16 April 1865); Scott, *The War of the Rebellion*, vol. 49, Part I, 313–18.

133. Hearn, 179.

134. Andrews, *History of the Campaign of Mobile*, 80.

135. Andrews, 79.

136. Hearn, *Mobile Bay and the Mobile Campaign*, 188; Andrews reported eight heavy guns from Totten’s Siege Train positioned on the eastern shore of Bay Minette; Andrews, 81.

137. Scott, *The War of the Rebellion*, vol. 49, Part I, 94.

138. As reported from the diary of a Confederate officer; Andrews, *History of the Campaign of Mobile*, 135.

139. As reported from the diary of a Confederate officer; Andrews, 80–81.

140. Andrews, 78.

141. Andrews, 120; “[W]ith his negroes” is a reference to Brig. Gen. John P. Hawkins, 1st Division of US Colored Troops (USCT).

142. Andrews, 139.

143. Andrews, 143.

144. Andrews, 142.

145. Andrews, 142.

146. Andrews; the ORN has a slightly different rendition of the messages between Gibson and Maury on 5 April 1865 from Scott, *The War of the Rebellion*, vol. 49, Part II, 1204–05: “I will make good soldiers of all the negroes you send me, provided I have axes and spades.”

147. Andrews, 146.

148. Andrews, 147.

149. Scott, *The War of the Rebellion*, vol. 49, Part II, 1186.

150. Scott, 1184–87, 1218; Hearn, *Mobile Bay and the Mobile Campaign*, 176; Hearn in *Mobile Bay and the Mobile Campaign* incorrectly cites ORN vol. 39 instead of vol. 49.

151. Hearn, 188.

152. Andrews, *History of the Campaign of Mobile*, 151–54.

153. Andrews, 153.

154. Andrews, 152.

155. Hearn, *Mobile Bay and the Mobile Campaign*, 188–89.
156. Andrews, *History of the Campaign of Mobile*, 155.
157. Hearn, *Mobile Bay and the Mobile Campaign*, 189.
158. Andrews, *History of the Campaign of Mobile*, 157.
159. Andrews, 162.
160. Andrews, 160.
161. Hearn, *Mobile Bay and the Mobile Campaign*, 191.
162. Hearn, 186.
163. Scott, *The War of the Rebellion*, vol. 49, Part II, 1192.
164. ORN, vol. 22, 120–21.
165. Hearn, *Mobile Bay and the Mobile Campaign*, 138.
166. Hearn, *Mobile Bay and the Mobile Campaign*, 173.
167. ORN, vol. 22, 20–22, 47.
168. Canby to Thatcher (16 March 1865); Thatcher to Canby (17 March 1865); ORN, vol. 22, 65–66.
169. Hearn, *Mobile Bay and the Mobile Campaign*, 169.
170. Hearn, 169.
171. Andrews, *History of the Campaign of Mobile*, 94; ORN, vol. 22, 70–72.
172. Hearn, *Mobile Bay and the Mobile Campaign*, 169–70.
173. Hearn, 170.
174. Andrews, *History of the Campaign of Mobile*, 145.
175. Andrews, 132–33.
176. ORN, vol. 22, 92.
177. Andrews, *History of the Campaign of Mobile*, 132.
178. Scott, *The War of the Rebellion*, vol. 49, Part I, 96.
179. Andrews, *History of the Campaign of Mobile*, 135–136.
180. Scott, *The War of the Rebellion*, vol. 49, Part I, 97.
181. Andrews, *History of the Campaign of Mobile*, 165.
182. Andrews, 121.
183. Andrews, 95; Hearn, *Mobile Bay and the Mobile Campaign*, 146, 149.
184. Andrews, 100–01.
185. Hearn, *Mobile Bay and the Mobile Campaign*, 156.
186. Andrews, *History of the Campaign of Mobile*, 112–13.
187. Scott, *The War of the Rebellion*, vol. 49, Part I, 119.
188. Andrews, *History of the Campaign of Mobile*, 114–17.
189. Andrews, 241–51.
190. Andrews, 117–20.
191. Hearn, *Mobile Bay and the Mobile Campaign*, 146, 176.
192. Scott, *The War of the Rebellion*, vol. 49, Part II, 1138, 1141–42; Andrews, *History of the Campaign of Mobile*, 103. An initial Confederate report of Steele’s “Column from Pensacola” claimed its strength at 40,000. One day later, the cited report above corrected the force estimate to “10,000 less,” thus the annotated quotation of “30,000.”

193. Andrews, 168.
194. Andrews, 168.
195. Andrews, 123.
196. Scott, *The War of the Rebellion*, vol. 49, Part I, 98.
197. Andrews, *History of the Campaign of Mobile*, 125, 127; Hearn, *Mobile Bay and the Mobile Campaign*, 182; Brig. Gen. St. J.R. Liddell to Maj. Gen. Maury (2 April 1865); Scott, *The War of the Rebellion*, vol. 49, Part II, 1190.
198. Andrews, *History of the Campaign of Mobile*, 125, 127; Hearn, *Mobile Bay and the Mobile Campaign*, 182; Brig. Gen. St. J.R. Liddell to Maj. Gen. Maury (2 April 1865); Scott, *The War of the Rebellion*, vol. 49, Part II, 1190.
199. Brigadier General St. J.R. Liddell to Major General Maury; Scott.
200. Andrews, *History of the Campaign of Mobile*, 170.
201. Andrews, 128–29; Hearn, *Mobile Bay and the Mobile Campaign*, 182–83; Scott, *The War of the Rebellion*, vol. 49, Part II, 1190–91.
202. Hearn, *Mobile Bay and the Mobile Campaign*, 183.
203. Andrews, *History of the Campaign of Mobile*, 176. Much of Liddell's correspondence is missing in the official records.
204. Andrews, 176.
205. Andrews believes it was five guns; Andrews, 181.
206. Andrews, 187.
207. Andrews, 187.
208. Hearn, *Mobile Bay and the Mobile Campaign*, 186; ORN, vol. 22, 86; Scott, *The War of the Rebellion*, vol. 49, Part I, 283.
209. Hearn, 191.
210. Andrews, *History of the Campaign of Mobile*, 190.
211. Liddell to Cockrell, 9 April 1865, Scott, vol. 49, Part II, 1222–23.
212. Andrews, *History of the Campaign of Mobile*, 190.
213. Andrews, 191–92.
214. Hearn, *Mobile Bay and the Mobile Campaign*, 196. Andrews, 209.
215. Andrews, 200–01; Hearn, 194.
216. Hearn, 194.
217. Andrews, *History of the Campaign of Mobile*, 208–10.
218. Andrews, 221.
219. Andrews, 227–28.
220. Andrews, 231.
221. Hearn, *Mobile Bay and the Mobile Campaign*, 200.
222. Hearn, 204.
223. Andrews, *History of the Campaign of Mobile*, 223.
224. Hearn, *Mobile Bay and the Mobile Campaign*, 201.
225. Scott, *The War of the Rebellion*, vol. 49, Part I, 144–46; ORN, vol. 22, 95.
226. Hearn, *Mobile Bay and the Mobile Campaign*, 201.
227. Hearn, 199–200.
228. Hearn, 199.

229. Hearn, 199; Scott, *The War of the Rebellion*, vol. 49, Part I, 99.
230. Hearn, 207; ORN, vol. 22, 130–32. Number includes the gunboat “Sciota,” the tug “Ida” and the tug “Althea.”
231. Andrews, *History of the Campaign of Mobile*, 225.
232. Hearn, *Mobile Bay and the Mobile Campaign*, 207; Scott, *The War of the Rebellion*, vol. 49, Part II, 1287.
233. Scott, *The War of the Rebellion*, vol. 49, Part I, 103–04.
234. Scott, 140.
235. Hearn, *Mobile Bay and the Mobile Campaign*, 202.
236. Hearn, 206.

IV. Integration Phase

As this handbook has previously emphasized, a staff ride consists of three phases. The first phase is the “Preliminary Study Phase.” This phase occurred before the visit to the battlefield and prepared the students for the visit. The second phase was the “Field Study Phase.” This phase occurred on the battlefield and enabled students to understand historical events through analysis of the actual terrain. The final phase of a staff ride is the “Integration Phase.” No staff ride is complete without this phase. The students use this phase to integrate their preliminary study with the field-work, gaining insights that are relevant to their current duties and enhance their professional development. It is critical for the students to understand what happened; why it happened; and, most importantly, what can they learn from the study of the battle or campaign.

When possible, students should have some time for personal reflection and thought before the integration phase. Thus, the leader should conduct the integration phase the day after the field phase ends. If you cannot wait an extra day, however, it is best to do the integration session at a location different than the last stand, a place comfortable and dry that will encourage open discussion by all the participants.

Keep in mind that the integration phase is *not* an after-action review of the ride itself (i.e., ways to improve the staff ride). While it is useful to seek constructive criticism to continue to improve the ride, this should be done at another time with written comments.

One method that often produces a fruitful integration phase is to conduct the session in three parts based on three broad questions. Sometimes, the leader only needs to present the general question and let others carry the conversation, or the leader may ask follow-up questions to prod the discussion.

Suggested Questions and Discussion for the Staff Ride

What aspects of the campaign had you developed, or imagined, in the preliminary study phase that changed, or were strongly reinforced, by your experience and study of the ground?

Elements of this chapter are based on the excellent analysis from Curtis S. King, William Glenn Robertson, and Steven E. Clay, *Staff Ride Handbook for the Overland Campaign, Virginia, 4 May to 15 June 1864: A Study in Operational-Level Command* (Fort Leavenworth, KS: Combat Studies Institute Press, 2006).

The staff ride leader could also ask a related question that might generate good discussion: *Did seeing the terrain alter your opinion of any of the leaders?* These are crucial questions. Seeing the terrain is central to a staff ride; otherwise the students could simply discuss the campaign in the classroom. Of course, students may develop a wide range of answers based on personal study and their observations in the field. In particular, a discussion of terrain for the Mobile Campaigns might include the vast operational distances that Canby had to deal with.

What aspects of warfare have changed and what aspects have remained the same since the Mobile Campaigns?

The answers to this question may seem obvious to the military professional: changes in weapons, transportation systems, communications, and others. The aspects that have “remained the same” may not seem as obvious, but students will often build on some initial answers and think through the implications of: the importance of operational maneuver; the role of personalities; command relationships; the importance of logistics; and the need for strong positive leadership that motivates soldiers, sailors, airmen, and marines. Other considerations that have changed little since 1864 might include determination, courage, and fear.

What insights can the modern military professional gain from the Mobile Campaigns that are relevant today?

Clearly, the participants can take this discussion in diverse directions. Once again, the type of unit taking part in the staff ride might help guide the discussion. For example, a military intelligence unit might focus on the commander’s situational awareness, intelligence gathering, and the importance of reconnaissance. Keeping in mind that the Mobile Campaigns are as much an operational level staff ride as they are tactical, it might be useful to prompt discussion by using the elements of operational art as a framework:

- End state/military conditions.
- Center of gravity.
- Decisive points and objectives.
- Lines of operations.
- Culmination point.
- Operational reach/approach/pause.
- Simultaneous and sequential operations.
- Tempo.

The three suggested questions of the integration phase are to facilitate the understanding and relevance of an historical staff ride to a modern audience. Below are other questions that should generate discussion of modern doctrine and operational art. The suggested answers are not intended to provide hard and fast “rules” of warfare. By the same token, the staff ride leader should encourage participants to develop their own answers, and thus be prepared to guide the discussion along many different paths.

1. Explore the synchronization and linkages of the two campaigns. If the Battle of Mobile Bay (or an equivalent campaign) had not occurred, could Canby’s Campaign up the eastern shore have been successful?

2. Evaluate Canby’s operational concept for Mobile.

a. Canby knew that Maury did not have a potent force in Mobile.

b. Capturing the forts on the east side pulled soldiers from Mobile and opened the rivers to the north.

c. Canby wanted to avoid a protracted siege on either side of the bay.

d. The depths in Mobile Bay affected naval operations and, thus, naval support for ground operations in the North Bay.

3. What purpose did Spanish Fort and Fort Blakely serve?¹

a. The bay is shallow around Mobile, thus even medium-draft vessels had problems getting into Mobile.

b. Huger and Tracy had been built to prevent Union gunboats from getting close to Mobile by running down the Tensaw.

c. Spanish Fort was originally intended to protect Huger and Tracy.²

4. Were the sieges at both forts even necessary? Could Canby have ignored Spanish Fort and Fort Blakely and successfully destroyed the batteries across the Blakely River? How?

a. Canby proved that he could put guns on the shores of Bay Minette and strike Batteries Huger and Tracy unimpeded.³ However, leaving the two forts alone would have exposed Canby’s forces to an unnecessary threat.

5. The Spanish Fort garrison was almost completely evacuated in one of the great retrograde operations of military history. On the other hand, the entire Fort Blakely garrison was captured. Brigadier General Andrews, a few years after the war, argued that Fort Blakely should have been aban-

done immediately after Spanish Fort fell and the garrison transported back to Mobile to defend that city.⁴ What is your opinion?

6. In what ways were the Mobile Campaigns harbingers of modern war?

a. Iron ship versus wooden ship.

b. Trench warfare (ask students why the casualties were so low).

c. Mine warfare (more ships were lost to mines than ship-to-ship or coastal artillery-to-ship). Until World War II, the single biggest loss of life in the US Navy was the sinking of the USS *Tecumseh* in 1864, with 93 drowned.⁵

d. Mine warfare on land.

6. Evaluate the “jointness” of Union operations in these campaigns. Discuss the success of the Battle of Mobile Bay and the Campaign for Mobile as joint operations. Why were they successful? What characteristics made them successful? Recall that Lincoln was the first common link in the chain of command between the Union Army and Union Navy.

7. Compare and contrast Union leadership between the two campaigns: Major Generals Granger and Canby and Rear Admirals Farragut and Thatcher.

This concludes your Mobile Staff Ride.

Notes

1. Blakeley is the correct spelling. The name of this town was also spelled “Blakely” without the extra “e” during the Civil War. For historical accuracy, “Blakely” will be used in its historical context. When referencing “Historic Blakeley State Park,” the more modern spelling will be used.

2. Chester G. Hearn, *Mobile Bay and the Mobile Campaign: The Last Great Battles of the Civil War* (Jefferson, NC: McFarland, 1993), 159.

3. Hearn, 202.

4. C.C. Andrews, *History of the Campaign of Mobile: Including the Co-operative Operations of Gen. Wilson's Cavalry in Alabama* (New York: D. Van Nostrand, 1867), 224.

5. Hearn, *Mobile Bay and the Mobile Campaign*, 207.

V. Support for a Staff Ride to Mobile Bay

Information and Assistance

a. The Army University Press at Fort Leavenworth can provide advice and assistance on every aspect of this staff ride. Resources include historical data, detailed knowledge of the campaign and battles, and familiarity with the battlefield parks around Mobile and Mobile Bay.

The Army University Press
ATTN: Staff Ride Team
290 Stimson Avenue, Unit 1
Fort Leavenworth, Kansas 66027-6900
913-684-2131 (DSN 552-2131)
<https://www.armyupress.army.mil/Educational-Services/Staff-Ride-Team-Offerings/>

b. Unlike other national military parks such as Vicksburg or Gettysburg, the National Park Service does not administer the parks where these staff ride stands take place. Most are state or state-sponsored, as is the case of Fort Blakeley, Alabama. Others are controlled by city and/or private concerns.

c. For Stands 1–5 at Fort Morgan, check <http://www.fort-morgan.org> or contact the Fort Morgan director, 251-540-7202.

d. For Stand 6 at Weeks Bay: If you want to use the Weeks Bay Center at Stand 6, contact the *Weeks Bay Reserve Tonsmeire Resource Center*, <http://weeksBay.org/contact.htm>. This is a non-profit organization that supports the Weeks Bay National Estuarine Research Reserve “in its efforts to protect the pristine coastal area of Baldwin County, Alabama.” The center includes the main building, a picnic facility, and other facilities.

Weeks Bay Foundation
11401 US Highway 98
Fairhope, AL 36532
251-990-5004
Fax: 251-990-9273

e. Stand 8 at Fort McDermott is sited at a private park in the middle of a development. The Fort McDermott Confederate Memorial Park, a private neighborhood association, supports the park. Find contact information about the Park and the organization “Raphael Semmes Camp 11” at <http://scvsemmes.org/contact.html>.

There is adequate parking for cars or vans, as well as a single bus, at this stand. If additional bus parking is necessary, CSI recommends that participants be dropped off at the intersection of Cannonade Boulevard and Spanish Main Street then follow a route around to the Marathon Station at the corner of Spanish Main Street and Spanish Fort Boulevard. The bus should then stage from the parking lot at Spanish Fort Plaza, a shopping center at the intersection of Spanish Main and Old Spanish Trail.

Note: Because Fort McDermott (Stand 8) is part of a private development, AUP does not recommend walking to and from Spanish Fort Plaza.

f. Stands 9 and 10 are in the middle of a housing development. Contact the Fort McDermott Confederate Memorial Park, a private neighborhood association, for more complete information at <http://scvsemmes.org/contact.html>. Alternatively, contact the Spanish Fort Public Works Department: 251-626-4884 or publicworks@cityofspanishfort.com.

g. Stand 12 at Five Rivers: Access to Five Rivers Delta Resource Center and its picnic facilities are arranged by its staff, 251-625-0814 or <http://www.outdooralabama.com/5-rivers-alabamas-delta-resource-center>.

h. Stands 13–18 are at Fort Blakeley. Contact Fort Blakeley for fees, picnic veranda reservations, and latest park info: 251-626-0798 or <http://www.blakeleypark.com/contact.asp>.

Logistics

a. Meals. The itinerary within this handbook presumes the ability to enjoy lunch at two different picnic areas: Fort Morgan and the Five Rivers Delta Resource Center. Feel free to make other arrangements as desired. When visiting the campaign area, plan to bring food and drinks or arrange catering from an area establishment. No eating facilities exist within any of the parks themselves; however, several restaurants, grocery stores, and fast-food establishments are within a 10-minute drive of Spanish Fort or a 25-minute drive of Fort Morgan.

b. Lodging. Mobile, Spanish Fort, and Gulf Shores offer plentiful hotel and motel accommodations. In this handbook, directions at the beginning of each day are from Spanish Fort.

c. Transportation. As a general rule, the Combat Studies Institute does not recommend depending on ferries as a means of transportation. However, there is a ferry that crosses the entrance to Mobile Bay. You could use this ferry as a side trip or to approach Fort Morgan from the west. Check <http://mobilebayferry.com> for latest fares and weather info. *Note: Buses are not allowed on the ferries.*

Medical

There are no military health care facilities in Mobile, Alabama, or on the eastern shore of Mobile Bay. The closest military health care facility is Naval Hospital Pensacola, approximately 55 miles southeast of Spanish Fort, Alabama.

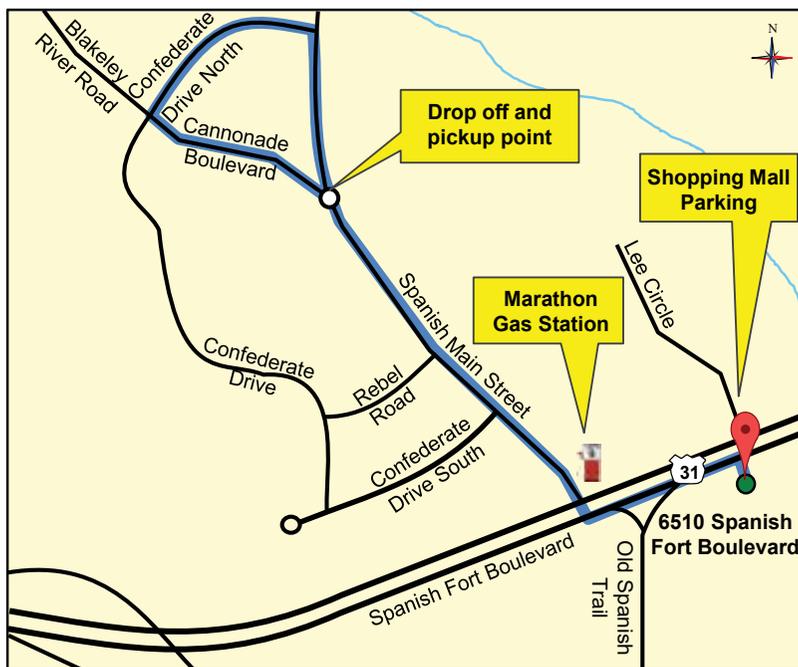
Other Considerations

a. Except for Fort Morgan and Fort Blakeley, most of the battlefield sites are in private hands. Do not trespass on private property without prior approval from the owner.

b. Ensure that your group has proper clothing for inclement weather. Violent thunderstorms can occur in any season.

c. Insect repellent is advised. Mosquitoes, fire ants, chiggers, and ticks are prevalent from March to November.

d. Roads and bridges, particularly in rural areas, are sometimes closed due to flooding or construction. Park personnel at Fort Morgan or Fort Blakeley may be able to offer up-to-date information regarding route issues.



Handout for Bus and/or Van Drivers

- Drop off group at Stand 8.
- Head northwest on Spanish Main Street toward Cannonade Boulevard.
 - Slight left onto Cannonade Blvd 0.2 mile.
 - Turn right at the 1st cross street onto Confederate Drive North .2 miles.
 - Turn right onto Spanish Main Street .4 miles.
 - Park at gas station at the bottom of the hill (6445 Spanish Fort Boulevard, Spanish Fort). Or park across the street in the shopping mall parking lot.
 - The phone number for the Marathon Station is: 251-626-1973.
 - Stand by with your cell phone to move back up the hill to collect your passengers. The wait will be about 25 minutes. *Note: Suggest doing a phone check before drop-off to ensure that communication works.*

Appendix A: Orders Of Battle

Order of Battle: Campaign for Mobile Bay–1864¹

Union Naval Forces

Vessel	Displacement (tons)	Guns	Commander
Monitors (Starboard Column)			
<i>Tecumseh</i>	1,034	2	Cmdr. Tunis A.M. Craven
<i>Manhattan</i>	1,034	2	Cmdr. James W.A. Nicholson
<i>Winnebago</i>	970	4	Cmdr. Thomas H. Stevens
<i>Chickasaw</i>	970	4	Lt. Cmdr. George H. Perkins
Gunboats (Port Column)			
<i>Brooklyn</i>	2,070	24	Capt. James Alden
<i>Octorara</i>	829	6	Lt. Cmdr. C.H. Green
<i>Hartford</i>	2,900	24	Fleet Capt. Percival Drayton
<i>Metacomet</i>	974	9	Lt. Cmdr. J.E. Jouett
<i>Richmond</i>	2,700	20	Capt. T.A. Jenkins
<i>Port Royal</i>	805	8	Lt. Cmdr. B. Gherardi
<i>Lakawanna</i>	1,533	14	Capt. John B. Marchand
<i>Seminole</i>	801	8	Cmdr. E. Donaldson
<i>Monongahela</i>	1,378	8	Cmdr. J.H. Strong
<i>Kennebec</i>	507	5	Lt. Cmdr. W.P. McCann
<i>Ossipee</i>	1,240	11	Cmdr. W.E. LeRoy
<i>Itasca</i>	507	6	Lt. Cmdr. G. Brown
<i>Oneida</i>	1,032	9	Cmdr. J.R.M. Mullaney ²
<i>Galena</i>	738	10	Lt. Cmdr. C.H. Wells
Total		174	

Figure 43. Union Naval Forces, 1864. (Created by Army University Press.)

Vessel	Displacement (tons)	Guns	Commander
East Supporting Force (Fort Morgan)			
<i>Sebago</i>	832 ³	6	Lt. Cmdr. W.E. Fitzhugh ⁴
<i>Genesee</i>	803	8	Acting Master Wm. Hanson ⁵
<i>Pembina</i>	507	4	Lt. Cmdr. L.H. Newman ⁶
<i>Bienville</i>	1,558	11	Lt. Cmdr. H.L. Howison ⁷
West Supporting Force (Dauphin Island)			
<i>Stockdale</i>	188	6	Acting Volunteer Lt. Thomas Edwards ⁸
<i>Estrella</i>	438	5	Acting Master G.P. Pomeroy ⁹
<i>Narcissus</i>	101	2	Acting Ensign William G. Jones ¹⁰
<i>John P. Jackson</i>	750	6	Acting Master Miner B. Crowell ¹¹
<i>Conemaugh</i>	955	10	Lt. Cmdr. J.C.P. deKraft ¹²
Total		58	

Figure 44. Union Naval Forces, 1864, continued.
(Created by Army University Press.)

Confederate Naval Forces

Vessel	Displacement (tons)	Guns	Commander
Ironclad			
<i>Tennessee</i>	1,273	6	Capt. James D. Johnson
Gunboats			
<i>Selma</i>	320	4	Lt. Peter U. Murphey
<i>Gaines</i>	863	6	Lt. Cmdr. J.W. Bennett
<i>Morgan</i>	863	6	Cmdr. George W. Harrison
Total Guns		22	
Gunboats Not Engaged			
<i>Baltic</i> (Ironclad)		6	
<i>Nashville</i> (Ironclad)		6	1st Lt. Chas. C. Simms ¹³
<i>Huntsville</i> (Floating Battery)		4	
<i>Tuscaloosa</i> (Floating Battery)		4	Cmdr. C.H. McBlair ¹⁴

Figure 45. Confederate Naval Forces, 1864.
(Created by Army University Press.)

Union Ground Forces

Maj. Gen. Gordon Granger

Clark's Brigade, Col. George W. Clark
 77th Illinois, Col. David P. Grier
 67th Indiana, Lt. Francis A. Sears
 34th Iowa, Col. George W. Clark
 96th Ohio, Col. Albert H. Brown

Bertram's Brigade, Col. Henry Bertram
 94th Illinois, Col. John McNulta
 20th Iowa, Col. William M. Dye, Capt. Edward Coulter

38th Iowa, Lt. Joseph O. Hudnutt
20th Wisconsin, Lt. Henry A. Starr

Guppy's Brigade, Col. Joshua James Guppy
161st New York, Col. William B. Kinsey
23rd Wisconsin, Lt. Edmund Juessen

Engineer Brigade, Brevet Brig. Gen. Joseph Bailey
96th USCT, Col. John C. Cobb
97th USCT, Col. George D. Robinson
1st Pontoniers, Capt. J.J. Smith

Artillery Brigade, Brig. Gen. Richard Arnold
1st Indiana Heavy Artillery, Maj. William Roy
6th Michigan Heavy Artillery,
2nd Connecticut Heavy Artillery, Lt. Walter S. Hotchkiss
17th Ohio Battery, Capt. C.S. Rice
Battery A, 2nd Illinois Volunteer Light Artillery Regiment,
Capt. H. Borris, Lt. Frank B. Fenton

Cavalry

3rd Maryland Cavalry
Company A, 2nd Maine Volunteer Cavalry Regiment
Company M, 14th New York Cavalry

Confederate Ground Forces

Fort Morgan, Brig. Gen. Richard L. Page (~600 troops)
1st Alabama Artillery Battalion
21st Alabama Infantry (-)
1st Tennessee Infantry Regiment

Fort Gaines, Col. Charles D. Anderson (600 troops)
21st Alabama Infantry (-)
1st Alabama Artillery Battalion (-)
Pelham Cadets
Reserves and Marines

Fort Powell, Lt. James M. Williams (~140 troops)
21st Alabama Infantry (two companies)
Culpeper's South Carolina Battery

Order of Battle: Campaign for Mobile 1865¹⁵

Union Ground Forces

Maj. Gen. E.R.S. Canby

Headquarters Troops

Engineer Brigade, Brig. Gen. Joseph Bailey

96th US Colored Troops (USCT), Col. John C. Cobb

97th US Colored Troops, Lt. Col. George A Harmount, Col.
George D. Robinson

1st Pontoniers, Capt. John J. Smith

Siege Train, Brig. Gen. James Totten

1st Indiana Heavy Artillery (-), Col. Benjamin F. Hays

New York Light Artillery (18th Battery), Capt. John J. Smith

XIII CORPS, Maj. Gen. Gordon Granger

Mortar Batteries

6th Michigan Heavy Artillery CO A, Capt. Seldon F. Craig

6th Michigan Heavy Artillery CO K, Lt. Charles W. Wood

First Division, Brig. Gen. James C. Veatch

First Brigade, Brig. Gen. James R. Slack

99th Illinois (5 CO), Lt. Col. Asa C. Matthews

47th Indiana, Lt. Col. John A McLaughlin

21st Iowa, Col. Salue G. Van Auda

29th Wisconsin, Lt. Col. Bradford Hancock

Second Brigade, Brig. Gen. Elias S. Dennis

8th Illinois, Col. Josiah A. Sheetz

11th Illinois, Col. James H. Coates

46th Illinois, Col. Benjamin Dornblaser

Third Brigade, Lt. Col. William B. Kinsey

29th Illinois, Lt. Col. John A. Callicott

30th Missouri (-), Lt. Col. William T. Wilkerson

161st New York, Maj. Willis E. Craig
23rd Wisconsin, Maj. Joseph E. Greene

Division Artillery, Capt. George W. Fox
Massachusetts Light, 4th Battery, Lt. Col. George W. Taylor
Massachusetts Light, 7th Battery, Capt. Newman W. Storer

Second Division, Brig. Gen. Christopher C. Andrews
First Brigade, Col. Henry Bertram
94th Illinois, Col. John McNulta
19th Iowa, Lt. Col. John Bruce
23rd Iowa, Col. Samuel L. Glasgow
20th Wisconsin, Lt. Col. Henry A. Starr
1st Missouri Lt Arty Battery F, Capt. Joseph Foust

Second Brigade (attached to Steele), Col. William T. Spicely
76th Illinois, Col. Samuel T. Busey, Lt. Col. Charles C. Jones
97th Illinois, Lt. Col. Victor Vifquain
24th Indiana, Lt. Col. Francis A. Sears
69th Indiana (-), Lt. Col. Oran Perry, Capt. Lewis K. Harris

Third Brigade (attached to Steele), Col. Frederick W. Moore
37th Illinois, Col. Charles Black
20th Iowa, Lt. Col. Joseph B. Leake
34th Iowa, Col. George W. Clark
83rd Ohio, Lt. Col. William H. Baldwin
114th Ohio, Col. John H. Kelly

Division Artillery (attached to Steele)
Connecticut Light, 2nd Battery, Capt. Walter S. Hotchkiss
Massachusetts Light, 15th Battery, Lt. Albert Rowse

Third Division, Brig. Gen. William P. Benton
First Brigade, Col. David P. Grier
28th Illinois, Lt. Col. Richard Ritter, Maj. Hinman Rhodes
77th Illinois, Lt. Col. John B. Reid

96th Ohio (5 CO), Lt. Col. Albert H. Brown
35th Wisconsin, Col. Henry Orff

Second Brigade, Col. Henry M. Day
91st Illinois, Lt. Col. George A. Day
50th Indiana (-), Lt. Col. Samuel T. Wells
29th Iowa, Col. Thomas H. Benton Jr.
7th Vermont, Col. William C. Holbrook

Third Brigade, Col. Conrad Krez
33rd Iowa, Col. Cyrus H. Mackey
77th Ohio, Lt. Col. William E. Stevens
27th Wisconsin, Capt. Charles H. Cunningham
28th Wisconsin, Lt. Col. Edmund B. Gray

Division Artillery
New York Light, 21st Battery, Capt. James Barnes
New York Light, 26th Battery, Lt. Adam Beattie

XVI Corps, Maj. Gen. Andrew J. Smith
114th Illinois Pontoniers, Maj. John M. Johnson

First Division, Brig. Gen. John McArthur
First Brigade, Col. William L. McMillen
33rd Illinois, Col. Charles E. Lippincott
26th Indiana, Col. John G. Clark
93rd Indiana, Col. De Witt C. Thomas
10th Minnesota, Lt. Col. Samuel P. Jennison
72nd Ohio, Lt. Col. Charles G. Eaton
95th Ohio, Lt. Col. Jefferson Brumback

Second Brigade, Col. Lucius F. Hubbard
47th Illinois, Maj. Edward Bonham, Col. David W. Magee
5th Minnesota, Lt. Col. William B. Gere
9th Minnesota, Col. Josiah F. Marsh
11th Missouri, Maj. Modesta J. Green
8th Wisconsin, Lt. Col. William B. Britton

Third Brigade, Col. William R. Marshall
12th Iowa, Maj. Samuel G. Knee
35th Iowa, Lt. Col. William B. Keeler
7th Minnesota, Lt. Col. George Bradley
33rd Missouri, Lt. Col. William H. Heath

Division Artillery

Indiana Light, 3rd Battery, Capt. Thomas J. Ginn
Iowa Light, 2nd Battery, Capt. Joseph R. Reed

2nd Division, Brig. Gen. Kenner Garrard

First Brigade, Col. John I. Rinaker

119th Illinois, Col. Thomas J. Kinney
122nd Illinois, Lt. Col. James F. Drish, Maj. James F. Chapman
89th Indiana, Lt. Col. Hervey Craven
21st Missouri, Capt. Charles W. Tracy

Second Brigade, Brig. Gen. James I Gilbert

117th Illinois, Col. Risdon M. Morre
27th Iowa, Maj. George W. Howard
32nd Iowa, Lt. Col. Gustavus A. Eberhart
10th Kansas (4 CO), Lt. Col. Charles S. Hills
6th Minnesota, Lt. Col. Hiram P. Grant

Third Brigade, Col. Charles L. Harris

58th Illinois (4 CO), Capt. John Murphy
52nd Indiana, Lt. Col. Zalmon S. Main
34th New Jersey, Col. William H. Lawrence
178th New York, Lt. Col. John B. Gandolfo
11th Wisconsin, Maj. Jesse S. Miller

Third Division, Brig. Gen. Eugene A. Carr

First Brigade, Col. Jonathan B. Moore
72nd Illinois, Lt. Col. Joseph Stockton
95th Illinois, Col. Leander Blanden
44th Missouri, Capt. Frank G. Hopkins
33rd Wisconsin, Lt. Col. Horatio H. Virgin

Second Brigade, Col. Lyman W. Ward
40th Missouri, Col. Samuel A. Holmes
49th Missouri, Col. David P. Dyer
14th Wisconsin, Maj. Eddy F. Ferrie

Third Brigade, Col. James L. Geddes
81st Illinois, Lt. Col. Andrew W. Rogers
108th Illinois, Col. Charles Turner
124th Illinois, Bvt. Col. John H. Howe
8th Iowa, Lt. Col. William B. Bell

Division Artillery Brigade, Capt. John W. Lowell
Illinois Light, Cogswell's Battery, Lt. William R. Etling
2nd Illinois Light, Battery G, Lt. Perry Wilch
Indiana Light, 1st Battery, Capt. Lawrence Jacoby
Indiana Light, 14th Battery, Capt. Francis W. Morse
Ohio Light, 17th Battery, Capt. Charles S. Rice

Column from Pensacola Bay, Maj. Gen. Frederick Steele
First Division, Brig. Gen. John P. Hawkins
First Brigade, Brig. Gen. William A. Pile
73rd USCT, Lt. Col. Henry C. Merriam
82nd USCT, Col. Ladislav L. Zulavsky
86th USCT, Lt. Col. George E. Yarrington

Second Brigade, Col. Hiram Scofield
47th USCT, Lt. Col. Ferdinand E. Peebles
50th USCT, Col. Charles A. Golchrist
51st USCT, Col. A. Watson Webber

Third Brigade, Col. Charles Drew
48th USCT, Col. Frederick M. Crandal
68th USCT, Col. J. Blackburn Jones, Lt. Col. Daniel Densmore
76th USCT, Maj. William E. Nye

Lucas Cavalry Division, Brig. Gen. Thomas J. Lucas
First Brigade, Col. Morgan H. Chrysler
1st Louisiana, Lt. Col. Algernon S. Badger

31st Massachusetts (mounted infantry), Lt. Col. Edward P.
Nettleton
2nd New York Veteran, Col. Morgan H. Chrysler, Lt. Col.
Asa L. Gurney

Second Brigade, Lt. Col. Andrew B. Spurling
1st Florida, Capt. Francis Lyons
2nd Illinois, Maj. Franklin Moore
2nd Maine, Maj. Charles A. Miller

Corps Artillery
Massachusetts Light, 2nd Battalion, Capt. William Marland

Knipe's First Division, Brig. Gen. Joseph F. Knipe
First Brigade, Col. Joseph Karge
12th Indiana, Maj. William H. Calkins
2nd New Jersey, Lt. Col. P. Jones Yorke
4th Wisconsin, Col. Webster P. Moore

Second Brigade, Col. Gilbert M. L. Johnson
10th Indiana, Maj. George R. Swallow
13th Indiana, Lt. Col. William T. Pepper
4th Tennessee, Lt. Col. Jacob M. Thornburgh

Division Artillery
Ohio Light, 14th Battery, Capt. William C. Myers

District of South Alabama, Brig. Gen. T. Kilby Smith
Dauphin Island, Lt. Col. Byron Kirby
3rd Michigan Cavalry (-), Capt. Eli D. Grinder
6th Michigan Heavy Artillery (-), Capt. Seymour Howell

Mobile Point, Lt. Col. Charles E. Clarke
1st Michigan Light, Battery G, Lt. George L. Stillman
6th Michigan Heavy Artillery (-), Maj. Harrison Soule

Confederate Ground Forces¹⁶

Maj. Gen. Dabney H. Maury

Thomas's Brigade, Brig. Gen. Bryan M. Thomas

1st Alabama Reserves, Col. Daniel E. Huger

2nd Alabama Reserves, Lt. Col. Junius A. Law

21st Alabama, Lt. Col. James M. Williams

Gibson's Brigade, Brig. Gen. Randall L. Gibson

1st Louisiana, Lt. Col. Robert H. Lindsay

16th Louisiana, -----

20th Louisiana, -----

25th Louisiana, Col. Francis C. Zacharie

4th Louisiana Battalion, -----

4th Louisiana, Maj. Camp Lounoy

13th Louisiana, -----

19th Louisiana, -----

30th Louisiana, -----

Battalion Sharpshooters, Col. Francis L. Campbell

Taylor's Command, Col. Thomas H. Taylor

City Battalion (-), Maj. William Hartwell

Pelham Cadets Battalion, Capt. P. Williams Jr.

Holtzclaw's Brigade, Brig. Gen. James T. Hotzclaw

18th Alabama, Capt. A.C. Greene

32nd Alabama, Col. Bushrod Jones

58th Alabama, -----

36th Alabama, Col. Thomas H. Herndon

38th Alabama, Capt. Charles E. Bussey

Sappers and Miners, Capt. L. Hutchinson

French's Division, Brig. Gen. Francis M. Cockrell

Cockrell's Brigade, Col. James McCown

1st Missouri (dismounted cavalry), Capt. Joseph H. Neal

3rd Missouri Battalion (dismounted cavalry), -----

1st Missouri, Capt. Charles L. Edmondson
4th Missouri, -----

2nd Missouri, Lt. Col. Stephen Cooper
6th Missouri, -----

3rd Missouri, Capt. Benjamin E. Guthrie
5th Missouri, -----

Steede's Mississippi Cavalry Battalion, Maj. Abner C. Steede
Abbay's Battery, Capt. George F. Abbay

Ector's Brigade, Col. David Coleman
29th North Carolina, Capt. John W. Gudger
39th North Carolina, Maj. Paschal C. Hughes
9th Texas, Lt. Col. Miles A. Dillard
10th Texas Cavalry (dismounted), Capt. Jacob Ziegler
14th Texas Cavalry (dismounted), Lt. Col. Abram Harris
32nd Texas Cavalry (dismounted), Capt. Nathan Anderson

Sears's Brigade, Col. Thomas N. Adair
4th Mississippi, Maj. Thomas P. Nelson
7th Mississippi Battalion, Capt. Samuel D. Harris
35th Mississippi, Capt. George W. Oden
36th Mississippi, Lt. Col. Edward Brown
39th Mississippi, Capt. C. W. Gallaher
46th Mississippi, Capt. J.A. Barwick

Clanton's Brigade, Brig. Gen. James H. Clanton
3rd Alabama Reserves, Maj. Strickland
6th Alabama Cavalry, Lt. Col. Washington T. Lary
8th Alabama Cavalry, Lt. Col. Thomas L. Faulkner
Keyser's Detachment, Capt. Joseph C. Keyser

Armistead's Cavalry Brigade, Col. Charles G. Armistead
8th Alabama, Col. Charles P. Ball
16th Confederate, Lt. Col. Philip B. Spence
Lewis's Battalion, Maj. William V. Harrell

Maury's Command, Col. Henry Maury
 15th Confederate, Col. Henry Maury
 Tobin's Battery, Capt. Thomas F. Tobin

Mobile Defenses

Left Wing Artillery, Col. Charles A. Fuller
 Right Wing Artillery, Col. Melancthon Smith
 Trueheart's Battalion, Capt. Charles L. Lumsden
 Gee's Battalion, Maj. James T. Gee
 Cobb's Battalion, Capt. Cuthbert H. Slocumb
 Grayson's Battalion, Capt. John B. Grayson

Batteries, etc., Col. William E. Burnet

Union Naval Order of Battle, 1865 (Ironclads and Gunboats)			
Ship	Weapons	Tons	Notes
<i>Kickapoo</i>	4 x 11-in Smoothbore	970	Milwaukee Class Ironclad Lt. Cmdr. M.P. Jones
<i>Milwaukee</i>	4 x 11-inch Smoothbore	970	Milwaukee Class Ironclad Lt. Cmdr. J.H. Gillis
<i>Winnebago</i>	4 x 11-inch Smoothbore	970	Milwaukee Class Ironclad Lt. Cmdr. W.A. Kirkland
<i>Chickasaw</i>	4 x 11-inch Smoothbore	970	Milwaukee Class Ironclad Lt. Cmdr. G.H. Perkins
<i>Octorara</i>	2 x 32-pounder 4 x 24-pounder 100-pounder Parrott	829	Sidewheel Gunboat Lt. Cmdr. W.W. Low
<i>Genesee</i>	100-pounder Rifle 10-inch Smoothbore 4 x 9-inch Smoothbore 2 x 24-pounder Howitzer	803	Sidewheel Gunboat Lt. Cmdr. J. Irwin
Total	31		

Figure 46. Union Naval Forces, 1865.¹⁷ (Created by Army University Press.)

Confederate Naval Forces, 1865			
Ship	Weapons	Tons	Notes
<i>Huntsville</i>	6.4-inch Brooke Rifle 3 x 32 Pounder Smoothbore	Unknown	Ironclad 3 Knots
<i>Tuscaloosa</i>	6.4-inch Brooke Rifle 3 x 32 Pounder Smoothbore	Unknown	Ironclad 3 Knots
<i>Nashville</i>	3 x 7-inch Brooke Rifle 24 Pounder Howitzer	Unknown	Ironclad ~3 Knots
<i>Morgan</i>	7-inch Brooke Rifle 6-inch Rifle 4 x 32 Pounder Smoothbore	863	Escaped Battle of Mobile Bay 10 Knots
<i>Baltic</i>			Decommissioned; Armor moved to <i>Nashville</i>
Total	30		

Figure 47. Confederate Naval Forces, 1865.
(Created by Army University Press.)

Notes

1. Chester G. Hearn, *Mobile Bay and the Mobile Campaign: The Last Great Battles of the Civil War* (Jefferson, NC: McFarland, 1993), 213–14.

2. Mullany was placed in temporary command of the *Oneida* only three days before the Battle of Mobile Bay on the 5th. US Naval War Records Office, US Office of Naval Records and Library, and National Historical Society, *Official Records of the Union and Confederate Navies in the War of the Rebellion* (US Naval War Records Office, Washington, DC: 1984–1922, repr., Harrisburg, PA: National Historical Society, 1987), Series I, vol. 21, 397, 402, hereinafter cited as ORN.

3. Displacement for this and the following ships in this table are from ORN, 27–272.

4. ORN, 849.

5. ORN, 742.

6. ORN, 381–82.

7. Howison was the temporary commander during the battle as its permanent commander, Commander J.R.M. Mullany, was placed in temporary command of the USS *Oneida*. ORN, 397, 402.

8. ORN, 18, 385.

9. ORN, 384.

10. ORN, 289–90, 678–79.

11. ORN, 29. Note: Acting Volunteer Lt. L.W. Pennington was subsequently placed back in command, although the date of his assumption of command is unclear.

12. ORN, 388.

13. ORN, 908.

14. ORN, 307.

15. Hearn, *Mobile Bay and the Mobile Campaign*, 214–21; Robert N. Scott, *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies*, vol. 49, Part I (US War Department, Washington, DC: 1880–1901; repr., Gettysburg, PA: National Historical Society, 1971), 105–09.

16. Hearn, 218–21; Scott, 1046–48.

17. Paul H. Silverstone, *Warships of the Civil War Navies* (Annapolis, MD: Naval Institute Press, 1989); US Naval War Records Office, US Office of Naval Records and Library, and National Historical Society, *Official Records of the Union and Confederate Navies in the War of the Rebellion*, 1987, XIV–XVI, 3–4, 120–21.

Appendix B. Medal of Honor Recipients

During the Mobile Campaign, the US Navy awarded 82 Medals of Honor, the US Marine Corps awarded 8, and the US Army awarded 16. The following summaries highlight a few selected citations:

Wilson Brown

Landsman, US Navy. Born 1841, Natchez, Mississippi. Date of issue: 31 December 1864.

Citation: On board the flagship USS *Hartford* during successful attacks against Fort Morgan, rebel gunboats, and the ram *Tennessee* in Mobile Bay on 5 August 1864. Knocked unconscious into the hold of the ship when an enemy shell burst fatally wounded a man on the ladder above him, Brown, upon regaining consciousness, promptly returned to the shell whip on the berth deck and zealously continued to perform his duties although four of the six men at this station had been either killed or wounded by the enemy's terrific fire.

John Cooper (awarded two Medals of Honor)

Rank and organization: Coxswain, US Navy. Born 1832, Ireland. Date of issue: 31 December 1864.

Citation for first award: On board the USS *Brooklyn* during action against rebel forts and gunboats and with the ram *Tennessee* in Mobile Bay, 5 August 1864. Despite severe damage to his ship and the loss of several men on board as enemy fire raked her decks from stem to stern, Cooper fought his gun with skill and courage throughout the furious battle, which resulted in the surrender of the prize rebel ram *Tennessee* and in the damaging and destruction of batteries at Fort Morgan.

Citation for second award: Served as quartermaster on Acting Rear Admiral Thatcher's staff. During the terrific fire at Mobile on 26 April 1865, at the risk of being blown to pieces by exploding shells, Cooper advanced through the burning locality, rescued a wounded man from certain death, and bore him on his back to a place of safety.

John Edwards

Rank and organization: Captain of the Top, US Navy. Born 1831, Providence, Rhode Island. Date of issue: 31 December 1864.

Citation: As second captain of a gun on board the USS *Lackawanna* during successful attacks against Fort Morgan, rebel gunboats, and the

ram *Tennessee* in Mobile Bay on 5 August 1864. Wounded when an enemy shell struck, Edwards refused to go below for aid and, as heavy return fire continued to strike his vessel, took the place of the first captain and carried out his duties during the prolonged action which resulted in the capture of the prize ram *Tennessee* and in the damaging and destruction of batteries at Fort Morgan.

Thomas Fitzpatrick

Rank and organization: Coxswain, US Navy. Born 1837, Canada. Date of issue: 31 December 1864.

Citation: As captain of the no. 1 gun on board the flagship USS *Hartford*, during action against rebel gunboats, the ram *Tennessee*, and Fort Morgan in Mobile Bay, 5 August 1864. Although struck several times in the face by splinters and with his gun disabled when a shell burst between the two forward 9-inch guns, killing and wounding 15 men, Fitzpatrick within a few minutes had the gun in working order again with new track, breeching, and side tackle; had sent the wounded below; cleared the area of other casualties; and was fighting his gun as before. He served as an inspiration to the members of his crew and contributed to the success of the action in which the *Tennessee* was captured.

John Lawson

Rank and organization: Landsman, US Navy. Born 1837, Pennsylvania. Date of issue: 31 December 1864.

Citation: On board the flagship USS *Hartford* during successful attacks against Fort Morgan, rebel gunboats, and the ram *Tennessee* in Mobile Bay on 5 August 1864. Wounded in the leg and thrown violently against the side of the ship when an enemy shell killed or wounded the six-man crew as the shell whipped on the berth deck, Lawson upon regaining his composure promptly returned to his station and, although urged to go below for treatment, steadfastly continued his duties throughout the remainder of the action.

Samuel McConnell

Rank and organization: Captain, Company H, 119th Illinois Infantry. Place and date: At Fort Blakeley, Alabama, 9 April 1865.¹ Entered service at Bushnell, McDonough County, Illinois. Born Belmont County, Ohio. Date of issue: 8 June 1865.

Citation: While leading his company in an assault, Captain McConnell braved an intense fire that mowed down his unit. Upon reaching

the breastworks, he found that he had only one member of his company with him, Private Wagner. He was so close to an enemy gun that the blast knocked him down a ditch. Getting up, he entered the gun pit, the gun crew fleeing before him. About 30 paces away he saw a Confederate flag bearer and guard, which he captured with the last shot in his pistol.

Charles Melville

Rank and organization: Ordinary Seaman, US Navy. Born 1828, Dover, New Hampshire. Date of issue: 31 December 1864.

Citation: On board the flagship USS *Hartford* during action against rebel gunboats, the ram *Tennessee*, and Fort Morgan in Mobile Bay, 5 August 1864. Wounded and taken below to the surgeon when a shell burst between the two forward 9-inch guns, killing and wounding 15 men, Melville promptly returned to his gun on the deck and, although scarcely able to stand, refused to go below and continued to man his post throughout the remainder of the action resulting in the capture of the rebel ram *Tennessee*.

Charles M. Rockefeller

Rank and organization: Lieutenant, Company A, 178th New York Infantry. Place and date: At Fort Blakeley, Alabama, 9 April 1865. Entered service at New York. Born New York. Date of issue: 2 August 1897.

Citation: Voluntarily and alone, under a heavy fire, obtained valuable information which a reconnoitering party of 25 men had previously attempted and failed to obtain, suffering severe loss in the attempt. The information obtained by him was made the basis of the orders for the assault that followed. He also advanced with a few followers, under the fire of both sides, and captured 300 of the enemy who would otherwise have escaped.

Medal of Honor Recipients for the Battles at Spanish Fort and Fort Blakeley

Name	Rank and Organization	Date	Reason for Award
Bras, Edgar A.	Sgt., Co K, 8th IA	8 April	Capture of flag at Spanish Fort
Callahan, John	Pvt., Co B, 122nd IL	9 April	Capture of flag at Blakeley
Dorley, August	Pvt., Co B, 1st LA Cav	11 April	Capture of flag at Mt. Pleasant
McConnell, Samuel	Capt., Co H, 119th IL	9 April	Capture of flag at Blakeley
Merriam, Henry	Lt. Col., 73rd USCT	9 April	Distinguished gallantry at Blakeley
Miller, Henry	Capt., Co B, 8th IL	9 April	Capture of flag at Blakeley
Pentzer, Patrick	Capt., Co C, 97th IL	9 April	Capture of flag at Blakeley
Rebman, George	Sgt., Co B, 119th IL	9 April	Capture of flag at Blakeley
Riley, Thomas	Pvt., Co D, 1st LA Cav	4 April	Capture of flag at Blakeley
Stickels, Joseph	Sgt., Co A, 83rd OH	9 April	Capture of flag at Blakeley
Vifquain, Victor	Lt. Col., 97th IL	9 April	Capture of flag at Blakeley
Wheaton, Loyd	Lt. Col., 8th IL	9 April	Distinguished gallantry at Blakeley
Whitmore, John	Pvt., Co F, 19th IL	9 April	Capture of flag at Blakeley

Figure 48. Medal of Honor Recipients for the Battles at Spanish Fort and Fort Blakeley. (Created by Army University Press.)

Medal of Honor Recipients

US Navy				
Atkinson, T.	Deakin, C.	Irlam, J.	McFarland, J.	Sheridan, J.
Avery, J.	Dennis, R.	Irving, J.	McIntosh, J.	Simkins, L.
Baker, C.	Densmore, W.	Irwin, N.	Melville, C.	Smith, James
Blagheen, W.	Diggings, B.	James, J.	Mifflin, J.	Smith, John
Brazell, J.	Donnelly, J.	Johnson, J.	Morgan, J.	Smith, John
Brown, J.	Doolen, W.	Jones, Andrew	Murphy, P.	Smith, Oloff
Brown, R.	Duncan, A.	Jones, John	Naylor, D.	Smith, Walter
Brown, William	Dunphy, R.	Jones, William	Newland, W.	Stanley, W.
Brown, Wilson	Edwards, J.	Jordan, T.	Nichols, W.	Sterling, J.
Burns, J.	Fitzpatrick, T.	Kendick, J.	Noble, D.	Taylor, G.
Carr, W.	Freeman, M.	Kenna, B.	O'Connell, T.	Taylor, T.
Cassidy, M.	Gardner, W.	Kinnaird, S.	Parks, G.	Todd, S.
Chandler, J.	Garrison, J.	Lawson, J.	Pelham, W.	Truett, A.
Chaput, L.	Halstead, W.	Machon, J.	Phinney, ___	Ward, J.
Cooper, J. (two awards)	Hamilton, H.	Mack, A.	Preson, J.	Wells, W.
Cripps, T.	Harris, J.	Madden, W.	Price, E.	Whitfield, D.
Cronin, C.	Hayes, T.	Martin, E.	Seanor, J.	Woram, C.
Davis, S.	Houghton, E.	McCulloch, A.	Sharp, H.	Young, E.
US Marine Corps				
Denig, J.	Hudson, M.	Martin, J.	Miller, A.	Oviatt, M.
Roantree, J.	Smith, Williard	Sprowle, D.		
US Army				
Bras, E.	Callahan, J.	McConnell, S.	Merriam, H.	Miller, H.
Moore, D.	Nichols, H.	Payne, T.	Pentzer, P.	Rebman, G.
Riley, T.	Rockefeller, C.	Stickels, J.	Vifquain, V.	Wheaton, L.
Whitmore, J.				

Figure 49. Complete list of Medal of Honor recipients for the Mobile Campaign.
(Created by Army University Press.)

Notes

1. The name of this town was also spelled “Blakely” without the extra “e” during the Civil War. To avoid confusion, the more modern spelling of “Blakeley” will be used in this book.

Appendix C. Annotated Bibliography

This bibliography is not intended to be comprehensive. Volumes are selected based upon probable availability and their usefulness for staff ride preparation.

I. Conducting a Staff Ride

Robertson, William G. *The Staff Ride*. Washington, DC: US Army Center of Military History, 1987. This pamphlet outlines the philosophy of the staff ride and offers suggestions on creating and conducting rides.

II. Land Operations

Johnson, Robert U. and Clarence C. Buel, eds. *Battles and Leaders of Civil War*. vol. 3. New York: The Century Company, 1885–87. This collection of essays from high-ranking participants has long been a standard work and is available in various reprints.

Scott, Robert N. *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies*. vol. 39 (Parts 1–2) and vol. 49 (Parts 1–3). Washington, DC: Government Printing Office, 1886–87, 1899. Originally compiled and published by the US government, the *Official Records* have subsequently appeared in several reprints, in CD ROM format, as well as in searchable databases on the internet. Indispensable for any serious study, these records include a wide variety of reports and correspondence from both sides.

Although the *Official Records* are the best primary references, C.C. Andrews's 1867 work, *History of the Campaign for Mobile (1865)*, is an excellent report by one of the Union division commanders.

The most recent work on both campaigns, published more than 20 years ago, is Hearn, Chester B. *Mobile Bay and the Mobile Campaign: The Last Great Battles of the Civil War*. Jefferson, NC: McFarland, 1993. It is an excellent overview of both campaigns.

III. Naval Operations

US Naval War Records Office. *Official Records of the Union and Confederate Navies in the War of the Rebellion*. vols. 24 and 25. Washington, DC: Government Printing Office, 1911–12. This is the naval counterpart to the Army's *Official Records* cited above. There are extensive sections within that compile the history and the capability of every naval vessel used in the war.

Silverstone, Paul H. *Warships of the Civil War Navies*. Annapolis, MD: Naval Institute Press, 1989. Another invaluable source of technical data.

IV. Weapons and Tactics

Coggins, Jack. *Arms and Equipment of the Civil War*. Wilmington, NC: Broadfoot Publishing, 1987 (1962). This very useful primer features instructive illustrations and an authoritative text. It provides a solid grounding in weapons capabilities, which is essential to understanding Civil War battles.

Griffith, Paddy. *Battle in the Civil War*. Nottinghamshire, England: Fieldbooks, 1986. This booklet describes and illustrates the fundamentals of Civil War tactics in a concise, easy-to-comprehend format. Highly recommended.

Ripley, Warren. *Artillery and Ammunition of the Civil War*. 4th ed. Charleston, SC: The Battery Press, 1984. This comprehensive work provides technical information on artillery and ammunition.

Thomas, Dean S. *Cannons: An Introduction to Civil War Artillery*. Gettysburg, PA: Thomas Publications, 1985. A very helpful primer on the technical characteristics of standard Civil War field artillery weapons.

V. Maneuver Support and Sustainment

Hess, Earl J. *Civil War Logistics: A Study of Military Transportation*. Baton Rouge, LA: Louisiana State University Press, 2017. This book is the most recent and comprehensive work on the subject.

Huston, James A. *The Sinews of War: Army Logistics 1775–1953*. Army Historical Series, Office of the Chief of Military History. Washington, DC: Government Printing Office, 1970. A standard work in the field, this survey provides helpful background data on Civil War logistics.

Lord, Francis A. *They Fought for the Union*. Harrisburg, PA: Stackpole, 1960. A wide-ranging examination of the Civil War experience, this work details organization, training, weapons, equipment, uniforms, and soldier life.

VI. Biographies (Federal)

Warner, Ezra J. *Generals in Blue*. Baton Rouge, LA: Louisiana State University Press, 1964. This standard reference work provides biographical sketches (and some photographs) of Union general officers.

VII. Biographies (Confederate)

Warner, Ezra T. *Generals in Gray*. Baton Rouge, LA: Louisiana State University Press, 1959. Contains short biographical sketches and photographs of Confederate general officers.

IX. Maps

US Department of the Interior Geological Survey.

1:24,000 (7.5 Minute Series Topographic):

Fort Morgan and Fort Gaines: USGS Map Name: Fort Morgan, AL. Map MRC: 0088B1

Weeks Bay: USGS Map Title: Magnolia Springs, AL. USGS Map MRC: 30087C7

Daphne Al: USGS Map Title: Daphne, AL. USGS Map MRC: 30087E8

Spanish Fort: USGS 24K Map: Bridgehead, AL. USGS 24K MRC: 30087F8

Fort Blakeley: USGS 24K Map: Bridgehead, AL. USGS 24K MRC: 30087F8

Fort Blakeley: USGS 24K Map: Hurricane, AL

Five Rivers Center and Blakeley River: USGS 24K Map: Bridgehead, AL. USGS 24K MRC: 30087F8

Maps can be ordered through the US Geodetic Survey at: <https://nationalmap.gov/ustopo>.

Bibliography

- Anderson, Col. C.D. "Letter from Col CD Anderson to His Wife, Oct 1 1864." Newspaper Article, *The Daily Dispatch* (1864): 1. <http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A2006.05.1185%3Aarticle%3D8>.
- Andrews, C.C. *History of the Campaign of Mobile; Including the Cooperative Operations of Gen. Wilson's Cavalry in Alabama*. New York: D. Van Nostrand, 1869.
- Bergeron, Arthur W. *Confederate Mobile*. Baton Rouge, LA: Louisiana State University Press, 2000.
- Browning, Robert M. "Go Ahead, Go Ahead." *Naval History Magazine* 23, no. 6 (10 November 2009): 10.
- Davis, George B., Leslie J. Perry, Joseph W. Kirkley, and Calvin D. Cowles. *The Official Military Atlas of the Civil War*. New York: Fairfax Press, 1983. Atlas.
- Department of the Army, Army Doctrine Reference Publication (ADRP) 3-0, *Unified Land Operations*. Washington, DC: November 2016.
- "Exploring Off the Beaten Path." <http://www.exploringoffthebeatenpath.com/battlefields/fortblakeley/index.html>.
- Gibbons, Tony. *Warships and Naval Battles of the Civil War*. New York: Gallery Books, 1989.
- Hearn, Chester G. *Mobile Bay and the Mobile Campaign: The Last Great Battles of the Civil War*. Jefferson, NC: McFarland, 1993.
- "History of Fort Morgan." Fort Morgan State Historical Site, n.d. <http://www.fort-morgan.org/history/>.
- Holzer, Harold, James M. McPherson, James I. Robertson, Stephen W. Sears, and Craig L. Symonds. *Hearts Touched by Fire: The Best of Battles and Leaders of the Civil War*. 1st ed. New York: Modern Library, 2011.
- Joint Chiefs of Staff, Joint Publication (JP) 3-0, *Joint Operations*. Washington, DC: 2011.
- Joint Chiefs of Staff. Joint Publication (JP) 5-0, *Joint Planning*. Washington, DC: 2011.
- Liddell, St. John Richardson. *Liddell's Record*. Baton Rouge, LA: Louisiana State University Press, 1997.

- Scott, Robert N. *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies*. 69 vols. Gettysburg, PA: National Historical Society, 1971. First published 1880–1901 by the US War Department (Washington, DC).
- Silverstone, Paul H. *Warships of the Civil War Navies*. Annapolis, MD: Naval Institute Press, 1989.
- Slinkman, John F. *Duel to the Death: Eyewitness Accounts of Great Battles at Sea*. New York: Harcourt, 1969.
- Tucker, Spencer. *Blue & Gray Navies: The Civil War Afloat*. Annapolis, MD: Naval Institute Press, 2006.
- US Naval War Records Office, US Office of Naval Records and Library, and National Historical Society. *Official Records of the Union and Confederate Navies in the War of the Rebellion*. 30 vols. Harrisburg, PA: National Historical Society, 1987. First published 1884–1922 by US Naval War Records Office.
- von Clausewitz, Carl. *On War*. Edited and translated by Michael Howard and Peter Paret. Princeton, NJ: Princeton University Press, 1984.

About The Author

US Air Force Colonel (Retired) Daniel W. Jordan III received his PhD in Modern European History from the University of Cincinnati in 2014. He is a contract historian for the Staff Ride Team of Army University Press at Fort Leavenworth, Kan. In addition to this handbook, Jordan has completed extensive development on a staff ride for Stonewall Jackson's 1862 Campaign in the Shenandoah Valley. He also travels extensively, presenting staff rides that include the historic battles of Gettysburg, Vicksburg, and New Orleans, as well as more current engagements: the Battle of Falluja and Operation Anaconda.

An experienced fighter squadron and group commander, Jordan completed operational tours in Asia and Europe. More recently, he taught joint operations at the US Army's Command and General Staff College and the Baltic Defence College.



Combat Studies Institute Press
An imprint of Army University Press
US Army Combined Arms Center
Fort Leavenworth, Kansas



CSI
Press



Jordan

Operational Art and the Campaigns for Mobile, 1864–65: A Staff Ride Handbook

AUP

