

2023

## An Analysis of American Civil War Strategy and Tactics, and the Significance of Technological Innovations

Ryan Rethaford  
CSUSB

Follow this and additional works at: <https://scholarworks.lib.csusb.edu/history-in-the-making>



Part of the [Military History Commons](#)

---

### Recommended Citation

Rethaford, Ryan (2023) "An Analysis of American Civil War Strategy and Tactics, and the Significance of Technological Innovations," *History in the Making*: Vol. 16, Article 9.

Available at: <https://scholarworks.lib.csusb.edu/history-in-the-making/vol16/iss1/9>

This Article is brought to you for free and open access by the History at CSUSB ScholarWorks. It has been accepted for inclusion in History in the Making by an authorized editor of CSUSB ScholarWorks. For more information, please contact [scholarworks@csusb.edu](mailto:scholarworks@csusb.edu).

# **An Analysis of American Civil War Strategy and Tactics, and the Significance of Technological Innovations**

By Ryan Rethaford

*Abstract: The American Civil War (1861-1865) is one of the United States' most defining moments. It remains the deadliest war ever fought by the United States and involved many new military technologies. This paper seeks to disprove the narrative that the Union and Confederate militaries failed to utilize these new technologies to their advantage. Many primary sources from officers and enlisted men prove they were aware of the significance of these technologies and used them effectively. Furthermore, this paper will draw upon a number of secondary sources to support this argument. Repeating weapons, breech-loaded weapons, and rifling were all used efficiently and rationally, and the more archaic tactics which persisted throughout the war, such as massed-infantry formations, were born of necessity, rather than ignorance of these new technologies.*

## **Introduction**

Historically, wars fought on the precipice of the introduction of new, deadly military innovations have been some of the most infamous and costly. The 19th and 20th centuries saw unprecedented technological advancement and some of the most gruesome conflicts. The American Civil War (1861-1865) is among these struggles, and the role new technologies played is undeniable. However, there exists a prevalent misconception regarding the nature of this conflict's battles. Films, video games, and even novels often portray Civil War combat in a manner that

leaves the consumer left with disbelief at what they view as suicidal charges, regiments of infantrymen illogically standing in a line firing their rifles at one another, or men walking straight into the line of fire of the enemy's artillery. While such things occurred, it was not always the case. These portrayals lead many to view both the officer and common soldier as having been incompetent: men stuck in the past, unable to recognize that new technologies, such as rifling, demanded new strategies and tactics. Even some within the historical community hold these views. This is arguably an inaccurate portrayal of the Civil War as a whole. In fact, the Civil War saw a plethora of military strategies and tactics which would not have been possible without the influx of new military technologies, although many well-established tactics remained for good reason. This paper will draw upon a number of both primary and secondary sources and seeks to disprove common misconceptions regarding the logic of the strategies and tactics used during the Civil War. By examining infantry tactics, cavalry tactics, artillery tactics, and overarching strategies, we can see that officers and common soldiers alike were well aware of the significance of these new technologies, and utilized them efficiently in the most logical ways possible.

### ***Historical Background***

Before delving into this paper's analysis, it is important to define strategy and tactics, to define the scope of this paper, and to acknowledge the interpretations which have been published in relation to this subject. For the purpose of this paper, *strategy* refers to the overarching goals of Civil War military leaders. An example of this would be seeking control of an important location, such as the town Harper's Ferry, which changed hands a total of eight times between the Confederacy and Union throughout the war and served as an important river crossing and railroad depot.<sup>1</sup>

---

<sup>1</sup> The apostrophe was removed from the town's name decades after the Civil War, but this paper will use the historical spelling.

In contrast, *tactics* refers to the techniques implemented on a smaller scale, typically in battle, and utilized at multiple levels, from the smaller-sized brigades and regiments to the larger divisions and corps of which armies were composed. *Strategy* and *tactics* go hand in hand with one another in the formation of war plans, and both are arguably of equal importance.

In regards to current literature on this subject, there is no clear consensus among historians on whether Civil War officers maneuvered their armies in reasonable ways given the new technologies available to them. Some historians contend the strategies and tactics were indeed suicidal and poorly planned. Others claim arguments similar to the one this paper will make, chiefly that the war was conducted in a rational way given the technology available. This paper will first summarize some of the former arguments, then the latter. However, it is important to note that much of the literature which pertains to strategy and tactics is often focused on very specific elements of warfare, and does not make a clear argument regarding how logical they were. This paper will take many of these more narrow analyses, and combine them into a meta-analysis in order to gain a deeper understanding of the strategies and tactics which were used.

Among those claiming that the Civil War had little to no revolutionary new strategies and tactics, and that the war was poorly conducted, is British historian A.D. Harvey. In his article titled, "Was the American Civil War the First Modern War?" Harvey analyzes the degree to which the Civil War contributed to military planning worldwide. He concludes that even had the American Civil War not occurred, the Franco-Prussian War of 1870 would have included many of the same elements by nature of the technology itself.<sup>2</sup> While there may be a degree of truth to this analysis, it overlooks the fact that regardless of hypothetical alternate histories, the Civil War was in fact the first large-scale conflict to feature the prolific use of many of the technologies it

---

<sup>2</sup> A. D. Harvey, "Was the American Civil War the First Modern War?" *History* 97, no. 2 (2012): 280.

did. Among these innovations were rifled small arms and rifled cannons, repeating carbines, sharpshooting rifles, defensive trenches, and the telegraph. Harvey also points to the Second Italian War of Independence in 1859, during which France moved soldiers by train, as being the first instance of a military using railways to transport troops.<sup>3</sup> While this may again be true, it arguably looks at the Civil War from too narrow of a lens, as trains were used as much for logistical purposes as troop movement, and there is no denying how widespread their use was during the Civil War (especially in the North). Furthermore, Harvey fails to account for the stark contrast between America's deadliest war, and a European war that cost far fewer lives than the Civil War. The scale of the Civil War is reason enough to draw a distinction between these two conflicts and their significance. Harvey touches on other elements of the war, including flanking maneuvers, the use of ironclads, and cavalry tactics, and gives an analysis of each. As with the previous areas, Harvey contends that practically every element of Civil War strategy and tactics was either not unique, or was only allowed to be effective due to poorly trained armies and inefficient cavalry. This ignores additional key elements to the Civil War, which include irregular and guerrilla tactics, such as were seen in Kansas and Missouri in the early stages of the war. Overall, Harvey makes some interesting points, but one can argue they are missing full context.

Ulysses S. Grant III (1881-1968), the grandson of Former President Ulysses S. Grant (1822-1885), gives his own commentary on the subject in the article "Military Strategy of the Civil War." In contrast to Harvey's interpretations, Grant gives a more balanced perspective. He refers to the Civil War as "the first modern war," and offers a combination of praise and criticism for the way each side of the conflict conducted their military campaigns. On the subject of the introduction of new military technologies early on and throughout the war, Grant says, "They were working with new arms in new media, and looked at from

---

<sup>3</sup> Harvey, "Was the American Civil War the First Modern War?" 273.

this point of view it is remarkable that the leaders on both sides did so well.”<sup>4</sup> In the following pages, Grant comments on the overarching strategies of both sides, offering a touch of criticism. Quoting General John Schofield (1831-1906), Grant acknowledges the belief that both sides made the mistake of concentrating on what Schofield referred to as “territorial strategy,” or the focus of capturing and occupying enemy territory as a primary objective.<sup>5</sup> Offering an alternative strategy to this, Schofield argued that the primary objective of a military force must be to destroy the enemy army. It appears Grant agrees with this notion, although he does not say it outright. Overall, Grant seems to give a fair analysis of the war, offering praise for successes and potential alternatives where both sides made the wrong strategic and tactical decisions.

### ***The Decades Prior to the Civil War***

Having given some examples of the literature, the next step is to provide historical background on the nature of warfare leading up to the Civil War itself. The era from the Napoleonic Wars (1803-1815) to the Mexican-American War (1846-1848) saw little change in strategy or tactics. Smoothbore weapons continued to be the staple, not just for infantry, but cavalry and artillery crews as well. In this sense, the American Civil War was indeed the first time American officers and enlisted men alike had to endure the increased accuracy of rifled weapons. Despite this, many tactics stayed the same throughout the war as they were fifty years prior, yet as this paper will show, this was born of necessity rather than the ignorance of officers stuck fighting in the past. In his book, *Civil War Infantry Tactics: Training, Combat, and Small-Unit Effectiveness*, Earl J. Hess provides an in-depth analysis of linear infantry tactics, which he notes originated in 17th and 18th century

---

<sup>4</sup> U. S. Grant, “Military Strategy of the Civil War.” *Military Affairs* 22, no. 1 (1958): 20.

<sup>5</sup> Grant, “Military Strategy of the Civil War,” 21.

Europe.<sup>6</sup> Hess seeks to explain why, despite the introduction of rifled weapons, Civil War infantry tactics changed little from past decades. When discussing officers' implementation of Napoleonic infantry tactics, Hess notes, "Those worthy of their salt could articulate their units with surprising ease during combat, going from column to battle line and back again as circumstances demanded. This was a brand of warfare very different from that of half a century earlier and remarkably similar to the Civil War half a century later."<sup>7</sup> This flexibility which Hess describes was an important element to Civil War armies. Much the same as Napoleon's forces before them, Union and Confederate forces followed a specific, battle-tested command structure, ensuring the available manpower was utilized as effectively as possible. This is, as Hess himself importantly notes, a large contrast from musket-armed infantry from the 1500s and 1600s, whose formations were much more akin to those of Renaissance-era pikemen or musketeers.<sup>8</sup> The question still remains, however, of why exactly Civil War tactics changed little from the Napoleonic era. That is a question this paper will soon seek to answer.

### ***A New Era of Military Technology***

The implementation of rifling was not the only major innovation that would shape the Civil War. In addition to the standard muzzle-loaded rifles most infantrymen would be armed with, repeating carbines, breech-loaded rifles, and sharpshooting rifles also played a significant role throughout the war, especially in the later years. Muzzle-loaded rifles were not much different in function from their smoothbore musket predecessors, except for their potentially superior accuracy and unanimous use of percussion caps instead of flint hammers to ignite the gunpowder (although, some older flintlock muskets are known to have been rifled and converted to

---

<sup>6</sup> Earl J. Hess, *Civil War Infantry Tactics: Training, Combat and Small-Unit Effectiveness*. (Baton Rouge: Louisiana University Press, 2015), xi.

<sup>7</sup> Hess, *Civil War Infantry Tactics*, 14.

<sup>8</sup> Hess, *Civil War Infantry Tactics*, 1.

percussion cap-style during the war, likely due to arms shortages). It is also important to note, as Hess mentions, that the *effective* accuracy and range of the new rifles was largely exaggerated. As Hess discusses the international response to rifle technology, he states, “European writers predicted many results, including increased firepower on the skirmish line and a reduction in the ability of artillery and cavalry to battle infantry. More radical observers even predicted the demise of linear tactics and their replacement with open order, skirmish formations.”<sup>9</sup> This does show that military theorists and observers were very forward-thinking, and many of their predictions would come to fruition by the time of World War I (1914-1918). However, as Hess importantly notes, many of these predictions did not come true immediately following the introduction of these early rifles, in large part due to the skill needed to properly adjust the rifle’s sights. Regarding this, Hess states:

In contrast to the flat trajectory of the smoothbore, this projectile [the rifled Minie ball] curved over the heads of many men who stood in front of it. Sighted for a distance of 300 yards, anyone standing between 100 and 225 yards from the muzzle would be safe. Ironically, the initial 100-yard killing zone was about the same effective range as the smoothbore, and the other killing zone was only 75 yards deep.<sup>10</sup>

What Hess describes here are the killing zones in which the bullet would either overshoot or undershoot the target. No matter which range a rifleman sighted his firearm, there would be specific range(s) in which his rifle would be prone to missing. This is understandable considering these were the first attempts at creating modern, effective sights. Furthermore, it would have been unlikely

---

<sup>9</sup> Hess, *Civil War Infantry Tactics*, 30.

<sup>10</sup> Hess, *Civil War Infantry Tactics*, 31.

that an infantryman would have the time to continually adjust his sights as the enemy drew closer. This tendency to overshoot the enemy is the likely reason why many Civil War officers would famously order their men to “aim low.” The key takeaway here is that while these new rifles had the *potential* to be far more accurate, long-ranged, and deadly than their smoothbore predecessors, in practice, the average soldier would never achieve this level of marksmanship. Thus, while some of these new technologies would serve as effective counters to cavalry assaults, as military theorists at the time had predicted, the Minie ball-style muzzle-loaded rifle was not enough to warrant a total overhaul of tactics.

The latter three firearms listed previously: repeating carbines, breech-loaded rifles, and sharpshooting rifles, were far more of a jump in tactical advantage than the standard muzzle-loaded rifle. Repeating carbines were typically of a lower caliber than standard rifles, but their superior rate of fire made up for this. In his book, *Weapons of the Civil War Cavalryman*, John Walter provides a thorough analysis of the model 1860 Spencer carbine, which was often used by cavalry. When describing its use by Union volunteers who privately acquired these repeaters, Walter states, “During the Battle of Hoover’s Gap, fought on June 24, 1863, men of Colonel John Thomas Wilder’s ‘Lightning Brigade’ were able to maul a far larger band of Confederates thanks to their privately acquired Spencer rifles.”<sup>11</sup> This statement from Walter is preceded by a diagram showing the inner functions of the Spencer carbine, demonstrating its complex inner workings, including a spring to push bullets from the interior magazine forward, and a second spring to elevate the bullet into the firing chamber.<sup>12</sup> These carbines were operated with a lever, in a very similar fashion to the repeating firearms which would rise to prominence in the decades following the Civil War. In this sense, the Spencer carbine was a military technology that revolutionized firearms.

---

<sup>11</sup> John Walter, *Weapons of the Civil War Cavalryman* (New York: Bloomsbury Publishing, 2020), 12.

<sup>12</sup> Walter. *Weapons of the Civil War Cavalryman*, 10.

Sharpshooting rifles could be either muzzle-loaded or breech-loaded, with the latter having a superior rate of fire. In his book, *Union Sharpshooter versus Confederate Sharpshooter: American Civil War, 1861-65*, Gary Yee gives a breakdown of these innovative rifles. In analyzing what is perhaps the most famous sharpshooting rifle of the Civil War, the Sharps rifle (the origin of the term sharpshooter comes from this rifle), Yee says the following:

The .52-caliber Sharps was a breechloading, single-shot rifle. Lowering the lever caused the locking block to drop and expose the chamber for inserting a linen or skin cartridge. After inserting the cartridge, the breech was raised, slicing off the end of the cartridge and exposing the powder to ignition by either a percussion cap or a pellet primer. Quick to load, the Sharps was ideal for skirmishing as reloading the rifle did not require the soldier to expose himself as much as when reloading a rifle musket.<sup>13</sup>

The ability of a sharpshooter, whether he was skirmishing the enemy or shooting at them from 500 yards away, to stay hidden and in cover while reloading was a tremendous advantage over soldiers unfortunate enough to be equipped with the standard muzzle-loaded rifle.

### ***Available Industry and Manpower, and the Terrain of the Battlefields***

Another important element to bear in mind when studying this subject is the regional differences between the Union and Confederacy. The Union had both superior manpower and superior

---

<sup>13</sup> Gary Yee and Johnny Shumate, *Union Sharpshooter versus Confederate Sharpshooter: American Civil War, 1861-65*. (Oxford, UK: Osprey Publishing, 2019), 19.

industry, which enabled it to endure losses much easier than the Confederacy. This enabled the Union to take bolder actions with fewer repercussions, which could help explain certain strategic and tactical differences throughout the war. Additionally, the terrain and weather conditions at the time of specific engagements may be important factors in understanding the decisions which were made by either side's officers. Weather conditions, mountains, and uneven terrains must be taken into account when analyzing tactics. By looking at the Battle of Agincourt in 1415 CE, it is clear how much of a decisive role muddy and uneven terrain can have on the effectiveness of offensive maneuvers. This was no less true during the Civil War. Cliffs, rivers, and woods also offered tactical advantages for defenders, while placing greater strain on the attacking force. The town of Harper's Ferry, in West Virginia, and the mountainous Maryland Heights overlooking it from across the Potomac River, serve as an excellent example of how important control of the terrain was to either side during the war. Some of the most pivotal Confederate incursions into Union territory began with the capture or re-capture of Harper's Ferry, enabling their forces to invade Maryland and Pennsylvania. A Union officer, Lieutenant Russel M. Tuttle, of the New York Volunteer Infantry, describes his division's deployment to recapture the area and defend Harper's Ferry in his journal (edited by George H. Tappan). Tuttle states, "After the battle near Sharpsburg, Williams Division was ordered to Harpers Ferry to drive away the Rebels and hold this place. As we supposed that they held the Maryland Hills which overlooked it, we had to climb the mountains from Brownsville, and advance along the ridge."<sup>14</sup> Maryland Heights, which Lieutenant Tuttle was clearly referring to, was of tremendous tactical significance. Overlooking Harper's Ferry, protected by the Potomac River, and teeming with ridges perfect for the deployment of artillery, it was a much sought-after position. Union forces took advantage of these natural defenses, although the garrison never

---

<sup>14</sup> Russel M. Tuttle and George H. Tappan, *The Civil War Journal of Lt. Russell M. Tuttle, New York Volunteer Infantry* (Jefferson, NC: McFarland & Company, 2006), 36.

numbered enough soldiers to prevent future Confederate advances. The placards in Harper's Ferry list the Union garrison around 10,000 men, which was nowhere near enough manpower to stop the advance of the Confederate Army of Northern Virginia when it invaded in late 1862.

### ***Analysis of Infantry, Cavalry, and Artillery Tactics***

The vast majority of manpower in the war consisted of infantrymen. The standard infantryman in the Napoleonic era served a similar function to Civil War soldiers, but the technology available to them differed. By the time of the Civil War, most infantrymen could expect to be equipped with rifles instead of muskets. As mentioned previously, this did not fully revolutionize combat, as the effective range was oftentimes negated due to the sighting difficulties. In his article, "Civil War Infantry Assault Tactics," John K. Mahon (1912-2003) discusses how infantry formations were utilized in an offensive manner. In relation to the impact rifles had on the battlefield, Mahon says:

It enforced the following vital changes: (1) Stretched battle lines, (2) obliged armies to form for combat much further apart, (3) reduced the density of men in the battle zone, and (4) made battles into firefights with shock action decidedly subordinate. Still more important it caused battles to be at once much longer in time and less decisive in outcome. There were to be no more Waterloos. Finally, it made defense a good deal stronger than offense.<sup>15</sup>

These examples show that Civil War officers and soldiers did indeed respond to the introduction of new technologies, proving they were aware of the changes which were necessary. However,

---

<sup>15</sup> John K. Mahon, "Civil War Infantry Assault Tactics," *Military Affairs* 25, no. 2 (1961): 59.

many elements of infantry tactics remained unchanged. As Mahon goes on to note, “Generally speaking the physical damage done by bayonet attacks was inflicted by bullets, and the issue decided before the two fighting lines closed with each other. In short, it was the threat of being run through, coupled with firepower, not the act itself that made attacks with the bayonet effective.”<sup>16</sup> Granted, Mahon also argues that Civil War formations were modeled on the assumption the bayonet would decide the outcome of battle.<sup>17</sup> Thus, Mahon appears of the opinion that infantry charges were not logical, even going as far as to say that, “Bullets worked their greatest execution against bodies of men advancing to the assault. The fact is that the firepower of the rifle musket was relatively modern whereas the formations used in attack were obsolete.”<sup>18</sup> This paper disagrees with this element of Mahon’s analysis, which otherwise is an excellent one. A primary source that demonstrates the effectiveness of infantry charges is the journal of the Confederate private William Randolph Howell (edited by Jerry D. Thompson), who took part in the Confederacy’s failed New Mexico Campaign. Among his journal entries, Howell notes, “The battle for some time appeared to be hanging on a thread, as it were, but about 4<sup>1/2</sup> P.M., as the brave Col. Green ordered a charge, our boys killed and wounded a great many of the enemy and routed them completely. In that famous charge with the enemy pouring grape into our ranks, we only had five killed, besides Major Lockridge, who fell at the cannon wheel.”<sup>19</sup> While this account from Howell only references a charge, with no mention of bayonets, it is a clear demonstration of the potential effectiveness of charges. Furthermore, the menial casualties the Confederates seem to have sustained demonstrate that charges did not always result in heavier casualties for the attacking force, oftentimes

---

<sup>16</sup> Mahon, “Civil War Infantry Assault Tactics,” 59.

<sup>17</sup> Mahon, “Civil War Infantry Assault Tactics,” 60.

<sup>18</sup> Mahon, “Civil War Infantry Assault Tactics,” 60.

<sup>19</sup> William Randolph Howell and Jerry D. Thompson, *Westward the Texans: The Civil War Journal of Private William Randolph Howell* (Texas, Texas Western Press, University of Texas at El Paso, 1990), 88.

having tremendous success. However, one potential hindrance to an attacking force was breastworks, or fortifications.

The importance of fortifications in defensive matters cannot be understated. Primary accounts support this analysis, with the diary of William C. Benson, a Union soldier, reading as follows, “Wednesday, 22. 23rd Corps moves up. Rebels attempt to cut their way through Hookers. We are sent double quick to support him. Work all night fortifying. Thursday, 23. We strengthen our works [fortifications] as the rebels are thought to be massing their forces to cut their way out at this point.”<sup>20</sup> While one could make the case that the common soldier was just following orders in their establishment of breastworks, it is clear that as a whole, Civil War armies recognized the value of strong defensive fortifications. Both sides of the war, if circumstances permitted, built fortifications to provide cover for their infantry.

Another important element to understanding infantry charges and defenses against them was the necessity of amassing firepower. The benefits breastworks provided to defending forces created a demand for the attacking force to mass superior firepower at the point of attack. This is why infamous battle charges, such as those at Fredericksburg and Gettysburg, despite their failure to secure the positions they intended to, were ever attempted. However, there were additional reasons for keeping infantry close together. Massed infantry formations were largely necessary for any decisive victory to be achieved. The Battle of Gettysburg (1863) serves as a good example of why such tactics were often necessary. In his article, “A Tale of Two Armies: The Confederate Army of Northern Virginia and the Union Army of the Potomac and Their Cultures,” Joseph T. Glatthaar notes that the Confederate Army of Northern Virginia numbered somewhere around 75,000 men at the time of the battle.<sup>21</sup> These estimates are

---

<sup>20</sup> Columbus C. Benson and William C. Benson. “Civil War Diary of William C. Benson,” *Indiana Magazine of History* 23, no. 3 (1927): 344.

<sup>21</sup> Joseph T. Glatthaar, “A Tale of Two Armies: The Confederate Army of Northern Virginia and the Union Army of the Potomac and Their Cultures,” *Journal of the Civil War Era* 6, no. 3 (2016): 317.

supported by another author, James M. McPherson, who, in his book, *The Illustrated Battle Cry of Freedom: The Civil War Era*, also concludes that the Confederates at Gettysburg numbered around 75,000.<sup>22</sup> On the Union side at Gettysburg, Allen C. Guelzo provides an estimate of their available manpower in his book, *Gettysburg: The Last Invasion*. Guelzo notes that while the Union may have had additional manpower in the region, the number of Union soldiers present at Gettysburg was roughly 112,000.<sup>23</sup> Combined, this totals around 187,000 soldiers present at Gettysburg. The reason these numbers are significant is directly related to the nature of this era's warfare. Civil War enlisted men and officers alike were well aware of the dangers a bullet posed to them. This is why, when possible, defending forces would build fortifications for cover. Similarly, skirmishers would often use boulders, trees, farmhouses, barns, or sheds for cover. If we now imagine 187,000 soldiers building breastworks, digging trenches, and attempting to use skirmishing tactics for the sake of being able to freely seek cover, we would be looking at a battlefield dozens of miles wide, in which no decisive victory could ever be achieved by either army. The breaking down of armies into smaller units, and the stalemates which followed, are infamous components of World War I. Furthermore, there are a multitude of examples in 18th and 19th-century histories in which skirmishing forces, despite hours of harassing the enemy army, inflicted minimal casualties. The simple fact is that a skirmishing force could delay a conventional army, but had little hope of defeating them. Thus, the only way for one side of a battle to defeat the enemy was to mass their firepower and concentrate their attack on weak points in the enemy formation. In turn, this forced the defending side to fortify the positions of their infantry which faced such attacks. In other words, both sides would end up massing their firepower in key locations. Pickett's Charge at Gettysburg is perhaps the most famous

---

<sup>22</sup> J. M. McPherson, *The Illustrated Battle Cry of Freedom: The Civil War Era*, (Oxford University Press, 2003): 648.

<sup>23</sup> Allen C. Guelzo, *Gettysburg: The Last Invasion* (New York: Vintage Books, 2014), 159.

example of this. The Confederate attempt to break through Union lines and split their army in half was thwarted by the Union successfully reinforcing the point of attack. Both sides massed their infantry at the same locations. There was simply no other way the battle could have been decisively concluded beyond one side charging the other.

Another key factor that demanded infantry be condensed was the need for coordination. Radios did not exist in this era, with the closest technology being the telegraph. However useful telegraphs may have been, they were of virtually no help in the field of battle. As armies deployed and officers executed orders received from their superiors, new orders could only be given by letter or by word of mouth. For common soldiers, who made up the overwhelming majority of troops, orders were given verbally by their commanding officers and perhaps repeated by their regiment's sergeants. Because of this, it was necessary for soldiers to be in close proximity to one another. If formations were too spread out, proper coordination and execution of orders would have been impossible. These are among the primary reasons why, despite the introduction of rifles, infantry was still kept in tight formations.

Many primary sources from the journals of Civil War infantrymen have been preserved, and offer firsthand accounts of what the Civil War was like for the typical foot soldier. One such journal is that of Rufus J. Woolwine (with edits by Louis H. Manarin). Woolwine served in the Confederate Fifty-First Regiment Virginia Infantry, and saw action in the battles of Cold Harbor and Lynchburg, among others.<sup>24</sup> Both leading up to and during the Battle of Cold Harbor, Woolwine saw action multiple times, noting that on May 31st (the first day of the battle of Cold Harbor) his unit, "Had to fall back under a galling fire. Joseph W. Rose killed. Heavy firing from their artillery. During the day the

---

<sup>24</sup> Rufus J. Woolwine and Louis H. Manarin, "The Civil War Diary of Rufus J. Woolwine." *The Virginia Magazine of History and Biography* 71, no. 4 (1963): 416.

sharpshooters kept very busy.”<sup>25</sup> Woolwine goes on to note, “At Gain[e]s’ Farm drove their sharpshooters from their pits and fortified.”<sup>26</sup> These excerpts demonstrate the fact that the threat posed by sharpshooters was well understood, and officers were well aware of both the need to dislodge sharpshooters and the tactical advantage fortifications offered the defending force.

A primary account of a Union sharpshooter who also fought at Cold Harbor can be found in Martin Pegler’s book, *Sharpshooting Rifles of the American Civil War: Colt, Sharps, Spencer, and Whitworth*. Pegler quotes directly from the writings of Private William King, who discussed his experiences at the battle. King wrote of his skirmishing element taking position in front of a swamp and laying down suppressive fire on the advancing Confederates. Pegler paraphrases King, stating, “At one point, King’s Sharps became so hot he was forced to stop shooting to let it cool. By choosing their position well, in front of impassable swampy ground and holding their fire until the last possible minute, the Berdan sharpshooters broke the Confederate charge with the loss to themselves of only one man killed and three wounded.”<sup>27</sup> One must wonder if the Confederate forces King fired upon were the very same soldiers Rufus J. Woolwine was among. There are a number of important points from this account that must be acknowledged. King’s gun becoming so hot that he was forced to stop shooting demonstrates the relatively fast rate of fire a Civil War sharpshooter was capable of. Furthermore, the use of the swamp to the sharpshooters’ tactical advantage demonstrates the important role terrain could have in any given battle. It may seem that the Confederate side in this particular engagement launched a foolhardy, suicidal attack, with one side being outgunned by the other, but this may have been impossible for them to realize prior to their attempted advance. Sharpshooters on both sides of the war had decisive roles in a number of battles.

---

<sup>25</sup> Woolwine and Manarin, “The Civil War Diary,” 437.

<sup>26</sup> Woolwine and Manarin, “The Civil War Diary,” 437.

<sup>27</sup> Martin Pegler, *Sharpshooting Rifles of the American Civil War: Colt, Sharps, Spencer, and Whitworth* (Oxford: Osprey Publishing, 2017), 42.

A primary account of the Battle of Fredericksburg (1862) comes from Union soldier Charles B. Haydon, whose diary (with edits by Stephen W. Sears), gives insight into the effect Confederate sharpshooters had in halting the Union assault. As Haydon states, “One hundred & eighty pieces of artillery were unable after several hours to drive a few sharpshooters from the town so that the engineers could lay the bridge.”<sup>28</sup> This demonstrates both the potential shortcomings of artillery, while at the same time showing how much of a tactical role sharpshooters could have, in this case slowing the entirety of the Union’s advance into Fredericksburg for multiple hours. Furthermore, we can again see the use of natural terrain to the defending force’s advantage, with the Confederates forming defenses on the far side of the Rappahannock River. The necessity for the Union engineers to build a bridge while under fire from Confederate sharpshooters must have been a terrifying ordeal.

Walter also gives an example of how breech-loaded weapons (typically used by sharpshooters), also provided infantry with an effective counter to cavalry. Walter emphasizes this fact, stating, “...particularly later in the war, infantrymen armed with breech-loaders chambering self-contained ammunition could fire many more shots than the couple of volleys that could be fired from a muzzle-loader while the horsemen approached...”<sup>29</sup> This demonstrates why cavalry in the Civil War was so often relegated to reconnaissance and raiding supply lines, rather than assaulting infantry lines directly.

Yet another important element of both infantry and mounted warfare is guerrilla tactics. Most guerrillas were mounted, although if circumstances demanded it, they could easily dismount and fight on foot. This style of warfare was unique from standard skirmishing tactics which were used by the vanguard of traditionally structured armies. In contrast to skirmishers, who

---

<sup>28</sup> Charles B. Haydon and Stephen W. Sears. *For Country, Cause and Leader: The Civil War Journal of Charles B. Haydon*. (New York: Houghton Mifflin Harcourt Publishing Company, 1993), 296.

<sup>29</sup> Walter, *Weapons of the Civil War*, 54.

would typically advance ahead of the standard infantry and harass the enemy, or provide a screen to their own army's retreat, guerrilla fighters would strike supply lines or civilian targets, and even terrorize innocent people for supporting one side or the other. In his book, *Guerrilla Warfare in Civil War Missouri, 1862*, Bruce Nichols discusses guerrilla warfare in depth. In describing a raid led by Confederate guerrilla William Clarke Quantrill, Nichols states, "The Rebels believed Lieutenant A. Bayard Nettleton's large patrol of 2nd Ohio Cavalry had left town after searching the place at dawn. They rode in, gunning down either an Ohio straggler or a local northern sympathizer."<sup>30</sup> This example showcases one of the frequent themes of Guerrilla warfare, which is the loss of civilian life. In contrast to civilians being hit by stray bullets (which was a legitimate risk for any who refused to flee the major battlefields), guerrillas on either side of the conflict were infamous for deliberately killing civilians. While actions such as this no doubt served as a distraction that drew patrols into the area, potentially depriving the frontlines of manpower, the most effective method of guerrilla warfare was its ability to disrupt logistics. Nichols provides an example of this when discussing the First Battle of Independence, on August 11th, 1862, saying the following, "... at four in the morning of August 11, Quantrill's men neutralized most of the Federal pickets, and the Rebel assault came into town from two directions, nearly taking the whole place by surprise."<sup>31</sup> Nichols then goes on to importantly note, "They [the Confederates] did benefit, however, from the large amount of weapons, ammunition, equipment, and supplies captured at Independence, which were used to arm and equip the new soldiers."<sup>32</sup> As can be seen from these two quotes, not only did guerrilla warfare draw patrols away from the frontline, but it also deprived one side of supplies while obtaining those supplies for the other. Thus, while how significant of a role guerrilla warfare

---

<sup>30</sup> Bruce Nichols, *Guerrilla Warfare in Civil War Missouri*. (Jefferson, NC: McFarland & Co. Inc., 2004), 14.

<sup>31</sup> Nichols, *Guerrilla Warfare in Civil War Missouri*, 157.

<sup>32</sup> Nichols, *Guerrilla Warfare in Civil War Missouri*, 158.

played is open to interpretation, there is no denying that it served, at the very least, as a major nuisance to the conventional armies of both the Confederacy and the Union. Guerrilla warfare had both tactical and strategic significance. Tactically, it could cause short-term disruptions to supply lines, whose results could be seen immediately. In the strategic long-term, it could lead to a diversion of manpower, and as casualties piled up in these small-scale battles, the deprivation of much-needed manpower which otherwise could have been deployed to the frontline of major engagements.

Guerilla warfare was in many ways a hybridization of mounted and foot combat. Conventional cavalry often served similar functions, but with notable differences. Some important uses of cavalry throughout the war were reconnaissance and the disruption of enemy logistics. John Wilson Phillips, whose diary has survived (and of which Robert G. Athearn has provided a forward to), was a Union cavalry officer, whose primary responsibilities included scouting in Northern Virginia. Phillips also saw action at Gettysburg, where he was wounded but survived.<sup>33</sup> Valuable insight into the role cavalry played in the Civil War can be gained from Phillips' journal. When describing his cavalry company's raid into Virginia, he wrote the following, "Passed Spotsylvania C[ourt] H[ouse] about 10 A.M. Reached Beaver Dam Station on the Virg Central R.R. about 4 P.M. Burned the Station and a large quantity of wood. Tore up the track and telegraph for some distance."<sup>34</sup> This demonstrates how much of a hindrance cavalry could pose to either side of the war. Regardless of cavalry's effectiveness (or ineffectiveness) in pitched battles, their mobility allowed for quick raids which often yielded debilitating consequences. Phillips also describes the use of skirmishers by the Confederates, demonstrating both how much of a nuisance they could pose, and their vulnerability to cavalry. As

---

<sup>33</sup> John Wilson Phillips and Robert G. Athearn. "The Civil War Diary of John Wilson Phillips," *The Virginia Magazine of History and Biography* 62, no. 1 (1954): 95.

<sup>34</sup> Phillips and Athearn, "The Civil War Diary," 96.

Phillips states, "I was ordered on picket and remained there until 10 o.c. a.m. to day. We were fired into just as we started but no harm done. We were harassed [*sic*] for a mile or two with the rascals in our rear but finally we halted and charged them with one squadron and so effectively drove them that they staid away."<sup>35</sup> This demonstrates what has been previously mentioned, that skirmishers are more of a harassing force than one capable of taking decisive action. Furthermore, it must be noted that skirmishers, in their typical scattered formations, would have been far more vulnerable to cavalry charges than regular infantry organized into a tighter formation. This signifies both one of the weaknesses of skirmishing and one of cavalry's greatest strengths and uses. This is also additional reason infantry formations were typically so tightly packed, as it served as an effective counter to potential cavalry attacks.

Another soldier, Confederate cavalryman John Coffee Williamson, also kept a diary. Williamson saw action in the Battle of Chickamauga (1863), among others.<sup>36</sup> The surviving parts of his diary do not cover his entire length of military service, but rather only a mounted foray into Union-controlled Tennessee in 1864 for the purpose of raiding supply lines. When describing this raid, Williamson wrote, "19th. Day light found us encamped on the Athens road near old Haley's. We took up the line of march soon and took Riceville Road where we arrived about 10 o'clock, and then we commenced burning the railroad and destroyed about 7 miles of it and encamped in 4 miles of Athens."<sup>37</sup> Thus, it seems the experiences of John Coffee Williamson are much the same as Union cavalryman John Wilson Phillips. Both men undertook forays into hostile territory for the purpose of disrupting communication, transportation, and supply lines. These examples should be evidence enough of how significant a role cavalry had outside of direct combat, and demonstrate that military officers

---

<sup>35</sup> Phillips and Athearn, "The Civil War Diary," 97.

<sup>36</sup> J. C. Williamson, "The Civil War Diary of John Coffee Williamson," *Tennessee Historical Quarterly* 15, no. 1 (1956): 61.

<sup>37</sup> Williamson, "The Civil War Diary," 63.

were well aware of how best to put cavalry to use. As sending cavalry headfirst against infantry (especially those armed with repeating or breech-loaded weapons, or massed-formations of standard infantry) was at best ineffective and at worst suicidal, it seems they were rarely utilized in such a fashion. It is not too far a stretch to likewise assume that infantry would not have been ordered to charge the enemy head-on if it was not the most effective method available. In this regard, it appears Civil War officers had a thorough understanding of how best to employ each type of soldier, and artillery crews were no exception to this.

Artillery often served as one of the most decisive factors in Civil War combat. In his article, "Civil War Artillery," Eugene B. Canfield conducts a thorough summary on the significance of both smoothbore and rifled artillery at Gettysburg. In noting the variety of cannons in use by the time Gettysburg was fought, Canfield says:

On the field at Gettysburg were emplaced 415 guns, of which 182 were Confederate and 233 Union. Although 60 per cent of the Union guns were rifles, while the Confederates had 50 per cent rifles, the artillery of both antagonists was made up primarily of three types of guns: 12-pounder smoothbores (Napoleons), 10-pounder parrott rifles, and 3-inch ordnance rifles. Earlier in the war the 6-pounder smoothbore also had seen service, but it was gradually replaced as the rifles and heavier smoothbores became available.<sup>38</sup>

It is noteworthy that despite the introduction of rifled cannons, the 12-pounder Napoleon remained a staple of Civil War armies on either side of the conflict. As was the case for most tactics, there was a reason for the continued use of Napoleonic cannons. When discussing the various shot types (solid shot, shells, case, and canister shot), Canfield notes, "Throwing canister represented one

---

<sup>38</sup> Eugene B. Canfield, "Civil War Artillery," *Ordnance* 41, no. 219 (1956): 436.

of the few cases where smoothbores outshone the rifles, since the rifles, for an equivalent weight shot, had a much smaller bore and could not hold as many balls.”<sup>39</sup> In simple terms, smoothbores loaded with canister shots essentially operated as oversized shotguns, hurling countless projectiles which would decimate infantry formations. Similarly, smoothbore shotguns to this day remain a worthy foe to rifles in certain situations, such as close-range engagements. The 12-pounder Napoleon thus remained the most efficient cannon for close-range use. While the improved accuracy of rifled cannons was a significant factor in Civil War warfare (especially for its ability to harass opposing artillery batteries), the fact the smoothbore remained relevant demonstrates that the introduction of these new technologies did not always warrant major changes in strategy or tactics. Patrick H. White, a Union artillery officer with Taylor’s Battery (and later a Chicago battery, the Mercantile Battery), kept a diary that provides invaluable insight and firsthand accounts of a number of battles. In addition to this, White was notably astute for a relatively low-ranking soldier, and noted the following as his army arrived near Shiloh Church, “I always thought it very strange that our generals did not throw up a little breastworks in our front, from snake creek on the northland Lick Creek on the south, which ran almost at right angles with the Tennessee, and em[p]ty into it about three miles apart. These were the right and left defenses of our lines.”<sup>40</sup> These are intelligent observations from White, who himself was an officer, albeit not a high-ranking one. He also gave an account that demonstrates the deadly firepower artillery brought to the battlefield, stating the following,

I called to the men to do[u]ble shot their pieces.  
[A]t the second discharge 3 of their field officer’s  
horses came into our line. After our first discharge

---

<sup>39</sup> Canfield, *Civil War Artillery*, 437.

<sup>40</sup> Patrick H. White and J. E. Boos “Civil War Diary of Patrick H. White.” *Journal of the Illinois State Historical Society (1908-1984)* 15, no. 3/4 (1922): 652.

they gave us a volley which passed over our heads, and our next was more effective as it was at point blank range with the muzzles deprest. [W]e killed near 400 of them, as that part of the ground was not fought over afterwards and the bodys was counted by the detail who enterd them.”<sup>41</sup>

This is a demonstration of an artillery crew inflicting regiment-sized losses upon the enemy. In this case, the Confederate attempt at charging the Union battery does indeed seem to have been suicidal. Risks have to be taken in battle, however, and perhaps had the Confederate volley not overshot the Union artillerymen (an example of the complications associated with sighting of Minie ball-rifles), results would have been much different. At the very least, this does call into question the degree of risk in charging a fortified position supported by artillery. However, when ground must be taken from the enemy, the question remains of what the alternative to a massed-infantry charge could possibly have been.

### **Conclusion**

This collection of primary and secondary sources demonstrates that contrary to popular myth, Civil War officers and enlisted men alike were well aware of the technologies they were dealing with. They were professional soldiers who knew what they were doing, and rather than naively walking into danger, they knowingly faced these dangers despite the risk it posed to their mortal bodies. Furthermore, they utilized terrain to their strategic and tactical advantage, in ways that capitalized on new military technologies. While many examples exist of poor judgment on the attacking side’s part, the technology available at the time simply did not allow for the abandonment of long-established tactics. These sources have shown that new strategies and tactics were

---

<sup>41</sup> White and Boos, “Civil War Diary of Patrick H. White,” 653.

implemented alongside the introduction of new technologies, but they coincided with the old ones, rather than replacing them outright. With this in mind, it seems the sources included support the conclusions this meta-analysis sought to prove.

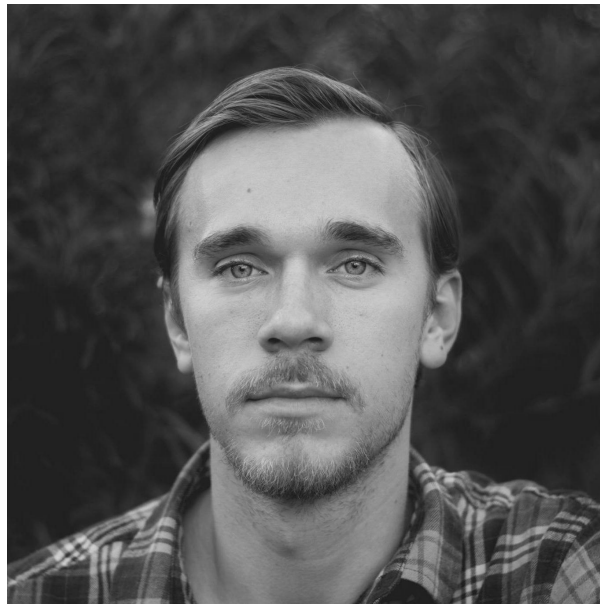
## **Bibliography**

- Benson, Columbus C., and William C. Benson. "Civil War Diary of William C. Benson." *Indiana Magazine of History* 23, no. 3 (1927): 333–64.  
<http://www.jstor.org/stable/27786302>.
- Canfield, Eugene B. "Civil War Artillery." *Ordnance* 41, no. 219 (1956): 436–40. <http://www.jstor.org/stable/45361483>.
- Glatthaar, Joseph T. "A Tale of Two Armies: The Confederate Army of Northern Virginia and the Union Army of the Potomac and Their Cultures." *Journal of the Civil War Era* 6, no. 3 (2016): 315–46.  
<http://www.jstor.org/stable/26070428>.
- Grant, U. S. "Military Strategy of the Civil War." *Military Affairs* 22, no. 1 (1958): 13–25. <https://doi.org/10.2307/1985481>.
- Guelzo, Allen C. *Gettysburg: The Last Invasion*. New York, NY: Vintage Books, 2014.
- Harvey, A. D. "Was the American Civil War the First Modern War?" *History* 97, no. 2 (326) (2012): 272–80.  
<http://www.jstor.org/stable/24429316>.
- Haydon, Charles B., and Stephen W. Sears. *For Country, Cause and Leader: The Civil War Journal of Charles B. Haydon*. New York: Houghton Mifflin Harcourt Publishing Company, 1993.
- Hess, Earl J. *Civil War Infantry Tactics: Training, Combat and Small-Unit Effectiveness*. Baton Rouge: Louisiana University Press, 2015.
- Howell, William Randolph, and Jerry D. Thompson. *Westward the Texans: The Civil War Journal of Private William Randolph Howell*. El Paso, TX: Texas Western Press, University of Texas at El Paso, 1990.
- Mahon, John K. "Civil War Infantry Assault Tactics." *Military Affairs* 25, no. 2 (1961): 57–68.  
<https://doi.org/10.2307/1984988>.
- McPherson, James M. *The Illustrated Battle Cry of Freedom: The*

- Civil War Era*. New York, NY: Oxford University Press, 2003.
- Nichols, Bruce. *Guerrilla Warfare in Civil War Missouri*. Jefferson, NC: McFarland & Co., Inc., 2004.
- Pegler, Martin. *Sharpshooting Rifles of the American Civil War: Colt, Sharps, Spencer, and Whitworth*. Oxford: Osprey Publishing, 2017.
- Phillips, John Wilson, and Robert G. Athearn. "The Civil War Diary of John Wilson Phillips." *The Virginia Magazine of History and Biography* 62, no. 1 (1954): 95–123. <http://www.jstor.org/stable/4245983>.
- Tuttle, Russel M., and George H. Tappan. *The Civil War Journal of Lt. Russell M. Tuttle, New York Volunteer Infantry*. McFarland & Company, 2006.
- Walter, John. *Weapons of the Civil War Cavalryman*. New York: Bloomsbury Publishing, Plc, 2020.
- White, Patrick H., and Boos, J. E. "Civil War Diary of Patrick H. White." *Journal of the Illinois State Historical Society (1908-1984)* 15, no. 3/4 (1922): 640–63. <http://www.jstor.org/stable/40186945>.
- Williamson, J. C. "The Civil War Diary of John Coffee Williamson." *Tennessee Historical Quarterly* 15, no. 1 (1956): 61–74. <http://www.jstor.org/stable/42621268>.
- Woolwine, Rufus J., and Manarin, Louis H. "The Civil War Diary of Rufus J. Woolwine." *The Virginia Magazine of History and Biography* 71, no. 4 (1963): 416–48. <http://www.jstor.org/stable/4246972>.
- Yee, Gary, and Johnny Shumate. *Union Sharpshooter versus Confederate Sharpshooter: American Civil War, 1861-65*. Oxford, UK: Osprey Publishing, 2019.

***Author Bio***

Ryan Rethaford is a recent graduate of CSUSB, having earned a Bachelor of Arts in history with a general concentration in the fall semester of 2022. His academic areas of interest include all cultures and eras of history, with a recent focus on the American Civil War following a weeklong trip to the historical town of Harpers Ferry, West Virginia. While he is currently taking time away from college to pursue other goals, Ryan intends to apply for a Master's program in the near future. He hopes to become a librarian and aid future history students in their own research endeavors.



*History in the Making*