

The Civil War Infantry Doctrine

A study on the origins and evolution of infantry tactics
in the American Civil War.

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i. List of Abbreviations

Brig.	Brigadier
Bvt.	Brevet (honorary rank)
Col.	Colonel
CO	Commanding Officer
C.S.	Confederate States
Gen.	General
<i>LDP</i>	<i>Land Doctrine Publicatie</i>
Lt.	Lieutenant
Maj.	Major
U.S.	United States
USMA	United States Military Academy
VMI	Virginia Military Institute

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Introduction

At the beginning of the American Civil War (1861 – 1865), the North and South were locked in a stalemate. The military strength of both sides could be considered roughly the same, and on the battlefield, neither side could present a significant advantage over the other. Both sides raised vast armies and armed their soldiers with the rifled-musket, giving them increased firepower. In addition, the Union and Confederate soldiers shared the same military traditions, were trained in the same infantry tactics, and had either no combat experience or shared the same experience in federal service. The military capability of the Union and Confederate armies was therefore as similar as it was limited.²

The large scale and advanced weaponry presented opportunities as well as challenges. On the battlefield, commanding officers had to solve these ‘tactical problems’. The tactical insight of one officer, expressed by his ability and willingness to make effective use of those under his command, could mean the difference between victory and defeat. Therefore, on the battlefields of the Civil War, where both North and South were able to match each other’s military capacity, effective military command was pivotal. Still, how did an officer acquire the tactical insight to turn the tide of battle in his favour? Was it forged from the bottom up through the experience of combat, or did it descend from the top down revealed by the study of tactics? Hence the thesis question: *What was the theoretical knowledge of warfare of the American commanding officer, how did he apply this knowledge on the battlefield and to what extent did he adjust these ideas during the course of the American Civil War?*

The American Civil War has been (and still is) closely examined by the academic community, covering a wide range of subjects. The military history of the Civil War has dominated popular interest, most vividly expressed by the re-enactment of its battles. Although academic interest for the military history remains high, it is neither dominant nor confined.³ While daunting at first and perhaps no longer susceptible to ground breaking revelations, there is still room left for further analysis of how the Civil War unfolded on the American battlefields. Regarding the subject of Civil War tactics (which attends to these questions), historians James M. McPherson and William J. Jr. Cooper comment: *‘In the area of tactics, numerous single-battle narratives and several accounts of soldier motivation and combat experience have offered fragmentary snapshots, but we lack a*

² Hsieh, Wayne. *The Old Army in War and Peace: West Pointers and the Civil War Era, 1814-1865*. Charlottesville: University of Virginia, 2004: 23.

³ McPherson, James M. and Cooper, William J. Jr. *Writing the Civil War: The Quest to Understand*. Columbia: University of South Carolina Press, 1998: 2-3.

*systematic analysis of Civil War tactics that integrates such factors as technology, terrain, weather, and leadership and traces tactical evolutions over four years of conflict.*⁴

A systematic analysis of Civil War tactics, as proposed by McPherson and Cooper, is therefore the starting point to answer the thesis question. Despite that the historiography of Civil War tactics is not extensive, it is not as incomplete as McPherson and Cooper suggest. The works *Attack and Die: Civil War Military Tactics and the Southern Heritage* (1982) by Grady McWhiney and Perry D. Jamieson, *The American Civil War and the Origins of Modern Warfare* (1988) by Edward Hagerman, *Battle Tactics of the Civil War* (1989) by Paddy Griffith and finally *West Pointers and the Civil War: The Old Army in War and Peace* (2004) by Wayne Hsieh, all provide complete analyses of Civil War tactics.

The difficulty, however, is that in search for confirmation of their own theories, these authors all shed a different light on the evolution of Civil War tactics. As a consequence, the 'diffused light' shed on the subject, has somewhat obscured the historiographical direction of this field. Therefore, this thesis will restore clarity to the questions of how and why infantry tactics were employed over the course of the Civil War. To achieve this, earlier and more recent studies on the subject are examined, further substantiated by the survey of four significant battles in the Civil War. An answer to the thesis question will be based on the findings from the four battles, and the corresponding findings of the five aforementioned authors.

The answer to the thesis question is formulated over two parts. The first part will handle the theoretical aspect of infantry tactics and will reconstruct the origins, transfer and adoption of a tactical doctrine by the U.S. Army until the outbreak of the American Civil War. Early-nineteenth century American infantry tactics originated from France, and this transfer of knowledge was further encouraged by the United States Military Academy established in 1802. After the War of 1812, the formation of a small professional U.S. Army went hand-in-hand with the adoption of a standardised tactical doctrine.

However, the reforms set in motion by the military were met with political and public resentment. The American martial society still held a high regard for the independent citizen-soldier (or irregular) and had an overall adversity towards strong federal institutions. It was during the Mexican-American War that the U.S. Army could finally proof the value of professional soldiers (or regulars) and a standardised tactical doctrine. After the Mexican-American War, advancements in musket technology prompted adjustments to the existing infantry doctrine; these were the last significant revisions to the doctrine before the outbreak of

⁴ McPherson and Cooper, *Writing the Civil War: The Quest to Understand*: 5.

the American Civil War. Finally, part one will turn to the build-up of the Union and Confederate armies during the early stages of the secession. As both sides quickly raised vast irregular armies, limitations of the existing tactical doctrine became apparent. The existing doctrine was developed to accommodate a small professional army and not vast and irregular armies. Drill-training constituted for many inexperienced soldiers and officers, the only form of preparation for combat.

The second part of this thesis will handle the practical aspect of infantry tactics, turning to the question how the tactical doctrine came into practice on the battlefield and more importantly if it evolved over the course of the war. Four battles on the eastern theatre will be examined during different stages of the Civil War: the First Battle of Bull Run or Manassas, the Battle of Antietam or Sharpsburg, the Battle of Gettysburg and the Battle of Spotsylvania Courthouse. The North and South entitled battles differently; the Union would name the battle after the nearest body of water, while the Confederacy would name it after the nearest town. This thesis will use the Union titles (since history is ultimately written by victors). The terrain of these four battles was mostly the same, sparsely populated with rolling grasslands, small streams and partial high grounds from which the battlefield could be dominated. While the first three battles took place in lightly wooded areas; only the last battle at Spotsylvania Courthouse was in a heavily wooded area.

While the strategic objectives and consequences will be briefly addressed, the thesis is centred on the tactical level of warfare, from the point in time that two opposing armies are positioned on the battlefield and engage each other. As the strategic circumstances of these four battles changed over the course of the war, only those influential on a tactical level will be taken into consideration. Furthermore, the thesis question is centred on the commanding officer; it is therefore important to remember that some tactical decisions were made with certain strategic objectives in mind. The first concern of an officer was the course of the battle, but on the battlefield the course of the war was always taken into consideration.

The ability to adapt to the course of the war was invaluable, on the tactical level as well as the strategic level. During a war it could be extremely difficult to adjust the established theoretical framework (or tactical doctrine) to the nature of warfare. The influential military theorist Carl von Clausewitz (1780 – 1831) formulated the concept of war as follows: '*War therefore is an act of violence intended to compel our opponent to fulfil our will.*'⁵ Unquestionably the Civil War does not challenge this concept of war (nor did any war before and after). While the concept of war has remained the same, the act of war itself has not. Warfare has been susceptible

⁵ Clausewitz von, Carl IN Graham, J.J. (editor) *On War*. London: N. Trübner, 1873: 22.

to inevitable change driven by technological progress. The evolution of warfare has provided us with new ways 'to compel our opponent to fulfil our will'. The ability to adapt to this inevitable change can therefore be decisive for a victory that achieves a state of peace.

The 2009 *Land Doctrine Publicatie* of the Royal Netherlands Army provides the present-day Dutch army officer with a conceptual framework for ground warfare. The *LDP* states that success in war does not solely depend on the availability of military capacity, for it is worthless without the capability to use it. In other words, the available men and resources can only be useful if the ability and willingness exist to use them. Military capability consists of three components: the conceptual, physical and mental.

The conceptual component comprises the doctrine, a set of common principles on warfare, tactics and procedures which translate military theory into practice. The physical component comprises the available operational resources of men and material, the soldier and his weapon. The mental component comprises the qualities of effective leadership, which is a well-organised use of resources, perception and the intrinsic motivation to function in a combat situation.⁶ The *LDP* provides a framework for these variables converging on the lowest level of warfare, the tactical level. The tactical level of warfare remains very elusive, even with the present-day theoretical knowledge of the *LDP*.

The convergence of the theory and practice of warfare on the battlefield was also considered problematic by the theorists of the nineteenth century. The German military theorist Helmuth von Moltke (1800 – 1891) summarised it as follows: '*No plan of operations extends with certainty beyond the first encounter with the enemy's main strength.*'⁷ The Swiss military theorist Antoine-Henri Jomini (1779 – 1869), however, was convinced that to a certain extent, warfare could be moulded into a system of fixed laws. Jomini divided the act of war into one political and five military levels. The highest level of warfare is political: '*statesmanship in its relation to war*' or diplomacy. Thereafter follows the highest military level: '*strategy or the art of properly directing masses upon the theatre of war, either for defence or invasion.*' Then there are '*grand tactics and logistics or the art of moving armies,*' followed by '*engineering or the attack or defence of fortifications,*' and finally '*minor tactics.*'⁸

⁶ Brocades Zaalberg, T.W., Cate ten, A., van Gils, R.J.A., Hagemeijer, W.J. and Mulder, M.J.A. *Land Doctrine Publicatie: Militaire Doctrine voor het Land Optreden*. Amersfoort: Opleidings- en Trainingscentrum Operatiën, 2009: 106.

⁷ Moltke von, Helmuth IN Hughes, Daniel J. (editor). *Moltke on the Art of War: selected writings*. New York: Presidio Press, 1993: 45.

See Clausewitz von, *On War*: 75. Von Moltke's statement is based on the concept of friction by Clausewitz: '*Everything is very simple in War, but the simplest thing is difficult. These difficulties accumulate and produce a friction which no man can imagine exactly who has not seen War*' and '*Friction is the only conception which in a general way corresponds to that which distinguishes real War from War on paper.*'

⁸ Jomini, Antoine-Henri IN Mendell, G.H. and Craighill, W.P. (editors). *Summary on the Principles of the Art of War*. Philadelphia: J.B. Lippincott & Co., 1862: 13.

Jomini concluded: '*War in its ensemble is not a science, but an art. Strategy, particularly, may indeed be regulated by fixed laws resembling those of the positive sciences, but this is not true of war viewed as a whole.*'⁹

The susceptibility to fixed laws therefore depends on the level of warfare. On the lowest level of warfare, the tactical level, Jomini recognises that: '*combats may be mentioned as often being quite independent of scientific combinations, and they may become essentially dramatic, personal qualities and inspirations and a thousand other things frequently being the controlling elements.*' Furthermore, '*The passions which agitate the masses that are brought into collision, the warlike qualities of these masses, the energy and talent of their commanders, the spirit, more or less martial, of nations and epochs, – in a word, everything that can be called the poetry and metaphysics of war, – will have a permanent influence on its results.*'¹⁰ This does not mean that Jomini disregards the application of any fixed laws on the tactical level; however, the application thereof can no longer ensure the same predicted outcome as on the strategic level.

Bibliography

Although the regulations and tactical manuals comprising the infantry doctrine of that time are well-documented, it is much harder to determine whether or not officers employed the prescribed tactics on the battlefield. The 'fragmentary snapshots' of first-hand accounts by soldiers and officers serve as valuable indicators of how tactics were employed in specific battles, but they unfortunately only offer us a partial image. In addition, neither side appointed official review boards to analyse the tactical doctrine after a battle. Therefore this thesis will lean heavily on the findings of secondary sources.

With regard to the analyses of infantry tactics before and during the American Civil War, the four aforementioned works were obviously important for writing this thesis: *Attack and Die: Civil War Military Tactics and the Southern Heritage* (1982) by Grady McWhiney and Perry D. Jamieson, *The American Civil War and the Origins of Modern Warfare* (1988) by Edward Hagerman, *Battle Tactics of the Civil War* (1989) by Paddy Griffith and *West Pointers and the Civil War: The Old Army in War and Peace* (2004) by Wayne Hsieh.

In *Attack and Die*, Grady McWhiney and Perry D. Jamieson argue that, during the Civil War, the rifled-musket greatly favoured the defender. While the Union military adjusted their tactics to exploit the superiority of the defensive position, the Confederates did not. The Confederate command persisted in using early-nineteenth century assault tactics, resulting in higher losses and consequently an inability to sustain the war effort against the North. The

⁹ Jomini, *Summary on the Principles of the Art of War*: 321.

¹⁰ Ibid.

authors attribute the compulsive use of offensive tactics to the Celtic origins of Southern culture, which inclined them to fight aggressively.¹¹ Historian Joseph T. Glatthaar comments that their findings: ‘caused a firestorm of debate which, unfortunately, has camouflaged the great contributions of the book’¹² and points out that: ‘McWhiney and Jamieson provide us with the best survey of American tactical thought from the Napoleonic era until into the Civil War.’¹³

The work of Edward Hagerman, *The American Civil War and the Origins of Modern War* follows the same line of thought as McWhiney and Jamieson with regard to the significant influence of the rifled-musket on infantry tactics in the Civil War. These advancements incited an increased use of defensive tactics (expressed by the use of field fortifications) already advocated by the American military theorist Dennis Hart Mahan before the Civil War.¹⁴ Hagerman suggests that the American Civil War carried the characteristics of trench warfare also witnessed in the First World War. In contrast to McWhiney and Jamieson, Hagerman perceives a dominance of the tactical defensive on the side of the Union as well as the Confederacy. Therefore, he defines the Civil War as the first modern war.¹⁵

Historian Paddy Griffith, however, contends the significant impact of the rifled-musket altogether. In his work *Battle Tactics of the Civil War*, Griffith argues that the American Civil War showed more characteristics of the Napoleonic Wars than of any early-twentieth century war. The need to employ field fortifications, he argues, was tactically not different than during the Napoleonic Wars. The theoretical advocacy of the tactical defensive needlessly extended the conflict, which otherwise would have seen more decisive battles as seen in the Napoleonic era. The failure of early-nineteenth century assault tactics was not the result of the increased firepower. It was rather the ignorance of commanding officers for the incompatibility of their soldiers with early-nineteenth century tactics.¹⁶

The dissertation of Wayne Hsieh *West Pointers and the Civil War: The Old Army in War and Peace* acknowledges Griffith’s claims to a certain extent. According to Hsieh, neither side could present a significant advantage over the other and therefore the individual ‘military expertise’ of commanding officers was far more influential than the emergence of the rifled-musket and use of field fortifications. The author also points regularly to the influence of the American national identity on the military, from a perceived difference between the American and European

¹¹ McWhiney, Grady and Jamieson, Perry D. *Attack and Die Civil War Military tactics and the southern heritage*. Tuscaloosa: The University of Alabama Press, 1982: 172-173.

¹² Glatthaar, Joseph T. IN McPherson and Cooper, *Writing the Civil War: The Quest to Understand*: 67-68.

¹³ Ibid.

¹⁴ Hagerman, Edward. *The American Civil War and the Origins of Modern Warfare*. Indianapolis: Indiana University Press, 1988: 293.

¹⁵ Hagerman, *The American Civil War and the Origins of Modern Warfare*: 9.

¹⁶ Griffith, Paddy. *Battle Tactics of the Civil War*. New Haven: Yale University Press, 1989: 189-192.

terrain, to the unwillingness to tolerate an American military establishment which imposed stricter control on the free-spirited mind of the American civilian.¹⁷

The views of these five authors on the evolution of infantry tactics in the Civil War will be examined in combination with the findings from the four battles. After the description of each battle, the tactics used by both sides will be briefly discussed. The final chapter will examine the views of the five authors compared to the findings with regard to the employed tactics in all four battles. The decisive role of the commanding officers, the infantry doctrine, field fortifications and the rifled-musket will be reviewed.

The descriptive parts of this thesis relied mostly on the following three works: *Battle Cry of Freedom: The Civil War Era* (1988) by James M. McPherson, *The Longest Night: Military History of the Civil War* (2001) by David J. Eicher and *The American Civil War: A Military History* by (2009) John Keegan. These works are most referred to with regard to the description of the four battles, dealing with the strategic background, opposing forces and battlefield terrain.

The first-hand accounts referred to are the army regulations, drill instructions and tactical manuals prescribed in the U.S. Army from 1815 to the Civil War. The comprised army regulations, drill-instructions and tactical manuals are the theoretical framework on which the tactical doctrine of the Union and Confederate military was built. Still, the success and importance of the established theoretical framework mainly depended on how it came into practice and, even more importantly, whether it came into practice at all.

¹⁷ Hsieh, *The Old Army in War and Peace*: ii.

Part One
The American Infantry Doctrine
1812 – 1861

‘The only really practical man is one who is thoroughly grounded in theory.’¹⁸

Chapter 1 The American infantry doctrine 1812 – 1846

1.1 The origins and transfer of nineteenth century infantry tactics

The infantry tactics which the American officer could refer to during the Civil War originated from France. The academic community is clear on the French origins of the conceptual foundation of nineteenth century American infantry tactics. According to Edward Hagerman: *‘American tactical and strategic thinking in the early and mid-nineteenth century largely followed the French lead.’*¹⁹ In the same line of thought Paddy Griffith comments: *‘There is no avoiding the fact that American military institutions before the Civil War were moulded most profoundly by the military theories of the French’*, boldly adding: *‘and it is therefore the French who take a major part of the blame for the military disaster.’*²⁰ Griffith’s last comment is arguably a cynical exaggeration of the French influence on the nature of the American Civil War.

The views of one military theorist, the Swiss²¹ Antoine-Henri Jomini (1779 –1869) were long regarded to be dominant during the first half of the nineteenth century. Griffith characterises Jomini as follows: *‘It is Bonaparte the renegade Corsican and Jomini the renegade Swiss who are generally supposed to have written most of the books which shaped the battles.’*²² In 1838 Jomini published his renowned work *Précis de l’Art de la Guerre: Des Principales Combinaisons de la Stratégie, de la Grande Tactique et de la Politique Militaire* or *The Art of War*.²³ In his work Jomini differentiates between strategy: *‘the art of bringing the greatest part of the forces of an army upon the important point of the theatre of war’*²⁴ and tactics: *‘the art of making them [the greatest part of the forces of an army] act at the decisive moment and the decisive point of the field of battle.’*²⁵

¹⁸ Mahan, Frederick Augustus IN Hagerman, *The American Civil War and the Origins of Modern Warfare*: 8.

¹⁹ Hagerman, *The American Civil War and the Origins of Modern Warfare*: 5.

²⁰ Griffith, *Battle Tactics of the Civil War*: 22.

²¹ See Reardon, *With a Sword in one Hand & Jomini in the other. The problem of military thought in the civil war north*: 1-2.

Jomini wrote his first work *Traité des Grandes Opérations Militaires* under the patronage of the French Marshal Michel Ney, and later served on the personal staff of Napoleon during his campaigns of 1805.

²² Griffith, *Battle Tactics of the Civil War*: 22.

²³ Reardon, Carol. *With a Sword in one Hand & Jomini in the other. The problem of military thought in the civil war north*. Chapel Hill: University of North Carolina Press, 2012: 3.

²⁴ Jomini, *Summary on the Principles of the Art of War*: 322.

²⁵ Ibid.

A general should therefore be: ‘*at once a good tactician and strategist*’²⁶ to win a decisive victory on the battlefield. However, Jomini adds: ‘*A general thoroughly instructed in the theory of war, but not possessed of military coup-d’œil, coolness, and skill, may make an excellent strategic plan and be entirely unable to apply the rules of tactics in presence of an enemy.*’²⁷ Even if a general does possess the aforementioned traits: ‘*No system of tactics can lead to victory when the morale of an army is bad; and even when it may be excellent, the victory may depend upon some occurrence.*’²⁸ Jomini acknowledges that his theories cannot teach a general what to do in every possible situation; he rather points out which errors a general should avoid. Still, in the end, Jomini argues that his theories grant ‘*an almost certain victory in the hands of a skilful general commanding brave troops.*’²⁹

Historian Carol Reardon points out that: ‘He [Jomini] *always believed that the unique circumstances of a situation and the commanding general’s genius and skill would determine the most appropriate response.*’³⁰ McWhiney and Jamieson describe this sentiment as follows: ‘*Military theorists before the Civil War stressed the tactical offensive and favoured close-order musket and bayonet tactics, but they often generalized their principles and shaded their advice with exceptional cases. Jomini sometimes qualified a main idea with a list of exceptions.*’³¹ Reardon argues that Jomini describes in great detail how to prepare for war, but not how to fight it.³²

Jomini’s theories were primarily aimed at ‘*the art of making war upon the map*’³³. Once two opposing armies were engaged on the battlefield (the tactical level of warfare), Jomini refrains from outlining a step by step approach.³⁴ For that, he turns to more general principles of warfare like: ‘*throw the mass of the forces upon the decisive point, or upon that portion of the hostile line which it is of the first importance to overthrow*’ and ‘*they [the forces] shall engage at the proper times and with energy.*’³⁵

While Jomini was not unaware of more complex tactical manoeuvres besides the direct and concentrated tactical approach, he considered them, such as the envelopment of enemy forces, hard to successfully execute.³⁶ The attacking general would move his forces against the left and right flank of the enemy, which would endanger his centre and grant the enemy the opportunity to counterattack and split the attacking forces through the centre. Jomini remarks,

²⁶ Jomini, *Summary on the Principles of the Art of War*: 322.

²⁷ Ibid.

²⁸ Ibid: 323.

²⁹ Ibid.

³⁰ Reardon, *With a Sword in one Hand & Jomini in the other*: 5.

³¹ McWhiney and Jamieson, *Attack and Die*: 46.

³² Reardon, *With a Sword in one Hand & Jomini in the other*: 5.

³³ Jomini, *Summary on the Principles of the Art of War*: 69.

³⁴ Reardon, *With a Sword in one Hand & Jomini in the other*: 5.

³⁵ Jomini, *Summary on the Principles of the Art of War*: 70.

³⁶ Hagerman, *The American Civil War and the Origins of Modern Warfare*: 4.

*‘any movement is dangerous which is so extended as to give the enemy an opportunity, while it is taking place, of beating the remainder of the army in position.’*³⁷

Only a commander like Napoleon Bonaparte possessed the resolve to execute such manoeuvres successfully, notwithstanding that even Napoleon had seen battles³⁸ which made the concentrated direct tactical confrontation more desirable. Hagerman therefore concludes, that Jomini under normal circumstances advised the less exceptional commander to rely on *‘the less desirable but more dependable –direct and concentrated strategic approach on interior lines.’*³⁹ This strategic approach, ultimately translated on the battlefield in a massed frontal assault against the weakest point in the enemy’s line, was a less desirable tactical approach because it would almost certainly end in high loss of life.⁴⁰

American military historians have long regarded Jomini’s views to be leading during the first half of the nineteenth century. Therefore, they naturally assumed that the generation of American officers who served during the Civil War, were also directly influenced by Jomini’s views.⁴¹ The English translation of *Précis de l’Art de la Guerre*, was certainly available to the American officers to study.⁴² However, Reardon argues that Jomini’s influence on the theoretical knowledge of the American officer was not that significant. There is, for example, little reference to Jomini in any genre of Civil War literature, nor is there any detailed analysis of his principles.⁴³ Furthermore, Jomini’s views were already, in some form or the other, present in the existing European military literature. Therefore, Reardon concludes that Jomini: *‘represents a single – though admittedly strong – voice among a mass of military authors whose ideas became available to the Civil War generation.’*⁴⁴

Reardon also question’s Jomini’s influence because the Civil War saw lively public debates on the usefulness of military theories altogether. The rejection of the study of military theories was based on presumptions such as, *‘too impractical, too pedantic or simply incompatible with the common sense that lay at the base of American’s national character.’*⁴⁵ Although Reardon herself remains unsettled on the influence of Jomini’s views, she concludes that the experience of the Civil War

³⁷ Jomini, *Summary on the Principles of the Art of War*: 204.

³⁸ See Jomini, *Summary on the Principles of the Art of War*: 205-206. Jomini describes the Battle of Austerlitz (2 December 1805) as an example in which Napoleon relied on the direct tactical confrontation.

³⁹ Hagerman, *The American Civil War and the Origins of Modern Warfare*: 4.

⁴⁰ Ibid.

⁴¹ See Reardon, *With a Sword in one Hand & Jomini in the other*: 1 and 5. The foundation for the belief of Jomini’s influence on the American Civil War was laid by the American Brig. Gen. J.D. Hittle.

⁴² See Eicher, John H. and Eicher, David J. *Civil War high commands*. Stanford: Stanford University Press, 2001: 55-56. The instruction at the USMA included several military textbooks among them Jomini’s first work *Traité des Grandes Opérations Militaires* (1804 – 1806) and his *Précis de l’Art de la Guerre* (1838, revised 1862, 1863) from which the English translation came available for study in 1854.

⁴³ Reardon, *With a Sword in one Hand & Jomini in the other*: 5-6.

⁴⁴ Ibid: 7.

⁴⁵ Ibid.

at least taught the Americans the value of an intellectual framework for the study of war, albeit one by American design, rather than European.⁴⁶

Hagerman, on the other hand, argues that before the Civil War, the American military theorists had already chosen an intellectual path which slightly diverted from their post-Napoleonic counterparts in Europe. Unlike their European counterparts, they were not burdened by decades of prolonged large scale conflicts to reflect upon. While theorists like Jomini were preoccupied with the codification of the lessons learned in the Napoleonic Wars (1803 – 1815), American theorists took a more original approach towards the existing (mainly European) military theory. And as Hagerman notes: ‘*the generation of American military writers that began to emerge by the 1830s modified the French influence in response to peculiarly American circumstances, technological change, and the lessons of a number of indecisive wars*’⁴⁷.

Especially with regard to the ‘*new orthodoxy*’ of the direct and concentrated tactical approach, a generation of American theorists emerged from the 1830s, who criticised this new orthodoxy, most notably Dennis Hart Mahan. Although the massed frontal assault was not discarded by them, it carried flaws (such as the inevitable high loss of life), which provided them the starting point for the formulation of an American tactical doctrine not centred on the tactical offensive.⁴⁸ Based on the superiority of the massed frontal assault, the tactical offensive could quickly turn into a positional stalemate. If technological advancements diminished the effectiveness of the massed frontal assault as a tactic, this would shift the balance in favour of the tactical defensive. A simplistic example is the emergence of the machinegun and subsequent trench warfare of the First World War. Hagerman argues that such a shift of balance in favour of the tactical defensive was also revealed during the Civil War.⁴⁹

While the early nineteenth century theoretical debate still mostly favoured the relative strength of the tactical offensive over the defensive, the importance of a strong tactical defensive was recognised much earlier. The French military theorist Simon François Gay de Vernon was the foremost authority on the tactical defensive and gave it a formal place in the French military doctrine. Vernon became professor at the prestigious *École Polytechnique*, officially established in 1804 by Napoleon to educate the military elite in the science of war with an emphasis on civil engineering.⁵⁰ In 1805 Napoleon ordered that Vernon’s work *Traité Élémentaire d’art Militaire et de Fortification*, be used as an official textbook at the *École Polytechnique* and the other French military

⁴⁶ Ibid: 52-53.

⁴⁷ Hagerman, *The American Civil War and the Origins of Modern Warfare*: 3.

⁴⁸ Ibid: 6-7.

⁴⁹ Ibid: 4-5.

⁵⁰ Azar, Gat. *A History of Military Thought from enlightenment to the cold war*. Oxford: Oxford University Press, 2001: 287.
AND Hagerman, *The American Civil War and the Origins of Modern Warfare*: 5-6.

schools. In his work, Vernon stressed the importance of field fortifications, not only for armies in a defensive position, but also for armies on the offensive. Gay de Vernon represented an earlier generation of French military theorists whose views, according to Hagerman, were overshadowed by those of the post-Napoleonic generation. However, the American theorists of the 1830s valued the views of both generations equally.⁵¹

The direct transfer of French (and European) military ideas to the United States began shortly after the War of 1812 (1812 – 1815). Unresolved tensions between the United States and their former coloniser, the British Empire, led to the War of 1812. The ragtag federal forces had to devote all their efforts to defeat the British expeditionary force. While the brief reappearance of the Redcoats on American soil ended in their demise, the conflict had revealed critical shortcomings in the organisational structure of the U.S. Army. To address these shortcomings, American officers were sent on official missions to obtain professional knowledge in Europe. One of those officers was Capt. Sylvanus Thayer (1785 –1872), a veteran of the War of 1812 and graduate of the USMA at West Point. Thayer was ordered to study military institutions and fortifications in France, England and Germany, and also to collect available ‘*books, maps and instruments*’⁵².

Besides official missions, professional knowledge was also obtained on more informal visits to Europe.⁵³ In 1815, Bvt. Maj. Gen. Winfield Scott (1786 –1866) was sent by his government to Europe. Scott travelled for a year through Europe to recover from his injuries sustained in the War of 1812, and for his own professional development.⁵⁴ As a senior officer and veteran of 1812, Scott personally had experienced the deficiencies of the American military. Thus, he conceived a new organisational standard for the U.S. Army. Between 1818 and 1821, Scott compiled the first standardised *General Regulations for the Army*, including regulations on infantry tactics for staff bureaus and the military academy. Scott did not ignore the existing American military practice, but he referred to the British army regulations and the French *Législation Militaire* as sources of inspiration.⁵⁵

The existing military practice was formed during the American Revolutionary War (1775 – 1783), under influence of the Prussian baron Friedrich Wilhelm von Steuben (1730 –1794).

⁵¹ Hagerman, *The American Civil War and the Origins of Modern Warfare*: 5-6.

⁵² Hsieh, *The Old Army in War and Peace*: 42.

⁵³ Ibid: 42 and 46.

⁵⁴ Mansfield, Edward D. *Life and Services of General Winfield Scott: Including the Siege of Vera Cruz, the Battle of Cerro Gordo, and the Battles in the Valley of Mexico, to the Conclusion of Peace, and His Return to the United States*. Auburn: Derby & Miller, 1852: 147-149 and 508.

⁵⁵ See Hsieh, *The Old Army in War and Peace*: 46-48. Hsieh gives us an example (albeit one rather obscure) on how Scott followed the existing American military practice with regard to the instructions given in an early West Point textbook on laying out the camp for a division of artillery.

Baron von Steuben was appointed Inspector in the Continental Army of Commander-in-Chief George Washington. In the winter encampment of Valley Forge, Von Steuben instructed the irregular troops (volunteers and militiamen) in marching, close-order formations and musket handling.⁵⁶ He published his instructions in the drill-manual: *Regulations for the Order and Discipline of the Troops of the United States* or *Blue Book*. In 1779, the Continental Congress adopted Von Steuben's work as the official drill instructions manual for the federal U.S. Army, which remained until 1812 when it was replaced by manuals based upon French systems of drill-training.⁵⁷

While Winfield Scott was concerned with the standardisation of army regulations, Sylvanus Thayer turned his attention to the reorganisation of the military academy at West Point. Appointed as Superintendent of the USMA (1817 – 1833), Thayer envisioned the academy as the breeding ground for (a generation of) American officers in command of a small professional U.S. Army. Thayer modelled the USMA after the military schools in France, for he considered the French '*as the sole repository of military science*.'⁵⁸ The education at West Point emphasised civil engineering; this academic approach was grounded in the French desire to integrate the military into civil society.⁵⁹ The work of Gay de Vernon, *Traité Élémentaire d'art Militaire et de Fortification* was translated for use as a textbook at the academy and also served as the theoretical foundation for American field manuals until 1830.⁶⁰

Direct French influence on the USMA came in the person of Benoit Claudius Crozet, alumnus of the *École Polytechnique*. Crozet was a professor in engineering and one of three Frenchmen among the seven faculty board members at West Point.⁶¹ Crozet was involved in the establishment of the engineering department and after he resigned from the USMA, he would play an important role in the founding of the Virginia Military Institute in 1839. The VMI established itself as the most prominent state military school and was of great importance for the training of Confederate cadets during the Civil War.⁶²

The two decades following after the War of 1812 were according to Hsieh: '*crucial formative years*'⁶³ for the American military. Supported by the Secretary of War John C. Calhoun (1782 –1850), the

⁵⁶ Middlekauff, Robert. *The Glorious Cause: The American Revolution, 1763 – 1789*. Oxford: Oxford University Press, 1982: 423-424.

⁵⁷ Winders, Richard Bruce. *Mr. Polk's Army: The American Military Experience in the Mexican War*. College Station: Texas A&M University Press, 1997: 25.

⁵⁸ Hsieh, *The Old Army in War and Peace*: 45.

⁵⁹ Gat, *A History of Military Thought*: 286.

⁶⁰ Hagerman, *The American Civil War and the Origins of Modern Warfare*: 6.

⁶¹ Hsieh, *The Old Army in War and Peace*: 46-50.

⁶² *Ibid*: 41-46.

⁶³ Hsieh, *The Old Army in War and Peace*: 25.

senior officers and veterans of 1812 ensued on a mission to lift the U.S. Army to the professional standard of its European counterparts. Despite that Hsieh perceived ‘*a certain awe for the epic sweep of the Napoleonic Wars*’⁶⁴, the French influence on the reforms of the U.S. Army was not ubiquitous on all organisational levels. The organisational structure and bureaucratic bodies of the army showed clear British influences. Still, the focal point of this thesis, the American infantry doctrine, was modelled after French example. The undeniable French influence on the American infantry doctrine, found its origins in the Franco-American alliance during the American Revolutionary War and was further amplified by the Napoleonic military legacy of the early-nineteenth century.⁶⁵

1.2 The adoption of a nineteenth century infantry tactics

During the War of 1812, the American infantry doctrine still rested on the *Blue Book* from 1779.⁶⁶ Among others, already as a Congressman, Calhoun raised this issue in 1814, and in response the army commissioned a Board of Tactics after French example. On February 25 1815, the Board commissioned the adoption of the famous 1791 French manual for infantry tactics, *Rules and Regulations for the Field Exercise and Manoeuvres of the French Infantry*, translated by the British officer John Macdonald.⁶⁷

The Board adjusted the manual to the existing American military practice by revising the French infantry tactics regarding the line formation and movement rates. These basic drill instructions were of utmost importance on the battle field as soldiers had to march at a specific rate of steps-a-minute to maintain their formation. Only as a cohesive fighting force, could infantry men attack and defend effectively and withstand the harsh reality of nineteenth century battlefields, such as thick white gunpowder smoke, the crackling sound of musket fire, exploding artillery shells and the shock of a cavalry charge.

In the basic line formation, soldiers had to stand and march facing the enemy in a file with single columns of soldiers standing in front of each other, several ranks deep and lines of soldiers standing side by side. The number of files is the measure of the width and the number of ranks is the measure of the depth of a troop formation. The Board adopted the thin two-rank line formation,⁶⁸ at the time it was a bold innovative reform as common practice dictated that a

⁶⁴ Ibid: 47.

⁶⁵ Ibid: 49-50.

⁶⁶ Ibid: 73.

⁶⁷ Ibid: 75.

⁶⁸ Scott, Winfield. *Rules and Regulations for the Field Exercise and Manoeuvres of Infantry*. New York: William A. Mercein, 1820: 6.

line formation should be three ranks deep. In comparison, the French did not adopt a partial two-rank line formation in their regulations until 1831.⁶⁹ The American military was less grounded in longstanding military dogmas such as line formations of more than two ranks. Moreover, the two-rank formation served the practical limitations of the small U.S. Army.

When soldiers in a line formation had fired their muskets, they reloaded while the rank behind them fired. Under fire, the casualties of the first two ranks were replaced by the men in the third rank. While a three-rank line formation could endure hails of enemy fire longer and was more resilient to cavalry charges, their effective firepower was equal to a two-rank formation. A small band of regulars, like the U.S. Army, could thereby match the frontal firepower of a three-rank line formation.⁷⁰

Another basic formation was the column formation; this formation presented a small frontage (or fewer files) and therefore could not present the same firepower as a line formation. However the small frontage served another purpose, namely manoeuvrability; the turning radius of a column formation was much smaller than a line formation. Troops marched in a column unto the battlefield before deploying into the line formation and unleashing their firepower. In short, the column was the formation for manoeuvre, especially over difficult terrain.⁷¹

The column formation was also employed as a shock tactic '*intended to throw maximum force for penetration against a narrow front.*'⁷² Attacks in line formations relied on firepower and attacks in column formations relied on shock tactics and the bayonet. The Board prescribed that a battalion would form a double attack column of two files, four companies deep and, in practice, the size of column formations would vary in time. In general, it was discouraged to only use a single formation; Jomini advocated the use of columns in combination with line formations.⁷³

The Board revised the French practice regarding the movement rates as soldiers were trained to march at specific rates depending on the combat situation. The standard movement rate was common-time, while quick-time and double quick-time were employed to bring the troops quickly in a position to close in and fire on the enemy. The Board adopted regulations which at the time imposed significantly higher movement rates than the existing French practice.⁷⁴ It remains speculative, but Hsieh suggests that the faster movements could reflect: 'a

⁶⁹ See 'École du Soldat; seconde partie' IN *Règlement concernant l'exercice et les manœuvres de l'infanterie*. Strasbourg: [Chez] Louis Eck, 1799: 53-54. AND 'École de Bataillon; première partie' AND 'Instruction Pour les Tirailleurs' IN *Ordonnances sur l'exercice et les manœuvres de l'infanterie*. Paris: [Chez] Thiériot, 1832: 8-9 and 165.

⁷⁰ Mahan, Dennis Hart. *An Elementary Treatise on Advanced-Guard, Out-Post and Detachment Service of Troops, and the Manner of Posting and Handling Them in Presence of an Enemy*. New York: John Wiley, 1861: 34.

⁷¹ Griffith, Paddy. *Forward into Battle: Fighting tactics from Waterloo to Vietnam*. Chichester: Antony Bird Publications, 1981: 14-15 and 38.

⁷² McWhiney and Jamieson, *Attack and Die*: 34 and 89.

⁷³ Scott, *Rules and Regulations*: 214. AND Jomini, *Summary on the Principles of the Art of War*: 145.

⁷⁴ See Table 1: 20.

*perceived American need to move faster and more flexibly on the broken terrain of American battlefields.*⁷⁵ The difference between the terrain of the (East Coast) American battlefields and European battlefields could not have been immense. After all, three out of four described battles in this thesis took place on open terrain, not much different from battlefields found in nineteenth century Europe (think for example of Waterloo). Therefore the exact reasoning behind the faster movement rates, prescribed by the Board, is hard to ascertain.

Still, Keegan's description of early-nineteenth century America could give us a suggestion, why the Board prescribed faster movement rates. Large parts of the East Coast of America were still heavily wooded, at least large enough to fuel the American industry (which in all honesty also could say something about the size of the American industry that time). While in Europe on the other hand forests had been cut down, so to fuel the industry the transition from wood to coal was made.⁷⁶ So perhaps the Board considered the American terrain more difficult to traverse, because of the presence of still heavily wooded areas. Furthermore, in Europe one could rely on a network of roads long established before the Americas were even discovered. Finally, the most common enemy of the U.S. Army were still the native-Americans, who mostly consisted of lightly armed irregular troops. Yet another distinct circumstance, the Board had to take into consideration when they prescribed faster movement rates.

The development of even swifter and more open order American infantry tactics ultimately led to the adoption of the 1825 *Infantry Tactics: or, Rules for the Exercise and Manoeuvres of the Infantry of the U.S. Army*.⁷⁷ The 1825 infantry manual had an increased emphasis on light infantry tactics and the Board ordered the Commandant of Cadets William J. Worth to conduct field trials of the proposed light infantry drill with the cadets at West Point.⁷⁸

⁷⁵ Hsieh, *The Old Army in War and Peace*: 77-78.

⁷⁶ Keegan, John. *The American Civil War A Military History*. London: Hutchinson, 2009: 4-5.

⁷⁷ See Table 2: 22.

⁷⁸ Hsieh, *The Old Army in War and Peace*: 78.

Table 1⁷⁹

Movement rates at steps-a - minute	Blue Book ⁸⁰	French 1791 ⁸¹	American 1815 ⁸²	American 1825 ⁸³	American 1835 ⁸⁴	Hardee 1860 ⁸⁵
Common-time	75	76 <i>pas ordinaire</i>	90	90	90	90
Quick-time	120	100 <i>pas de charge</i>	120	120	110	110
Double quick-time	–	120 <i>pas accélérée</i>	150	160	140	165 under specific circumstances 180

During the Civil War both sides adopted the work *Rifle and Light Infantry Tactics for the Exercise and Manoeuvres of Troops When Acting as Light Infantry or Riflemen* as the standard tactical manual for light- and line infantry, published in 1855 by Lt. Col. William J. Hardee (1815 – 1873). European practice dictated that light infantry employed more conspicuous tactics on the battlefield, and unlike line infantry, light infantry men used individual aimed fire-at-will whilst moving in open-order formations (or clouds) in front of the line infantry or on the flanks. In addition, they were drilled to present their enemy with significant smaller targets by using the terrain for cover and firing from kneeled or prone positions.⁸⁶

Line-infantry fired a musket-volley on command and advanced (or retreated) shoulder to shoulder in close-order formations. Armed with the bayonet for melee fighting, soldiers in a close-order formation were more resilient to cavalry charges and were ideally in a squared formation to fend off a cavalry charge from all directions. The light infantry did not employ such formations; their muskets did not yet grant them the fire-rate nor the range to repel a cavalry charge before physical contact was made. The lack of mass in the loose-formation and arguably

⁷⁹ See Hsieh, *The Old Army in War and Peace*: 86. For a more elaborate table on the evolution of movement rates.

⁸⁰ Steuben von, Friedrich Wilhelm. *Regulations for the Order and Discipline of the Troops of the United States*. Albany: Daniel & Samuel Whiting, 18037: 8-9.

⁸¹ See 'École du Soldat; premiere partie' AND 'École du Peleton; troisieme leçon' IN *Reglement concernant l'exercice et les manoeuvres de l'infanterie*: 20 and 96.

⁸² See 'School of the Soldier; part III – lesson I' AND 'Regulations for Light Infantry and Riflemen, Section VI. Part II' IN Scott, *Rules and Regulations*: 49 and 377.

⁸³ See 'School of the Soldier-Part III' AND 'Exercises and Manoeuvres for Light Infantry and Riflemen' IN Scott, *Infantry Tactics; or Rules for the Exercises and Manoeuvres of the Infantry of the U.S.' Army*. Washington: Davis & Force, 1825: 58, 154 and 245.

⁸⁴ See 'School of the Soldier-Part I' AND 'School of the Company-Lesson III' IN Scott, *Infantry-Tactics; or Rules for the Exercise and Manoeuvres of the United States' Infantry*. New York: George Dearborn, 1835: 29 and 131-132.

⁸⁵ See 'School of the Soldier-Part I' IN Hardee, William J. *Rifle and Light Infantry Tactics; for the Exercise and Manoeuvres of Troops when acting as Light Infantry or Riflemen, Vol. I. Schools of the Soldier and Company; Instructions for Skirmishers*. Philadelphia: J.B. Lippincott & Co., 1860: 24-26 and 115.

⁸⁶ Hsieh, *The Old Army in War and Peace*: 79-80.

the individual character of the light infantry made them vulnerable to routing in a melee fight. Therefore, the light infantry executed specialist tasks like reconnaissance, covering the flanks of the line infantry and harassing the enemy to slow down its advance or retreat. Such tactics demanded a specialised training and an even more exceptional organisational capacity on the battlefield.⁸⁷

During the Napoleonic Wars, practice encouraged troops to train both in line- and light infantry tactics; naturally the Americans followed that example, and the Board of Tactics set in motion a process that would increasingly emphasise the adoption of light infantry tactics by line infantry. In addition it was also better applicable to the U.S. Army which was *'too small and dispersed to sustain a solid system of infantry specialization.'*⁸⁸ The American Maj. C.K. Gardner believed that the militia would be more effective if they were trained in light infantry tactics. The already individual character of the militiaman was more easily moulded in the light infantry doctrine than the line infantry. Moreover Gardner foresaw an even broader application for light infantry tactics, as he considered the light infantry instruction *'applicable to every infantry battalion'*⁸⁹.

Still, during the Civil War, the distinction between light- and line infantry tactics remained in place because the light infantry was not yet regarded as able to act en masse unsupported by line infantry. A battalion in open-order was unprecedented and the 1825 infantry tactics instructed light infantry units to close their formation and withdraw to the main body in case they faced a cavalry charge.⁹⁰

In 1835, Scott again revised the American infantry regulations without significant changes to the light infantry tactics. The new edition was in effect a translation from the French 1831 infantry tactics, which had altered the old French tactics of 1791 by incorporating the situational use of the two-rank line formation and by adding specific light infantry regulations. The American 1835 infantry tactics followed the French in the situational use of combined light- and line infantry tactics to repel cavalry charges. This development reflected the broader trend of employing an increasingly open order of battle, expressed by the increasingly higher interval of paces between files.⁹¹ The 1825 regulations prescribed a maximum interval of twelve paces, without considering the circumstances of the terrain. The 1835 regulations abandoned this limit of twelve paces.

⁸⁷ Ibid: 79-80.

⁸⁸ Ibid: 81.

⁸⁹ Ibid: 82.

⁹⁰ Ibid: 80-83.

⁹¹ See Table 2: 22.

Table 2

Interval of paces Between files	American 1825 ⁹²	American 1835 ⁹³
Skirmish-order	6	10 or at most 15
Maximum-order	12	—

However, the reform which had increased the standard movement rates was undone by Scott in order to conform to the French practice of 1831. The 1825 regulations had prescribed double quick-time for all movements in loose-order, whereas the 1835 regulations prescribed double-quick time only in situations of absolute necessity, added by the option of ordering the men to plainly run.⁹⁴ Reading these regulations remained something totally different from executing them and higher movement rates could mean that soldiers fatigued more easily. According to the 1825 regulations, officers were authorised to slow down their troops to prevent excessive fatigue;⁹⁵ a fear also expressed by the 1835 regulations.⁹⁶

The 1855 regulations by Hardee, which were employed during the Civil War, show us that the adopted standard movement rates corresponded better to the 1825 regulations than to the 1835 regulations.⁹⁷ Despite Scott's brief fall back to French conservatism, the Board of Tactics had foreseen the use of increased standard movement speeds long before the arrival of the rifled-musket (which Hardee could take into consideration). Reasonably one cannot argue that the Board could foresee the use of quicker infantry movements as an answer to the technological advancements in weaponry; it is better to assume that the military legacy of the Revolutionary War in combination with the perceived different American terrain had already gently pushed the American infantry doctrine on this path.⁹⁸

Two different military traditions, both grounded in French theory, arose within the U.S Army: the doctrine of the Board based on the '*modern tactics of manoeuvre and decisive battle*',⁹⁹ and the tactical defensive expressed by the use of field fortifications advocated by military theorists at

⁹² See 'Exercises and Manoeuvres for Light Infantry and Riflemen' IN Scott, *Infantry Tactics* 1825: 266.

⁹³ See 'Instruction for Light Infantry and Rifle or Skirmishers' IN Scott, *Infantry-Tactics* 1835: 193.

⁹⁴ Ibid: 188.

⁹⁵ See on the common-time march, 'School of the Battalion-Part III' IN Scott, *Infantry Tactics* 1825: 154 AND on the quick-time march for skirmishers, 'Exercises and Manoeuvres for Light Infantry and Riflemen' IN Scott, *Infantry Tactics* 1825: 245, on quick-time march for skirmishers.

⁹⁶ See 'Instruction for Light Infantry and Rifle, or Skirmishers' IN Scott, *Infantry-Tactics* 1835: 189 -190.

⁹⁷ See Table 1: 20.

⁹⁸ Hsieh, *The Old Army in War and Peace*: 84-85.

⁹⁹ Griffith, *Battle Tactics of the Civil War*: 126.

West Point.¹⁰⁰ Since Thayer's appointment, the USMA had emphasised civil- and military engineering. A prominent nineteenth century American military theorist (and protégé of Thayer) was Dennis Hart Mahan (1802 –1871), who after his graduation in 1824, was assigned to the Corps of Engineers.¹⁰¹

Like his predecessors, Mahan travelled to France where he spent four years as a military observer and studied a year at the *École d'application de l'Artillerie et du Génie* in Metz. In France, Mahan learned that the French tactical doctrine was ideal for a professional European army, but not for the American army which mainly depended on irregular troops. In times of war, the small cadre of professional American regulars would be unable to bring the main body of irregulars up to their own professional standards quickly.¹⁰² Mahan was convinced that despite their '*superior advantages*', such as the higher grade of moral and intellectual qualities, the irregulars required discipline and habitual training to withstand battles against regular infantry.¹⁰³

In 1832, Mahan was appointed Professor of Military and Civil Engineering at West Point, a senior position from which he was able to exert significant influence on the American military elite. West Point was already dominated by the Corps of Engineers, to which each year the graduating class commissioned their top ten to twenty per cent. Unsurprisingly, the Corps of Engineers would provide an uneven share of American officers above the divisional level during the Civil War.¹⁰⁴ In addition to his senior position, Mahan further influenced the tactical doctrine through his published work, which was adopted by the academy as official textbooks. In 1836 Mahan published the work *A Complete Treatise on Field Fortification*, replacing the work of Gay de Vernon.

While *Field Fortification* was '*steeped in French thought*',¹⁰⁵ Mahan had adjusted his work to American military practice defined by the dependence of irregular troops, especially by rejecting the primacy of the concentrated frontal attack. The American irregulars were incompatible with such offensive tactics, which constituted harsh discipline and coincided with a high loss of life and therefore required the battle-hardened and disciplined regular for successful execution. Mahan further added that the ranks of the American citizen-soldiery '*are filled with all that is most*

¹⁰⁰ Ibid: 126-127.

¹⁰¹ Gat, *A History of Military Thought*: 287.

¹⁰² Hagerman, *The American Civil War and the Origins of Modern Warfare*: 6-7. AND Hsieh, *The Old Army in War and Peace*: 74-75.

¹⁰³ Mahan, Dennis Hart. *A Treatise on Field Fortification*. New York: John Wiley, 1852: vi-vii

¹⁰⁴ Hagerman, *The American Civil War and the Origins of Modern Warfare*: 7.

¹⁰⁵ Ibid: 9.

valuable in society',¹⁰⁶ to which Hagerman adds, 'and not to be overlooked by any military man in an egalitarian ideology, they were voters.'¹⁰⁷

Therefore Mahan advocated to 'place the militia soldier on his natural field of battle, behind a breastwork, and an equilibrium between him and his more disciplined enemy is immediately established.'¹⁰⁸ The tactical doctrine advocated in *Field Fortification* was centred on the active tactical defence, which stated, 'the chief object of entrenchments is to enable the assailed to meet the enemy with success, by first compelling him to approach under every disadvantage of position, and then, when he has been cut up, to assume the offensive, and drive him back at the point of a bayonet.'¹⁰⁹ While Mahan regarded the tactical defensive to be more appropriate for a U.S. Army that mainly depended on irregulars, he did not fully discard the tactical offensive. In 1852, Mahan did not consider the entrenched position tactically superior to a successfully executed massed frontal assault. Indeed, certain battles still required the mobility of conventional assault tactics, for example to turn the enemy's flank.¹¹⁰

In *Field Fortification* Mahan acknowledged the higher accuracy and longer range of the rifle, even mentioning promising technological developments to solve the low fire rate by breach loading. Still the higher accuracy of the rifle is only 'some compensation' over the less accurate, but higher fire rate of smooth-bore musket fire.¹¹¹ In 1847 Mahan published *An Elementary Treatise on Advanced-Guard, Outpost, and Detachment Service Troops*. This was, according to Hagerman, in response to the development of the rifled-musket, which increased the range and accuracy while maintaining the common, but not necessarily practical muzzle loading of the smoothbore-musket.¹¹²

In *Outpost* Mahan revised his views in response to the increased firepower of conventional assault tactics, advocating that attacking columns should take 'every advantage of the ground to mask their movements'.¹¹³ In prolonged engagements, skirmishers should be reinforced by small columns of line infantry 'thoroughly conversant with the duties of skirmishers',¹¹⁴ positioned between the attacking skirmishers and the main body of troops. Furthermore, Mahan advocated the greater situational use of the dispersed order of all troops when attacking 'positions in obstructed ground'.¹¹⁵

¹⁰⁶ Mahan, *A Treatise on Field Fortification*: vii.

¹⁰⁷ Hagerman, *The American Civil War and the Origins of Modern Warfare*: 9.

¹⁰⁸ Mahan, *A Treatise on Field Fortification*: vii.

¹⁰⁹ Ibid: 9.

¹¹⁰ Hagerman, *The American Civil War and the Origins of Modern Warfare*: 9-10.

¹¹¹ Mahan, *A Treatise on Field Fortification*: xviii-xix.

¹¹² Hagerman, *The American Civil War and the Origins of Modern Warfare*: 10.

¹¹³ Mahan, *An Elementary Treatise on Advanced-Guard, Out-Post and Detachment Service of Troops, and the Manner of Posting and Handling Them in Presence of an Enemy*. New York: John Wiley, 1861: 51.

¹¹⁴ Ibid: 54.

¹¹⁵ Ibid: 73.

The nineteenth century debate on assault tactics was centred on the use of large or small attack column formations. Large attack columns were employed to overwhelm the enemy defenders by superior numbers. The danger, however, was that large attack columns could quickly end in an obstructing mass, which would lead to men being pushed forward unable to fight. The small attack columns were less likely to end in disarray on the regimental level¹¹⁶ and they were also more likely to compel each other to keep fighting, compared to a unanimous mass of ten thousand troops.¹¹⁷ According to McWhiney, Jamieson Mahan had advocated two attack lines in the official academy *Advanced-Guard* textbook, from which the first wave advanced in line formation followed by the second wave advancing in small column formations. Reserves should be held back in column formations for manoeuvrability before deploying in line.¹¹⁸

With his work *Field Fortifications*, Mahan had intended to adjust the French tactical doctrine to accommodate a mainly irregular army. Thereafter, in *Outpost*, Mahan advocated a modern tactical doctrine which was better suited to a professional army. In effect, Mahan had proposed two different tactical doctrines for two different types of armies. Griffith has viable concerns with the ambivalent theories proposed by Mahan, which according to him contained ‘*Delphic paradoxes*’.¹¹⁹ Paradoxically, Mahan advocated that, on one hand, armies should be prepared for the active tactical defence by throwing up breastworks and, on the other, maintain tactical mobility on the offensive. Therefore, Griffith blames Mahan for not fully grasping the reality that these specific doctrines would be lost in a large-scale mobilisation of irregulars.¹²⁰

1.3 The Mexican-American War 1846 – 1848

In 1821, the Mexicans overthrew Spanish rule and established their own republic. Little more than a decade later, the Mexican government faced its own civil uprising with the secession of Texas. First encouraged by the Spanish and later by the Mexican officials, Anglo-American immigrants had migrated to Texas. Unfortunately for the Mexican government, in 1836 the Anglo-Americans established the Republic of Texas in the northern territories of Mexico. Under the pretence of Indian insurgencies, the federal government in Washington sent troops to Texas. While officially not involved in the Texas War of Independence (1835 – 1836), it was clear to the Mexican government where the American allegiances lay.

¹¹⁶ Griffith, *Battle Tactics of the Civil War*: 91.

¹¹⁷ Ibid: 151-153.

¹¹⁸ McWhiney and Jamieson, *Attack and Die*: 43.

¹¹⁹ Griffith, *Battle Tactics of the Civil War*: 125.

¹²⁰ Ibid: 125-127.

In July 1845, the Texans voted in favour of the annexation treaty proposed by the U.S. Congress. Mexico considered the joining of Texas to the Union, an American act of war.¹²¹ The outbreak of the Mexican-American War (1846 – 1848) would become the baptism of fire for the reformed and professionalised U.S. Army. The administration of President James K. Polk (1845 – 1849) faced a worthy adversary on paper as there was strong nationalistic support from the Mexican public for the war and some European commentators predicted a victory for the young Mexican nation-state.¹²²

The Mexican army was substantially larger than the U.S. Army, and in addition to the recent invasions of the Spanish and French, the Mexican officer corps (much like their American counterparts) had gained combat experience against domestic (Indian and Texan) insurgencies. However, the Mexican soldiers lacked training and were poorly equipped, especially the artillery branch. While the U.S. Army had egalitarian origins, the Mexican army had inherited a Spanish aristocrat officer corps which was characterised by a higher regard for the cavalry than for the other two army branches. The common Mexican soldier, especially the local militia, compensated for their overall low military capacity with the zeal instilled by the defence of their homes against yet another foreign invader.¹²³

The Mexican-American War has been called a '*rehearsal for the Civil War*',¹²⁴ which it literally was for the junior officers serving in the U.S. Army. Thirteen years after the Mexican-American War, many would face each other as senior officers in the Union and Confederate armies. On the strategic level, the war in Mexico showed other resemblances to the Civil War. The U.S. Army was forced to invade Mexico and to suppress the Mexican territorial aspirations, much like the Union armies were forced to invade the Confederate states to end the secession. Mexican armies had the advantage of interior operational lines and knowledge of the terrain, just like the Confederate armies had of their territory during the Civil War. Finally, Mexico, like the Confederacy, hoped to prolong the war to gain foreign recognition for their cause and subsequently diminish American public support for the invasion.¹²⁵

The Mexican hopes for victory were however suppressed by the U.S. Army and the military reformers would finally witness the success of their efforts to professionalise the American military. Before 1812, the three distinct army branches, infantry, cavalry and artillery, along with a functioning staff-system had not existed. Now, in Mexico these three branches

¹²¹ Winders, *Mr. Polk's Army*: 6-8.

¹²² Hsieh, *The Old Army in War and Peace*: 68-69.

¹²³ Howe, Daniel Walker. *What Hath God Wrought: The Transformation of America, 1815-1848*. Oxford: Oxford University Press, 2007: 750-751.

¹²⁴ Howe, *What Hath God Wrought*: 747.

¹²⁵ Ibid.

would prove their value by supplementing each other and thereby acting as one coherent force. The infantry served as the backbone of the army, equally strong on the offensive as defensive. The highly mobile cavalry served for reconnaissance and shock tactics by charging down the enemy on the battlefield, while the artillery supported movements of infantry and cavalry with long range firepower. Armed with standardised weaponry and tactical doctrine, each branch would meet the requirements of their combat roles effectively.¹²⁶

The American infantry was still a mix of regular and irregular troops, the latter consisting of militiamen and volunteers. The militia had mainly administrative and logistical tasks, as they were not allowed to serve outside their state borders. On the other hand, the volunteers were allowed to serve for extended periods and outside their state borders.¹²⁷ While President Polk had intended a leading role for the volunteers in Mexico, their efforts were not decisive in battle. Ultimately relative few of them saw actual combat.¹²⁸ The drill-training of volunteers mainly depended on the willingness of their commanding officers.¹²⁹ Moreover, volunteers expected to retain their civilian privileges, which did not contribute to the effectiveness of drill-instructions. As a result, officers commanded these men more loosely, which further obstructed their abilities to act en masse.¹³⁰ Future Union General George Meade wrote: '*we could march to the City of Mexico, but I doubt the practicability of doing so with a force of volunteers*' while the regulars '*made war against the Army and Government of Mexico, and not against the people – the volunteers commenced to excite feelings of indignation and hatred in the bosom of the people, by their outrages on them.*'¹³¹

Still, in a rapid pace, the U.S. Army would defeat the Mexican enemy time and again and while all three army branches actively fought on the offensive, remarkably none suffered high losses in battle. After the first major engagement, the Battle at Palo Alto (May 8, 1846), Maj. Gen. Zachary Taylor reported the loss of only two per cent of his men (55 of 2,228) and after the Battle of Resaca de la Palma (May 9, 1846), he reported a loss of six per cent. The Commanding General of the Army, Winfield Scott faced the Mexicans at the Battle of Cerro Gordo (April 18, 1847) in a strong fortified position; nevertheless, he only reported a five per cent loss. The combined American losses of the bloodiest battles of Contreras, Churubusco, Molino Del Rey and Chapultepec only totalled 2,700 men.¹³²

¹²⁶ Hsieh, *The Old Army in War and Peace*: 68-69.

¹²⁷ Winders, *Mr. Polk's Army*: 68-69.

¹²⁸ Ibid: 69-72.

¹²⁹ Ibid: 74.

¹³⁰ Ibid: 81.

¹³¹ Ibid: 197 AND Meade, George G. *The Life and Letters of George Gordon Meade: Major-general United States Army*, Volume 1. Baltimore: Butternut & Blue, 1994: 108.

¹³² McWhiney and Jamieson, *Attack and Die*: 40.

The success of the tactical offensive by the U.S. Army was confirmed by the relative light losses against a mostly defensive positioned enemy. Even from behind their fortifications and field works, the Mexicans had no answer to the well-orchestrated American military performance. After the victory at Resaca de la Palma, American military theorist and future Union Maj. Gen. Henry W. Halleck (1815 –1872) wrote, *‘The Americans attacked the whole line with skirmishers, and with dragoons supported by light artillery, and the charge of a heavy column of infantry decided the victory.’*¹³³ The effectiveness of a professionally executed tactical doctrine was maybe new to the Americans, but in the end, the tactics (and equipment) employed in Mexico differed little from those employed by the early-nineteenth century armies in Europe.

The American infantry mainly fought in close-order two-rank line formations, firing concentrated musket volleys followed by a bayonet charge in column against fortified positions. The cavalry was held back until the enemy formations disintegrated to charge them down with the sabre, while the artillery had seen action on the offensive and defensive. In Mexico, the regulars of the U.S. Army had proven to have mastered the complex modern tactics of the nineteenth century.¹³⁴

The infantry doctrine developed by Scott and the Board of Tactics had proven to be successful in Mexico. The adoption of increased movement rates and the two-line formation had contributed to the rapid success of the U.S. Army in Mexico. The relative small American force had defeated a numerically superior enemy, which fought from the tactical defensive. However, the tactical defensive as advocated by Mahan and expressed by an increased use of field fortifications, gained little recognition after the war against Mexico. Even from behind their field fortifications, the Mexican regulars and irregulars were no match for the American regular troops.¹³⁵

Halleck, however, did not lose faith in the doctrine advocated by his mentor, arguing that the Mexican field fortifications were too poorly constructed. Whether true or not, in the Battle of Cero Gordo, Scott had sent his men uphill to break through the field fortifications and capture the Mexican stronghold on top. The American regulars succeeded in capturing the fortified Mexican left, while the volunteers failed to capture the fortified right and were repelled by the Mexican troops.¹³⁶ The military experience in Mexico had revealed the true value of a professional army and officer corps, at least ending public talk of closing the USMA at West Point.¹³⁷

¹³³ Ibid.

¹³⁴ Ibid: 34 and 40.

¹³⁵ Ibid: 35.

¹³⁶ Ibid: 36.

¹³⁷ Howe, *What Hath God Wrought*: 749.

Still, public support for a professional army remained small as the American ideal of the citizen-soldier forged in the Revolutionary War persisted. Since the establishment of the U.S. Army in the nineteenth century, its veterans had fought against British and Mexican forces. These large-scale but limited military endeavours had been fought along the lines of the nation-state using nineteenth century warfare. More often the American soldiers had faced the other inhabitants of their continent, the native-Indians.

To secure their lands and ways of life, the Indians fought prolonged but small scale irregular wars against the federal government in Washington. However, the American military showed no professional interest to these Indian Wars, which can be explained by the fact that no Indian army ever posed a serious threat to the federal government in Washington. Occasionally the U.S. army suffered unnecessary and embarrassing defeats, even during the second half of the nineteenth century. Still, during the most successful military campaigns of the native Seminoles in Florida (1816 – 1858), the Indians proved unable to deliver decisive strategic victories against the federal troops. The path chosen by the military reformers had prepared the American military for conventional warfare along the lines of the nation-state and eventually prepared the North and South to fight each other.¹³⁸

After the War of 1812, military and political reformers had established the necessary institutions to make the American military capacity and capability sustainable in times of peace. The U.S. Army now consisted of three distinct army branches, equipped with a standardised set of drill instructions and tactical manuals, supplemented by one uniform administrative standard. Furthermore, to obtain the latest professional knowledge, observer missions were imposed. Future Union General George B. McClellan, for example, was sent to observe the Crimean War (1853 – 1856) as a member of the Delafield-commission. During times of peace, the core cadre of combat experienced officers could finally be supplemented by cadets from West Point as their training compensated for (although not substituted) their lack of combat experience.

The doctrinal and organisational reforms, initiated during the 1820s and 1830s, had proven their worth during the war against Mexico. These legacies were inherited by the armies of the American Civil War, along with the technological advancements of the 1850s. Of which the advancements in weaponry were ultimately incorporated into the patterns of tactical thought established during those early decades of the nineteenth century. The continued path of reform could not have prepared the American soldiers and officers for their next crucible. The regular army was never intended to serve as a training-cadre for militiamen and volunteers numbering in

¹³⁸ Hsieh, *The Old Army in War and Peace*: 69-71.

the hundreds of thousands. The model for the professional army was hardly ideal for the Union and Confederate armies. Nevertheless, it was the only model available and the remaining regulars needed no further encouragement to adopt the training-intensive military system that had proven so successful in Mexico.¹³⁹

On the tactical level, the Mexican-American War revealed developments which would only show their full impact during the Civil War. While the tactical offensive had been successful during the campaigns in Mexico, the undercurrent of military thought which advocated the tactical defensive was on the rise. Halleck and protégé of Mahan published his work *Elements of Military Art and Science* in 1846, in which he underlined the belief that the American citizen-soldier would prove to be equal to his European professional counterpart from the safety of an entrenched position. While Halleck can hardly be considered to have posed any innovative theories of his own, he amplified the trend set in motion by his mentor among American senior officers and military theorists, arguing that the massed frontal assault in Mexico only prevailed due to the poorly constructed Mexican fortifications.¹⁴⁰

¹³⁹ Ibid: 142-143.

¹⁴⁰ Hagerman, *The American Civil War and the Origins of Modern Warfare*: 14-15.

Chapter 2 The American infantry doctrine 1848 – 1861

2.1 The rifled-musket and light infantry tactics

After the Mexican-American War, the U.S. Army continued on the path of professionalisation reflected by an emphasis on training and discipline. Furthermore, it developed, manufactured and adopted a new rifled-musket which was complemented by the adoption of the latest French light infantry doctrine. In the same line of thought as the previous tactical reforms, the adoption of yet another French tactical doctrine was blended with the existing American military practice. Ultimately, the intention was to equip and train all infantry units in the use of the rifled-musket and the latest light infantry tactics instead of receiving a limited training in skirmish- and target practice.¹⁴¹

Until the introduction of the rifled-musket, infantry had been armed with the smoothbore muzzle-loading flintlock musket. The bullet, a heavy round ball, could travel over four and up to five hundred yards (457 metres). Aiming over these ranges however was useless and even in massed volleys over two hundred yards (182 metres), the target could be easily missed. It was only at around fifty or sixty yards (45 or 54 metres) that soldiers could be expected to hit their targets with a smoothbore-musket. While training and practice could teach soldiers to utilise the technical abilities of the smoothbore-musket more effectively, the weapon remained overall technically insufficient for aimed fire.

Between 1815 and 1861, the smoothbore-musket would see some notable improvements as the flintlock was replaced by a percussion cap, increasing water resistance to the extent that one could fire the weapon in rainy weather. Moreover, the cap was more easily replaced, which slightly increased the rate of fire.¹⁴² In 1847, the French army officer Claude-Etienne Minié invented a new bullet which would accelerate the adoption of the rifled-musket. Before the invention of the Minié ball, the use of rifled-muskets was problematic. Unlike the smoothbore-musket, the barrel of a rifled-musket had grooves which would bring a fired bullet into a spin, thereby making its trajectory more accurate. However, to grasp the grooves, the bullet had to fit tightly into the rifled-barrel. Therefore reloading the musket required a considerable amount of force, and sometimes even a mallet was needed to fit the bullet into place. The use of rifled-muskets was therefore limited to specialised infantry units.

The Minié ball addressed the problem of reloading a rifled-musket; the conical bullet had a wooden plug fitted into the hollow base. When fired, the pressure expanded the wooden plug, thereby grasping the grooves of the rifled-barrel. The American gunsmith James H. Burton

¹⁴¹ Hsieh, *The Old Army in War and Peace*: 144.

¹⁴² Griffith, *Battle Tactics of the Civil War*: 73-74.

invented a more cost effective variant of the Minié ball, which could expand under pressure without a wooden plug. Tests conducted by the American Ordnance Department showed that the larger conical Burton bullet was able to penetrate a three-and-a-quarter inch (2.5 centimetres) thick pine plank over a range of one-hundred yards (91 metres).¹⁴³ The rifled-musket in combination with the Burton bullet was not only lethal over a longer range, it also maintained its accuracy over greater distances.

While the Ordnance Department was not as progressive with the adoption of a breech-loading rifle, the Department followed the technical developments regarding small firearms in Europe closely and conducted repeated tests with the latest European and American firearms.¹⁴⁴ During the Civil War, the standard rifled-musket equipped by Union troops was the *Model 1861 Springfield rifle*, which had an effective range of between three and four hundred yards (247 and 365 metres) and could kill at one thousand yards (914 metres); the standard Confederate rifled-musket, the *Pattern 1853 Enfield*, had similar specifications.¹⁴⁵

The Secretary of War between 1853 and 1857 (and later Confederate President) Jefferson F. Davis (1808 –1889) recognised the importance of these technical improvements in weaponry. While the Ordnance Department developed, tested and manufactured rifled-muskets, Secretary Davis ordered Lt. Col. William J. Hardee (1815 – 1873) to formulate a new tactical manual which would complement the new weaponry.¹⁴⁶ Hardee based his manual directly on the light infantry doctrine of the French *chasseurs à pied*. Since 1838, this elite light infantry unit used their rifles for long-range aimed fire, sabre-bayonet fencing and employed an increased movement rate. While Hardee included the emphasis on aimed fire and an increased movement rate in his manual, the sabre-bayonet fencing and hard physical training of the *chasseurs* were left out.

Still, the virtues of peak physical conditioning did find their way into the American infantry doctrine as another French infantry unit served as an example for the elite infantry units in the Civil War.¹⁴⁷ In France the American Col. Emory Upton had witnessed the *Zouaves*, a French elite light infantry unit, based on a concept originating from Algeria. The French campaigns in North Africa were closely followed by the American officers who saw romanticised resemblances with their own skirmishes against the native-Americans on the western frontiers.¹⁴⁸

¹⁴³ Hsieh, *The Old Army in War and Peace*: 147-148.

¹⁴⁴ Ibid: 146-147.

¹⁴⁵ McWhiney and Jamieson, *Attack and Die*: 49.

¹⁴⁶ Hsieh, *The Old Army in War and Peace*: 145-146.

¹⁴⁷ Griffith, *Battle Tactics of the Civil War*: 101.

¹⁴⁸ Hsieh, *The Old Army in War and Peace*: 145-146.

The so-called American Zouave training was characterised by hard physical training in conjunction with the colourful uniforms; it was a conscious attempt to create elite American infantry units. However, the Zouave training did not reflect the tactics employed by the *chasseurs* as the American Zouaves were rather renowned for their colourful display than their ability to execute complex light infantry tactics. During the Civil War, the Zouave regiments were left out of the general sources of recruitment to maintain their special status. Naturally over the course of the war their losses were not compensated and these regiments dissipated, and with them the benefits of their training.¹⁴⁹

Hardee made further adjustments to the *chasseurs* manual by adding instructions for firing and reloading from kneeled and prone positions. In addition, he contacted fellow officers in search for publications with instructions for formations larger than a single battalion.¹⁵⁰ While Hardee maintained the basic movement rates of the 1835 *Tactics*, he added higher movement rates for the double quick-time and the run. In his regulations, Scott had included double-time, but only advocated limited use. Hardee, however, advocated a more common use of the double quick-time and, in addition, he lengthened the step, giving the soldier not only a faster but also a longer stride. Under exceptional circumstances, Hardee advised an even higher double quick-time of one hundred and eighty steps a minute, which let the soldier cover four thousand yards (3.7 kilometres) over twenty-five minutes, adding the novel advice of breathing through the nose to delay fatigue.¹⁵¹ In general, Hardee's manual emphasised an increased speed and mobility of tactical movements to mitigate the increased firepower of the rifled-musket.¹⁵²

In late July 1854, Hardee submitted his draft to the Board of Tactics for review; field trials were held by the cadets between August and December at West Point and the official report was issued by the Board in December 1854. The report stated that Hardee's manual for light infantry tactics should supplement the existing drill instructions of the line infantry (Scott's 1835 infantry tactics) or, in the words of the Board, '*to present concisely, a view of this system and its general harmony with the existing drill for heavy infantry*'.¹⁵³ Secretary Davis took over the recommendations of the Board and authorised Hardee's manual to be '*adopted for the instruction of the troops when acting as light infantry or riflemen*'.¹⁵⁴

In addition, the president of the Board, Lt. Col. Silas Casey advocated a revision of the line infantry tactics, and in 1857, the War Department ordered all infantry to be regularly

¹⁴⁹ Griffith, *Battle Tactics of the Civil War*: 101-102.

¹⁵⁰ Hsieh, *The Old Army in War and Peace*: 149.

¹⁵¹ See Table 1: 20. AND McWhiney and Jamieson, *Attack and Die*: 50.

¹⁵² Hagerman, *The American Civil War and the Origins of Modern Warfare*: 20.

¹⁵³ Hsieh, *The Old Army in War and Peace*: 149-150

¹⁵⁴ Ibid: 148-150.

exercised in Hardee's tactics. According to Casey, practice had revealed that line infantry was already '*usually employed as light troops*.'¹⁵⁵ However, the distinction between light- and line infantry was still not abandoned as confirmed by the distribution of different musket-models by the Ordnance Department. The standard .58 calibre Springfield Model 1855 rifled-musket fitted with the socket-bayonet was intended for line infantry, while the .58 calibre Springfield Model 1855 rifle fitted with the sabre-bayonet was intended for light infantry. Furthermore, the Springfield 1855 rifle was 6.6 inches (16.7 centimetres) shorter than the Springfield 1855 rifled-musket. The shorter rifle was intended to accompany the mobility of the light infantry; the sabre-bayonet was influenced by the new French concept of bayonet fencing. The later 1857 and 1858 rifles were equipped with special crosshair front sights not used on the rifled-musket.¹⁵⁶

Hardee's manual is described by Paddy Griffith as a package which was '*attractively complete and apparently 'modern' in its philosophy*.'¹⁵⁷ However, Griffith also argues that despite the recognition of an increased importance for light infantry tactics, it would not prove to be revolutionary because it '*by no means abolished the traditional concept of fighting in line, shoulder to shoulder, two deep*.'¹⁵⁸ The American tactical reforms were therefore as innovative as European practice prescribed.

Such argumentation is however blind to the American willingness to adopt innovative infantry tactics. In 1859, Captain Cadmus M. Wilcox (1824 – 1890) published his work *Rifles and Rifle Practice* which contributed to the development of infantry tactics combined with the rifled-musket. According to Wilcox, fortifications would lose their need for complexity because the rifled-musket would be equally effective in defending basic fortified constructions.¹⁵⁹ Moreover, the rifled-musket would more easily provoke battles over a longer range, which would put a strain on the effective command and control of soldiers.¹⁶⁰ Therefore, effective training intensified discipline and use of the terrain for cover was needed to keep the command and control in pace with the more open order of battle and thereby the prevalence of the tactical offensive. As the command and control of troops was still primarily carried by the voice, music signals and orderlies carrying written orders.¹⁶¹

Despite his criticism of the likes of Scott, Hardee and Casey, Griffith admits that their published works were never intended to present a system of fixed laws which could fully prepare

¹⁵⁵ Ibid: 150.

¹⁵⁶ Ibid: 150-151.

¹⁵⁷ Griffith, *Battle Tactics of the Civil War*: 100-101.

¹⁵⁸ Ibid: 101.

¹⁵⁹ Wilcox, Cadmus M. *Rifles and Rifle Practice an Elementary Treatise upon the Theory of Rifle Firing, Explaining the Causes of Inaccuracy of fire, and the Manner of Correcting it*. New York: D. Van Nostrand, 1859: 248-253.

¹⁶⁰ Wilcox, *Rifles and Rifle Practice*: 242-243.

¹⁶¹ Hagerman, *The American Civil War and the Origins of Modern Warfare*: 20.

the soldiers for the reality of the battlefield.¹⁶² Even Hardee's exemplars, the *chasseurs à pied* were, despite their specialised role, forced in massed frontal assaults during the Crimean War (1853 – 1856) and the Second Italian War of Independence (1859).¹⁶³ The proposed military theories on infantry tactics ultimately came down to the capability of the soldiers to comprehend and bring them into practice when they were ordered to do so. Until now, the American infantry doctrine had been successful on paper and in practice, proven by the success of the regular army in Mexico. The vast armies raised during the Civil War would truly challenge the application of the proposed infantry tactics.

2.2 The creation of Union and Confederate armies

From 1861, the sectional crisis between the North and South deteriorated to the point that the institutions of the federal government came under severe pressure. The federal U.S. Army, including supporting institutions like the USMA, began losing the loyalty of its soldiers and officers. Until the outbreak of the Civil War; 1292 officers served in the U.S. Army, of whom 923 would remain loyal to the federal cause, while 369 officers sided with the Confederacy. Of the total 1,902 alumni from the VMI in Lexington, 1,781 (re)enlisted with the C.S. Army.¹⁶⁴

The total number of 1292 available regular officers was roughly doubled by appointing re-enlisted veterans and citizens with leadership capabilities. Less than 3000 experienced and trained officers were initially available for the command of a total 3,050,000 troops serving in the Civil War. This meant that only one trained or experienced officer was available for each regiment of roughly one thousand troops. Regulations prescribed at least thirty-nine commanding officers for each regiment, excluding the even higher number of required staff officers.¹⁶⁵

In short, ninety-eight per cent of the officers appointed during the Civil War were inexperienced and insufficiently trained. Naturally, many of these officers would face their limitations under the stress of combat, but remarkably many more succeeded to fulfil their role accordingly. Griffith concludes that the level of proficiency between officers trained at West Point and civilians trained in combat cannot be determined.¹⁶⁶ According to Hsieh, the first year of the war gives a reasonable idea how 'West Pointers' performed their duties as CO's. Since promising lower ranking officers, without a West Point background, had to earn their promotion

¹⁶² Griffith, *Battle Tactics of the Civil War*: 114.

¹⁶³ Ibid: 102.

¹⁶⁴ McPherson, *Battle Cry for Freedom*: 328.

¹⁶⁵ Griffith, *Battle Tactics of the Civil War*: 91 and 95-96.

¹⁶⁶ Ibid: 95.

in combat.¹⁶⁷ The Confederate command highly valued the training at West Point as CO's in the C.S. Army were ranked on their class standing and graduation year rather than their former rank in the U.S. Army.¹⁶⁸

Nonetheless, in the first years of the war both sides had to accept an inexperienced officer cadre, which was reflected in the effectiveness of their armies (or lack thereof). All the organisational levels of an army had to function properly to ensure the basic requirements for operation, such as disciplined troops which received a minimal level of training, equipment, provisions and pay. Naturally, over time more promising and capable officers would rise through the ranks, thereby increasing the overall effectiveness of the army.¹⁶⁹

At the height of the Mexican-American War, the federal government had raised 115.000 troops¹⁷⁰ at the outbreak of the Civil War; the U.S. Army was comprised of only 16.000 troops.¹⁷¹ On March 6, 1861, the Confederate Congress in Richmond authorised the creation of an army of 100.000 troops. By May, the Confederate forces increased in size to no less than 400.000 troops. In a response to the first Confederate attack on Fort Sumter (April 15, 1861) President Abraham Lincoln (1809 –1865) called upon 75.000 state militiamen for a ninety day federal service. Within the year the Union states raised a staggering 700.000 militiamen.¹⁷²

On paper a standard regiment in 1861 consisted of a headquarters, marching band and one thousand troops divided into ten companies. In practice, such regimental standardisation was not present and numbers would vary in time and place. While at the start of the war, regiments often consisted of more than a thousand troops, naturally over time this number was reduced. On average, the combat strength of a regiment on campaign during the Civil War was four hundred troops, a Union regiment a dozen above and a Confederate regiment a dozen below average. The average combat strength of an experienced regiment was even lower, around two hundred troops due to loss in combat.¹⁷³

¹⁶⁷ Hsieh, *The Old Army in War and Peace*: 211-212.

¹⁶⁸ Eicher, David J. *The Longest Night Military History of the Civil War*. New York: Simon & Schuster, 2001: 82.

¹⁶⁹ Griffith, *Battle Tactics of the Civil War*: 95-96.

¹⁷⁰ Keegan, *The American Civil War*: 42.

¹⁷¹ Griffith, *Battle Tactics of the Civil War*: 95.

¹⁷² Keegan, *The American Civil War*: 42-43.

¹⁷³ Griffith, *Battle Tactics of the Civil War*: 91-92. AND See Tables 3 and 4: 37.

Table 3¹⁷⁴

Organisational structure of formations	Brigades	Regiments	Battalions	Companies	Soldiers
Division	2 or 3				
Brigade		2, 3 or 4			
Regiment			2 or 3	10 ¹⁷⁵	
Battalion				8	
Company					82

While such battle-hardened regiments were relatively small, they could pose a formidable fighting force. Apart from a higher resilience to the stress of combat, their smaller size made them easy to command through voice and personal example. The resilience of regiments in combat depended heavily on their institutional continuity; the longer a regiment campaigned together on the lower levels of command, the higher the morale of its troops. While the transfer of a regiment in a new brigade could pose some friction, disbanding a regiment or the transfer of its companies to other regiments could pose much larger problems for morale. Regiments were formed on the basis of state and ethnic origin and even on the origin of nationality. Therefore appointing new companies to a regiment could undermine its overall cohesion.¹⁷⁶

Table 4¹⁷⁷

Number of formations in the field	Union Min.	Confederate Min.	Union Max.	Confederate Max.	Union Most Frequent	Confederate Most Frequent
Corps per army	1	1	8	4	3	2
Divisions per corps	2	2	6	7	3	3
Brigades per division	2	2	5	7	3	4
Regiments per brigade	2	2	12	20	4	5

In 1861, the North and South not only lacked a strong cadre of officers, the combat capability of the soldiers was also fairly limited. Most soldiers had an overall ignorance of military tradition and no combat experience. The military elite was not oblivious to the shortcomings of these massive irregular armies and the senior officers, who had witnessed the birth of the U.S. Army in

¹⁷⁴ See Craighill, William P. *The Army Officer's Pocket Companion: Principally Designed for Staff Officers in the Field*. New York: D. Van Nostrand, 1862: 65.

¹⁷⁵ See Casey, Silas. 'Volume I. Schools of the Soldier and Company Instructions for Skirmishers and Music' IN *Infantry Tactics, for the instruction, exercise and manoeuvres of the soldier, a company, line of skirmishers, battalion, brigade or corps d'armée*. New York: D. Van Nostrand, 1863: 3.

¹⁷⁶ Griffith, *Battle Tactics of the Civil War*: 93-94.

¹⁷⁷ See Eicher, John H. and Eicher, David J. *Civil War high commands*: 73.

the earl-nineteenth century, warned Washington about the limited capability of these improvised armies.¹⁷⁸

2.3 The drill-training of Union and Confederate soldiers

The Union and Confederate regiments were composed of a cross-section of nineteenth century American society, thus each regiment represented an above average level of intellect compared to professional European regiments. The value of drill training was therefore quickly acknowledged by soldiers and officers.¹⁷⁹ Soldiers were trained hour after hour; a Virginian soldier commented, '*we drill six times a day in the hot sun*'.¹⁸⁰ After European practice, the Confederate Col. A.P. Hill instructed to first train manoeuvres on the squad and company level before training on the battalion and regimental level. The Confederate Lt. James Langhorne wrote that his commanding officer Brig. Gen. Thomas J. Jackson '*had his whole brigade drilling at a charge bayonets double quick time for the last week*'.¹⁸¹

According to Griffith, drill training provided two benefits described as follows: '*the tactical articulation in the period leading up to close combat, and esprit de corps once the serious killing had begun*'.¹⁸² Tactical articulation can be explained as the ability to move in large formations under different combat and terrain circumstances, which in turn made the command by officers of formations more effective. In addition, well-executed drill instructions on the battlefield could instil fear in the enemy when a disciplined and cohesive force closed in on them. However, in the heat of battle, the execution of drill instruction became increasingly difficult, which could result in the loss of cohesion and reduce the combat effectiveness of the formation.¹⁸³

When the chaos of battle struck panic in the troops and the tactical articulation was lost, the 'esprit de corps' should suppress the panic. Under fire, the abstract ideals for which men had taken up arms were easily forgotten, so instead their comrades would compel them to keep fighting. The longer troops practiced drill instructions together, the more proficient they became and bonded as a unit. This while gaining pride in their regiment and '*suppressing or stifling the spirit of individualism*'.¹⁸⁴ In battle, veterans would encourage their younger comrades who were more susceptible to fear and panic. In the tactical manual of the *chasseurs à pied*, this supervision in

¹⁷⁸ Griffith, *Battle Tactics of the Civil War*: 97.

¹⁷⁹ Ibid: 105

¹⁸⁰ Glatthaar, Joseph T. *General Lee's Army From victory to collapse*. New York: Simon & Schuster, 2008: 50.

¹⁸¹ Glatthaar, *General Lee's Army*: 51.

¹⁸² Griffith, *Battle Tactics of the Civil War*: 106.

¹⁸³ Ibid: 107.

¹⁸⁴ Glatthaar, *General Lee's Army*: 318.

support of each other was termed *surveillance*. In close-order formations, surveillance functioned better than in open-order skirmish formations.¹⁸⁵

Still, drill training was only one condition for discipline; the other was strong leadership. When troops closed in on the enemy, the troops were more likely to trigger out of order reactions. For example, when the command was given to fire, it was very hard for soldiers to stop before their ammunition was depleted. While the problem of uncontrolled fire had been recognised by Winfield Scott, he could not provide an effective solution to include in the infantry doctrine. Griffith remarks that firing their muskets or storming towards the enemy was experienced by soldiers as a '*positive act*' which released the tensions of months of boredom and hardship.¹⁸⁶

In 1862, the official infantry doctrine based on the 1835 *Infantry Tactics* of Winfield Scott and supplemented by Hardee's *Rifle and Light Infantry Tactics*, was replaced by the *Infantry Tactics* of former president of the Board of Tactics, Silas Casey. The 1862 *Infantry Tactics* were based on the French *ordonnances* of 1831 and 1845¹⁸⁷ and combined Scott's third volume and Hardee's first two volumes. The C.S. Army followed the U.S. Army in the adoption of revisions.¹⁸⁸ The preparation of the Union and Confederate soldiers for war was limited to drill training and the information found in the tactical manuals. The manuals of Casey and Hardee were intended to instruct officers and soldiers on how to perform basic infantry movements.

Instead tactical manuals served as a replacement for the lack of large-scale field exercises; war games with live ammunition under the supervision of an experienced officer cadre would at least have given inexperienced troops a sense of what they could expect on the battlefield rather than implying that '*if you read this slim volume you will find everything you need to know*'.¹⁸⁹ These manuals were not intended to bridge the gap between theory and practice of the battlefield, but were nonetheless criticised for their lack of realism and sparked a general aversion towards their use. Apart from the fact that these manuals were written after French example and were intended for use by professional soldiers, the ideas taken from the *chasseurs à pied* reflected the most effective and modern infantry tactics of that time.

The problem, according to Griffith, however was that the limitations of these tactical manuals were never explained. The reason for their supposed inapplicability was rather that these manuals were placed into the hands of a well-educated army without further clarification. In the

¹⁸⁵ Griffith, *Battle Tactics of the Civil War*: 108-110.

¹⁸⁶ Ibid: 111-113.

¹⁸⁷ See Casey, Silas. 'Volume I. Schools of the Soldier and Company Instructions for Skirmishers and Music' IN *Infantry Tactics*: 5.

¹⁸⁸ Hagerman, *The American Civil War and the Origins of Modern Warfare*: 20.

¹⁸⁹ Griffith, *Battle Tactics of the Civil War*: 114

end too much was expected from these tactical manuals, while the wider context in which they were written was neglected. This could have been corrected if the tactical doctrine would have been reviewed or evaluated during the war, attending to the criticism in the field.¹⁹⁰ At the start of the war both sides had no choice than to rely on the experience most of their irregular troops had acquired as volunteers and militiamen. There was little time left to enlighten these men into the finer details of large scale infantry fighting. As most effort was put into the drill-training, which would let these loosely formed bands of militiamen function as an army in the first place.

¹⁹⁰ Ibid: 114-115. AND McWhiney and Jamieson, *Attack and Die*: 67.

Part Two
The warfare of the American Civil War
1861 – 1864

‘But before going on with my narrative I want to digress & tell about a curious little idiosyncrasy which was developing itself, in both armies, & among both officers & men, under the test & stress of battle for the first time. I had already noticed it in reading the newspaper accounts of the little collisions which were beginning to occur in various directions, & had likened it in my mind to the way in which a person lays hold of an iron which he knows is hot, but does not at all know how hot—whether only uncomfortably warm, or hot enough to make the flesh sizzle. He does not grab it promptly with a full strong grip but picks it up & drops it for a time or two, till he gets the measure of the heat & sees whether he can stand it. Well it was in very much that way that officers & men took hold of fighting at first.’¹⁹¹

Chapter 3 Bull Run to Antietam 1861 – 1862

3.1 The First Battle of Bull Run July 21, 1861

In early July 1861, federal forces amassed around Washington to defend the capital. Some 35,000 troops were organised into a field army and came under the command of the Brig. Gen. Irvin McDowell (1818 – 1885), who would lead his ‘Army of North eastern Virginia’ in an offensive against the Confederate forces of General Beauregard.¹⁹² The federal General-in-Chief Winfield Scott had not envisaged such a direct strategic approach; he believed that the inexperienced Union troops would not yet be capable of an offensive so early in the Civil War.¹⁹³

Scott proposed an alternate strategic plan or the ‘Anaconda Plan’; Union armies would wait until the autumn of 1861 before moving down south, because during this time of the year the rivers would rise providing easy inland access. Moving south along the Mississippi River, the river could provide the Union armies with exterior supply and communication lines. Moreover, the Mississippi River would be brought back under federal control, thereby denying the Confederates the same inland access routes into the North.¹⁹⁴ A naval blockade all along the Southern coastlines would further deny the Confederacy access to supply and transport routes by

¹⁹¹ Alexander, Edward Porter in Gallagher, Gary W. (editor). *Fighting for the Confederacy: The Personal Recollections of General Edward Porter Alexander*. Chapel Hill: The University of North Carolina Press, 1998: 42.

¹⁹² Keegan, *The American Civil War*: 100-101.

¹⁹³ McPherson, James M. *Battle Cry of Freedom The Civil War Era*. Oxford: Oxford University Press, 1988: 334-335.

¹⁹⁴ Eicher, *The Longest Night*: 81.

sea. The federal navy set up the blockade, but Scott's plan to move along the Mississippi River in autumn was abandoned, only to be reintroduced in the federal strategy in 1862.¹⁹⁵

During a meeting on June 29, 1861 in the White House with the cabinet and President Abraham Lincoln, Brig. Gen. Irvin McDowell submitted his own plan. McDowell proposed an overland march towards Manassas, Virginia located between Washington and the Confederate capital of Richmond. Since the Southern secession there had been strong public outcries for quick and decisive action against the rebels, and President Lincoln answered these calls by appointing McDowell commander of the Army of North eastern Virginia.¹⁹⁶ McDowell's plan served the still limited strategic objectives of the President; a federal victory would be a clear message to the rebellion and tactically could pave the way for a quick capture of Richmond, ending the Civil War altogether.¹⁹⁷

The general belief was that the Civil War could be won by capturing strategic objectives and occupying territory, but ultimately the war could only be won by completely destroying each other's armies and hinterland.¹⁹⁸ McDowell's first strategic objective was to force a path into northern Virginia and cross a tributary of the Occoquan River, the Bull Run, about twenty-five miles (40 kilometres) west of Washington.¹⁹⁹ His path however was blocked by the Confederate 'Army of the Potomac' under the command of General P.G.T. Beauregard (1818 –1893), who had positioned his troops at the railroads of Manassas-Junction not far south of the Bull Run.

The Union army, some 34,000 men strong, was organised into twelve brigades divided over five divisions; the fifty-three artillery pieces were evenly divided over each brigade.²⁰⁰ However, the effective number of Union troops committed to battle was lower. Most of the 4th Division was held in reserve while the 5th Division was held entirely. On July 16, McDowell gave the order to march towards the towns of Centreville and Manassas.²⁰¹ The Union army, however, was slowed down by a poorly organised supply train and the inexperience of the irregular troops to march over prolonged distances.

On the early morning of July 20, the vanguard of McDowell's army finally reached Centreville, three miles (5 kilometres) to the northeast of the Bull Run creek.²⁰² Beauregard had positioned his troops along the south bank of the creek; the battle line was some eight miles (13 kilometres) long, from Sudley Springs in the northwest down to Mitchell's Ford in the southeast

¹⁹⁵ McPherson, *Battle Cry of Freedom*: 335.

¹⁹⁶ Eicher, *The Longest Night*: 81.

¹⁹⁷ McPherson, *Battle Cry of Freedom*: 335-336.

¹⁹⁸ Eicher, *The Longest Night*: 88.

¹⁹⁹ Keegan, *The American Civil War*: 101.

²⁰⁰ Ibid: 102.

²⁰¹ Eicher, *The Longest Night*: 87-88.

²⁰² Keegan, *The American Civil War*: 102.

and directly south of Centreville.²⁰³ From Centreville ran a road – the Warrenton Turnpike – to the town of Alexandria in the west, which crossed the creek at the Stone Bridge. Furthermore, the creek could be crossed at several fordable points: at Sudley Springs in the northwest; Farm Ford, just above the Stone Bridge; Lewis Ford, Ball's Ford and Island Ford, south of the Stone Bridge; Mitchell's Ford and Blackburn's Ford directly south of Centreville and finally McLean's Ford and Union Mills Ford further down to the southeast. Only a mile (1.6 kilometres) to the southwest of the Stone Bridge stood Henry House Hill; behind it to the southwest stood Bald Hill and next to it stood Matthews Hill to the northwest.²⁰⁴

The higher south bank of the creek was occupied by the Confederate 'Army of the Potomac', some 20,000 men strong. The Army of the Potomac was organised into seven brigades and one reserve brigade. The forty artillery pieces were divided and attached to each brigade in addition to the four Virginian cavalry regiments. Beauregard's line of defence extended over almost five miles (8 kilometres) from the Stone Bridge to Union Mills Ford. Beauregard's army was not the only Confederate force near Manassas. The Confederate 'Army of Shenandoah' was positioned some fifty-four miles (87 kilometres) to the northwest in the town of Winchester. Under the command of General Joseph E. Johnston (1807 –1891), a 12,000 man army was organised into four brigades and the twenty artillery pieces were divided and attached to each brigade, supported by 1st Virginia cavalry regiment.

Meanwhile, McDowell had positioned his troops around Centreville and detached the 4th Division, 5,000 men strong, ordering them to march eastward to guard the rear of the army.²⁰⁵ McDowell's plan of battle was to hold Beauregard's troops in the position at the Stone Bridge; in the meantime his main force would march around the Confederate army, in the direction of Sudley Springs and turn against the Confederate left flank.²⁰⁶ The 2nd Division and the 3rd Division would cross the Bull Run at Sudley Springs and move south. The 1st Division would feint an attack at the Stone Bridge, while the division's 4th Brigade would take up positions at Blackburn's Ford to prevent a Confederate counter attack on the Union left flank.

From 19 July, the Army of Shenandoah began to arrive at Manassas-Junction (although the 4th Brigade would not arrive until July 21) to reinforce Beauregard. While Johnston held a higher rank, Beauregard was granted field command; his battle plan was to attack the Union left flank at Blackburn's Ford and Mitchell's Ford in order to advance towards Centreville. Although the Confederates were outnumbered, they held strong defensive positions.²⁰⁷ If both battle plans

²⁰³ Keegan, *The American Civil War*: 102.

²⁰⁴ See Map 1: 77.

²⁰⁵ Eicher, *The Longest Night*: 88-90.

²⁰⁶ Keegan, *The American Civil War*: 102.

²⁰⁷ Eicher, *The Longest Night*: 91-92.

were successfully executed, the Union and Confederate armies would manoeuvre in a huge counter clockwise direction.²⁰⁸

The former federal officers of the U.S. Army were evenly divided among the Confederate regular and irregular troops. In the Union army, Scott had ordered to leave the regular officers only in command of regular troops. Scott had opposed the dispersion of the already scarce number of experienced and trained officers. As a result, McDowell had two completely regular infantry battalions and two completely regular artillery batteries at his disposal.²⁰⁹

On the early morning of 21 July, at 2:30 a.m. McDowell ordered his 2nd and 3rd Division to move southwest along the Warrenton Turnpike before turning northwest to the crossing at Sudley Springs. The 1st Division moved along the Warrenton Turnpike towards the Stone Bridge, while the division's 4th Brigade moved towards Mitchell's Ford. Surprised by the sudden attack of McDowell, Beauregard was awakened at 5:15 a.m. by the Union 4th Brigade advancing towards Mitchell's Ford.²¹⁰ Elements of the 1st Division reached the Stone Bridge at 6:00 a.m. where the Union Brig. Gen. Daniel Tyler faced the small 7th Brigade of the Army of the Potomac under the command of Confederate Col. Nathan Evans. Around 9:00 a.m., Evans witnessed that the Union troops made no serious attempt to cross the Stone Bridge. At the same time, the Confederate Chief Signal Officer, Capt. Edward Porter Alexander, spotted the flanking manoeuvre by the Union 2nd and 3rd Division at Sudley Springs.²¹¹

At 9:30 a.m., the 2nd Division reached the crossing at Sudley Springs and by now Evans was informed by Capt. Alexander of the Union flanking manoeuvre. Confident that the 1st Division would not force a breakthrough at the Stone Bridge, Evans ordered troops to take up positions on the western slopes of Matthews Hill. Meanwhile, in preparation for a counter attack on the Union left flank, Beauregard sent the ambivalent order: '*hold in readiness to advance at a moment's notice*' to Brig. Gen. Richard S. Ewell of the 2nd Brigade at Union Mills Ford. To support Ewell's advance, the 3rd Brigade of General David R. Jones was ordered to move into position across the Bull Run. However, Jones discovered he was advancing alone, as Ewell made no attempt to advance himself and remained in position at Union Mills Ford.²¹²

The Union 2nd Division, under the command of Col. Ambrose E. Burnside (1824–1881) had crossed the creek and reached the Confederate positions of Evans at Matthews Hill. However, Burnside experienced difficulties in manoeuvring his irregulars in position to form a

²⁰⁸ Ibid: 92.

²⁰⁹ Keegan, *The American Civil War*: 102.

²¹⁰ Eicher, *The Longest Night*: 92-94.

²¹¹ Keegan, *The American Civil War*: 102-104.

²¹² See Map 2: 78. AND Eicher, *The Longest Night*: 94.

line of battle. Eventually, Burnside succeeded and, supported by both regular artillery batteries, the Confederates came under heavy fire. Evans requested support and the 2nd and 3rd Brigade moved in to reinforce the defensive line on Matthews Hill. McDowell sensed that the Confederates stiffened their resistance and he ordered the 1st Division of Tyler to force a breakthrough at the Stone Bridge. Just north of the bridge was the unguarded crossing of Farm Ford. The 3rd Brigade under the command of Col. William T. Sherman (1820 –1891) resolutely crossed the creek and advanced towards the Confederate positions on Matthews Hill from the east.²¹³

The Confederate troops came under attack from the west and east, and at 11:30 a.m., they were ordered to retreat eastwards to positions on the western slopes of Henry House Hill. As the Confederate line collapsed, panic spread among the men, resulting in a disorderly and chaotic retreat. The only four Confederate artillery pieces positioned on Henry House Hill provided a ferocious cover fire for the regrouping infantry units. Around the same time, the 4th (and last) Brigade of Johnston's army arrived by train at Manassas-Junction.²¹⁴ By now McDowell's objectives were clear and Johnston was the first to recognise the tactical importance of Henry House Hill for the Confederate defence. Johnston's Brig. Gen. Thomas J. Jackson (1824 –1863) had already positioned his 1st Brigade on the 'false crest' out of sight behind the top of the Hill.²¹⁵ The cavalry, under the command of Col. James Ewell Brown Stuart was positioned on the Confederate left flank, ready to spring into action at the foot of Bald Hill.

By 2:00 p.m., the battle was concentrated on the western slopes of Henry House Hill and McDowell ordered his troops to press the attack, outnumbering the Confederate defenders on the Hill two-to-one. McDowell's attack was supported by his valued regular artillery units, who were positioned southwest of the Union line of attack. Clad in blue uniforms, the Confederate 33rd Virginia Infantry regiment counterattacked and advanced on the Union artillery position. Tragically, the Union infantry units supporting the two regular artillery units held their fire as the Confederate regiment approached, mistakenly identifying their blue uniforms for Union soldiers. The Virginians opened a close-range volley of musket fire with devastating effect on the Union infantry and artillery units. Surprised and struck by panic, the south western part of the Union line fell in disarray. At this moment the Confederate cavalry regiment of Col. Stuart spring into action and smashed into the retreating Union soldiers.²¹⁶

²¹³ Keegan, *The American Civil War*: 104.

²¹⁴ Eicher, *The Longest Night*: 95-96.

²¹⁵ Keegan, *The American Civil War*: 104-105.

²¹⁶ See Map 3: 79. AND Eicher, *The Longest Night*: 96.

The Union troops regrouped, counter attacked and retook their positions, but it was too late. By now Confederate reinforcements arrived and pressed on from the southeast, Johnston's 4th Brigade from Manassas-Junction and Beauregard's 6th Brigade from Blackburn's Ford. To the northeast on Henry House Hill, Brig. Gen. 'Stonewall' Jackson spurred his men on to attack: '*Reserve your fire until they come within fifty yards! Then fire and give them the bayonet! And then you charge, yell like furies*'. The Union line was pushed from the plateau back to the foot of Henry House Hill. McDowell's attack was falling apart as Union troops retreated hastily over the Stone Bridge along the Warrenton Turnpike and back in the direction of Sudley Springs.²¹⁷

The sudden retreat of the Union forces was further worsened by hundreds of spectators who had left Washington for a family's day out.²¹⁸ The defeat of the numerically superior Union army was a shock to the nation; an estimated 12,000 Union soldiers lost their regiments in the chaos of the ensuing retreat.²¹⁹ The Union Army of Northeastern Virginia had 460 dead, 1,124 wounded and 1,312 missing; the Confederates had 387 dead, 1,582 wounded and 13 missing. It was an important victory for the South, which strengthened the belief in- and support for the Confederate cause of secession.²²⁰

3.2 The infantry tactics of the First Bull Run

The first major engagement of the Civil War had been fought along the lines of the basic tactical concepts employed in the Mexican-American War. For example, open order tactics only saw limited use at Bull Run in comparison to closed order tactics. Indeed, light infantry advanced in open order formations, providing aimed cover fire for the line infantry advancing in columns before deploying in two rank line formations to engage the enemy. The massed line infantry used controlled volleys of musket fire; however, at close range, these volleys of fire had more shock value than causing actual physical damage.²²¹

The Union troops struggled on their march towards Centreville. Union Col. Sherman commented, '*The march demonstrated little save the general laxity of discipline; for with all my personal efforts I could not prevent the men from straggling for water, blackberries, or anything on the way they fancied*.' and '*We had good organization, good men, but no cohesion, no real discipline, no respect for authority, no real knowledge of war*'.²²² The rolling terrain at Bull Run provided the Confederates with strong defensive positions,

²¹⁷ See Map 4: 79.

²¹⁸ Eicher, *The Longest Night*: 96-98.

²¹⁹ Keegan, *The American Civil War*: 105-107

²²⁰ Eicher, *The Longest Night*: 99.

²²¹ Hsieh, *The Old Army in War and Peace*: 234-235.

²²² Sherman, William T. *The Memoires of General W.T. Sherman*. New York; D Appleton and Company, 1889: 173-174.

but also made it more difficult to quickly bring troops into position. Nevertheless, the Confederates managed to position themselves in front of the flank attack of the Union troops at Matthews Hill and Henry House Hill.²²³

The Union commanders made use of the rolling terrain to conceal their movements; Col. Sherman successfully advanced from Farm Ford and attacked the Confederates from behind on Matthews Hill. Historian Wayne Hsieh classifies this as a '*reasonable good sign of battlefield competence*'.²²⁴ However, the Confederate commanders were just as apt. Brig. Gen. Jackson had positioned his troops behind the top of Henry House Hill, concealing them from the advancing enemy on the slopes. The Confederates awaited the Union troops to arrive over the top of the hill. Mahan had warned of the risks of advancing over the top of a hill: '*If the crest of a hill intervenes in a pursuit, it should be gained with great caution, for fear of coming suddenly upon the enemy in force on the opposite side.*'²²⁵

The Union troops had already been mostly armed with the rifled-musket, which gave them more than triple the range of the Confederate troops, who were mostly armed with smoothbore-muskets. There is, however, no evidence of Union troops using the increased range effectively to their advantage. The Union Col. William B. Franklin reported afterwards '*that a great deal of the misfortune ... is due to the fact that our troops knew very little of the principles and practice of firing ... the rear files sometimes firing into and killing the front ones*'.²²⁶ A partial explanation for the poor aiming by the Union troops was that their rifled-muskets were sighted for three-hundred yards (274 metres), so at close-range soldiers would fire over the heads of their targets.

Johnston concluded afterwards that the Confederate soldiers had been more accurate in their fire: '*Our men require less instruction in shooting than in any other military exercise.*' However, he admitted in a report to President Davis that it was probably '*the consequence more of excitement than of want of skill.*' However, the general opinion on both sides was that Southern white men were traditionally better shots, and '*it is one of our great advantages over the Northern people*'.²²⁷

Still, accurate aiming was not decisive for the outcome of the battle. Rather it was the Confederate advantage of the defensive position, their ability to actively reinforce and stabilise their line as exemplified by Brig. Gen. 'Stonewall' Jackson. Griffith concludes that the Confederate command employed a mobile- or active concept of operations.²²⁸ The tactical flexibility of the Confederate commanders ensured that troops from unengaged sectors along the

²²³ Hsieh, *The Old Army in War and Peace*: 234-242.

²²⁴ Ibid: 237.

²²⁵ Mahan, *An Elementary Treatise on Advanced-Guard*: 147.

²²⁶ Hsieh, *The Old Army in War and Peace*: 236.

²²⁷ Glatthaar, *General Lee's Army*: 62.

²²⁸ Griffith, *Battle Tactics of the Civil War*: 31.

original line of battle could be directed to Henry House Hill and repel the Union flanking manoeuvre.

While the theory behind McDowell's battle plan was not inherently wrong, the majority of his troops lacked the level of proficiency and experience to successfully execute the complex flanking manoeuvres. Moreover, the regular officers were not evenly dispersed among the irregular troops. Many regular Union officers were forced to leave their divisional and brigade duties to take direct command of their troops, like Col. Burnside who had to take direct command of the irregulars in order to speed up the deployment at the foot of Matthews Hill.²²⁹ While the Confederate soldiers were just as inexperienced, their response to McDowell's manoeuvres were less demanding, such as holding the line and repelling the attackers. Indeed, the Confederate commanders did not dare to pursue the fleeing Union army and expose their troops to more complex movements.²³⁰

The First Battle of Bull Run also saw the first effective use of a signals organisation – wig-wag flags, deployed by the Confederate command. This system of communication proved valuable when the chief signal officer Capt. Alexander could warn Col. Evans of McDowell's flanking manoeuvre.²³¹ While the tactical importance is questionable, Hagerman notes that Beauregard ordered his troops to entrench their positions and prepare for a melee fight with fixed bayonets, including the light infantry. According to Hagerman, Beauregard thereby challenged the conventions of the tactical offensive since its success in Mexico.²³² In contrast, Griffith does not find the tactical decision to construct field fortifications of such great importance for the course of battle, as ultimately the outcome was not decided along Beauregard's extensive line of defence but at Matthews Hill and Henry House Hill.²³³

3.3 The Battle of Antietam September 17, 1862

According to historian John Keegan, during the second half of 1862, the character of the Civil War suddenly transformed into a '*much more serious, bitter, and hard-fought [war] than that of the first year*'.²³⁴ On August 28, 1862, the Union and Confederate forces engaged each other for the second time at Manassas-Junction. The Second Battle of Bull Run '*was a much fiercer encounter than*

²²⁹ Keegan, *The American Civil War*: 104. AND Eicher, *The Longest Night*: 96.

²³⁰ Griffith, *Battle Tactics of the Civil War*: 31-32.

²³¹ Hagerman, *The American Civil War and the Origins of Modern Warfare*: 103.

²³² Ibid: 105.

²³³ Griffith, *Battle Tactics of the Civil War*: 30-32.

²³⁴ Keegan, *The American Civil War*: 163.

the first, evidence of how much both sides had learned in thirteen months of fighting'.²³⁵ The Union and Confederate soldiers were no longer easily shaken by the experiences on the battlefield. Compared to the chaotic retreat after the First Battle of Bull Run, the Union troops now retreated '*reasonably orderly*'.²³⁶ Since the Seven Days Battles from June 25 to July 1 1862, '*both Union and Confederate forces were reasonably competent in terms of tactics on the brigade and regimental levels and had at the very least adequate march-discipline and reasonably good unit cohesion*'.²³⁷

After the defeat of the Union at the Second Bull Run, the federal capital came under threat of the Confederate 'Army of Northern Virginia' commanded by the famous General Robert E. Lee (1807 –1870). The defence of Washington came in the hands of Maj. Gen. George B. McClellan (1826 –1885) and the Union 'Army of the Potomac'.²³⁸ After the Second Bull Run, the Confederates seized the initiative, General Lee wrote to President Jefferson Davis: '*We cannot afford to be idle, and though weaker than our opponent in men and military equipments, must endeavor to harass, if we cannot destroy them*'.²³⁹ On September 4, Lee ordered his army to cross the Potomac River into Maryland.²⁴⁰ As he advanced into the North, Lee forced McClellan to respond to his movements. Moreover, Lee could relieve his battered home state Virginia and a victory on northern territory could generate foreign recognition for the Confederate cause.²⁴¹

On 9 September, Lee separated his army and with 'Special Order No. 191, ordered the II Corps of Maj. Gen. 'Stonewall' Jackson to move southwest and capture the strategically located Union arsenal at Harpers Ferry. The I Corps of Maj. Gen. James Longstreet (1821 –1904) was ordered to move west and investigate rumours of state militia activity in Boonsboro and Hagerstown. The II Corps Division of Lt. Gen. D.H. Hill was ordered to Fredericktown to secure the rear guard of Jackson and Longstreet.²⁴² On 13 September, McClellan was informed about Lee's movements; Union soldiers had found a copy of Special Order No. 191 in an abandoned Confederate encampment. However, McClellan neglected to act decisively on the opportunity to defeat the dispersed Army of Northern Virginia and Lee was informed the next day about the intelligence leak, ordering Hill's Division to form a defensive line along three passes of the South Mountain to slow down the pursuing Army of the Potomac.²⁴³

Meanwhile, Lee considered aborting the Maryland campaign and ordered the I Corps of Longstreet to retreat west and await Jackson's return from Harpers Ferry in the town of

²³⁵ Ibid: 164.

²³⁶ Hsieh, *The Old Army in War and Peace*: 280.

²³⁷ Ibid.

²³⁸ Keegan, *The American Civil War*: 164-165.

²³⁹ Eicher, *The Longest Night*: 336.

²⁴⁰ Keegan, *The American Civil War*: 167.

²⁴¹ Eicher, *The Longest Night*: 336-337.

²⁴² Ibid: 338-339.

²⁴³ Ibid: 340-341.

Sharpsburg. On September 15, news reached Lee that the small defence force could no longer hold back the Army of the Potomac at South Mountain, but also that Jackson had captured Harpers Ferry. Strengthened by the news of Jackson's success, Lee ordered defensive positions set up along the Antietam Creek, east of Sharpsburg. The position with which Lee chose to face McClellan was according to historian David J. Eicher, '*tactically a questionable one*'.²⁴⁴ While according to Paddy Griffith: '*He [Lee] adopted a well-conceived position in depth around Sharpsburg, although it had weaknesses due to the proximity of the River Potomac in the rear and the searching batteries of enemy rifled artillery on the heights in front.*'²⁴⁵

Still, the Confederate supply lines were restricted to the only crossing of the River, Boteler's Ford southwest of Sharpsburg, which was also the only escape route.²⁴⁶ The Antietam Creek itself offered little defence as there were three bridge crossings near Sharpsburg: the Upper Bridge to the northeast, the Middle Bridge directly to the east and the Rohrbach Bridge to the southeast of the town.²⁴⁷ The Rohrbach Bridge was the only crossing over the Antietam Creek which was within rifle range of the Confederate line of defence.²⁴⁸ Confined in between the two waterways, the battlefield was only two square miles (3.2 kilometres).

Overlooking the Cornfield northeast of Sharpsburg, the Confederate left was concentrated in and around the West Woods and the small Dunker Church, ironically the prayer house of a German pacifist sect. The centre line of defence was directly east of Sharpsburg, concentrated around a sunken road (afterwards known as Bloody Lane) in front of the Middle Bridge. The right line of defence was concentrated southeast of Sharpsburg, in front of the Rohrbach Bridge.²⁴⁹ The Confederate soldiers were not entrenched but used the cover provided by the terrain, such as elevations in the rolling farmland, stonewalls and small clusters of trees.²⁵⁰ On 15 September, McClellan slowly moved his 75,316 troops²⁵¹ in position; in the morning Lee's forces had only consisted of Longstreet's I Corps, 19,000 strong. Some 11,000 troops of Jackson's II Corps would not arrive from Harpers Ferry until the afternoon, in addition to the 10,000 troops left behind to oversee the surrender of the Union garrison.²⁵²

Finally on 17 September at dawn, McClellan ordered his troops into battle. His battle plan was to concentrate three army corps' on the left of the Confederate defensive line while the large IX Corps of Maj. Gen. Ambrose E. Burnside was ordered to create a diversion on the

²⁴⁴ Ibid: 347.

²⁴⁵ Griffith, *Battle Tactics of the Civil War*: 36.

²⁴⁶ Eicher, 2001:347-348.

²⁴⁷ Ibid: 348.

²⁴⁸ McPherson, *Battle Cry of Freedom*: 539.

²⁴⁹ Keegan, *The American Civil War*: 167-168.

²⁵⁰ McPherson, *Battle Cry of Freedom*: 539.

²⁵¹ Eicher, *The Longest Night*: 349.

²⁵² Ibid: 348.

Confederate right. In addition, four Union divisions and cavalry were held in reserve to exploit any possible breakthroughs on the Confederate centre and right. McClellan expected Burnside to draw away the attention from the Confederate left and if he had the opportunity to breakthrough and cross the Rohrbach Bridge, Burnside could attack the Confederate right flank and roll up their entire line of defence. In theory, McClellan could achieve the objective given to him by President Lincoln '*to destroy the rebel army*'.²⁵³

Under the command of Maj. Gen. Joseph 'Fighting Joe' Hooker, the I Corps led the attack against the Confederate left. Hooker was able to drive the Confederate soldiers of Jackson's II Corps back from the West Woods and the Cornfield. Around Dunker Church, Union soldiers had penetrated the Confederate lines, but Lee responded accordingly, sending reinforcements from quiet sectors on his centre and right to counterattack. Hooker's I Corps was shattered before the Union's XII Corps, part of the second attack wave, could support them. The XII Corps advanced even further behind the Confederate lines around Dunker Church, but without support they were unable to follow through. Like the I Corps before them, the XII Corps was repelled by the Confederate defenders and suffered heavy losses.²⁵⁴

The third attack wave was led by a division of Maj. Gen. 'Bull' Sumner's II Corps, advancing through the Confederate lines in the West Woods.²⁵⁵ Again Lee responded, sending two divisions to counterattack the II Corps, one arriving just in time from Harpers Ferry and another from the Confederate right near Rohrbach Bridge. Sumner's division was obliterated from the rear, flank and front. The battle on the Confederate left had now raged for five hours and 12,000 men²⁵⁶ were already lying wounded or dead on the battlefield. The fighting was so ferocious that five Union and five Confederate divisions, which had already suffered too many losses, disengaged in mutual consent.²⁵⁷

During the midday, two fresh Union divisions of Sumner's II Corps were ordered to concentrate their attack on the centre of the Confederate line of defence. The attack succeeded as the Confederate soldiers were unable to withstand the superior numbers; their lines were shattered and the Confederate centre was wide open. However, McClellan had lost his resolve, shaken by the defeat of three of his army Corps' and, worried that Lee could mount yet another counterattack on the centre, he kept his fresh VI Corps in reserve. The Confederate centre fell silent and a tactical opportunity was lost, while the fighting on the Confederate right increased.²⁵⁸

²⁵³ See Map 5: 80. AND McPherson, *Battle Cry of Freedom*: 539.

²⁵⁴ See Maps 6 and 7: 81.

²⁵⁵ McPherson, *Battle Cry of Freedom*: 541.

²⁵⁶ Ibid.

²⁵⁷ See Map 8: 82.

²⁵⁸ McPherson, *Battle Cry of Freedom*: 541-543.

On the Confederate right, a Georgian brigade had stubbornly defended the crossing at Rohrbach Bridge against Burnside's IX Corps. From behind trees and a stone wall, the Georgians picked off the exposed Union troops trying to cross the bridge one-by-one. In the early afternoon, two Union regiments, suffering heavy losses, finally secured the bridgehead. When the Confederate positions at 'Burnside's Bridge' fell, it became clear that Burnside could have sent his main force through the fordable crossing south of the bridge instead of desperately trying to cross the bridge. Well in the afternoon, three of Burnside's divisions forced the Confederate right flank back to Sharpsburg, threatening to cut off the only Confederate escape route over the Potomac at Boteler's Ford.²⁵⁹

Despite Burnside's progress, McClellan was still worried about Lee's ability to counterattack. Therefore McClellan also ordered the V Corps, intended to support any breakthrough by Burnside, to stay in reserve in addition to the VI Corps. As Lee witnessed his right flank falling apart, another Confederate division from Harpers Ferry arrived. The division under the command of Maj. Gen. A.P. Hill crossed the Boteler's Ford and charged into the left flank of Burnside's attack. The Confederate counterattack surprised the Union troops as Hill's men wore captured Union uniforms, causing four Union regiments to hold their fire before realising they faced the enemy. The tables were turned and the Union attack on the Confederate right began to unravel; the Union forces had failed to sustain their attacks along the Confederate line after successful breakthroughs.²⁶⁰

That night at Lee's headquarters, exhausted Confederate corps and division commanders reported that several brigades had lost fifty per cent or more of their men. Scarcely 30,000 Confederate soldiers had survived through the day unscathed. Nevertheless, Lee decided to remain in position the following day. Despite the arrival of two fresh Union divisions on the morning of 18 September, McClellan dared not to renew his attack. As darkness fell on the second day of the tactical stalemate, Lee ordered his troops to retreat. Lee's Maryland campaign abruptly ended and McClellan had gained a minor strategic victory by averting a Confederate intrusion of the North.²⁶¹

Still, McClellan had failed to coordinate his attack waves accordingly while his troops penetrated the Confederate lines, supporting divisions came too late and opportunities to exploit the breakthroughs of the Confederate line were lost. According to Griffith, the Union attack was '*no better coordinated than it had been at First Manassas*.'²⁶² The Army of the Potomac had 2,010 dead,

²⁵⁹ Ibid: 543.

²⁶⁰ See Map 9: 82. AND McPherson, *Battle Cry of Freedom*: 543-544.

²⁶¹ Ibid: 544.

²⁶² Griffith, *Battle Tactics of the Civil War*: 36.

9,416 wounded and 1,042 missing of the 38,000 men sent unto the battlefield. Lee had about 2,700 dead, 9,024 wounded and 2,000 missing. In total the massacre at Antietam had left about 4,810 men dead on the battlefield.²⁶³

3.4 The infantry tactics of Antietam

At the battle of Antietam, Hagerman argues, McClellan had broken with his previous pattern of entrenching his positions, thereby suggesting that he found himself in tactically uncharted territory when he was ordered to take the offensive and destroy Lee's rebel army. McClellan lacked the confidence for a decisive offensive, for he had been more comfortable on the defensive, which resulted in a half-hearted attack at Antietam.²⁶⁴ Still he had a solid battle plan and a numerically superior force; therefore, it remains speculative why McClellan did not follow through. Perhaps McClellan lacked the confidence for a decisive attack because of his inexperience on the offensive or maybe he was simply intimidated by Lee's ability to counterattack, or both.

Lee's Army of Northern Virginia had withstood a numerically superior and better supplied force. However, the sentiment among the Confederate soldiers afterwards was that, if Lee had ordered them to fortify their defensive positions, they would have suffered fewer casualties. While he did make tactical use of the rolling terrain concealing his troops, the outcome of the battle was decided by Lee's ability to respond to McClellan's attacks by shifting his troops from quiet sectors and by the reinforcements arriving from Harpers Ferry.²⁶⁵ McWhiney and Jamieson explain Lee's counterattacks by his overall preference for the tactical offensive even when he was forced in the defensive.²⁶⁶

Still Lee's counterattacks were direct responses to McClellan's movements and it is therefore questionable if Lee expressed a clear preference for the tactical offensive at Antietam. McClellan forced Lee's hand by attacking him, but who in turn demonstrated an active tactical defensive in the same manner as Beauregard and Johnston had at Bull Run. Strengthened by the capture of Harpers Ferry and the relatively strong positions along the Antietam Creek, Lee saw an opportunity to challenge McClellan, despite him being outnumbered. Such tactical decisions and the desire to force a decisive victory would, according to historian Russell F. Weigeley, characterise Lee over the course of the war. Weigeley argues in his work, *The American Way of*

²⁶³ Eicher, *The Longest Night*: 363.

²⁶⁴ Hagerman, *The American Civil War and the Origins of Modern Warfare*: 55-56.

²⁶⁵ Griffith, *Battle Tactics of the Civil War*: 36.

²⁶⁶ McWhiney and Jamieson, *Attack and Die*: 70.

War, that '*Lee was too Napoleonic. Like Napoleon himself, with his passion for the strategy of annihilation and the climatic, decisive battle as its expression, he destroyed in the end not the enemy armies, but his own.*'²⁶⁷

According to Hagerman, '*the lessons of Antietam were certainly against the continuing use of open infantry assault tactics.*'²⁶⁸ This may be true from the standpoint of the Union attackers, but it is not so from the standpoint of the Confederate defenders. If Lee had sacrificed mobility by ordering his troops to entrench and huddle together, the already outnumbered Confederate troops would have likely been unwilling to counterattack. At this stage of the Civil War, no clear tactical developments were revealed other than that both sides had shown an increasing aptitude in waging war. Or as Hsieh suggests, '*the same process of halting improvement in military competence among both contending armies that had begun at the outbreak of hostilities in 1861. Since both sets of troops improved roughly at comparable rates, neither gained much of an advantage over the other on an organisational level.*'²⁶⁹

²⁶⁷ Weigeley, Russell F. *The American Way of War: A History of United States Military Strategy and Policy*. Bloomington: Indiana University Press, 1973: 127.

²⁶⁸ Hagerman, *The American Civil War and the Origins of Modern Warfare*: 56.

²⁶⁹ Hsieh, *The Old Army in War and Peace*: 282.

Chapter 4 Gettysburg to Spotsylvania 1863 – 1864

4.1 The Battle of Gettysburg July 1-3, 1863

From the winter of 1862 until the late spring of 1863, the Confederacy had endured several Union offensives in attempt to capture the Confederate capital of Richmond. On 15 December 1862, the campaign of the Army of the Potomac under the command of Maj. Gen. Burnside was halted by Lee at Fredericksburg, Virginia. The Union offensive was renewed in April 1863, now under the command of Maj. Gen. Hooker. On 6 May, Hooker's army was defeated in the woods near Chancellorsville, Virginia; again Lee's Army of Northern Virginia had averted a Union breakthrough in the eastern theatre.²⁷⁰

Although Lee had won a succession of limited victories in Virginia, none of these had resulted in the definitive defeat of the Army of the Potomac. In the western theatre, Union offensive efforts had been more successful; on 18 May, the promising Maj. Gen. Ulysses S. Grant (1822 – 1885) laid siege on the city of Vicksburg, Mississippi. Three days earlier Lee had been called to Richmond to discuss the threat from the west with President Jefferson Davis and the Secretary of War James Seddon, and the still lingering Army of the Potomac in the north. Lee argued that in order to regain the strategic initiative, a Confederate campaign into northern territory was needed.²⁷¹

The strategic objectives differed little from those of the Confederate Maryland campaign which ended at Antietam in September 1862. A Confederate offensive on northern territory would relieve the pressure from war torn Virginia and the Army of Northern Virginia could live off the land. After Chancellorsville, the Army of the Potomac had positioned itself along the Rappahannock River and a Confederate offensive would force the Union army out of its defensive position. Finally, by achieving a victory, Lee still hoped to strengthen the position of the 'Copperheads', the Democratic Congressmen in favour of making peace with the Confederacy.²⁷²

In the first week of June 1863, Lee ordered his Army of Northern Virginia to move into the Shenandoah Valley, as the morale of his well-supplied troops was high. Throughout June, both Union and Confederate armies engaged in strategic manoeuvres. The new commander of the Army of the Potomac, Maj. Gen. George G. Meade (1815 – 1872) reasoned that if he concentrated the Union forces, Lee would be compelled to attack him. As long as Lee's objective was to destroy the Army of the Potomac, Meade could decide on what grounds. Meade ordered

²⁷⁰Keegan, *The American Civil War*: 185-187.

²⁷¹ Ibid: 187.

²⁷² Ibid.

his troops to march towards Big Pipe Creek, Virginia southeast of Gettysburg, Pennsylvania to set up defensive positions and draw Lee into a fight. However, Lee was informed about the Union forces crossing the Potomac River and he decided to concentrate his forces near Gettysburg.²⁷³

The sleepy Pennsylvanian town of Gettysburg, with only 2,390 residents²⁷⁴ was the centre of what would become the largest and bloodiest battle of the American Civil War.²⁷⁵ Gettysburg was built along crossroads on open rolling grasslands in the north, surrounded by wooden farmhouses. Among the wooden housing of the flourishing town, brick buildings had been built. On the northern edge of town, there was the Pennsylvania College on and the western edge, there was the Lutheran Theological Seminary. Both buildings had cupolas which would serve as observation posts during the battle.

From the south western edge of town, a ridge stretched out to the southwest, known as Seminary Ridge. From the southern edge of town, another ridge stretched out to the south known as Cemetery Ridge.²⁷⁶ The northern end of Cemetery Ridge culminated into two hills, Cemetery Hill (153 meters) and Culp's Hill (186 meters) slightly to the east. The southern end of Cemetery Ridge culminated into the joint hilltops of Little Round Top (200 meters) and Big Round Top (234 meters).²⁷⁷ The terrain on the north western front of the two hilltops was heavily wooded, littered by rock boulders and broken up by fields and fences. These killing fields would be known later as Devil's Den, the Wheatfield and the Peach Orchard.²⁷⁸

On 30 June, a Confederate foraging party stumbled on Union cavalry northwest of Gettysburg. The next morning, a sizeable Confederate force was sent to determine the size and strength of the encountered cavalry. The two Union cavalry brigades had taken up defensive positions and withstood the Confederate attack until the Union I Corps arrived under the command of Maj. Gen. John F. Reynolds. After he assessed the situation, Reynolds decided that the Confederates, now advancing in strength, had to be prevented from reaching the high grounds south of Gettysburg. Reynolds was shot and killed during the counterattack against the Confederates now advancing from the west and north.²⁷⁹

Meade had about 93,500 troops under his command, organised in seven smaller corps and consisting of infantry divisions, each with an attached artillery brigade, a cavalry corps and

²⁷³ Keegan, *The American Civil War*: 188-191.

²⁷⁴ Eicher, *The Longest Night*: 507.

²⁷⁵ Ibid: 510.

²⁷⁶ Keegan, *The American Civil War*: 191.

²⁷⁷ Eicher, *The Longest Night*: 509-510.

²⁷⁸ Keegan, *The American Civil War*: 191.

²⁷⁹ See Map 10: 83. AND Eicher, *The Longest Night*: 508-511.

artillery reserve.²⁸⁰ Lee advanced unto Gettysburg with about 70,200 troops, organised in three larger corps', consisting of infantry divisions and each with an attached artillery battalion. In addition, each corps had an artillery reserve and a separate cavalry division.²⁸¹

When General Lee arrived at Gettysburg on 1 July, he found that the troops of the Union I Corps were positioned to the west, while the IX Corps was positioned to the north of. During the afternoon, the Union positions began to crumble under the Confederate attacks and Lee ordered Lt. Gen. Richard S. Ewell to attempt the capture of Cemetery Hill south of Gettysburg.²⁸² Lee feared that if Meade arrived with his main force, the Union commander would order his troops to entrench Cemetery Hill. However, Ewell failed and as the first day of battle ended, Union troops of the I Corps and IX Corps established a defensive line south of Gettysburg on Cemetery Hill and Culp's Hill.²⁸³

During the night, both armies arrived in Gettysburg at full strength and concentrated their force on the opposite ridges, separated by a shallow valley, south of Gettysburg. On the morning of 2 July, the second day of the battle, the main Confederate force occupied Seminary Ridge and faced the main Union force to the east on Cemetery Ridge. Lee's plan was to manoeuvre the I Corps south down Seminary Ridge before making a sharp turn to the north. From there the Confederates would advance against Meade's left flank, rolling up the Union line of defence on Cemetery Ridge.²⁸⁴

The commanding General James Longstreet of the I Corps reluctantly complied with the order of his superior and it was not until four in the afternoon before the I Corps began to move. That morning Longstreet had pleaded with Lee to disengage and not fight the battle on Meade's terms, but Lee could not be convinced. As Longstreet ordered his divisions against the Union left flank, the division of Maj. Gen. Lafayette McLaw engaged the Union III Corps, which suffered heavy casualties in the Wheatfield and Peach Orchard. McLaw's advance was finally halted by the V Corps of Maj. Gen. George Sykes; Meade had sent Sykes to support the left flank. The Confederate division of Lt. Gen. John Bell Hood failed to make the sharp turn to the north as Lee had planned. Instead Hood moved his division too far to the east and was pinned down by enemy fire at the foot of the Round Tops. Hood decided to press on and ordered his division to advance towards the Union positions at the Devil's Den and Little Round Top.²⁸⁵

²⁸⁰ Ibid: 502-503.

²⁸¹ Ibid: 503.

²⁸² Ibid: 517.

²⁸³ Keegan, *The American Civil War*: 192.

²⁸⁴ See Map 11: 84. AND Keegan, *The American Civil War*: 194.

²⁸⁵ Eicher, *The Longest Night*: 521-526.

Among the rock boulders of Devil's Den, the fight intensified as the Confederate Alabaman and Texan regiments began advancing up the slopes to take Little Round Top. When captured, Little Round Top could become a Confederate artillery position, endangering the Union defensive line along Cemetery Ridge. Meade's chief engineer recognised this danger, but as Meade was being informed, four regiments of the V Corps had already raced up the slopes. On his own initiative, Col. Strong Vincent ordered four regiments to take and hold Little Round Top. Both sides laid down sustained fire until their ammunition pouches were emptied. On the northern slopes, Col. Joshua L. Chamberlain of the 20th Maine regiment, decided that he had no choice but to order his men to fix their bayonets and charge down the hill.²⁸⁶ The 20th Maine captured three hundred dazed Confederate soldiers.²⁸⁷

During the second day at Gettysburg, Lee's soldiers had failed to force a breakthrough on the Union left flank. At the Wheatfield and Peach Orchard, the Union III Corps of Maj. Gen. Daniel E. Sickles suffered heavy casualties, but held the line long enough until reinforcements of the V Corps arrived. While the Confederate brigades captured Devil's Den and held the ground at the base of Big Round Top, their advance was halted.²⁸⁸ More importantly, the Union soldiers withstood the assault on Little Round Top and thereby denied Lee the artillery positions which could have seriously endangered Meade's left flank.²⁸⁹

On the northeast of the Union defensive line, the soldiers defended their entrenched positions against Confederate attacks by Ewell's II Corps, southeast of Gettysburg. During the second day, Meade was forced to send reinforcements to his left flank and as a result, the Union line in the northeast was dangerously thinned out. Yet Meade reasoned that on the third day of battle, Lee would attack the Union centre on Cemetery Ridge, for on the first day he had attacked the Union right and on the second day had attacked the left.²⁹⁰

The morning of 3 July was announced by Union artillery fire on the right flank of the Union defensive line where Union troops attacked trenches they had lost on the first day. Elsewhere no serious manoeuvres or attacks occurred that morning. As Meade had anticipated, Lee decided to attack the Union centre on Cemetery Ridge, led by the I Corps division of Lt. Gen. Pickett. Under the cover of the woods on Seminary Ridge, the Confederate soldiers tensely awaited the order to advance unto the open grasslands up the slopes of Cemetery Ridge.

²⁸⁶ Ibid: 527-529.

²⁸⁷ Keegan, *The American Civil War*: 194-195.

²⁸⁸ Eicher, *The Longest Night*: 535.

²⁸⁹ Keegan, *The American Civil War*: 195.

²⁹⁰ See Map 12: 85. AND Keegan, *The American Civil War*: 195.

Longstreet disagreed with Lee's decision for a frontal assault against the Union centre and suggested to renew the attack on the Union left.²⁹¹

Lee persisted and seven minutes past one, Longstreet's forty artillery batteries bombarded the Union artillery positions for two hours in anticipation of the infantry assault. After two hours, both sides had exchanged artillery fire without inflicting serious damage. Pickett asked Longstreet for permission to advance and the troops began moving, skirmishers in front followed by the line infantry. The Union and Confederate skirmishers exchanged fire until the former withdrew back to their defensive lines. As the Confederate troops charged over the top of the ridge, the Union batteries fired canister shots into the advancing mass, literally obliterating the Confederate soldiers. Under heavy musket fire, the Confederate soldiers charged with fixed bayonets into the Union defenders. During their advance, the Confederates had sustained heavy casualties and were forced to retreat; 'Pickett's Charge' on Cemetery Ridge had failed.²⁹²

Lee's final attack and last chance to turn the tide of battle in his favour had failed and he was forced to retreat from Gettysburg, ending the Confederate campaign on enemy territory.²⁹³ The Confederate soldiers paid a high price for Lee's offensive. Of the 70,274 soldiers engaged in battle, 4,637 were killed, 12,391 were wounded, and 5,846 went missing, more likely the Confederate losses totalled 28,000. Meade had committed 93,534 soldiers to combat, 3,149 were killed, 14,503 were wounded, and 5,161 went missing. In total, 163,808 soldiers engaged in combat at Gettysburg, from which around twenty eight per cent, some 45,687 men were killed, wounded or went missing. The Union had won an important strategic victory at Gettysburg, as the Confederacy could not afford another offensive into northern territory.²⁹⁴

4.2 The infantry tactics of Gettysburg

The Confederate attackers at Gettysburg advanced at double-quick time in close-order formations, nevertheless rapid advancements could not compensate their losses by rifled-musket fire. Moreover, the Confederate soldiers could not sustain the double quick-time for prolonged distances; afterwards their officers reported that their men fatigued and were unable to reach their objectives. While this was sometimes used as an excuse, it was more than often a serious problem which was also reported during the First Battle of Bull Run. Back then it was attributed

²⁹¹ Keegan, *The American Civil War*: 196-197.

²⁹² See Map 13: 86.

²⁹³ Keegan, *The American Civil War*: 197-201.

²⁹⁴ Eicher, *The Longest Night*: 550.

to a lack of discipline and experience, but at Gettysburg it had been the Confederate veterans who struggled.

As McWhiney and Jamieson illustrate, '*Maj. George H. Hildt said the Thirtieth Ohio became 'utterly exhausted' when it crossed a ploughed field at Sharpsburg at 'double quick time'. When the Fifth Alabama came into battle on July 1, 1863, at Gettysburg by advancing 'frequently at a run' across mixed terrain, many of its soldiers fainted from exhaustion.*'²⁹⁵ After the second day of fighting, an officer of Hood's Division reported, '*We were repulsed the first charge, because the men were completely exhausted when they made it, having double-quickened a distance of some 400 yards, under a severe shelling and a scorching.*'²⁹⁶ At Gettysburg, the exhaustion was attributed to the hot and humid weather; in general soldiers were ordered to drop their full campaign gear before a battle or charge.²⁹⁷

The heavy Confederate losses were the result of Lee's plan to attack Meade's strong defensive positions three days in a row, a foreign observer noted: '*The plan of attack seems to have been very simple.*'²⁹⁸ On the third day Meade had expected Lee to attack his centre; therefore, Union troops had not been shifted from the centre to weaker sectors of the line. While Griffith reminds us that the rifled-muskets used by the attackers and defenders still '*fell a long way short of perfection*', technical difficulties of loading the rifled-musket still persisted, misfires and poor aiming further contributed to the ineffectiveness.²⁹⁹ Whether rifled-musket fire was relatively ineffective or not, massed volleys of fire still had a devastating impact on advancing attackers at Gettysburg. Lee had clearly misjudged the outcome of his attacks on the second day and even more on the third day, exemplified by Pickett's charge. In hindsight Lt. Gen. Longstreet was right when he advised his stubborn commander to disengage and draw Meade out of his defensive positions and from the high ground around Gettysburg.

Once the positions around Gettysburg were taken, it was clear that Meade's line of defence had left little gaps for Lee to exploit. Adequate response on the second day of the battle by Meade's commanders closed the last gaps in the line at Peach Orchard and Little Round Top. Lee could not acquire a foothold to pry Meade's troops from their positions; a crucial tactical opportunity to capture high grounds already failed on the first day as the II Corps under the command of Lt. Gen. Ewell had shown no persistence to capture Culp's Hill.³⁰⁰

²⁹⁵ McWhiney and Jamieson, *Attack and Die*: 101.

²⁹⁶ Ibid: 102.

²⁹⁷ Glatthaar, *General Lee's Army*: 277. AND Griffith, *Battle Tactics of the Civil War*: 161-162.

See Eicher and Eicher, *Civil War high commands*: 61. '*An infantryman carried an average of 45 pounds of gear, including his clothes, rifle and bayonet (up to 14 pounds), twenty rounds of ammunition, three day's rations, a canteen of water (4 pounds), a blanket and/or overcoat, a shelter-half or 'pup tent', mess gear and personal items.*'

²⁹⁸ McWhiney and Jamieson, *Attack and Die*: 179.

²⁹⁹ Griffith, *Battle Tactics of the Civil War*: 85.

³⁰⁰ Hsieh, *The Old Army in War and Peace*: 323.

4.3 The Battle of Spotsylvania Courthouse May 8-21, 1864

On 4 July 1863, the day after the Confederate defeat at Gettysburg, Union Maj. Gen. Grant captured Vicksburg. Still, the Confederacy was not defeated during the summer of 1863 and it would take a '*relentless reduction of his [Lee's] fighting numbers*'³⁰¹ by the hand of General-in-Chief Grant to deprive the Southern men of their conviction to fight for belief in the Confederate cause.³⁰² The morale among the veteran troops of the Army of Northern Virginia remained high and General Lee summarised the Confederate predicament as follows: '*If victorious, we have everything to hope for in the future. If defeated, nothing will be left for us to live*'.³⁰³

After Gettysburg, President Lincoln urged Maj. Gen. Meade to pursue and destroy the Army of Northern Virginia, but like McClellan after Antietam, Meade lacked the resolve to do so. During the night of 13 July, Lee withdrew his army across the Potomac River and after Meade allowed Lee to cross the Rappahannock River, he halted his pursuit and positioned the Army of the Potomac along a tributary. It would not be until 3 May 1864 that the Army of the Potomac would cross the Rapidan River and embark on the Overland campaign.³⁰⁴

During the spring of 1864, President Lincoln appointed Ulysses S. Grant General-in-Chief. While Meade remained the acting commander, Grant directed the strategic objectives and attached his headquarters to the Army of the Potomac. In addition, Grant orchestrated the operations of the other Union armies, appointing Maj. Gen. William T. Sherman commander of the armies in the west and Maj. Gen. Philip Sheridan commander of the cavalry in the eastern theatre.³⁰⁵

Grant's strategic plan did not revolve solely around the capture of Richmond; he planned coordinated advances on different fronts to prevent the Confederate armies from reinforcing each other. Meade's objective was to engage Lee's army. Sherman's objective was to engage Johnston's army in the west and to move far into the enemy interior to tear up the Confederate hinterland and deprive them of their taste for fighting.³⁰⁶ The Confederacy had lost northern Virginia as a strategic buffer, and after Vicksburg, its operational lines were severed by Union campaigns in the Confederate interior.³⁰⁷

The Union and Confederate armies had wintered only a few miles apart from each other on opposite sides of the Rapidan; Grant had prepared to cross the river and position his army against Lee's right flank. Grant did not underestimate his direct adversary; Lee would not expose

³⁰¹ Keegan, *The American Civil War*: 237.

³⁰² Ibid: 237-238.

³⁰³ McPherson, *Battle Cry of Freedom*: 719.

³⁰⁴ Keegan, *The American Civil War*: 237-239.

³⁰⁵ McPherson, *Battle Cry of Freedom*: 718.

³⁰⁶ Ibid: 722.

³⁰⁷ Keegan, *The American Civil War*: 238.

his army in an open field to Grant's superior numbers. Lee decided not to contest the river crossing; instead he planned to hit the Army of the Potomac in the flank as they marched through the heavily wooded Wilderness where their superiority in numbers (115,000 against 64,000) was less an advantage than in the open.³⁰⁸

On 5 May, the Confederate II Corps approached from the west and ran into the Union V Corps moving south away from the Rapidan. However, Lee had been awaiting the arrival of Longstreet's I Corps and was therefore forced to engage the 70,000 Union troops with fewer than 40,000 Confederates. Lee knew that the dense undergrowth of the Wilderness would make his lesser numbers more mobile while the Union masses would struggle. The Wilderness turned into a vicious fight; the thick smoke lingered in the woods hindering the visibility. The fight among the trees was further worsened by artillery shells, which had set the undergrowth on fire. The fighting concentrated around two intersections, which Grant needed to hold in order to continue on his march south.³⁰⁹

The limited visibility of the terrain caused the loss of one of Lee's best generals, James Longstreet. During the battle, Longstreet was wounded by friendly fire. Ironically in May 1863, during the Battle of Chancellorsville, Lt. Gen. Stonewall Jackson was fatally wounded by friendly fire in the same woodlands.³¹⁰ After two days, the fighting died down and both sides conceded to a temporary stalemate. Of the some 100,000 Union soldiers engaged in the battle, 2,246 were killed, 12,037 were wounded and 3,383 went missing. On the Confederate side, out of the 60,000 engaged, the estimated losses were between 7,750 and 11,400.³¹¹ These high casualty rates compelled previous Union commanders on the offensive to retreat behind the nearest river. However, Grant had promised Lincoln that: '*whatever happens, there will be no turning back.*'³¹² For the first time during a campaign in Virginia, the Army of the Potomac would stay on the offensive after its initial battle.³¹³

Grant had hoped to avoid fighting in the woodlands and lure Lee to the open field. Lee, however, decided to make his stand from behind his fortified positions in the Wilderness and, after three days of relentless fighting, Grant ordered to disengage and manoeuvre around Lee's fortified positions.³¹⁴ On both sides the battle had lacked direction and coordination. Without a clear strategy behind their attacks, the fighting remained indecisive, which was largely dictated by

³⁰⁸ McPherson, *Battle Cry of Freedom*: 724.

³⁰⁹ Ibid: 725.

³¹⁰ Keegan, *The American Civil War*: 239.

³¹¹ Eicher, *The Longest Night*: 671.

³¹² McPherson, *Battle Cry of Freedom*: 726.

³¹³ Ibid: 728.

³¹⁴ Keegan, *The American Civil War*: 240.

the physical limitations of fighting in the dense woodlands. Lee had halted the Union advance through the woods of the Wilderness, but he had not stopped the Overland campaign.³¹⁵

On 7 May, both armies exchanged random fire and Grant prepared plans to march around the Confederate right and take the crossroads near the town of Spotsylvania, about twelve miles (19 kilometres) to the south. If his plan succeeded, Grant would position himself between Lee and Richmond, forcing Lee to attack him or retreat.³¹⁶ During the night of 7 May, the Army of the Potomac marched towards their new objective. While the Union soldiers were certain to face more savage fighting, Grant's tenacity was more encouraging than the lethargic attitude of their former commanders.³¹⁷

Grant had ordered Maj. Gen. John Sedgwick of the VI Corps and Maj. Gen. Gouverneur K. Warren of the V Corps to march toward the crossroads of the Spotsylvania Courthouse. Meanwhile the crossroads were secured by Union cavalry awaiting the reinforcements, but in the early morning of 8 May, the Union V Corps collided with the Confederate I Corps of Lt. Gen. Anderson. He had spurred Anderson to race towards the crossroads as Lee had recognised their tactical importance.³¹⁸

Facing north, the Confederate line spread out over a mile from west to east, northwest of Spotsylvania. The Confederate II Corps had reinforced the right flank and during the night the Confederates fortified their positions. Constructing two lines of entrenchments but lacking spades, the Confederates loosened the earth with their hands, bayonets and cups. The line was further reinforced with abatis; the branches became a crude form of barbed wire.³¹⁹ The I Corps was positioned along Laurel Hill. The II Corps held the Confederate right, fortified in a position in the shape of a Mule Shoe, a rounded and wooded elevation facing all surrounding directions. Furthermore, the III Corps under Lt. Gen. Jubal Early held the Confederate right line of defence stretching from the Mule Shoe in the north to the southwest in front of the crossroads of Spotsylvania.

All in all, the entire Confederate line of defence was shaped in a reversed V, pointing to the northwest. On 9 May, the Union forces amassed near the Confederate lines. Warren faced the Confederate left and Union Maj. Gen. Winfield S. Hancock positioned himself to turn the left flank. Burnside approached from the northeast, advancing towards the Confederate right secured by Early. Meanwhile, Lee had sent skirmishing parties to harass the approaching Union troops. A Confederate sharpshooter aimed and shot the Union General Sedgwick below the left

³¹⁵ Eicher, *The Longest Night*: 671.

³¹⁶ McPherson, *Battle Cry of Freedom*: 726.

³¹⁷ Keegan, *The American Civil War*: 241.

³¹⁸ See Map 14: 87. AND Eicher, *The Longest Night*: 671-672.

³¹⁹ Glatthaar, *General Lee's Army*: 368.

eye over a distance of one-thousand yards (914 metres) and moments earlier Sedwick's worried staff officers had urged him to take cover, to which he had replied, '*they couldn't hit an elephant at this distance.*'³²⁰

During the afternoon of 9 May, Hancock moved towards the exposed left of Lee, but as darkness fell, the attack was called off. The danger of the exposed left had been recognised by Lee, who had ordered the division under Maj. Gen. Henry Heth, to leave Early's III Corps and position itself on the Confederate left flank.³²¹ On 10 May, Grant planned a frontal assault along the Confederate defensive line. Lee positioned his artillery along his line of defence and as the amassed Union troops charged towards the Confederate lines, their formations were shattered by artillery fire. Maj. Gen. Wright assigned a special assault force under the command of Col. Emory Upton to break through the fortified lines on the Mule Shoe.³²²

Upton, a '*young and intensely professional West Pointer*',³²³ picked twelve regiments, formed into four lines and he instructed his men to fix their bayonets and to hold their fire until they were on top of the enemy trenches.³²⁴ Charging across two-hundred yards (183 metres) of open ground and moving through the abatis, they breached the first line of entrenchments, immediately spreading left and right to widen the gap. The second assault line rushed past the first, towards the second line of entrenchments some hundred yards (91 metres) further. The third and fourth assault lines rounded up thousands of stunned Confederate prisoners.³²⁵

Upton's assault force crossed the defensive lines and penetrated into the heart of the enemy position. The Confederate line on the Mule Shoe was wide open for Wright's supporting division to pour in and carry the momentum of Upton's dashing assault. Sadly they arrived too late as Lee had time to aim his artillery at the approaching divisions, which were shattered in their advance. While Upton's tactics had proven to be successful, the coordination with the supporting division failed.³²⁶ The Confederate counterattack that followed, forced Upton's men to fall back and, by nightfall, Upton had lost a quarter of his men. Nevertheless, he was awarded a battlefield promotion and proposed that Grant apply the same tactics on a corps, backed by follow-up attacks all along the line.³²⁷

³²⁰ Eicher, *The Longest Night*: 675.

³²¹ See Map 15: 87.

³²² Eicher, *The Longest Night*: 673-676.

³²³ McPherson, *Battle Cry of Freedom*: 729.

³²⁴ Keegan, *The American Civil War*: 243.

³²⁵ McPherson, *Battle Cry of Freedom*: 729.

³²⁶ Keegan, *The American Civil War*: 243.

³²⁷ See Map 16: 88. AND McPherson, *Battle Cry of Freedom*: 729.

On 11 May, the fifth day of battle, Grant made plans to launch another massed frontal assault against the Mule Shoe the next morning.³²⁸ However, Lee expected another flank attack the next day and had withdrawn his artillery in order to swiftly meet such a threat.³²⁹ During the night, heavy rains ceased and on the morning of 12 May, the battlefield was cloaked in fog. The Confederate soldiers huddled in their entrenchments on the Mule Shoe and could not spot enemy movements. Instead they heard the approaching Union mass and requested the return of the artillery to their position. It was too late; Hancock's II Corps and Wright's VI Corps charged into the Confederate line as attackers and defenders amassed in the entrenchments on the Mule Shoe.³³⁰

Both sides were caught in savage fighting; once fired, the rifles and muskets became clubs and spears. The concentrated mass of Union soldiers became uncontrollable and a counterattack drove them back to the edge of the Confederate lines. The firestorm and subsequent melee fight on the Mule Shoe raged for eighteen hours, well into the evening. Union soldiers settled in the outer line of defence of what was afterwards known as the Bloody Angle. During the fight on the Mule Shoe, additional Union attacks on the Confederate left and right had been repelled.³³¹

From 5 May through 12 May, the Army of the Potomac lost some 32,000 men as they were either killed, wounded, or missing; a total greater than for all Union armies combined in any previous week of the war. Lee's casualties were proportionately as high with about 18,000 men, including the devastating loss of twenty of fifty-seven corps, division and brigade commanders. Yet both sides were still able to make up for about half of their losses by calling in reinforcements.³³²

On May 13, the ferocious fighting ceased as both sides recuperated. From 14 May to 17 May both sides engaged in sporadic fighting and exchanged fire from their entrenchments. Lee extended the Confederate line of his III Corps further down south past Spotsylvania Courthouse.³³³ Grant shifted his front clockwise in order to force Lee from of his entrenched positions on Laurel Hill. The Confederate line now stretched from behind the abandoned trenches and the mass grave of Bloody Angle in the northeast down to the southeast. Grant had ordered Hancock to the rear and Wright proposed to attack the Confederate left on 18 May at

³²⁸ Eicher, *The Longest Night*: 667.

³²⁹ McPherson, *Battle Cry of Freedom*: 729.

³³⁰ Eicher, *The Longest Night*: 678.

³³¹ See Map 17: 88. AND McPherson, *Battle Cry of Freedom*: 729-730.

³³² McPherson, *Battle Cry of Freedom*: 732.

³³³ See Map 18: 89.

dawn.³³⁴ However, Wright was repulsed and during the night of 19 May, Grant made plans to send Hancock further down south to end the stalemate at Spotsylvania Courthouse.³³⁵

As Hancock moved south, Lee was forced to respond and the campaign entered a new phase. Of the 110,000 Union soldiers engaged at Spotsylvania, 17,500 casualties were reported. Lee had engaged 50,000 men and lost an unrecorded number, possibly around 10,000 men.³³⁶ Grant had proven his determination to fight Lee to the bitter end. Grant had not been careless with the lives of his men, but he certainly had not spared them either.³³⁷

The following months, Lee could not be tempted to attack Grant; instead Lee retreated to Petersburg where from June 1864 to March 1865, both adversaries were caught in a siege of First World War proportions. Meanwhile the Confederate hinterland had been gradually hollowed out by the Union operations of Generals William T. Sherman and Philip Sheridan, until Lee finally surrendered to Grant on April 9 1865 at the Appomattox Courthouse.³³⁸

4.4 The infantry tactics of Spotsylvania Courthouse

The battle at Spotsylvania Courthouse confirms Hagerman's belief in the superiority of the tactical defensive during the Civil War. As Hagerman argues, the superiority of the tactical defensive was proven by Grant's inability in the Wilderness as well as at Spotsylvania to overcome Lee's fortified positions without suffering heavy losses. While Lee's fortified positions ultimately failed to keep Grant's army in position, it was only because Grant had relentlessly ordered his men in massed frontal assaults against fortified positions.³³⁹

The assumption that Grant neglected offensive tactical manoeuvres to overcome Lee's fortified positions is refuted by Hsieh, who points out that Grant '*throughout the [Overland] campaign constantly attempted to turn Lee's army*'.³⁴⁰ Therefore it cannot be asserted that Grant only intended to overcome the Lee's positions by blunt force. Still, Hsieh does agree with Hagerman that, '*Grant did not have a systematic tactical outlook but rather acted according to an appraisal of each situation as it arose, blending an erratic mixture of common sense about the new conditions of warfare with predisposition to traditional tactics*'.³⁴¹

³³⁴ See Map 19: 89.

³³⁵ Eicher, *The Longest Night*: 678-679.

³³⁶ Ibid: 680.

³³⁷ McPherson, *Battle Cry of Freedom*: 732.

³³⁸ Keegan, *The American Civil War*: 243-244.

³³⁹ Hagerman, *The American Civil War and the Origins of Modern Warfare*: 244-245.

³⁴⁰ Hsieh, *The Old Army in War and Peace*: 313-314.

³⁴¹ Hagerman, *The American Civil War and the Origins of Modern Warfare*: 264.

During the Overland campaign, the Civil War entered the final phase of tactical offensive warfare. Still, on a larger scale, clear tactical developments had failed to appear on the battlefield; Grant had never expressed an outspoken interest in the use of novel infantry tactics. In his memoirs, Grant described Hardee's tactics as '*nothing more than common sense and the progress of the age applied to Scott's system. The commands were abbreviated and the movement expedited ... I do not believe that officers of the regiment ever discovered that I had never studied the tactics that I used*'.³⁴² Grant's disdain for Hardee's tactical manual, in favour of a more general strategic overview, cannot be held against him in his role of General-in-Chief. Nevertheless, if he had shown more interest in the assault tactics developed by lower ranking officers closer to the heat of the battle, most notably Col. Emory Upton at Spotsylvania Courthouse, Grant may have regretted his neglect of more refined assault tactics.³⁴³

During the Mexican-American War, the U.S. Army had successfully employed such assault tactics. At the Battle of Molino del Rey, an attack column of no more than five-hundred soldiers defeated the Mexican defenders as well as in the Battle of Chapultepec, with two small attack columns each of two-hundred fifty soldiers.³⁴⁴ Grant was present during both battles and described the assault tactics in his memoirs: '*Two assaulting columns, two hundred and fifty men each, composed of volunteers for the occasion, were formed. They were commanded by Captains McKinzie and Casey respectively. The assault was successful, but bloody*'.³⁴⁵ It is therefore surprising that Grant did not follow through on Upton's example, still ordering a massed frontal assault the next day.

³⁴² Grant, Ulysses S. *Personal Memoires of U.S. Grant*. New York: Charles L. Webster & Company, 1885: 129.

³⁴³ Hsieh, *The Old Army in War and Peace*: 322-323.

³⁴⁴ McWhiney and Jamieson, *Attack and Die*: 34.

³⁴⁵ Grant, *Personal Memoires of U.S. Grant*: 79.

Chapter 5 The academic opinions concluded

In their works, Edward Hagerman, Grady McWhiney and Perry D. Jamieson claim that the existing tactical doctrine was challenged during the Civil War by the arrival of the rifled-musket. As a consequence of the increased range and fire-rate, the prevalence of the post-Napoleonic tactical offensive shifted towards the tactical defensive. This doctrinal shift was expressed over the course of the war by an increased use of field fortifications. On the other hand, Paddy Griffith and Wayne Hsieh do not perceive the arrival of the rifled-musket of such great influence on the tactical doctrine and both dispute the claim that the Civil War saw an unprecedented use of field fortifications.

Griffith refutes the importance of the rifled-musket as a tactical ‘game changer’ altogether and argues that the use of field fortifications was not born out of tactical necessity. Military theorists had needlessly propagated the use of field fortifications and the false sense of protection had a lethargic effect on the soldiers and officers. Otherwise, after the initial struggles of inexperience, Civil War armies would have demonstrated the same offensive tactics witnessed in the Napoleonic Wars and Mexican-American War.

While Hsieh acknowledges the increased accuracy of the rifled-musket, he regards factors such as the level of proficiency and the morale of an army as far more decisive when determining whether offensive tactics succeeded or failed.³⁴⁶ During the Civil War, neither side had a significant tactical advantage and both armies gained equal rates of proficiency. Moreover, both Union and Confederate senior officers shared the same training and combat experience, which made individual ‘military expertise’ even more important: *‘In the crucial eastern theatre, the average regiment in the Army of the Potomac fought as hard and as well as its Confederate regiments benefited from far superior brigade, division, corps, and army commanders’*.³⁴⁷

According to Hagerman, increased firepower of the rifled-musket affected the infantry doctrine by the increased use of field fortifications on the offensive as well as defensive. Military theorist Mahan had actively advocated the use of entrenchments by citizen-soldiers and that assault tactics were best left to regular soldiers. Therefore, during the Civil War, the mostly irregular troops were ordered into entrenchments by their commanders. The troops themselves actively pursued such defensive tactics because they experienced the increased firepower of the rifled-musket.³⁴⁸

³⁴⁶ Hsieh, *The Old Army in War and Peace*: 280-281.

³⁴⁷ Ibid: 244.

³⁴⁸ Hagerman, *The American Civil War and the Origins of Modern Warfare*: xii and xv.

Jamieson and McWhiney do not perceive such an early recognition of the tactical defensive by the American military. In the Mexican-American War, officers witnessed the success of assault tactics against Mexican field fortifications.³⁴⁹ Furthermore, until the Civil War, tactical theories had stressed that field fortifications could not withstand any frontal assault carried by 'good' troops.³⁵⁰ The officers in the Civil War, who had not witnessed the success of the tactical offensive in Mexico, were therefore the first to recognise the devastating effect of the rifled-musket fired from entrenchments.³⁵¹

The influence of the rifled-musket on the American battlefields must not be underestimated, but whether the rifled-musket was utilised to its full extent, thereby forcing the Union and Confederate soldiers into entrenchments, remains questionable. Joseph T. Glatthaar remarks that, based on Griffith's own data,³⁵² the average range of fire in Civil War battles was 127 yards (116 metres).³⁵³ It is important to note that this includes battles fought in heavily wooded areas, where ranges of fire would have been much shorter. Therefore Glatthaar concludes that the average range of fire on more open battlefields was probably well above 127 yards.

If we recall, the accurate range of the smoothbore-musket was only around fifty or sixty yards (45 or 54 metres), while the rifled-musket, which had an effective range of between three and four hundred yards (247 and 365 metres), could kill from over one thousand yards³⁵⁴ (914 metres). So it is safe to assume that, over time, Civil War soldiers attained a level of proficiency which allowed them to deliver accurate fire over greater distances not seen in previous conflicts.

The increased firepower in terms of range and rate of fire had a minimal effect on the more complex assault tactics prescribed by the existing infantry doctrine. While such tactics were proven to be successful, they were tactical experiments and only executed by soldiers and officers on the lower levels of command. Assault tactics, as demonstrated by Emory Upton in the battle of Spotsylvania, were never brought into practice on a larger scale. The causes can be sought in the initial inability of the irregular troops to successfully execute such tactics as officers refrained from using them. In addition, the existing doctrine was never officially reviewed, so useful adjustments were not imposed from the top down.

The spontaneous adjustments to assault tactics by soldiers themselves were defined by their limitations and common sense. A good example of this is the Battle of Fort Donelson (11-

³⁴⁹ McWhiney and Jamieson, *Attack and Die*: 69.

³⁵⁰ Ibid: 72-73.

³⁵¹ Ibid: 144.

³⁵² Griffith, *Battle Tactics of the Civil War*: 147.

³⁵³ Glatthaar IN McPherson, and Cooper, *Writing the Civil War*: 69.

³⁵⁴ The staff officers of Union commander Sedgwick would certainly agree.

16 February, 1862). The brigade of Union Col. Morgan L. Smith, consisting of two Zouave regiments, advanced in a series of successive rushes, also known as the 'Indian rush'. The reason for these successive rushes is rather interesting as these men were supposed to be in peak physical condition. After all, this is one of the virtues of the Zouave regiments. However, they fatigued during the assault and, in order to catch their breath, they advanced in successive rushes while sustaining their rate of fire.

The Union Brig. Gen. Lew Wallace remarked, '*indeed, purpose with them answered all the ends of alignment elbow to elbow...Now on the ground, creeping when the fire was hottest, running when it slackened, they gained ground with astonishing rapidity, and at the same time maintained a fire that was like a sparkling of the earth. For the most part the bullets aimed at them passed over their heads and took effect in the ranks behind them.*'³⁵⁵

³⁵⁵ McWhiney and Jamieson, 1982: 102.

What was the theoretical knowledge of warfare of the American commanding officer, how did he apply this knowledge on the battlefield and to what extent did he adjust these ideas during the course of the American Civil War?

Conclusion

The conceptual component, the tactical doctrine of the Union and Confederate infantry during the American Civil War was similar. Since the early-nineteenth century, the American infantry doctrine was based on French tactical thought. After the War of 1812 (1812 – 1815), the Board of Tactics, presided by Winfield Scott, developed a standardised infantry doctrine, based on the 1791 French manual for infantry tactics. Scott made adjustments to the French manual by adopting the two-rank line formation and increasing the movement rates. Between 1815 and 1825, the American regulations prescribed a significantly higher movement rate compared to the French professional standard. However, Scott revised his regulations in 1835, returning to lower movement rates in order to conform to the 1831 French manual for infantry tactics.³⁵⁶ Still, the interval of paces between files of the skirmish- and maximum order was further increased with the 1835 regulations.³⁵⁷

Before returning to the more conservative French standards of 1831, the Board of Tactics increasingly explored the possibilities of swifter and more open-order infantry tactics. It remains, however, speculative why Scott and the Board at first deviated from the otherwise strictly followed French professional standard. Whether the reasoning behind Scott's adjustments was based on perceived differences between the (more broken) American and European terrain, or rather finds its origins in the existing American military tradition is unclear. Fact remains that the American infantry doctrine emphasised an increased movement rate and more open order long before it would be dictated by the arrival of the rifled-musket.

The development of a tactical doctrine by military and political reformers was part of a grander scheme to build a small professional U.S. Army, an expansible army maintained by a core of regular soldiers and officers in times of peace. However, the creation of a strong federal institution was met with political and public resentment, and while irregulars (militiamen and volunteers) remained an intrinsic part of the American military, the reformers persisted. A uniform organisational structure and core of regulars was established, armed with standardised weaponry and trained in the latest tactical fashion.

During the decades of reform, after the War of 1812, a generation of regular officers was trained at the USMA; these officers would serve in the Mexican-American War (1846 – 1848)

³⁵⁶ Table 1: 20.

³⁵⁷ Table 2: 22.

and, over the course of time, form the senior command of the Union and Confederate military. Prior to the Civil War, the war against Mexico would be the only significant combat experience of these regular officers in conventional warfare. Ultimately their training and combat experience in Mexico undoubtedly influenced the warfare in the American Civil War.

The theoretical knowledge of these officers on warfare was both steeped in the virtues of the 'tactical offensive' as well as the 'tactical defensive'. The virtues of the tactical offensive such as manoeuvrability, concentration of force and the belief in decisive victory, rose to prominence in early nineteenth century Europe as part of the Napoleonic legacy transferred to the United States. In the same period, American intellectual attention increased for the tactical defensive. The USMA, modelled after example of the *École Polytechnique*, emphasised civil and military engineering. At West Point, the military elite was introduced to the leading ideas of the Corps of Engineers and most notably of the most prominent early nineteenth century American military theorist, Professor Dennis Hart Mahan (1802–1871).

Already before the arrival of the rifled-musket, Mahan advocated the relative advantage of irregular troops in the tactical defensive. The employment of field fortifications would address the shortcomings of irregular troops when pitched against regular troops. Moreover, the tactical defensive was more preferable because of the offensive limitations of irregular troops, most notably in the massed frontal assault. Still, Mahan did not disregard the tactical offensive as long as tactical manoeuvres such as the massed frontal assault were executed by regular troops. The theoretical ambivalence expressed by Mahan cannot be held against him; the American military still resided in a twilight-zone between the models of a mostly regular army and a mostly irregular army. Mahan had attempted to formulate an infantry doctrine, which could accommodate both army models.

The Mexican-American War witnessed the success of the regular army and, while President Polk had intended to let the volunteers play a large military role, it was the regular army that triumphed in Mexico. The regular soldiers and officers had mastered the early nineteenth century tactical offensive and defeated a numerical superior enemy in hostile territory on the tactical defensive. After the Mexican-American War, the existing tactical doctrine was revised under the influence of technological advancements in weaponry, the arrival of the rifled-musket and widespread availability. This increased the tactical opportunities of long-range fire.

The French combat experiences with the rifled-musket in colonial Africa led to the prominence of light infantry tactics. In 1855, the American officer William J. Hardee published his work *Rifle and light infantry tactics*, based on the tactical manual of the *chasseurs à pied*. Hardee's manual was adopted by the Board as the official light infantry doctrine (and subsequently by the

Union and Confederate military). Moreover, the Board intended to include the line infantry in the application of Hardee's manual, although the distinction between light and line infantry remained.

Light infantry tactics were characterised by open order formations, which demanded a greater individual discipline of the soldier and in turn demanded a greater attention of the commanding officer to maintain control on the overall cohesion and thereby the combat effectiveness. The successful execution of light as well as line infantry tactics required regular drill training coupled with combat experience; the nineteenth-century infantry tactics adopted by the American Board of Tactics were therefore most appropriate for the professional regular army.

At the outbreak of the Civil War, irregular troops in the Union and Confederate armies outnumbered the core of regular troops. The professional knowledge and experience dissipated in the irregular masses on the lower levels of command, but persisted in the higher levels. In the first battle of Bull Run on 21 July 1861, the Union and Confederate commanders not only struggled with their adversaries, but also struggled to maintain order and control of their own troops.

The Union commander at Bull Run, Brig. Gen. McDowell devised his battle plan around a single flanking manoeuvre against the Confederate left. Not necessarily unfeasible and primarily centred on 'Jominian' principles, McDowell's plan was to concentrate his Union forces at the weakest point of the fortified Confederate line, which was the exposed left flank. In order for his plan to succeed, the mostly inexperienced Union soldiers would have to perform some considerable tactical manoeuvres, but that did not stop McDowell from taking them to battle.

At Bull Run, the Confederates responded quickly to the Union flanking manoeuvre and repositioned themselves on Matthews Hill. After their withdrawal from Matthews Hill, Confederate General Joseph E. Johnston predicted that the battle would be decided on Henry House Hill. While both sides suffered from the lack of regular soldiers and officers, the irregular troops were more manageable on the tactical defensive. The Confederate commanders at Bull Run were not forced to perform large tactical manoeuvres, while McDowell's strategic objective was to take quick and decisive action against the Rebels. This made tactical manoeuvring inevitable.

At the Battle of Antietam, Confederate General Robert E. Lee was forced on the tactical defensive and faced a numerical superior force, but did not order to build field fortifications. Again the Union commander, Maj. Gen. George B. McClellan devised a battle plan around two fronts; Union forces would stage an attack against the Confederate right, while McClellan's main

force would engage the Confederate centre and left. Compared to Bull Run, both Union and Confederate soldiers endured heavy losses, but with few exceptions, the soldiers fought relentlessly and were no longer as easily panicked. The Union troops penetrated the Confederate defensive positions around Sharpsburg, but their commander failed to coordinate the attack waves accordingly, leaving them behind enemy lines without support. This major tactical flaw in the execution of McClellan's battle plan was fully exploited by Lee, who awaited the arrival of his reinforcements from Harpers Ferry and defeated the Union forces one by one in counterattacks.

During the battle of Gettysburg, the tactical importance of occupying crucial high grounds went hand in hand with the ability of Union Maj. Gen. George G. Meade to manoeuvre his forces around to reinforce sectors under threat of Confederate attacks. The battle was not lost on the first day, but as Meade closed the gaps in his defensive line on the second day, and he correctly predicted Lee's plan of attack on the third day, a Confederate defeat was almost certain. Lee had failed to secure crucial high grounds on the first and second day and was now left with facing a strong reinforced defensive line. While Lee could have decided to withdraw, his strategic objective was to deliver a decisive victory on Northern territory, which forced him to order a final massed frontal assault.

After Gettysburg, the Union commander Ulysses S. Grant was determined to capture the Confederate capital of Richmond and engage Lee's forces wherever he could. Lee's objective was to hold off the Army of the Potomac as long as possible and therefore he increasingly relied on strong fortified positions. After the inconclusive battle in the Wilderness, Grant intended to manoeuvre around Lee to position himself between Lee's forces and the Confederate capital. However, Lee perceived Grant's plan and managed to position himself first near the Spotsylvania crossroads. Lee occupied strong defensive positions and while Grant at first attempted to manoeuvre around, he decided that a massed frontal assault was necessary to destroy Lee's positions and force him out of the woods.

Over the course of the four battles there is indeed an increased use of field fortifications, which were primarily of tactical importance during the battles of Gettysburg and Spotsylvania. Still, this does not justify the claim of a conscious shift towards the tactical defensive in response to the increased firepower of the rifled-musket.

Whether the tactical defensive was superior to the tactical offensive remains a different question. In all four battles, the attackers hardly adjusted their offensive tactics, despite the increased use of field fortifications by the defenders at Gettysburg and Spotsylvania. Lee as well as Grant still ordered massed frontal assaults against strong defensive positions. At Antietam,

Lee was strategically on the offensive and tactically on the defensive, but did not order the construction of field fortifications at Antietam. However, Lee's troops did utilise the artificial cover provided by the terrain, such as stonewalls or a sunken road. So in general, if the terrain would not provide sufficient artificial cover, Civil War commanders felt compelled to employ field fortifications on the tactical defensive.

Besides protection against the increased firepower, artificial cover had a far more valuable purpose for the Civil War commander as they could occupy more ground with fewer men, effectively denying the enemy room for manoeuvre and access to crucial high grounds. Meade at Gettysburg and Lee at Spotsylvania employed field fortifications which prohibited their adversaries from tactical manoeuvres, forcing them to withdraw or ordering massed frontal assaults. Still, Civil War commanders could not solely rely on their defensive positions. The early nineteenth century tactical virtues of manoeuvres and concentration of force had persevered, so defenders had to maintain a level of mobility to reinforce or counterattack along the defensive line.

The massed frontal assaults during the American Civil War were characterised by a high loss of life on the side of the attacker. In this regard, field fortifications were tactically superior to the massed frontal assault. This tactical advantage could have been mitigated if attacking commanders would not have neglected the use of more complex assault tactics (like successive advances by small attack columns), which were already advocated before the Civil War by European and American military theorists. The superiority of the tactical defensive was therefore rather superficial as small attack columns had proven to be successful against fortified defensive positions. This was despite the increased firepower of the rifled-musket.

The American Civil War was, in terms of infantry tactics, a transitional war where offensive tactics witnessed in the Napoleonic Wars clashed with the increased use of field fortifications advocated by American military theorists, notably Mahan and Halleck in the 1830s and 1840s. The firepower of the rifled-musket was not yet significant enough to force both attackers and defenders in prolonged trench warfare.

The elements most decisive for the *modus operandi* of the American officers on the battlefield were their strategic objectives and the capability of their troops to achieve these objectives on the tactical level. The commanding officers on both sides showed a firm belief in the decisive battle to achieve their strategic objectives. This belief had compelled McDowell at Bull Run, Lee at Antietam and Gettysburg and Grant at Spotsylvania to engage and set aside any possible tactical disadvantages, such as an inexperienced irregular army, inferior numbers or

strong defensive positions. At Antietam, McClellan disengaged from battle, convinced that he could not achieve a decisive victory against Lee's forces.

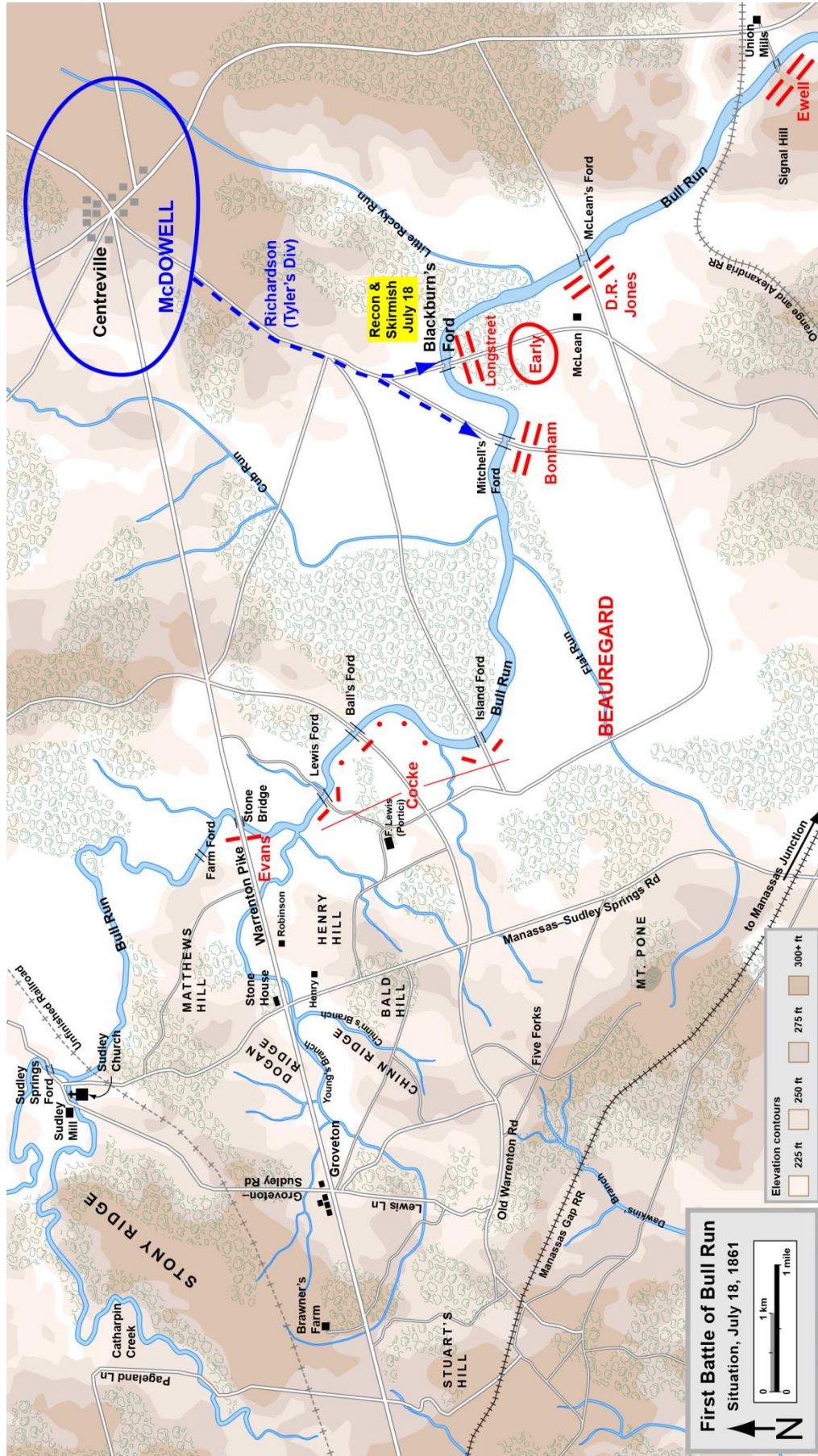
The tactical offensive in the Civil War was defined by early nineteenth century infantry tactics and the successful execution of these tactics in the Mexican-American War. This, combined with the firm belief of Civil War commanders in decisive battles. Therefore senior commanders ordered the massed frontal assault when tactical manoeuvres had failed to force a breakthrough, whether theory and experience taught them or not. The tactical defensive was defined by the advocacy of field fortifications prior to the Civil War and the proven tactical value of field fortifications to limit the manoeuvrability of the attacker during the Civil War.

Still, the American Civil War challenged the unrestrained use of massed frontal assaults, because of the increased firepower of the rifled musket and the increased use of the shovel. Edward Hagerman would characterise the Civil War as the first modern war, and while this could be considered a bold statement, based on the findings of this thesis I must agree. In all four battles, reviewed in this thesis, the tactical superiority of the defensive position is clear. Massed frontal assaults or grand flanking manoeuvres were no longer guarantees for victory. While the defenders were still forced to maintain a certain level of mobility; troop movements were more easily intercepted, undoubtedly in part by the increased firepower of the rifled musket.

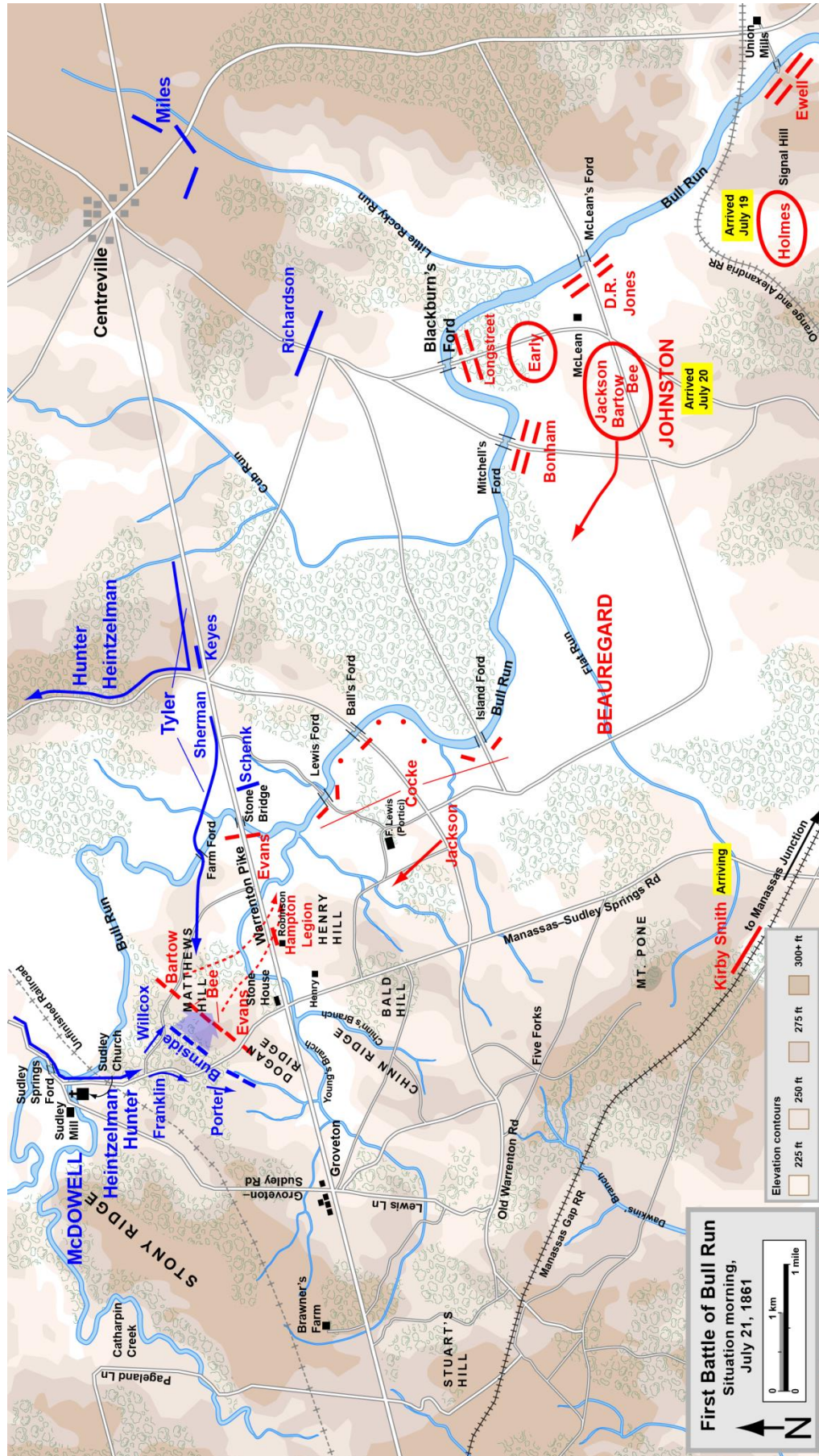
Towards the end of the Civil War it was no longer self-evident, as Grant demonstrated at Spotsylvania Courthouse, to order a massed frontal assault against a smaller force in a fortified defensive position, before exploring other tactical solutions such as more complex assault tactics or evading the static fortified positions. However, if the defending commanders reacted accordingly by extending their fortified line of defence, as Meade did at Gettysburg and Lee did at Spotsylvania, the attacking commanders were forced to order a massed frontal assault or settle for an exchange of fire from trenches.

Appendix

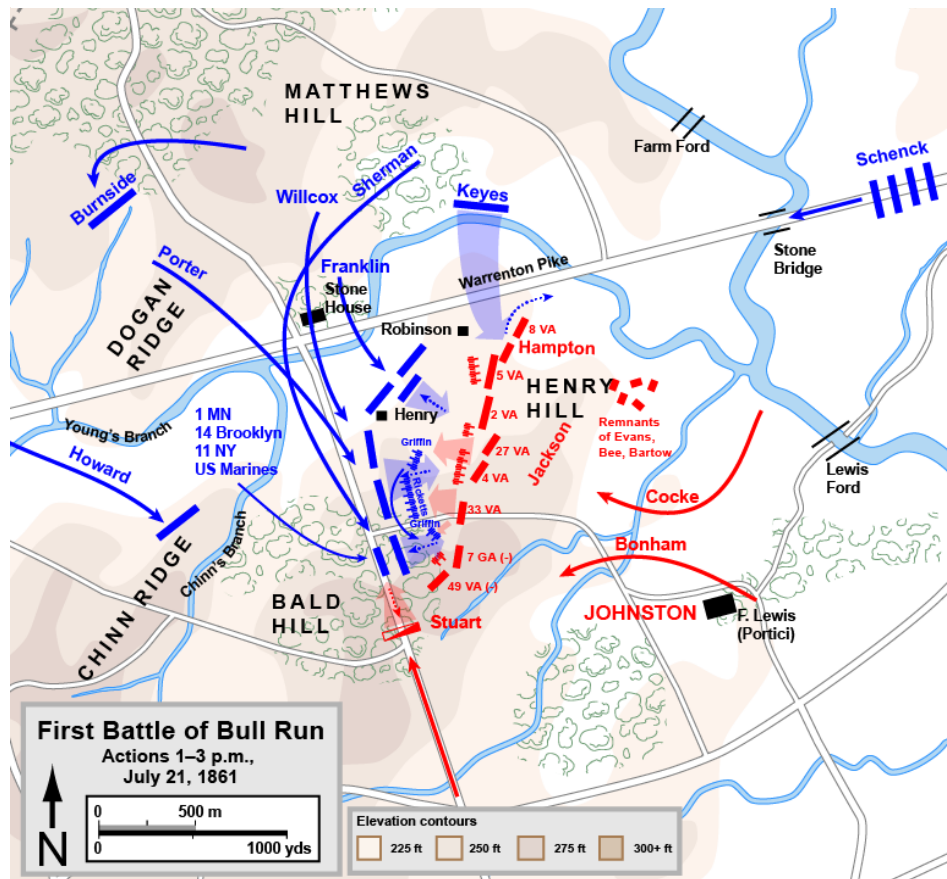
Map 1: First Battle of Bull Run – Situation July 18, 1861.



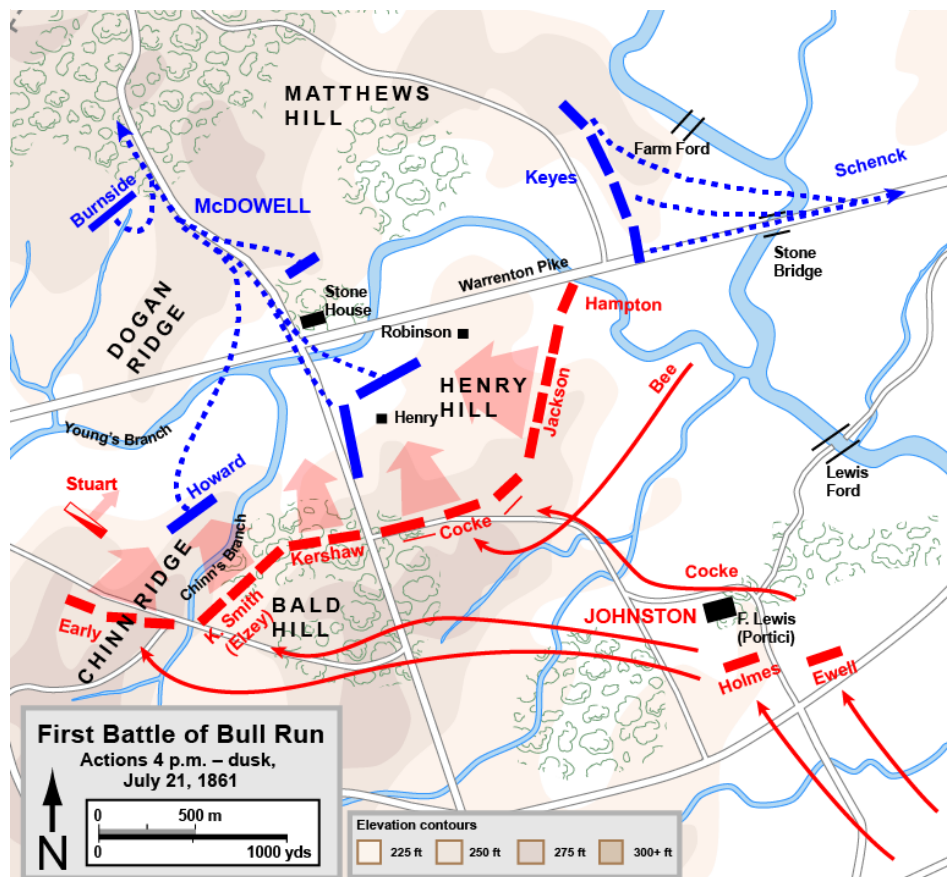
Map 2: First Battle of Bull Run – Situation morning July 21, 1861.



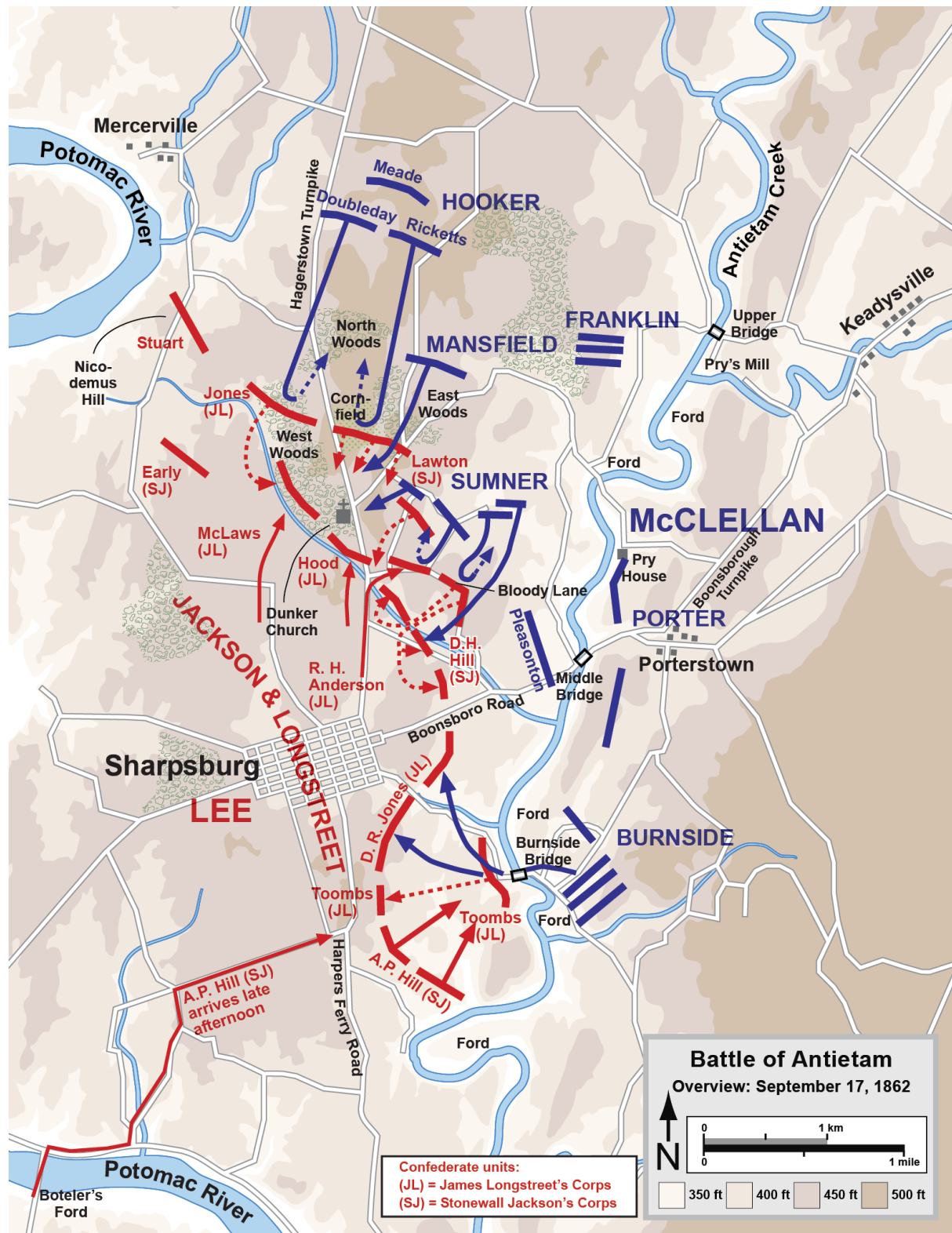
Map 3: First Battle of Bull Run – Actions 1-3 p.m. July 21, 1861.



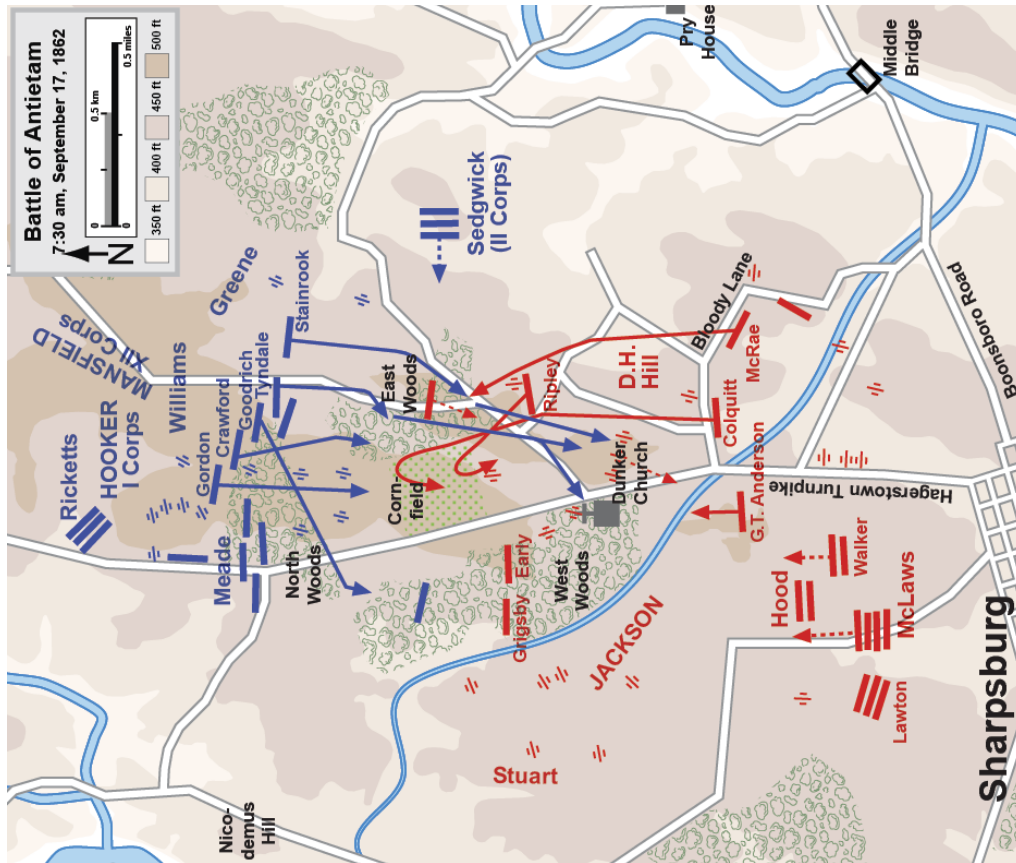
Map 4: First Battle of Bull Run – Actions 4 p.m.-dusk July 21, 1861.



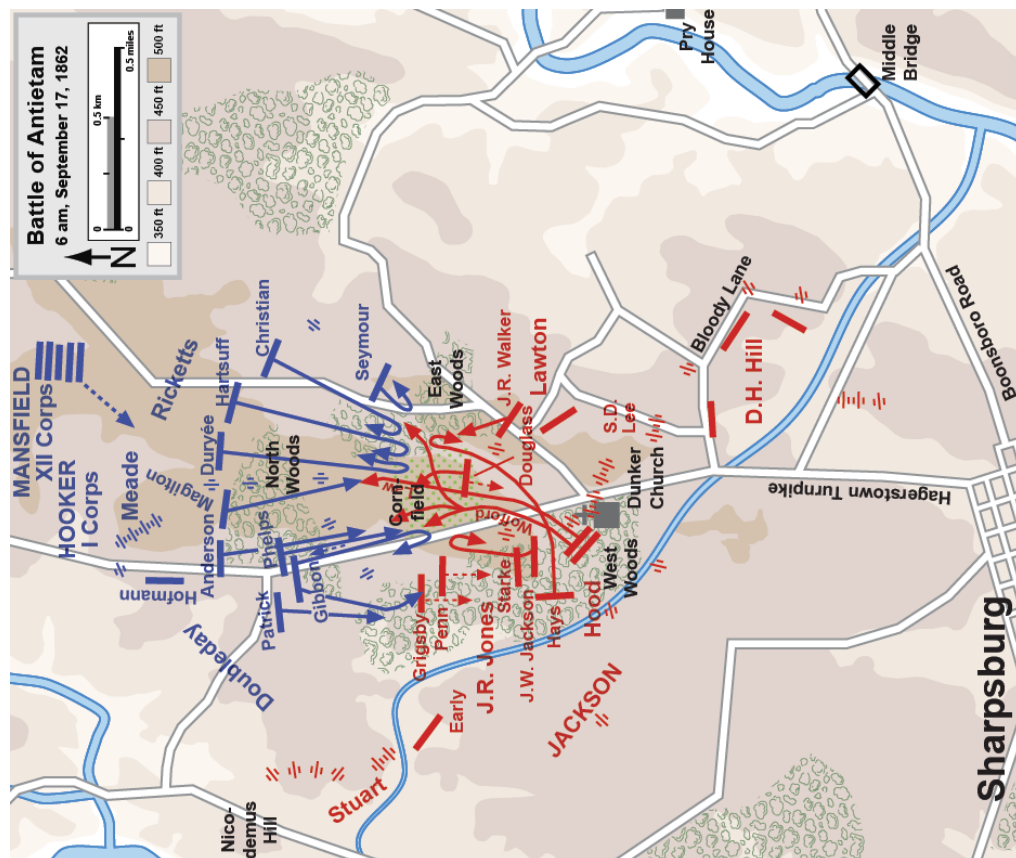
Map 5: Battle of Antietam – Overview September 17, 1862.



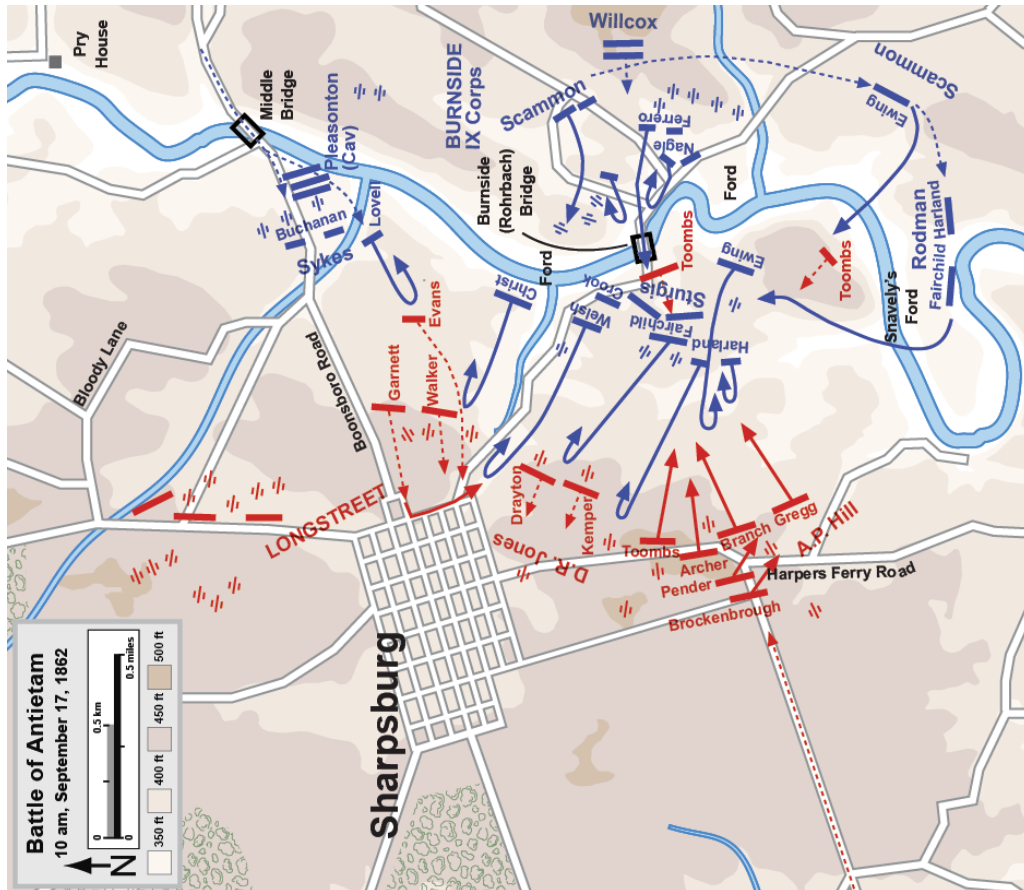
Map 7: Battle of Antietam – 7:30 a.m. September 17, 1862.



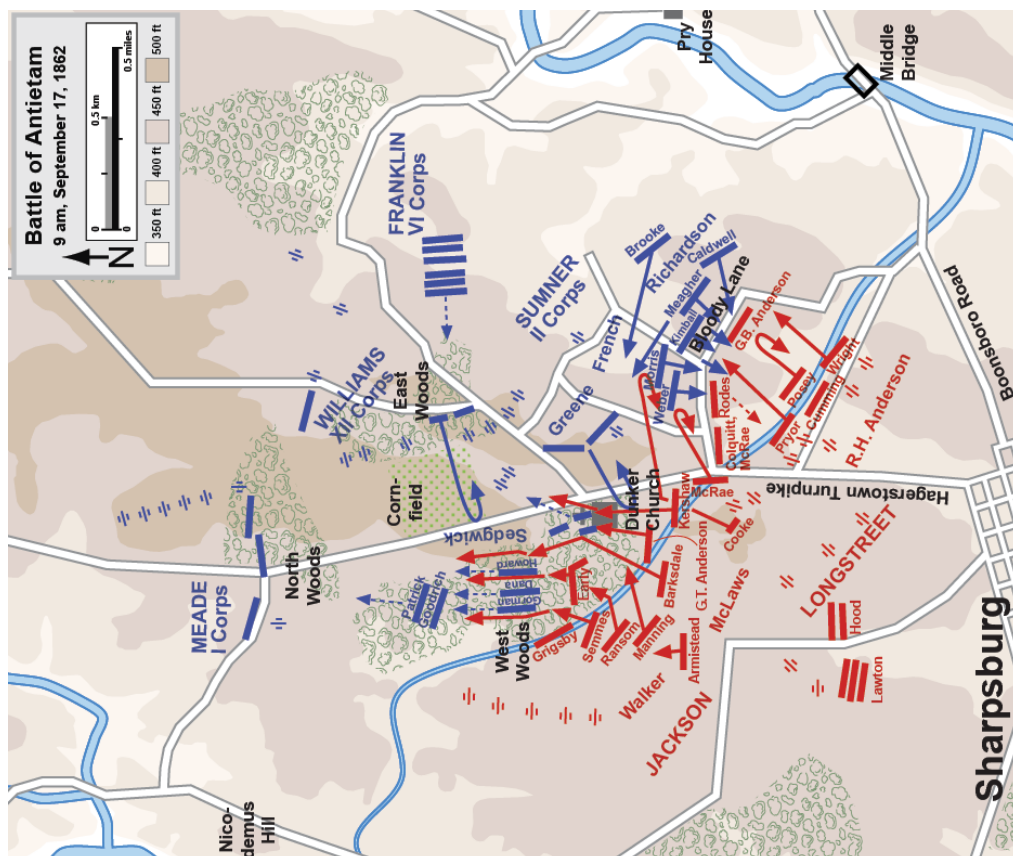
Map 6: Battle of Antietam – 6 a.m. September 17, 1862.



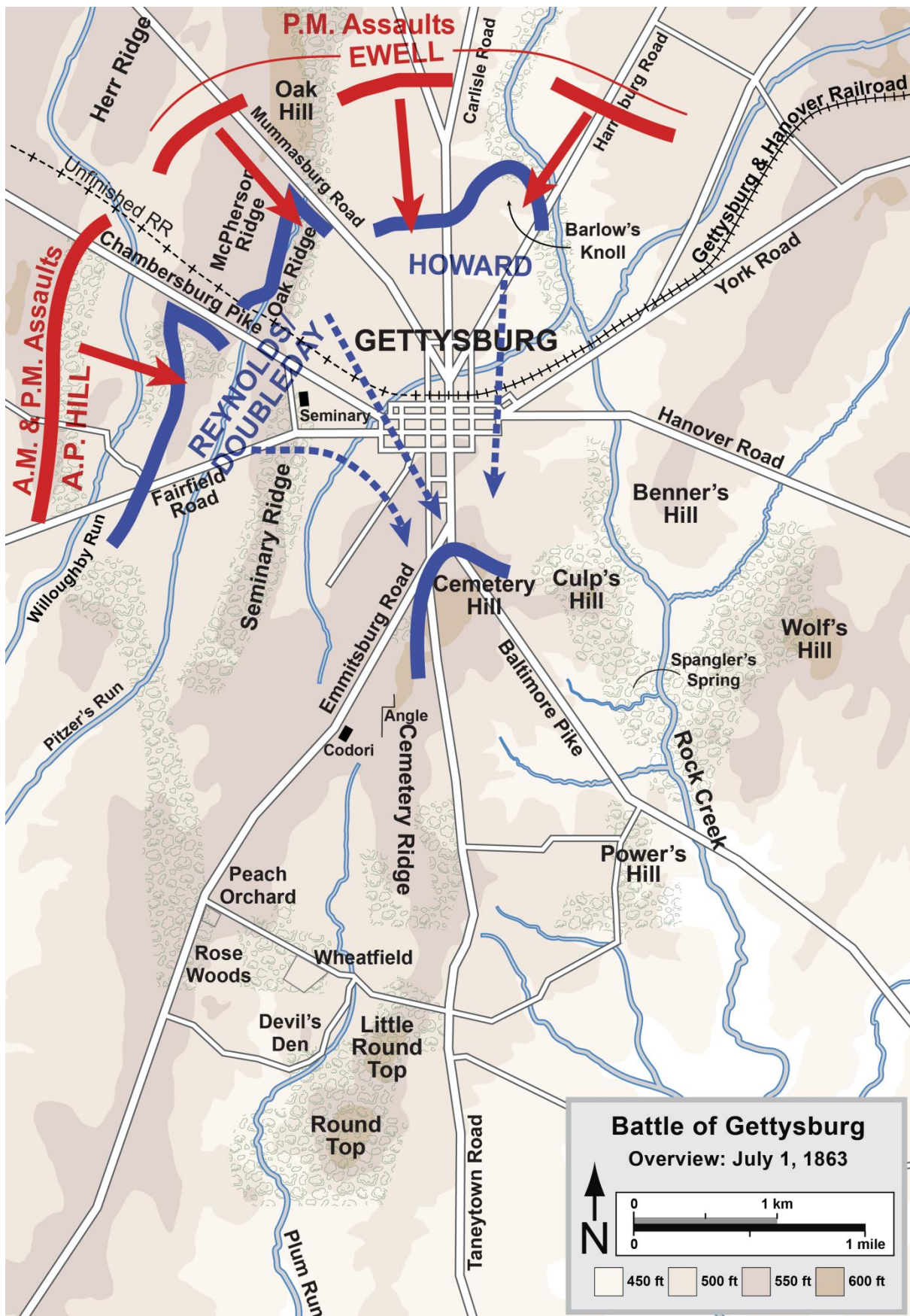
Map 9: Battle of Antietam – 10 a.m. September 17, 1862.



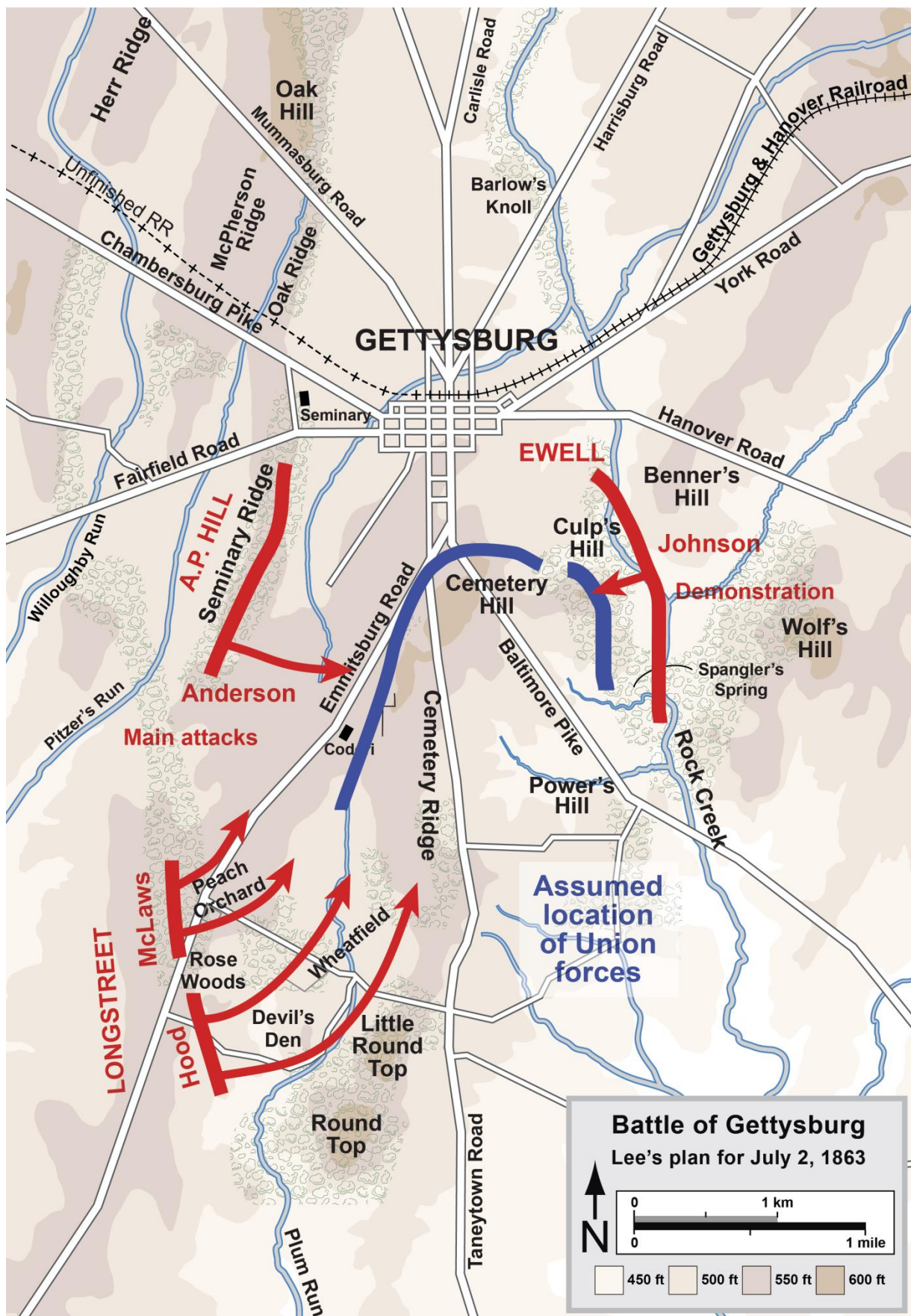
Map 8: Battle of Antietam – 9 a.m. September 17, 1862.



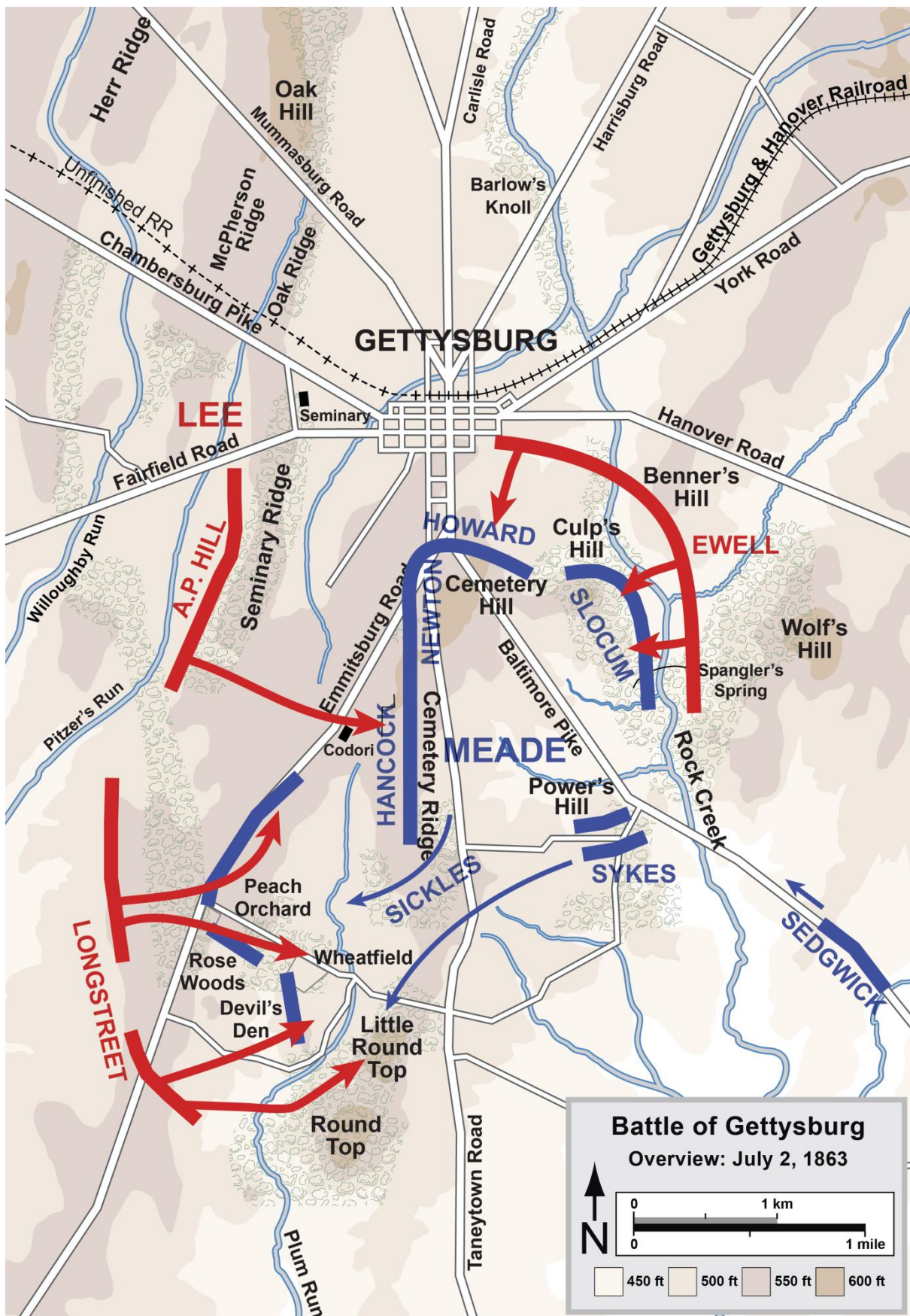
Map 10: Battle of Gettysburg – Overview July 1, 1863.



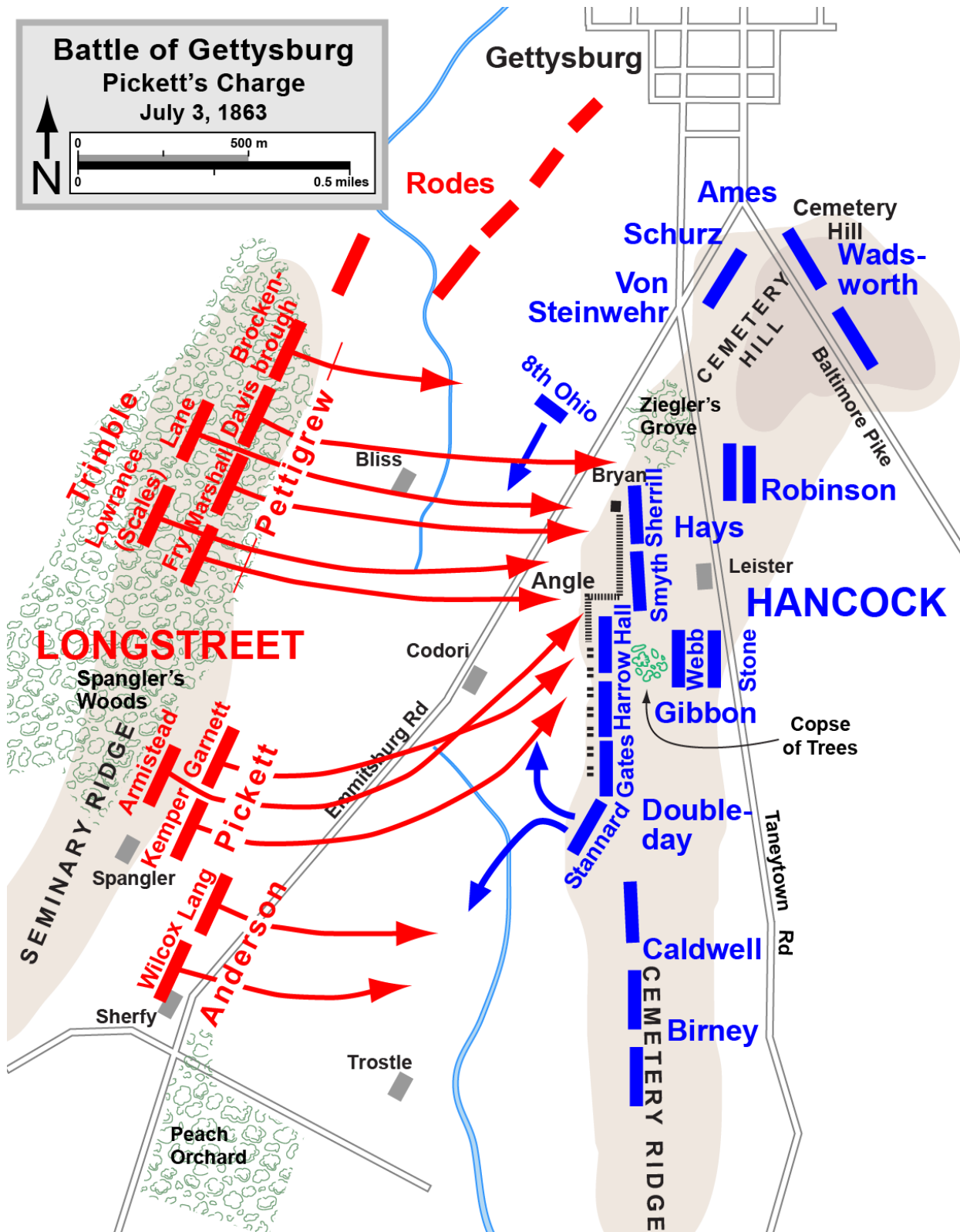
Map 11: Battle of Gettysburg – Lee's plan for July 2, 1863.



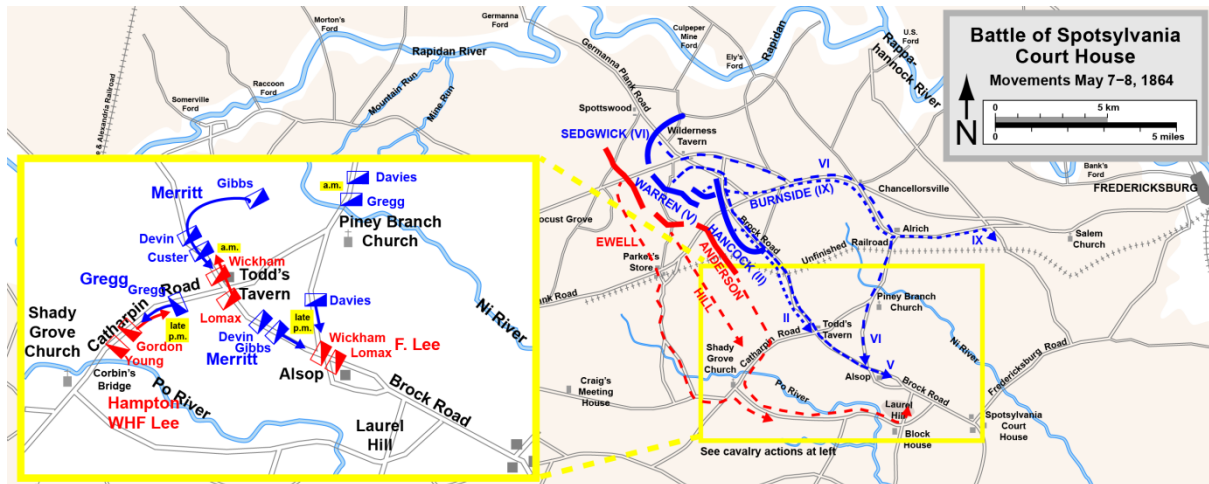
Map 12: Battle of Gettysburg – Overview July 2, 1863.



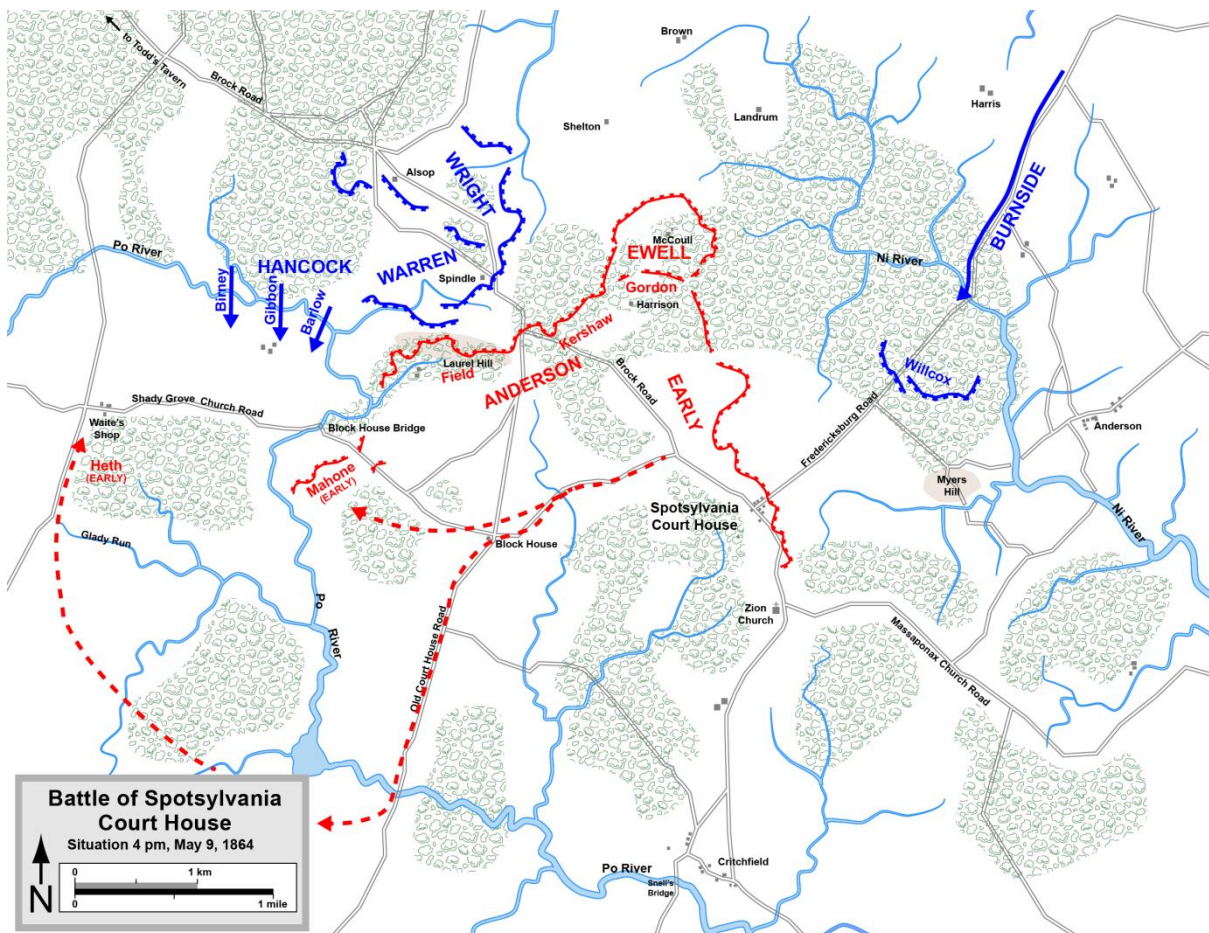
Map 13: Battle of Gettysburg – Pickett's Charge July 3, 1863.



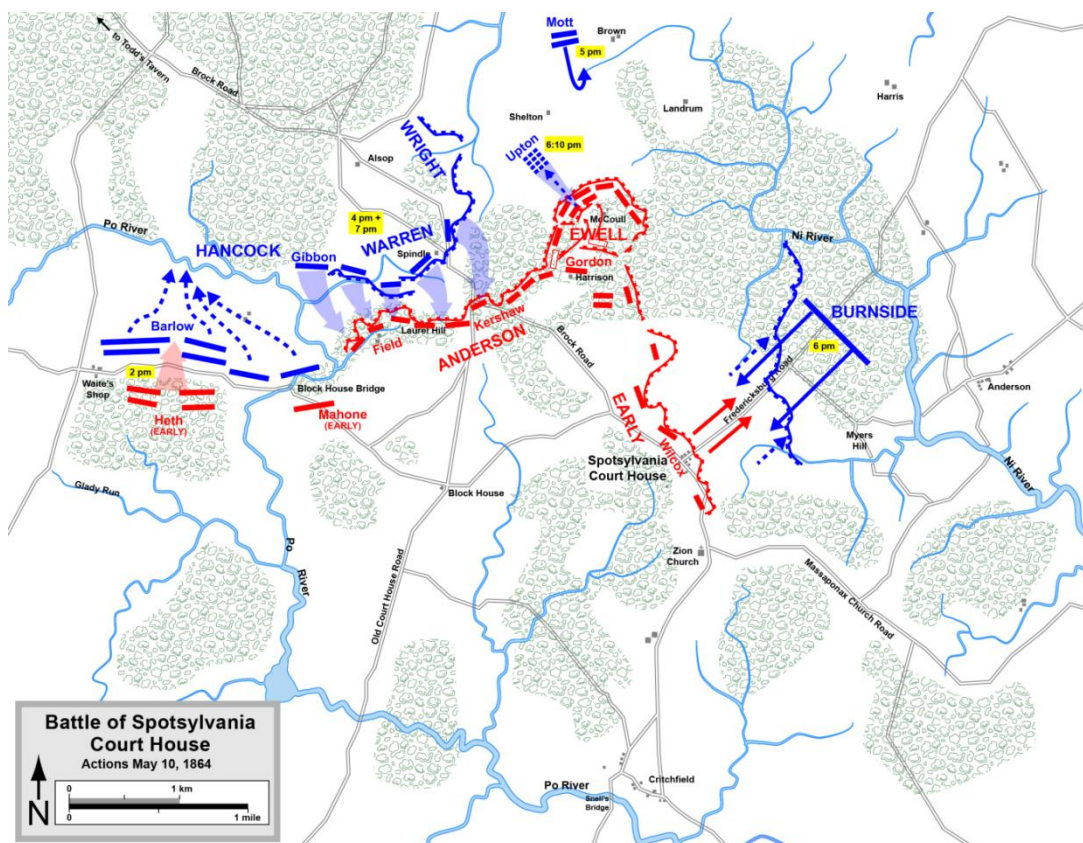
Map 14: Battle of Spotsylvania Court House – Movements May 7-8, 1864.



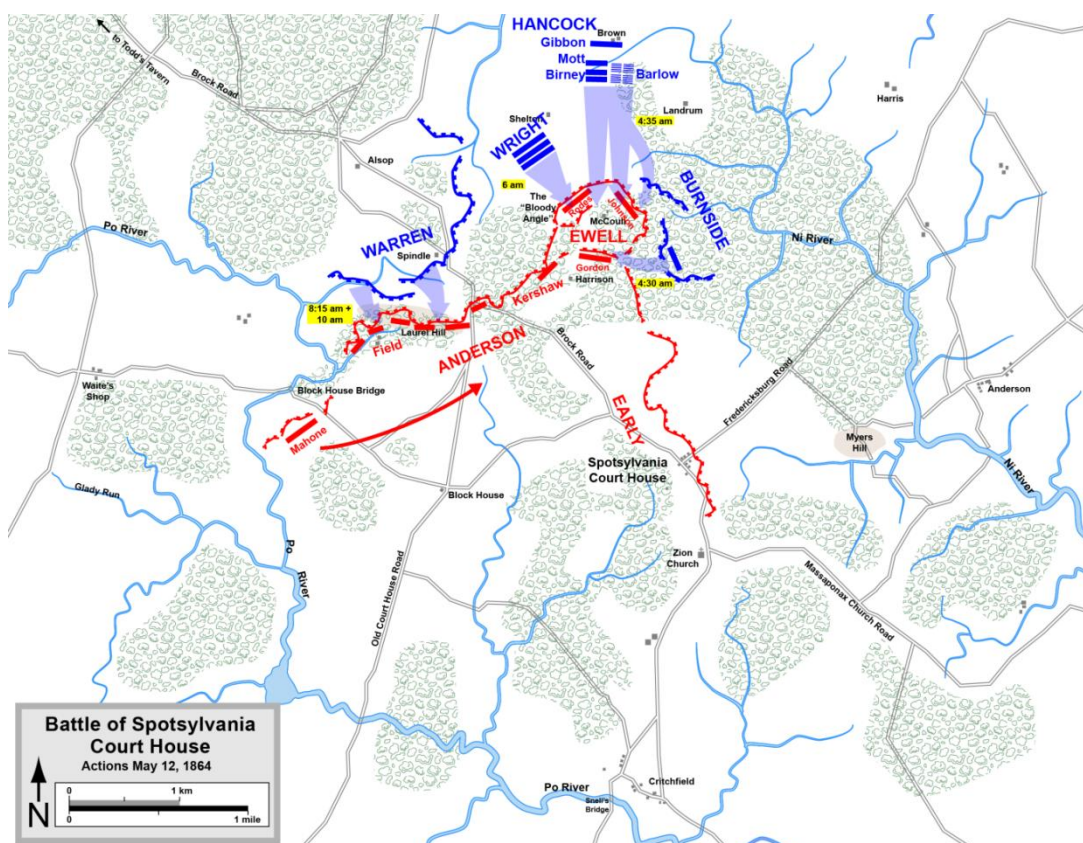
Map 15: Battle of Spotsylvania Court House – Situation 4 pm May 9, 1864.



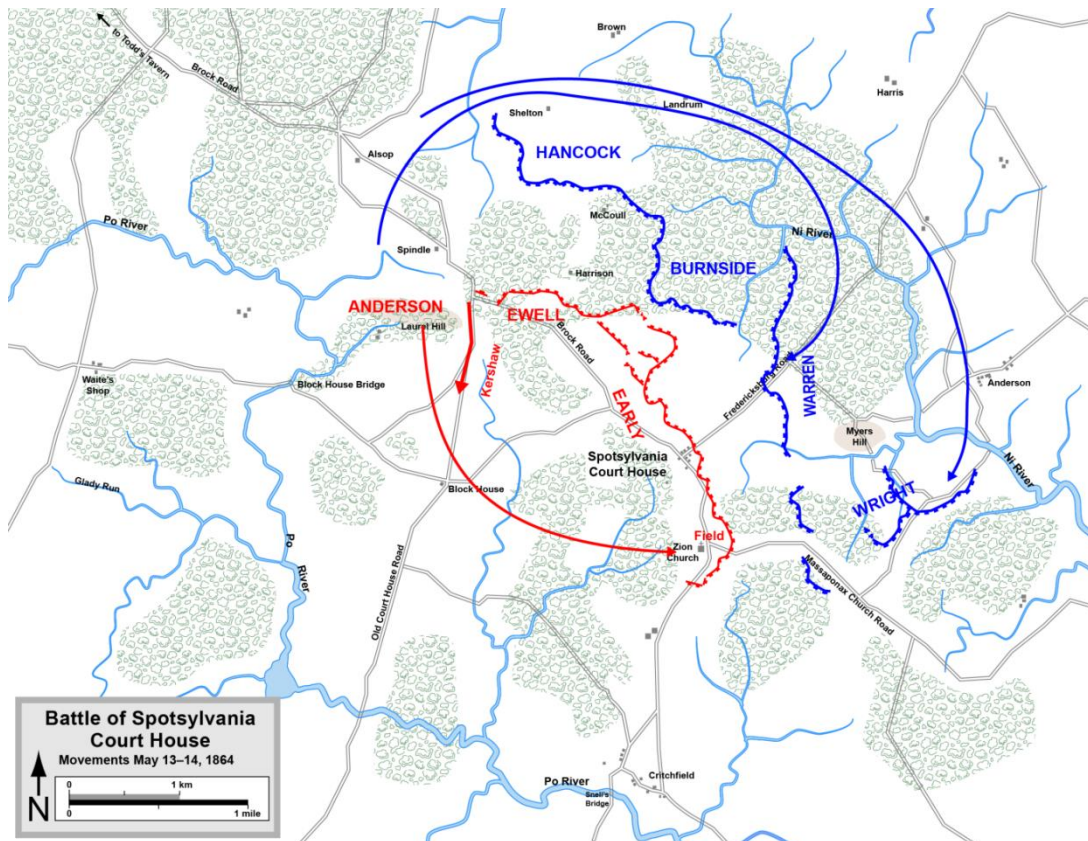
Map 16: Battle of Spotsylvania Court House – Actions May 10, 1864.



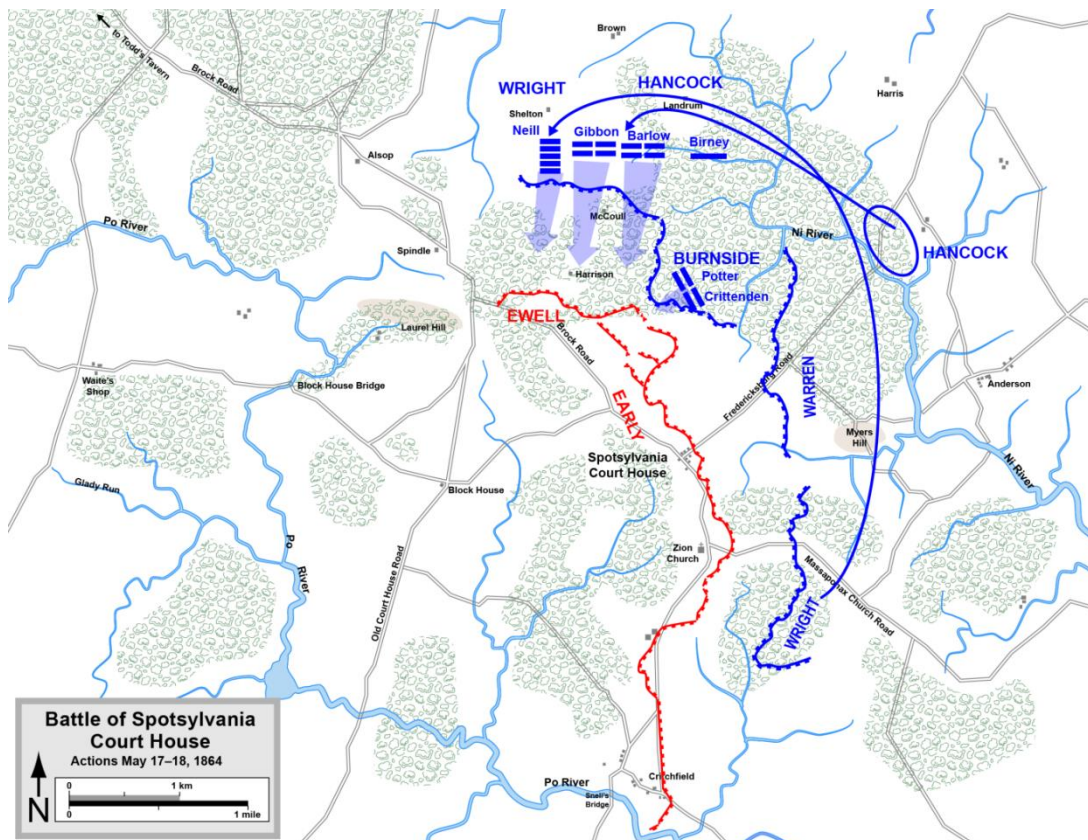
Map 17: Battle of Spotsylvania Court House – Actions May 12, 1864.



Map 18: Battle of Spotsylvania Court House – Movements May 13-14, 1864.



Map 19: Battle of Spotsylvania Court House – Actions May 17-18, 1864.



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