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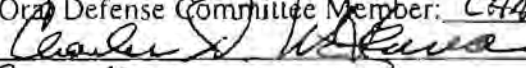
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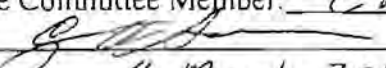
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Oral Defense Committee Member: Craig A. Swanson, PhD

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Table of Contents

	Page
DISCLAIMER.....	i
EXECUTIVE SUMMARY.....	ii
ILLUSTRATIONS.....	iii
ACKNOWLEDGEMENTS.....	iv
INTRODUCTION.....	1
BACKGROUND.....	4
JOMINI, NAPOLEON, AND MAHAN.....	8
LOGISTICS OF THE UNION ARMY.....	12
The Battle of Bull Run.....	12
A LASTING IMPACT ON LOGISTICS.....	15
Coordination and Reorganization.....	15
Corruption and Quality Control.....	17
Union Army Supply/Distribution Structure.....	18
Modern Day Supply/Distribution Structure.....	20
CONCLUSION.....	21
BIBLIOGRAPHY.....	23

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Executive Summary

Title: Architect of Union Victory? Montgomery Meigs, Jomini, and Union Success in the American Civil War

Author: Major David J. Young, United States Army

Thesis: Although Brigadier General Montgomery C. Meigs, who served as the Quartermaster General of the Union Army, was commissioned as an engineer with no formal logistics training, his pre-Civil War assignments, innate intelligence and integrity, as well as an iron will all contributed to his ability to succeed in arguably one of the toughest assignments in the military at that time.

Discussion: In April of 1861, at the start of American Civil War, the troop strength of the Union Army was approximately 17,000 soldiers. By August, the Army had grown to over twenty seven times its original strength to approximately 500,000 soldiers. President Lincoln had sent out requests for troops and the individual states were doing an excellent job mobilizing and assembling volunteers to fight what was originally estimated to be a short conflict. The true test, however, would be to provide logistics support to these soldiers on a scale and scope that had never been attempted in this country's brief history.

This study will look at the person he chose to make that support a reality, Brigadier General Montgomery C. Meigs, who served as the Quartermaster General of the Union Army. Although BG Meigs was commissioned as an engineer with no formal logistics training, his pre-Civil War assignments, innate intelligence and integrity, as well as an iron will all contributed to his ability to succeed in arguably one of the toughest assignments in the military at that time.

His performance as the Quartermaster General was nothing short of phenomenal. Reviewing his performance, methods, and execution during campaigns throughout the war, the study will suggest answers to the following questions: To what extent did Montgomery C. Meigs contribute to the Union success in the American Civil War? Did Jominian principles shape his approach? Are Jomini's principles still applicable to the modern day execution of logistics?

The analysis will begin with an overview of the pre-civil war career of Brigadier General Montgomery C. Meigs. The study will include an examination of the principles outlined by Jomini, who identified logistics as one of the six distinct elements that define the art of war. The analysis will then examine the logistics infrastructure and execution of logistics and highlight the role played by BG Meigs as the Quartermaster General of the Union Army from 1861-1865. The analysis will conclude by examining the applicability of Jomini's principles to modern day logistics practices.

Conclusion: General Meigs was the epitome of a logistician. He identified the requirements of the soldier and the combatant commander, met those requirements, and managed to ensure that the soldiers, supplies and equipment arrived at the right place and the right time on the battlefield. His execution of logistics in the Civil War while serving as the Quartermaster General was crucial to the success of the Union Army.

Illustrations

	Page
Figure 1. Logistics of the Union Army.....	18
Figure 2. General Supply/Distribution Diagram.....	20

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I would personally like to thank the Dean of Academics, Dr. Charles D. McKenna for his patience, mentorship, and guidance throughout this process. I would also like to thank my wife, Amy D. Young for proofreading my paper several times.

Often times logistics and logisticians are the unsung heroes of war. The combat arms and maneuver commanders will only turn their attention to logistics if a requirement isn't met. The impact and importance of BG Meigs as the Quartermaster General of the Union Army cannot be understated. A testament to his abilities, BG Meigs was undoubtedly a key to the Union Army's success in the American Civil War.

Introduction

Montgomery C. Meigs, one of the ablest graduates of the Military Academy, was kept from the command of troops by the inestimably important services he performed as Quartermaster-General....Perhaps in the military history of the world there was never so large an amount of money disbursed upon the order of a single man.... The aggregate sum could not have been less during the war than fifteen hundred millions of dollars, accurately vouched for to the last cent.¹

In April of 1861, at the start of American Civil War, the troop strength of the Union Army was approximately 17,000 soldiers. By August, the Army had grown to over twenty seven times its original strength to approximately 500,000 soldiers.² President Lincoln had sent out requests for troops and the individual states were doing an excellent job mobilizing and assembling volunteers to fight what was originally estimated to be a short conflict.³ The true test, however, would be to provide logistics support to these soldiers on a scale and scope that had never been attempted in this country's brief history.

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¹ William J. Miller, ed., *The Peninsula Campaign of 1862: Yorktown to the Seven Days. Vol. 2.* (CA: Savas Woodbury, 1995), xiii.

² Russell F. Weigley, *Quartermaster General of the Union Army: A Biography of M.C. Meigs.* (NY: Columbia, 1959), 204.

³ James A. Huston, *Sinews of War: Army Logistics 1775-1953.* (Washington, D.C.: Office of Military History, U.S. Army, 1966), 162.

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How would the Union clothe, arm, feed and transport an army of this size? An army whose soldiers and horses required and consumed 600 tons of subsistence and forage each day. President Lincoln shared this concern with Congress in his speech to them on July 4th when he stated that "one of the greatest perplexities of the government is to avoid receiving troops faster than it can provide for them."⁴ He had only been inaugurated four months earlier, taking over the administration as the nation was on the brink of a Civil War. To compound the difficulties he faced running this young administration, several key leaders, to include the Secretary of War, John B. Floyd, and the Quartermaster General, Joseph E. Johnston, vacated their positions to join President Jefferson Davis and the Southern Confederacy.⁵

Neither the military nor the civilian sector could look to previous U.S. conflicts for resolution of the "perplexity" spoken about by President Lincoln. The most recent conflict, the War with Mexico, offered few insights into tackling the complex logistics issues that faced the

⁴ James A. Huston, 161.

⁵ Russell F. Weigley, *Quartermaster General of the Union Army: A Biography of M.C. Meigs*. (NY: Columbia, 1959), 160.

Union Army. The North possessed an undeniable advantage over the South with respect to the raw materials and the industrial base necessary to support the war effort. Throughout the war, the South was constantly hampered by logistics shortfalls stemming from a lack of materials and ammunition, as well as a grossly inferior naval and railroad network.⁶ It was imperative, however, to understand that the industrial and material advantage of the North was only a potential advantage. The North had to “translate potential might into strength mobilized on the battlefield” to truly seize and exploit that advantage.⁷

In light of the vacancy caused by Johnston, President Lincoln needed to appoint a Quartermaster General who could harness that advantage and clothe, arm, feed, and transport the army that he was building. He needed someone to develop, manage, and solicit the necessary contracts, organize the receipt, issue, and distribution of supplies, as well as provide him sound counsel in matters of logistics for the military.

Background

Montgomery Cunningham Meigs was born in Augusta, Georgia in May of 1816. He was the eldest son of Charles D. Meigs, a physician and author who raised his son with integrity and constantly impressed upon his children the importance of honoring one’s family. His grandfather, Josiah Meigs, was a graduate and professor at Yale, and also appointed as the

⁶ James A. Huston, *Sinews of War: Army Logistics 1775-1953*. (Washington, D.C.: Office of Military History, U.S. Army, 1966), 198.

⁷ Russell F. Weigley, *Quartermaster General of the Union Army: A Biography of M.C. Meigs*. (NY: Columbia, 1959), 5.

surveyor general of the United States by President James Madison. Affluent and intelligent, the Meigs family had a distinguished history of civil and military service.⁸

In 1830, Montgomery attended the School of the Franklin Institute at the age of 14 and enrolled in the University of Pennsylvania at the age of 15. The following year he entered the United States Military Academy at West Point. His class began with 66 cadets but dwindled to 49 by the time they graduated in 1836. In his class he was ranked fourth, and received his initial commission in the artillery. One year later, he transferred to his desired branch of the Corps of Engineers. At that time, similar to present day practice, the graduates of West Point received their branch based on class rank. The scientific corps, engineers, topographical engineers and ordnance were the most sought after branches, with artillery, infantry and cavalry receiving the remaining cadets.⁹ Logistics functions were performed in the military but oftentimes officers would transfer to a different branch because of the lack of promotion opportunities.¹⁰

Meigs' first assignment with the engineer corps involved surveying the Mississippi River. The purpose of this project was to improve the navigation along the river and into the port of St. Louis. Most notably during this assignment, Lieutenant Meigs met and worked with Lieutenant Robert E. Lee very closely. Graduating from West Point six years earlier, Lee had a superb reputation both as a cadet and during his early years of service. Meigs too was impressed by Lee and worked on this project with him over the next year.¹¹

His next short tour was in Delaware constructing the area in and around Fort Delaware. He worked with the Corps of Engineers to build the fort, improve the harbors, and improve the

⁸ William J. Miller, ed., *The Peninsula Campaign of 1862: Yorktown to the Seven Days*. Vol. 2. (CA: Savas Woodbury, 1995), 4.

⁹ William J. Miller, 9.

¹⁰ Russell F. Weigley, *Quartermaster General of the Union Army: A Biography of M.C. Meigs*. (NY: Columbia, 1959), 232.

¹¹ Russell F. Weigley, 32.

safety of the Delaware Bay. He became the dispersing agent for the Delaware works project, a rather daunting task for a young lieutenant, but a task that helped to prepare him for his future logistics assignments.¹²

In 1841 Lieutenant Meigs was reassigned to Washington where he served on the Board of Engineers for Atlantic Coast Defenses. As a member of the board, he served as a liaison for the Delaware works project, but more importantly he gained invaluable experience and insight into the inner workings and bureaucracy of the senior leadership and headquarters of the Army.¹³ This observation and interface included the War Department, a place later in his career with which he would become intimately familiar, but more importantly at the time the place where he would meet his future wife, Louisa Rodgers.¹⁴

After a brief stint in Philadelphia, Lieutenant Meigs and his family spent the next nine years in Detroit, Michigan. In this rapidly developing area of the west, he supervised the construction of Fort Wayne, which was located on the Detroit River, as well as several fortifications on Lake Frontier. Undoubtedly a complex and arduous assignment, this too prepared him for several of the logistics challenges that awaited him at the start of the Civil War. Developing the plans for the fortifications, requisitioning and receiving supplies, he built Fort Wayne from the ground up. Although he was receiving excellent engineering and logistics training during his tenure in Detroit, he unfortunately missed out on the Mexican War where several of his classmates and fellow officers gained combat experience. As Fort Wayne was nearing completion, he was then called back to Washington for his next assignment.¹⁵

¹² Russell F. Weigley, 36.

¹³ Russell F. Weigley, 37.

¹⁴ Russell F. Weigley, 37.

¹⁵ William J. Miller, ed., *The Peninsula Campaign of 1862: Yorktown to the Seven Days*. Vol. 2. (CA: Savas Woodbury, 1995), 14.

After 14 years as a lieutenant, he was promoted to the rank of captain. He had been selected for his new assignment by President Franklin Pierce to serve as the supervising engineer for the extension of the United States Capitol as well as the design and construction of the Washington Aqueduct. Captain Meigs' reputation for dedication, creativity, and intelligence was the reason President Franklin chose him to lead these projects.¹⁶ The extension was necessary because Congress had outgrown the original Capitol building and the aqueduct was commissioned in an attempt to bring a municipal water supply into Washington.¹⁷ A true testament to Captain Meigs' ability, these projects required coordination with several members of both the House and the Senate, negotiations with the appropriations committees, as well as solicitation, award and management of multi-million dollar contracts.¹⁸ Both projects had their own unique set of challenges. Together they were a massive undertaking. He had to plan, coordinate and phase the construction of the Capitol extension while the building was still in use. Despite the fact that the project was not completed until after well after the start of the Civil War, Captain Meigs was arguably the driving force behind its success. The Aqueduct was also an engineering masterpiece. As part of its construction, he built the Cabin John Bridge across Rock Creek. The bridge at the time was the largest masonry single-arch bridge in the world, spanning 220 feet.¹⁹ Despite his herculean effort on these projects, a systemic disagreement with the Secretary of War, John B. Floyd, ultimately caused Captain Meigs to be "exiled" to the Tortugas in Florida.²⁰

¹⁶ Russell F. Weigley, *Quartermaster General of the Union Army: A Biography of M.C. Meigs*. (NY: Columbia, 1959), 65.

¹⁷ Russell F. Weigley, 63.

¹⁸ Russell F. Weigley, 66.

¹⁹ William J. Miller, ed., *The Peninsula Campaign of 1862: Yorktown to the Seven Days*. Vol. 2. (CA: Savas Woodbury, 1995), 22.

²⁰ Russell F. Weigley, *Quartermaster General of the Union Army: A Biography of M.C. Meigs*. (NY: Columbia, 1959), 115.

Captain Meigs left Washington for the Tortugas late in 1860. There was a great deal of unrest as he travelled through the south to Florida. As he was settling into Fort Jefferson, several southern states began to secede from the Union. In the spring of 1861, as the nation was preparing for war, Captain Meigs was conducting business in Washington. Secretary of State William Seward brought him in to advise President Lincoln on the practicability of reinforcing and holding either Fort Pickens or Fort Sumter. He was able to quickly develop a plan and calculate the logistics requirements for the president. Ultimately, his plan was carried out and he led the execution and successful fortification of Fort Pickens.²¹

In May of 1861, Captain Meigs was approached by the Secretary of State and offered a position as a colonel in the infantry. Although he was mindful of the promotion and pay raise, he respectfully declined, thinking that his expertise could be better utilized in the engineer corps. He was approached a second time, this time by Montgomery Blair, the Postmaster General, who mentioned the possibility of heading the Quartermaster's Department. Blair thought that "Meigs would have a highly important command of great usefulness, and one for which his abilities and experience made him well fitted."²² They recognized his superb performance managing the public works projects and knew there was no officer with more contracting experience than Captain Meigs. Though the process took over a month, Montgomery C. Meigs was appointed to the rank of Brigadier General and Quartermaster General in the Army of the United States on June 13.²³

Jomini, Napoleon, and Mahan

²¹ Russell F. Weigley, 153.

²² Russell F. Weigley, 162.

²³ Russell F. Weigley, 165.

Logistics is the art of moving armies. It comprises the order and details of marches and camps, and of quartering and supplying troops; in a word, it is the execution of strategical and tactical enterprises.²⁴

Logistics comprises the means and arrangements which work out the plans of strategy and tactics. Strategy decides where to act; logistics brings the troops to this point; grand tactics decides the manner of execution and the employment of the troops.²⁵

General Baron Antoine Henri Jomini begins his book *The Art of War* with a definition of war that identifies it as having six distinct parts. The first five he identifies as “purely military branches” which are Strategy, Grand Tactics, Logistics, Engineering, and Tactics. The sixth, he remarks, is an “essential branch, hitherto unrecognized, might be termed Diplomacy *in its relation to War*.”²⁶ Jomini, a Swiss born officer who served both under and against Napoleon at different points in his career, studied the Napoleonic way of war, and based his military theories on the lessons and tenets of Napoleon. Jomini is recognized as one of the first military theorists to use the term “logistics” and explain in detail its importance to a commander.²⁷ The term logistics is derived from the title of the position *major general des logis* (the German translation of which is *Quartiermeister*), who had three main functions: house and feed the troops, direct the march columns, and locate the columns on the ground.²⁸ Jomini thought of this as a rather simplistic explanation, and further defines logistics as encompassing all duties of the staff officer.²⁹

²⁴ Antoine Henri De Jomini, *The Art of War*.(London: Greenhill Books, 1995), 69.

²⁵ Antoine Henri De Jomini, 69.

²⁶ Antoine Henri De Jomini, 2.

²⁷ James A. Huston, *Sinews of War: Army Logistics 1775-1953*. (Washington, D.C.: Office of Military History, U.S. Army, 1966), 692.

²⁸ Antoine Henri De Jomini, *The Art of War*.(London: Greenhill Books, 1995), 252.

²⁹ Antoine Henri De Jomini, 253.

Jomini devotes *Chapter VI: Logistics; Or The Practical Art of Moving Armies* to the topic of logistics, beginning with an overview of his thoughts on the topic. He discusses the complexity of the topic and then provides a list of eighteen steps that would need to be accomplished if a staff officer was planning to move an army.³⁰ Although Jomini included functions and tasks not currently associated with logistics (e.g. reconnaissance and surveillance, communications and signals, etc.) the following eight of the eighteen steps were essential to the successful execution of logistics:

1. The preparation of all the material necessary for setting the army in motion, or, in other words, for opening the campaign. Drawing up orders, instructions, and itineraries for the assemblage of the army and its subsequent launching upon its theater of operations.
3. Arranging with the chiefs of engineers and artillery the measures to be taken for the security of the posts which are to be used as depots, as well as those to be fortified in order to facilitate the operations of the army.
5. Taking every precaution for the proper execution of movements ordered by the general. Arranging the march of the different columns, so that all may move in an orderly and connected manner. Ascertaining certainly that the means requisite for the ease and safety of marches are prepared. Regulating the manner and time of halts.
6. Giving proper composition to advanced guards, rear guards, flankers, and all detached bodies, and preparing good instructions of their guidance. Providing all the means necessary for the performance of their duties.
9. Arranging and superintending the march of trains of baggage, munitions, provisions, and ambulances, both with the columns and in their rear, in such manner that they will not interfere with the movements of the troops and will still be near at hand. Taking precautions for order and security, both on the march and when trains are halted and parked.
10. Providing for the successive arrival of convoys of supplies. Collecting all the means of transportation of the country and of the army, regulating their use.
11. Directing the establishment of camps, and adopting regulations for their safety, good order, and police.
12. Establishing and organizing lines of operations and supplies, as well as lines of communications with these lines for detached bodies. Designating officers capable of organizing and commanding in rear of the army; looking out

³⁰ Antoine Henri De Jomini, 255.

the safety of detachments and convoys, furnishing them good instructions, and looking out also for preserving suitable means of communication of the army with its base.³¹

Jomini notes that the eighteen steps he lists are extensive but by no means all inclusive. The purpose of this example, as well as the other examples in the chapter, is to highlight the difficulties associated with the planning and coordination needed to accomplish one task. Jomini understands that each army will have several specified logistics tasks for each position within a staff. The key is to develop a reference or “special book” for each subject that details their duties.³²

Although both Civil War and modern day logistics vary in some ways from those outlined by Jomini, the underlying principles are still valid. Developing a comprehensive logistics sustainment plan is one of the keys to successful strategic planning. He identified the necessity of establishing and protecting lines of communication, and the necessity of destroying the enemy’s lines of communication.³³ Recognizing that the size of the battlefield and distance from the unit’s home station was increasing rapidly, calculating and understanding rates of march, consumption rates, and establishing main and intermediate depots were essential to increasing and maintaining the operational reach of the unit.³⁴

The tenets and practices of both Napoleon and Jomini were taught at West Point. The original reprint of *The Art of War* was prepared at the Academy, and was one of the texts used by Dennis Hart Mahan, a scholar and true proponent of their works.³⁵ Mahan was the top cadet in his class of 1826 and returned to serve as an academy professor from 1830 to 1871. When he

³¹ Antoine Henri De Jomini, 254-257.

³² Antoine Henri De Jomini, 257.

³³ Antoine Henri De Jomini, 63.

³⁴ Antoine Henri De Jomini, 262.

³⁵ Peter Paret, ed., *The Makers of Modern Strategy from Machiavelli to the Nuclear Age*. (NJ: Princeton University Press, 1986), 414.

returned to teach at West Point he had recently attended the Military School of Application for Engineers and Artillerists at Metz, France. Mahan truly believed that United States Army officers could learn a great deal from the French Army and their military system, as he thought it was vastly superior the U.S. system.³⁶ He felt so strongly about this fact that he even petitioned the Superintendent, Sylvanus Thayer, and the Secretary of War, James Barbour, to send officers to French military schools for further education. Though his request went unanswered he eventually became a professor of Civil and Military Engineering and the Art of War. As a professor he was able to share with each of his classes the methods, teachings, and principles of both Napoleon and Jomini.³⁷

Logistics of the Union Army

...a major general commands a corps; a lieutenant general commands the whole army; but the quartermaster general supplies the means of moving that army and his command extends from the Atlantic to the Pacific, from the Lakes to the Gulf, and, in doing so, was in 'second place not in military rank but in actual real influence over the war.'³⁸

The Battle of Bull Run:

BG Meigs was formally appointed to the position of Quartermaster General on June 13, 1861, and immediately faced numerous challenges. His first real test would be to prepare the

³⁶ Michael Phipps, "Mahan at West Point, "Gallic Bias," and the "Old Army": The Subconscious of Leadership at Gettysburg." http://www.nps.gov/history/history/online_books/gett/gettysburg_seminars/9/essay1.pdf, 2.

³⁷ Michael Phipps, 6.

³⁸ William J. Miller, ed., *The Peninsula Campaign of 1862: Yorktown to the Seven Days*. Vol. 2. (CA: Savas Woodbury, 1995), 96.

rapidly growing army for the ensuing campaign. His staff consisted of 13 clerks who typically managed a budget of approximately five million dollars a year.³⁹ As he had shown many times before, Meigs had a unique ability to digest complex problems and systematically work to solve them. He developed a list of five requirements, the first of which was to identify the available supplies as well as a list of items that had previously been issued. The Secretary of the War Department, Simon Cameron, had attempted to manage the Quartermaster's Department in the interim, but he was grossly unqualified for the task. Next he identified the transportation requirements to move the force, and worked diligently to purchase horses and wagons. BG Meigs then established contracts and worked to develop an ordering system in an effort to increase the flow of supplies. He also needed quickly to find quartermaster officers to serve and manage the lower levels. And finally, he had to reorganize his department and augment his undermanned and inadequate staff.⁴⁰

General-in-Chief Winfield Scott reported the troop strength to be 66,000 at the council of war on June 25, 1861.⁴¹ The council was divided and undecided on the Union's next move. Based on the estimates and position of the Confederate forces, most members of the council wanted to advance and engage the Confederate forces enroute to Richmond. During a second council meeting on June 29, General Scott lobbied for his plan, which was named the "Anaconda Plan,"⁴² but the council had decided to move forward with an attack. The council then turned to BG Meigs and asked for an assessment of the troop readiness and availability of transportation for the advance. Meigs replied that all he required was a date of movement and he would have

³⁹ Russell F. Weigley, *Quartermaster General of the Union Army: A Biography of M.C. Meigs*. (NY: Columbia, 1959), 224.

⁴⁰ Russell F. Weigley, 167.

⁴¹ William J. Miller, ed., *The Peninsula Campaign of 1862: Yorktown to the Seven Days*. Vol. 2. (CA: Savas Woodbury, 1995), 98.

⁴² Neil Kagan, ed. *Atlas of the Civil War: A Comprehensive Guide to the Tactics and Terrain of Battle*. (Washington D.C.:National Geographic), 34.

the transportation available. Although at the time he was confident with his assessment, he quickly learned that it was overly optimistic and ultimately caused a delay in the operation of more than a week.⁴³

The council set a date of July 8, 1861 for Major General Irvin McDowell to move his force of 30,000 men south and engage the Confederate General Pierre G.T. Beauregard's force of 26,000. Moving McDowell's units into position primarily by rail and then ground movement to Manassas, BG Meigs recognized his miscalculation on July 6. Only able to run single track from Baltimore to Washington, combined with an inadequate offload detail, caused an enormous bottleneck at the depot in Washington. Neither the troops nor the 6,000 horses and mules would be staged and ready to move on July 8. The delay, in fact, would cause McDowell to lose eight days. He was not able to begin his movement until July 16.⁴⁴

Major General McDowell was defeated at Bull Run. One can debate the tactics and decisions made by the commanders on the ground, and assess their effectiveness on the battlefield. However, the error of BG Meigs and the logistics failures leading up to the operation cannot be overlooked. Though both the Union and Confederate forces were "green" and untested, the logistics shortfalls arguably caused a delay in the offensive that allowed the Confederate leadership time to learn of the impending plan, develop an opposing strategy, as well as maneuver reinforcements to a better position.⁴⁵ The difficulties of providing proper logistics support certainly contributed to the overall failure of the operation.

⁴³ Russell F. Weigley, *Quartermaster General of the Union Army: A Biography of M.C. Meigs*. (NY: Columbia, 1959), 170-173.

⁴⁴ Russell F. Weigley, 172-174.

⁴⁵ Neil Kagan, ed. *Atlas of the Civil War: A Comprehensive Guide to the Tactics and Terrain of Battle*.

(Washington D.C.:National Geographic), 38.

BG Meigs learned several tough lessons about logistics very quickly, none more important than the difficulties associated with the transportation of supplies and personnel. The railhead turned out to be a single point of failure as he attempted to bring the horses, wagons, supplies and troops into the same location without an adequate detail to offload the rail cars. His supply of horses and mules were also being sent to him down a single track from Baltimore to Washington. Russell F. Weigley, author of *Quartermaster General of the Civil War*, notes that Meigs “was coming to handle his job with a smoothness and sureness of touch which would help to guarantee that, however often the Union army might lose battles because of inept strategy or fumbling tactics, never after the summer of 1861 would a major operation fail because the Quartermaster’s Department had not provided food or forage or transportation.”⁴⁶ A logistician must be acutely aware of the overall plan of the combatant commander, but must also understand the logistics requirement and timelines of supply. This information allows the logistician to provide the commander a more accurate assessment of logistics capabilities and identify any shortfalls, particularly any which could reduce the chance that an operation could be successful.

A Lasting Impact on Logistics

From the moment he accepted the post of Quartermaster General until he left that post, BG Meigs was assessing and implementing systems either to formalize and improve existing processes and procedures or establish new ones as necessary. His original staff was able to fit inside a small room, but by the end of the war the Quartermaster’s Department had their own building. Establishing a supply system from scratch, overcoming corruption in contracting,

⁴⁶ Russell F. Weigley, *Quartermaster General of the Union Army: A Biography of M.C. Meigs*. (NY: Columbia, 1959), 4.

improving on the quality of product from supply vendors, General Meigs worked steadily throughout the duration of the war to solve these issues. There are definite parallels between the logistics challenges and the execution of logistics by the Union Army in 1861 and the present day Army.

Coordination and Reorganization:

Many of the supply issues were not Meigs' alone. They extended to other departments that fall under the present day construct of force sustainment functions. The Ordnance, Subsistence, and Medical Departments were separate from the Quartermaster's Department and were responsible for the procurement and issue of arms and ammunition, provisions, and hospital stores. The Quartermaster's Department was, however, responsible for the transportation of these items from the depot to the front lines. Though interdepartmental coordination should have been spearheaded by the Secretary of War, Meigs had to establish these relationships and coordination procedures himself.⁴⁷

Within his own department he made several improvements over time. His department began with thirteen clerks when he took over in 1861.⁴⁸ The sheer volume of money and supplies forced him to expand quickly and increase the number of civilians within the office. By 1863 his department had expanded to 213 personnel, which was more than the entire War Department had employed in 1859. By 1865 he had more than doubled his department to 591 civilian clerks and employees.⁴⁹ He also reorganized the department and created nine divisions, each headed by at least a colonel, to manage the procurement, contracting, or distribution of the various commodities and services required to support the Union Army. First Division provided animals for the armies, Second Division administered clothing and equipment. The Third

⁴⁷ Russell F. Weigley, 218.

⁴⁸ Russell F. Weigley, 224.

⁴⁹ Russell F. Weigley, 235.

Division managed ocean and lake transportation while the Fourth Division managed rail and river transportation. The Fifth Division was responsible for forage and fuel, the Sixth, hospitals and barracks, and the Seventh Division managed wagon transportation. The Eighth managed inspections and finally, the Ninth managed financial requirements of the Quartermaster General's Office. This reorganization would serve to improve coordination and continuity of department, as well as decrease the management burden on the quartermaster general. The divisions could also provide closer, more direct supervision of the commodities and service providers, which would serve to reduce the number of dishonest and corrupt agents.⁵⁰

Corruption and Quality Control:

Corruption was a problem throughout the war, most seriously during the early phases.⁵¹ The Union Army needed massive quantities of supplies, livestock, wagons, and services, and they needed them quickly. There was little to no time to plan, pre-war stocks were scarce, and regulation was virtually non-existent, which at times allowed the contractors to charge exorbitant amounts for supplies. To make matters worse, often the quality of the goods or services was poor.

To address this problem General Meigs established a team of six inspectors who were under his direct supervision. Each inspector was a colonel and they were charged with visiting the depots, posts, and unit supply activities around the country to perform audits and quality control checks. He too would make assessment visits when possible and from these visits and the inspector's reports he was able to publish directives and establish policies to improve the contracting process.⁵²

⁵⁰ Russell F. Weigley, 234-235.

⁵¹ Russell F. Weigley, 184.

⁵² Russell F. Weigley, 223.

Union Army Supply/Distribution Structure:

Logistics of the Union Army

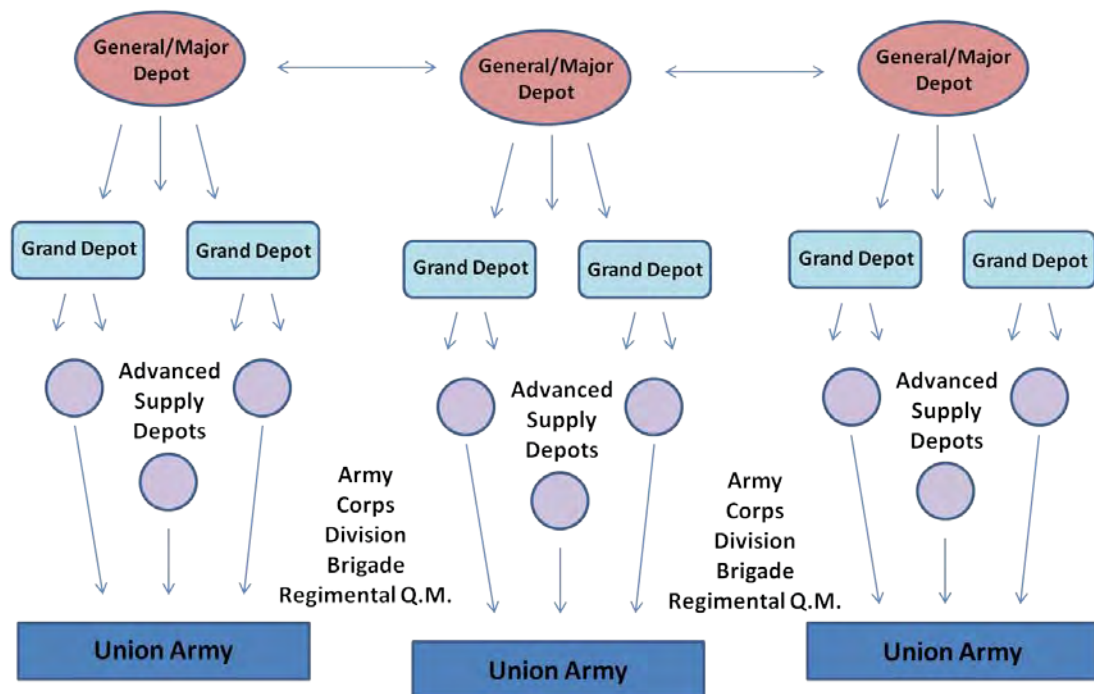


Figure 1:

General Meigs developed the framework for the logistics structure of the Union Army.

By creating intermediate supply points, he decreased the management burden on the Quartermaster's Department and increased the forward stockage of supplies, which in turn decreased the amount of time units had to wait for supplies.

Quartermaster's Department: The department was responsible for the maintenance and stockage levels of the general or major depots. They would also contract and procure certain items for the entire army (e.g., uniforms, horses, tents). Quartermasters at the unit and depot level were responsible for providing requirements to the department, and it was the responsibility

of the department to forecast and procure an adequate stock. Visibility on the levels within each major depot allowed General Meigs the latitude to transfer between regional depots when necessary.⁵³

General/Major Depot: The general depots were located throughout the United States in cities such as New York, Philadelphia, St. Louis, Baltimore, Washington, and Chicago. They were controlled and stocked by the various sub-bureaus of the War Department (e.g. Quartermaster's, Subsistence, Ordnance, etc.) and their primary mission was to provide support to the grand depots of the armies.⁵⁴

Grand Depot: Grand depots were located with the field armies and controlled by the Army commanders. The depots were established in an area that was easily accessible from both the front and rear lines of supply and transportation. These depots were typically far enough from hostile action to remain secure.⁵⁵ The depots had quartermaster officers assigned to them who were responsible for the purchase of supplies and direct contracting with local vendors. They supervised the storage and safekeeping of the depot as well as inspections of the on hand stocks. They were also responsible for transportation of supplies to the advanced supply points.⁵⁶

Advanced Supply Point: These were forward supply points that directly supported the units at the Army, Corps, Division, Brigade, and Regimental level. The quartermasters at each level received bulk issue of supplies then broke them down and distributed them as necessary.⁵⁷

The responsibilities at the major supply depots were enormous. On average the depot had on hand 9,000 men, 1,000 animals and millions of dollars of supplies and equipment, and a

⁵³ Russell F. Weigley, 222.

⁵⁴ James A. Huston, *Sinews of War: Army Logistics 1775-1953*. (Washington, D.C.: Office of Military History, U.S. Army, 1966), 174.

⁵⁵ James A. Huston, 174.

⁵⁶ Russell F. Weigley, *Quartermaster General of the Union Army: A Biography of M.C. Meigs*. (NY: Columbia, 1959), 220.

⁵⁷ Russell F. Weigley, 219-220.

captain was the accountable quartermaster. Meigs was often plagued with inexperienced and at times incompetent quartermasters in the field, but he worked diligently to improve the rank hierarchy and the promotion opportunities within the branch in an effort to attract and retain better officers.⁵⁸

Modern Day Supply/Distribution Structure:

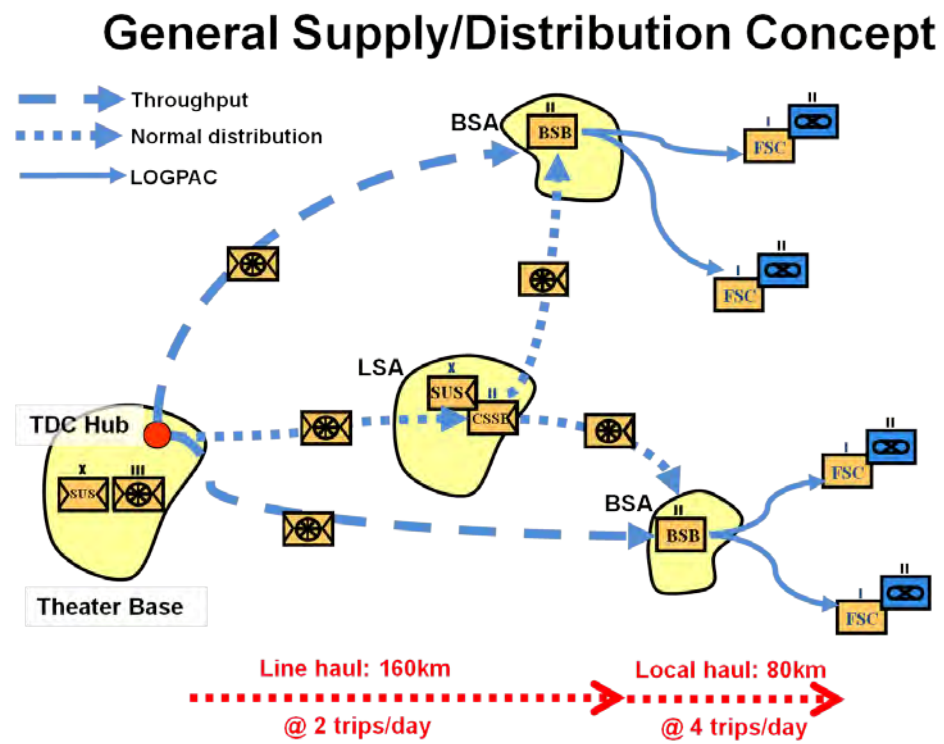


Figure 2:⁵⁹

The modern day model is similar to the structure used by General Meigs. Of course technology has greatly changed and improved the accountability, storage, and shipping processes for the modern day quartermaster but the concept is relatively similar. One of the main differences in the process is the throughput from the major hub or depot directly to the brigade or even battalion level. Changes to this process began as early as World War II, and served to

⁵⁸ Russell F. Weigley, 230-232.

⁵⁹ Headquarters, Department of the Army. *FM 4-0, Sustainment*. (Washington D.C., Headquarters, Department of the Army, April 2009), 1-4.

decrease the number of supply points that an item had to pass through before reaching the end user.⁶⁰

Conclusion

...the victory of the North was due not to the operational capabilities of its generals, but to its capacity to mobilize its superior industrial strength and manpower into armies which such leaders as Grant were able...to deploy in such strength that the operational skills of their adversaries were rendered almost irrelevant.⁶¹

Montgomery Meigs was not trained as a quartermaster and had little to no background in logistics. At that time, there were few manuals or references on the conduct and execution of service and support functions in the military. The nation's previous conflicts also offered little insight as to the method or procedures for arming, clothing, or feeding a force of the size and magnitude that President Lincoln had assembled. Fortunately for the Union Army, General Meigs was an extremely intelligent, organized, and gifted officer who served brilliantly as the Quartermaster General of the Union Army.

In David J. Ulbrich's article entitled, *Logisticians Need Practice: Comparing the Pre-War Military Careers of Montgomery Meigs and Henry Aurand*, Ulbrich contends that "...logisticians do not miraculously acquire managerial, administrative or organizational skills

⁶⁰ Russell F. Weigley, *Quartermaster General of the Union Army: A Biography of M.C. Meigs*. (NY: Columbia, 1959), 220.

⁶¹ Michael Howard, *The Causes of War and other Essays, Second Edition*. (Massachusetts: Harvard University Press, 1983), 103.

overnight...they need experience, both in theory and in practice.”⁶² A review of Meigs’ career from the time he entered the United States Military Academy supports the author’s thesis. He studied the tenets, theories, and principles of both Jomini and Napoleon while attending West Point. He worked diligently and excelled in each assignment, always striving to learn, understand and improve himself. His assignments on the Capital extension, the Aqueduct, and building Fort Wayne certainly provided him the necessary practical experience. Although he was not “classically trained” as a logistician, General Meigs’ perseverance, determination and pre-war training were the keys to his success.

“Logistics is that branch of administration which embraces the management and provision of supply, evacuation and hospitalization, transportation, and service. It envisages getting the right people and the appropriate supplies to the right place at the right time and in the proper condition.”⁶³ General Meigs was the epitome of a logistician. He identified the requirements of the soldier and the combatant commander, met those requirements, and managed to ensure that the soldiers, supplies and equipment arrived at the right place and the right time on the battlefield. His execution of logistics in the Civil War while serving as the Quartermaster General was crucial to the success of the Union Army.

⁶² David J. Ulbrich, “Logisticians Need Practice: Comparing the Pre-War Military Careers of Montgomery Meigs and Henry Aurand.” (Logistics Spectrum. Jul-Sep 2000), 32.

⁶³James A. Huston, *Sinews of War: Army Logistics 1775-1953*. (Washington, D.C.: Office of Military History, U.S. Army, 1966), vi.

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