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Water Courses, Railroads, Roads, and Passes in the Gettysburg Campaign

by

Troy D. Harman

A Dissertation

Presented to the Graduate and Research Committee

of Lehigh University

in Candidacy for the Degree of

Doctor of Philosophy

in

History Department

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Abstract

As a Park Ranger at Gettysburg National Military Park, I have long pondered whether Union Major General George G. Meade and Confederate Lieutenant General Robert E. Lee expected their armies to meet near Gettysburg in late June of 1863, or whether their encounter west of town was a complete surprise prompting an unplanned engagement? If they, indeed, had planned it, there must have been logistical requirements and principles of warfare that made their confrontation at Gettysburg likely, if not inevitable. The challenge to answering this question has been that historians of the Gettysburg Campaign have described, at length, “how” the two armies met at Gettysburg, but few have considered “why” both commanders would have taken deliberate steps to meet at Gettysburg. This dissertation argues that, when the logistical constraints and military strategies inherent in the Civil War era are taken into account, the battle of Gettysburg was not a random event. This study merges operational planning with combat decisions, from beginning to end, never forgetting the two were inextricably connected. The tangible connecting thread between them was a mutual dependence that both armies had on water courses, railroads, roads, and passes in the Gettysburg Campaign. An important result of this analysis is that it provides an explanation of battlefield orders that otherwise did not make sense.

Troy D. Harman

Introduction

This dissertation argues against the standard interpretation of the Battle of Gettysburg as an accidental, last option fight in a sleepy, little remote Pennsylvania town, far from strategic centers of importance, but rather depicts it as a predictable battlefield situated between the major Susquehanna and Potomac Rivers, located on the Monocacy River (hereafter Monocacy) headwaters at the nexus of several improved roads, and linked to the outside world by a railroad. Gettysburg will be characterized as a prototypical battlefield dependent on water, rail, and improved roads necessary to sustain an army's presence in one location for more than twenty-four hours, and entirely consistent in location with logistical concerns for protecting key symbolic places and strategic communication corridors. That Gettysburg emerged as the logical point of contact for both army commanders will take precedence over the traditional view of accidental collision. This dissertation will reduce all operational and tactical decisions down to the essentials of water, rail, and road.

This is not the position taken by other general histories on the battle of Gettysburg that have focused on everything but naturally suitable conditions for battle in South Central Pennsylvania. The most influential general histories written in the last fifty years, Coddington's *Gettysburg Campaign: A Study in Command* (1963), Sears, *Gettysburg* (2003), Brown's *Retreat From Gettysburg: Lee, Logistics and the Pennsylvania Campaign* (2005) and Guelzo's very recent *Gettysburg: Last Invasion* (2013) have all looked at Gettysburg from the perspective of an unintended fight at

worst or an accidental meeting engagement at best.¹ None of them portrayed Gettysburg as a logically predictable battleground based on the confluence of water, rail, and roads, the central ingredients to every Civil War battle location. Moreover, none of these general histories reduced operational and tactical level decisions down to the essentials of water, rail, and road.

Edwin Coddington has been the most influential Gettysburg battle historian over the last fifty years with his *Gettysburg Campaign: A Study in Command*, a work that had immediate and lasting impact, from the 1960s down to the present. His tactical study of the battle is important because it was the first general history to reject the 1950s convention that Lieutenant General Robert E. Lee lost the battle of Gettysburg due to mistakes of his corps commanders. It became the first work of its kind to not linger on Confederate mistakes. Coddington did not seek to defend Lee; he was just simply tired of the narrative that focused on Confederate command debacles, rather than recognizing right decisions made by Major General George G. Meade and his corps commanders. In short, Coddington believed the explanation for Lee's defeat rested with Meade and his corps commanders' actions more than shortcomings of Lee's subordinates. Along these lines Coddington stated,

Because these traditional interpretations have become threadbare and somewhat frayed around the edges, another account of the battle seems to be needed, even at the risk of its being considered by some "superfluous and presumptuous" [in offering a fresh perspective]. To achieve better focus and deeper perspective this study emphasizes Northern and Southern problems of command in the broader setting of the whole campaign. By using many new sources of information and concentrating on questions of command, it is hoped this book will dust off a few of the older explanations for its outcome, alter some, and discard others.²

What Coddington intended to do was avoid the old arguments revolving on Confederate mistakes and missed opportunities, along with presumptions that Meade lacked experience and skill to be an equal general with Lee. Coddington wanted military problems, tactical situations, and principles of war to take precedence. He chronologically addressed each tactical problem on its own merit apart from taking sides or engaging in Southern apologetics. His primary goal was to avoid traditional historical arguments for the invincibility of Lee, Major General J.E.B. Stuart, and other key Southern officers at Gettysburg, and to shift the discussion to problems faced by officers on both sides.³

Stephen Sears' *Gettysburg* is another influential volume on the campaign to appear within the last fifty years. He provided occasional references to the environment, but then quickly dispensed with surrounding terrain, depots, and vital water crossings to return to discussing human agency. Specifically, his argument revolved on the premise that hubris drove most of Lee's decisions at the operational and tactical levels, and that hubris largely explained his defeat at Gettysburg. "What happened in the three days of Gettysburg, July 1-3, 1863, was in some measure a result of that arrogance."⁴ He depicted an overconfident Lee certain of a great victory north of the Potomac. For Sears, Lee's hubris caused him to be so intent on invading Pennsylvania that he did so at the expense of losing Vicksburg. Lee's decision to continue fighting on the battle's first day in spite of absent cavalry and an army not yet

concentrated, along with his decision to make Pickett's Charge on the battle's third day are further examples for Sears of hubris interfering with logical decisions.

At the heart of Sears' concerns is the lack of credit given to Union commander Meade, "With so much attention paid to the losers, and for so long, it is easy to lose sight of the victors....George Gordon Meade and the men of the Army of the Potomac came to Gettysburg without contempt for their opponents, and as a consequence they never deceived themselves about the impending battle."⁵ Sears argued that Meade won because his decisions, in contrast with Lee's, were grounded in humility. All of this may be true enough, but I have three concerns. Sears is a magazine editor, and his book draws upon numerous accounts melded together from articles in such publications as *Gettysburg Magazine* and *North and South Magazine*, which are contributed to regularly by battlefield rangers, guides, and patrons of the park. This contributes to an overreliance on secondary sources to make many of his points. The second concern is about trying to curry favor with as many Civil War writers as possible. His book is largely a fusion of many contributions made through monographs and military quarterlies over a twenty-five year span that also wins over many authors and contributors. It synthesizes the latest work of others rather than advancing an original work based on imaginative thought processes.⁶ Though his synthesis holds much value, the author has not invested the same time studying the place as the battlefield historians that he credits.

Of even greater concern to me is that his analysis gives limited attention to the natural constraints that made Lee's and Meade's operational decisions knowable days

and weeks before the battle, along with making their tactical decisions predictable hours before implementation. There is no better example than his description of a meeting engagement on July 1, 1863. He gives all the necessary geographic features but then does not make concrete connections between those terrain features and forethought of battle location. In describing the crossroads at Gettysburg he writes,

Angling into the town from the west was the Chambersburg Pike, the axis of advance for two corps of Lee's army; it became, leaving town toward the east, the York Pike. Trisecting the northern quadrants west to east were roads from Mummasburg, Carlisle, and Harrisburg, over which Ewell's corps was advancing. The roads entering town through the southeastern quadrant, over which the Federals advanced, were (from east to south) the Hanover Road, the Baltimore Pike, and the Taneytown and Emmitsburg roads. Running south by west was the Hagerstown Road. Ten roads altogether, entering from all points of the compass. For anyone traveling (or marching) through south-central Pennsylvania, it was hard to avoid Gettysburg.⁷

It was heartening to read the final sentence above for the first time, but then disappointing that Sears did little with it afterwards. It is a hollow exercise in language to lay-out the roads, hills, and other terrain features if not for the purpose of understanding advanced planning and command analysis, but that was the course that Sears charted. His overriding goal for describing the crossroads was not to explain how Gettysburg provided a natural place for battle, but rather to quickly dispense with the obligation of addressing topography, and to establish a template for readers to imagine battle action. It would be just as easy to conclude Civil War armies chose such conditions well in advance, thereby making the fight on the Monocacy headwaters rather predictable, yet his discussion did not return to why the armies were there.

His point that Lee's overconfidence and Meade's lack of hubris determined major decisions in the campaign holds some validity in light of Lee's admission to fault after Pickett's Charge, but Sears' explanation hardly replaces the many environmental factors working behind arrogance or humility. That an extended valley basin with a sufficient water course, nexus of conveniently located roads and a rail line made Gettysburg a naturally predictable place for battle apparently does not matter. For Sears, even the ideal confluence of roads produced an unplanned meeting engagement.

In *Lee's Retreat*, Brown explores an army's dependence on forage as sense of emphasis for campaign objectives. He stated in the introduction, "The idea for the Pennsylvania campaign arose many months before. It was born in a desperation caused by the looming collapse of the Army of Northern Virginia if it remained in war-ravaged central Virginia without adequate food and supplies for its men and fodder for its horses and mules."⁸ He emphatically reiterates in the epilogue, "That Lee's campaign into Pennsylvania was a foraging expedition carried out on an immense scale.... All of that was totally unavailable in Virginia at the time. Only two months before, Lee's army had been on the brink of collapse."⁹ Brown centers his book on Lee's retreat as the defining event that won Lee the Gettysburg Campaign, because he saved all of his supplies that fed his army through October of 1863. For Brown, Lee's retreat turned the Gettysburg Campaign "into a kind of victory for Lee and the Army of Northern Virginia. It restored the balance of power between the two great, contending armies in the eastern theater of war.... Gettysburg cannot be viewed as the turning point of the Civil War or even a turning point of the eastern theater of war after Lee's remarkable retreat."¹⁰

Therefore, Brown's book largely revolves on how Lee made his great escape over South Mountain and back to Virginia to win the Gettysburg Campaign with a forty-mile supply train of hay, oats, barley, wheat, chickens, clothing, furnace bellows, farming equipment, and other miscellany, followed by droved hogs, sheep, and cows. He focuses on battles within mountain passes, infantry marches through the Cumberland Valley, rearguard fights in the streets of Hagerstown, Maryland and the final crossing of the Potomac River by both armies into Virginia. His description of the retreat, pursuit, and final escape is indeed an epoch retelling that reminds us that Lee achieved his number one operational goal of feeding his army through the autumn, which diminishes the tactical defeat, and loss of men after Pickett's Charge. What it fails to do, however, is to discuss how and why the battle came to occur where it did.

Guelzo's *Gettysburg: Last Invasion* offers the latest opus on Gettysburg. It has garnered national attention and promises to have a lasting impact on the historiography. It is the general history now causing all the buzz in the Civil War community, in part because Guelzo sides with Meade detractors who believed the commanding general preferred retreat from Gettysburg to the Pipe Creek Line in Maryland. That is not a popular position to take in the Civil War community. There is much more to his argument though. His points are quite broad, addressing a wide array of questions, yet he is able to pull them together under the question, "Could this [the many soldier claims] really have happened at that time?"¹¹ Knowing there were significant discrepancies in time keeping, inaccuracies in monument placements, passage of decades for memoirs, and limitations to eyewitness accounts, Guelzo

believed it appropriate to question everything, but in particular four long held assertions. Guelzo ponders,

Nor is there any way that these sources could finally settle the great controversies of the battle: Did Major General J.E.B. Stuart lose the battle before it even started by galloping off on a senseless joyride with the Confederate cavalry, and thus deprive the Confederates of intelligence-gathering capacity? Did Lieutenant General Richard Stoddert Ewell lose the battle because he lacked the energy and the ruthlessness to press his successes on July 1st to the point of driving the battered Union forces off Cemetery Hill and Culp's Hill? Did Major General Dan Sickles force George Meade to stay and fight at Gettysburg on July 2nd, as Sickles claimed after the war? Was Lieutenant General James Longstreet criminally negligent by insolently refusing to mount the Confederate attacks on July 2nd and 3rd with the appropriate spirit Lee demanded?¹²

He concludes, "These are only the most prominent of the Gettysburg controversies, and I put forward the answers I do with the resigned confidence that neither reason nor reasonableness is guaranteed certainty of success over self-interest and braggadocio."¹³ By this he meant that veterans on both sides argued through the press over who charged the farthest at Gettysburg, or who qualified for the next equestrian monument, or who deserved recognition from Congress. Union veterans also argued for and against Meade depending on previous loyalties to Major General Joseph Hooker who resigned from army command three days before the battle, while most Confederates advanced a Lost Cause explanation that blamed Lee's subordinates for loss at Gettysburg.

In the quest to probe beyond these biases, and to challenge long held assertions, Guelzo states, "I have spent most of my time in pursuit of the accounts written by the veterans of the battle themselves, in the form of autobiographies, lectures, pamphlets,

dedicatory speeches, ill-tempered newspaper articles, self-aggrandizing memoirs, and that most peculiar of American literary genres, the regimental history.”¹⁴ Guelzo’s last point about the regimental history is quite evident in his sources.¹⁵ He also noted that,

One of the greatest collections of manuscript materials on the battle is the vast heap of letters and accounts (mostly Union) solicited by John Badger Bachelder, the battle’s first great remembrancer, and finally published in 1994-95 as *The Bachelder Papers* by David and Audrey Ladd in three volumes. But even within The Bachelder Papers, the old veterans advance conflicting accounts, rehearse old grievances, debate large-scale tactical pictures which they could never have known about at the time, and defend pet theories with only slightly less vehemence than that which they employed in the battle itself.¹⁶

Guelzo leans heavily on the regimental history for nuggets of information that allow him to vividly convey unit action within the broader mural. His advantage over the other three authors mentioned is that he is notably more lively, philosophical, and eloquent, which allows him to carefully navigate around the difficult questions. Artfully he suggested that Meade preferred to fight at Pipe Creek, Maryland on July 1, while still criticizing Daniel Sickles’ behavior on July 2. He articulated Lee’s tactical plans to be different from James Longstreet’s wishes on July 3, yet defended Longstreet’s determination in executing Pickett’s Charge. He surmised that J.E.B. Stuart intentionally stretched the meaning of his orders in order to maneuver closer to Washington and Baltimore, yet conceded that orders to march on the east side of the Blue Ridge Mountains allowed for that interpretation.

Regarding the role of environment at Gettysburg, Guelzo did devote his prologue to a geological description of the Cumberland and Susquehanna Valley, the Blue Ridge Mountains, and the Gettysburg area, but it only takes him three pages. Granted,

environmental agency is not his focus, but like the other general histories discussed here, the environment becomes a backdrop for discussions on human agency. His prologue briefly sets the stage for human drama rather than making the case for Gettysburg as a naturally suitable place for battle.¹⁷

These are four monographs on the short list of most influential general histories of the campaign and three day battle in the last fifty years. Each one has brought a different angle to the discussion but employing many of the same sources. For Coddington, a new study was needed to change the conversation from Confederate miscalculations to problems that occupied commanders on both sides. For Sears, Lee's arrogance explained much of what happened in the campaign and battle, while Meade's humility led to smart, measured decisions defined by reason and self-control. For Brown, Lee won the Gettysburg Campaign during the retreat where he protected his supplies that sustained his army through October. Though not explicitly stated, Brown implied the battle itself became a necessary defensive stand to cover supplies being shuttled west over the Blue Ridge Mountains and south to Virginia. For Guelzo, many of the sacred held truths of the Gettysburg Campaign and battle should be called into question because of uncertainties with recorded times, inexact placement of monuments, differing maps, and extrapolated accounts that overreach the participant's rank and scope. Each of these historians called for a re-examination through fresh perspective.

What I am doing differently is pulling together all of these viewpoints under one overarching theme, which is the agency of water, rail, and road. Though I disagree with

some of their particular conclusions, I do not necessarily disagree with the approaches. Each of them has merit, so the focus of this study is not to dismiss the most influential general histories of the last fifty years. Instead, this study pulls together the best from each one into an environmental structure that rules out many of the campaign's and battle's uncertainties, and tightens the focus around certain central ingredients that hold together all Civil War battles.

It starts with the premise that battle location was very predictable at the operational level, based on proximity to water courses, improved roads, rail lines, mountain ranges, and passes. The aforementioned general histories recognize the environmental surroundings but do so more as background and backdrop. In this work the environment takes the lead in narrowing options on where the battle would commence, and how it would be fought with Gettysburg as a predictable location for battle. The structure of water, rail, and improved roads becomes the rudder in steering the two armies together at Gettysburg. The Susquehanna and Potomac Rivers framed the north-south polarities of campaign, while the Northern Central and Cumberland Valley railroads shaped its east-west borders. The Blue Ridge Mountains predictably covered and concealed Confederate lines of communications from Virginia to Pennsylvania and back again, even as the Monocacy River and its several branches dictated how the Army of Potomac would advance from Virginia to Maryland to Pennsylvania and back again. Finally, the destruction and reconstruction of the Hanover-Gettysburg rail line played a major role in where the armies chose to establish battle

lines. Every decision from the operational to tactical level had to conform to the structures of water concourses, rail, roads, mountains, passes, and valleys.

In the chapters that follow, the two armies find their battle positions on the parallel Rock and Marsh Creek lines, establish combat lines that evenly divided the ten roads east and west, and fight across the intervening middle ground marked by the north-south Emmitsburg Road. The opposing parallel Cemetery and Seminary Ridge lines the armies occupied are depicted as cover for layered positions reaching back to Rock and Marsh Creeks respectively, rather than positions unto themselves. Beyond the fight itself, these ridgelines are best understood as cover for water used to sponge artillery between rounds approximately 25,000 times, to nourish 60,000 horses and mules pulling wagon trains in the rear, for hydrating 175,000 military personnel in front and rear, and for treating approximately 20,000 wounded.

Finally, the upcoming chapters will view the federal right flank at Culp's Hill as much more than a barb on the end of a symbolic fishhook the way conventional history has portrayed it. Instead, Culp's Hill is viewed in this work as a secure federal link with the Rock Creek water supply, even as it represents a compromised position conceding the Hanover-Gettysburg rail line to Lee's army. Confederate attacks against Culp's Hill will appear in the chapters that follow as a deliberate wedge between the federal right and rail restoration to Gettysburg, even as Union offensive maneuvers and plans for attack north of the Hanover Road are argued as federal attempts to reestablish rail links to the battlefield.

The distinction between my research and the general histories noted above is not so much a radical departure from standard sources, but more of a careful examination of officer reports, soldier accounts, civilian remembrances, early historical writings, and war correspondent editorials for reference to water ways, railway connections, road nexus points, and key mountain passes and corridors. Even the soldier accounts that do not specifically mention water, rail, or road describe actions and movements that pertain to all three. Unlike the aforementioned general histories, this work deliberately attempts to tie the natural and manmade environment of the region with officer decisions at the operational and tactical levels to demonstrate that Gettysburg was a natural battleground. Therefore, I employ sources related to regional and battlefield geography, along with references for water, rail, and roads in South Central Pennsylvania, as well as works on military intelligence, tactics, strategy and logistics to reinforce the Monocacy River headwaters at Gettysburg a natural place for battle.¹⁸

Chapter 1: Unique Challenges in Doing Gettysburg Battle History

1.1 Gettysburg Historiography – Ebb and Flow of 155 years

The historiography of why the battle occurred at Gettysburg has evolved for 155 years toward the notion of accidental meeting place, of two armies surprising each other in a strategically unimportant Pennsylvania town far from the horrors of war. That the Cashtown Road or Chambersburg Pike served as a predictable path for Lee's army to follow through South Mountain into the Susquehanna Valley, or a logical place for federals to arrest movements in South Central Pennsylvania is lost on the historiography. Instead, the historiography has perpetuated a shoe requisition story whereby Confederates marched to Gettysburg to seize an imagined warehouse full of brogans. In this view, one pictures scores of barefooted Confederates improperly clothed and fed stumbling onto an unknown force in an unfamiliar place, hand to mouth supplying of their army against superior manpower and resources. Such stories fed postwar Lost Cause stereotypes of Confederate veterans scraping by, and of fighting so long and valiantly against impossible odds and inevitable outcomes, but little remains in the historiography of a real basis for the majority of the Southern army being there in the first place, or of Federal awareness of this fact. Though the shoe story has no real traction among serious scholars of the battle today, thanks to *These Honored Dead: How The Story of Gettysburg Shaped American Memory* (2004), it still resonates with the general public in part to continuing influence of Burns' *Civil War*, which periodically plays on PBS, or the series circulates on the internet.¹⁹

The disappointing reality now, with the shoe story rendered a fairy tale, is the historiography no longer offers a calculated reason for either army to consider battle at Gettysburg. There is now no real basis for battle location other than accidental meeting at the crossroads, or perhaps predestination, which is a matter for theologians rather than historians to consider. That Gettysburg offered rail communication links to Harrisburg, Philadelphia, Baltimore, and Washington for reinforcements, munitions, supplies, and medical equipment, along with multiple improved roads radiating to each of these places is lost on the historiography. That Gettysburg is on the headwaters of the Chesapeake in one direction and Susquehanna in the other, positioned to sustain thousands of men, horses, mules, artillery sponging buckets, and steam powered trains, not unlike Antietam Creek, Bull Run, Cedar Creek, Wilson's Creek, Stones River, Monocacy, Chickamauga, Pittsburg Landing, and the Peninsula Campaign, is missing from the historical record. That Adams County sat politically halfway between the state and federal capitals of Harrisburg and Washington, offering geologically hard surfaced passes to two of six branches on the Monocacy River is a foreign thought in modern scholarship. That Gettysburg served as a natural place to sustain two armies for three days and hospitals for four months, and hosted 15,000 people for the ceremony that became synonymous with Lincoln's Gettysburg Address is all incidental in the current story. By this work's end, it will become clear the two armies did not stumble onto to each other accidentally, that much forethought figured into fighting at Gettysburg, and that Gettysburg constituted a natural place for battle.

The historiography has not always downplayed the role of environment. In the immediate aftermath of the war, books addressing the battle such as Abbot's, *History of the Civil War* (1866), Swinton's *Campaigns of the Army of the Potomac* (1866), and Bates' *Battle of Gettysburg* (1875) did make mention of favorable roads naturally suited to bring the armies together, in a low valley basin, east of the South Mountain range.²⁰ Such books mentioned the natural passes through the Blue Ridge toward Gettysburg, the hard natural diabase sill surface perfectly suited for improved roads, and flow patterns of creeks and rivers. Such early introductory chapter descriptions of the battlefield not only set the stage for the battle, but likely revealed a late nineteenth-century need to alleviate underlying tensions in the American psyche that nature and second nature can coexist together. As Kasson's *Civilizing the Machine* makes clear, Americans wrestled with the upheaval that industrialization exacted on their natural work rhythms, their craft traditions, and their natural environment.²¹ There was therefore a new sensitivity in Victorian America to nature as expressed in the writings of the Romantics, and as exhibited by visual artists who added animal limbs to pianos, lion claws to bathtubs, and colorful flowers to Singer Sewing machines. Early battle historians showed the same sensitivity in describing the natural environment of South Central Pennsylvania to contrast it with the battle's implements of war designed in industrialized foundries and armories.

This was especially true when an environmentalist movement began to take hold in the latter half of the nineteenth century, carving out green space in urban settings, and offering intelligent scientific solutions to industrialization's social ills, making it not

uncommon for a good book on the battle of Gettysburg to reflect the same message. Books such as Bachelder's *Gettysburg: What to See, and How to See it* (1873) and *Popular Resorts* (1875) suggested that human reason and science could make the once violent battlefield a health spa for healing mind, body, and spirit.²² Such books assured rational lay-out of rail for day trippers to ride the Harrisburg – Gettysburg Railroad from the state capital, or take the Western Maryland line from Baltimore to visit Gettysburg's medicinal springs and fresh air. They also promised carriage tours into undisturbed natural settings filled with moss covered rocks, chirping birds, babbling brooks, and other peaceful, bucolic natural scenes that stood in stark contrast to the death struggle there twenty years earlier. After the Battlefield Commission engineered rational road construction through the battlefield, the same could be done with Henry Ford's mass produced Model-T, in the second decade of the twentieth century. Emmor Cope's 1904 St. Louis World's Fair map, a prized relic in the Gettysburg National Military Park museum collection, visually reinforced infrastructure improvements with its careful emphasis on Battlefield Commission planning of roads, bridges and rail accesses through the battlefield. It reassured visitors to the fair that park administrators had taken an intelligent scientific approach to battlefield preservation by accommodating it for automobile and train without destroying the resource. Intelligent engineering had tamed an untamable place, making it a source of health and leisure for urban masses. It therefore behooved late nineteenth-century and early twentieth-century historians to devote introductions to battle action with a brief explanation of the battlefield's natural setting, but this would not last for long.

Another reason for early books devoting more attention to Gettysburg's favorable strategic environment, with its naturally hard surfaced roads and sufficient water sources, involved limited source material available for the first twenty-five years after the battle. That is, early histories did not have the plethora of officer reports and soldier articles so common later in the century. This began to change in the late 1880s when the Government Printing Office published the *Official Records of the War of Rebellion* (1889) making most of the after-action reports available in print form to veterans for the first time, encouraging officers and enlisted men to read what happened around their own units in the heat of battle and to write their own memoirs.²³ The mood of the country in the 1880s conspired with release of these reports to create a national appetite for soldier stories in print. Mystic chords of memory intrigued receptive audiences to read and pushed leading major newspapers and journals to publish, participatory accounts that entertained questions of who chose Cemetery Hill on the battle's first day, or who saved Little Round Top on the second day, and who was at fault with Pickett's Charge on the third day. Because the nature of these accounts revolved around controversial generals and their decisions, the stage was set for future secondary works on the battle to focus on personalities and disputes rather than the environment. The published participatory account most indicative of this historiographical shift away from the operational environmental perspective to a soldier's tactical war story was Oliver W. Norton's 1913 *Attack and Defense of Little Round Top*.²⁴ Its 350 pages of heroic soldier accounts not only raised the saving of Little Round Top to unprecedented heights in the battle's historiography, but did so with

personalities, giving credence to stories of great men rather than an operational environment perspective. Great feats to save a steep hill had trumped broader lines of operations that brought armies to South Central Pennsylvania in the first place.

Serious works on the campaign waned after the fiftieth anniversary as a new generation, already tired of reliving their parents and grandparents stories of the Civil War, shifted their focus to contemporary dangers in the Balkans and World War I. World War II followed in such quick order that it too dominated headlines and then memory for two decades, postponing new Civil War scholarship until the 1960s when the nation's attention focused again on the war through centennial commemorations.²⁵ Unfortunately for the environmental approach, Edwin Coddington's *Gettysburg Campaign: A Study in Command* (1968) emerged shortly after the commemorations with a command study methodology that relied heavily on Bachelder's correspondences and analysis.²⁶ In doing so, his work reintroduced an entire generation to issues surrounding the battle's heroes, their professional jealousies, grievances and strong opinions about who succeeded or failed in key moments of the conflict. His book also reintroduced symbolic truths, originally landscaped into park design by Bachelder, mainly the High Water Mark of the Confederacy that emphasized the war's turning point at Gettysburg. This powerful life over death symbolism made Pickett's Charge illogically revolve around a few small scrub oaks unimportant in the battle's historiography until Armistead's Virginia and Webb's Philadelphia brigade publically reconciled in front of them, in July 1887, at a momentous reunion that, along with a subsequent monument, crystallized the idea of Confederacy's high tide. The power of

reconciliation demonstrated there through the hand shake of dozens, across a stone wall marked roughly by several maturing trees, transformed that place in the national consciousness for generations and consequently gave the Pickett's Charge story an otherworldly feel. It was with this famous veteran group handshake that the title Pickett's Charge stuck in national memory. As oak trees often marked the spot of Ancient Roman oracles, the High Water Mark monument in front of the small group of trees seemed to offer wisdom to future pilgrims of the battlefield on the Confederacy's fate after Gettysburg.

Coddington's explanation of the charge reintroduced the High Water Mark theme to thousands of Civil War enthusiasts, which is not bad in and of itself, because symbolic truth holds a special place in historiography. Where he went wrong was in conflating a military action with symbolism. In doing so, he argued that Confederate high command willfully and intentionally reduced the mile footprint of four assaulting divisions to a demi-brigade sized space 1/16th their original frontage to assault the Philadelphia brigade. It makes little sense when one realizes that narrowing frontage by design, in the age of single loader muskets, is equivalent to reducing fire power, intentionally leaving flanks unprotected and inviting double-envelopment. Coddington could not see beyond the trees and High Water Mark commemoration to separate military tactics from symbolic truth. To make the attack work in the fashion that Coddington described, requires three-dimensional warfare marked by tanks, automatic weapons, heat seeking missiles, and aircraft support. Linear tactics is only as effective as fields of fire at ground level. Had he thought it through logically, separate treatment

would be given to Bachelder's memorial landscape in a later chapter, apart from tactics of the actual assault. The bigger point with Coddington, and this work, is that the last fifty years of battle historiography resumed where the pre-World War I memorial period ended, with an overemphasis on symbolic truths landscaped into the story after the battle with its turning points, heroes, villains, and famous charges. This is all well and good, except a generation of new students of the battle fell captive exclusively to old war stories to the extent that all traces of Gettysburg's environmentally suitable location for battle disappeared.

At best, the historiography has made mention in recent years of a crossroads that brought the two armies together, as in Schildt's, *Roads to Gettysburg* (1978), and his *Roads from Gettysburg* (1998), and Hassler's *Crisis at the Crossroads: First Day at Gettysburg* (1970), but even then there is little discussion on the importance of roads in the decision making process of where and how to fight a battle.²⁷ Both Schildt and Hassler chronicle corps movements to and from the battlefield by several roads, but the roads serve as a backdrop for human interest stories rather than real analysis. Recent general studies on the battle such as Sears' *Gettysburg* (2003) and Trudeau's *Gettysburg: A Testing of Courage* (2002) have followed suit in depicting the human drama at the expense of identifying Gettysburg's natural surroundings suitable for battle.²⁸ Trudeau fell into the same trap of conflating symbolism with military action in describing Pickett's Charge. Pfanz's three works *Gettysburg: Second Day* (1987), *Gettysburg: Culp's Hill & Cemetery Hill* (1993), and *Gettysburg: First Day* (2001) masterfully blended human interest with tactics, arguably covering officers' dilemmas,

issues, and decisions better than anyone, while regally remaining above the fray to tell a balanced story free of petty disagreements, though he still left the reader to ponder why the armies fought at Gettysburg.²⁹

Regarding works in the last fifty years on railroads and the Gettysburg campaign, there are two that clearly reference Gettysburg as a logical place for battle based on railroads. Turner's *Victory Rode the Rails* (1953) is a bit outdated, but he understood the crucial role of rail transportation during the Gettysburg campaign long before others.³⁰ He described in great detail what no one else has in a secondary source, then or now. When reading his assertion that Confederate destruction of northern rail in June 1863, and the subsequent federal rebuilding of it, had a profound impact on the outcome of the campaign, one is left to wonder why broad campaign studies largely ignore it, but the answer is simple. That is, Gettysburg military historians who might have considered Turner's work, think of it as a railroad book, and such books are read by train enthusiasts, or perhaps historians of technology. The same can be said about Clark's *Railroads in the Civil War: Impact of Management on Victory and Defeat* (2001) in that it offers some insight into the importance of rail in 1863, and even a couple allusions to the Gettysburg Campaign, but leaves the reader wanting in the end, because it is a book about how Union armies managed railroads better than Confederate ones.³¹ The irony is that had Clark devoted serious attention to Confederate sabotage of rail during the Gettysburg Campaign, and its impact on how battle lines developed, then his general argument would have needed rethinking and restructuring. In the end, his work is constrained to discussion of technology and early scientific management, rendering it a

separate topic from battlefield history. The few mentions made of Gettysburg are additions rather than real attempts to integrate battle history with rail use during the campaign.

Thomas's even more recent, *Iron Way: Railroads, Civil War, and Making of Modern America* (2011) on Union management of rail in the Southern Confederacy makes several good references to Herman Haupt's impressive handling of rail repair during the Gettysburg Campaign.³² This should garner some attention from Gettysburg battlefield enthusiasts, but the book's appeal remains limited to academic circles because of its abstract argument that railroads represented a bridge to modernity in the South, along with geographic and social mobility for blacks and whites who imagined themselves connected to faraway destinations when in sight of a train station. This philosophical angle is intellectually fascinating to social and technology historians, but too esoteric for a military unit putting together a staff ride at Gettysburg. Moreover, it falls short of integrating rail with the actual battle because the scope is limited to themes of rail technology, mobility, and modernity. In short, because the study of Gettysburg has become so detached from environmental context, railroad studies are extraneous to the real issues of personalities, heroes, and villains. Railroad books are about trains, and battlefield books are about battles. These two subcultures do not communicate in a meaningful way about the battle.

Water as a factor in the Gettysburg Campaign has only received minimal treatment in the historiography except for references to Meade's original position at Pipe Creek line on June 30, 1863, and his alleged desire to fall back on it during the

battle of Gettysburg. All major works on the battle mention his June 30, 1863 Pipe Creek Circular as his intended position before the battle began in Gettysburg on July 1. Each of the general histories entertain accusations made by Meade's contemporaries that the Pipe Creek position remained his preferred option during the three day battle. Third corps commander Major General Daniel Sickles even went so far as to imply that his advance to the Peach Orchard, and the subsequent battle there prevented Meade from retreating to Pipe Creek on July 2. Again, the battle's historiography shifted so far decidedly to personalities, heroes, and villains around the silver anniversary that no one stopped to ask why Pipe Creek would be favorable ground from a water vantage point, or to point out that both Pipe Creek and Gettysburg's Rock and Marsh Creeks were part of the same Monocacy River trunk, and that to one degree or the other water served as the common denominator to both positions. In fact, articles written by participants for *Century Magazine* 1884-87, now in Johnson and Buel's edited, *Battles and Leaders: Tide Shifts* (1887), rarely mention the necessary water sources available at Gettysburg to establish their respective lines of battle, and seldom note that Gettysburg constitutes the headwaters for the Monocacy River.³³ Someone in opposition to my work might say, "see there you have it, water did not factor into Gettysburg as a suitable place for battle," but we know this cannot be so because Civil War armies never fought apart from an existing water source as in Bull Run, Antietam Creek, Cedar Creek, Wilson Creek, Stones River, Chickamauga, Peninsula Campaign, Red River Campaign, Pittsburgh Landing, while the armies were named after rivers such as the Army of Potomac, Cumberland, Ohio, Tennessee, James, and others. We also know that Civil War era

armies did not have the technology to transport water by aircraft into a dry, barren place, nor could they quickly build water aqueducts to supplement local supply. Furthermore, we know that the headwaters of the Monocacy River at Gettysburg sustained 175,000 men, 60,000 horses and mules, produced sponging water for 35,000 rounds of artillery, nourished 27,000 wounded at Camp Letterman hospital for four months, and provided steam power for trains departing from Gettysburg daily from July 10, 1863 until November 18, 1863 when President Lincoln arrived a day before his now famous address. Since it is an impossibility for Civil War armies to fight apart from an adequate water source, it is simply not accurate to state water had little or nothing to do with a battle fought at Gettysburg. One must find when and under what circumstances the historiography abandoned all responsibility to it in the storyline.

So where does one go to find links between the battle and its relationship to water, rail, and road. One begins with the understanding that armies seldom, if ever, stumbled onto each other in complete unawareness. Even with intelligence breakdowns, many ways existed for opposing Civil War armies to learn approximate locations of the opposition from small cavalry unit reconnaissance to telegraph communication to mountain observation vistas to depending on spies, and to conversing with dislocated migrating populations. And, when these detection measures failed, armies fell back on the knowledge that their enemy had to follow good roads that paralleled with consistent water sources necessary to sustain thousands of horses, mules pulling miles of artillery vehicles, ambulances and ordnance, along with herds of cows, pigs, and sheep in the rear. There are simply no exceptions to this rule. Therefore,

in absence of complete information, finding one's enemy in June 1863 devolved into a process of elimination around a few eligible bodies of water running north-south capable of supporting an army of 75,000 plus men, 30,000 plus horses and mules, and potentially several thousand additional sorts of livestock. The same is true with period transportation and communication systems; namely armies always followed existing rail lines not only to be near supplies, and telegraph communication with other components of the army, but for reliable direction. Unlike pikes and toll roads, rail lines often marked an unambiguous, straight path to destination towns and cities. Train tracks could be counted on from point A to B, which is why runaway slaves stayed in contact with them to points north, and why Civil War armies used them in all theaters of the war for points of direction.

Finally, good roads provided similar assurance in finding one's enemy in that armies did not pick a battlefield with only one good way in and out. Choosing a battlefield with only one good road for advance or retreat invited disaster due to limited mobility, congestion, and danger of logistics being cut or destroyed. Therefore, towns with a confluence of several good roads passable in varying weather conditions stood out on campaign maps, such as the Confederate one prepared by Jedediah Hotchkiss before the Gettysburg Campaign, showing portions of Virginia, Maryland, and Pennsylvania. Only a handful of towns on this map included five or more improved roads east of South Mountain between Harrisburg and Washington D.C., on or near the Monocacy River, or in proximity to the Conewago and Conodoguinet branches of the Susquehanna River, including Westminster and Frederick, Maryland and Hanover,

Carlisle, and Gettysburg, Pennsylvania. Using their own surveyor maps, such as the 1858 *Hopkins' Map of Adams County*, Union engineers plotted these crossroad towns with the matrix of water, rail, and north – south valley corridors to locate Lee's whereabouts with an increasing degree of certainty by the time Meade assumed command three days before the battle. Environmental factors alone provided this assurance. The only real question, in the final twenty-four hours leading to the opening clash, remained not where to find contact, but where to find massed strength.

Destruction of rail and telegraph is also key to determining enemy location. Lee's Army of Northern Virginia spent days destroying sections of rail from the B&O RR to the Cumberland Valley RR to the Northern Central, essentially disrupting a north-south half circle that encompassed three states, with an east-west slash running through it in South Central Pennsylvania. Damage extended north from Harper's Ferry, West Virginia through Chambersburg, Shippensburg, and Newville, Pennsylvania along the Cumberland Valley line, while it ran north of Baltimore, Maryland to Hanover Junction and Carlisle, Pennsylvania on the Northern Central, with an west-east hyphen extending from Gettysburg through Hanover Junction to York, Pennsylvania on the Gettysburg-Hanover line. This deliberate sabotage delayed where the Union army could operate to full capacity, and therefore frustrated their mobilization efforts toward the battlefield. In general, Lee knew that Meade could not move comfortably out of Maryland into Pennsylvania without seriously renovating rail and telegraph north of the state border,

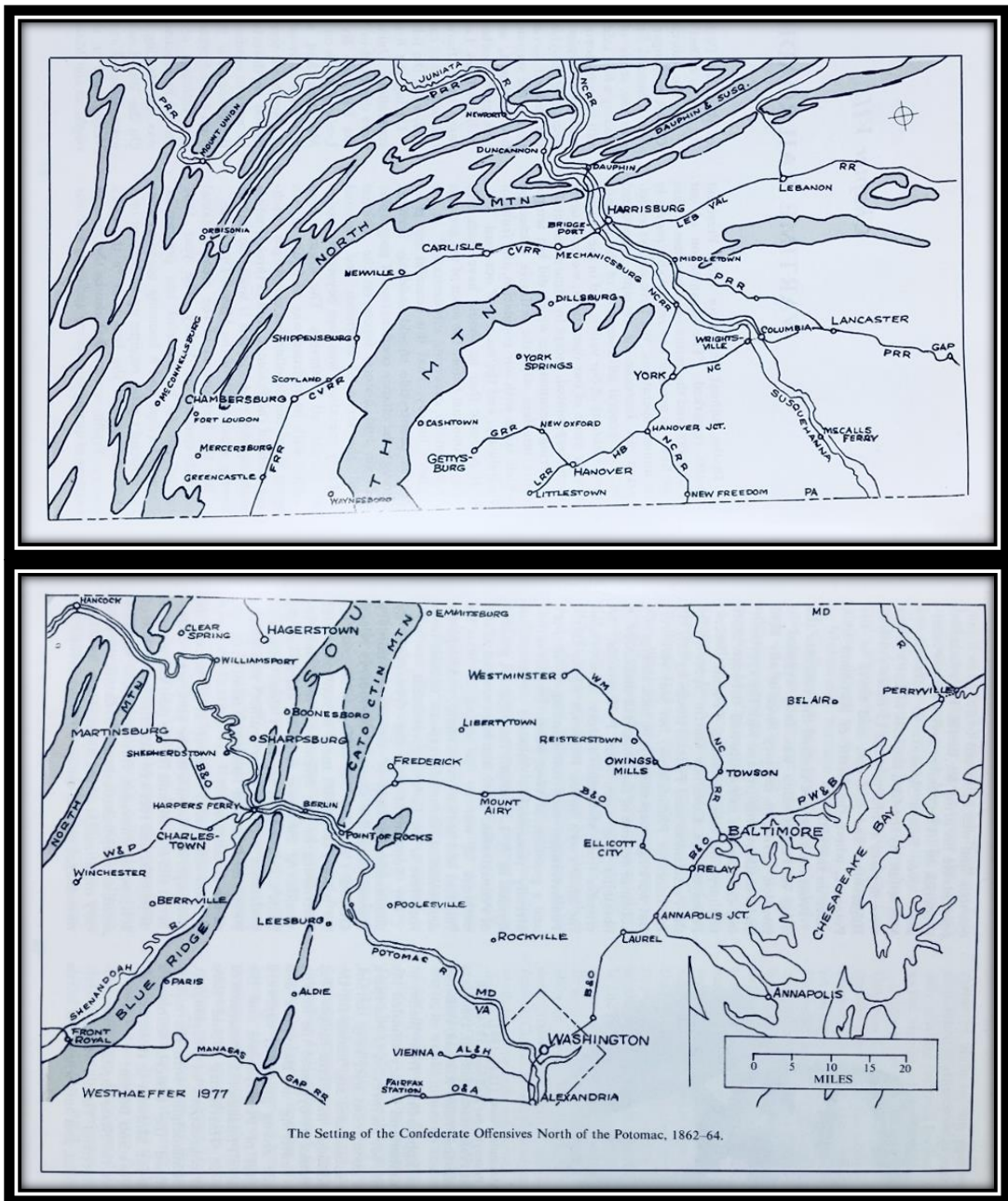


Fig. 1 – The Setting of the Confederate Offensives North of the Potomac, 1862-64, by Paul J. Westhaeffer. Targeted in the Gettysburg Campaign, Left-Right, CVRR = Cumberland Valley, B&O = Baltimore & Ohio, GRR = Hanover-Gettysburg, LRR = Littlestown, and NCR = Northern Central. Also depicted, Left-Right, WP = Winchester and Potomac, AL&H = Alexander, Loudoun, & Hampshire, O&A = Orange & Alexandria, WM = Western Maryland, PW&B = Philadelphia, Wilmington, and Baltimore, PRR = Pennsylvania.

which gave Lee time to prepare on equal transportation and communication footing, or to evacuate across the South Mountain if he so chose. In either case, railroad and telegraph disruption constrained Meade's movements north of the Pennsylvania border, and delayed Pennsylvania Emergency troops in Harrisburg from reaching the front lines. If Meade chose to fight in Pennsylvania, his only rail option involved repair of the Northern Central line from Baltimore to Hanover Junction to Carlisle. We know this because it was the only line running south-north on his front east of Blue Ridge Mountains, west of the Susquehanna River, and north of Washington D.C. which had to be protected at all times. There simply was no other rail line connecting that part of both states to serve the purpose of defending the federal capital from Pennsylvania. It can also be easily ascertained that if Meade's army moved north into Pennsylvania, it had to remain west of the Northern Central at Hanover Junction to shield repair and eventual transport of supplies there behind Union lines. It is also known that political pressures were tremendous for Meade to draw Lee's army south away from Harrisburg and ideally out of Pennsylvania altogether. Therefore if Meade moved north, he had to follow the Northern Central and remain west of Hanover Junction, which placed him on the Hanover-Gettysburg line, the only east-west connector toward Lee's movements along the Blue Ridge. In short, operating east of Hanover equaled an advance towards Gettysburg. Lee's destruction of the Northern Central thereby limited how far Meade's army could proceed quickly into South Central Pennsylvania, and framed where federal forces could operate.

So there were clear ways and means for both army commanders to determine the other's whereabouts prior to direct contact. Intact or destroyed rail, roads, and water, in relation to the symbolic and political polarities of Washington and Harrisburg, helped both sides know where the other had to be. As this work will make clear, even with breaks in intelligence gathering, both armies knew with a high degree of probability where the other had to maneuver based on operational needs. Logic therefore establishes where the battle could occur, but more than that it helps order the evidence correctly, because there are many officer accounts that do not make sense without knowledge of the location of rail, road, and water. As we will see, Brigadier General Alpheus Williams and Major General Henry Slocum's 12th Corps reports make little sense in the absence of understanding the importance of Meade's logistical needs on his operational right wing. The same can be said of Hermann Haupt's memorandums regarding repair of the Northern Central and Hanover-Gettysburg lines throughout the three day battle. This then is the greater point: once operational needs form the basis of one's analytical and reasoning skills, then officer memorandums and reports finally make sense.

In constructing this work, there is no need to find a hidden treasure trove of unpublished works to make an otherwise implausible case plausible. There is neither the need to cherry pick with the research, nor to stretch or twist it to make an awkward fit, or engage in counterfactual history that borders on fiction. To the contrary, the evidence for this case has existed under the battlefield historians' collective nose all along. It is the official reports, memorandums, congressional subcommittee hearings,

and soldier letters and articles that form the basis of most publications, combined with principles of war found in Jomini's *Art of War* (c 1818), Burnod and D'Aguilar's *Napoleon's Maxims of War* (1862), and Frederick the Great's *Instructions for His Generals* (c 1750).³⁴ In short, once the basic needs for water, rail, and road are established as the starting point of discussion, with principles of war guiding the analysis, then original reports, memorandums, testimonies, and articles fall into place for the first time. Many participatory accounts that fall outside the pale of usual interest in Little Round Top, Devil's Den, Wheatfield, Pickett's Charge, and battle action on the western end of the battlefield finally fit in this logical paradigm.

1.2 More Problems in Doing Battle History

Doing battle history offers additional challenges. The first one, which will be discussed more thoroughly in a separate section on terminology, involves specific language used by commanders in their notes and reports to each other at the time of the battle. These official correspondences were compiled into a three volume set and published in the 1880s, and form the core of most Gettysburg battle histories. The specific problem they pose is that West Point trained officers penned the reports to each other with little regard for lay readers. Officers used official language best understood by those in their own culture and did not feel the need to add explanatory remarks for future historians unversed in military communication. This is not to suggest they were unaware of writing to future generations. Clearly they wrote to protect legacies and reputations, knowing that students of war would eventually read through their papers. However, their language reflects a subculture that understood itself in the

most efficient terms. For modern readers who do not understand the charged meaning of these terms, reports can seem choppy, in need of elaboration, and hence unrevealing. The generals who wrote them can appear insufficiently informed or without a plan.

Another problem with doing battle history is the burden of trying to mesh post-war symbolic truth with battle action on the ground. Veterans returned to battlefields by the thousands around the silver anniversary dedicating thirty new monuments a year from 1880 to 1890 at Gettysburg. On average, a new monument dedication ceremony occurred every week at Gettysburg for ten years. In 1887, 1913, and 1938, veterans ceremoniously walked Pickett's Charge at Gettysburg and shook hands for a photo op along the stone wall where Pickett's Virginians had contested on July 3, 1863. On each occasion, the representation of an angled stone wall and some nearby trees as the rebellion's High Water Mark captured their attention and captivated the national imagination.

Such stories of the memorial period are vital to understanding how veterans shaped public memory, of how they shaped the landscape, and of how they began reconciliation. Each of these post-war gatherings should be remembered as significant to the nation going forward. However, the symbolic truth of Gettysburg as a turning point can look very different than a direct frontal assault on the ground in July of 1863. This was especially true for Confederate commanders who never mentioned the trees or the small angle in the stone wall. The overall commander of the assault, Lieutenant General James Longstreet, reported that he aligned the attack against a salient bend in

the Union line, but this was from the perspective of someone commanding four divisions across a mile's expanse. The angle near the copse of trees needed only one brigade of 1,500 men to fill its environs, while the Confederate assault involved ten brigades in the first wave alone. With an assault of this magnitude that involved parts of two corps extending a half mile north of the small angle in the stone wall, the objective point had to be the larger salient bend in the fishhook at Cemetery Hill.

So how did the meaning of the charge narrow to such a small frontage? The first answer is that both flanks of the charge collapsed and were driven through crossfire to within a quarter-mile of the angle and trees giving them the appearance of intended objective. The second answer is that when veterans returned by thousands to dedicate their monuments in the 1880s, most of the generals in the know who directed strategy had passed. To soldiers on the ground who knew little of broader strategy, the stone wall, angle, and nearby trees came to represent the central place of their struggle and eventually their place of reconciliation. The first historian of the battlefield John Bachelder named the location the High Water Mark of the Rebellion and landscaped the space with a memorial in 1892 to emphasize that theme. Even before the memorial, his High Water Mark theme found its way into the American subconscious through Paul D. Philippoteaux's Cyclorama painting of Pickett's Charge shown in Boston in 1884 and various places after that until brought to Gettysburg in 1913. The 1887 reunion of Alexander Webb's Philadelphia brigade with Lewis Armistead's Virginia brigade, their ceremonial handshake across the wall, and their unusual agreement to honor the fallen General Armistead with a marker inside the angle sealed the High Water Mark's

importance. Bachelder's theme had become so prevalent by 1895 that soldier claims of fighting anywhere along an extension of that stone wall carried significance in the post-war north. This is one example of how conflating symbolic truth with military history has blurred the lines between memorialization and the actual event. Trying to separate these two worlds has become a distinct historical challenge.

A third problem with practicing Gettysburg battle history is the limitation set on



Fig. 2 – Original Conceptual Map of Gettysburg Battlefield, Lands Owned, Proposed Purchases.

analysis by political boundaries that define the battlefield park. In essence, there are two battlefields. There is the battlefield that Congress funds annually with a budget to preserve, protect, and interpret historic houses, fences, roads, geographic landscapes, and monuments. This is the battlefield the public knows and loves, but there is another battlefield. The second one is the conceptual boundaries, or those boundaries outside the park's political boundaries. These borders represent the original intended parameters of the park, as expressed by the veterans within the original 1895 enabling legislation. The veterans signed a petition with a conceptual blueprint of the battlefield they wished to preserve that is a third larger than the current 6,000 acres adjusted by Congress in 1990. The theoretic blueprint includes significant sites not currently in the park boundaries such as Hospital Hill (Fig. 1, #6) east of Gettysburg, where one of the largest field hospitals of the war provided 1,600 permanent beds and processed 20,000 patients during a four month period. The original boundaries included Wolf Hill and Brinkerhoff Ridges (Fig. 1, #7) immediately east of Gettysburg where a division of federal cavalry protected the federal right flank for the second day of battle along the Hanover Road, and where nearly 14,000 federal infantry from two corps waited in readiness for a decisive attack order issued by Meade at 10:00 AM on the same day. Finally, the veterans wanted to preserve Wolf Walk Ridge and McAllister Hill (Fig. 1, #7) south of Gettysburg on the federal far right flank where Union infantry pivoted east and artillery guarded the Baltimore Pike.

The common thread to each of these unsaved sites is they all encompass significant ground on the federal right where the Army of Potomac tried to pivot and

straighten their position for two days before finally succeeding on the third day. It is the part of the battlefield where the army's logistical center rested with its water source on Rock Creek, its rail connection to the Hanover-Gettysburg line, its primary artery of the Baltimore Pike, its political links with Washington D.C., its hospitals, and its artillery and ambulance parks. The historiographical misfortune of this current park exclusion is that this is the ground General Meade gave most of his attention to during the battle. It is the only ground where a decisive attack order was issued by the commanding general, and the only part of the Union front where the federal army took the offensive, advancing to Benner's Hill on July 1, deploying for a decisive attack on July 2, and pivoting from Culp's to Benner's Hill on July 3. Because these positions are outside the park's political boundaries, the continuity of Meade's offensive plans on his right are given less attention with the result that traditional narratives have shown little interest in explaining the purpose of deployments away from the main action.

Another difficulty in doing battle history is the little interest shown in places where casualties were low. This is largely because significance has become synonymous with losses, a concept that finds its meaning in the courageous acts of great men. Gettysburg historiography is steeped in Whig history that celebrates self-made men, their heroic strivings to achieve, and fighting for a righteous cause. Acknowledging honor and valor on the battlefield is always priority, but it has become such a single-minded focus that little attempt is made to explain purpose behind maneuvers, deployments and skirmishes on the battlefield's fringe. At best, the historiography documents locations of inactive units with maps, reports and other first-hand accounts,

and devotes a few pages to skirmishes away from the main battle lines, but makes no attempt to integrate them in a comprehensive way with the rest of the battle. Daily interpretation in the park is still based on Coddington's tactical study that stresses high casualty areas, while giving little thought to positions outside the Union fishhook shaped battle line held by federal soldiers on July 2 and 3.

1.3 Gettysburg Exceptionalism: A Unique Historical Problem

Gettysburg was never accorded its water title like so many other battles. That should have bothered someone before now, especially considering that so many battles and campaigns identify with the closest river or tributary, while Gettysburg remains an exception. For instance, there was Manassas or Bull Run, Sharpsburg or Antietam Creek, Seven Days or Peninsula Campaign (York and James Rivers), Murfreesboro or Stones River, and Shiloh or Pittsburgh Landing (Tennessee River) just to name the more prominent ones. The question then is how did Gettysburg avoid the same historical treatment? The answer is a complicated one, but essentially it is similar to all the other battles with two names. That is, the common denominator to all battles that maintained a town name identification is the theme of home. Southerners typically named battles after the closest place of familiarity, a place that could be called home. Northern military commanders had no emotional connection with Southern towns, instead identifying with the nearest geographic location on a map, typically the closest river or its tributaries. Likewise, strategies in the East revolved on following key roads or rail toward Richmond, along with nearby tributaries of the Potomac, Rappahannock, Rapidan, York, and James making it natural for generals to operate on certain

communication lines while remaining somewhat indifferent to boroughs and towns. Campaigns from a northern perspective revolved completely on natural resources and avenues of approach to transport and sustain men and material. Add to this that two-thirds of all Civil War battles occurred in Virginia, and only one north of the Mason-Dixon, this pattern of dual names repeated itself enough to become the norm. Gettysburg on the other hand was not only a northern victory, but the only one fought on northern soil, and broke with the pattern of two names so common in Virginia and further South.

A second reason for the battle assuming its town name alone has much to do with early historiography shaping it as an exclusive gem of northern admiration. No one worked at this more than John Bachelder, who did not participate in the battle, but made Gettysburg his permanent residence immediately afterwards, and began corresponding with veterans to preserve the battlefield. Over the years that he served as primary historian, from 1863 to 1896, he established the Gettysburg Battlefield Memorial Association, served as its president, and oversaw early acquisition of battlefield lands and right-of-ways across it. He worked with the Grand Army of the Republic (GAR) veterans' organization and its many chapters to locate original battle lines for monument, marker, and tablet placement. He landscaped the battlefield with specific themes in mind that favored a northern perspective.

Bachelder shaped the early historiography of the battle in several other ways such as delineating clear lines where Confederate and Union monuments could be located in the 1880s during the height of the memorial period. Union and Confederate

monuments were to be erected on original lines of battle usually a mile apart as is the case with Cemetery and Seminary Ridges. Though Bachelder established rules that theoretically allowed for Confederate monuments to coexist on the battlefield with Union ones, forbiddance of intermingling the two made the reality quite different. Furthermore, land acquisition for Confederate positions came after Bachelder, and Southern monuments generally were unwelcomed for the first fifty years after the battle. Add this to depleted budgets of former Confederate state governments that placed little value on erecting monuments to defeat, and the formative years of battlefield preservation and memorialization virtually excluded the Southern perspective.

Bachelder's correspondence with Union veterans was dramatically greater than with Confederates, which caused the storyline to assume a distinct Union flavor. The South's defeat at Gettysburg became a foregone conclusion after the High Water Mark monument's dedication in 1892 rendering Confederate strategies a subplot to the inevitable. Together these post-war developments reinforced Gettysburg as a unique Northern victory on Northern soil, which is an important first step to identifying the battle with the town of Gettysburg. For Bachelder, as well as G.A.R. veterans and their families, Gettysburg represented home rather than a geographic feature on a map. Had Southerners been allowed to name it, the campaign may very well have taken on a geographic feature name, or a rail company identification.

Regarding nomenclature, Lee referenced Gettysburg by name several times in his July 31 report, not for the value of the town itself, but instead as a directional point

on the map for marches to and from the area. The same is true for such towns as Chambersburg, York, and Carlisle noted as check points on the march rather than final destinations. His July 31, 1863 and January 1864 reports together spent disproportionately more time describing movements in relation to South Mountain, the B & O Railroad, the Rappahannock, Shenandoah, Potomac, and Susquehanna Rivers. For instance, at the operation level, there is mention of Harrisburg as a potential objective in Lee's report to Jefferson Davis, but the broader emphasis to Davis was operations on the Susquehanna, destruction of Pennsylvania rail and bridge, gathering supplies for the coming months, and of being uncomfortably far from his Virginia base of operations when the battle began. As for the battle itself, Confederate reports are vague about hill and ridge names except for Cemetery Hill with its easy to recognize grand archway, tombstones, and notable marking as town cemetery on the 1858 Adams County map. All in all, the other hill names came into better focus after the war. Richard Ewell called Culp's Hill, the wooded hill on our left, while James Longstreet identified the Round Tops as the hills on our right. The Confederates did not even give their own Seminary Ridge line or Benner's Hill position a name, instead referring to the former as having gentle slopes and woodlots, while the latter was described as lower, inferior, and bald. With few exceptions, Lee associated his surroundings with the environment rather than identity with place.

1.4 Strategy and Tactics

Before going into a general description of the how the two armies met at Gettysburg, it is important to begin with an explanation of strategy and tactics. Both

commanding generals Meade and Lee understood the necessity of military principle, military science, and the art of war. They first learned them at West Point where Jomini's *Art of War* and *Napoleon's Maxims* were emphasized. Later they put these principles into practice through various military actions and assignments that included the Second Seminole War for Meade, and the Mexican War for both Meade and Lee. Both practiced surveying and topographical and civil engineering that involved the precise disciplines of topography and structures. Lee, for instance, gave personal instruction and direction to the building of forts for the inner harbor defenses of Baltimore, Charleston, and Savannah, along with arranging soldier defenses for the Charleston & Savannah rail lines. Between the two men, they contributed to the design of forts, harbors, lighthouses, roads, canals, and railroads. Both men understood the science of physical and human structures on a level that few others did.³⁵

Scientific principles had been applied to war by Frederick the Great and Napoleon in the latter eighteenth and early nineteenth centuries, forever changing the way military planners approached war. Frederick the Great's *Instructions to His Military Generals* provided extensive detail on logistics at the army level. He also instructed on the importance of mobility, firepower, and maneuver as central ingredients to success on the battlefield. Mobility meant exerting his troops to march long distances to seize initiative and secure the element of surprise. Firepower involved constant drill until firing by volley became second nature, even in deteriorating conditions. Maneuver was the art of gaining your enemy's position without firing a shot by "approaching the provinces whence he draws his subsistence, cutting him off from his capitol, threatening

his depots, or in short, taking up any position by which you deprive him of his provisions.”³⁶ Frederick became the first modern general to employ the oblique order of battle at Leuthen in 1757. The oblique order called for the attacker to approach the enemy’s position at a 45 degree angle, not unlike a flanking maneuver that rolls-up up the end of a line. Frederick modernized the oblique by coordinating infantry, artillery, and cavalry to overwhelm the decisive point of the battlefield. Lee incorporated each of these military principles in his battles, particularly the oblique order of battle employed in the famous Pickett’s Charge on July 3, 1863.

Napoleon Bonaparte wrote in Maxim LXXVIII, “Peruse again and again the campaigns of Alexander, Hannibal, Caesar, Gustavus Adolphus, Turenne, Eugene, and Frederick. Model yourself upon them. This is the only means of becoming a great captain, and of acquiring the secret of the art of war. Your own genius will be enlightened and improved by this study, and you will learn to reject all maxims foreign to the principles of these great commanders.”³⁷ Napoleon is sometimes called the first scientific general, because he was the first to calculate military decisions in quantitative terms, in formulas and in ratios, as evidenced by *Napoleon’s Maxims* and Jomini’s *Art of War*. In these two works, we learn that Napoleon applied mathematics to battlefield decisions not unlike Isaac Newton employed calculus to the heavens. Napoleon decreed that a frontal assault must have at least a two-to-one numerical advantage to carry a position. He advocated maneuvering one’s enemy across a geographic divide, such as a mountain or river, and then overwhelming the separated halves in succession. He

warned against making lengthy detours, on a wide arc around an enemy's flank where the defender has a shorter attack distance from the base.

Civil War generals admired Napoleon and exhibited a fascination with his military principles for two reasons. First, Americans preferred French role models over English ones, because of two wars with the English, and the uneasy feelings that still endured. The Revolution and War of 1812, along with later territorial disputes in Texas and Oregon made Americans leery of the English in the Early Republic. The many Irish who came to America in the 1840s compounded this feeling by adding more anti-English sentiments in the United States.³⁸ The overall mood at West Point reflected this sentiment as emphasis of study revolved on Napoleon even though Wellington had defeated him at Waterloo. This started with Dennis Hart Mahan, a great admirer of Napoleon who taught military operations at West Point. He lectured from the *Art of War* by Jomini, a Swede who traveled with Napoleon and recorded the general's military principles within a broader treatise on the history of Western warfare. Mahan also founded a Napoleon club at West Point that regularly practiced memory drills on Napoleon's logistical and tactical maxims.

Mahan's Napoleonic influence at West Point was far reaching in that he taught a third of the army's future officers that commanded at Gettysburg and other Civil War battles. He paid attention to their battles too as evidenced by a full length article he wrote on Gettysburg in 1866 titled, "Salient of the Battle of Gettysburg," where he covered the entire battle in mathematical language, characterizing the Union line as a salient that expanded from an acute, sixty degree angle where all sides were equal, to a

right, ninety degree angle with an hypotenuse.³⁹ In mind-bending geometric terms, he explained how the acute angle allowed for precise matching of frontages when troops moved from one front to the other. Mahan's Napoleonic lectures and writings illustrate that military science had become as important at West Point in the 1850s as political science in Washington, D.C. or physical sciences in building rail lines from New York to Chicago.

The principle text used by Mahan, Jomini's *Art of War*, offers military axioms that later appeared in the language of reports at Gettysburg. Terminology referenced in Jomini such as dislodge, position, decisive, detach, refuse, operations and tactics are terms sometimes italicized in after-action reports, and always understood by other officers. To understand these terms is to understand the battle, while not knowing them leads to a severely limited perspective. Dislodge is a prime example. When Robert E. Lee reported to Jefferson Davis after Gettysburg that "we attempted to dislodge the enemy, and, though we gained some ground, we were unable to get possession of his position," Lee's entire battle plan is understood in that one word.⁴⁰ As William Duane stated in his *Military Dictionary* adapted for U.S. military institutions in 1810, dislodge means "to drive an enemy from their post or station" and leave the battlefield altogether.⁴¹ This means the attacker is not trying to entrap, ensnare, encircle, or annihilate, but rather leaving a way out hoping the defender will take it. Dozens of books and articles on the battle have needlessly searched and speculated on Lee's true objective when the answer lies in the word dislodge.

Position is another key Jomini word repeated and emphasized in Gettysburg reports.⁴² In describing a position, Jomini wrote that “an army may often find it proper to await the enemy at a favorable point, strong by nature...to cover an important objective point....”⁴³ When Lee wrote Davis after the battle, he not only stated that he failed to dislodge the enemy, but that he also did not gain possession of the position. Lee’s senior corps commander Lieutenant General James Longstreet argued with Lee that it was impossible to take that position. Repeated use of the term position in Confederate reports confirms a terrain oriented objective. A position is always built on key terrain. In this case, they were discussing Cemetery Hill and Ridge. Gaining possession of that position promised to dislodge federal forces from Gettysburg.

Jomini wrote about a decisive attack that is also repeated in Gettysburg battle reports, stating, “it should be well understood that there is in every battlefield a decisive point, the possession of which, more than any other, helps to secure the victory....”⁴⁴ He added, “The decisive point of a battlefield is certainly that which combines strategic with topographical advantages. When the difficulties of the ground are not too formidable upon the strategic point of the battlefield, this is generally the most important point.”⁴⁵ In essence, Jomini instructed that decisive attack seizes a point that ends the battle. When Meade ordered Slocum to make a decisive attack on his right with parts of three corps during the morning of the battle’s second day, his choice of words informs the reader he planned to end the battle with one attack. When considering 1st and 11th Corps casualties from the battle’s first day in comparison with elements of the 12th, 5th, and 6th Corps planned for the assault, Meade had ordered

more than half of his then available army for the attack. The details of the planned attack show federal intent to regain ground north of Gettysburg lost on the first day, including the town and positions that threatened the federal right flank. Relegating Lee to the defensive at Oak Ridge was the final tactical objective.

Detach – to separate one’s force – is yet another precise word that appears in the reports without further explanation signaling to the informed reader to consult Jomini’s military guide or Napoleon’s maxims.⁴⁶ In short, the word is italicized in reports and given special attention by Jomini and Napoleon himself, because it is a high risk option that places an army in potentially grave danger if not conducted with precise intelligence, correct timing, and great caution. Napoleon wrote, “No force should be detached on the eve of a battle, because affairs may change during the night, either by retreat of the enemy, or by the arrival of large reinforcements to enable him to resume the offensive, and counteract your previous arrangements.”⁴⁷ Frederick the Great instructed, “When you are acting offensively, detachments ought never to be employed, and even though you are in open country, and have some places in your possession, no more troops are to be spared than are barely sufficient to secure your convoys.”⁴⁸ As a rule, detached forces must be large enough to hold their own in a geographically isolated place where supports cannot easily reach them. This usually translates to a corps level action involving seven to ten thousand troops on a Civil War battlefield. An army is never more vulnerable than when a portion of it is detached in the face of an enemy, even if the detached body is only maneuvering to attack to advantage with the rest of army. This is so because there are no guarantees one’s enemy will not shift

disproportionately to the detachment and overwhelm it, or launch a decisive attack on the main portion of the army absent one corps. That whole dilemma will be illustrated later in this work when explaining Meade's attack order to Slocum during the morning of the battle's second day, and Slocum's reply that he could not detach enough troops to make the attack.

Refuse or crochet are commonly used terms that can be traced from battle reports to Jomini's manual.⁴⁹ Both terms always involve the flank of a regiment, brigade, division, corps, or army bending back at right angles with the main line. Such troops are refusing to have their flank turned and subjected to enfilade fire. Squarely striking the flank enables the attacker to bring all of his weapons to bear on one point, while the defender's field of fire is reduced to a narrow tapered end where the flank is easily rolled-up. Refusing the line permits the defender to face the attacker squarely in protection of the flank. An additional benefit of the refused line is that it can instantly pass from defense to offense by pivoting 180 degrees around the enemy's flank. This option existed when the assailer bypassed the refused flank.

Lee's movements into South Central Pennsylvania mirrored Jomini's instruction for foraging in enemy territory. He stated that when doing so, "A general should be capable of making all the resources of the invaded country contribute to the success of his enterprises: he should use the local authorities, if they remain, to regulate the assessments so as to make them uniform and legal, while he himself should see to their fulfillment. If the authorities do not remain, he should create provisional ones of the leading men, and endow them with extraordinary powers. The provisions thus acquired

should be collected at the points most convenient for the operations of the army.”⁵⁰ Lee did that by sending a third of his army into the Susquehanna Valley five days before the main battle, allowing his army to spread out within a 30 mile radius of Gettysburg from Chambersburg to Shippensburg, Carlisle, Wrightsville, and York, Pennsylvania. It was not a coincidence that he did this a month before harvest time, nor happenstance that he collected enough hay, oats, rye, barley, sheep, hogs, and cows to feed his army through October. In each of these places that his army entered, his officers requisitioned supplies from town officials and paid them along the way, albeit with Confederate money that soon proved worthless. In any case, provisions were “collected at the points most convenient for the operations of the army,” along roads extending from the centrally located hub of Gettysburg not far from the South Mountain and Lee’s lines of communication in the Shenandoah Valley. Jomini provided the blueprint for why Lee crossed into the Susquehanna Valley and gathered supplies within a thirty mile radius of Gettysburg in July 1863.

Finally, Jomini’s directions for selecting lines of operations and determining sites of tactical deployment were adopted by Major Generals George G. Meade and John F. Reynolds in the hours leading-up to the battle of Gettysburg. For choosing a line of operations, Jomini wrote,

If the art of war consists in bringing into action upon the decisive point of the theater of operations the greatest possible force, the choice of the line of operations, being the primary means of attaining this end, may be regarded as the fundamental idea in a good plan of a campaign. The objective point will be determined upon in advance, the general plan to be followed to attain it, and the first enterprise to be undertaken for this end: what is to follow will depend upon the result of this first operation and the new phases it may develop.⁵¹

What Jomini urged here was that the commanding general pre-determine the decisive point for the theater of operations, and then align all of his movements to bring critical mass on that point. Secondly, he acknowledged that new phases of the operation may develop after first contact resulting in various contingency plans to achieve the same objective. As we will see, Meade arranged his infantry and cavalry corps on June 30, 1863 to be able to either advance in force on Monocacy's headwaters at Gettysburg or fall back in concentration on Pipe Creek depending on the new phases that developed. Once the battle began, Reynolds urged Meade to send everyone forward to Monocacy's headwaters.

Jomini offered more direction in choosing lines of operations that reflects what Meade did in late June of 1863. Jomini stated,

In every case, each theater must have its own base, its own objective point, its zones and lines of operations connecting the objective point with the base, either in the offensive or the defensive. It has been taught and published that rivers are lines of operations *par excellence*. Now, as such a line must possess two or three roads to move the army within the range of its operations, and at least one line of retreat, rivers have been called lines of retreat, and even lines of maneuver....⁵²

Jomini introduced a couple more key elements to lines of operations in this paragraph. First, there must be a base that is tied to the objective point. In Meade's case, that base was Westminster, Maryland with its extensive railroad supply depot, and the objective point became Marsh Creek's principle branch of Willoughby Run one mile west of

Gettysburg. Furthermore, Jomini's statement about rivers and roads applies well to Meade's actions too, as federal maneuvers north to Gettysburg and south again to the Potomac followed the Monocacy River. The three primary roads used to do this were the Emmitsburg and Taneytown Roads, and the Baltimore Pike.

As for the moment that a general shifts from lines of operations to tactical deployments, Jomini's instructions served Reynolds and Meade well on July 1. Jomini urged,

He [the commanding general] should endeavor in all of his combinations, whether deliberately arranged or adopted on the spur of the moment, to form a sound conclusion as to the important point of the battlefield; and this he can only do by observing well the direction of the enemy's line of battle, and not forgetting the direction in which strategy requires him to operate.⁵³

Jomini made it clear that the commanding general's first tactical deployment obligation is to determine the key position on the battlefield in relation to broader strategic objectives. As we will see, Reynolds built his defense on July 1 around protecting Cemetery Hill as the nexus point for the three primary roads that federal infantry corps used to reach Gettysburg, and as part of the bulwark with Culp's Hill that connected the right flank to Monocacy-Rock Creek. Consistent with Jomini's principles, Reynolds (in the confidence of Meade) did not forget that strategy required him to cover his supply base twenty-four miles south at Westminster and Washington, D.C. beyond.

1.5 Introductory Overview of the Gettysburg Campaign

Though this work digs deeply to tie every aspect of the battle into the influence of water concourses, rail lines, and improved roads, it is necessary here to give a straightforward overview of the campaign and three day battle apart from environmental agency or any other analytical factor. The concise version revolves on Lieutenant General Robert E. Lee's decision to seize the initiative and maneuver his Army of Northern Virginia out of the Old Dominion, and into Maryland and Pennsylvania after his recent tactical victory at Chancellorsville, May 2-3, 1863. Lee intended to give Virginia farmers a chance to recover by temporarily transferring hostilities into Pennsylvania, where supplies could be gathered from a state relatively untouched by war. He also hoped to fuel a growing peace movement in the North, and persuade foreign powers of the Confederacy's legitimacy, by advancing into Northern territory. Using the South Mountain as an axis for advance, Lee marched his troops up the Shenandoah and Cumberland Valleys to Chambersburg, Pennsylvania where part of his force crossed the South Mountain on June 26 and marched into the Susquehanna Valley to gather supplies and disrupt rail and telegraph communications from Gettysburg to Hanover to York. Intersecting their path were three brigades of Major General J.E.B. Stuart's Confederate cavalry corps that road north, along the Northern Central Railroad, destroying track and cutting telegraph from Westminster, Maryland to Carlisle Pennsylvania.

Meanwhile, Major General Joseph Hooker marched the Army of the Potomac from near Chancellorsville to as far north as Frederick, Maryland in the attempt to arrest

Lee's movements and draw him back to Virginia. Disputes with the War Department, however, led to Hooker resigning at Frederick and being replaced by Major General George G. Meade on June 28. Within hours after Meade assumed command, he shifted the army's supply depot east from Frederick to Westminster, Maryland to more directly cover Baltimore and Washington, D.C. Meade also authorized Major General John F. Reynolds to advance the army's Left Wing into Pennsylvania and find Lee's army rumored to be to the west near South Mountain. Brigadier General John Buford's federal cavalry division guarded Reynolds' infantry movements in that direction, and on June 30 discovered Major General Henry Heth's Confederate infantry division eight miles west of Gettysburg at Cashtown. The following morning of July 1 at 8:00 AM, Heth's division tried to enter Gettysburg on the Cashtown Road (also known as the Chambersburg Pike), but was resisted in earnest for two hours by Buford's cavalry. Federal infantry subsequently made forced marches of four to eight miles, by way of the Emmitsburg Road, to help Buford reverse Confederate gains by 11:30 AM. For three hours, both armies rushed reinforcements forward setting the stage for the fight to reopen around 2:30 PM. Confederate attacks resumed on two fronts, with primary assaults coming from the west and secondary ones from the north. Around 4:00 PM, both Union fronts devolved into a retreat south through the town to Cemetery Hill, where they rallied under Major Generals Oliver O. Howard and Winfield Scott Hancock who directed the placement of artillery and arranged the positions of arriving infantry for this contingency. Throughout the evening and early morning of July 2, Union campfires grew south along Cemetery Ridge and east toward Culp's Hill indicating to the

Confederates they had missed an opportunity to dislodge federal forces from Gettysburg.

By daylight on July 2, the Union battle line resembled a fishhook with the barb of the hook on the right at Culp's Hill, the bend in the center at Cemetery Hill, the shank along Cemetery Ridge on the left and the eye of the hook on the far left at Little Round Top. Confederate deployment outlined the fishhook matching its frontage on three sides. Seminary Ridge constituted the primary Confederate position opposite Cemetery Ridge, while Benner's Hill served as the equivalent to Culp's Hill.

Lee's battle plan for the second day was rather simple. Two-thirds of his army would attack the federal flanks, while the remaining third watched the center. The two-thirds attacking the flanks would either drive the federal flanks in toward critical mass on the center to overwhelm it in Jomini fashion, or draw federal reserves from the center to the flanks, prompting the final third of the attacking force to directly seize the center. All combinations centered on seizing the central position of Cemetery Hill and Ridge for the second and third day.

During the late afternoon of July 2, Lieutenant General James Longstreet's main Confederate attack struck the Union left flank under Major General Daniel Sickles at the Peach Orchard position attempting to drive the Union line up the Emmitsburg Road toward Cemetery Hill and the town itself. This resulted in bloody fighting at the Peach Orchard, Wheatfield, Devil's Den, and Little Round Top, where federal troops made separate stands to prevent their flank from being driven in. Meade tripled his numbers

on this front by shifting troops from the center to his left stopping Confederate progress well short of Cemetery Hill, though a few isolated Southern brigades facing the left-center did reach the lower slopes of Cemetery Ridge at dusk. Because the main attack did not drive the federal left closer to Cemetery Hill, the few Southern brigades that assaulted Cemetery Ridge directly did so haphazardly without support on their right, or their left as they soon learned.

Support on their left broke down in part because Confederate assaults on the western slopes of Cemetery Hill mysteriously stopped. The three-prong attack against the bend in the fishhook was to begin on the far federal right at Culp's Hill and develop counterclockwise to East Cemetery Hill and then West Cemetery Hill gradually covering the full arc of the hook. The assaults at Culp's Hill and East Cemetery Hill commenced in succession as planned, but the final sequential attack at West Cemetery Hill stalled, permitting federal troops to shift right and secure compromised areas. The stalled attack at West Cemetery Hill also contributed to a breakdown in support at Cemetery Ridge, stopping Confederate progress there. With the three-pronged attack delaying at the foot of West Cemetery Hill, and the main attack at the Peach Orchard weakening before it reached Cemetery Ridge, the remaining third of the Confederate army did not have enough support to seize the weakened center.

The third and final day of the battle involved more of the same. The federals decided to defend the fishhook one more day, while the Confederates tried again to bring critical mass against the bend of the hook. The seven hour assault against Culp's Hill attempted to pressure Cemetery Hill from the federal right, or at least hold federal

defenders there, while the main attack struck the bend on the left-center at Cemetery Ridge and Hill. The concerted effort intended to crack the center from one or both directions and force a federal retreat toward Washington, D.C. The Confederate attacks against Culp's Hill continued as long as possible before running low on munitions, manpower, and energy levels after seven hours of fighting. Confederate resupply at Culp's Hill became impossible because of the mill ponds at Rock Creek that prevented wagons from crossing with fresh rounds. The mill ponds also made removing wounded and dead difficult enough to consider a temporary truce or withdrawal. The result was a seven hour fight against Culp's Hill that ended before the main attack against the left-center began. When the latter did begin, the troops facing Culp's Hill had withdrawn 300 yards from the federal front, far enough to break contact, resupply, and be in position for pressuring a federal retreat if the main attack at Cemetery Hill succeeded. At the least, their continued presence in front of Culp's Hill discouraged federal troops from shifting to the main attack.

The eventual main attack against Meade's left-center and center has become a story unto itself known as Pickett's Charge. Three other Confederate divisions supported Pickett's division in the attack to dislodge federal forces from the Cemetery Hill position and spur them to retreat toward Washington, or at least diminish federal reserves enough to begin a Confederate withdrawal to Virginia without vigorous pursuit. The final grand assault against Hancock's 2nd Corps at Cemetery Ridge ended with a resounding Union victory as the attack was decisively repulsed to the degree that it is remembered as the High Water Mark of the Confederacy. The Southerners constructed

field fortifications along Seminary Ridge in case of a federal counterattack, but that attack never came. On July 4, Confederate retreat to Virginia began, with the federal army in cautious pursuit. Since the Gettysburg Campaign represents the last operational offensive into the North by an entire Confederate army, the campaign then constitutes the decline of Southern hopes in the East. Conceding offense at the operational level eliminates the element of surprise and generally signals stalemate and eventual defeat. Gettysburg is considered significant primarily for this reason.

This is the often repeated tactical (in-battle schematics) narrative of the three day battle that will remain at the core of the pages to follow. It is indisputable that three Confederate corps made a concerted effort toward the union center for two days, and that Union defenders repelled those attacks in detail to prevent critical mass against Cemetery Hill. This basic tactical template will go unchallenged in the pages to follow. What this work does instead is broaden the scope of the attacks to show environmental influences on command decisions. It examines location of vital water courses, rail lines, and improved roads to argue where federal dispositions needed to be for operational (broader theater of war) security. It shows why the fishhook was a logistically compromised position that federal commanders considered adjusting for two days, before they finally did after Pickett's Charge. Defending the fishhook is viewed in this work as a temporary purgatory that federals endured until their line could be straightened, their logistics fully covered, and their offensive maneuvers could begin. In the narrative that follows, the battle does not end with the repulse of Pickett's Charge. It ends when the federal line is fully straightened and the offensive phase has begun.

The fishhook was a temporary tortoise shell alignment to cover water, rail, and road at a bare minimum until the line could be uncoiled and the offensive phase began.

Within the opening sections, notice repeated references to the Susquehanna and Monocacy Rivers as primary operational objective points, along with their tributaries, as direction for movements and branches for deployment of divisions and corps. From there, note the final narrowing of those branches to the Monocacy headwaters framing Gettysburg. The same will hold true for road, railroad, and mountain pass discussions. Environmental agency will guide the discussion from this point forward, beginning with broader campaign movements toward South Central Pennsylvania, and then shifting to tactical decisions made on the battlefield itself. Natural and manmade environmental influences will fundamentally shape our view of the Gettysburg Campaign in the chapters that follow.

Chapter 2: Symbolic Polarities, Water Courses, Improved Roads, Rail Links, and Passes

2.1 Symbolic Capital Polarities

The federal idea to open an option for defense of Washington at Gettysburg had its beginnings in the dual missions Meade needed to accomplish when taking over for Major General Joseph Hooker on June 28, 1863. That is, he had to both defend Washington and draw Lee down from Harrisburg, setting up a high stakes tug-of-war between the two armies and two national capitals. Meade preferred to fight closer to Washington because there was less room for error in doing so. If he needed to suddenly fall back from defenses around Frederick or Westminster, Maryland into Washington he could do so rather quickly. Fighting closer to Washington also meant that Harrisburg was safe, that Governor Andrew Curtin of Pennsylvania could rest more easily knowing Lee's army had left his state, and that Meade had a labyrinth of over sixty miles of entrenchments to withdraw to in the federal capital if his army needed it. Lee, on the other hand, wanted any fight that might occur closer to Harrisburg, for all the same reasons in reverse. A siege of Washington had to be avoided at all cost, because he did not have a secure supply line to sustain an eight to ten month siege, nor did he have siege equipment, nor was his army big enough to surround the federal capital and squeeze off all outside road and rail access.

Moreover, Lee's maneuvers had to divert federal attention from the Confederate Capital, Richmond, Virginia, and the best way to do that was by threatening the

Pennsylvania Capital, Harrisburg. Lee carefully stipulated in his reports to Jefferson Davis that he would advance, “upon” and “against” Harrisburg, which is not to be confused with laying siege, seizing or holding the state capital.⁵⁴ It is important to note that Lee never used the latter three terms, because he knew he could not occupy Harrisburg so far from Virginia. His line to Culpeper, Virginia, via the Cumberland Valley, would be greatly overextended, in effect inviting federal divisions to cross South Mountain and block his way home. The Army of the Potomac could simply march through several passes into Maryland, West Virginia, or Virginia and sever his communications. Lee acknowledged the problems in advancing upon Harrisburg stating, “...on the night of the 28th, information was received from a scout that the Federal Army, having crossed the Potomac, was advancing northward, and that the head of the column had reached the South Mountain. As our communications with the Potomac were thus menaced, it was resolved to prevent his farther progress in that direction by concentrating our army on the east side of the mountains.”⁵⁵ As Lee stated here, the timing of Hill and Longstreet’s Confederate corps crossing South Mountain towards Gettysburg directly related to reports of federal forces approaching the mountains. Their crossing was meant to draw federal attention east of the mountains, and away from communications to the south. Ewell’s corps had already advanced fifty miles east to York further demanding federal attention in South Central Pennsylvania, if for no other reason than to protect Washington. The commanding general’s advance upon Harrisburg then was never more than a feint intended to draw federal forces into Pennsylvania. From Lee’s perspective, a battle in Pennsylvania also placed Meade in a precarious condition of over-extended

defense of the state of Pennsylvania hung in the balance a few months before a new election year.

2.2 Operational Logistical Polarities

Adding more weight to this tug-of-war between Lee and Meade, involving Harrisburg and Washington, or even Harrisburg and Richmond, were the logistical dependencies tied to both polarities. Lee's movements in the last week of June 1863 largely followed Jomini's instruction for foraging in enemy territory that,

A general should be capable of making all the resources of the invaded country contribute to the success of his enterprises: he should use the local authorities, if they remain, to regulate the assessments so as to make them uniform and legal, while he himself should see to their fulfillment. If the authorities do not remain, he should create provisional ones of the leading men, and endow them with extraordinary powers. The provisions thus acquired should be collected at the points most convenient for the operations of the army.⁵⁶

Lee stated it this way in a general order to his army on June 21,

The Chiefs of the Commissary, Quartermaster, Ordnance and Medical Departments of the army will make requisitions upon the local authorities or inhabitants for the necessary supplies for their respective departments, designating the places and times of delivery. All persons complying with such requisitions, shall be paid the market price for the articles furnished if they so desire, and the officer making such payment shall take duplicate receipts for the same, specifying the name of the person paid, and the quantity, kind, and price of the property, one of which receipts shall be at once forwarded to the Chief of the department to which such officer is attached.⁵⁷

This supply gathering invasion, not coincidentally, occurred a month before harvest time when Pennsylvania fields ripened with wheat, oats, barley, and rye. Consequently, the Army of Northern Virginia spread out with hundreds of twenty-foot

wagons to gather food needed to feed Lee's army through October. Lee also adhered to the necessity of maneuvering along fixed water systems that supplied his men and animals, in this case the Susquehanna River and its tributaries such as the Conewago that extended south toward Gettysburg. Together, these two military principles spread out Lee's army in a thirty mile radius around Gettysburg clockwise, west to east from Greencastle to Chambersburg to Shippensburg to Carlisle to Wrightsville to York, Pennsylvania. In tandem with each of these locations were important turnpike and rail bridges, rail junctions, and telegraph connections for Lee's army to disrupt and destroy in addition to key South Mountain passes that had to be controlled for insulated communications in the Cumberland Valley. As Tilberg stated decades later,

Lee's plan of campaign was undoubtedly similar to that of his invasion which ended in the battle of Antietam in September 1862. He [Lee] then called attention to the need of destroying the bridge over the Susquehanna River at Harrisburg and of disabling the Pennsylvania Railroad in order to sever communication with the west. 'After that,' he added, 'I can turn my attention to Philadelphia, Baltimore, or Washington as may seem best for our interest.'⁵⁸

Meade's Army of the Potomac operated on the opposite polarity above Washington, and around the key crossroads and logistical center of Frederick, Maryland with its easy access roads through South Mountain into the Cumberland Valley. From there, he could secure sections of the Baltimore & Ohio railroad to repair them, along with his overall line of communications, while threatening Lee's escape route. Chief Engineer Gouverneur K. Warren had recommended shifting the army to Harper's Ferry for this purpose.⁵⁹ He understood that "Up to that time [Confederate Brigadier] General [J.D.] Imboden had been operating on the left of the Confederate army on its march into

Maryland and Pennsylvania, and had inflicted great damage along the Baltimore and Ohio Railroad between Martinsburg and Cumberland, and to the Chesapeake and

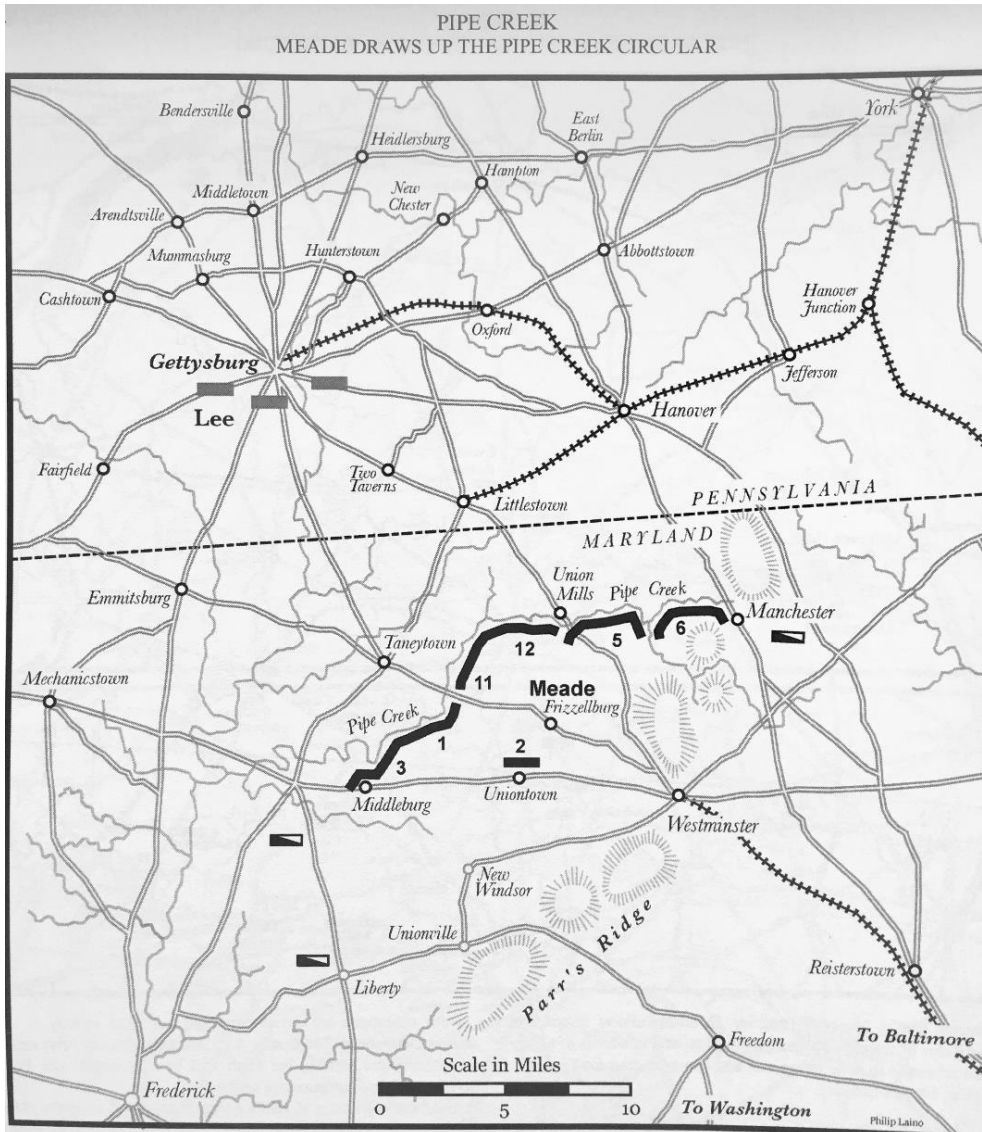


Fig. 4 - Pipe Creek: Meade Draws up the Pipe Creek Circular Marking Positions for Each (#) Corps, by Philip Laino.

Ohio Canal.”⁶⁰ If Meade advanced on Harpers Ferry, he could arrest such destruction and have the United States Military Railroad Construction Corps (USMRC) begin restoration of the B&O to threaten Lee’s communications in Virginia at Williamsport and

Falling Waters. At the least, basing his operations in Frederick placed him on the Monocacy River giving him a water, rail, and road network that extended east to cover the federal capital and Baltimore at Westminster, Maryland where operations eventually shifted. Once Meade moved his center of gravity to Westminster, and built his defense of Washington on the Pipe Creek line, this allowed for better coverage of the city of Baltimore and its road and rail extensions that included the Northern Central line. When Stuart's Confederate cavalry began their sabotage of the Northern Central line in late June of 1863, the federal Fifth Corps and Sixth Corps were better positioned northeast of Westminster to block their access to Baltimore and Washington. In any case, with the centered defense of those two cities at Westminster, its direct coverage of the Baltimore Pike and sustenance provided by the Monocacy's Pipe Creek tributary, a meaningful position was established.

To be ready for every contingency, Meade covered his base of operations by positioning corps across a thirty mile expanse of Pipe Creek, intersecting key roads that fanned-out from Washington and Baltimore like sun's rays to points from east to west at Manchester, Reisterstown, Union Mills, Westminster, Union Mills, and Taneytown. In doing so, he could check Confederate incursions toward the capital over a much wider front, while encompassing sections of the Northern Central, Baltimore and Ohio, and Western Maryland lines. At the operational level, this expansive line blanketed Baltimore and Washington, but had Lee's army ever approached any portion of it, the line would have reduced to a three mile tactical front, preferably along Parr's Ridge, from Manchester to Union Mills, and covering a line of communications back to the

capital. As it turned out, Pipe Creek remained an operational contingency, and Westminster evolved into a supply base holding over four hundred rail cars, and 4,000 tons of medical and food supplies by July 3, 1863.

This is where water, rail, and road became central to the discussion, because all options for Meade and Lee were tied to this dependency. There were no exceptions because the armies were too large to sit in one place as they had during the American Revolution when George Washington's largest army consisted of 12,000 troops. With an army that small, it was easy to roam nomadically and live off the surrounding countryside indefinitely. In contrast, one federal corps at Gettysburg contained that many men, and there were eight corps including the cavalry. An army that size could not sit long without water for nearly 40,000 horses, 92,000 military personnel, 300 artillery pieces to sponge, dozens of field hospitals, and filled water stations for hospital steam trains. Rail lines permitted an army to remain in one location indefinitely by hardwiring their supply needs to larger depots in far flung places. Telegraph further strengthened these connections by following previously approved rail company right-of-ways through private and business properties. If armies marched on rail and telegraph lines, they were regularly fed, connected to a broader network of communication and advancing on a straight line to destination points. Equally important were improved roads for the 30 to 40 miles of wheeled vehicles that followed the armies. Good roads were vital to thousands of shod horses and hundreds of artillery vehicles, ambulances, and ammunition wagons.

Meade and Lee's decisions were also constrained by the depth of water and condition of rail, but not in the traditional sense. That is, rather than trying to argue Gettysburg was the ideal place for battle because it rested on a grand river or a major rail juncture, we will invert this argument and say the opposite, that Gettysburg was the ideal location because water tables were low and easily fordable, and because rail lines were sabotaged and in need of repair. As for water tables, we know that when Lee moved north, he did not have pontoon bridges. Miles of wagons with pontoon boats and assembly platforms simply did not exist in his supply trains north of the Potomac. As for the one pontoon bridge he used to cross at Falling Waters during the retreat, it was jerry-rigged by his engineers from dismantled wharves on the Potomac. It did not come from Lee's supply trains, so it was impossible for his army to cross a major river such as the Susquehanna without access to a ferry or existing bridge. When the federals burned the Wrightsville Bridge across the Susquehanna on June 28 that effectively ended any chance of Lee moving on Harrisburg or Philadelphia. Therefore, Lee's movements were confined to crossing bodies of water easily fordable such as the Monocacy River's headwaters at Gettysburg.

Likewise, he did not have the manpower to secure several rail lines in enemy territory, nor enough supplies coming from the South to sustain his army during a raid, so controlling a Northern trunk for his own purposes made little sense. Furthermore, he did not have heavy siege artillery to encircle a city, so controlling a major Northern depot as a destination for siege equipment was not necessary either. Therefore, his best option involved disrupting Northern rail within the region he planned to maneuver to

deny federal army supply advantages, and to pick a battle location far enough from Baltimore, Washington, and Harrisburg that federal engineers could not repair rail quickly. That place proved to be the Gettysburg Train Station, along the Hanover-Gettysburg line, at its intersection with the Monocacy River's headwaters.

2.3 Water Courses

Therefore, it was from the capital polarities of Harrisburg and Washington, the river oppositions of the Susquehanna and the Potomac, and rail framework of the Cumberland Valley and the Northern Central that Lee and Meade played a high stakes game of chess in the final days of June 1863. Commanding General Meade, after long consultation with Major General Reynolds at Frederick on June 28, instructed his Left Wing commander, "to push forward the army as rapidly as possible in the direction of Harrisburg; in which direction it was then supposed that the enemy was moving, to compel him to relinquish his hold upon the Susquehanna, and to force him to battle whenever and wherever found."⁶¹ Meade testified to Congress similarly,

I determined...and so notified the General-in-chief, that I should move my army as promptly as possible on the main line from Frederick to Harrisburg, extending my wings on both sides of that line as far as I could consistently with the safety and the rapid concentration of that army, and should continue that movement until I either encountered the enemy, or had reason to believe that the enemy would advance upon me; my object being at all hazards to compel him to loose his hold on the Susquehanna, and meet me in battle at some point....⁶²

In simple terms, Major General Abner Doubleday, 1st Corps commander at Gettysburg surmised, "Under the impression that Lee's army was spread out along the Susquehanna from Carlisle [Conodoguinet Creek] to York, Meade threw out his own

forces fan-shaped to march in that direction.”⁶³

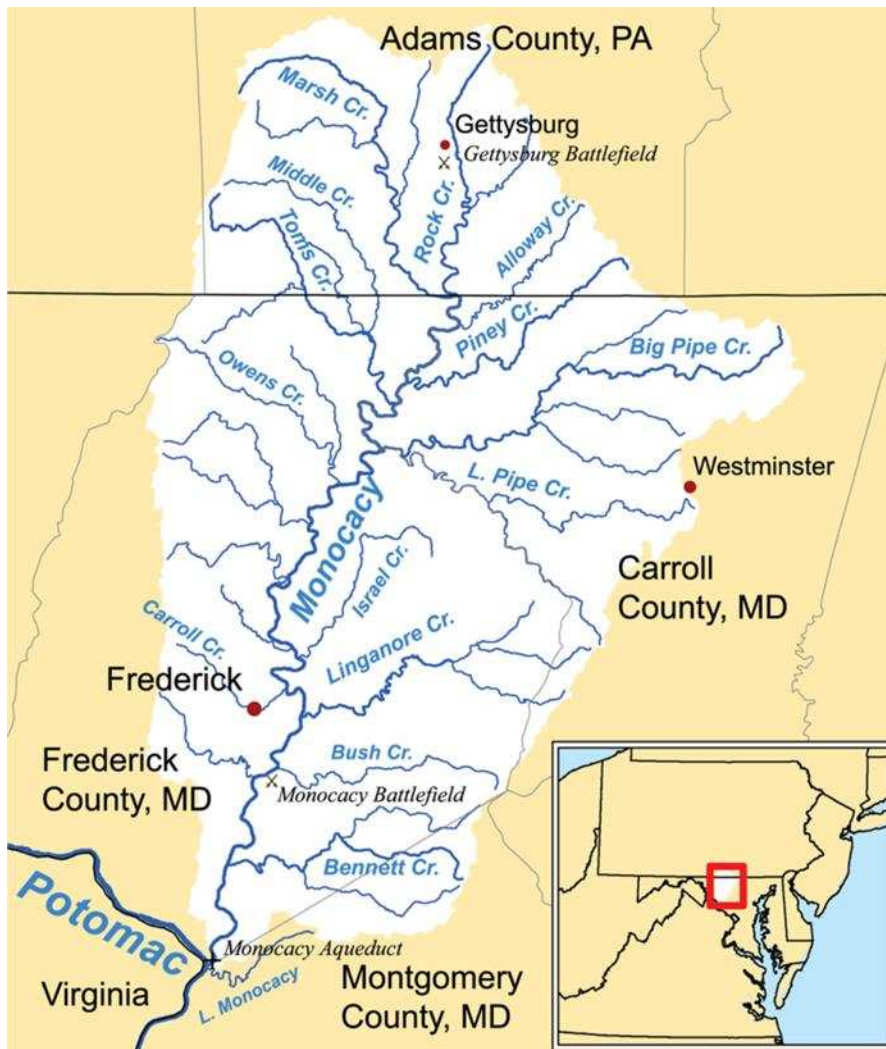


Fig. 5 - Monocacy and Its Many Branches, Karl Musser, USGS & Census Bureau Data.

Again, both armies anchored themselves on major rivers, maintained pickets on key roads, and destroyed or maintained key rail links with telegraph connections, while both orbited capital cities such as Harrisburg and Washington that held great symbolic and political significance. As both generals considered their next moves, water and roads strongly influenced, if not determined, where they might clash. When Meade assumed command on June 28, he telegraphed Halleck, “...in ignorance of the exact

condition of the troops and position of the enemy, I can now say that it appears to me I must move toward the Susquehanna, keeping Washington and Baltimore well covered, and if the enemy is checked in his attempt to cross the Susquehanna or if he turns toward Baltimore, to give him battle.”⁶⁴ Lee and Meade both recognized that only one water concourse extended across no man’s land to connect them from north central Maryland to south central Pennsylvania, and that was the Monocacy with its several tributaries. Union Chief Engineer Gouverneur Warren testified before Congress,

When we got into the neighborhood of Taneytown, we began to get pretty definite information of where Lee was; but it was still quite uncertain whether the main strength of his army was off over on our right, towards York, or on our left, towards Chambersburg. We could not tell exactly where the mass of his army was, though his forces were lying off on both sides of us. If he could get off on our right, he could go down to Baltimore; if to the left he might escape us and go to Washington.... In view of these contingencies we had prepared lines of battle in different positions. One probable line was the line of Manchester and Ridgeville; the dividing ridge between the Monocacy and the waters running into the Chesapeake Bay. Then we had another line under consideration on Big Pipe creek.⁶⁵

What Warren acknowledged were the multiple branches of the Monocacy trunk capable of sustaining the army, while blocking a direct path to either Baltimore or Washington. These branches, running counterclockwise east to west included Big Pipe Creek, Little Pipe Creek, Rock Creek, Marsh Creek, Middle Creek and Tom’s Creek all of which offered several battle ready life lines. Moving left to right or right to left simply meant ascending or descending creek branches of the Monocacy toward South Central Pennsylvania or toward Baltimore. Water veins proved to be so predictable in finding

one's opponent that War correspondent Charles Carleton Coffin recorded in the *Boston Journal* on June 29, 1863,

If Lee advances with nearly all his forces into Pennsylvania, there must be a collision of the two armies not many miles west of Gettysburg, probably among the rolling hills near the State line, on the headwaters of the Monocacy.... I believe that Washington [and] Baltimore will not be harmed. I expect to see Adams, Franklin, Cumberland, and York counties run over somewhat by the rebels, and I also expect to see Lee utterly defeated in his plans. His army may not be annihilated. Hooker may not achieve a great, decisive victory. But I fully believe that Lee will gain nothing by this move.⁶⁶

Geographically, the various branches of the Monocacy that extended into South Central Pennsylvania found their origins in, "...the Gettysburg Sill, formed ridges and hills that punctuated the Gettysburg Plain.... Frost wedges broke apart the bedrock, strewing the ground with boulders."⁶⁷ Not only did a boulder strewn ground make-up the battlefield's signature rock features including Devils Den, Slaughter Pen, Little Round Top, Culp's Hill, and hundreds of stone walls across farm fields, it was the substance of improved Macadamized roads. Springs also surfaced from ruptured subsurface water veins to form Spangler, Codori, Katalysine, Natural, Cold, and Menchey's Springs. Signage across the battlefield today reminds us that plate tectonics made Gettysburg the headwaters for the Monocacy River and watershed for the Chesapeake as its springs drained into runs, flowed into creeks, merged into rivers, poured into the Chesapeake Bay, and finally emptied into the Atlantic Ocean.

For Meade, fighting on the Monocacy in Maryland meant subsisting on that river's Big and Little Pipe Creeks, while his moving to south central Pennsylvania demanded dispositions either on its Rock Creek branch if the Confederates offered

battle on Marsh Creek, or on Marsh and Tom's Creeks if Lee maneuvered west over South Mountain into the Cumberland Valley. As historian Joseph V. Collins points out, Meade understood that to fight at Gettysburg meant establishing a line on the "Monocacy's headwaters, in extreme southern Pennsylvania at the confluence of Rock and Marsh Creeks, at the Maryland-Pennsylvania border...a few miles north of the village of Harney, Maryland."⁶⁸ John Buford's Union cavalry reconnaissance followed by John Reynolds' infantry advance into Pennsylvania soon affirmed that,

Between the two ranges of hills, the Catoclin and the South Mountain [same Blue Ridge parent range], is a narrow valley which has always been distinguished for its fertile beauty. At the head of this valley, on a gentle western slope, and forming a focal centre for roads running north, south, east, and west, lies the town of Gettysburg. A mile to the east of the town runs Rock Creek, the chief of the head-waters of the Monocacy River.⁶⁹

If Lee remained west of Gettysburg, Marsh Creek represented the ideal federal position to threaten his principle line of communication back to South Mountain and Virginia via the Fairfield Road. For Reynolds 1st Corps occupying that branch of the Monocacy on June 30,

Marsh Creek, the second stream in size and importance, rises near the base of Green Ridge, in Franklin Township, about two miles south of the Chambersburg pike. Its general course is southward to the Maryland line where, after being joined by North Branch, Mummasburg Run, Stahle's Run, Little Marsh Creek, Willoughby's Run, besides other small streams, it unites with Rock Creek and forms the Monocacy.⁷⁰

Several of Lee's Confederate corps operated west of Gettysburg on "the largest stream in the county...the Conewago, which has its source at South Mountain, near the

line dividing Adams from Franklin. It drains a large extent of the country.”⁷¹ The Conewago Creek permitted his army to reach several points north of Gettysburg to then access the Mummasburg, Heidlersburg, and Hunterstown Roads, and from there connect to the most northerly prolongation of Monocacy Rock Creek. For Richard Ewell’s Confederate infantry operating across these three roads, along with J.E.B. Stuart’s Cavalry corps eventually supporting them, “Rock Creek rises in the vicinity of Hunterstown and, after pursuing a tortuous course and receiving many tributaries, unites with Marsh Creek at the Maryland line. It also played an important part during the great battle.”⁷² On that part of the battlefield, “Rock Creek has a 65 square mile watershed in Adams County, Pennsylvania. At the confluence with Marsh Creek, Rock Creek becomes the Monocacy River....”⁷³ Each of Rock Creek’s tributaries helped to sustain Union artillery, infantry, and cavalry positions during the three day battle.

As Ewell’s Corps broke ties with the Conewago to fight at Gettysburg on July 1, his two available divisions, under Major Generals Robert Rodes and Jubal Early, reconnected across Rock Creek north of town to battle the Union 1st and 11th Corps. After the two federal corps retreated through town to Cemetery Hill, Rodes and Early pursued to points west and north of Cemetery Hill connecting to the Stevens, Blocher, Tiber, Culp’s, and Winebrenner Run tributaries of Rock Creek, while Johnson’s late arriving division under Ewell deployed along Lady Run and advanced skirmishers to Rock Creek contesting the Cemetery Hill arc indirectly through Culp’s Hill from the east. Edward Johnson’s position essentially became one with the water source as, “Rock Creek meanders its course in a general southerly direction, among enormous boulders

and through gentle fields, until it unites with Marsh Creek, a few miles south of Gettysburg, to form the Monocacy.”⁷⁴ Artillery Lieutenant Edward Whittier described

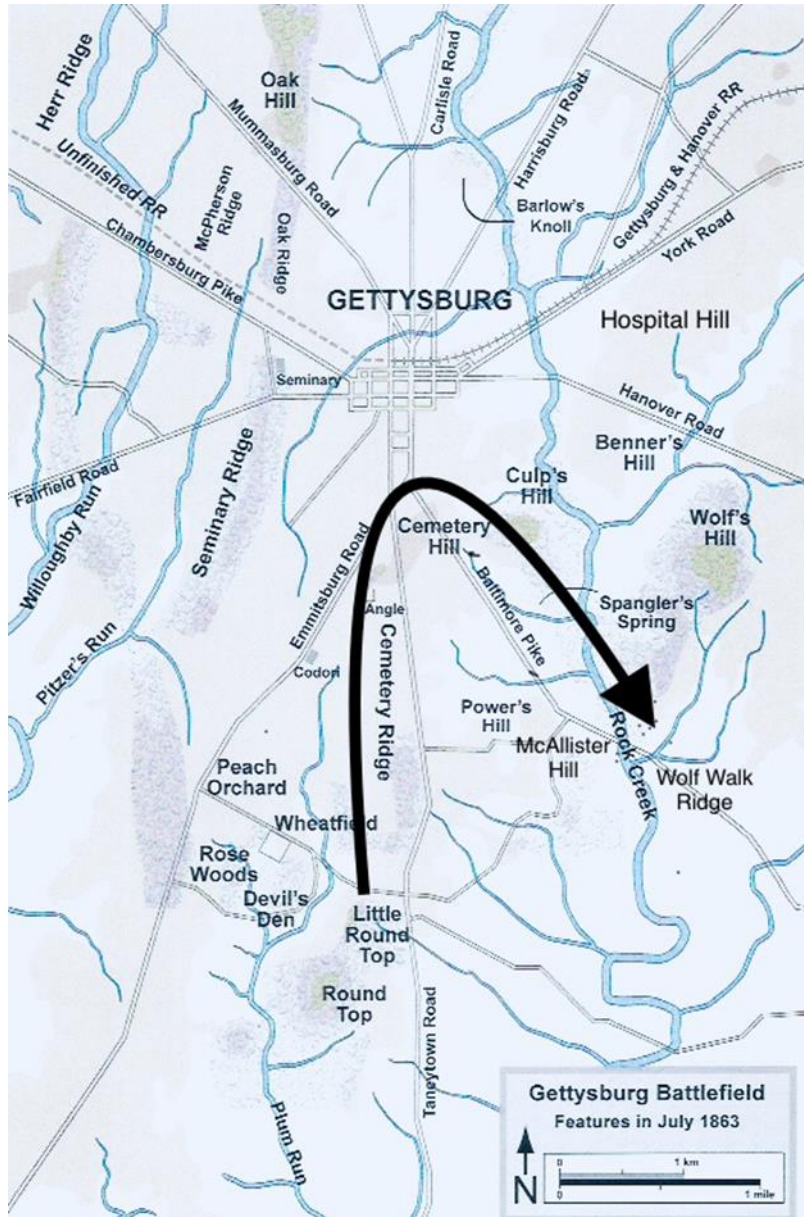


Fig. 6 - Gettysburg Battlefield: Features in July 1863, by Hal Jespersen. Union Fishhook Battle Line Anchored on Rock Creek through Culp's, Powers, and McAllister Hills, and Wolf Walk Ridge.

Johnson's position from a federal perspective stating,

...to the right and east, a great expanse of farming country bisected by Rock Creek, which, flowing in a southeasterly direction, ran nearly parallel to that portion of our front; in the southeast and at a distance of about seven hundred

yards, Culp's Hill, bold, rough, and densely wooded, rising from the bed of the stream whose tortuous channel skirted its eastern base for nearly three-quarters of a mile until its southern slopes merged in the swamp, rocky and almost impassable, separating Culp's from Wolf's Hill bristling with the welcome bayonets of the [Union] Twelfth Corps.⁷⁵

The greater point here is that a Civil War army's dependency on large quantities of water would enable generals to predict likely meeting points for battle days before actual contact. Once the battle opened, it did so according to General Meade's son, Captain George Meade, within the framework of water,

Facing the north, thence, we may define the general shape of the battleground as rudely representing a parallelogram, four and a half miles long by two and half wide, the long sides of it lying north and south, the short sides east and west, the spectator in the town of Gettysburg occupying the middle of it, taking it from east to west, and about one-fourth of its length from the north, taking it from north to south. Two creeks, Rock Creek and Willoughby Run, flow, as to their general direction, north and south along the east and west sides of this parallelogram. Their direction may be more nearly particularized by saying that Rock Creek, taken due east of the center of Gettysburg, is three-quarters of a mile distant, and that Willoughby Run, taken due west of the center of Gettysburg, is a mile and a quarter distant, making the distance between them at Gettysburg two miles; and that, from these points, the creeks, in flowing three miles and a half to the end of the battlefield, at the south diverge from this width of two miles apart at the north to a width apart of three and a half.... It now only remains to add that on the line of a semi-circle, rudely described, north of Gettysburg from the center of Gettysburg, taking in the slopes rising from Rock Creek and Willoughby Run and across the Carlisle Road, the battle of the first day was waged.⁷⁶

As basic as this understanding is, it holds little agency in the battle's historiography. The major works in recent years, such as those by Coddington and Sears dispense quickly with mention of water sources to focus on problems of command or issues of pride and arrogance. This alone is not problematic since the veterans

themselves argued human agency in their memoirs and articles, at least since the 1880s when the first official records were published for dissemination. Their classic arguments through the press have given students of the battle endless positions to take, so that is not the concern. Instead, the issues are the major blind spots that come with focusing on human agency to the happenstance of environmental constraints. This did not mean that water dependency forced the generals of both armies to fight, but it did limit where they could offer battle, so much so that Gettysburg, along with Hagerstown, Frederick, Chambersburg, Carlisle, Harrisburg, Hanover, and Westminster formed the only realistic possibilities during the campaign. Once Lee completed his crossing of South Mountain, from the Cumberland into the Susquehanna Valley on June 28, 1863, only Carlisle, Gettysburg, Frederick, Hanover, and some point in the vicinity of Westminster qualified.

2.4 Improved Roads and Crossroads

Roads constrained where armies could fight in much the same manner as did water courses. As a general rule, Civil War armies did not offer battle in a location where there was only one improved road for the reason that need for sudden retreat could be disastrous. Spacing was critical between divisions of infantry, cavalry, artillery, ambulances, ordnance wagons, and herded animals due to crowd control measures to prevent choke points and panic. One need only to imagine miles of backed-up traffic on a major interstate in the twenty-first century to see why offering battle on one road had to be avoided. As a precursor to every position undertaken before a Civil War battle, officers identified avenues of approach to and from the position to be prepared to advance, and in the event of retreat, have a suitable way out. Army staff, provost

marshals, and cavalry pickets worked to prevent blockages and bottlenecks and to preserve flow of communication. Crossroads presented opportunities to march divisions to a point on parallel courses, not only to accelerate travel time, but to cut down on the accordion effect associated with long lines. Former Senior Historian of Gettysburg National Military Park, Kathy Georg Harrison pointed out the early formation of such roads around Gettysburg, in describing the first major intersection of two Native American travel and trade routes at the juncture of modern Oak – Seminary Ridge Road and Hagerstown Road. She emphasized that the Oak – Seminary Ridge, running north to south was ideal for travel and trade because it rested on a dry, granite ridgeline with wooded cover, and that it intersected with modern day Hagerstown Road, used first by the Six Nations and then later as part of the Great Wagon Road that opened the West and Deep South to eighteenth-century settlement from Philadelphia. She noted, “It was these Indian trails that brought the area’s first white pioneer settlers to the area, to settle the Marsh Creek, Rock Creek, and Gettysburg communities.”⁷⁷

Union artillery chief Henry Hunt commented on the natural road advantages in 1863, stating, “From Gettysburg, near the eastern base of the Green Ridge, and covering all the upper passes into the Cumberland valley, good roads lead to all important points between the Susquehanna and the Potomac. It is therefore an important strategic position.”⁷⁸ Confederate Corps Commander James Longstreet reiterated, “From Gettysburg roads diverge to the passes of the mountains, the borders of the Potomac and Susquehanna, and the cities of Baltimore and Washington: so that it was something

of a strategic point.”⁷⁹ The Frenchman, Brevet Major-General Regis De Trobriand who commanded a Union brigade at Gettysburg concurred,

Ten roads and one railroad lead to Gettysburg. From the west, the Millerstown and Chambersburg; from the north, the Mummasburg, the Carlisle, and the Harrisburg (the State capital); from the east, the York and Bosmantown [Bonaughtown]; from the south, the Baltimore, the Taneytown, and Emmitsburg. This concentration of roads made the place important strategically, in regard to which General Lee was not mistaken. He would have established himself there, without striking a blow, if Buford with his cavalry had not opposed an obstinate resistance to Hill’s column, advancing by the Chambersburg road, and if Reynolds, without doubt in order to give time to General Meade to arrive, had not endeavored to defend the Seminary Heights against the superior forces of the enemy.⁸⁰

Hunt, Longstreet, and De Trobriand commented as such knowing muddy roads bogged down movement of wheeled vehicles, it not being uncommon for wheels to carve into the muck and mire until entire artillery pieces disappeared. In addition hardships were placed on shooed horses and mules forced to march on uneven surfaces. Deep ruts were unavoidable on unimproved roads, field and farm lanes. For this reason, the several direct arteries from Gettysburg leading to Hagerstown, Harrisburg, Baltimore, and Washington stood out on the general campaign map prepared for Lee by Confederate engineer Jedidiah Hotchkiss. Hotchkiss recorded on Monday, February 23, 1863, “I got secret orders from the General to prepare a map of the Valley of Va. extended to Harrisburg, Pa., and then on to Philadelphia; --wishing the preparation to be kept a profound secret. So I went to reducing a map of Cumberland Co., Pa.”⁸¹ This detailed valley map that included Adams County (see Fig. 6), coupled

with intelligence gleaned from Hotchkiss's highly secretive scouting mission there in February 1863, and Jeb Stuart's brief September 1862 cavalry reconnaissance into Franklin and Adams counties after the battle of Antietam, combined with general knowledge of the Gettysburg area accumulated from several southern appointments to Carlisle Barracks before the war provided Lee concrete information on Gettysburg road

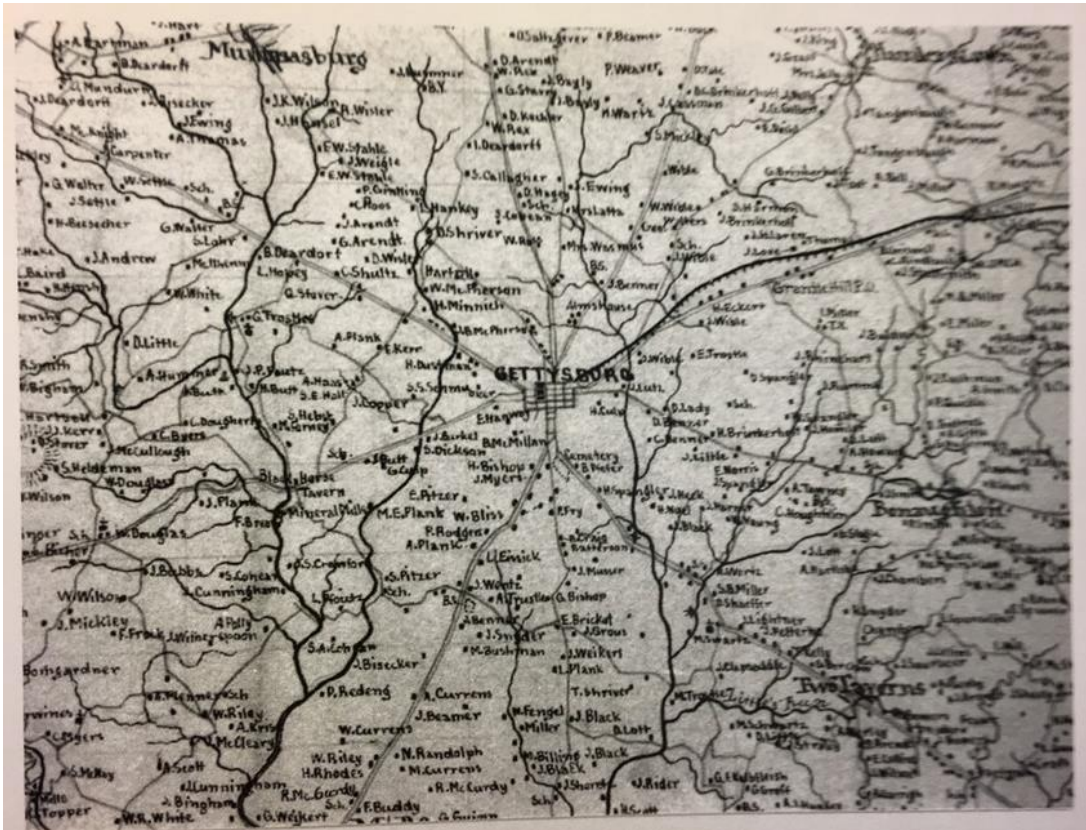


Fig. 7 - Jedediah Hotchkiss Map used by Lee. Close-up of Gettysburg's Road Network. An Accompanying Chart Identified Surnames Sympathetic to the South. Library of Congress.

conditions.

Lee would have learned three essential points about the Gettysburg road network, with the first being the unusual geological advantages of the Cashtown Gap west of Gettysburg. Geologist Andrew Brown's piece on the geology of Gettysburg for *GEOTIMES* explained it best when he wrote,

Lee's selection of Chambersburg as a concentration point was based on the geology of the Cashtown Gap. The other gaps in the northern part of South Mountain are narrow and torturous, but Cashtown Gap...owes its existence and character to a great cross-fault, the Cashtown fault, which offsets the topographic crest of the main ridge of South Mountain about 3 miles. Erosion has carved in the fault zone an almost straight pass about 8 miles long, the highest point in which is a ridge less than a mile of wide between the headwaters of Conococheague Creek on the west and Marsh Creek on the east. Of the eight passes that figure in the Gettysburg campaign, Cashtown Gap was the only one through which it was possible to move expeditiously a large force with artillery and wagon trains. By concentration west of the gap Lee was able not only to protect his communications to the south, but to move either east or northeast over easy roads.⁸²

Because Lee's objective included crossing South Mountain into the Susquehanna Valley to gather supplies, to unify his army in South Central Pennsylvania and to draw federal forces away from the fortress city of Washington by threatening Harrisburg, then Cashtown Gap offered the perfect entry point for such operations. This is the broader point that Andrew Brown was making.

Second, in keeping with the William and Thomas Penn design for towns, roads spread out like spokes of a wheel from a central gathering point of community activity known as a square. Conversely, Lee understood the concept of all roads leading to a central Penn square. From this concentration point, he could diverge to threaten Washington D.C. southeast toward Baltimore, or directly south through Frederick. Finally, Lee knew Gettysburg benefited from a national trend in road construction related to the War of 1812 that improved transportation and commerce. One of his infantrymen, Sergeant Randolph A. Shotwell of the 8th Virginia, described the character of one such road, the Cashtown Road (also known as the Chambersburg Pike). "As we

approached the Cashtown Gap about noon the vertical rays of the sun seemed like real lances of steel tipped with fire! The broken rock of the Macadamized [quarried diabase sill] turnpike and the broad flat flagstones of the mountain slate reflected the heat until a perfect steam arose in our faces as we trudged along and the choking dust gathered in throats and eyes causing infinite annoyance.”⁸³ Describing the character of the York Pike, General John B. Gordon recollected,

Begrimed as we were from head to foot with the impalpable gray powder which rose in dense columns from the macadamized pikes and settled in sheets on men, horses, and wagons, it is no wonder that many of York’s inhabitants were terror-stricken as they looked upon us. We had been compelled on these forced marches to leave baggage-wagons behind us, and there was no possibility of a change of clothing, and no time for brushing uniforms or washing the disfiguring dust from faces, hair, or beard.... In my eagerness to relieve the citizens from all apprehension, I lost sight of the fact that this turnpike powder was no respecter of persons, but that it enveloped all alike – officers as well as privates.⁸⁴

What happened in Gettysburg through construction of the Cashtown Pike, in particular, is emblematic of a wider movement that involved pooled money, state charters, and toll collection toward early American versions of macadamized roads replete with deep cut grades, layers of quarried stone, peaked centers for better drainage, and evenly spaced culverts. Though such pikes had a defense purpose in linking coastal cities with interior settlements, citizenry soon found more profitable ways to use them. Gettysburg citizens, for instance, authorized construction of the Cashtown Pike by 1811 to reach other major markets.⁸⁵ What it did for Franklin County was a common occurrence in that it linked that county economically to Adams County and beyond by encouraging farmers to bring their surplus over South Mountain from

the Cumberland into the Susquehanna Valley. For decades, Pennsylvanians west of Adams County, who traded east found crossing the Susquehanna on ferries and its few bridges to be problematic thereby establishing a pattern, dating back to colonial times, of following Monocacy's headwaters to the Baltimore harbor to participate in the trans-Atlantic and coastal trades. The Mummasburg Road, which was the original Shippensburg-Baltimore Road (1769-1774), led farmers from Western Pennsylvania through the crossroads of Gettysburg to the Westminster-Baltimore Road and the Monocacy Trail on to Baltimore.⁸⁶

Therefore, wide-scale turnpike construction related to military necessity, western migration, and eastern commerce laid the foundation for Gettysburg becoming a likely crossroads for mobile armies during the Gettysburg Campaign. In other words, the original purpose of the Cashtown Road had come full circle when Lee made it his principle line of communications from the Cumberland to Susquehanna Valley, and his primary avenue of approach to Gettysburg. This goes to the heart of this work's central argument that Gettysburg was simply not an accidental meeting engagement. To the contrary, it had been in the making for decades with its geographic centrality between so many important cities, its ample water supply, its mountain ranges that insulated movements from Virginia to Pennsylvania, and back again, its ripe harvest of grains, its fort towns guarding key passes that grew into Waynesboro, Chambersburg, Shippensburg, Carlisle, and Harrisburg, and its turnpike construction.

2.5 Fortress Towns Protecting Key Passes

Fort towns guarding key passes offered another example of the “second nature” of Gettysburg.⁸⁷ In other words, fort towns represented another human improvement to Gettysburg’s natural environment making it better for transportation, communication, and agriculture. Jomini wrote, “Forts serve two principle purposes: first, to cover the frontiers; secondly, to aid the operations of the campaign.”⁸⁸ Waynesboro, Chambersburg, Shippensburg, Carlisle, Harrisburg, and Gettysburg were originally established as fortress settlements in the 1700s, coming into early prominence during the French and Indian War (1755-1763) at a time when South Mountain was part of the frontier. Native Americans found themselves caught in the middle of several nations, a sort-of middle ground surrounded by French to the north and west, Spanish to the south, and British to the east. Whenever a tribe aggressively approached South Mountain from the west, settlers prepared to check them in the passes where make-shift blockhouses and forts were constructed both through local initiative and crown support for first defense, to take refuge until British regulars could march west to reestablish security. So, the fortress towns that sustained Lee’s presence during the Gettysburg Campaign originated from military defense aimed at restricting access through passes from the Cumberland to Susquehanna Valley.

Federal artillery Chief Henry Hunt reflected on precisely how Lee employed such passes to his advantage, stating,

A battle was of necessity to Lee, and a defeat would be more disastrous to Meade, and less so to himself, at Gettysburg than at any point east of it. With

the defiles of the South Mountain range close in his rear, which could be easily held by a small force, a safe retreat through the Cumberland Valley was assured, so that his army, once through these passes, would be practically on the banks of the Potomac, at a point already prepared for crossing. Any position east of Gettysburg would deprive him of these advantages. It is more probable that General Lee was influenced by cool calculation of this nature than hot blood.⁸⁹

Lee's military secretary A.L. Long also reflected in the 1880s on the commanding general's use of South Mountain passes, noting,

In his [Lee's] view, the best course would be to invade Pennsylvania, penetrating this State in the direction of Chambersburg, York, or Gettysburg. He might be forced to give battle at one or the other of these places as circumstances might suggest, but, in his view, the vicinity of Gettysburg was much the best point, as it was less distant from his base on the Potomac, and was so situated that by holding the passes of the South Mountain he would be able to keep open his line of communication. York, being some twenty-five miles farther from the mountains, was a less desirable locality.⁹⁰

Captain George Meade reached the same conclusion:

Ewell and Early could have just as easily have counter-marched [from York, Carlisle, and Shippensburg] to *Lee* at Chambersburg [on June 28] as to Cashtown, near Gettysburg. But Gettysburg, although somewhat more distant than Chambersburg from Lee's base at Williamsport, had for him the inestimable advantage, in view of the then position of the ARMY OF THE POTOMAC, of rendering secure his line of communication with Williamsport. His marching on Gettysburg meant the maintenance of the invasion.⁹¹

Therefore, as Lee and Meade searched for suitable ground, between Harrisburg and Washington, to make contact, Gettysburg qualified with regards to roads to evenly space marching divisions, ordnance wagons, ambulances, artillery, and cavalry. Andrew Brown's *GEOTIMES* article explained the geological advantages; "As the roads generally avoided the diabase outcrops, trafficability across the Triassic sediments was good,

much like that in the Great Valley. Like the Confederates, the Union troops took advantage of geological conditions to expedite their movements.”⁹² Therefore the roads invited movement in all kinds of weather, and permitted parallel movements that minimized choke points and shortened the accordion effect. If one army controlled the road network, it could consolidate from four directions of the compass or disperse in any direction, basically react to whatever the circumstances required. For Lee, the centrality of the road nexus at Gettysburg substantially cut into consolidation time for Ewell’s spread-out corps in South Central Pennsylvania, and positioned him to either retreat west over South Mountain, or turn south to make contact with Meade at Frederick or Westminster, depending on how far north and west the latter proceeded. For Meade, an advance to the crossroads of Gettysburg denied Lee easy consolidation, blocked his offensive options toward Washington, and limited his exit to two good roads leading west, the Cashtown and Fairfield roads respectively.

2.6 Rail Lines

To go along with road, water, and mountain corridors, both armies had to consider rail in the middle ground that separated them. For Meade to build a line of defense around Frederick or Westminster meant having direct links to the Baltimore & Ohio or Northern Central, and shorter lines of communication to Washington and Baltimore, but advancing to Gettysburg meant inheriting badly damaged rail east to Hanover Junction and longer lines of communication. Jubal Early who was responsible for the damage documented, “I also directed Col. White to proceed with his cavalry to Hanover Junction, on the Northern Central road, destroying railroad bridges on the way,

and to destroy the junction and a bridge or two south of it, and then proceed to York, burning all the bridges up to that place.”⁹³ Writing of Confederate General Jubal A.

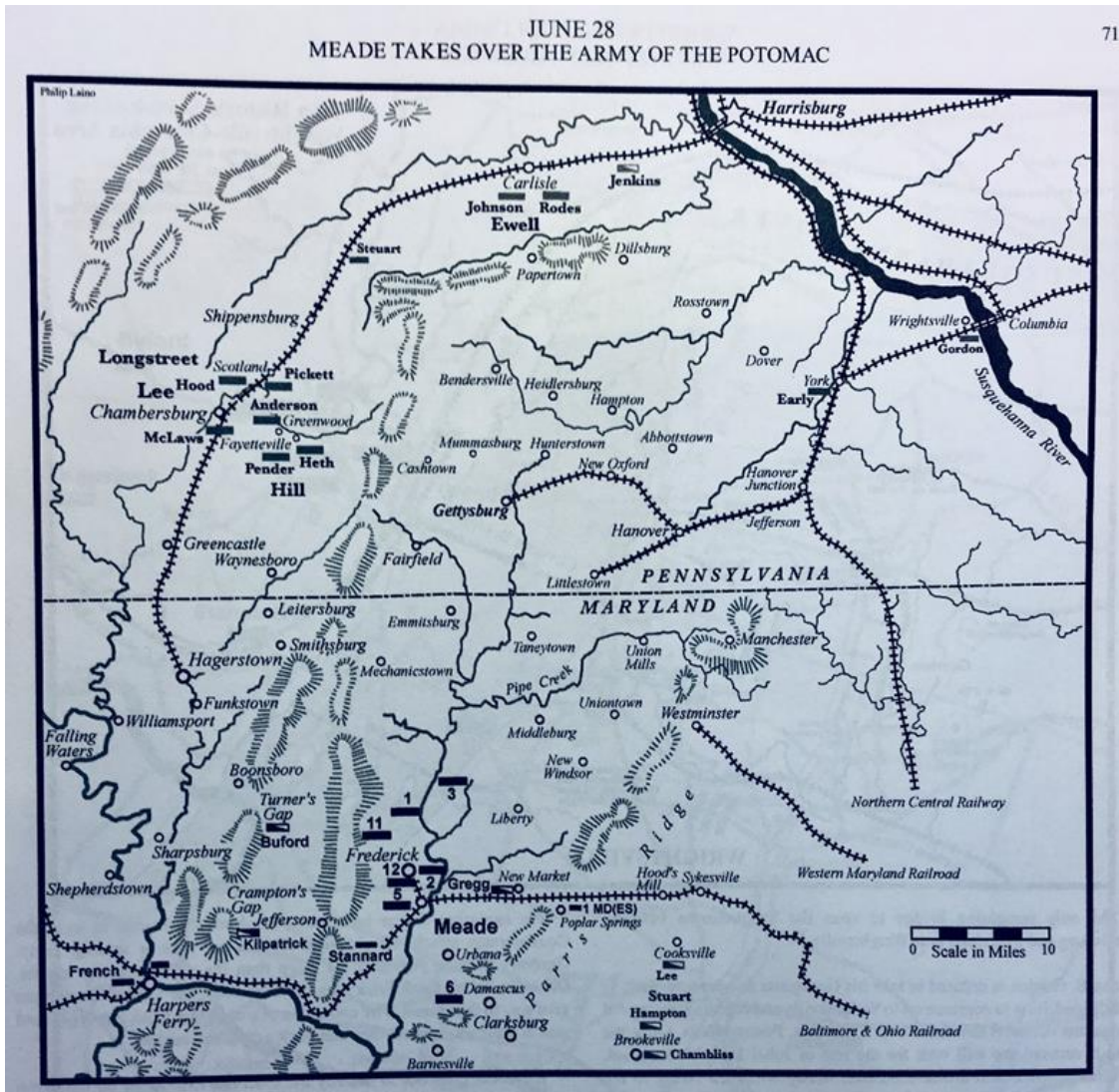


Fig. 8 – June 28 – Meade Takes Over The Army of The Potomac. Lee Guided on and Targeted the Cumberland Valley (Left), Northern Central (Right), and Gettysburg-Hanover-York (Center) Lines Depicted Here. Philip Laino.

Early’s rail sabotage a decade later, the first official battlefield historian John Bachelder wrote that, “Twelve bridges on the line of the Northern Central Road were burned at the same time, and nineteen on the ‘Wrightsville Branch,’ which extends from York to Wrightsville, and thence by the ‘Columbia Branch’ to Lancaster, where connection is

made with the Pennsylvania Railroad.”⁹⁴ McClure, in his history of York County, quoted from an eyewitness who remembered,

York residents found themselves terribly isolated that Tuesday. The Confederate Army was positioned to the west, and the bridge at Wrightsville smoldered in its watery grave. Telegraph lines and railroad bridges were down north and south. The gloomy, wet weather, the humiliating presence of the enemy and the halt of local commerce all cast a gloom over York. The extent of the damage inflicted by rebels was not immediately clear. It was raining so hard for much of the day that few ventured forth.⁹⁵

Gerald Bennet, in his brief history of the Gettysburg Railroad Station, reiterated that General Jubal A. Early’s division interrupted Gettysburg Railroad Company operations on June 26, 1863 by destroying the railroad bridge across Rock Creek, and by burning several freight cars. His research suggested that service was not restored until July 10, and that normal commercial functions of the railroad had to wait because the federal government commandeered the line six more weeks for hospital use.⁹⁶

York resident James Latimer grumbled to his brother about Confederate destruction to rail, bridges, and telegraph, stating, “We have been cut off from the World for two days (it seems like as many weeks)...and I hope communication will be resumed soon.”⁹⁷ Early did spare York proper, explaining to its citizens through broadsides, “I have abstained from burning the rail-road buildings and car shops in your town, because after examination I am satisfied the safety of the town would be endangered....”⁹⁸

The damage proved substantial enough for Meade to consider carefully the consequences of fighting so far from the federal capital. However, for Meade to remain

in Maryland meant that Lee could continue to destroy infrastructure and steal supplies in South Central Pennsylvania. The threat to more bridges, hundreds of miles of track, telegraph, and perhaps the major rail trunk in Harrisburg was too great to ignore. If not contested, the damage to materiel likely grew worse, and the political damage irreparable. For Lincoln's army to do nothing to remove Lee from Pennsylvania amounted to an impotency not likely to be forgotten in the November 1864 election, only sixteen months away. These are the decisions and consequences that Meade faced on June 28 when Joseph Hooker suddenly resigned his command.

But what if General Hermann Haupt and his United States Military Railroad Construction Corps worked overtime to repair key links around Hanover and York south to Westminster and Baltimore? Haupt after all had begun to develop his reputation for stunningly quick repairs to damaged railroad bridges using scavenged material from surrounding forests. His resourceful crisscrossing of small woods to make high rise bridges in Virginia amazed his contemporaries on both sides, and later inspired Andrew Carnegie's steel cage construction in Chicago after the Great Fire of 1871. When Meade eventually opened this option of contesting and cornering Lee between Gettysburg and South Mountain, through John Fulton Reynolds' left infantry wing and vanguard of John Buford's cavalry, he did so in tandem with Haupt's intelligence. Haupt warned a day before the battle on June 30,

Lee is falling back suddenly from the vicinity of Harrisburg and concentrating all his forces. York has been evacuated. Carlisle is being evacuated. The concentration appears to be at or near Chambersburg. The object apparently a sudden movement against Meade, of which he should be advised by courier

immediately. A courier might reach Frederick by way of Western Maryland Railroad to Westminster.⁹⁹

Elaborating on this a few days later, Haupt added,

Very extensive arrangements had been made to procure information from scouts, and I saw clearly that instead of attacking Harrisburg an exceeding rapid concentration of the enemy forces had been going on that day towards Gettysburg, evidently designed to fall upon and crush in detail the Army of the Potomac before it could fully concentrate or its new commander get it well in hand.¹⁰⁰

Simply put, within a fifty mile radius of Gettysburg federal supply systems operated without railroad and telegraph access thanks to Lee's deliberate efforts to level the logistical playing field, thus hindering rapid federal concentration. Haupt made these observations only because it was his job to restore damaged transport and communication systems. Likewise, Meade moved his left wing into South Central Pennsylvania in accordance with Haupt's intelligence. That Haupt's immediate attention to rail restoration around Gettysburg coincided with Meade's simultaneous commitment of Reynolds' left wing to the Monocacy headwaters at Marsh Creek validates rail importance in the establishment of the federal position at Gettysburg.

Development of the main supply depot at Westminster for fighting either on Monocacy's Pipe Creek branch in Maryland, or along the Rock and Marsh Creek branches at Gettysburg occurred within twenty-four hours of Haupt's warnings. As early as 11:20 A.M. on July 1, Quartermaster General Montgomery Meigs laid the foundations for Meade through Brigadier General R. Ingalls at army headquarters stating,

Bootees, socks, and other supplies will be sent to Westminster by the Western Maryland Railroad; also a construction train, to lay down sidings and prepare the means of transacting business there. General Haupt is ordered from Harrisburg to Baltimore and the Northern Central, to take charge of the repairs of the Northern Central and the work upon the Western Maryland Railroad. If this movement is successful, you will probably have a depot at Westminster for a time. Reports seem to indicate a concentration of the rebels. Some trains, if you strike the Northern Central at any point which they can reach, can be moved on to that road. These movements are ordered, and are in preparation. Supplies of shoes are on the cars.¹⁰¹

As will become evident, Meade's Rock Creek line depended on Westminster as its primary supply depot. Had the Army of Potomac fallen back from Gettysburg, the relocation had to cover Westminster. Likewise, any movements toward the Monocacy's headwaters depended on rail links back to Westminster. Specifically, the Northern Central to Hanover-Gettysburg lines linked Westminster to Gettysburg.

Lee also viewed Gettysburg as a favorable location for battle, partly on the decreased efficiency of rail. That is, his destructive sweep through South Central Pennsylvania in the week prior to the battle had so disrupted rail and telegraph communications that major reconstruction was needed, if for no other reason than to sustain federal hospitals after the battle. Lee's advance into Maryland and Pennsylvania had followed rail exclusively, with all three corps marching north along the Cumberland Valley rail line, before turning east to establish lines of communication from Fairfield to Gettysburg along the Cashtown Road that also incidentally paralleled the unfinished "tapeworm" railroad begun by renowned abolitionist Thaddeus Stevens in 1835.¹⁰² They marched parallel with the tapeworm to completed portions of the Gettysburg – Hanover line, tearing up rail and burning bridges on the line to York. To the horror of

Gettysburg citizens, their five year old rail system including a new bridge across Rock Creek was burned to the ground. Wife of a local railroad worker Sallie Robbins Broadhead recorded in her diary for June 27, 1863, “when I got up I found that the Rebels had departed, having, on the night of the twenty-seventh, burned the railroad bridge over Rock Creek, just outside of the town and the cars that had brought up the militia, and had torn up the track and done other mischief. I became more uneasy about my husband, and I went to see some of the railroad hands to find out what I could relating to him.”¹⁰³ Bennett’s study on the Gettysburg Railroad Station notes that before the war, “Getting locally produced agriculture and manufactured goods to market and developing commerce depended on efficient, affordable transportation. That goal had been the root cause of the development of the road network that hubbed at Gettysburg by the mid-19th century.”¹⁰⁴ Lee had temporarily disrupted hopes like these of “dramatically expanding the growth of the area’s economy” when Early’s division marched through Gettysburg to York. It would be November of 1863 before hospital trains stopped servicing Gettysburg.

J.E.B. Stuart’s cavalry ride between Army of the Potomac (AOP) and the federal capital was more than an exercise in vanity to repair a damaged reputation after the bloodied standoff at Brandy Station, and certainly greater than an excursion to capture two hundred supply wagons in Maryland. To this point Lieutenant Colonel W.W. Blackford, former acting chief engineer of the Virginia and Tennessee Railroad, and aide-de-camp to Stuart wrote,

Two plans were presented by Stuart and submitted to General Lee's consideration: one, to take the route through the valley, and the other, which Stuart was ardently in favor of, to sweep around the rear of Meade's army and dash northward past him, and between him and Washington; cutting his communications, breaking up the railroads, doing all the damage possible, and then to join Early in Pennsylvania. General Lee left the decision of the question to Stuart, and Stuart immediately prepared to carry it into execution.¹⁰⁵

The larger purpose to Stuart's preferred sweep around the rear of Meade's army was two-fold. First, it operationally divided federal attention in two directions, diverting Union strength east away from Lee's advancing army to the west, and secondly to disrupt communications behind AOP lines. Disrupting communications had two effects; first it psychologically introduced apprehension and fear into the seats of federal and state governments, and, second, it tangibly altered track and wire. In a scene that would become familiar a year later in Georgia with Major General William Tecumseh Sherman, Stuart's cavalry pulled up Northern Central track every few miles, built bonfires with ties to melt the rail, and twisted the metal like Sherman's later famous neckties, tossing the deformed byproducts into nearby woods. Blackford reflected on the certainty of rail and telegraph damage done by Stuart's cavalry and the federal predicament from it, stating, "With the exception of a squadron of the enemy, encountered at Winchester, we met no opposition until Hanover was reached about noon on the 30th. It seems remarkable that the enemy should not have used more enterprise than this, for we were destroying his communications as we advanced."¹⁰⁶

What Lee successfully achieved was preventing the Army of Potomac from using these rail lines to supply federal troops in South Central Pennsylvania should the battle take place there. He took away the option of three rail companies coordinating to help the Union cause as they had during the Antietam Campaign the previous September

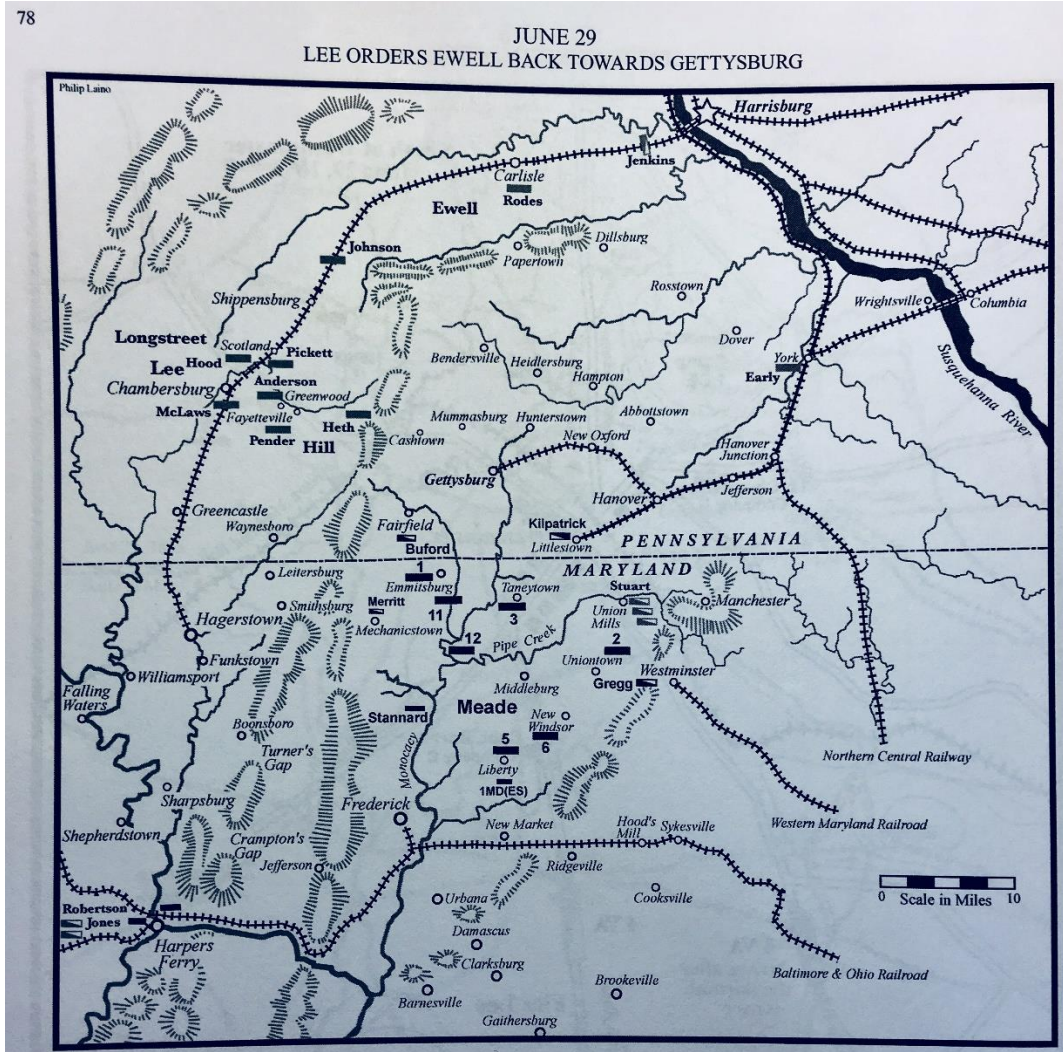


Fig. 9 – June 29 – Lee Orders Ewell Back Towards Gettysburg. This Map also Illustrates the Four Railroads That Lee Targeted in June 1863 that had Aided Federal Forces Nine Months Earlier in The Antietam Campaign. Philip Laino.

when they rapidly resupplied McClellan. Regarding a resumption of hostilities at Antietam on September 18, 1862 Secretary of War, Edwin M. Stanton had urged,

To the officers, or any of them, of the Northern Central Railroad, Pennsylvania Central Railroad, and Cumberland Valley Railroad, at Harrisburg, Pa.: An ammunition train will leave here [Washington, D.C.] about 1 o'clock a.m. for Hagerstown, via Harrisburg, to be run through at the fastest possible speed, so as to reach its destination to-morrow morning early. It must have the right of way throughout, as General McClellan needs the ammunition, to be used in the battle to be fought to-morrow. It is expected that you will use every possible effort to expedite the passage of this train. By order of the President of the United States: Edwin M. Stanton, Secretary of War.¹⁰⁷

Altogether a four-car powder train was transported over 200 miles from an arsenal in Washington D.C. north to Harrisburg, Pennsylvania via the Northern Central Railroad, and then south to Hagerstown, Maryland by way of the Cumberland Valley Railroad (CVRR) to resupply General McClellan at Sharpsburg. The delivery was made in roughly 12 hours demonstrating the logistical advantages of railroads. As noted by the historian's office of the Cumberland Valley trail system, "The final, high-speed leg of the ammunition run from Bridgeport to Hagerstown also established the CVRR as a pivotal supply route for Union troops, a role the CVRR played for the balance of the war."¹⁰⁸

The point is that such coordination between rail companies during the Antietam Campaign threatened Lee's existence north of the Potomac River in September 1862, and would likely do the same in June 1863 if he did not take preventative measures. It is not a coincidence that Lee targeted each of these same lines on the way to Gettysburg. Making the Cumberland Valley line his main avenue of approach to Pennsylvania and back, along with continual destruction of the line, by George Pickett's Virginia division as late as July 1, reveals that he understood this. As the German Reformed Messenger reported, "The buildings of the railroad company [in Chambersburg] were demolished,

and the track of the road torn up and the cross ties burned and the rails rendered useless, for miles in both directions from town.”¹⁰⁹ That Lee targeted rail is also confirmed in his official report where he stated, “The expedition of General Early to York was designed in part to prepare for this undertaking by breaking the railroad between Baltimore and Harrisburg, and seizing the bridges above and below York...”¹¹⁰

2.7 June 28, 1863: Nature and Second Nature Conspire on Gettysburg

The broader campaign initiatives to gather supplies and destroy rail suddenly came to an end on the night of June 28 when the Confederate spy, Henry Thomas Harrison, visited Lee’s headquarters in Chambersburg, Pennsylvania. In their secretive meeting, the tug-of-war between the Susquehanna and Potomac, Harrisburg and Washington, and Cumberland Valley and Baltimore & Ohio Railroads came to a head. Lee reported to Davis, “The advance against Harrisburg was arrested by intelligence received from a scout on the night of the 28th, to the effect that the army of General Hooker had crossed the Potomac, and was approaching the South Mountain.”¹¹¹

The intelligence that Harrison brought to Lee warned that five of seven Union infantry corps had crossed the Potomac, centered on Frederick, Maryland with the closest corps resting at Middleburg, just twenty-four miles south of Gettysburg.¹¹² Knowing that distance could be closed in one day’s march, Lee knew military engineering and supply gathering must end immediately. The supplies must be positioned near South Mountain for ready escape into the Cumberland Valley and his Army of Northern Virginia (ANV) had to consolidate within twenty-four to forty-eight

hours to avoid the defeat of his isolated corps in succession. Gettysburg was centrally located to his fanned-out army, directly accessible by way of multiple intersecting roads, and situated well to cut concentration time in half. Lee understood that his army's operations had disrupted rail, telegraph, and bridge infrastructure enough in the Susquehanna Valley that his opponent would be logistically reduced to pre-modern forms of transportation and communication, unable to quickly concentrate infantry corps, resupply ordnance, or bring in medical supplies and personnel.

The difference in communication and transportation systems for Meade north and south of the Mason Dixon line could not have been more dramatic in late June 1863. One could argue that AOP had made modern communication systems so proficient in Virginia that Lee had to leave the state to break the stronghold of water, rail, and road along the Rappahannock and Rapidan. A steady stockpile of supplies arriving behind federal lines around Fredericksburg combined with daily field glass balloon surveillance and nighttime campfire watches made it nearly impossible for Confederate movements to go undetected. Thaddeus Lowe's hydrogen balloons had worked out surveillance to a science, uncoiling the aircraft by rope to proscribed heights, equipping the basket with telegraph communications, staffing it with cartographers, and providing armored bottoms resistant to sharpshooter fire. Rebel counterintelligence measures included painting tree stumps black to resemble artillery howitzers from the air and lighting decoy campfires to scramble night maneuvers. Lee's movement away from this strangle hold had to be carefully disguised merely to reach the Shenandoah-Cumberland Valley for his movement north. Therefore, when Lee

exhorted Longstreet toward the end of the first day of battle “the enemy is there, and I am going to attack him there,” he simply reminded his senior corps commander the federals were less anchored in their communication systems at Gettysburg than perhaps any stage of the war as a consequence of bold maneuvers and rail destruction.¹¹³

So when both armies jockeyed for position after June 28, Lee understood in advance that a concentration on Gettysburg placed Meade in a more precarious state than his army faced at any other time of the war. Lee’s careful plans of sabotage all around Gettysburg made it as much an ideal gathering place from a supply perspective as the desirable aspects of water, road, and central location perspective. Simply put, federal supply systems operated apart from rail and telegraph within a fifty mile radius of Gettysburg thanks to Lee’s deliberate efforts to level the logistical playing field, thus hindering rapid federal concentration. Haupt made these observations only because it was his job to restore modern systems of transportation and communication.

Chapter 3: Day 1 – Union Establishment of a Battlefront on Monocacy's

Headwaters

During the first day of the battle, the two armies, then in operational mode spread out over dozens of miles, came into contact with each other west of Gettysburg, prompting each army to switch to the tactical phase, attempting to strengthen their troops at the point of contact and establish left and right lines to prevent flanking maneuvers by the opposition. If Meade at this point had not decided to counter Lee's invasion of south central Pennsylvania with a defensive line along Pipe Creek in northern Maryland or about sixteen miles north at the strategic town of Gettysburg, the events of July 1 forced his hand. Although the fighting on that morning was west of town, Meade gave special attention to his right flank in the hills to the north and northeast of town. One reason for this was that Confederate troops were located east of Gettysburg and were mostly likely coming to join the battle. However, Meade was also concerned with his right flank for logistical and strategic reasons. Protecting the north-south flowing Rock Creek was necessary to sustain his large army. In addition, Meade had to make sure that Lee did not maneuver around him and advance on either Baltimore or Washington. To insure that this did not happen, Meade had to make sure the ANV did not have access to the roads radiating out of Gettysburg to the southeast. The following narrative details the AOP's efforts to establish a strong right flank in the hills north and northeast of town. With possession of the high ground and adequate troop strength, the AOP could then pivot 90 degrees to straighten its line and drive the ANV back to South Mountain and ultimately Virginia (which is what happened after the third day of

the battle). However, the failure of the AOP to hold on to Barlow's Knoll north of town and Brigadier General Alpheus S. Williams' attack on Benner Hill aborted at the end of day one, the AOP found itself in a peculiar fish-hook shaped line anchored on Cemetery Ridge but then bent back around Culp's Hill, having to defend possible attacks from the north and northeast. Logistically, the Confederates now controlled the upper reaches of Rock Creek and the rail line from Hanover. As July 2 dawned, Meade determined that uncoiling the fish-hook was his highest priority, both for tactical and logistical reasons.

3.1 June 29-30, 1863: Gettysburg was a Natural Choice

Brigadier General John Buford, who commanded one of three federal cavalry divisions, and the vanguard of Meade's Left Wing, arrived in Gettysburg on June 29 and spread his cavalry west and north, gathering information about Lee's location and intentions. His mission was to cover federal infantry to the east, while feeling for the enemy in the direction of South Mountain to the west. In the process, Buford helped federal infantry choose a battlefield that best defended Pennsylvania and points further south such as Washington and Baltimore. Federal Artillery Chief Henry Hunt later assessed Buford's role in determining the ground.

Directly north of the town the country is comparatively flat and open; on the east of it, Rock Creek flows south. On the south and overlooking it, is a ridge of bold, high ground, terminated on the west by Cemetery Hill and on the east by Culp's Hill, which, bending to the south, extends half a mile or more and terminates in low grounds near Spangler Spring. Culp's Hill is steep toward the east, is well wooded, and its eastern base is washed by Rock Creek. Impressed by the importance of the position, Buford, expecting the early return of the enemy in force, assigned to [Colonel Thomas C.] Devin's brigade the country north [of Gettysburg]...sent out parties in all directions to collect information, and reported the condition of affairs to Reynolds [Moritz Tavern on Marsh

Creek]. His pickets extended...easterly some 1,500 yards north of the town, to a wooded hillock near Rock Creek.”¹¹⁴

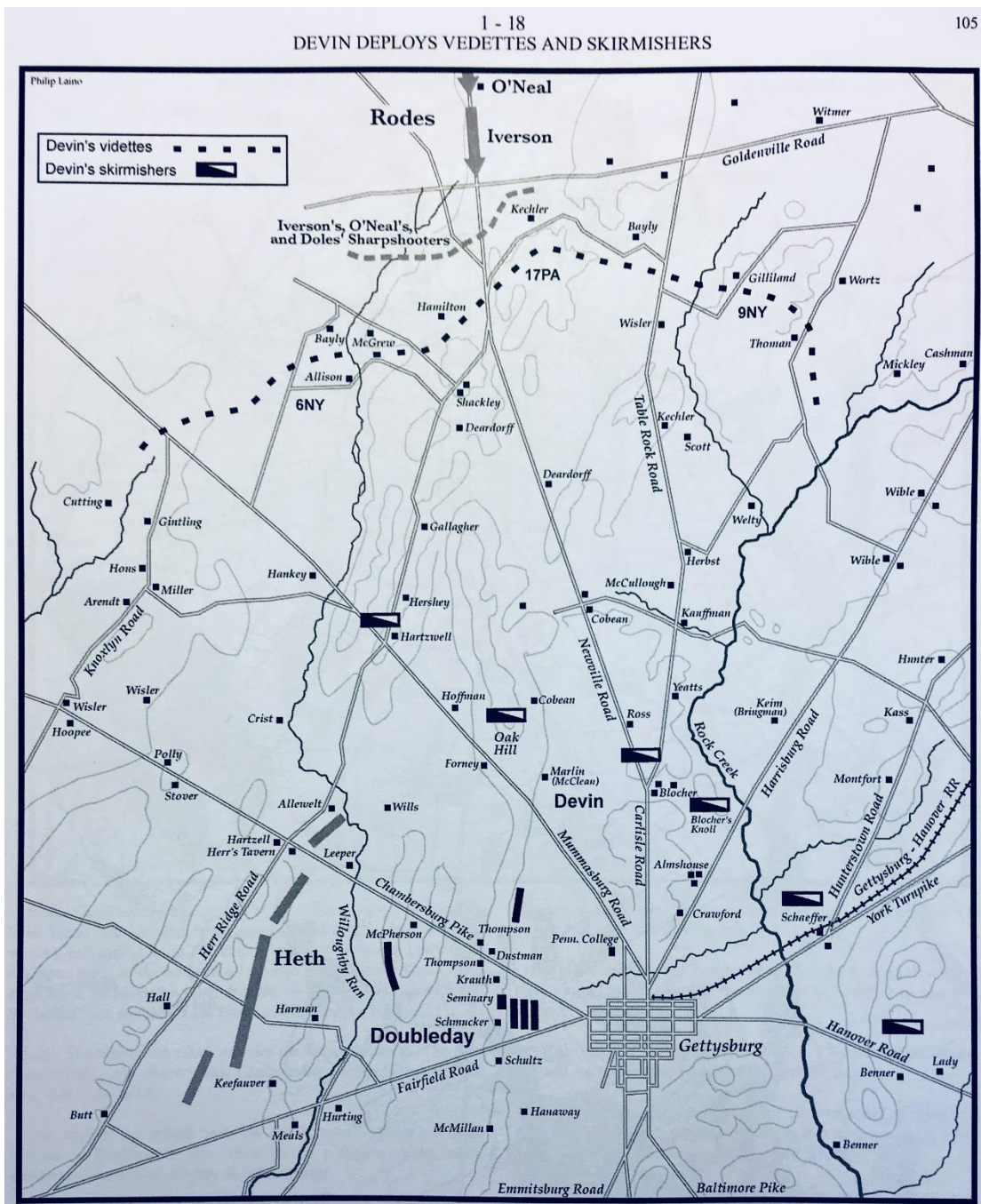


Fig. 10 – 1-18 (1 = Day 1) (18 = Map #18): Devin Deploys Vedettes and Skirmishers by Philip Laino. This Map Illustrates How Colonel Thomas C. Devin Deployed an Outpost of Buford’s Cavalry North of Gettysburg Establishing the Federal Right Flank on Rock Creek.

One of the earliest monographs on the battle described it similarly,

The Gettysburg ridge is an irregular, interrupted line of heights and hills running due south from the town of Gettysburg. At the town, the ridge bends back, eastward and southward, in a *crochet* formed by Cemetery and Culp's hills. The former is so called from the burying-place of the town situated thereon. It commands the positions available for the enemy on the north and northwest. The latter forming the right knob of the line is in rough and rocky ground, much wooded and very unfavorable to the use of artillery. Along its eastern base runs Rock Creek, one of the tributaries of the Monocacy.¹¹⁵

When Buford arrived at the Monocacy River's headwaters, he learned that Ewell's corps of Army of Northern Virginia had entered Adams County on June 26, with elements of his corps marching through Gettysburg proper to York. This information was then paired with the June 28 observations of Brigadier General George Armstrong Custer who rode the dismantled Gettysburg-Hanover rail line with his 5th and 6th Michigan. Buford also exchanged information with David McConaughy's agents for the Bureau of Military Intelligence in Gettysburg, who monitored daily movements behind enemy lines. They reported that Ewell's corps had spread across South Central Pennsylvania destroying communication infrastructure and gathering supplies. All of this information was exchanged with Meade in Taneytown, Maryland and Reynolds at Marsh Creek over a forty-eight hour period.

What Buford gradually understood as he exchanged information with Meade in Middleberg and then Taneytown, Maryland, either through cavalry chief Major General Alfred Pleasonton, or Meade's personal representative Joseph Dickenson, was that denying Confederate entrance into Gettysburg forced decisive action. First, a federal show of strength near Lee's line of communication at Cashtown Pass would achieve the urgent political objective of pulling the Confederate commander down and away from

Harrisburg. Secondly, a federal show of strength on Monocacy's headwaters forced Lee to consolidate near Cashtown either to fight or retreat under less than ideal conditions. Thirdly, Buford realized that controlling the Gettysburg crossroads denied Lee the ability to easily concentrate, while simultaneously blocking his direct accesses to Frederick, Westminster, Baltimore, and Washington. Finally, controlling the road network forced Confederate troops returning from York to circumvent Gettysburg altogether well to the north on the less improved Black Gap Road. It would make them fight a rear guard action at Cashtown to escape with supplies over the South Mountain and into the Cumberland Valley.

In summary, a capable division commander like Buford would have understood that Lee's line of retreat through Cashtown and Fairfield Passes was endangered by his cavalry's presence, requiring Lee to recall his army to that point. Buford certainly ascertained that Confederates lacked cavalry in the immediate area, which made Southern infantry more likely to engage him to divert federal attention away from Confederate wagon trains crowding against South Mountain.¹¹⁶ Finally, Buford would have surmised that pressuring Lee's communications at South Mountain offered the potential for decisive action. The combined strength of Buford's cavalry with Reynolds' infantry could embarrass Confederate movements in Pennsylvania.

Before Buford proceeded with offense or defense, he had to ascertain whether the ground could sustain a fight in and around Gettysburg for more than twenty-four hours, and that meant he needed to look for tactical positions that intersected with water, rail, and road. Cemetery Hill immediately stood out as key terrain that controlled

the roads, the town, and the surrounding countryside. The veterans disagreed on whether Buford, Reynolds, Major General Oliver O. Howard, or Major General Winfield Scott Hancock deserved credit for seeing the value of Cemetery Hill. Congress started the controversy of who deserved this acclaim by originally limiting recognition for federal victory at Gettysburg to Hooker, Meade, and Howard.

In a resolution dated January 28th, 1864, the thanks of Congress were tendered to General Joseph Hooker and his army for the movement covering Washington and Baltimore; and to Major-General George G. Meade, Major-General Oliver O. Howard, and the officers and soldiers of that army, for the skill and heroic valor which, at Gettysburg, repulsed, defeated, and drove back, broken and dispirited, beyond the Rappahannock, the veteran army of the Rebellion.¹¹⁷

Specifically, Congress acknowledged that Hooker deserved credit for beginning the campaign, while Meade was given recognition for presiding over the victory, and Howard earned acknowledgment for building the army's bulwark defense around Cemetery Hill during the afternoon of July 1. The trouble with singling out Howard among the corps commanders is that clearly others had played a role in choosing the key position of Cemetery Hill, including Hancock who personally represented Meade there at the end of the battle's first day. Hancock rallied troops at strategic points all across the hill, and then conferred personally with Meade that it was good ground. Moreover, he repulsed Pickett's Charge from Cemetery Hill on the battle's final day to shift the war's momentum. Hancock believed he was in charge on Cemetery Hill at the end of July 1, and therefore deserved recognition for choosing the position that brought final victory. Hancock testified to the Congressional subcommittee on March 22, 1864, "I told General Howard I had orders to take command in the front. I did not show him the

orders, because he did not demand it. He acquiesced.”¹¹⁸ Assistant Adjutant-General Eminel P. Halstead witnessed the exchange on Cemetery Hill between Howard and Hancock, and published a version closer to Howard’s perspective. He wrote,

When near General Howard, who was then alone, he [Hancock] saluted, and with great animation, as if there was no time for ceremony, said General Meade had sent him forward to take command of the three corps. General Howard replied that he was the senior. General Hancock said: “I am aware of that, General, but I have written orders in my pocket from General Meade, which I will show you if you wish to see them.” General Howard said: “No; I do not doubt your word, General Hancock, but you can give no orders here while I am here....”¹¹⁹

Both men believed they chose the ground, but Hancock made his case well enough that Congress belatedly acknowledged his contribution nearly three years later on May 30, 1866, thanking him, “for his gallant, meritorious, and conspicuous share in that great and decisive victory.”¹²⁰ Finally, the Commonwealth of Pennsylvania rendered their judgement in 1896, only a decade after Hancock’s death, when the state erected an equestrian to Hancock next to Howard’s headquarters’ marker on Cemetery Hill as if to say Congress should have honored their native son instead of the general from Maine.

Certainly arguments could be made for all four men choosing Cemetery Hill as the key position for the army to rally upon, but it is more likely that the decision was set in motion two days before the battle when Buford first arrived in Gettysburg and began conversing with Reynolds about how to defend the place. Buford stated his role in a note to Pleasonton on June 30 at 10:40 PM that, “I have kept General Reynolds informed of all that has transpired.”¹²¹ There were two sides to Buford’s role. The first, and most obvious was to uncover enemy movements. This involved determining the

enemy's location, strength, and morale, or willingness to fight, in deciding where and when to give battle. There was a second, less obviously stated role though that is equally important, which is that Buford had to assess key terrain, observation points, cover, concealment, obstacles, and avenues of approach. This translates into important hills, condition of roads, and the strategic location of mountains and streams. The first role was a route-related reconnaissance, whereas the second role was an area related reconnaissance. Both were vital. Buford located key roads for infantry movements, identified strategic mountains and ravines used for cover and concealment, and found water for men, horses, and artillery sponging. This was Hunt's point that Buford recognized the "importance of the position," particularly the tie-in to Rock Creek through Cemetery and Culp's Hill.¹²² Hoke analyzed it this way in 1887.

Rock Creek, a stream of some considerable size, runs by its eastern base, and passing south, at length enters the Monocacy. This flank was well protected by the nature of the slope, which is high and commands the entire country around it. The distance [in 1863] from the toe of the horse-shoe --- Federal center -- to the termination of the line at Rock Creek is about three quarters of a mile.¹²³

Buford also picketed along the northern prolongation of Rock Creek to Hunterstown, where his cavalry located Confederate pickets protecting Ewell's lines of communications on the Black Gap Road to York. From there, he monitored arrival of ANV forces rumored to be returning from York. To the west, he monitored Confederate movements in Fairfield, and to the South he guarded the Emmitsburg gateway to supplies at Westminster. The placement of Buford's pickets, counterclockwise from east to west, along the York, Harrisburg, Mummasburg, Chambersburg, Hagerstown,

Emmitsburg, and Taneytown roads reveals that he anticipated ANV approaches from all directions. Because cavalry screens infantry movements, his deployment of cavalry across all these roads also indicates he expected Reynolds to be ready to support in all those directions, largely depending on the flank most threatened.

When Reynolds advanced the left wing of army infantry north of Emmitsburg, Maryland, to within four miles of Gettysburg, and then ordered the 1st Corps to advance rapidly to the battlefield on the morning of July 1, the plan for defending Washington by way of Gettysburg was well under way. General Meade's son, also named George Meade stated in his book that by June 30,

General Reynolds was on Marsh Creek, four miles from Gettysburg, ready to march for that place early the next morning. General Howard was within supporting distance of General Reynolds, between him and Emmitsburg, General Sickles was at Emmitsburg. General Hancock was at Uniontown. General Slocum was about a mile beyond Littlestown, on the road to Hanover. General Sykes was at Union Mills. General Sedgwick was within two miles of Manchester. General Gregg, with his division of cavalry, was at Manchester, and General Kilpatrick, with his division, at Hanover. General Meade's headquarters were at Taneytown.¹²⁴

With each of the federal army corps covering roads leading directly to Pipe Creek, Westminster, Baltimore, and Washington beyond, Reynolds edged closer to the headwaters of the Monocacy at Gettysburg because, as a note recovered from his body that morning stated,

...we have reason to believe that the main force of the enemy is in the vicinity of Cashtown or debouching from the Cumberland Valley above it. The corps are placed as follows: two divisions of the First Corps behind Marsh Run, one on the road leading to Gettysburg, and one on the road leading from Fairfield to the Chambersburg Road at Moritz Tavern; the Third Division, with the reserve

batteries on the road to Chambersburg, behind Middle Creek, not placed in position. This was the position taken up under the orders to march to Marsh Creek. I have not changed it, as it might be necessary to dispute the advance of the enemy across this creek, in order to take up the position behind Middle Creek, which is the one I alluded to, near Emmitsburg. Howard occupies in part the position I did last night, which is to the left of the position in front of Middle Creek, and commands the roads leading from Fairfield down to Emmitsburg and the pike below.¹²⁵

What Meade's critics noticed in Reynolds words are references to falling back by design on Emmitsburg to cover Pipe Creek and left flank access to Westminster, but when all statements are viewed collectively, as we will see, a retrograde movement represented one of several options. Retracing steps to Emmitsburg merely represented a wise contingency if the enemy had already massed in front of Gettysburg, but that is not the focus here. For our purposes, the more intriguing information found in the notes and instructions on Reynolds body is use of language pertaining to water as basis for lines of battle. What is new to this work is the realization and recognition that Marsh Run, Marsh Creek, and Middle Creek hold hegemony in the language over towns for movement, destination, and deployment of army corps. Reynolds attached more value to the confluence of water with roads than towns themselves. Because he did not mention the Conodoquinet Creek tributary of the Susquehanna River further north at Carlisle, or Conococheague Creek tributary of the Potomac River west of South Mountain at Greencastle, then it is easy to fix his orders on Monocacy's headwaters at Gettysburg.

In making such plans, Reynolds and Howard had conversed late into the evening at Moritz tavern, just five miles south of Gettysburg on the Emmitsburg Road, discussing

scenarios in the event that Buford made contact with Confederate columns again on the Cashtown Road. Intelligence gathered from Buford made it probable that blocking this thrust would constitute the main parry. Joseph Rosengarten of Reynolds' staff wrote that in such a scenario, "Reynolds counted in turn on having within his reach and at his immediate service at least the three corps that belonged to him, and there can be little question that if they had been up as promptly as he was in answer to Buford's call, the line he marked out would have been fully manned and firmly held...."¹²⁶ Even so, questions about which flank could be turned remained open. Confederate flank attacks to the east from York, or southwest by way of Fairfield to Emmitsburg had to be carefully anticipated because they could undo the position. Since it was probable the main thrust would come by way of Cashtown Road, Reynolds' own 1st Corps would meet it on Marsh Run, either on Marsh Creek proper three miles west of Gettysburg where the first cavalry picket shots were fired at 5:30 AM, or the Willoughby Run branch of Marsh Creek where Buford fell back to and where Reynolds supported him at 10:00 AM. Reynolds would expect Howard's 11th Corps to support his right north and east of Gettysburg, while threats from the west and southwest required Sickles' 3rd Corps to be on guard for the expected turning maneuver in that direction.

A Confederate cavalry flanking maneuver on the Union right could directly access and burn the main rail supply depot at Westminster, unless Right Wing Commander Henry Slocum released one, two, or all three of his corps from Pipe Creek north to Rock Creek in Pennsylvania. Equally worrisome was the possibility of a flanking maneuver on the far left that could open a door through Emmitsburg to Westminster via the

Waynesboro-Emmitsburg Turnpike. Left Wing commander John Reynolds had to be careful in this regard to assure his operational flank and rear remained secure. Therefore, reducing frontage from the operational level down to the tactical level had to be precise in timing and location.

This raises the question of whether Buford and Reynolds knew about the July 1, Pipe Creek Circular written by Meade that stipulated Pipe Creek as the primary defensive position, thirteen to sixteen miles south and southeast of Gettysburg. Though no definitive evidence exists to prove that either received a copy before the fighting began on July 1 at Gettysburg, the argument is a moot point. Neither Buford nor Reynolds needed to possess a copy of the circular to know that it was the primary plan in effect. It was quite clear that it had taken shape since Meade assumed command on June 28 with Chief of Staff Daniel Butterfield, Artillery Chief Henry Hunt, and Chief Engineer Governor K. Warren devoting two days planning for its defense. Because Buford remained in constant communication with Cavalry Chief Alfred Pleasonton, who reported directly to Meade, and because Buford met with Meade's personal representative Joseph Dickenson in Gettysburg on June 30, and due to Buford regularly updating Reynolds about his front, it can be readily surmised that Reynolds knew his options within the broader scheme. The fact that Meade did not recall him should be enough evidence that Reynolds' movements toward Gettysburg fell within the perimeters of his wishes. Meade confirmed this in correspondence with Reynolds on June 30, 11:30 A.M. stating,

Your dispatch is received. The enemy undoubtedly occupy the Cumberland Valley, from Chambersburg, in force; whether the holding of the Cashtown Gap is to prevent our entrance or is their advance against us remains to be seen. With Buford at Gettysburg and Mechanicsville, and a regiment in front of Emmitsburg, you ought to be advised in time of their approach. In case of an advance in force either against you or Howard at Emmitsburg, you must fall back to that place, and I will reinforce you from the corps nearest to you, which are Sickles [3rd Corps] at Taneytown and Slocum [12th Corps] at Littlestown [10 miles south of Gettysburg]...In the meantime, if they advance against me, I must concentrate at that point where they show the strongest force...P.S.—If, after occupying your present position, it is your judgment that you would be in better position at Emmitsburg than where you are, you can fall back without waiting for the enemy or further orders. Your present position was given more with a view of an advance on Gettysburg than a defensive position.¹²⁷

The language here from Meade to Reynolds is filled with variables and contingencies that permitted advancing on Gettysburg as well as falling back based on circumstances, proving Meade understood the fluidity of the situation. Meade had left the situation in flux, that had he only wanted Pipe Creek, then all leeway in his orders would have been eliminated. General plans with clearly specified goals are realistic, but the Pipe Creek Circular had too many ifs, ands, and buts. The final statement, “Your present position was given more with a view of an advance on Gettysburg than a defensive position,” certainly advocates “advance on Gettysburg” more than defense of Pipe Creek.¹²⁸ There were two implications to this statement. First, as discussed in the beginning of Chapter Two, Meade preferred Pipe Creek for defensive purposes over Monocacy’s headwaters because of shorter lines of operations to Washington, D.C. The further both Meade and Lee moved north, the more vulnerable their lines of communication became to cavalry raids, ambushes, sabotage, and infantry turning maneuvers. Simply put, the further north they moved, the more risk to being cut-off

from their base of operations. And, for Meade, the railroads from his base became worse the further north he moved into Pennsylvania. Meade's final statement also implies that an advance on Gettysburg was offensive, which will be a major focus in Chapter Four. For our purposes, an "advance on Gettysburg," was also an advance on Monocacy's headwaters at Marsh Creek. Had Reynolds' infantry reached the battlefield before Buford gave ground, the position at Gettysburg would have rested three miles west on Marsh Creek at its intersection with the Chambersburg Pike.

Therefore, Reynolds and Buford understood their actions on July 1 complied with an option that had developed under Meade's wishes since June 29 when Buford arrived in Gettysburg. At the same time, they recognized that the Marsh Creek line at Gettysburg had not yet evolved into the primary option due to its distance from Washington and bad condition of rail after damage done by Ewell's Corps. Even so, it was a viable option if circumstances dictated. Politically, South Central Pennsylvania was the primary option if the Lincoln administration hoped to carry the state in the next general election, which may have influenced Lincoln's choice of Philadelphia's own son Meade to lead the army in late June of 1863, with Lee already in Pennsylvania. This decision in-turn influenced Meade's appointment of Lancaster, Pennsylvania native John Reynolds to lead the left wing into the state. That Meade and Reynolds called Pennsylvania home likely affected their final decisions to make a stand in the state too. It is more than coincidental that Meade sent native Norristown, Pennsylvania Winfield Scott Hancock to Gettysburg to give a final assessment on whether Reynolds had chosen wisely in making Gettysburg the primary option. If Lee chose Virginians to lead his

cavalry corps and two of his three infantry corps in defense of Virginia, why would it be any different for Pennsylvania generals to lead in their state's defense, particularly when over one-third of the federal army, or 34,000 combatants, were from the Keystone State? The motivation of defending one's home state had energized Virginia units time and again. And, from a Union morale standpoint there can be little doubt the heroic actions of so many Pennsylvanians drew inspiration from fighting in their home state. Repeatedly, Pennsylvania soldiers were reminded at Gettysburg to defend their native soil. The psychological advantage of fighting on Pennsylvania soil should not be viewed as a fortuitous byproduct of army movements, but instead a calculation by Lincoln's generals who made deliberate decisions to meet the enemy in that state.

If we consider the information gathered by Buford and Reynolds on June 30, in conjunction with military principles that guided them and the actual decisions made on July 1, then we can reasonably reconstruct original strategy. First, it is safe to surmise the layered federal defense of Marsh Creek and Willoughby Run, along the successive parallel undulations of Belmont, Herr, McPherson, and Seminary ridges points to definite knowledge of Lee's main force on the Cashtown Road. For Reynolds to commit his entire 1st Corps to Willoughby Run tells us he clearly trusted the intelligence accumulated and analyzed up to that point. A second insightful clue to intent was the careful spacing of 1st Corps troops along McPherson ridge, particularly where wood lots

are concerned. Making Herbst Woods the centerpiece of Union deployment along Willoughby Run is a prime example. The initial advancement of Brigadier General Solomon Meredith's Iron Brigade through Herbst Woods to the banks of Willoughby Run, found its purpose in cover and concealment against incoming Confederate artillery and advancing infantry. Lieutenant General Ambrose Powell Hill's Confederate Corps' artillery held a better position with more guns to bear along Herr Ridge than did the few Union pieces of horse artillery on McPherson Ridge, making the woods a great equalizer

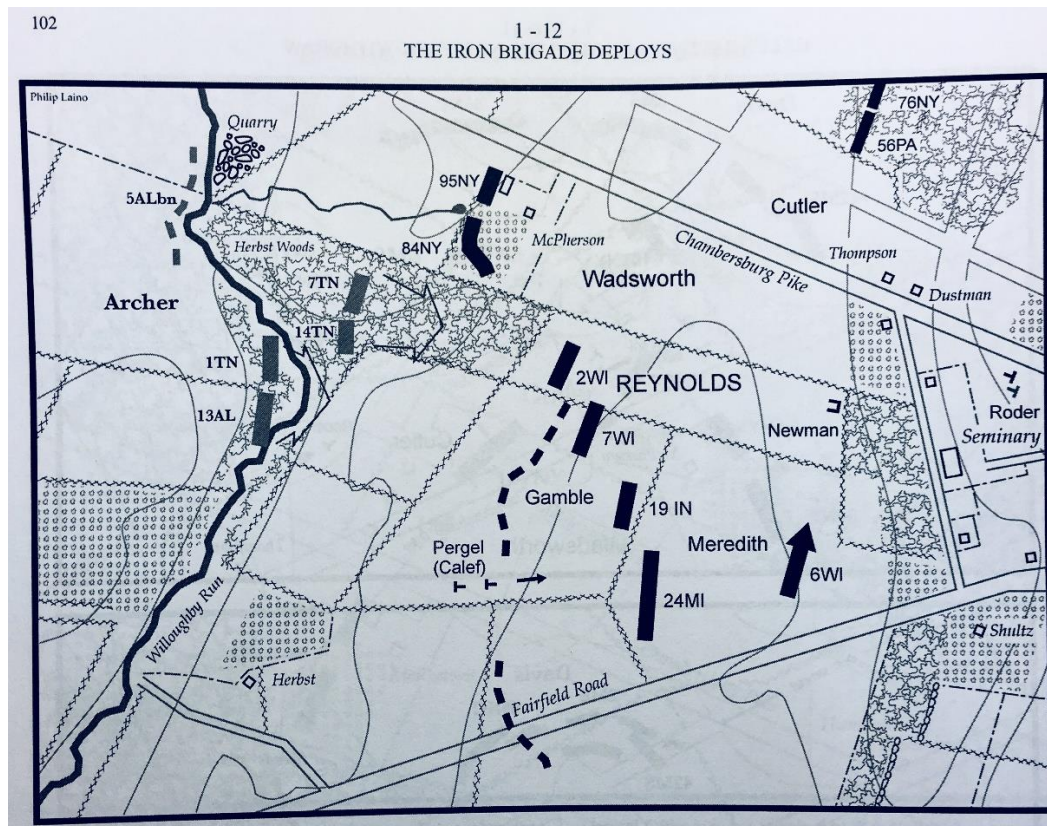


Fig. 11 – 1-12 -The Iron Brigade Deploys at 10:00 AM. Notice Careful 1st Corps Spacing Around the Centerpiece of Herbst Woods for Cover, Concealment, and Element of Surprise. Philip Laino.

in this respect.

The woods not only permitted the Iron Brigade's Wisconsin, Michigan, and Indiana soldiers to make a concealed advance against Brigadier General James J.

Archer's Tennessee and Alabama brigade, but they also provided an element of surprise at the point of contact that led to federal envelopment of Southern units. Furthermore, the woods enabled the smaller Union force to keep the Confederates guessing about actual location, strength, and morale. As a rule, woods favor a smaller force for all the above reasons, but particularly because they give pause to an enemy who would otherwise overwhelm it out in the open. Woods also limit sight lines, break-up fields of fire, and separate combat into small, isolated pockets of unit action altogether enabling a smaller army to endure longer than in an open field. When Lee advanced to meet Commanding General Ulysses S. Grant in the Wilderness in May 1864, he did so for the same reason, understanding fully the consequences of showing his undersized army in open ground. At Gettysburg, the first day's fighting therefore assumed a grizzly nature along the banks of Willoughby Run with close, small arms infighting amidst thickets, thistles, and patches of burning vegetation.

So the woods played a big part in the deployment of Meredith's Iron brigade but did not constitute the only location for Brigadier General James S. Wadsworth's division. Oddly, Brigadier General Lysander Cutler's brigade was deployed 200 yards north of Meredith's right thereby creating a gap not easily filled. Why would Reynolds do this? In part, this was executed to secure the right flank and rear of Wadsworth's division north of the Cashtown Road, as well as to take advantage of McPherson Ridge concealment in that direction, and to create enough frontage for the two advanced brigades of Wadsworth's division to have their own fields of fire. However, all these advantages came with the danger of a thinly covered gap at best complicated by fences along the

Chambersburg Pike and a deep railroad cut. Cutler's 14th Brooklyn and 95th New York infantry admirably filled the gap in unison with Meredith's 6th Wisconsin infantry at a critical moment in the morning fight, but that proved to be a heroic stop-gap measure in the absence of a more substantial force. At least another Gettysburg-sized brigade of 1,500 troops was required to adequately secure that space. So why did Reynolds' risk that gap? The answer is that he intended to fill it with another brigade as more of Wadsworth and eventually Brigadier General Thomas A. Rowley's division arrived. He could do this either by bringing Brigadier General Gabriel R. Paul, or Brigadier General Henry Baxter's brigades of Brigadier General John C. Robinson's division forward from their reserve position on Seminary ridge, or insert Colonel Roy Stone's Pennsylvania Bucktail brigade of Rowley's division, which is eventually what happened. Tragically, Reynolds' untimely death left Major General Abner Doubleday to fill that vacuum, but it was Reynolds who created space for anticipated arrivals. What are we to make of this? Simply, Reynolds sketched out a line of battle that allowed room for an entire corps to find frontage for fields of fire along McPherson ridge.

So the next question is did he intend to build his line along the northern prolongation of McPherson Ridge, or perhaps in the opposite direction to the south behind Seminary Ridge? The short answer is wherever the threat developed. Reynolds could easily surmise that Confederate approaches against his tactical, or battlefield left would emerge from the Fairfield Road, whereas moves against his strategic, or broader operational left would proceed eight miles south of Gettysburg along the Waynesboro–Emmitsburg turnpike to his main supply depot at Westminster. Therefore, it behooved

him to keep the 3rd Corps in front of Emmitsburg, while this threat to his operational left flank existed. A note found on Reynolds' body attested to this fact stating, "I think if the enemy advance in force from Gettysburg, and we are to fight a defensive battle in this vicinity, that the position to be occupied is just north of the town of Emmitsburg, covering the plank road to Taneytown. He will undoubtedly endeavor to turn our left by way of Fairfield and the mountain roads leading down into Frederick and Emmitsburg Pike, near Mount Saint Mary's College."¹²⁹ So where did Reynolds intend to place the 11th Corps once they reached the battlefield? One clue emerged in the hour before Reynolds' death as Brigadier General Francis C. Barlow halted his 1st Division of the 11th Corps, along the Emmitsburg Road, in front of the soon famous Peach Orchard, to inquire where his division should go.¹³⁰ After a short rest, he learned it should proceed into Gettysburg for deployment to the right of the 1st Corps, north of town. This order turned out to be one of Reynolds' final decisions.

His last instructions are equally telling, namely the memorandum rushed to Meade in Taneytown stating that he planned to incorporate the town into his defense of Gettysburg. In a now immortal, even haunting dictation to Meade, received by the commanding general in Taneytown after Reynolds' death, the left-wing commander ordered aide-de-camp Captain Stephen D. Weed to, "Tell him [Meade] the enemy are advancing in strong force, and that I fear they will get to the heights [Cemetery Hill] beyond the town before I can. I will fight them inch by inch, and if driven into the town, I will barricade the streets and hold them back as long as possible."¹³¹ Reading between the lines, he was asking Meade to trust him in choosing a position adequate for the

defense of the supply base at Westminster, and the nation's capital beyond, so much so that he was willing to employ the town as a buttress to hold Cemetery Hill, Cemetery Ridge, and Culp's Hill. By throwing up obstacles and barricades in the town streets, he in effect turned the town into a vast labyrinth to slow pursuit if it came to that. Reynolds ordered certain streets and alleys blocked with furniture and other make-shift barriers to restrict avenues of pursuit in the event of early withdrawal. His withdrawing forces would avoid the obstacles and follow the open corridors through the mouse maze safely to high ground south of town. In effect, the old street fighter Reynolds, brevetted for gallantry in street battles at Buena Vista and Monterey during the Mexican War, made guerilla fighting an essential contingency to defense at Gettysburg. He understood from his experience in Mexico and observations at Fredericksburg that door-to-door, cellar-to-cellar, garret-to-garret fighting favors a small force much in the same way Herbst woods extended the capabilities of his outnumbered brigades on McPherson Ridge. As timber breaks up formations, absorbs projectiles, and restricts artillery use, so do brick, stone, and wood buildings in city streets. So the town became integral to the defense of the heights that link Gettysburg to water, rail, and road connections.

Therefore, Reynolds' final note to Meade revealed the wing commander had committed the army to a battle on Monocacy's headwaters at Gettysburg. This was so because Meade had to push forward additional corps to save the two corps currently engaged. Howard's advance of two 11th Corps divisions along the Taneytown Road is supportive of this conclusion. That is, Major General Carl Schurz and Brigadier General Adolph von Steinwehr's divisions of that corps were placed on a course directly north to

Cemetery Hill, with Schurz's division continuing the march through borough streets to open plains north and northeast of town. Schurz, commanding the 3rd Division, 11th Corps reported that, "On July 1, at 7 a.m., the Third Division left its camp, near Saint Joseph's College, at Emmitsburg, with orders to march to Gettysburg by way of Horner's Mill."¹³² A correspondent with Brigadier General Alexander Schimmelfennig reflected, "...and on the march from Emmitsburg to Gettysburg with a detail of 10 Corporals one from each company of the brigade marched in rear as rearguard to keep up stragglers. We followed Schimmelfennig through the town and halted near the Pennsylvania College, Schimmelfennig's division was in an open field near the town."¹³³ Though the final deployment of Schurz's division completed around 11:00 AM, a half hour after Reynolds' death, their charted course to the north of Gettysburg was plotted hours earlier, with Schurz and Steinwehr marching past Horner's Mill on the Taneytown road sometime after 9 A.M. even as Reynolds personally rode to the field. This tells us that Reynolds intended to heed Buford's June 30 warnings that elements of Lee's army were returning from York to threaten the federal right flank.¹³⁴ It also alerts the historian that Reynolds sought to anchor his right on Rock Creek. Howard's order for two of his 11th Corps divisions to detour east from the Emmitsburg Road to Taneytown Road for a direct march north to Cemetery Hill, the town, and open plains to the right of the 1st Corps was given at least an hour before Reynolds' death. This is clear evidence of Reynolds' intent to defend Gettysburg, and by proxy extend the position to Rock Creek. In doing so, he would also secure the Taneytown Road, Baltimore Pike, and Hanover Road links to Pipe Creek allowing for the remainder of the army to safely concentrate on

the Rock Creek branch of Monocacy's headwaters. Moreover, in the event Meade committed the right wing of his army in a timely manner to Gettysburg, the 11th Corps' advance on the Taneytown road bridged the army's two wings. That Howard moved two-thirds of his corps away from the Emmitsburg Road, with its direct avenues of approach to the 1st Corps' left, to gain direct approaches to the 1st Corps' right proves that he was sketching out a position at right angles that covered the town, its water source, and roads that would bring the remainder of the army to the battlefield. Buford's cavalry had already sketched out this line along Willoughby Run to the west and Rock Creek to the northeast. The infantry simply formed behind their screen.

To fully understand what happened, we must know a little about what did not happen. That is, when moving from the operational to the tactical, from broad campaign maneuvers to battlefield positions, frontages have to naturally condense from potentially a thirty mile front to a three mile one. The broader operational front must cover all possible contingencies such as threat to rail, avenues of approach, key water sources, symbolic places, and logistical centers, requiring the seven infantry corps spread-out until contact with the opposition on one front demands all corps be summoned to that point. It is imperative that all fronts be on alert, and that lines of communication allow for quick response and direct movements to the front. As the frontages condense around the contested area, it is vital they arrive in such a way to match frontages of the opposition, and if offensive opportunities present themselves, be ready to bring numbers to bear on one or more flanks. This is why Reynolds had to hold the 3rd Corps on Middle Creek near Emmitsburg until Lee's strength could be

confirmed along the Cashtown Road. Until Reynolds obtained definite information on his front, he had to cover the operational left at Middle Creek to block a potential flanking force along the Waynesboro-Emmitsburg turnpike running west to east from Emmitsburg to Westminster. The 3rd Corps' position there was also offensive because the same turnpike ran east-west to Lee's supply base at Fairfield. The pike was absolutely critical as a backdoor access to both armies' supply and communication systems requiring that Reynolds' be certain of Lee's main force in front of him on the Cashtown Road. That Major General David B. Birney's division of 3rd Corps marched up the Emmitsburg Road to arrive in front of the Round Tops, on the tactical left at 6:00 PM, is transition protocol from operations to tactics. Reynolds would have done the same with the 3rd Corps, though likely much earlier, because he had specific knowledge that perished with him at 10:30 AM. Doubleday, who inherited the fight on Willoughby Run recorded, "and as General Reynolds, who was high in the confidence of General Meade, had formed his lines to resist the entrance of the enemy into Gettysburg, I naturally supposed that it was the intention to defend the place."¹³⁵ Regrettably, he had to spend the remainder of the morning and early afternoon trying to recover Reynolds' knowledge and intent, leading to indecision with 3rd Corps at Middle Creek.

One of the subtleties missed in the eventual arrival of 3rd Corps between 6 P.M. on July 1, and 2 A.M. on July 2, is the two divisions of that corps approached the battlefield from Emmitsburg on two parallel routes, with Birney's division taking the Emmitsburg Road, and Brigadier General Andrew A. Humphreys' division following a series of back roads.¹³⁶ The real significance of splitting the divisions on separate

juxtaposed roads is often overlooked, with the emphasis usually placed on Humphreys obtaining a bad guide who mistakenly led the division behind enemy lines. The telling of Humphreys' movement has become a light moment in the historiography where the author pauses to permit the reader to chuckle over 3rd Corps wandering aimlessly, lost in the dark behind Confederate lines. The story goes that Lieutenant Francis W. Seely's Battery K, 4th U.S. Artillery halted in front of the Black Horse Tavern, along with the rest of Humphrey's division, while Humphreys personally approached the tavern owners for directions. A bugler from Seely's battery did not receive the warning to quiet down and sounded a bugle in the dark heightening everyone's anxiety of being discovered by nearby Alabamians. The whole movement then has boiled down to a few wrong turns, to fumbling in the dark, a bad guide, and a humorous ending that involves a clueless bugler.¹³⁷

The unfortunate consequence to this story is that like so many other stories repeated in the literature, the greater significance is reduced to a trivial incident. What is missed is the greater point that Humphreys was not lost. As his report makes clear, his division did not stumble behind enemy lines, but instead advanced deliberately to threaten ANVs right flank and rear, particularly their lines of communications along the Fairfield Road. Humphrey's writes, "As we approached the crossing of Marsh Run, I was directed by General Sickles, through a staff officer, to take position on the left of Gettysburg soon as I came up. For reasons that will be apparent, from this statement I concluded that my division should from this point follow the road leading into the main road to Gettysburg, reaching the latter road in about a mile and a half, and at a distance

from Gettysburg of about 2 miles; but Lieutenant-Colonel Hayden was positive that General Sickles had instructed him to guide the division by way of Black Horse Tavern, on the road from Fairfield to Gettysburg. Accordingly, I moved the division in that direction, but, upon approaching the Black Horse Tavern, I found myself in the immediate vicinity of the enemy, who occupied that road in strong force. He was not aware of my presence, and I might have attacked him at daylight with the certainty of at least temporary success, but I was 3 miles distant from the remainder of the army...I accordingly retraced my steps...."¹³⁸ As offense and defense are merely the flip side of a coin, Humphreys' maneuver had a defensive purpose too, namely locating Lee's right flank and sealing it from access to federal wagon trains moving up the Emmitsburg Road. The only real trouble with Humphrey's mission was the situation had changed on the ground by the time he reached the tavern requiring that he pull back to the Emmitsburg Road. His offensive and defensive duties were turned over to Union cavalry pickets allowing Humphries' infantry to reunite with Birney's division and the rest of the 3rd Corps on the army's tactical left near the Round Tops.

The other intent to maneuvering two 3rd Corps divisions on parallel routes was to avoid congestion that accompanies multiple divisions marching on one road. As the 11th Corps divided onto two roads in the morning, with one division remaining on the Emmitsburg Road, and the other two crossing east to the parallel Taneytown Road, so did the 3rd Corps split with one of its divisions moving on parallel courses west of the Emmitsburg Road. When Meade instructed his corps commanders on July 1 to "make themselves thoroughly familiar with the country indicated, all the roads and positions,

so that no possible confusion can ensue....” this is what he meant, and July 1 movements prove his orders were received.¹³⁹ A third reason to move half the 3rd Corps on a western parallel course was to follow the Willoughby Run branch of Marsh Creek and Marsh Creek proper towards Lee’s right flank and rear. That is what Humphreys meant when he reported, “This was on a road nearly parallel to the main road from Emmitsburg to Gettysburg, and about 2 miles west of it.”¹⁴⁰ Following these courses replenished horses and barrels for sponging within the several 1st and 3rd Corps batteries that followed this route on July 1, even as it denied Confederates the same in reverse. Humphreys could expect to find his enemy’s flank by advancing on the Marsh Creek axis, even as his infantrymen could fill their canteens. Again, the 3rd Corps followed standard protocol for an army condensing its frontage from operations to tactics, the flanks closing gradually until frontages matched that of the enemy. That the 3rd Corps should move its two divisions on separate parallel roads to limit congestion, better cover wagon trains, and test ANVs flank and rear is predictable. The only real question is

oncoming infantry that connected the army's right flank to Rock Creek along the Harrisburg Road, while establishing a reserve position at Cemetery Hill that naturally anchored on Rock Creek through its Winebrenner Run tributary, and Culp's Hill *crochet*.

How can we credit Reynolds for anchoring his defense on Rock Creek when he died before federal infantry was deployed there on July 1? How can certainty be reached that he directed the 11th Corps to the right of 1st Corps for an offensive line on Rock Creek that originally extended with cavalry pickets to Hunterstown, or a defensive *crochet* at Cemetery Hill to cover arrival of three federal corps from the southeast? This work will proceed to do so in two ways. First, participant accounts that support a position anchored on water, rail, and road will continue to build the case. Secondly, this work will lean on the immovable truth that armies relied on existing water sources, multiple improved roads and transportation, and communication systems to sustain their position during and after battle. The irrefutable truth that Civil War armies could not fix in one location for more than twenty-four hours apart from water, rail, and road will make the argument certain.

3.2 Reynolds Covers Water, Rail, and Road

Reynolds not only parried Lee's main thrust from Cashtown Road, but his layered defense west of Gettysburg covered Rock Creek, rail access, and critical roads east of his position allowing the federal army a water supply and direct routes to the developing battlefield. While his parry directed west with Union 1st Corps along McPherson and Seminary Ridges, his thrust was coming from the right with two thirds of the 11th Corps

marching on the Taneytown Road to Cemetery Hill and beyond to points north of town and right of 1st Corps. The 11th Corps was not only there for 1st Corps flank protection, and a refused flank that tied in to Rock Creek, but the hinge of a pivoting wing to take the enemy in reverse should more of Meade's army come up on the right from Frederick, Westminster, Manchester, and Reisterstown. The closest supporting corps to make the pivot a reality was Major General Henry W. Slocum's 12th Corps near Two Taverns roughly five miles from the pivot at the time of Reynolds death. Though the 12th Corps fell under jurisdiction of right wing commander Slocum, and ultimately Meade, their support of the secondary Rock Creek line option would become necessary if the fight continued on the Monocacy's headwaters at Gettysburg. Reynolds could not know for sure Slocum would help him, but his last note to Meade promised to barricade the town if necessary and fight inch-by-inch through it to anchor the position in front of the heights. Reynolds' final instructions from Meade to advance on Gettysburg with an eye for offense, coupled with the impossibility of disengaging 1st Corps, and a close working relationship the two cultivated over decades made support certain. These are key clues that he intended to sketch out a much larger position and hold out until other corps arrived.

If support on the right did not arrive quickly, Reynolds planned for the 11th Corps to entangle the enemy in town and fall back incrementally to a refused position running at right angles with Cemetery Hill to Culp's Hill and Rock Creek. If Slocum's right wing marched immediately, the 12th, 5th, and 6th Corps could arrive in time to uncoil the refused right flank and restore the federal position facing west. Though Reynolds'

perished before these options played out, Howard put them in motion by sending three urgent notes to Slocum to hurry 12th Corps to the field.¹⁴¹ Howard's decision to urge 12th Corps to Rock Creek line had its roots in intelligence gathered while Reynolds still commanded the left wing. Buford warned him for two days that a part of Lee's army marched easterly to York and could return at any time to overwhelm their right flank.¹⁴² That Reynolds exposed his right flank to this potentiality attests to his trust in Meade's timely support of the flank.

3.3 12th Corps as Primary Guardians of Monocacy-Rock Creek

When Howard urged Slocum to come up, he did so knowing 12th Corps had moved to within supporting distance at least as far as Littlestown, Pennsylvania ten miles south of Gettysburg. He knew this because of contingency plans discussed the previous evening with Reynolds over Lee's impending advance on Gettysburg. Howard wrote,

Just at sunset I received a request from General Reynolds, commanding First Corps, to meet him at his headquarters [on Marsh Creek]. He then showed me the order from your [Meade's] headquarters placing him in commanding of the First, Eleventh and Third Corps; also the circulars of the commanding general [Meade] dated June 30, together with a confidential communication. The purport of these papers was that a general engagement was imminent, the issues involved were immense, and all commanders urged to extraordinary exertions. General Reynolds and I consulted together, comparing notes and information, until a late hour. I then returned to Emmitsburg [the Middle Creek line].¹⁴³

In studying the June 30 circulars from army headquarters that evening at Moritz Tavern on Marsh Creek, Howard and Reynolds learned Lee was concentrating his army

at South Mountain not far from Reynolds' Marsh Creek line. They knew Buford's cavalry sighted Hill's Confederate Corps a few hours earlier at Cashtown only thirteen miles away. The circulars also informed of the regional destruction to rail, as well as locations of federal corps along Pipe Creek, including Slocum's 12th Corps presence at Littlestown. In comparing notes and information, they would have looked at roads to and from Gettysburg, the supporting distances of Reynolds' three corps, and their current positions on Marsh and Middle Creeks respectively. When Howard sent his urgent pleas for Slocum to hurry to the field, the latter received one of them at Two Taverns, five miles southeast of Gettysburg town proper, and under four miles from the developing staging area for army supply wagons, artillery reserve, and ambulances at the juncture of Rock Creek, Baltimore Pike, and Powers Hill. Two Taverns hotel keeper Mr. Snyder shared "that Slocum and his staff were at dinner in the hotel when the orderly came in with Howard's dispatch; that Slocum, as soon as he read it, left the table quickly without finishing his meal and 'in ten minutes they were all gone.'"¹⁴⁴ Howard reported, "I now sent again to General Slocum, stating that my right flank was attacked, and asking him if he was moving up, and stating that I was in danger of being turned and driven back."¹⁴⁵

As the urgent message arrived around 1:30 PM, Brigadier General Alpheus Williams's 1st division, followed by Brigadier General John White Geary's 2nd division of 12th Corps had already stacked arms on the Baltimore Pike, removed their gear and walked down to the Little Run tributary of the Monocacy to fill canteens. With the 1st Corps having successfully repulsed Confederate Major General Henry Heth's division before 11:00 AM, a relative silence pervaded the battlefield until 2:30 PM preventing

Slocum from acoustically verifying Howard's urgent requests. Except for a few random artillery blasts, Slocum had to make a complex decision based on Howard's assessment alone. Moreover, he had to consider his orders to abide by the Pipe Creek Circular that also allowed for secondary options like Rock Creek, yet cautioned to revert to the former in an emergency. Then there is the other complication that if he marched the 12th Corps to the field, 5th and 6th Corps would be obligated to support from the simple fact that all three belonged to the right wing of the army, mutually responsible to one another under Slocum's authority. As a matter of course, 3rd Corps held the same obligation to 1st and 11th Corps, thereby guaranteeing three of the army's seven infantry corps to the Rock Creek line before sunset. Likewise, a decision by Slocum to advance 12th Corps to Monocacy's headwaters tipped the scales irrevocably by committing the remainder of the army to the secondary option at Rock Creek.

This would partly explain the 12th Corps not resuming their march toward Rock Creek until 1:45 or 2:00 PM, after Howard's aid interrupted Slocum's dinner at Two Taverns. The afternoon fight had not opened, so marching to the sound of the guns did not figure into the timing of his decision; thus some other factor influenced the half hour delay. One reason involved a lull in action caused by federal victory in the morning. Though resumption of the fight appeared inevitable, both sides had to carefully plan their next move, which required time. Secondly, Slocum needed to go forward and assess the ground first. He had to see the ground for himself and determine best placement for his own 12th Corps, along with the other two corps that must follow. Thirdly, time passed in reforming columns on the Baltimore Pike to begin the march.

Filling canteens, making coffee, and allowing for the rear to close ranks consumed at least a half hour. However, the biggest cause for delay rested in Slocum knowing his committal of 12th Corps to Gettysburg represented a fulcrum point shift from Pipe Creek to Rock Creek. His decision for 12th Corps alone started a chain reaction in committing the army to Monocacy's headwaters. To make the best possible decision, Slocum personally rode ahead of his corps, not to assume command of the field, but to explore how his corps and wing might cover Howard's right and stabilize the position.

Slocum did ride ahead to see the ground himself and prepare the way. One of the major casualties of the Gettysburg story is misinterpretation of Slocum's role once he reached the battlefield. It was fancied by some, then and now, that as senior officer on the field he steered clear of Howard to avoid taking command of a potential debacle.¹⁴⁶ Howard's uneventful notation, "About 7 p.m. Generals Slocum and Sickles arrived at the cemetery," left it to the imagination that Slocum maintained a low profile at his headquarters on Powers Hill during the afternoon battle and fallback to Cemetery Hill, when the reality is quite different.¹⁴⁷ If he wanted to disappear, then why leave Two Taverns to visit the field in the first place? He could hide there just as well. Secondly, if he worried that Howard wanted to turn over a deteriorating situation to him, then why commit his 12th Corps to a lost cause? He could simply wait for Howard's corps to fall back on his position closer to Pipe Creek. These questions raise doubts about a conventional view that fails to link Slocum's whereabouts with Howard's urgent requests to save his right flank that afternoon.

Again, Slocum's overriding purpose for ordering 12th Corps to the battlefield was to cover the army's right flank against a portion of Lee's army known to be marching west from York. Therefore, he did what the situation required by going ahead of his two divisions to explore ways of achieving this mission. If not laying low, what did Slocum do and where did he go? The answer is he began his mission on Powers Hill, not to disappear but to examine the terrain on the right where his lead division would go.¹⁴⁸ That he chose to climb that hill for observation is more evident since the recent tree clearing on the eastern slope in accordance with the park's general management plan. For the first time in over a century one can see what Slocum, Meade, and others saw from that position over the course of three days. It is clear now why Powers Hill, about one mile south of Cemetery Hill, emerged as one of three primary signal stations and Slocum's headquarters to the extent veterans identified it as Slocum's Hill in the post war years. One can plainly trace, east to north, the favorable positions for the second day's action on the Union right, such as Wolf Hill, Brinkerhoff Ridge, Benner's Hill, Hunterstown, Culp's Hill, and Cemetery Hill. Slocum could visually estimate the relationship between Howard's position at Cemetery Hill and the aforementioned hills to his right where his lead elements needed go. Even the road to York, where cavalry reports had warned of enemy presence for two days, stood in clear sight from the bird's eye view atop Slocum's Hill.

Slocum could also look southeast and see Rock Creek, along with Granite Schoolhouse lane to the south, and open fields adjacent to this lane that became the army's concealed staging area for ambulance, ordnance, and artillery reserve parks.

Many of his corps' wheeled vehicles parked there before day's end. As he gazed east to Wolf Hill, with its great curtain of woods, he could see that it provided his corps concealed access all the way to the York Road where the 6th New York cavalry stood in plain sight guarding Howard's flank. A line of sight to Benner's Hill was also had there too. It was the most significant prominence overlooking Howard's right, and situated at right angles with Union guns on Cemetery Hill to make it a suitable artillery position for artillery crossfire against expected Confederate flanking forces north of Gettysburg. It stood out as the best position for his 12th Corps to secure the 11th Corps and army flank, but he needed to reconnoiter ground. This is what he did.

According to a local civilian Mary E. Young, "The twelfth corps had now come up Baltimore pike, Gen. Slocum in command. He asked if there was a man there who could pilot him around to the right. As father had just come from town he mounted an orderly horse and took Gen. Slocum around to the position he wanted called Benner's Hill."¹⁴⁹ Slocum found her father Mr. Young as he was returning from town presumably to their farm house east of Wolf Hill, along White Run Road.¹⁵⁰ The northeast-southwest running stream marked one of four parallel routes on that side of Wolf Hill connecting Hanover Road to Baltimore Pike. These included, from east to west, modern day Highland Avenue, White Run, Low Dutch and Two Taverns roads respectively. Both armies increasingly paid attention to them as the battle progressed because each one gave direct access to their flanks. Slocum needed the first two to maneuver his 12th Corps infantry in tandem with several artillery batteries and ordnance to Benner's Hill where the 11th Corps waited for support at Barlow's Knoll. To help him achieve this

maneuver and deploy his troops at Benner's Hill in the most effective way, he consulted Mary Young's father to guide him there first. It is not certain how Slocum learned about his potential guide, though he probably heard Mr. Young knew Wolf's Hill better than most, and it was not unusual for officers to sequester local people to find unmarked roads on Civil War battlefields. Courthouse county maps generally did not show field lanes and farm roads scratched out for direct access to main roads, making it necessary to find good local guides. Slocum and his staff found Mr. Young who agreed in short order to show the way around to Hanover Road and Benner's Hill. Slocum probably offered to pay him a sum for his service, and the two of them were off.

Slocum and Young did not travel alone, as Mary and several girls followed them in their circuitous exploration. Because Mary mentioned her father mounting an orderly horse, it is probable the girls did the same to keep pace with the right wing commander. Even so, the terrain was not easy to navigate. Bachelder later described the character of the ground stating,

This [Wolf Hill] is a rough forest-clad elevation located on the left bank of Rock Creek, southeast from Benner's Hill, and east from Culp's Hill. A few rural cottages have here and there nestled down in the openings among the rocks. They are often surrounded by fine gardens, and nearly obscured by luxuriant vines, nourished by the disintegration of the ages. They are approached by rough pathways, rendering fast driving impossible.... A blind path turns from this to the right, up Rock Creek, where you can cross and return to town over Culp's Hill; or, continue along the stream to the Hanover road, and return to town through York Street. The path to the left, which is most frequented, leads down the hill among the boulders, through the grove to Rock Creek, which we ford, and come upon the Baltimore turnpike, between the bridge and old saw-mill.¹⁵¹

Because Slocum and Young were already east of Wolf Hill, it is not likely they took the path to the left down to the bridge and old saw-mill, but rather followed either White Run Road, or a parallel route of connecting lots now known as Highland Avenue Road that led to Hanover Road and Benner's Hill.

Not only did Mary Young and several of her girlfriends accompany the ride, but so did Slocum's staff around 2:00 PM. We know this because at least one of them returned to the Baltimore Pike to escort Alpheus Williams' 1st division to Benner's Hill. Williams reported that "Before reaching Rock Creek, I was met by one of his [Slocum's] staff officers, with orders to turn the 1st Division to the right, taking a cross road towards the Bonaughtown Pike [Hanover Road]. Geary's division was to move up towards Gettysburg."¹⁵² Frequently generals and their staffs were aided by a cavalry company assigned to headquarters' staff, such as Company F, 17th Pennsylvania cavalry that escorted George Sykes' 5th Corps from Bonaughtown to Gettysburg on July 2, or Colonel John Black's 1st South Carolina cavalry that screened James Longstreet's countermarch on July 2. For Slocum, he had approximately eighty cavalymen attached to him for the same purpose, namely "The men of Companies D and L of the 9th N.Y., who were serving with the Twelfth corps were active in helping to place the troops and guns in position as they arrived on the field."¹⁵³ These two companies aided Slocum in scouting, screening, and directing his corps to Benner's Hill. Buford also assigned the 6th New York Cavalry to the area to guard the York Road against any potential turning maneuvers, which they did until Cemetery Hill friendly fire forced a retrograde to York and 6th Streets on Rock Creek. The regiment's new position rested at the western base of Benner's Hill near the

Lott Farm, where Confederate Lieutenant General Richard S. Ewell later established corps headquarters. Not coincidentally, the 6th New York Cavalry aligned on Rock Creek to replenish their horses and take advantage of a natural geographic break to strengthen flank protection. This regiment together with Slocum's two companies of the 9th New York Cavalry likely constituted the cavalry presence that Confederate reports warned of on the federal right.¹⁵⁴

3.4 Links Between 11TH & 12TH Corps on Monocacy-Rock Creek

The significance of links between the 11th & 12th Corps across Monocacy-Rock Creek on July 1 is that it represents the first tangible evidence of Slocum's Right Wing cooperating with Howard's Left Wing to prevent Lee from breaching the Rock Creek line. The 12th Corps' deliberate arrival on the right of the 11th Corps constituted the first step in Meade's offensive plans to pivot his right flank and pin Lee's army to South Mountain. As for the evidence, it is plausible that Slocum consulted with the 6th New York Cavalry in reconnoitering Benner's Hill, and in cooperating with Barlow's 1st division, 11th Corps west of Rock Creek. The communication between Brigadier General Francis C. Barlow at Blocher Knoll, Major William Elliott Beardsley of the 6th New York Cavalry at Rock Creek, and Henry Slocum of the oncoming 12th Corps at Benner's Hill is still somewhat of a mystery. Did the left hand know what the right hand was doing? Did Barlow's 1st division, 11th Corps realize that William's 1st division, 12th Corps rushed to their support east of Rock Creek? Did Beardsley's 6th New York Cavalry understand his cavalry regiment linked the 11th and 12th Corps at Rock Creek? The answer most likely lies with Howard who rode with Barlow "between 10 and 11 miles" from Emmitsburg the

morning of July 1, who then took over battlefield command around 11:00 AM after Reynolds' death, and then urged the 12th Corps forward from Two Taverns to the battlefield.¹⁵⁵ It was also Howard who personally assigned Barlow to the army's right flank before noon. When Howard reached Gettysburg, he led Barlow's 1st division up the Baltimore Pike to within a mile of the town square, then dismounted and climbed the multistoried Fahnestock House for observation. While there, he learned from "Major [William] Riddle...the sad tidings," of Reynolds death, and of his own appointment to operational command. Howard promptly assigned Major General Carl Schurz to temporary 11th Corps command, so that he could focus on the broader responsibilities of left wing command.¹⁵⁶ Howard reported,

In the meantime I went to the top of a high building [Fahnestock House] in Gettysburg, facing westward, I saw firing beyond Seminary Ridge and not far from the seminary. Toward the right, masses of cavalry were drawn up in order, to the east of the ridge and to the northeast of the town. A portion of the First Corps, of General Wadsworth's command, was between me and the seminary, taking position near the railroad.¹⁵⁷

Although particulars of the Howard and Barlow conversation are lost due to Barlow's severe wound that prevented him from writing a report, this fact does not preclude a reconstruction of their general tone in the minutes prior to Barlow's deployment. First, it would be basic protocol for operational commander and permanent 11th Corps leader Howard to brief division commander Barlow of the status of the army's right flank that he was marching forward to guard. For instance, one would assume that Howard informed Barlow about the 6th New York Cavalry to his immediate right on Rock Creek. Howard could simply point to Beardsley's troopers from

the Fahnestock House roof minutes before Barlow marched forward to connect with them on Rock Creek. Likewise, one would expect that Howard mentioned the repeated warnings from Buford that a portion of Lee's army was returning from York and could appear on Barlow's flank shortly. Lastly, one would presume that Howard discussed his intent to provide more support on Barlow's right. Schurz later wrote to Howard that although Barlow's Division "was ordered by me to form on the right of the Third Division.... The First [Barlow] remained with you [Howard] in the position above indicated."¹⁵⁸ Schurz was simply stating that Howard personally directed Barlow to the right flank, and ordered him forward to Rock Creek.

How can we cross-reference that Howard and Barlow's conversation revolved on substantive updates about the army's right flank, latest whereabouts of Confederate divisions within striking distance, and closest reserve support? One way to do this is to realize AOP could not remain at Gettysburg without anchoring its right on Rock Creek, that holding the right firmly on Barlow's front meant the difference between fighting at Gettysburg and falling back on Pipe Creek. In other words, Barlow did not need to be briefed on the obvious fact that his position covered the primary avenue of approach to Gettysburg, and the road to Washington. Units going to the front lines in battle always find their escape route before advancing, well before the emergency develops. In riding forward with Howard on the Baltimore Pike, he readily knew the way forward for his division and other divisions that might come to his support. Likewise, he recognized it to be the way out in the event of emergency. Barlow also understood that he was being moved on a separate route to the right of the other 11th Corps divisions and right of the

army's position. He was with Howard and Schurz in the soon famous Peach Orchard when that decision was being made. Once deployed across the Harrisburg Road, and anchored at right angles with Rock Creek, Barlow used his previous experience to realize the vital nature of holding that position. He could see the 6th New York Cavalry of Devin's brigade to his immediate right covering the flank as the cavalry always did during the Civil War.

Barlow's training and experience permitted him to identify the Baltimore Pike as his advance and escape route, realize his division directly covered the army's primary water source at Rock Creek and verify that his division represented the army's flank based on visible cavalry support to his right. The only question about his position not readily answered, apart from Howard telling him, was the 11th Corps commander would soon seek help from the 12th Corps to bolster his position. It is completely logical Howard communicated this to Barlow, along with his only reserve Brigadier General Adolph von Steinwehr's division at Cemetery Hill covering both his and Brigadier General Alexander Schiemelfennig's 3rd division until help came. Are there any other cross-references that Howard coordinated Barlow's 1st division advance with 12th Corps supports coming up on the right? Again, this is important because Barlow's position represented the pivot point for holding an offensive posture on the Rock Creek line north to Hunterstown. It constituted the break-line for maintaining a presence on Rock Creek north of Gettysburg, and it represented the line in the sand that federals needed to hold to pin Lee's army to South Mountain.

3.5 Williams 1ST Division, 12TH Corps Advance on the York Road

The short answer is yes. Slocum recorded that, “On the morning of July 1, the [12th] corps was moved to Two Taverns, and remained at that place until information was received that the First and Eleventh Corps were engaged at Gettysburg, when the march was at once resumed, and, agreeably to suggestion from General Howard, the First Division [12th Corps] was put in position on the right of our line, near Rock Creek.”¹⁵⁹ The key words here are, “agreeably to suggestion from General Howard.” With these words, Slocum plainly tells us that his movements on the right were conducted in accordance with Howard’s wishes. Though careful to call the coordination a “suggestion from General Howard,” due to seniority in time and grade, he still agreed to it. The validation of Howard’s coordination was the march itself.

As stated earlier, Brigadier General Alpheus S. Williams recorded that a staff officer met his division on the Baltimore Pike and led them to Benner’s Hill. The staff officer, representing Slocum, led the division precisely to the position just then examined with Mr. Young using a series of field lanes and farm roads now known as Highland Avenue Road. Mr. Young helped Slocum wisely choose this road as an avenue

of approach to Benner's Hill for a couple reasons. First, in selecting a road before

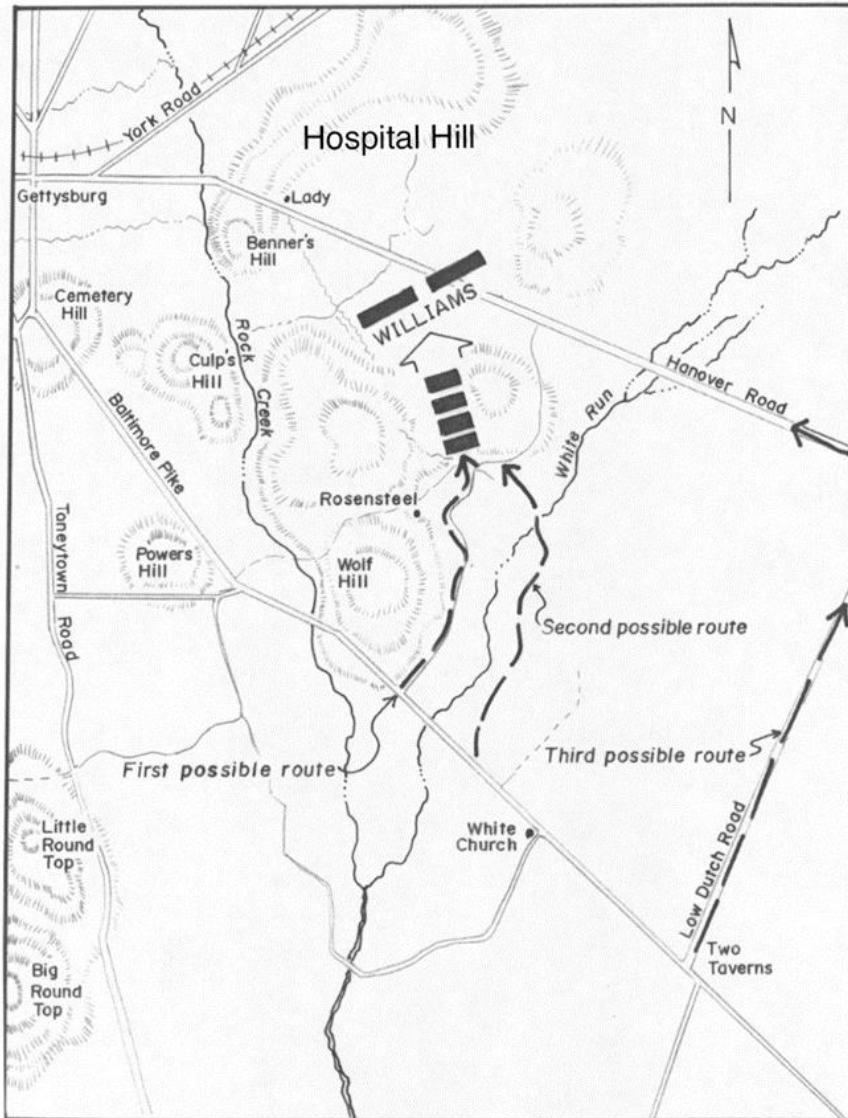


Fig. 13. - Williams Advances on the York Road at 3:30 PM. John Heiser.

reaching Rock Creek Bridge, the 1st division could march their infantry, mounted officers and horse drawn artillery to the destination without having to ford the main body of Rock Creek. They could follow the outer eastern boundaries of the water course for directional and sustenance purposes, from the Baltimore Pike to Hanover Road, without having to cross it. Secondly, the road was completely concealed from enemy view in

their march by a four mile stretch of wooded hills known collectively as Wolf Hill. Slocum understood that to maintain an element of surprise, his 1st division needed concealed access from Confederate cavalry on Benner's Hill who held a sweeping view east of eventual Union positions at Wolf Hill, Brinkerhoff Ridge, Cress's Ridge, Culp's Hill, and Powers Hill. All of these positions were visible from Benner's Hill requiring that Williams' maintain secrecy in his march.

For soldiers in the 27th Indiana, Williams' 1st division, 12th Corps, the view from Wolf Walk Ridge, where they turned from the Baltimore Pike onto Highland Avenue Road, presented a memorable view. Edmund Randolph Brown of the 27th Indiana recollected,

When we reached the point from which the ground begins to break off towards the valley of Rock Creek, the tremendous crash and din, though still three or four miles distant, seemed almost at our feet. As Culp's Hill and Cemetery Ridge loomed into view, we could scarcely believe that the scene of action was not on our side, rather than beyond, those heights. While rising above them higher and higher, and reaching far around the horizon, was a cloud of dust and smoke, of ever-increasing density."¹⁶⁰

The view made less of an impression on Colonel Charles Morse of the 2nd Massachusetts Infantry who stated with little fanfare, "After a short halt the corps was moved to the right across country east of Rock Creek, until it faced a slope toward Benner's Hill."¹⁶¹

Whatever pause or reflection entertained by the soldiers quickly turned to the task of maneuvering off the Baltimore Pike onto unimproved roads, through heavy timber and around to Benner's Hill. In trying to navigate the maneuver Williams recollected,

There was a good curtain of woods between me and the hills, and halting the head of the column, with intentions to close up and deploy in two lines, I rode into the woods, and dismounting went forward to the foot of the hill, where I had a good view of the sides and the crest. I could see on top [of Hospital Hill], mounted rebel officers, evidently reconnoitering, but no signs of artillery or large force.¹⁶²

The central point here is that Williams did not feel his way there, but “was met by one of his [Slocum’s] staff officers” who guided the division to a position chosen by Slocum for securing the 11th Corps and army’s right flank.¹⁶³ If we consult Williams’ report we learn that Slocum did more than reconnoiter the area himself, employ a local guide to find the most direct farm lanes to it, and send a staff officer to direct Williams’ division; he also formulated a plan for artillery to secure the army’s right flank. Williams recorded that his division “was directed to the right,” by the staff officer, “for the purpose of seizing upon a commanding position easterly of the town of Gettysburg,” and that “I had with me two batteries of artillery [Muhlenberg’s Brigade], which were put in the [Hanover] road, and directed to follow the assault, come into battery on the crest of the hill, and open on the enemy’s masses.”¹⁶⁴ In so stating, Williams indicated the position to be suitable for flank fire against Jubal Early’s turning maneuver of Barlow’s Knoll. Because Williams did not ascend Benner’s Hill himself to have this view on July 1, he could only have received this information through Slocum’s staff officer. In response to this intelligence, the temporary 12th Corps commander Williams brought along two batteries from the Baltimore Pike to Benner’s Hill for a total of ten guns maneuvering either on the same Highland Avenue Road farm lanes as 1st division

infantry, or on the parallel Low Dutch Road for less congestion. In either case, the horse drawn artillery would have turned west onto the Hanover Road to begin the ascent of

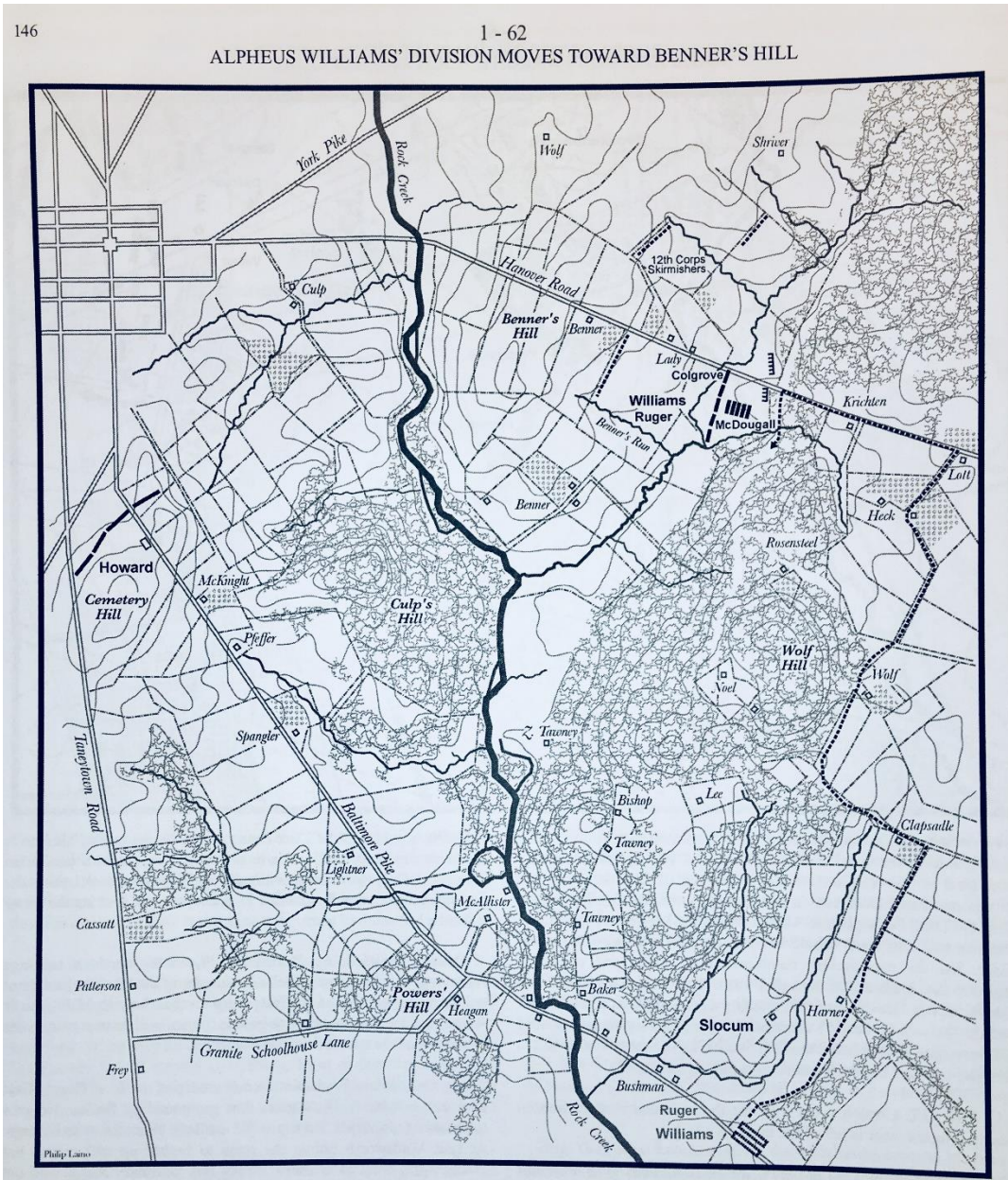


Fig. 14 – 1-62 - Alpheus Williams' Division Moves Toward Benner's Hill by Philip Laino.

Benner's Hill.

So where was Williams? Slocum's staff officer met him on Wolf Walk Ridge two miles south of Gettysburg, along the Baltimore Pike, and began to lead his division on a

series of single farm lanes known collectively today as Highland Avenue Road that run slightly northeast before turning northwest. Williams's recollected,

While massed in the fields, reports of the battle going on in advance of Gettysburg were brought to [Henry W.] Slocum, turning the command of the corps over to me, rode on in advance towards Gettysburg. Before reaching Rock Creek, I was met by one of his staff officers, with orders to turn the 1st Division to the right, taking a cross road towards the Bonaughtown Pike [Hanover Road]. Geary's division was to move up towards Gettysburg.¹⁶⁵

The crossroad is still so narrow today the 1st division had to maintain a two column width at the most, but probably single file in some places. As stated earlier, the turn onto these lanes from the Baltimore Pike assured the infantry, mounted officers, and horse drawn artillery bypassed Rock Creek Bridge to avoid fording the water course. When Williams' division reached the largest of the Wolf Hill prominences at 669 feet on the Hanover Road, the farm lane veered east to the E. Deardorff Farm to connect with the Hanover Road there. Remnants of this road are still visible, in addition to the Deardorff House itself. Slocum's staff officer made sure the division took the most direct course though, having them turn west into a saddle between the tallest prominence and one beside it.

Williams dismounted and crossed Lady Run, a small tributary of Rock Creek into the valley on the eastern base of Benner's and Hospital Hills. He visually surveyed frontage to the west, seeing various sides of the hills, probably meaning he could easily examine its two terraces. He also saw the Daniel Lady Farm, with its small stone frame outline to his right and its signature red barn with ornate cupola, a centerpiece along the Hanover Road. Because he did not mention the staff officer at this stage, he likely

examined Benner's Hill on his own. What caught his eye instantly were mounted Confederate sentinels silhouetted on the crest above. Major Morse of the 2nd Massachusetts recalled, "Along the crest of the hills, within long-rifle range, were numerous horsemen who appeared to be staff officers of the enemy. They were riding back and forth, and seemed to be directing the movements of troops which were concealed by the range of hills."¹⁶⁶ Concerned his division would be spotted, Williams concealed both Brigadier General Thomas H. Ruger and Colonel Archibald L. McDougall's brigades in the thick woods of Wolf Hill, likely permitting the men to fill their canteens in the Lady Run tributary of Rock Creek. In crossing the run's two branches, the lead division of the 12th Corps had found the Rock Creek line north of Gettysburg. The 1st division could hear the rumble of battle to their western front just beyond the crest of Benner's and Hospital Hills at Barlow's Knoll where the 11th Corps flank was under assault.

After carefully investigating his front, Williams ordered Ruger's brigade from the canopy of woods to form at an angle of about 80 degrees with the Hanover Road and begin ascent of Benner's Hill. The probable order left to right, south to north, consisted of the 27th Indiana, 2nd Massachusetts, 13th New Jersey, 107th New York and 3rd Wisconsin infantries. The three left regiments formed an acute 54 degree angle with the Hanover Road, the latter two an obtuse, as they inched closer to contact with the mounted Southern horseman atop the crest. In doing so, they moved diagonally right across the Hanover Road, directing on a provincial road dating back to the 1740s the oldest of its kind in Adams County. The issue of exactly where the First Division scaled

Benner's Hill is of importance here, because location is key to proving Williams maneuvered through the backcountry solely for the purpose of securing the 11th Corps flank at Rock Creek. For starters, it is probable that the men of the Twelfth Corps faced Benner's Hill towards the north side of the Hanover Road. Along these lines, Williams informed Colonel Bachelder that earlier when, "Staff officers [were] sent forward, [they] reported to me a high bare hill on the *right of the road* [my italics] from which the town, and the masses of rebel columns were plainly to be seen."¹⁶⁷ Colonel Silas Colgrove of the 27th Indiana Infantry who was partly responsible for establishing Ruger's skirmish line at Benner's Hill noted, "I threw out Company G, deployed as skirmishers to the front and *right...*" [my italics].¹⁶⁸ In an oral statement to Bachelder, Williams would clarify, "The position held by Johnson's [Confederate] division on the night of the first was also the objective point of the First Division, Twelfth Corps..."¹⁶⁹ Because Major General Edward Johnson's division deployed north of the Hanover Road, and to the right of Williams, this is yet another account indicating that Williams was aiming for a hill to the *right* of the road. As if to put all doubts to rest, Williams told Bachelder that his "intention" was that of "...advancing at once to take possession of Benner's Hill and the ridge north of it [Hospital Hill]...."¹⁷⁰ Again, a course taken north, or to the right side of Hanover Road precisely led Williams to the 11th Corps' right flank, and to the right flank of the army on Rock Creek extending north. Direction is critical to understanding early precedent for establishing the Rock Creek line north of Gettysburg.

There are three revealing aspects to Ruger's diagonal right ascent. First, slanting right caused the lead brigade to climb Hospital Hill on the north side of Hanover Road

rather than Benner's Hill proper on its south side as the historiography has perpetuated. Secondly, the diagonal course steered away from the Hanover Road more toward the York Road, fitting well with Confederate reports that a Union force was "advancing on the York road."¹⁷¹ Thirdly, the diagonal ascent along the provisional road aligns perfectly with the 11th Corps flank at Barlow's Knoll. This was an exciting discovery for me the first time I walked it. I looked up from the provisional road, as I followed Ruger's path, and saw the modern day radio tower rising above Hospital Hill and realized in that moment Williams and Ruger knew the location of the 11th Corps flank that afternoon, down to the most recent development of Barlow's advance to the knoll that soon bore his name, and Rock Creek that defined his position.

3.6 Etymology and Williams' 1st Division on July 1, 1863

It is necessary at this point to stop and clarify the meaning of "advancing on the York road," because the York Road represented the location on the battlefield where the 11th and 12th Corps came together to secure the Rock Creek line north as more federal corps arrived on the right flank.¹⁷² It was also the road that needed to be held to secure the Gettysburg-Hanover Railroad for repair by the USMRC. Therefore, precision with our words is particularly important with regards to Ruger's brigade and their proximity to the York Road. That is, to state that Ruger's brigade advanced on the York Road, while literally marching across a 1740s provincial road at right angles with the York Road at first seems contradictory to Confederate sightings and warnings on July 1.

Southern reports of a threatening enemy force on the York Road simply do not make sense in relation to the 1st division's true location at 4:30 PM, on July 1, at least not until a closer etymological investigation reconciles the matter. Rhetorically speaking, the preposition "on," in Civil War literature, does not necessarily mean "on top of" as some might think, but something less direct as in "toward." Some of the more famous clichés of the Civil War bear this out such as regiments "advancing on the colors," or the many Union campaigns under the banner of "on to Richmond," or Confederate calls to "march on the federal capital," or even the numerous participant mentions of "converging on Gettysburg." In all of these instances, the word "on" is not literal in the sense of "on top of" the colors, or Richmond, or federal capital, or Gettysburg, but instead a moving "towards" these rally points.

Yet another factor to consider about direction and location of the 1st division, 12th Corps for July 1 involves the proximity of Wolf Hill to the York Road where Confederate reports warned of federal presence. That is, the mere fact that Williams' division occupied Wolf Hill justified such Confederate reports, because the hill's northern prolongation intersects with York Road. Had the 1st division remained concealed east of Wolf Hill, and not turned west across the Lady Farm, Hanover Road, and a 1740s provisional road to the first tier of Hospital Hill, Early's Confederate division could expect to see them on the York Road in short order. From the perspective of mounted Southern sentinels, as long as part of the Union 12th Corps remained east of Wolf Hill, then high alert existed along the York Road. When etymology is coupled with participant accounts, there can little doubt that Williams' division caused the stir and

eventual halt of Confederate pursuit of the 11th Corps. Most importantly, Williams' 1st division, 12th Corps advanced directly toward Barlow's division, 11th Corps at their Rock Creek position.

3.7 Clash with Mounted Sentinels

When Williams dismounted at Lady Run and surveyed the sides of Benner's and Hospital Hills, he also spotted mounted Confederate sentinels on the first plateau of Hospital Hill, just north of Hanover Road. Ruger's brigade not only advanced right-oblique in the direction of the mounted Confederates, they also employed the Lady House with its rather large barn and the crest in front of the first plateau to cover and conceal their approach. This first terrace also formed enough of a ravine that while Williams saw the mounted Confederates, the Confederates in return had trouble seeing Ruger's advanced skirmish line. Brigadier General Williams recounted that,

I accordingly directed General Ruger to deploy his brigade, under the cover of woods [of Wolf Hill], and charge [Benner's] hill, supported by the 1st Brigade under Col. [Archibald] McDougall. I had with me two batteries of artillery [Muhlenberg's Brigade], which were put in the [Hanover] road, and directed to follow the assault, come into battery on the crest of the hill, and open on the enemy's masses. Ruger's brigade was actually ascending the slope of the hill, when I received orders to withdraw the division....¹⁷³

James H. Baum, Company F, 46th Pennsylvania described the moment from McDougall's reserve brigade perspective stating,

After reaching the field of conflict, we were told to get ready to charge up a certain hill. I felt bad about it as something told me if I went up that hill I would never come down again. However the charge was not made and all was well. We lay down on our arms. Usually we 'stacked' them. This time we lay on the

ground with our guns in our arms, ready instant for action. My feet were tired and I took my shoes off and rested them. [Sic]¹⁷⁴

While McDougall's brigade remained in reserve within the shadow of Wolf Hill's thick trees, Williams made sure two Union batteries followed Ruger to his left rear on the Hanover Road. It is quite possible these two batteries traveled the Low Dutch Road, which is parallel to Highland Avenue Road, for unhindered movement from the Baltimore Pike to Hanover Road, as well as protected transport with infantry between them and potential emergency. Lieutenant Charles E. Winegar's 1st New York Light Artillery, Battery M, and Lieutenant Sylvanus T. Rugg's 4th U.S., Battery F, comprised ten guns total. The 13th New Jersey assigned a company to watch one of the batteries in the rear as Ruger's brigade advanced to secure the crest. Skirmishers from the 27th Indiana, 2nd Massachusetts, 13th New Jersey, 107th New York, and 3rd Wisconsin crept closer to the plateau, navigating around the Lady Farm buildings to within a couple hundred yards of mounted Confederates that turned-out to be the 35th Battalion of Virginia Cavalry, or White's Comanches who guarded Ewell's left flank. Captain Frank Meyers of Company A, recorded that, "White's battalion, then the only body of cavalry with the A.N.V., was sent by General Ewell to the left of his corps, and as they gained the high

hills in that direction they had a full view of the battle....”¹⁷⁵

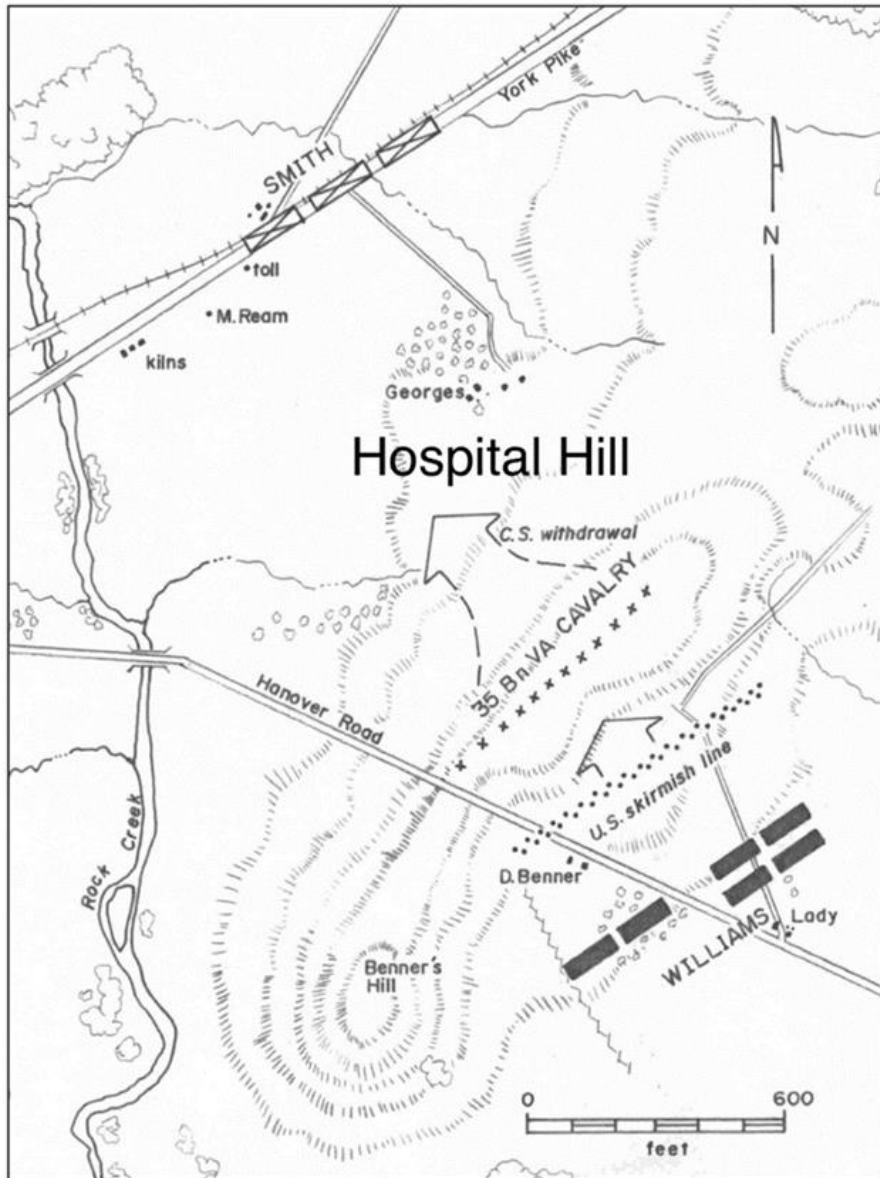


Fig. 15 – Advance of Williams’ Division across the Lady Farm by John Heiser and Troy Harman.

From White’s perspective, his 35th Virginia Cavalry had marched over to Hospital Hill when friendly fire relocated the 6th New York Cavalry to 6th and York Streets on Rock Creek. The 35th not only filled that vacuum, but must have navigated around the two companies of 9th New York Cavalry attached to Slocum’s staff to claim the birds-eye

view of Early's Confederate position. In any case, White's Comanches spotted Ruger's skirmishers approaching through the Lady Farm and called for help from Major General Jubal A. Early that led to Brigadier General William Smith, Governor-Elect of Virginia, sending over his brigade from the Harrisburg Road three miles away. The brigade left its reserve position from a crop of woods behind Lieutenant Colonel Hillary P. Jones artillery platform, at the juncture of Harrisburg and Shealer roads, using the latter to march east. At the first intersection, the brigade either turned south onto Hunterstown Road to York Road, or continued to follow Shealer Road east to its direct perpendicular connection with York Road where the ascent of Hospital Hill began. Spear-heading the move was Captain Funkhouser's Company D, 49th Virginia. Captain Funkhouser recalled:

At 5 P.M. our Brigade [was] ordered out on the left to guard the flank. Our regiment [was] ordered to the front as skirmishers and such skirmishing I have never seen. The major had not sense enough or was scared too badly to deploy the Regiment and it was a general jumble up and we advanced like a set of rabbits. The enemy's guns from the heights [Cemetery Hill] commenced playing upon our flanks as soon as we commenced to move and fired along our lines the whole time for three quarters of a mile. It was a terribly disagreeable place to be, not half deployed and worse commanded. At dark we fell back and [Major] Gen'l [Edward] Johnson's Division moved up in our front. Night closed the scene.¹⁷⁶

He added, "I ran into a new line of men marching and made sure they were [not] Yankees, but it was Johnson's Division coming to our support. I was greatly relieved and soon found our men lying down in the deep clover on a hillside."¹⁷⁷

White's 35th Virginia cavalry wasted no time in placing Company D, 49th Virginia onto a skirmish line in the plateau on the hill's eastern face, even as they screened for the remainder of Smith's Virginia Brigade and the oncoming Georgia brigade under

Brigadier General John B. Gordon. Union accounts recounted distinct back and forth movements of the mounted sentinels that suggested the deployment of a skirmish line in the tall grass. Captain Frank M. Myers, Company A, 35th Battalion Virginia Cavalry described the scene.

The [35th] battalion passed on, and soon met some of the Yankee skirmishers from a division of infantry on Rocky [Rock] Creek [west of Hospital Hill], whom they captured and sent back [to the rear], and in a short time Gen. Gordon marched his brigade to the support of the [35th VA] cavalry. About this time a battery, from the Cemetery Hill, was fiercely shelling White's men, and as Gordon's skirmishers appeared on the field a storm of shot and shell ploughed the ground along the line, causing part of it to falter; but the Major who commanded was a splendid officer, and brought his people up to it handsomely; once, indeed, he displayed almost more than human coolness and daring — in reforming a part of his line that had broken under the fire, and just as the Major reached it a heavy shell exploded exactly under his horse, causing both it and the rider to roll over on the ground in a cloud of dirt and smoke, all who saw it thinking that they were surely both killed, but amid the cloud the beautiful bay sprang up, with the gallant Major still in the saddle exclaiming, 'Steady men, steady; no use to break; keep the line steady;' and the men were steady after that.¹⁷⁸

As the two skirmish lines exchanged fire, from about 4:20 to 6:00 PM, more Confederate units were shifted over to York Road near the western base of Benner's and Hospital Hills, including Gordon's Georgia brigade that had just finished seizing Barlow's Knoll from the 11th Corps. Brigadier General Albert G. Jenkins 17th Virginia Cavalry relieved Gordon there from gathering prisoners so that he could respond to the growing rumors that a large Union combined force of infantry, cavalry, and artillery were advancing on the York Road against their flank. Jubal Early later wrote in his memoirs that he did not believe the rumors, but sent Gordon anyway. One of the tipping points for him in sending Gordon was Governor-elect Smith's uncharacteristic

refusal to rejoin Early's division in pursuit of the 11th Corps through the town. Smith's son Freddy brought the news to Early in such a convincing manner that Early assigned Gordon to Ewell's left flank. When Gordon arrived at the western base of Hospital Hill, artillery shells from Cemetery Hill were falling thick and fast.

Lieutenant George Campbell Brown of Ewell's staff elaborated in his papers in 1869 on the circumstances by which Confederate troops were sent off towards the York Road and up Hospital Hill. In describing the moments of the Union Eleventh Corps' retreat through town on July 1, he recollected that as, "Early moved forward...he sent one brigade under 'Extra Billy' Smith to his left rear to prevent the approach of the enemy in that direction."¹⁷⁹ Though Brown did not specifically mention 12th Corps or the York Road, he was certainly referencing it with enemy threats to the "left rear." This is a revealing point, because it speaks directly to the Union Twelfth Corps' scouting parties present there around 3:20 PM, and the 12th Corps flanking maneuver against Early at 4:00 PM. When placed with all the other pieces, Brown simply described the late afternoon threat of Williams' 1st Division to the Confederate left flank and rear from Benner's and Hospital Hills.

Further along in his account, Brown depicted Ewell's supreme moment of decision. He explained that,

By the time we got into the town, the enemy had crowned the top of Cemetery Hill with a battery supported by quite a long line of infantry & opened on us in the hollow. Riding forward, Gen'l's Ewell & Early surveyed the ground & examined the position & force on Cemetery Hill. Having concluded to attack, if Hill concurred, Gen'l Ewell ordered Early & Rodes to get ready. Just then up came "Freddy" Smith, son of "Extra Billy" to say that a heavy force was reported

coming up in their rear. Early said to Gen'l Ewell, 'Gen'l, I don't much believe in this, but prefer to suspend my movements until I can send & inquire into it.'¹⁸⁰

Early had his own version of this pivotal moment remembering that,

In a very short time Colonel Smead, of Ewell's staff, came to me and informed me that Ewell had sent him to tell me that Johnson was coming up, and to ask where I thought he ought to be put. The enemy just about this time commenced a furious fire from his artillery all around. While Colonel Smead and myself were having a hurried conversation about the subject of his message, with the shells bursting around us, the aide [Freddy Smith] of General Smith came to me in a gallop and under great excitement, and told me that General Smith said the enemy was advancing on the York road with infantry, artillery, and cavalry, and he could not hold him back. General Smith had not obeyed my order when I sent for him by reason of the report of an advance on that road.¹⁸¹

In looking at these two accounts, that of Brown and Early, it becomes apparent that Confederate worries centered on the danger of being flanked around their left rear, as they pursued Union forces through the town. Consequently, Smith's Brigade and later Gordon's Brigade were placed on or near the York Road for security reasons. Smith's Brigade was assigned there initially as a precautionary measure to the sighting of Union forces, but the dispatching of Gordon's Brigade to the York Road was in direct response to a developing threat.

Another noteworthy point which may be gleaned from Early's reminisces is that Ewell wanted Early to advise him on where to place Major General Edward "Allegheny" Johnson's division. If Early had a hand in this decision, it makes more sense then why Johnson marched out across the York Road and over Hospital Hill in route to the Daniel Lady Farm. In doing so, Johnson relieved Smith and Gordon from the York Road, while

assuming the duties of securing the Confederate left flank. Interestingly, Johnson marched directly towards the position vacated by Williams after 6:00 PM, certainly the scene of the reported threat. Not only did Johnson report to Williams' location, but filled the vacuum created by Ruger and McDougall's withdrawal to the east side of Wolf Hill. Walker's Virginia Brigade filled the saddle and woods of Wolf Hill after dark to within rifle range of the 27th Indiana near the juncture of Clapsaddle and Highland Avenue Roads.

An important footnote to Johnson's arrival on Williams' front is that Early did not end his flank support of the army at Benner's Hill. Before the 11th Corps had fallen back to Cemetery Hill, all four of Early's brigades, even his two pursuit ones belonging to Brigadier General Harry T. Hays and Colonel Isaac E. Avery, had turned east to rest on their arms in the pale of Benner's or Hospital Hill. Though the Louisianans and North Carolinians of the latter two brigades faced Cemetery Hill, Confederate artillery from Benner's and Hospital Hills shadowed over their positions and covered their advances. Moreover, Early's two support brigades belonging to Smith and Gordon deployed under cover of two story buildings along East Middle Street extending Early's left to Rock Creek on the western slopes of Benner's Hill. The same two brigades maneuvered up and down the York Road again on July 2 to cover the army's left flank in absence of adequate cavalry support.

As for the 1st Division, 12th Corps evacuation from Benner's Hill, Williams received the order from Slocum to fall back closer to the Baltimore Pike between 5:30 and 6:00 PM. It was the natural course to take after the 11th Corps retreated to

Cemetery Hill, leaving the 1st division well out front detached and isolated from the rest of the army. Slocum therefore withdrew them closer to the Baltimore Pike to both protect the army's lines of communications and close the gap. In the bigger scheme, Slocum's recalling of Williams verifies the 1st Division marched to Benner's and Hospital Hills to secure the 11th Corps flank at Barlow's Knoll, because once the 11th Corps fell back, their purpose for remaining north of town ceased to exist.

Williams' division executed this withdrawal by retracing steps through the twin camel humps of Wolf Hill, and onto Highland Avenue Road to the Wolf house, a mile south of the Hanover Road. Because the nearest supports under Wadsworth's 1st division, 1st Corps, entrenched a mile away on the northwest slope of Culp's Hill, Slocum ordered the rest of his corps, namely Geary's division to relocate from their bivouac in front of Little Round Top to Culp's Hill. Meanwhile, Williams' division maintained a detached, offensive posture that evening east of Wolf Hill, which made them vulnerable to Johnson's Confederate division of Ewell's corps who cautiously followed in the dark to points south of the Hanover Road. The uneasy lines that separated them signaled temporary advantage to the Confederates who had violated the Rock Creek line north of Gettysburg and turned the federal right flank to points south of the Hanover Road. Fifty-two years later, Professor Fiebeger summarized the meaning of Williams' July 1 movements to his West Point Cadets stating,

The head of the XII Corps reached Rock Creek about the time Early appeared, and in order to protect the right flank of the XI Corps started up the east side of Rock Creek to seize Wolf Hill and reach the Hanover road. Its advance guard had barely driven Jenkins [White's] cavalry from the [Hospital] hill, when the order was suspended, as the XI Corps was falling back on Cemetery Hill. It was this

movement of the XII Corps that was reported to Ewell as an attempt to turn his left flank.¹⁸²

The answer to the “so what?” here is that, in contrast to modern historiography treating Williams’ flanking maneuver as a poorly defined march without a clear objective, Chapter Three argues that Williams knew exactly where he was going because Slocum had personally reconnoitered Hospital Hill and assigned a staff officer to lead him to that point. Slocum had carefully chosen the position in relation to Barlow’s advanced position on the knoll that came to bear his name, and followed up by sending a staff officer back to Williams to meet his 1st division at the Baltimore Pike, and lead them to the objective point.

The intriguing thought here is did Slocum envision his whole corps marching to Benner’s Hill? Because Williams’ report describes a scenario where federal guns are firing on the masses below, and owing to the fact that Slocum was out there only to secure the 11th Corps flank, it is reasonable to believe he anticipated his whole corps marching to that point. He could not have known that his 2nd division under Brigadier General John White Geary would be intercepted by Major General Winfield Scott Hancock to secure the army’s left wing near Little Round Top. Presuming he anticipated his whole corps on the federal right, the 12th Corps design on Benner’s Hill originally qualified as a decisive corps size offensive intending to shore up the flank. It is helpful to pause and reflect here on the possibilities if Geary’s 2nd division of the 12th Corps had joined Williams at Benner’s Hill as he was apparently supposed to do. When Geary

reached the Wolf Walk Ridge intersection with the Baltimore Pike, and inquired where he should go, he was soon put in touch with Hancock who ordered him to the left in

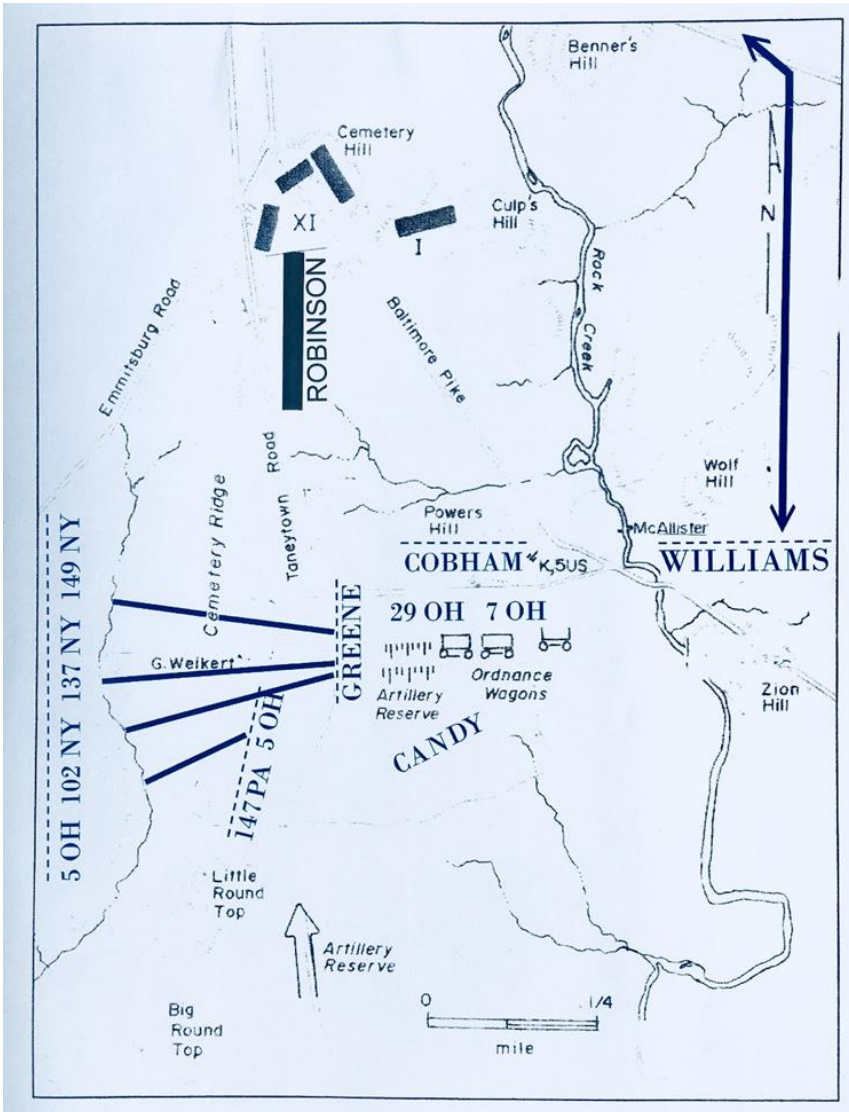


Fig. 16 - Slocum's 2nd Interior Line at Powers Hill by John Heiser and Troy Harman.

support of the 1st Corps, in front of the Round Tops. Hancock perceived himself correctly in this role representing Meade until the commanding general reached the field. In that role, he had divided responsibilities with Howard to defend the right center, while he personally oversaw the left center; and in keeping with those defensive responsibilities, he placed Geary in precisely the correct location. However, had Geary found Howard, or

one of his staff, then Geary would have joined Williams where Howard originally assigned them to be. Slocum certainly understood the importance of securing the right flank before the 5th and 6th Corps arrived.

3.8 Reason for Secondary Treatment of Williams in the Historiography

It is necessary here to pause and ask why these evaluations of 12th Corps intentions are not carefully considered in other works, of why Coddington and Sears treat Williams 1st division maneuver to Benner's Hill as incidental to the overall outcome of July 1 fighting. This needs to be addressed because Williams' flanking maneuver constituted the last federal attempt to hold the Rock Creek line north of Gettysburg on July 1. Likewise, it signaled the first federal attempt to secure an offensive posture on the Rock Creek line at Benner's and Hospital Hills. Coddington, Sears and others have downplayed this crucial action for several reasons, but one salient one stands out. That is, George Meade paid little to no attention to Williams' after action report, or the detailed movements of his 1st division as reported by Brigadier General Thomas H. Ruger, mainly because Meade did not recognize Williams as the 12th Corps commander, or Ruger's promotion to division command. Meade thus set a historiographical precedent of treating Williams' actions on July 1 as secondary to the main event. Slocum was quite upset by this omission enough to write Meade several months after the battle to complain his 12th Corps was not better represented in the commanding general's final report.¹⁸³ Meade responded with discreet humor stating that he saw Williams at the July 2, Council of War and wondered why he was there, the implication being that Meade saw him as a division commander among corps commanders.¹⁸⁴ Even so, Meade

understood humor had its limits due to the seriousness of Slocum's accusation, and thus offered an addendum to his original report with several key bullet point clarifications. Though Meade's addendum served as a good gesture, permanent damage was done to the historical record in that many historians do not read it, or they give it less weight because additions appear in the *Official Records* separate from Meade's full report. The addendum seems to be an add-on to pacify Slocum, appearing somewhat detached, if not lost, several pages after the main report. It also reflects movements made by the 1st division either outside of the fishhook, or away from Culp's Hill on the first, second, and third days of the battle, somewhat anathema to how the main battle unfolded. There is nothing found in the bullets to enhance the battle's traditional framework, and therefore goes unnoticed except out of historical obligation to accurately document all movements on July 1. Geary's prompt submission with his report, along with perhaps his native Pennsylvania connections to Meade, and Meade's desire to minimize uncertainties in the wake of Congressional hearings assured Geary's 2nd Division report became the representative one of the 12th Corps.

In choosing Geary's report as the principle one of the 12th Corps, Meade may have also wanted to cover himself by eliminating discussions of what did not happen. By October, the political environment was deteriorating with rumors of a congressional hearing to explore why Meade allowed Lee escape to Virginia. There were also rumors that Meade preferred to fight at Pipe Creek instead of Gettysburg, and Sickles seemed anxious to contribute to this discussion when his 3rd Corps was not returned to him in October. Understanding these circumstances, Meade realized it wise to stick with the

victory as is and avoid offensive and defensive contingencies discussed in Williams' and Ruger's report. The commanding general should go with protocol and report pertinent facts, such as key positions, rounds expended, casualties incurred, and acts of courage, rather than contingencies, variables, and options that never fully materialized. Geary's official report focused on what happened in earnest rather than what almost happened with options that developed to varying degrees before being shelved. It is true that Geary completed his report before Williams, giving him the edge in how the 12th Corps would be remembered at Gettysburg, but the fact that Geary's 2nd division did the majority of fighting where the battle was decided at Culp's Hill dictated what should be remembered. Unfulfilled offensive maneuvers and skirmishes, on July 1, as described by Williams and Ruger, gave way to final defensive stands executed by Geary.

That Meade and Geary were both Pennsylvanians likely factored into the decision to emphasize the latter's report over Williams, too. Major General John F. Reynolds, Major General Winfield S. Hancock, and Brigadier General John Gibbon, three prominent Pennsylvanians fighting along the western sector of the Union defensive position, received disproportionate attention, if not preferential treatment in assignments given at both the operational level and on the battlefield. Reynolds established the position along Marsh and then Rock Creek upon which the three day battle would be fought. Hancock found himself recently raised from division command to a junior corps commander to personally representing Meade on the battlefield at the end of July 1 deciding whether to stay at Rock Creek or fall back on Pipe Creek. After Daniel Sickles was wounded on July 2, his 3rd Corps fell under the jurisdiction of Hancock

whom Meade assigned to command the left wing, or roughly two-thirds of the federal army at Gettysburg. On July 3, Meade gave Hancock the responsibility of leading a counteroffensive after Pickett's Charge, with 5th and 6th Corps reserves placed under his command for this purpose. If not for Hancock's wounding in repulsing the charge, a counteroffensive may have gained traction. Brigadier General John Gibbon, in turn, took over temporary command of the 2nd Corp with Hancock's left wing assignment, giving him command of the freshest corps to defend the key position of Cemetery Hill from its southwestern slope of Cemetery Ridge. Moreover, his presence was not questioned like Williams at the Council of War in Meade's headquarters on the night of July 2. Meade surrounded himself with Pennsylvanians whom he elevated to high positions of authority. Honoring Geary's report over Williams followed this pattern.

To emphasize Williams' contributions also meant giving credit to Slocum whom Meade had cut ties with after the Gettysburg Campaign when the 12th Corps and 11th Corps were transferred by rail to stabilize Tennessee on September 24, 1863. The two corps eventually combined to become a mainstay in the western theater as the 20th Corps, giving them an out of sight, out of mind status for Meade and AOP by the fall of 1863 when Meade was writing his report. Slocum had an icy relationship with Meade at best, the latter understanding the former had contributed to Major General Joseph Hooker's downfall through complaints to Major General Henry Halleck about his performance at Chancellorsville. Moreover, Slocum was Meade's senior in time and grade and could have assumed army command had he chosen too. Meade knew that as well which undermined his authority at Gettysburg, as in the case of the July 2 Council

of War where Meade had to depend on a committee vote to solidify his decisions at Gettysburg. Meade needed Slocum to voice support to stay and fight it out, before he could proceed to do so. As we will see, Meade had a falling-out with Slocum during the morning hours of July 2 over Slocum's decision to fight defensively at Culp's Hill, rather than stay ready for a decisive attack on the army right. It was Slocum who killed the offensive options on the federal right on both July 1 and July 2, not Meade. Finally, Slocum visualized himself to be the right wing commander at the tactical level, on the second and third days of the battle, when that authority existed only at the operational level and in the early morning July 2 hours when Slocum was temporarily placed in charge of 5th, 6th, and 12th Corps for a decisive attack on the federal right. When that plan fizzled, because of Slocum's withdrawal to Culp's Hill, Meade intended Slocum's jurisdiction to revert to 12th Corps command.

That Slocum assigned Williams responsibility for writing the 12th Corps report reveals that Slocum viewed himself as something greater than corps commander during the battle. There was a certain arrogance to Slocum's assumption that he maintained right wing command at the tactical level. Such a command served a useful purpose when the army was dispersed thirty to fifty miles at the operational level, or even in the transition to Gettysburg as corps marched from their detached state to reattachment with army command, but quite unnecessary when the army condensed to a three to four mile front. As will become evident, Slocum could reasonably consider himself in command of the right wing that included the 12th, 5th, and 6th Corps when Meade contemplated, developed, and eventually ordered a decisive attack on his right the

morning of July 2, in the same way that Howard served as operational commander at Gettysburg the afternoon of July 1, and Hancock controlled the army's left wing on the morning of July 3 when Meade considered an offensive on his left involving several corps, but not after Slocum relinquished the offensive on the right in pulling all three corps back to the greater Culp's Hill area.

So, for these reasons, Meade would have downplayed Slocum's role, with all the offensive options that fell by the wayside on the right, and instead focused on Geary's concrete report documenting the defense at Culp's Hill. Slocum and his 12th Corps were at a safe distance by the time Meade compiled and submitted the army report reinforcing a Union defensive victory, with Pennsylvanian Geary holding stoutly at Culp's Hill. Relieved that Slocum resided in another theater of the war, no longer able to interfere directly with his command, Meade cropped his broader offensive responsibilities from the official army command report and incorporated a report with nuts and bolts information on defending the hill. When Slocum complained about Williams' actions being overlooked, Meade needed to do some damage control in light of murmurs from Major General Daniel E. Sickles, Major General Abner Doubleday, Major General Daniel Butterfield, and Major General Alfred Pleasonton that Meade should have done more at Gettysburg. Sending a corrective, addendum report with key bullet points from Brigadier General Thomas H. Ruger's divisional report intended to satisfy Slocum enough to make him disinterested in post-battle controversy.¹⁸⁵

In contrast to the final straightforward version found in Geary's report, this work will continue to paint a fuller picture of all options considered before official

submissions trimmed away variables, contingencies and overall realities of a Civil War battlefield. Incorporation of Geary's basic account into Meade's official report then set the template for a simple rendering of Gettysburg lasting to the present, one that is void of questions about whether the commanding general intended to stay and fight at Gettysburg. The report is a tactical rendering of interior defense not concerned with strategic coverage of water courses, rail, and improved roads that sustain an army in the field. In contrast, Williams' report and Ruger's report raised uncertainties about a changing situation, with the sort-of pitfalls that Meade hoped to avoid. Therefore, Meade's final report, and the subsequent general histories that followed focused on battle action at Culp's Hill.

3.9 Closing of Operations on July 1

When the July 1 fighting began, Meade had his lines of operations spread out over dozens of miles along the various branches of the Monocacy River that included Pipe Creek, Rock Creek, Middle Creek and Marsh Creek, but by day's end had consolidated his army on a three mile tactical front that ran north-south along Rock Creek. Lee had shaped Meade's tactical deployment by having his army massed west of Gettysburg in the morning, and then by adding to that strength north of town in the afternoon resulting in the battle spreading sequentially from Meade's left to right. The opening shots were fired three miles west of Gettysburg, along Marsh Creek, then resumed in earnest one mile west of town on the banks of Willoughby Run, before

extending northeast of Gettysburg to Rock Creek where the federal right flank resisted.

Confederates returning from points east of Gettysburg joined the fight at 2:30 PM to turn the Rock Creek flank forcing a federal retreat to the heights south of town and the Union fishhook shape that anchored its right flank on Rock Creek at Culp's Hill.

Confederate columns continued to arrive east of Rock Creek on July 1 driving the federal right flank from the Gettysburg-Hanover Railroad and threatening Meade's lines of operations to Westminster twenty-four miles south. The loss of Barlow's Knoll and the stalled advance by Williams' 1st division, 12th Corps had placed Meade in an awkward position with his right flank recoiled and opened to attacks east of Gettysburg. For these reasons, Meade made his right flank and the hills to the north and northeast of town his focus for the second day of battle. Gaining these strong hills would secure his logistics, prevent Lee from maneuvering around him to advance on either Baltimore or Washington, and allow his army to pivot ninety degrees to straighten its line and drive Lee's army back to South Mountain and ultimately Virginia. As July 2 dawned, Meade determined that uncoiling the fishhook was his highest priority, both for tactical and logistical reasons.

Chapter 4: Day 2, Morning – Union Offensive Plans to Secure the Rock Creek Line

4.1 July 2, 1863: Rock Creek Line Solidifies with Plans for Rail

The Union defensive position, at the end of first day fighting, would resemble a fishhook shaped line, running south to northeast, anchored on the left at Little Round Top, while the right rested on Wolf Hill near the Hanover Road. The position ran juxtaposed with Rock Creek the entire length of the line, with infantry and artillery primarily along the Cemetery Hill and Ridge position with the option of extending the right to Benner's and Hospital Hills when the 5th Corps reached the field early on July 2. By the afternoon of July 2, cavalry moved to cover the flanks at Hunterstown on the right and Emmitsburg on the left. This would constitute Meade's Monocacy-Rock Creek line. To secure it, he needed his right infantry wing to be extended to Benner's and Hospital Hills. As the Federal Cavalry Chief Alfred Pleasonton recalled, "General Meade was strongly impressed that our right was our weakest place, and on both the 2d and 3d of July he gave it his attention. On the 3d, during the artillery combat on our left, he took a position on a high mound between the right and left flanks, watching our right, and expecting a heavy attack in that direction."¹⁸⁶

Taking Benner's and Hospital Hills on July 2 would have achieved several objectives. First and foremost it covered accesses to Baltimore and Washington along the whole front, particularly on the federal right where Confederate penetration threatened to open direct accesses to the Baltimore Pike, at multiple points between

the tactical right at Culp's Hill, and the operational right twenty-four miles to the southeast at Westminster. This would be made all the more easy due to the Baltimore Pike turning southeast roughly parallel to the Hanover Road allowing the enemy closer proximity to the pike than any other place on the battlefield. Because thousands of wagon trains, ambulances, and artillery vehicles sat parked along the pike, sixteen miles south at Union Mills, and due to the stockpiling of food and medical supplies at Westminster, a buttress on the right flank at Benner's and Hospital Hill added a layer of protection against disaster. A second objective achieved by buttressing the Rock Creek line on the right with these two hills was an offensive stance that pinned ANVs metaphoric shoulders to South Mountain. That is, occupying Benner's and Hospital Hills on the right and the Round Tops on the left assured Lee's army had nowhere to go on their front and little room to maneuver to his rear. Unless Lee was willing to make a wide, even risky circuitous flanking maneuver at the operation level, his only option would be to retreat.

A third achieved objective in holding the Rock Creek line at Benner's and Hospital Hills offered use of Rock Creek north of Barlow's Knoll as a geographic barrier to restrict Confederate deployment. A strong 12th Corps skirmish line thrown forward would in essence restore what the 11th Corps held in the early afternoon of July 1. This would serve the added purpose of covering the Hanover – Gettysburg Railroad to enable the USMRC to rebuild communication and transportation links with the outside world. For all of these reasons, Meade considered trying to restore the Rock Creek line north on July 2, and he immediately began the process of repairing rail links to South

Central Pennsylvania. Quartermaster General Montgomery C. Meigs informed the Commander of U.S. Military Railroads, Brigadier General Herman Haupt,

General Meade desires that you be prepared to push on the repairs of the Northern Central Road to open connection with him from Baltimore as soon as he reaches the line of the road. I have ordered Construction Corps and train to Western Maryland Road, now open, to prepare siding and turnouts and be ready to transfer to the Northern Central. As soon as that is safe, you will proceed via Baltimore to these two lines to take charge of operations. These roads have sent away much of their equipments. Some of the military stock will be sent forward; it is lighter than the B. & O.R.R. engines.¹⁸⁷



Fig. 17 - USMRC Crewman Posing Next to 4-4-0 "General Haupt," circa 1863, National Archives. A 4-4-0 Had Four Leading Wheels, Four Driving Wheels, and Zero Training Wheels. Nearly Every Railroad in North America Used Them in the 1860s.

Meigs' biographer, Russell Weigley explained,

Immediately Haupt requested 400 men of the Quartermaster's Department Railroad Construction Corps, a goodly number of full train crews, and plenty of rolling stock. The enemy had now pulled westward from Harrisburg in order to concentrate on the path of the Army of the Potomac, and Haupt put the Construction Corps to work rebuilding bridges and repairing track on the Northern Central to Hanover Junction and thence along the York and

Cumberland toward Gettysburg, which was held by part of Federal 1st [Buford's] Cavalry Division.¹⁸⁸

To secure Gettysburg for such repair meant pivoting the 12th, 5th, and 6th Corps counterclockwise around to Benner's and Hospital Hills. Slocum wrote to Meade at 9:20 PM on July 1, stating, "If you conclude to make the fight here, the most of the Artillery Reserve can be used to advantage; and in that case the Fifth and Sixth Corps can be used to extend our right."¹⁸⁹ Retaking those hills became the primary offensive option for Meade early July 2. Well to the rear, federal engineers worked behind the scenes to reestablish links from the operational level to the battlefield.

As for the supply base behind rail extensions into Pennsylvania, Westminister developed overnight into the principal depot. Haupt would invest much time in revamping the Western Railroad, from Baltimore to Westminister, for this purpose. To meet the task he informed Secretary of War Staunton on July 2 that, "I hope to pass 150 cars per day each way [Baltimore to Westminister], capable of carrying from 2,000 to 4,000 wounded in return cars. The rapidity of loading and unloading will measure the capacity of the road."¹⁹⁰ He estimated in this official report,

Tanks were filled by dipping water from the streams, and with other arrangements required by the circumstances of the case we were enabled to provide for a transportation of 1,500 tons [of medical, material, and food supplies] per day each way. In two days the army was supplied not only with everything required, but with an excess which has been left for the use of the hospitals.¹⁹¹

Had the federal army ever fallen back from Monocacy's headwaters at Gettysburg, Pipe Creek and the depot at Westminster had to be covered. The Pipe Creek line offered the next confluence of water, rail, and road able to sustain Meade's army indefinitely, while covering Baltimore and Washington, D.C.

4.2 Lee and Ewell Disrupt the Northern Prolongation of Rock Creek

On the Confederate side, Early overcommitted his division east to guard Ewell's left flank at Benner's and Hospital Hills, and to guard the York Road and West Middle Street until Johnson's division arrived. Johnson had been given the right-of-way on the Cashtown Road to hasten his division's march to the battlefield, along with access to an unfinished railroad cut at Seven Stars in order to circumvent Hill's wagon trains. Once on the field, the division climbed out of the cut, and guided on it around the north end of town through the campus of Gettysburg College and over to York Road where Gordon and Smith's brigades of Early's divisions awaited. Officers of the division recorded,

Johnson's division broke camp two miles west of Fayetteville, on the morning of July 1st, and, marching on the Chambersburg Pike [Cashtown Road], arrived at Gettysburg about 6 p.m. Turning to its left, the command passed along the railroad, forded Rock Creek, and continued up to the toll-gate on the York turnpike, turned to the right through a slight valley it passed over the crest and went into bivouac for the night, receiving shots en route from artillery on east Cemetery Hill.¹⁹²

When Johnson did arrive, there was uncertainty about the location of Williams, leading to his skirmishers feeling for the 1st division with great caution. Gordon and Smith's men warned them of Williams' presence around the Lady Farm and Wolf Hill beyond. There were real questions about whether Ruger's brigade constituted the

whole threat on their front, or whether Wolf Hill concealed perhaps the entire 12th Corps. This cost Johnson perhaps an hour, from 6:00 to 7:00 PM, permitting the sun to go down by the time his four brigades occupied the Lady Farm. Brigadier General James A. Walker's old "Stonewall" brigade led the way pushing through Wolf Hill's passes to the Hanover Road, E. Deardorff Farm lane, and Highland Avenue Road on the eastern side. As any unit will do when feeling for the enemy, particularly when that enemy withdraws from their front, is fill the vacuum. That is what the 2nd, 4th, 6th, and 33rd Virginia infantry regiments of Walker's brigade did, filling every logger's trail in Wolf Hill woods to the aforementioned places stopping within a couple hundred yards of the Wolf Farm where the 27th Indiana of Ruger's brigade established a screen of skirmishers. This was the uneasy stand-off in the early morning hours of July 2.

Meanwhile, Johnson's other three brigades fortified Benner's and Hospital Hills, crowning the crest with parts of three battalions of artillery and digging in along Lady Run north of the Lady Farm. Lee inquired of Ewell twice that evening whether he should pull Johnson and Early's divisions from either side of Benner's Hill on the east side of town to the west and southwest side of Gettysburg, largely because Lee worried the wedged shaped Union line, along with the town's Roman grid streets, dangerously divided his army's two wings.¹⁹³ Consequently, Ewell's two divisions of Early and Johnson found themselves perilously isolated from the rest of ANV, a problem exacerbated by news Ewell's scouts brought to his corps headquarters that evening either at the Lady or Lott Farm. Specifically, Johnson had sent a party of scouts to Culp's Hill only to have most of them captured in the dark by the 7th Indiana Infantry of

Brigadier General Lysander Cutler's brigade. Two or three scouts escaped to clamor down the dusky northern slopes of Culp's Hill to Hanover Road where they stumbled onto and took prisoner a courier representing 5th Corps commander Major General George Sykes. A message was found in his possession and taken back to Ewell informing him that the entire 5th Corps rested on the Hanover Road at Bonnevillie only four miles from the battlefield, and would report to Slocum the next morning to extend his flank.¹⁹⁴ He was likely held captive and questioned further, but nothing more is mentioned in Ewell's report. For Ewell and Lee this reconnoitering mission had uncovered two uncomfortable truths; one Culp's Hill was occupied by Union troops, how many no one knew, but occupied nevertheless, meaning that Johnson had best stay put on the Lady Farm until further investigation. Secondly, the scouts had discovered a memorandum that revealed an additional federal corps of 10,000 stood in close proximity to Ewell's left, meaning parts of two corps threatened the flank, and as importantly, Major General J.E.B. Stuart's Confederate cavalry was not there protecting the flank. That scouts discovered this potentially disastrous threat without prior warning meant there was no Confederate cavalry guarding the flank, all the more reason to wait. Ewell would never live this decision down, but the Union 12th and 5th Corps made halting necessary. Post-war Southerners continued to imagine that the recently deceased Confederate Lieutenant General Thomas Jonathan "Stonewall" Jackson would have pressed on anyway, regardless of the circumstances.

Longstreet continued to push for Lee to make Ewell withdraw from his island to the southwestern side of the battlefield so that he could execute a turning maneuver of

the Union left in the direction of Westminster. Such a maneuver was not possible with Ewell stranded on the eastern side of the Union wedge. Lee compensated by stringing sharpshooters through the streets and buildings of Gettysburg, not only to bring marksman fire on Cemetery Hill artillery, but create a thin membrane force to connect his widely separated wings. Even so, the divide could ruin his army, yet Lee permitted Ewell to maintain his position, because Ewell convinced Lee that he could make Cemetery Hill indefensible by applying pressure on Culp's Hill. Because Lee's primary tactical objective was Cemetery Hill, Ewell's desire to stay resonated particularly with Lee.

There were other factors making the risk worthwhile at the operational level more so than the tactical. Yes, a pincer on Cemetery Hill through Culp's Hill constituted sound reasoning at the tactical level, but on the logistical level, there were additional advantages. One of them was to block repair of the Hanover – Gettysburg rail line, destroyed so methodically by Early's division in the last week. With Early and Johnson's divisions stretched across Benner's and Hospital Hills, from York to Hanover roads, completion of rail repair from Hanover or Littlestown to Gettysburg became impossible. Herman Haupt said as much in a memorandum at 3:00 PM communicating to Meade that his USMRC could not tie-in to Gettysburg due to dispositions of the enemy. He informed Secretary of War Stanton, "I have no very recent information from Gettysburg, but at last account, the position of the enemy would not permit the reconstruction and operation of the Gettysburg Branch of that line. I can soon open the branch road to Gettysburg after we have full and undisturbed possession."¹⁹⁵ Lee therefore delayed

federal rail and telegraph communications to Gettysburg by leaving part of Ewell's Corps east of the town cemetery and Culp's Hill. He understood that all of the destruction his army did to Pennsylvania rail at the operational level of the campaign left AOP stranded far from steam train supply systems, if only a part of his army sat in the path of reconstruction. On July 3, Stuart's cavalry arrived to extend Ewell's presence there, making sure rail did not bring relief to the federals. In short, blocking rail repair there reduced AOP logistically on the same footing with ANV to horse, mule, and wagon forms of transportation and communication. Lee understood that soldiers carried three days rations with them into battle, and that supply wagons were customarily sent well to the rear to allow infantry, cavalry, and artillery clear access to the battlefield. In this case, most of the federal supply wagons were moved at least fourteen miles south on the road to Westminster making resupply to Gettysburg highly difficult.¹⁹⁶ Lee recognized that quick resupply with horse and mule power would be difficult, which is why he destroyed so much rail and telegraph at the operational level.

One other major logistical reason for the risk of leaving two isolated divisions east of Gettysburg, away from easy support, involved Rock Creek. For Ewell to sit on rail links to Gettysburg meant that he also sat on water stations designed to power the steam trains arriving and departing.¹⁹⁷ Moreover, the federal hospitals stretched for five miles along Rock Creek, as did the army's artillery and ambulance parks with 20,000 horses and mules. Confederate attacks east of Gettysburg posed a continual threat to this federal lifeline. Rock Creek was a magnet for wounded too as Editor William McClean of the *Gettysburg Compiler* recollected in 1906, "Those familiar with the story

of the battle recall the number of wounded men found along the creek, those who crawled there to quench their hot thirst and cool their parched throats.”¹⁹⁸ It is a grizzly thought, but enemy encampment and fighting across the water supply source upstream caused hardships for federals logistically downstream. Polluting the water supply with urine and blood is part of the tacit agreement of total war. Altogether, Confederate assaults across Rock Creek compromised the sinew connection of the federal defensive position on Monocacy’s headwaters. Again, Lee’s orders to sabotage the Gettysburg-Hanover-York line, combined with Ewell and Early’s decision to guard the Gettysburg-Hanover line along York Road indicates that Lee’s early campaign military engineering remained a factor as long as his army blocked reconstruction.

The Rock Creek line also represented symbolically something greater if possible. That is, it symbolized a Maginot line of sorts that must not be violated if the federal army planned on remaining at Gettysburg. In a way, it constituted a water break line that Confederates should be held from crossing, because of all the reasons mentioned such as protecting supply lines, rail repair, logistical water access, but also tactical avoidance of a refused, 85 degree angled position. If Benner’s and Hospital Hills were held by federals, and a strong skirmish line thrown forward to Rock Creek north of Gettysburg, then all of the above were protected and Confederate movement became pinned to South Mountain; however, a permanent refused line at Culp’s Hill equated defense with all of its negatives including critical mass against the center from reverse pressure at Culp’s Hill. Allowing Johnson’s division of Ewell’s Corps to remain on that flank forced the federals on the defensive, it gave Lee the initiative.

Understanding this dilemma, Meade communicated with Slocum from Taneytown on the evening of July 1 about the prospects of making an offensive move on the right. Slocum had initiated the conversation by informing Meade, as operational commander, at 9:20 PM that the right flank offered offensive promise. He wrote Meade, "Your note to General Hancock of 6 p.m. is received. If you conclude to make the fight here, most of the Artillery Reserve can be used to advantage; and in that case the Fifth and Sixth Corps can be used to extend our right."¹⁹⁹ With the artillery reserve less than eight miles south on the Taneytown Road, the 5th Corps only four miles east of the battlefield on the Hanover Road, and the 6th Corps en-route either on the Baltimore Pike proper, or on a middle road connecting with Taneytown, the potential of a disproportional advantage on the right seemed possible. In response, the 5th Corps commander Major General George Sykes recorded, "On the receipt of General Meade's note to General Slocum of the 1st instant, I left Hanover at 7 p.m., and marched 9 miles to Bonaughtown, en route to Gettysburg. I shall resume my march at 4 a.m. [Brigadier General Samuel W.] Crawford's [3rd] division [5th Corps] had not reached Hanover at the hour I left there."²⁰⁰ Meade would follow-up on his operational commander's suggestion the next morning with orders to attack there, but much preliminary work had to be accomplished. Meade wrote Hermann Haupt, who was made Superintendent of Military Railways in Pennsylvania, and impressed upon him for repairs to be made right away, mainly along the Northern Central line to reconnect lines extending to Hanover and Gettysburg. This required Haupt to bring in 400 workers, of which little is

known, except that Irish and African-Americans comprised a percentage. The Confiscation Acts of 1862, along with the recent Emancipation Proclamation had cleared the way for African Americans to participate through repairing rail lines, digging trenches, setting up tents, and a host of other supportive duties to aid AOP. Many ties of wood were brought in from Virginia by rail too. Halleck had made it clear that Meade would cover the federal capital, which meant that Haupt began to assess every rail line in Maryland and South Central Pennsylvania to determine standards of support for



Fig. 18 - "General Haupt" Locomotive, Haupt with a Black Hat, Circa 1863, National Archives.

federal defense.

After Meade communicated with Haupt on reconnecting Gettysburg with the Northern Central to Westminster, the latter began telegraphing Major General Darius N. Couch, in charge of emergency troops in Harrisburg. He also sent emissaries ahead to

see what repairs precisely were needed. Engineer of Construction, J.B. Clough, assessed at 12:00 AM on July 2, "Just returned from New Oxford and Hanover Junction. There are nineteen bridges destroyed between York Haven and Hanover Junction. Between Hanover Junction and Gettysburg there are two small ones gone, and one partially. I think these three bridges can be put up in from one to two days."²⁰¹ His railroad workers inserted new ties in damaged sections, located bent rail, heated and straightened it for attachment. To speed-up the process, workers put down one tie for every four damaged, before moving onto the next disrupted section several miles north. In this manner, they repaired interval breaks to rebuild continuity in the vital sections that linked the battlefield to staging areas like the one Haupt designed in Westminster, where he stocked four hundred rail cars of medical and food supplies by July 3. To make Westminster viable for this purpose, he had to insert siding for parking cars, he instituted strict time tables for arrival, delivery, and return. He added multiple water stations, increased rolling stock, maximized loads per trip, and carefully monitored stoppages.

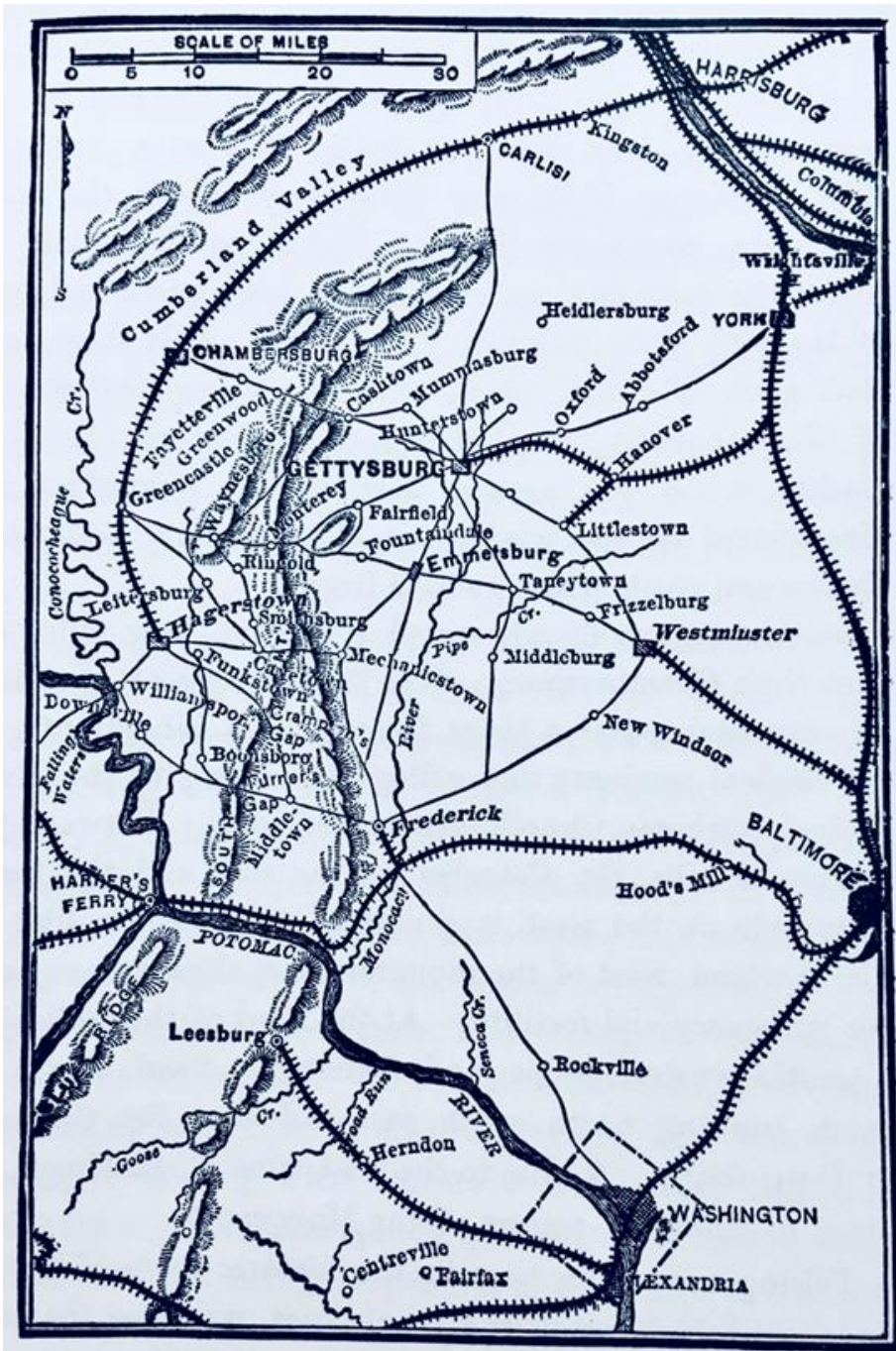


Fig. 19 - Maryland and Southern Pennsylvania, From the Potomac to the Susquehanna, from Jacob Hoke's, Great Invasion.

Haupt would also coordinate with Darius Couch of Pennsylvania emergency defenses in Harrisburg to reconstruct the Cumberland Valley Railroad (CVRR) from the state capital south to Scotland, Pennsylvania (seven miles northeast of Chambersburg),

where Brigadier General William F. Smith's emergency troops eventually pressured Lee's retreat from Waynesboro to Hagerstown. Haupt made himself available to Meade stating,

By this time General Meade had moved northward. The Baltimore & Ohio Railroad had been cut by the enemy, and I concluded that the most efficient service that I could render would be to go to Harrisburg, ascertain the condition of affairs in Pennsylvania – especially the numbers and position of the forces that had been raised – and then make my way across the country on foot, or horseback, and give General Meade all the information I could gather. With this object in view, I started for Harrisburg, but as the Northern Central Railroad had been badly injured, I was compelled to travel via Philadelphia and Reading. I reached Harrisburg in the evening of June 30, and reported at once to the capitol, where I found Governor Curtin and his staff.²⁰²

As for the cooperative efforts between railroad officials to restore rail lines, CVRR historian Paul Westhaeffer wrote that, "Both Haupt and [Thomas Alexander] Scott [Director of the CVRR] were strongly of the same view and immediately took steps to provide the rail transport Meade would need for an offensive."²⁰³ According to Westhaeffer, both Haupt and Scott agreed that Meade would need quick restoration of the CVRR, but that fixing the NCRR was of greater urgency to Meade's predicament at Gettysburg, and that work on it began "well before the battle had ended."²⁰⁴ Westhaeffer added that workers of Haupt's USMRC "came by rail from their base at Alexandria to restore 19 bridges on the Northern Central that Early had wrecked during his march on York. This had stopped all rail movement between Baltimore and Harrisburg and had barred Federal access to the Gettysburg area via the Western Maryland and Gettysburg Railroads."²⁰⁵

Reconstructing gaps at intervals across a hundred miles of rail, Haupt accomplished one of the minor miracles of the war, giving Meade the option of pursuing Lee to the Potomac by way of the B&O, from Westminster to Frederick to Williamsport.

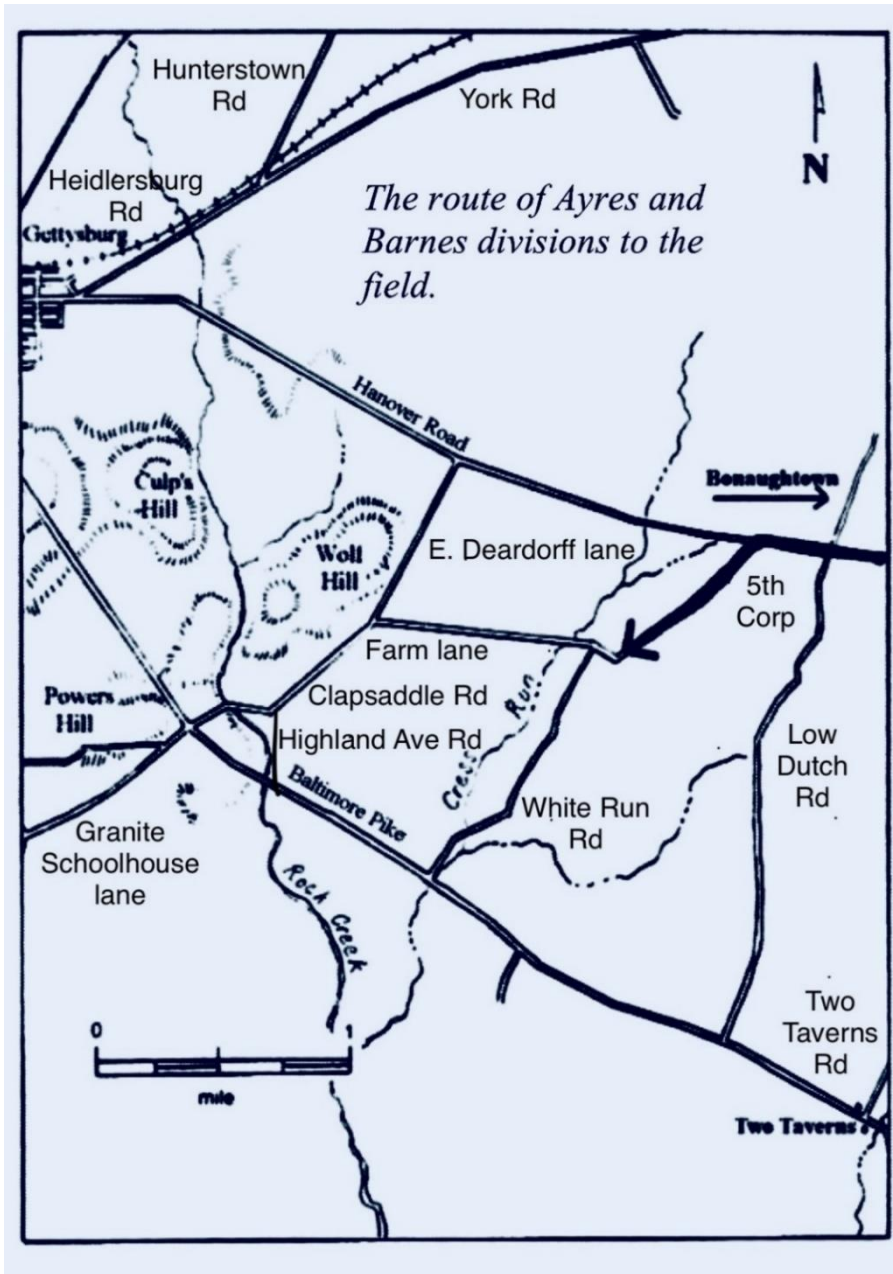


Fig. 20 – Route of Ayres and Barnes’ Divisions, 5th Corps, to the Field by John Heiser and Troy Harman.

His USMRC worked around the clock from July 1 to 14, to restore links, not only for Meade to pursue, but to begin the long process of bringing supplies to the wounded at

Gettysburg and transporting many of them to base hospitals in Harrisburg, Philadelphia, Baltimore, and Washington. (The Northern Central and Hanover – Gettysburg lines also brought Lincoln to the battlefield for his famous address over four months after the battle.)

Haupt's assistants assessed the Hanover – Gettysburg line as having two bridges fully burned and one partially burned, and that it could be reconstructed in two days. To make the proper evaluation, the assistant took an engine as far from Hanover to the battlefield as possible, recording that burned bridges stopped the engine ten miles from Gettysburg. Knowing the USMRC had begun their work to repair rail and telegraph links to Gettysburg and Littlestown, Meade took Slocum's suggestions about extending the right seriously. Meade had informed Slocum on the night of July 1, before leaving Taneytown that if the majority of the army arrived overnight, they could make a decisive attack there in the morning. The challenge would be the 5th Corps coming up in time on the right by way of Hanover Road, and the 6th Corps advancing toward the right by way of Baltimore Pike. The 5th Corps bivouacked only four miles east of the battlefield by 7:00 PM on July 1, but the 6th Corps had to march 32 miles that evening and next morning to be available on July 2. Oddly enough, Meade was under the impression the latter could not only make it, but be on the field early on July 2, only a few hours after Meade reached the field himself. Though it seems unreasonable in retrospect, the potential was there if the 6th Corps had not turned wrongly onto a byroad to Taneytown, before returning to the Baltimore Pike and finding themselves behind

wagon trains that slowed the march. Meade remained on the federal right

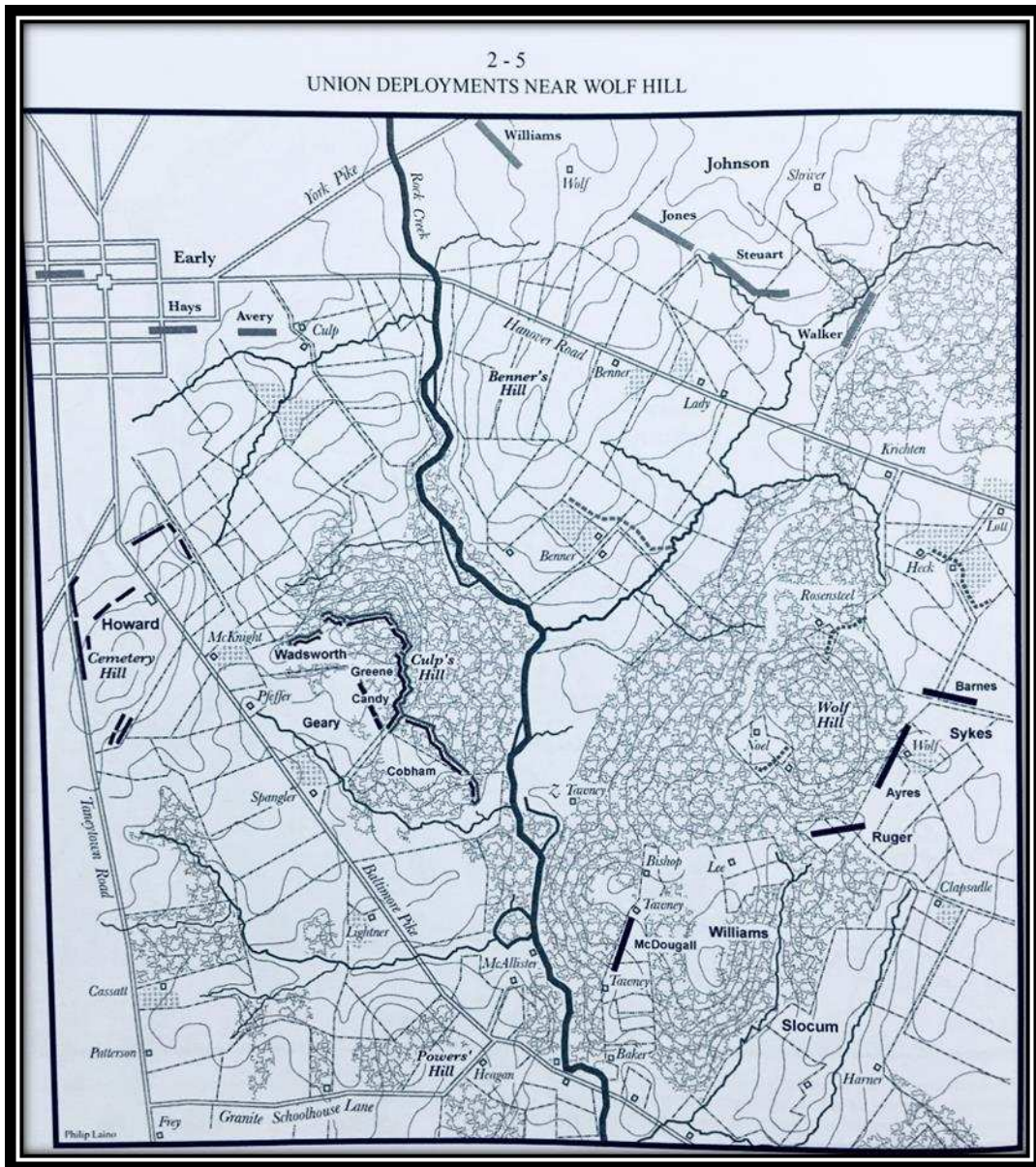


Fig. 21 – 2-5 – Union Deployments Near Wolf Hill around 8:30 AM by Philip Laino.

receiving periodic updates about the 6th Corps march, and was particularly disappointed that its commander, Major General John Sedgwick, did not appear in person after midnight. Throughout the morning of July 2, he waited in futility for the corps to arrive,

finally turning over communications with Sedgwick to Butterfield at noon, while he himself rode toward the left to consider an attack there.

The point is that Meade maintained the decisive attack option on his right until midday July 2, to be spearheaded by the 12th and 5th Corps, and supported by the 6th Corps. This attack would clear the way for Hanover-Gettysburg rail repair, Baltimore Pike security, Rock Creek integrity and offensive pressure of Lee's army against South Mountain. The central piece would be Williams' 1st division, 12th Corps placed near the Wolf Farm where Highland Avenue Road forms at right angles with modern day Clapsaddle Road. A company of 16th Pennsylvania Cavalry escorted Sykes, his staff and 5th Corps, along the Hanover Road shortly after 4:00 AM from Bonnevillle toward the battlefield. Timothy J. Reese, who wrote the official history of the 5th Corps, explained the last couple miles of marching,

Following the Hanover Road for another two miles, the corps turned left onto a country road taking them toward the Baltimore Pike where they turned right heading directly for Gettysburg. At 5:00 AM, they met outriders of Slocum's corps already in place south of Culp's Hill. The sun was well up when Sykes received orders to form on Slocum's right and advance as skirmishers to the east of Rock Creek. After considerable jockeying of position, the corps formed in line of battle confronting Wolf's Hill from which Rebel sharpshooters were pestering the XII Corps men. Ayres pushed his line into the woods with Barnes on his right and waited, but nothing happened.²⁰⁶

When the lead columns reached White Run Road, they were directed to turn south just far enough to turn west again on a farm lane, field road marked by power lines today. The lane guided Brigadier General James Barnes' division of United States Regulars on its north side, and directed Brigadier General Romelyn B. Ayres' division on its south

side to a right angles connection with Williams' 1st division, 12th Corps at the Wolf Farm. The two corps married there at a ninety degree angle thoroughly boxing in Walker's Virginia "Stonewall" brigade found sniping from the nearby woods of Wolf Hill. Meanwhile, riders on the Baltimore Pike communicated with Sedgwick's 6th Corps to gage progress of the march, with the understanding the 12th and 5th Corps assault would begin when the 6th Corps reached supporting distance.

4.3 Meade Extends the Right on July 2, 1863

Meade remained committed to the developing assault ordering Slocum at 9:30 A.M. to look into the "practicability of attacking the enemy in that quarter" when the 6th Corps came up.²⁰⁷ His specific order to Slocum stated, "The commanding general desires that you will at once examine the ground in your front, and give him your opinion as to the practicability of attacking the enemy in that quarter."²⁰⁸ Shortly thereafter, closer to 10:00 A.M., as Meade clarified before congressional hearings, his chief of staff certified,

The commanding general desires you to make arrangements for an attack from your front on the enemy, to be made by the Twelfth Corps, supported by the Fifth. He wishes this to be a strong and decisive attack, which he will order so soon as he gets definite information of the approach of the Sixth Corps, which will also be directed to co-operate in this attack. For this purpose, he has sent an officer to ascertain the whereabouts of General Sedgwick, and report.²⁰⁹

Meade also sent Chief Engineer Gouverneur K. Warren to the right with Slocum around 10:00 AM to help with this determination. Major General Daniel Sickles who commanded the 3rd Corps on the left flank wrote, "I went in person to headquarters and asked General Meade to come with me and reconnoiter the left. He was too busy. I

asked for [Major General Gouverneur K.] Warren; Warren was busy on the right preparing for an attack by the right wing on Culp's Hill, under Slocum. Butterfield was too busy preparing Meade's orders."²¹⁰

Warren had ridden to the battlefield on July 1, before riding back to army headquarters in Taneytown late afternoon to report conditions to Meade. On his ride down, he followed the Baltimore Pike south, then turned west on a crossroad that connected him to the Taneytown Road. The crossroad could have been the Ridge Road, which became so important for Longstreet's proposed turning maneuver on the federal left, July 2.²¹¹ The other likely crossover road taken by engineer Warren would be the road that once linked the town of Barlow, on the Taneytown road, with the Emmitsburg Road roughly four miles south of Gettysburg. This is the same conduit that two-thirds of 11th Corps used on July 1 to move directly to Cemetery Hill, through the town, and right of the 1st Corps. In any case, Warren's goal was to not only reach Meade with information from the battlefield, but to also investigate avenues of approach, and in worse case scenarios, key terrain to fall back on along those same avenues. Warren returned to the battlefield by the morning of July 2, and was sent by Meade personally, around 9:30 AM, to investigate the practicability of a decisive assault on the right.

The conventional view of the battle is that Warren met with Slocum and deemed the attack inadvisable on the basis the ground too difficult to traverse for either army. In other words, if Meade intended to make a preemptive strike on his right, to protect his right, Slocum and Warren deemed it treacherous enough to abandon the offensive there and rest assured the enemy would do the same. This story gained further support

in 1913 through Norton's *Attack and Defense of Little Round Top*, a highly popular book among veterans around the fiftieth anniversary. Norton informed 5th Corps readers and future historians who parroted his perspective that,

Early on the morning of the 2d General Meade expected Lee to attack him on his right, and determined to attack Lee before the latter moved against him. At 9:30 A.M. he ordered Slocum, who commanded the Twelfth and Fifth corps, constituting the right wing of the Union army, to get ready to attack, and that he would give the signal as soon as the Sixth corps arrived within supporting distance. Slocum, whom General Sherman afterwards said was capable of commanding 80,000 men as he was, carefully examined the ground in his front, with its uneven surface, woods, hills, and streams, and reported to Meade adversely and advised against making the attack.²¹²

There is some truth to Slocum's reservations about the terrain on his front. For example, Benner's Hill was fifty feet lower as an artillery platform than the Union Cemetery Hill a mile away, and lines of sight for artillery were seriously circumscribed by the four mile belt of woods at Wolf Hill, preventing support fire to the east and southeast in the direction of Culp's Hill. Rock Creek Valley Ravine, running north to south, was filled with rocks, bogs, and mill ponds from two dams that powered a grist and saw mill. If Union defenders held defenses behind Rock Creek on boulder covered slopes of Culp's Hill, the enemy should be repulsed, particularly when the Confederates had limited sight lines for artillery support. In this sense, there was real merit to Slocum's early morning reservations about needing Benner's and Hospital Hills to protect the army's right.

However, if one digs deeper, the time sequences for Warren's visit and his discussions with Slocum to not attack on the right, along with Meade's receptivity to their findings, does not fit with what Slocum had already committed to do. That is, if

Warren visited the right about 10:00 AM, which is the timeframe given by Meade to the Committee on the Conduct of War and there is every reason to believe his recollection is correct, then there is a problem with Slocum and Warren having enough time to examine the ground together on the right, particularly when Slocum had already begun pulling Williams's 1st division, and the two divisions of 5th Corps back to Culp's Hill before 9:00 A.M. To this point Sykes informed Howard before 9:30 A.M., "Our line has been contracted. Our right rests on Rock Creek. I have massed my troops in rear of our right."²¹³ Though Meade's "practicability of attacking" order was sent at 9:30 A.M., and positive "strong and decisive attack" order distributed at 10:00 AM, Slocum noted only the former arriving at 10:30 AM, and of personally receiving it at 11:00 AM.²¹⁴

Contradictory to these two orders, Slocum had begun pulling both corps south of Culp's Hill at 8:00 AM, meaning that Warren's visit was nothing more than a rubber stamp of a decision made by Slocum two hours earlier. In fact, Geary's 2nd division, 12th Corps was digging in on the upper slopes of Culp's Hill by 10:00 AM and Williams' 1st division had settled in on the hill's lower slopes by then too. The visit by Warren looked more like a visit to hear and observe what Slocum had already decided, reinforced by background sounds of axes, picks, and shovels felling trees and moving earth and stone. As the New York Monuments Commission recorded in their memoriam to Henry Slocum, "General Slocum, after a careful examination of the ground, reported unfavorably on the plan, an opinion in which General Warren, the chief engineer of the army, concurred. The movement was abandoned."²¹⁵ The operative words here are "Warren concurred." If Warren investigated any part of the ground with Slocum during his pre-noon visit, time

constraints limited it to a couple panoramic views like the one from atop Culp's Hill where the 60th New York cleared trees for Union artillery. As Warren testified to a congressional subcommittee on March 9, 1864, "From the reconnaissance that I made I advised General Meade not to attack in that direction, because of the character of the ground. Soon afterwards I rode out with General Meade to examine the left of our line, where General Sickles was.... However when we got on the ground the enemy were just about attacking...."²¹⁶ His "Soon afterwards" visit to Sickles front, which occurred after 3:00 PM would further indicate his reconnoitering of the right occurred long after the 5th and 12th Corps pulled back from the Hanover Road to Powers or Culp's Hill on the Baltimore Pike. The "character of the ground" that Warren referred to as unfavorable for attack was Culp's Hill, which was something entirely different than Meade's original attack order.

This is vital to the discussion of water, rail, and road, because it was Slocum and not Meade, or anyone on his staff, who abandoned the plan for restoring the Rock Creek Line north of Gettysburg that shielded accesses to the Baltimore Pike, secured the Hanover-Gettysburg Railroad, and pinned Lee's trains against South Mountain where retreat was his only option. As we will see, Meade never let go of the idea. He returned to the plan of dislodging Lee from Benner's and Hospital Hills twice more over the next 32 hours.

4.4 Slocum Shuts Down Meade's Right Extension on July 2, 1863

As evidence the die was cast by Slocum, the temporary right wing commander wrote the commanding general that,

Your note of 9:30 a.m. is received. I have already made a better examination of the position in my front than I am able to now that we have taken up a new line. If it is true that the enemy are massing troops on our right, I do not think we could detach enough troops for an attack to insure success. I do not think the ground in my front, held by the enemy, possesses any peculiar advantages for him.²¹⁷

This memorandum is tantamount to an admission by Slocum that he personally determined the attack impracticable, and made the decision to not only fall back, but to inform the commanding general after the fact around 11:00 AM. First, he omitted the strong and decisive attack order in his response, choosing to ignore not only its execution, but its existence. Secondly, he employed the personal pronoun "I" four times in this brief three sentence memorandum, indicating that he alone made the decision to fall back from the Hanover Road line. Thirdly, he admitted to taking up a new line, different than the one Meade approved for readiness to attack. Finally, he decided not enough troops could be detached to insure success, which meant Wolf Hill and Benner's Hill geographically divided the 5th and 12th Corps from the principle battlefield east of these two hills. This is a situation we will return to more fully in the next segment. On his own, Slocum had traded an offensive staging area that enveloped the enemy's flank in exchange for an entrenched defensive line on Culp's Hill, devoid of offensive options. What Warren found was steadfast commitment to building fortifications on Culp's Hill.

The army's chief engineer must have experienced some frustration being briefed by Slocum on a decision they should have made together.

A closer examination of Slocum's rebuttal to an offensive reveals the following. First, Slocum said that he could not *detach* enough troops to execute the attack that Meade wanted to make. This is a loaded statement. Detach is a meaningful military word, because it implies the assault would be launched from an isolated position, or far from supporting distance to the rest of the army, which should come as a surprise to anyone who has thought about Meade's attack order before. However, the reality is that few people have seriously thought about it, because few historians have addressed the order. After all, Warren and Slocum advised against it, and that settled it. The attack is generally considered unfeasible because Slocum said it was, and because it is generally assumed that Meade intended for the 12th Corps to be on the defense at Culp's Hill all along. From there, it is hard to imagine parts of three corps charging down the side of that hill with its heavy timber, massive boulders, dammed up mill ponds, marshy surroundings and narrow defiles that led to the enemy at Benner's Hill.

4.5 Agincourt: Urban Legend and Meade's Attack Plan on His Right

Edwin Coddington largely perpetuated this version of the battle in his seminal work on Gettysburg that appeared in the 1960s. Its staying power resulted from the monumental work that went into it, and the difficulty in researching and writing such a comprehensive monograph in the era before personal computers and the internet. The latter two technologies led to an explosion of published works on Gettysburg in the

early 2000s that made Coddington just one of many good works. However, from the late 1960s to the early 1990s, it was an unrivaled staple of park rangers, licensed guides, and military instructors. Oddly enough, Coddington passed away before completing it, leaving his graduate students to complete the task, which is well enough, but there are sections in the book that raise questions about origin of analysis.

In any case, either Coddington, or one of his understudies offered some analysis of Meade's attack orders the morning of July 2, on the federal right. His book surmised that Meade ordered the assault to begin from Culp's Hill, implying it had to advance down through the heavy timber, rocky slopes, across the mill ponds, up the narrow Rock Creek Valley Ravine, and through the marshy fields into Confederate artillery at Benner's Hill. Coddington wrote,

About the middle of the morning he [Meade] directed Slocum and Warren to examine the area around Culp's Hill for the purpose of determining whether it was a desirable place from which to attack the enemy. Whether he would start his offense from there with the Fifth and Twelfth Corps would depend upon their report and the time of the arrival of the Sixth Corps, which he wanted near at hand to participate in the movement. If Slocum on the night of July 1 toyed with the idea of an attack from the Union right, he had second thoughts next day when he could more readily perceive the rugged nature of the terrain along his front. Both he and Warren late in the morning expressed their disapproval of an assault from this position.²¹⁸

In his interpretation, Warren wisely warned against this on behalf of Meade and that ended discussion of the offensive option there.

In reality, Coddington, or someone in his stead did not think through this one carefully leaving a generation of Civil War historians and enthusiasts astray. If the writer

had paused to consider frontages for the attack alone, it would become apparent that substantial parts of three Union corps could not fit in the Rock Creek Valley Ravine in front of Culp's Hill. The space is merely big enough for one brigade of about 1,500 soldiers to stand in battle formation, as evidenced by Johnson's Confederate advance later that day through the same ravine when Brigadier General George H. Steuart's Maryland, North Carolina, and Virginia brigade were pried or shoehorned into the glen to assault Culp's Hill. So, not only was the terrain rugged enough, and mill ponds deep enough to advise against an assault from Culp's Hill, the intervening ground leading up to Benner's Hill widened at best to a three brigade or mile front, thereby limiting fields of fire in a direct assault. If Coddington had carefully thought through the details of a strong and decisive attack on Meade's right, his scope for the attack would have widened beyond the immediate confines of Culp's Hill and the narrow Rock Creek Valley Ravine in front of it.

If one takes the language in Meade's orders seriously, he called for a decisive attack which meant an attack big enough to effectively end the Confederate threat in South Central Pennsylvania. To give authority to his order, he committed parts of three corps for the task, or the equivalent of over half the army considering losses suffered on July 1. Meade intended to drive Johnson's division from Benner's Hill and Hospital Hill altogether. If one works out frontages for the three lead divisions of such an attack under Williams, Barnes, and Ayres, their width spanned one-and-a-half miles, or the distance today between Benner's Hill cul de sac and north to Shealer Road. With 6th

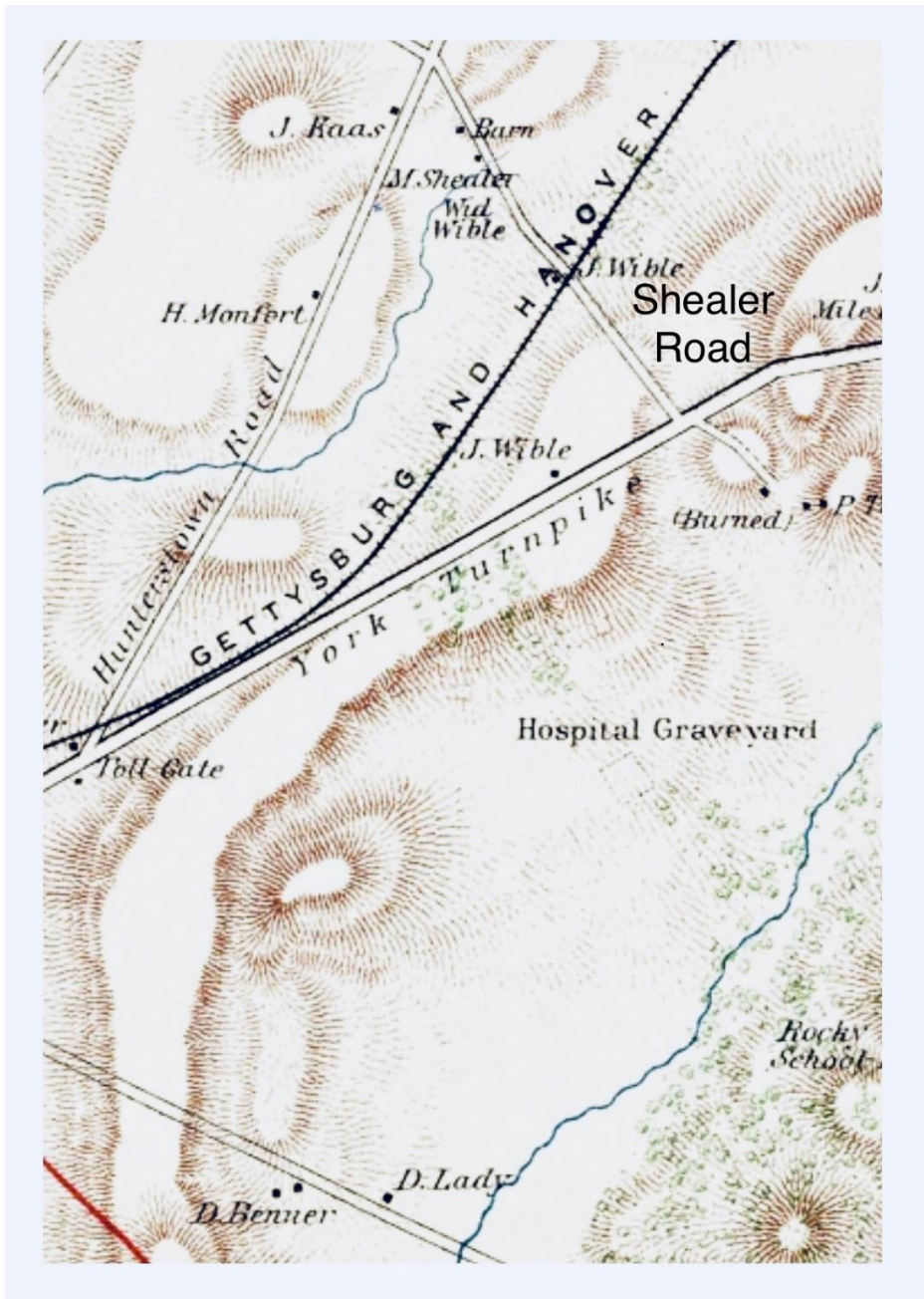


Fig. 22 – E.B. Cope and G.K Warren Map of the Battle-Field of Gettysburg, PA. July 1, 2, and 3, 1863. Frontages for a Decisive Attack, Involving Parts of Three Corps, Would Extend from D. Benner on the Left, to Shealer Road on the Right.

Corps support, federal infantry figured to outnumber Confederate defenders three-to-one at the point of attack, with no fewer than ninety artillery pieces available. Once in possession of the Benner's and Hospital Hill ridgeline, ninety artillery pieces, spaced twelve to sixteen yards apart, in front of their respective corps, would frown over Early's

Confederate division on the eastern edge of town. Because Ewell would lose his only artillery platform covering Johnson and Early, his entire corps would be compelled to leave positions east of Gettysburg, and return to Oak Ridge where the battle began for them. This outcome is much more than a logical scenario, it is what Ewell eventually did to begin his final retreat on July 4. Losing Benner's Hill and Hospital Hill guaranteed it. This is the decisive attack that Meade visualized for the morning of July 2, but it did not happen until the retreat began on July 4.

Coddington, or his final proof writers should have carefully considered that three fresh corps, or over half the army would make the assault; that the objective point of Benner's and Hospital Hills commanded the east side of Gettysburg rendering Johnson's and Early's Southern presence there untenable; that all Confederate gains on July 1, would be reversed pinning Lee to South Mountain; that the main water source, primary rail connection, and direct Baltimore Pike approach to Washington would all be secured with the attack. Though Coddington's problems of command perspective offered valuable insight into decision making throughout the three day battle, his analysis clearly fell short of examining the merit of Meade's order for a strong and decisive attack against the positions of Benner's and Hospital Hills. Because he could not see the merit in such an attack, he chose to ignore the peremptory order in the same manner that Slocum did. In Coddington's defense, Meade chose to exclude the July 1 actions of Williams' 1st division, 12th Corps in his initial report, as well as deemphasize Slocum's July 2 withdrawal to Culp's Hill. Even so, Coddington's book needed a water, rail, and road paradigm shift, along with a fresh perspective on that part of the battlefield, for

Meade's order to make sense. He needed to visualize how Meade's decisive attack order related to Haupt's work behind the scenes repairing rail links to Hanover, York, Carlisle, Harrisburg, Baltimore, and Washington, D.C. He needed to factor in how an attack placed Lee permanently on the defensive in front of Gettysburg, of how that secured federal supply trains on the Baltimore Pike, and of how that aligned Meade's army offensively along Rock Creek four miles north to Hunterstown.

This first step to a paradigm shift requires recognition that parts of three corps demanded a much wider staging area than Rock Creek Valley Ravine. If the two lead brigades of Williams' 1st division, buttressed by the six available brigades of 5th Corps, attempted to advance straight up the ravine to Benner's and Hospital Hills, the immediate difficulty would be limited frontage. From the federal perspective that morning, advancing through such limited open space required federal supports be funneled through a choke point defined by the creek, its high banks, mill ponds, and soft marshy ground, with the rear columns singularly stacked for two miles to the rear. The absence of a concealed staging area for reserves in Rock Creek Valley Ravine meant the additional twelve brigades of 5th and 6th Corps, still marching to the scene, had to reform two miles to the rear in the fields south of Powers Hill.

There is simply not enough space for all the brigades participating in a decisive attack to remain ready and in supporting distance, within the singular space of Rock Creek Valley Ravine. The staging area there is not big enough for twenty brigades to deploy, reinforce at correct supporting distances, maintain proper spacing, provide for flank support, and increase lines of sight for maximum fields of fire. Had such a plan

commenced, within a space too narrow for flank support, too wet for normal maneuvers, and too steep for quick ascent, the outcome should have resembled the French disaster at Agincourt in 1415. The ravine would simply have funneled the narrow three brigade front uphill through muck and mire into direct and indirect fields of crossfire from Johnson's Confederate division. Conceding Wolf Hill to Johnson invited concealed fire from the east even as Major Joseph W. Latimer's artillery and Johnson's infantry fired down on them from the north and west. To avoid the funnel, Slocum needed to spread the attack well east of Wolf Hill, not only for flank support but to increase fields of fire another two miles. For the entire force to find fields of fire, the brigades needed to maneuver beyond the heavy timber and rocky fastness of Wolf Hill to Brinkerhoff Ridge. In doing so, three lead brigades and supports still had room to face north toward Johnson from the ravine, while the eventual sixteen brigades could stretch out to the Hanover Road axis to box him in at right angles. This two wing effort not only provided enough room to maneuver and frontage for the three corps involved, but it divided Johnson's attention in two directions against a holding or fixing force in the ravine, and a flanking force from Brinkerhoff Ridge. If Johnson overcommitted in either direction, he could be taken from the other direction. Another reason for needing to put forth more than a three brigade front is that four brigades under Johnson awaited from an entrenched position along Lady Run, altogether possessing a two-to-one advantage. Frontal assaults require at least a two-to-one advantage, and should strive for three-to-one ratios. Assaulting through the Rock Creek Valley Ravine with a

three brigade front and reserves stacked in columns for more than a mile constituted a formula for disaster. There is little wonder that Warren would turn down such an idea.

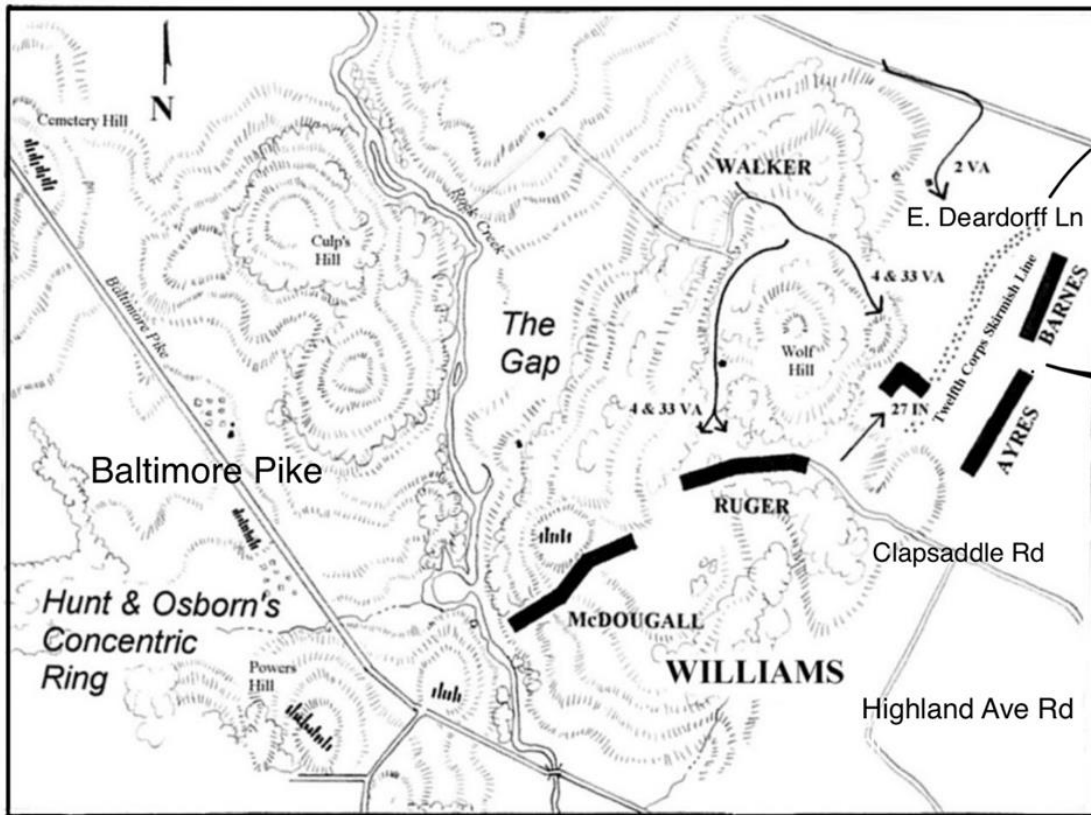


Fig. 23 - The Gap, Hunt & Osborn's Concentric Ring, by John Heiser. Situation between 6-8 AM. Three Divisions from Two Corps, in a State of Readiness, in the Staging Area for Decisive Attack.

However, that was not the plan for the attack and Warren knew it, as did others who were ordered to dig trenches, build log fortifications, and fell trees toward the enemy with sharpened branches at 10:00 AM. Unfortunately, no historian has thought through it well enough to realize how silly the notion is, and of why Coddington has done the last generation a disservice in insinuating an assault from Culp's Hill without explaining Meade's plan in a logical way. One look at the crag and timber covered slopes of Culp's Hill with waist deep mill ponds at its base explains why Meade's attack order warrants little consideration in the historiography. Warren had no allegiance to the

modern, Coddington implied version of attack, but he could read Slocum well enough to know the latter had cast his lot with an entrenched defensive stance on Culp's Hill, and that to keep harmony in the army, he had to second the decision. He knew that a state of readiness required the attack assemble east of Wolf Hill, at the confluence of E. Deardorff Farm lane, Highland Avenue Road and Hanover Road, where the 12th and 5th Corps originally united for the attack between 6:00 and 8:00 AM. Not only did multiple roads exist there, but Wolf Hill provided the cover and concealment for element of surprise. Moreover, Wolf Hill gave federal attackers a flanking position to take Johnson in reverse, as well as to protect the same from happening to them. One of the fallacies in believing the federal assault would remain in the Rock Creek Valley Ravine is the Confederates did not confine themselves there, Johnson having sent Walker's Virginia brigade to Meade's staging area east of Wolf Hill in search of the federal right flank. Coddington never really thought it through logically, in an environmental context, and in keeping with overall strategy.

4.6 Clues to the Actual Plan

Another loaded word that jumps out in the decisive attack order is the military term *detach*. Detach in its fullest sense implies operating in isolation from the rest of the army, far from easy supporting distance. It is dangerous to detach a force, because if there is trouble, support forces are far from the scene of emergency. When generals design a deliberate attack plan, it is safer to align one's army in close proximity side-by-side to avoid the detached condition. A general is never more nervous than when some portion of his army is detached, because they can be overwhelmed before help arrives.

Lee's chest pains suffered at Chancellorsville, for instance, related to his wings remaining separated by day's end on May 2, 1863. Stonewall's wounding by itself did not send the general into a critical condition, it was the fact that he could not bring together his wings before sunset. He understood the federals operated from a central position, and could overwhelm his wings the next morning if Hooker so chose.

So what is the upside to detaching a third, or half of one's army for assault? The answer is that separation requires the defender to support in two directions, which raises the possibility of the defender committing reserves disproportionately in the wrong direction. The other danger is of being fired upon from two directions, of crossfire, of maximum fire power, of an opponent gaining critical mass at a point of convergence. So dividing one's force to attack from two directions is considerably more risky than fighting on the same line, but it is substantially more rewarding. If the defender overcommits in the wrong direction, or if he does not ration out his troops quickly to threatened points, then he will pay dearly. Through disguise, the attacker can make decisions on this matter cloudy and confusing, as in feints, demonstrations, deception and decoy. These are options not available when fighting on the same line, where assault troops and supports are tightly fitted side-by-side.

In Slocum's case, elements of 12th, 5th, and eventually 6th Corps would operate in seclusion east of the four mile north-south series of wooded elevations known as Wolf Hill, a good mile from the nearest support on Culp's Hill. Rock Creek's mill ponds further isolated the ordered attack by adding an additional geographic break between the Wolf Farm staging area and Geary's 2nd division, on Culp's Hill after 5:00 AM. When Slocum

informed Meade that “If it is true that the enemy are massing troops on our right, I do not think we could detach enough troops for an attack to insure success,” he was not only referring to the 6th Corps not yet in supporting distance, but detachment required a force big enough to act alone without help from the remainder to the army.²¹⁹ Morse documented troubles for Williams’ 1st division beyond Wolf Hill on July 1, stating, “Our whole column diverged to the right and marched obliquely toward the front. As we marched on, we came into broken country with considerable timber, which shut off all view of the movements of other parts of the army or the enemy; but all shared the feeling that the latter could not be far away.”²²⁰ The point here is their detached condition east of Wolf Hill placed them on an island geographically, not easily supported by the rest of the army. This is a dangerous arrangement on its face, because as Jomini warned, “Armies have been destroyed for no other reason than that they were not kept together.”²²¹ Making matters worse for Slocum was that his detached force represented not only the tactical flank but the operational one that included Westminster twenty-four miles south. In other words, Slocum was responsible for filling a twenty-four mile vacuum between the tactical right at Culp’s Hill and the army’s operational center at Westminster. A failed attack on that quarter opened the floodgates for Lee to threaten Westminster and beyond. It did not help that Brigadier General David M. Gregg’s division of Union cavalry had to guide lead elements of Brigadier General Samuel W. Crawford’s division of the 5th Corps onto the field, and hold up that corps’ rear on the Hanover Road. Crawford had left Frederick, Maryland on June 29, marching 58 miles in three days, but still trailed Ayres and Barnes’ divisions of

5th Corps by several hours, making them unavailable for the decisive attack, and keeping Gregg's cavalry from supporting one. In any case, this is what Slocum meant about not being able to detach enough troops to hold his own across twenty-four miles of operational space. In Slocum's estimation, more reserves were needed east of Wolf Hill to launch a decisive attack and cover the army's operational flank and rear.

The final deeply revealing language in Slocum's reply to Meade's 9:30 AM practicability of attack order was, "now that we have taken up a new line."²²² Specifically he stated to Meade, "Your note of 9:30 a.m. is received. I have already made a better examination of the position in my front than I am able to now that we have taken up a new line."²²³ Coddington's work missed this one, because neither he nor the graduate students who completed his work identified the old, original line, leaving careful readers to wonder the difference in a new line. The old line, of course, was the staging area around the Wolf Farm, near its confluence with E. Deardorff Farm lane, and modern day Highland Avenue Road where Williams' 1st division, 12th Corps advanced to Benner's and Hospital Hills on July 1, and ultimately where they fell back to and waited for the 5th Corps to extend their line on July 2. The new line then was the defensive position at Culp's Hill firmly established by 10:00 AM. The other deeply meaningful words in this excerpt were "I have already," meaning Slocum discarded the old line on his own without consulting the commanding general. This is reaffirmed in Slocum's official report filed after the battle, where he consistently justified direction and placement of 5th Corps divisions "by direction of the commanding general."²²⁴ The only official language from Slocum that did not credit Meade with a corps level decision

on the right that morning was “I have already...taken up a new line.” This reply to the 9:30 A.M. practicability attack order did not once link the commanding general to decisions made, but instead announced a change of plans apart from his input. Interestingly, Warren’s name is not mentioned in Slocum’s official response to Meade, making one wonder if the chief engineer had any real input in the decision to abandon the offense. Because the federal army prevailed in the end, and Slocum left the army with his 12th Corps in September 1863, the matter of Slocum cancelling Meade’s strong and decisive attack order faded to postscript in the reports, and subplot in the historiography.

However, the disagreement is extraordinary in that Slocum robbed Meade of pursuing offense on his right, meaning he took-away one half the options at Meade’s disposal in battle, and he did it without involving Meade in the decision. The first grievance here is that he did it on his own, almost daring the commanding general to question his time-in-grade seniority over Meade, reminding him subtly that he could have secured the distinction of commanding general if so inclined. Meade would have remembered that Slocum helped bring down Hooker with criticism to Lincoln’s chief of staff Major General Henry W. Halleck after Chancellorsville and needed little prompting to do the same again. Slocum’s withdrawal from the staging area then communicated he would decide, not unlike Reynolds deciding to barricade the streets on July 1, or Sickles advancing to the Peach Orchard on July 2. This is not to say that Meade rejected these decisions, it is just to say that his corps commanders took control of implementing them. What reconciled conflict between Meade and Slocum in the end was Union

victory; Slocum leaving the army, and Meade's willingness to acknowledge Slocum's continued role as right wing commander; Slocum's elevation of Williams' to temporary corps command; and Williams' promotion of Brigadier General Thomas H. Ruger to division command. Meade did this by writing an addendum to his official report, featuring the contributions of Williams' 1st division under Ruger, and in so doing acknowledged Williams as corps commander. This is easily surmised because Meade did not read reports below the corps level in preparing his own final report, so that his final inclusion of Ruger's actions affirmed Williams' temporary elevation. In reverse, it is possible that Meade originally excluded the 1st division's contributions to repay Slocum for undoing his offensive plan. Excluding those details would serve the simultaneous purpose of striking an abandoned offensive option from the record, while also silently admonishing Slocum for letting the option die. Adding details from Ruger's report went far to settling this issue, probably just in time for congressional hearings where Slocum did not complain about Meade.

The second disadvantage in deciding to fall back to Culp's Hill, is that Slocum empowered and emboldened his enemy through limiting Meade's options. That is, generals try to build options on the battlefield so they are prepared for any contingency. Meade had both offensive and defensive contingencies ready for changing circumstances. Along with this, it is vital that an army commander maintain an element of surprise, and to do this he must keep every option open, even if unused. As Jomini states, "A general who stands motionless to receive his enemy, keeping strictly on the defensive, may fight ever so bravely, but he must give way when properly attacked. It is

not so, however, with a general who indeed waits to receive his enemy, but with the determination to fall upon him offensively at the proper moment....”²²⁵ The point is when a general falls back strictly to a defensive position, he eliminates offense, and his opponent no longer worries about defending. If the attacker has to contend with the possibility of being attacked, he will leave reserves in the rear to guard key rail, water, wheeled vehicles, flanks, and escape routes. He will give careful thought to not overcommitting on his front, so that he has ample coverage elsewhere in the event of an emergency. The opposite is true though if he knows his opponent will not threaten him, if his opponent is predictably committed to the defense. In such instances the attacker brings all reserves to the front to advance without fear of consequences. His actions are emboldened, and his morale increases immeasurably.

In short, the trouble with Slocum committing Meade’s right flank to defending Culp’s Hill was that it made defense an all or nothing proposition, which is why Slocum permitted his corps to build fortifications, field works, breastworks, and rifle pits. Slocum was taking up a position with severely limited fields of fire for infantry and artillery due to heavy timber and primitive logger trail access, and a position that gave his enemy hundreds of trees and rocks to hide behind and snipe away from. His enemy had several low defile accesses under his line of sight and numerous blind angles to approach 12th Corps defensive positions, which is always a danger in defending a wooded hill, but win or lose, that is the choice that Slocum relegated the army. Fortunately for him, the position held making negative consequences less relevant, but

one can only wonder how many lives could have been saved all along the line had Meade pinned Lee to South Mountain on July 2.

4.7 Paris and the Dilemma of Waiting

How could this happen? How might Meade save lives and how did Slocum lose them by giving-up on the offensive option? The Comte de Paris elaborated on this in his seminal work *Battle of Gettysburg* excerpted in 1886 from a seven volume history of the Civil War, originally published in French between 1874 and 1890. The foreign, wartime observer Paris missed the Gettysburg Campaign, but visited the battlefield on October 14, 1890 appearing as a central figure at several monument dedications, and he toured the grounds with Major Generals John Newton, Doubleday, Howard, Horatio G. Wright, Sickles, Slocum, and Gregg. His excerpted book on Gettysburg was first published two years before the battle's silver anniversary, a period of renaissance in Civil War memory that prompted the first serious scholarship on the battle. In promoting the release of Paris's upcoming volume on Gettysburg, battlefield preservationist Colonel William Brooke-Rawle stated,

The 'History of the Civil War in America,' by the Comte de Paris, has been written to the end of the year 1862, with a degree of ability which is remarkable. In his search for the truth concerning the campaign of Gettysburg, for his forthcoming volume, that author has loosened an avalanche of newspaper and manuscript communications, especially from 'our friends on the other side,' and he may well hesitate before attempting to reconcile the many disputed questions which have arisen.²²⁶

His analysis of Gettysburg clearly shows that he understood battlefield tactics and strategy, and his regular interaction with battle participants evidences insider

information not found elsewhere. Union veterans heralded his Gettysburg volume as the best one of their era.

The one criticism of the book now is that Paris did not cite sources, often elaborating on a topic with the authority of an eye witness or participant, yet frequently unclear on who provided him the information. One might consider that he guarded information given in confidence and protected identities to secure stories otherwise unobtainable. It should also be noted that history books in the 1880s followed less formal citation procedures, frequently inserting symbols at the bottom of a page, or assuring their informant to be trustworthy. Altogether, the format of his book reflects an era marked by evolving standards in the discipline of history. It is best to view his book as a primary source because he interacted with veterans, during the memorial period, and provided them a voice three years before publication of the *Official Records*. His work fueled numerous participant articles, memoirs, and books that followed over the next twenty years. It is no small feat that AOP veterans preferred his study over others.

The Count offered intriguing insight on the dilemma that Meade found himself in the morning of July 2, especially regarding the situation on the federal right flank. Paris pointed out that Meade felt the urgency to make an attack on his right at morning, mainly because Lee had not revealed his intentions. Paris explained that as the morning wore on without an angry shot fired from the enemy, military protocol required that Meade consider the reasons why and act accordingly. As Paris explained, "The enemy had not, during these first five important hours of the day, fired a single cannon-shot to

annoy the Federals or to interrupt their preparations. Astonished at this inexplicable silence on the part of an adversary ordinarily so active, Meade concluded that Lee had not finished his concentration, and had only the forces engaged the previous day about him."²²⁷ In other words, if Lee uncharacteristically permitted the morning to pass without attacking, then the burden fell on Meade to consider why, with the first thought being Lee must not be ready. That usually meant all of Lee's army was not yet up, which placed the onus on Meade to attack. That was the game. If one side foregoes the initiative, then it is imperative the other side seizes it.²²⁸

Therefore, Meade grew concerned the morning of July 2 with the day ticking away, wondering what Lee intended to do. It was not like Lee to spend the better part of the day idle knowing his window of opportunity began at dawn at 4:15 AM and closed at sundown, 7:15 PM. As it turned out, Lee did not begin the main infantry attack with Longstreet until 4:00 PM. Up to that point, Meade's signal posts on Cemetery Hill, Powers Hill, and Little Round Top kept constant surveillance of Lee's position looking for any indicator of attack, but found nothing the better part of the day. Union skirmishers also aided intelligence by bringing in captives from middle ground helping high command piece together location of Confederate brigades, divisions and corps. Through process of elimination, Meade's staff had determined Longstreet's Corps was the only one unaccounted for the morning of July 2. This was the case because the latter remained concealed a little over three miles west of Gettysburg behind Herr Ridge on Marsh Creek. Longstreet's corps was placed there for water supply and to be out of sight lines of Union signal stations, or contact with federal skirmishers. Longstreet's

absence and Lee's willingness to allow the daylight hours to slip away, demanded Meade attack. This was how Paris described Meade's dilemma.

The solution, as Paris saw it, was Meade's decisive attack order on his right. Paris stated,

He had once conceived the idea of taking the offensive in his turn, and of anticipating by attacking the positions of Ewell on Benner's Hill with the Twelfth and Fifth corps. This bold project was justified by appearances, and the point of attack well chosen: the Confederate Second corps was, in fact, the easiest of approach, the open country extending between the rest of the Southern army and the Federal positions being an obstacle [limited cover and numerous stone fences] in the way of such an attack, the importance of which Lee was soon to experience in turn.²²⁹

He explained that maneuvering of the Union 12th and 5th Corps into an attack would have forced Lieutenant General Ambrose P. Hill to support Ewell, presumably with Major General Richard H. Anderson's division, or with help from General Longstreet, if for no other reason than to prevent a federal turning maneuver designed to reverse Confederate gains from July 1, and threaten Lee's line of communications along the Cashtown Road. Anderson's relocation from the Confederate center at Seminary Ridge would undo Longstreet's main attack designed to proceed from the far Confederate right toward Anderson's front along the Emmitsburg Road. The Count's main point was that Meade's intended assault toward Benner's Hill guaranteed him the initiative, and in all likelihood dictated a different fight in a different location. Without Stuart's cavalry covering Ewell's left, Lee could not afford to leave the latter apart from additional infantry division support. All of the probabilities came to a sudden halt with Slocum's belated note, "I," not the commanding general, "have taken up a new line."

4.8 Preliminary Skirmishing Toward Reclaiming Rock Creek North

The skirmishing in the early morning hours between Ruger's Union and Walker's Confederate brigades is important because it signaled the arrival of Sykes' 5th Corps and the developing stages of Meade's decisive attack order. Between 6 A.M. and 8 A.M.,

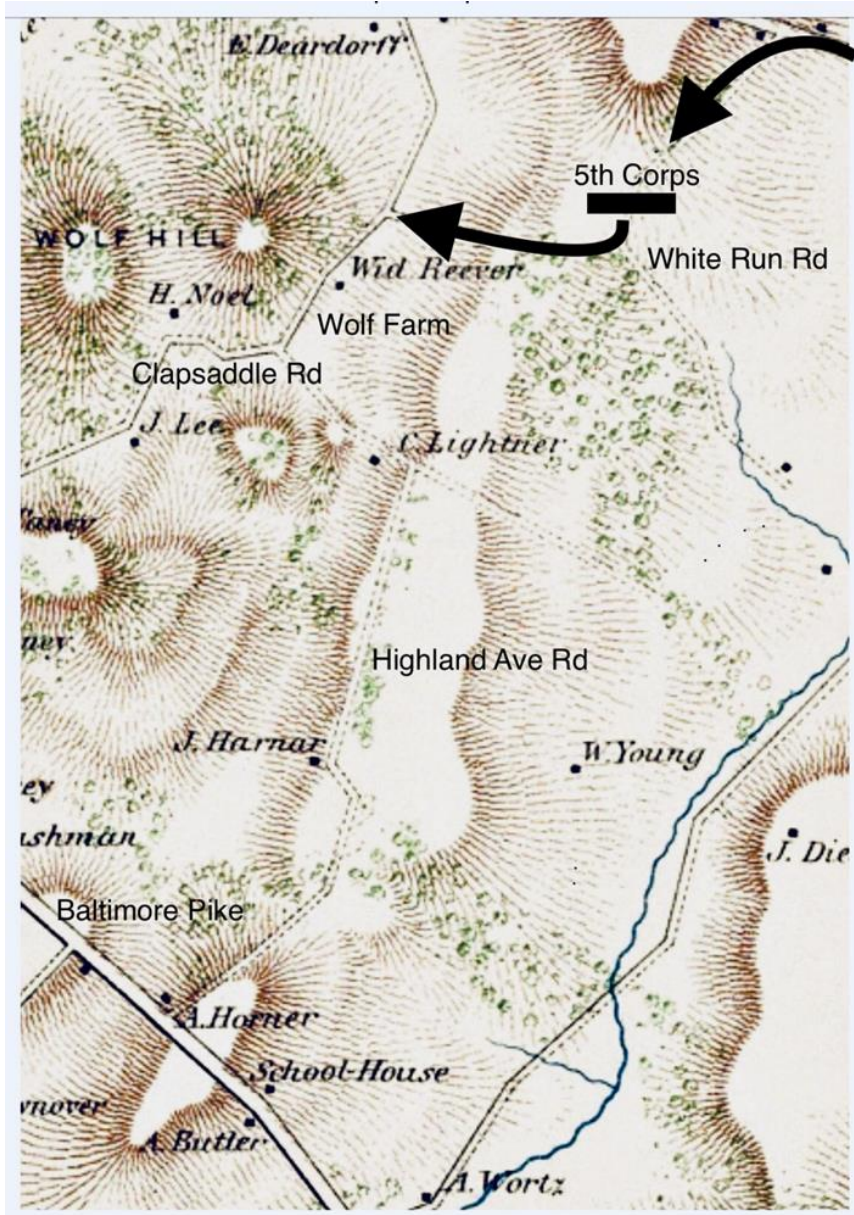


Fig. 24 - E.B. Cope and G.K Warren Map of the Battle-Field of Gettysburg, PA. July 1, 2, and 3, 1863. Top to bottom, White Run Road, Wolf Farm, Clapsaddle Rd, Highland Ave Rd, and Baltimore Pike Marked 5th & 12th Corps Deployments, and Maneuvers on July 2.

while the attack was still forming east of Wolf Hill, Williams advanced part of the 27th Indiana to make contact with the enemy enough to keep channels open for the 5th Corps to join at right angles, via E. Deardorff lane and its parallel farm lane immediately south connecting White Run Road with the Wolf Farm. Brigadier General James Barnes' 1st Division to the north and Brigadier General Romeyn B. Ayres' 2nd Division to the south, guided on these two lanes respectively to link with the advanced position of Colonel Silas Colgrove's 27th Indiana at Wolf Farm. Colonel Sidney Burbank's 2nd Brigade, Ayres' Division threw forward skirmishes from the 2nd and 10th U.S. Regulars to help the 27th Indiana skirmishes screen the 5th Corps' arrival. Burbank reported,

The brigade was formed in line of battle, its left resting on the right of the Twelfth Army Corps. Skirmishers were deployed in front, and the line advanced slowly through a thick woods, behind which it had been deployed. The line halted on the edge of the woods, and remained in that position for an hour or more, the skirmishers feeling for the enemy in front. At the end of this time, I received orders to withdraw the brigade and to establish it in a new position somewhat to the rear.²³⁰

Major Arthur T. Lee, 2nd U.S. Infantry reported, "Twenty men from the regiment were thrown forward as skirmishers in a body of woods, beyond which and to the right could be seen the enemy's pickets. After a skirmish of nearly two hours, during which there was considerable firing and some casualties, the line was marched by a flank movement to the left and rear some 2 miles, where the command rested until about 5 p.m."²³¹

W.H. Sanderson, 2nd U.S. Infantry, who was with Major Lee remembered that,

After advancing about half a mile over broken ground, we met an Orderly, with orders for us to advance and join onto the right of the Twelfth Corps skirmishers...over an abrupt hill, then up another not quite so steep, upon which were two wheatfields, separated by a snake fence. As we attained the summit of

the hill we discovered at the foot of the incline at our front an orchard, adjoining which was a red barn, which was separated from the wheatfields by a stone fence running parallel to our line. As yet we had not met any opposing skirmish-line, but at this juncture there arose as if out of the ground a heavy line of skirmishers with butternut hats, who opened on us with a shower of leaden pills. We sent back an exchange as best we could.²³²

Federal artillery also advanced to support the skirmishes. Battery commander Captain Frank C. Gibbs, 1st Ohio Light Artillery reported, "Marching nearly all night of July 1, we went into position about 8 a.m. on the morning of the 2d, to the right of the Baltimore pike, in a field of wheat, being thrown to the front of infantry support about 100 yards and in rear of our line of skirmishers some 60 yards. We remained under skirmish fire one hour, the infantry in our rear meeting with some casualties. From thence we took up our line of march, crossing the Baltimore pike, and going into park on the left of it."²³³

Walker's Virginia brigade boxed them in with Colonel John Q.A. Nadenbousch's 2nd Virginia sharpshooting south from concealment of the E. Deardorff Farm, while marksman from the 5th, 4th, and 33rd Virginia infantries sniped easterly from the shadows of thick timber at Wolf Hill. Walker's Virginians had to do this in absence of at least one cavalry brigade on Ewell's left flank to prevent blindside access to Benner's and Hospital Hills. Several small companies of the 35th Virginia Battalion of cavalry conducted probes into the Rock Creek Valley Ravine, on the west side of Wolf Hill, to the base of Culp's Hill, while others probed the eastern side along the Hanover Road where the 5th Corps marched in. Together Walker and several small companies of White's Comanches tried to guard the Confederate army's left flank. Extra precaution was

exercised by Johnson when Walker's brigade refused his line north of the Hanover Road at right angles with the rest of division to face Wolf Hill. Sometime after nightfall on July 2, the refused flank acted as a crochet to pivot several hundred skirmishers right from an easterly direction to a southerly one rotating clockwise below the Hanover Road. Skirmish lines from Colonel John Q.A. Nadenbousch's 2nd Virginia, Major William Terry's 4th Virginia, Colonel J.H.S. Funk's 5th Virginia, and Captain J.B. Golladay's 33rd Virginia permeated the woods, rocks, roads, and fields in and around Wolf Hill. Elements from all of Walker's regiments except perhaps Lieutenant Colonel D.M. Shriver's 27th Virginia participated in the probing mission. Once completed, the anchor of their left and that of the Army of Northern Virginia had fanned out to the E. Deardorff house and barn. Colonel Nadenbousch's 2nd Virginia held that hitching post, and the only southern cavalry to speak of was one or two squadrons of the 35th Battalion of Virginia Cavalry roaming the area, probing for federal strength along the Hanover Road.²³⁴

Any thoughts Meade may have had about reopening his decisive attack on the federal right during the early afternoon of July 2 were set-back with the news the 6th Corps would not begin to reach the field until 2:00 PM, arriving in accordion fashion up until 8:00 PM, with stragglers trickling in after midnight. Meade, who had hoped to see the 6th Corp commander, Major General John Sedgwick, in the wee hours of the morning, and then again later, finally turned over the right flank to Chief of Staff Daniel Butterfield at noon, and told him to communicate with Sedgwick, and gage his progress, while Meade went over to the left to examine potential for offense there. The 6th Corps had, at some point, turned west away from Baltimore Pike on a crossroad to

Taneytown, Maryland before doubling back to the former. Either the 6th Corps was marching on a by-road to Taneytown through miscommunication, or Meade ordered them to move west to the Taneytown Road for an offensive option on his left. The back and forth marching just twelve miles south of the battlefield cost them valuable time. In either case, Meade looked to his left at noon.

Chapter 5: Day 2, Afternoon – Union Offensive Plans Shift to Left of Rock Creek Line

5.1 Meade Shifts Attack Plan to His Left

The integrity of the Rock Creek line depended as much on the left flank being secure as the right. Rock Creek intersected with the Taneytown Road immediately south of the Round Tops, even as its veins flowed from the west of these iconic hills through Plum Run Gorge and nearby environs of Devils Den and the Wheatfield. Artillery guns posted on Little Round Top, Devils Den, the Wheatfield, and Peach Orchard all drew their sponging water from Rock Creek, or its Plum Run tributary on that end of the battlefield. Brigadier General John W. Geary's division of the 12th Corps, and Major General David B. Birney's division of the 3rd Corps encamped on Plum Run the evening of July 1, while Brigadier General Andrew A. Humphrey's division joined them early on July 2. Brigadier General John Buford's cavalry division bivouacked on Plum Run the morning of July 2, before Brigadier General Judson Kilpatrick's cavalry division refreshed their horses on Rock Creek proper the morning of July 3. The final and most important water consideration on the left concerns Rock Creek's confluence with Marsh Creek three miles south of the Round Tops. Marsh Creek represented Reynolds' original defensive position along the Monocacy's' headwaters on June 30, as well as the avenue of approach to the battlefield for the 1st, 11th, and 3rd Corps, and the axis of advance for Buford's cavalry and federal artillery participating in the first day's battle. The joining of these two primary water sources on that part of the battlefield assured conflict of

varying degrees for three days. It was indeed tactically smart for Meade to shift his attentions to the left for the same reasons he would want to attack on the right. That is, when the enemy overcommits to the center, the central apex becomes the pivot for one or both wings to envelop, not unlike wrapping a bow around a package, militarily speaking it is an envelopment or double envelopment. Jomini relates the ideal example of this from Cannae stating, "The order concave in the center has found advocates since the day when Hannibal by its use gained the battle of Cannae. This order may indeed be very good when the progress of the battle itself gives rise to it; that is, when the enemy attacks the center, this [position] retires before him, and he suffers himself to be enveloped by the wings."²³⁵ If Meade still had the onus to attack, during Lee's idleness, then he had to explore offensive options on the left flank, if not the right. So, Meade ventured over to the left, between 12 PM and 1:30 PM, to investigate Sickles' 3rd Corps front, and according to several sources he entertained the thought of an attack on his left with the 3rd and 5th corps.²³⁶ Meade stated in his March 11, 1864 congressional testimony, "...the 5th Corps was ordered over to the left...and I went to the left with the view of ascertaining as far as I could the position of my own troops and the troops of the enemy, and with the intention of ordering an attack from there...."²³⁷ In his April 4, 1864 testimony, Meade discussed his shift from making an attack on his right to exploring one on the left. However, he did not mention that Slocum undermined his hopes for the former. He simply stated, "I therefore abandoned that [right flank] attack, and waited for the 6th corps to arrive, intending to move the 5th corps over to the left, as I did, and then, if the enemy did not attack me, to make an attack myself from the left."²³⁸

The historiography has little to say about Meade's offensive plan on the army left, but the official reports bear out that he explored the possibilities. Major General George Sykes 5th Corps report stated that while his corps was situated on Rock Creek, "I was directed to support the Third Corps, General Sickles commanding, with a brigade, should it be required."²³⁹ This precautionary order of "should it be required" came before Lee revealed his main attack intentions there at 3:30 PM. Brigadier General A.A. Humphreys, who commanded a division on Sickles' front, and who later became Meade's Chief of Staff seconded this notion of preliminary support reporting, "I was at the same time authorized to draw support, should I need it, from General Caldwell's division, Second Corps, and by General Hunt, chief of artillery, was authorized to draw from the Artillery Reserve should I require more."²⁴⁰ The operative words here are "should I need it," because the 2nd Corps came into support behind Humphreys at 10:30 AM, five hours before Lee revealed his main attack on Meade's left. Moreover, the committee hearings testimony reinforced that Meade looked at offensive options on his left, namely Chief of Artillery Henry Hunt's testimony that revealed Meade sent him to investigate Sickles position in the early afternoon of July 2.

It is well documented that Sickles had issues with the location of his assigned station, which boiled over around noon in conversation with Meade at army headquarters. The commanding general tired of the subject to the point that he ordered Sickles to find and occupy Geary's 2nd division position from the evening before, and not bother him any longer. Concerned that his exchange with Sickles had ended without resolution, Meade assigned Hunt the duty of going over to survey the position

with the 3rd Corps general. Hunt rode out to the advanced position of the Peach Orchard with Sickles and agreed it to be good ground for artillery and that it offered better offensive options than did the defensive one Meade had assigned on the low ground in front of the Round Tops. His mixed evaluation of the Peach Orchard left open possibilities for Meade when he stated,

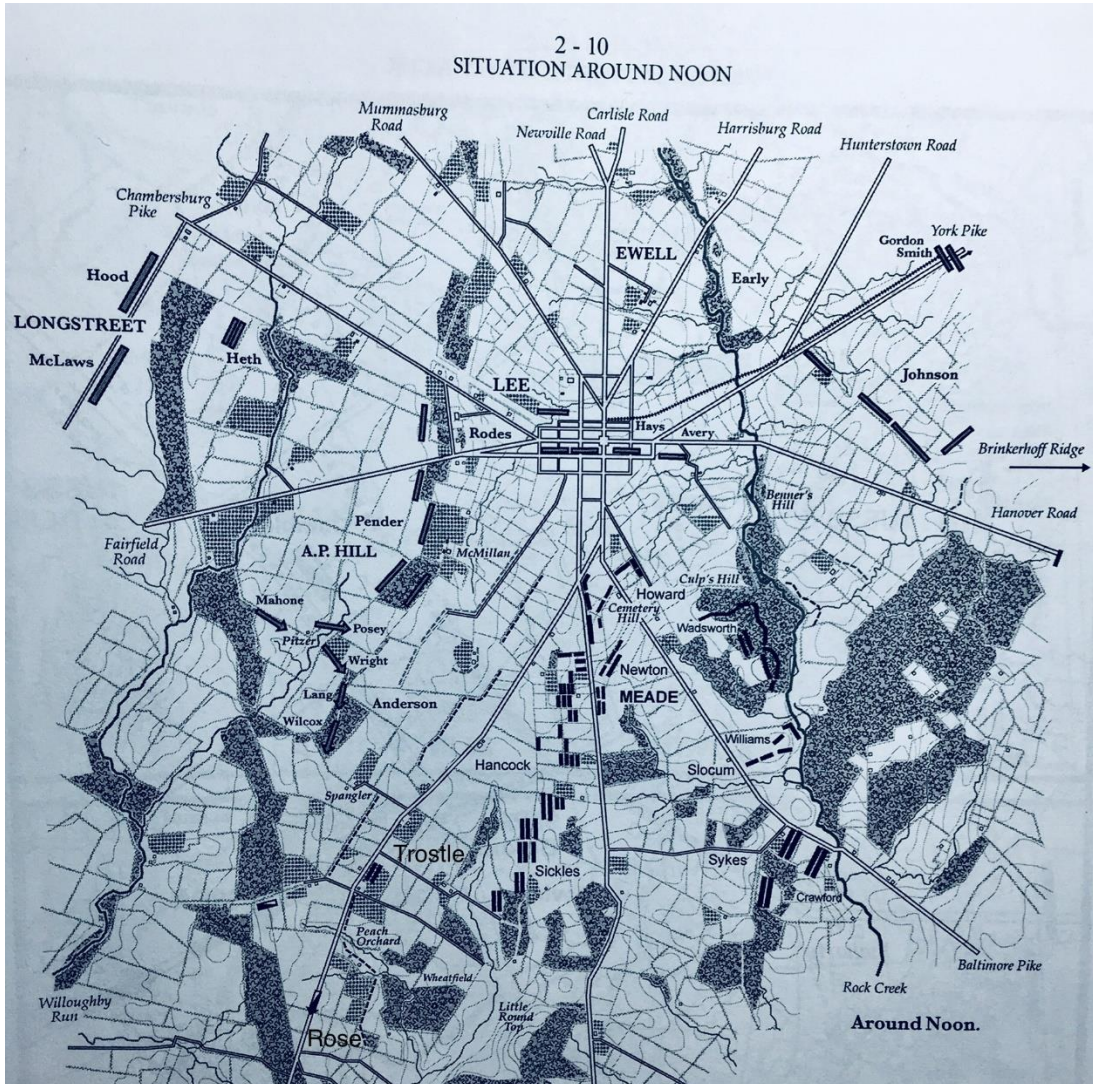


Fig. 25 – 2-10 – Situation Around Noon by Philip Laino. Major General Richard H. Anderson Enters Pitzer's "strip of woods" on the Left. Sickles' Headquartered at Trostle. His Left Flank Rested Near the Rose Farm Around Noon.

I moved down that [Emmitsburg] road; it was a very good line to occupy, provided it was necessary to watch our left flank and prevent a movement by the enemy, or from which to make an offensive demonstration; but one which

exposed both its own flank and the flank of the 2d corps, which would have to move forward to join it, to a cross-fire, if the enemy should take position in the strip of woods of which I have spoken.²⁴¹

Hunt left little doubt the Emmitsburg Road Ridge offered potential with his statement that, "it was a very good line to occupy." His meaning here is based on an artilleryist's evaluation of what constituted good ground. A suitable artillery platform had gradual slopes for easy horse drawn artillery access and easy escape routes. The military crest needed to be devoid of heavy timber, rocks and other obstacles that prevented proper spacing between guns and clear lines of fire. A good artillery position was low enough that attackers did not find shelter under the guns at close range as with Little Round Top. The Emmitsburg Road Ridge provided all of the above, whereas Little Round Top and the adjacent Munshower Knoll (rocky outcrop immediately north of Little Round Top) were deficient in each of these areas.

The final sentence of Hunt's evaluation regarding a "strip of woods" is particularly revealing because it references a point on the Union line opposite the 3rd Corps position that Hunt warned Sickles about the enemy maintaining. Hunt's warnings coincided with Sickles' decision to investigate Pitzer Woods with elements of the U.S. Sharpshooters and 3rd Maine, who skirmished with portions of Wilcox's Alabama Brigade. Hunt's concern for Sickles' Peach Orchard position was that it could be cross-fired from Pitzer Woods where Seminary and Warfield Ridges come together. Establishing a 3rd Corps artillery line on the Emmitsburg Road did little good if Confederates were allowed to keep the opposite ridgeline, only 300 to 400 yards distant. Permitting the enemy to hold Pitzer Woods not only provided them an artillery

platform at close range, but also a nearby ridge to cover and conceal thousands of troops able to advance at a moment's notice against the orchard line. In short, Hunt suggested that securing Pitzer Woods denied the enemy cover, concealment, and an artillery platform for attacking the federal left. An approved assault by Meade would need to turn Lee's right flank at Pitzer Woods and sweep Confederate infantry north toward the Seminary where Lee's primary line of communications rested along Fairfield Road.

Hunt's other vital point argued the Emmitsburg Road "was a very good line to occupy, provided it was necessary to watch our left flank and prevent a movement by the enemy, or from which to make an offensive demonstration." His meaning is quite clear that the Emmitsburg Road line offered a forward position from which to watch enemy concentration at close range, and make direct contact through advanced skirmish lines, or demonstrate toward the federal left with a stronger force. As this work will continue to clarify, the 3rd Corps originally rested in the Plum Run Valley visually disconnected from the Confederate position on Warfield Ridge and Pitzer Woods. Their original valley deployment conceded the environs of the Emmitsburg Road to the enemy rather than watching and guarding it. In essence, Hunt suggested that undertaking a position on the Emmitsburg Road permitted not only vigilant observation of enemy concentration on that flank, but offered prospects for "an offensive demonstration," toward Pitzer Woods to draw Lee's reserves away from some other point of concentration.

5.2 Hunt Explores Offense on Behalf of Meade

Hunt's commentary on this to the congressional subcommittee is always misunderstood in the historiography as a strange statement for an artillery chief to make. More than anything, it is treated as a curiosity from the standpoint that Sickles eventual advance of half his corps to the Peach Orchard was a bad decision at best, and a direct disobedience of the commanding general's orders at worst, worthy of court martial. So why would Hunt lend credibility to it under sworn oath for the permanent record? Why tie himself to Sickles in any way, particularly when Meade had restored Hunt to artillery chief duties, and Sickles had left the army? Hunt defended Meade on every other matter during the hearings and after the war, so why reinforce what has increasingly seemed a bad decision that Sickles had advanced half of his 3rd Corps to the Emmitsburg Road without Meade's final approval? The basic tenor and tone of the historiography is to downplay the positive aspects of Hunt's assessment, and instead emphasize his warnings that an advance exposed the 2nd and 3rd Corps to cross-fire. One could also attribute Hunt's favorable remarks on the Emmitsburg Road position to being balanced and credible before the committee, if not a bit fearful of what Sickles might do to him through newspapers, as he had done to Meade under the pseudonym *Historicus*. If this tactic was used against Meade, then Hunt and others could suffer the same consequences. Hunt needed to avoid the bullseye being placed on his back. These are viable points, but none address Hunt's comments directly.

So, what was Hunt trying to tell the committee on behalf of Sickles? The answer is rather simple, but profound, which is Meade sent him out to the Emmitsburg Road

and beyond to explore offensive prospects that afternoon on the army's left front. Meade told the committee as much stating he planned to advance with elements of the 3rd and 5th against the Confederate right. If one examines the William H. Paine map developed for Meade, from approximately 4:00 AM to 2:00 PM, it shows Sickles' original intended footprint to extend south from the Abraham Trostle Farm to the Wheatfield and then diagonally southwest over Rose Hill to the Emmitsburg Road or Peach Orchard Ridge. The map identifies deployment location of specific brigades that included not only 3rd and 5th Corps brigades, but 6th Corps ones too, indicating Meade dictated these details to his cartographer Paine in the early afternoon, while planning a decisive attack on his left. Hunt's visit helped to begin this process.

What did the plan specifically involve? It was to be similar in design to the earlier one on the right except that Meade intended to seize the southern prolongation of Seminary and Warfield Ridges, as a first step in rolling up Lee's right at least far enough for federal cavalry to threaten Lee's communication lines in the rear, along the Fairfield Road. Hunt's statement to the committee about the Peach Orchard giving better leverage for offense, along with his early afternoon warning to Sickles to watch the enemy's position at Pitzer Woods points to the beginning of discussions within the higher command about offensive advances on the left. Hunt's latter concerns for Pitzer Woods, in particular, evidences discussions of decisive attack on the left, not only because the latter constituted the Confederate flank and rear, but Warfield Ridge represented the only available artillery platforms to Lee on that part of the battlefield. Seizing it denied Lee a position on the southern end of the field to threaten the federal

left. Hunt's statements to the committee about Pitzer Woods reinforces that Meade had identified a point of assault on his left in the early afternoon hours of July 2, before Lee's intentions became clear.

5.3 Little Round Top Sighting Ends Offense on the Left

Between 1:30 PM and 2:10 PM, the signal station on Little Round Top created

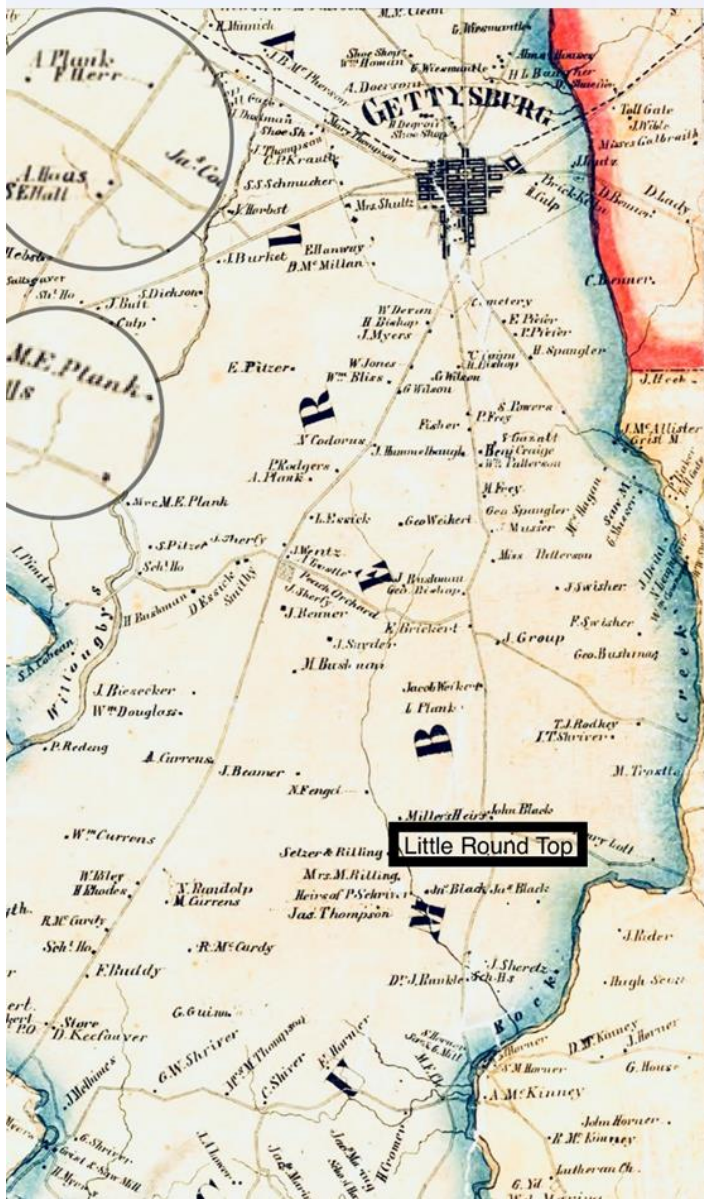


Fig. 26 – 1858 Adams County Map, G.M. Hopkins. Dr. Hall House is Upper Left. Hall House is Herr Ridge. Plank House below Hall is Brahm's Hill. East-West Road Above Hall is Old Mill Road.

quite a stir with two alarming messages. The first one at 1:30 PM reported, "A heavy column of enemy's infantry, about 10,000 strong, is moving from opposite our extreme left toward our right."²⁴² Only forty minutes later, they followed up with, "Those troops were passing on a by-road from Dr. Hall's house to Herr's tavern, on the Chambersburg pike. A train of ambulances is following them."²⁴³ Using the 1858 Adams County Map, the signal station identified the Hall House near the Fairfield Road as the location for Confederate maneuvers. Cross-referencing Confederate reports for the same time frame and location, it is easy to surmise the signal station spotted Lieutenant General James Longstreet's now infamous countermarch, ironically conducted to avoid surveillance from the Little Round Top Signal Station. Federal discovery of Longstreet's columns came as a result of Major General Lafayette McLaws circling his division into lower ground around Breahm's Hill to avoid detection, not realizing his four brigades reappeared in view of Little Round Top signalmen at Hall House near the juncture of Old Mill and Herr Ridge roads. Longstreet's columns were simply maneuvering into lower ground to overtake the federal left by surprise, but the signal station mistakenly interpreted the momentary turn-around as a shift of 10,000 Confederates with wagon trains to attack the federal right. This impression sent Meade to investigate his right again and the roads north of town that led to Culp's Hill. The signal station's message effectively ended Meade's offensive plans on his left that day.

Brigadier General Judson Kilpatrick received the assignment to reconnoiter roads leading to the federal right, but not without some discussion first with Brigadier General David M. Gregg. Gregg's division of cavalry continued to cover the right flank that day

along Hanover Road after they brought up the 5th Corps rear at noon, escorting Brigadier General Samuel W. Crawford's division onto White Run Road and finally Baltimore Pike, before the division found its way to a staging area on Rock Creek and

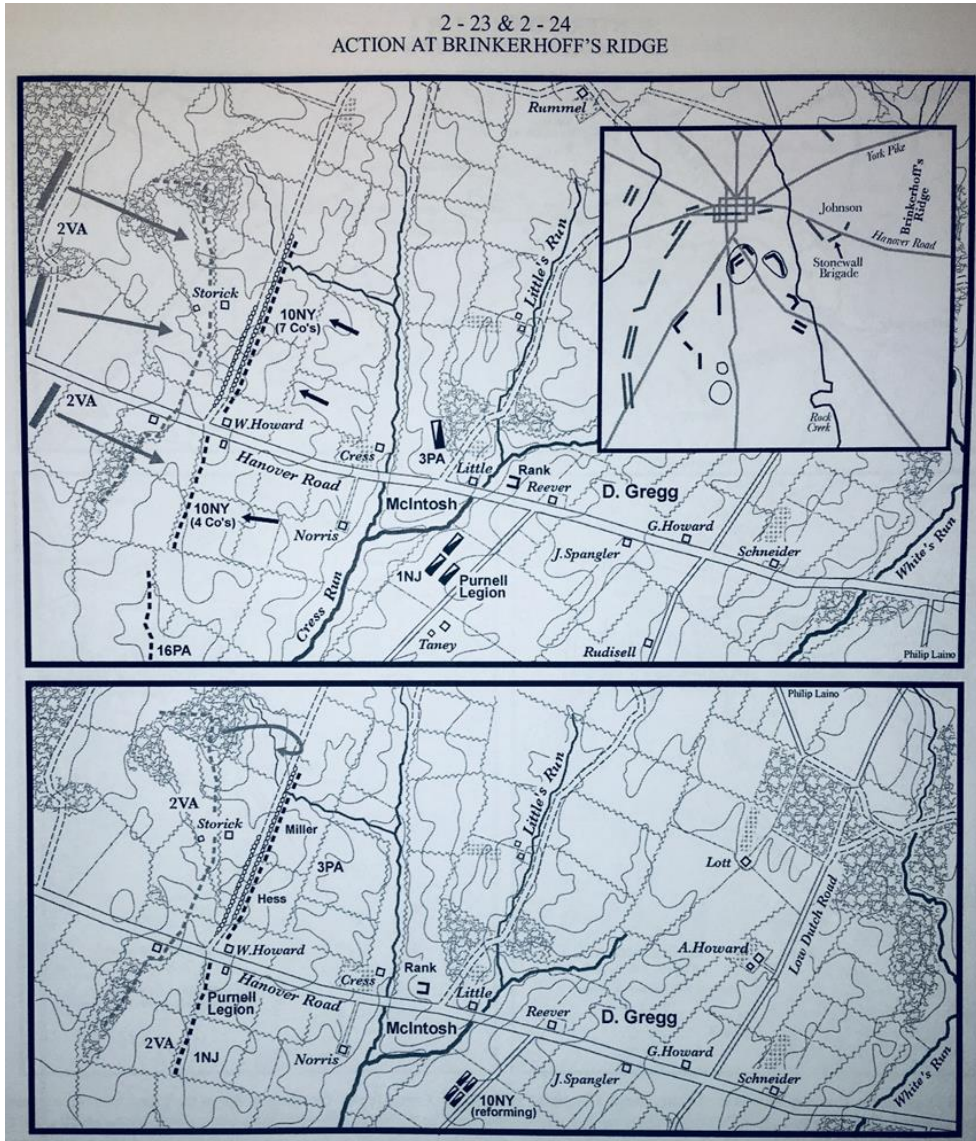


Fig. 27 – 2-23 & 2-24 – Action At Brinkerhoff's Ridge by Philip Laino. Stationed in the Cress Run Valley, Gregg Threatened Johnson's Flank and Rear. Conversely, Gregg Protected Low Dutch Road Access north to the Gettysburg-Hanover Railroad, and to Hunterstown, and south to the Baltimore Pike.

eventually the far left of the army. Gregg's division then positioned themselves east of Brinkerhoff Ridge down in the Cress Run valley at the juncture of Low Dutch and

Hanover Roads, poised to threaten Johnson's flank and rear, and postured to siphon Confederate strength away from Culp's Hill. The 10th New York, 3rd Pennsylvania, 1st New Jersey, Purnell's Maryland Legion, and 16th Pennsylvania cavalries dutifully performed this task by engaging the 2nd Virginia Infantry east of Wolf Hill, even as the Little Round Top Signal Station relayed their urgent messages through army headquarters behind Cemetery Hill and out to Gregg's position across the Hanover Road. The message Gregg received from Pleasonton read, "You will hold your force well in hand in your present position, with pickets and scouts well out. The enemy are in heavy force on the road from Heidlersburg [12 miles north of Cemetery Hill] to Gettysburg and toward [East] Berlin. You will see that our flank and rear are not turned without giving timely information. I understand your position to be 3 miles from Gettysburg, on the Hanover Road."²⁴⁴ Five minutes later, Pleasonton ordered Gregg, "You will then move your command to the north of Gettysburg, toward the Heidlersburg [also known as Harrisburg] road, to ascertain if the enemy is in that position in force."²⁴⁵

Gregg had much juggling to do to protect the right. Shortly before 1:00 PM, the cavalry corps commander, Major General Alfred Pleasonton ordered Gregg to send a regiment over to Sickles front on the left, to replace Buford who gradually evacuated his cavalry division throughout the morning. Meade learned of Buford's division repositioning to the operational left at Taneytown, and then the main depot at Westminster in a brief memorandum exchange with Pleasonton around noon. Meade was surprised the whole division had left, which prompted the commanding general to query whether the cavalry chief had replaced them. Meade's Chief of Staff Butterfield

wrote to Pleasonton, "My note, written five minutes since, is a little confused, I find. The general [Meade] expected, when Buford's force was sent to Westminster, that a force should be sent to replace it, picketing and patrolling the Emmitsburg road."²⁴⁶ This miscommunication about cavalry flank protection is an odd occurrence that has no clear answer why except that Meade had taken over the army only four days earlier, and there were instances during the battle where commanders treated Meade as the corps commander they knew before he assumed army command. In Pleasonton's case, the cavalry leader owed his position and loyalties to Meade's predecessor Hooker, making him reluctant to accept Meade's authority. Even so, when Pleasonton indicated Buford's cavalry was not replaced on the left, then Meade insisted through Butterfield that he tend to it right away, which led to Gregg ordering his distant relative Colonel J. Irvin Gregg to support the left with his cavalry brigade. Not long after the latter released Lieutenant Colonel William E. Doster's 4th Pennsylvania Cavalry for the task, the 2nd Virginia advanced east of Wolf Hill to attack Gregg at Brinkerhoff Ridge. When the Little Round Top Signal Station relayed their emergency warning of significant Confederate infantry forces moving toward the federal right, Gregg tried to figure how he could both defend the Hanover Road and scour access roads north of town for a mystery force spotted by the signal station.

Even as Gregg contemplated who could be spared to reconnoiter roads leading from the army left to the right, Brigadier General Judson Kilpatrick, 3rd Cavalry division commander, showed in person. His cavalry division was responsible for protecting the army at its north and south polarities, so it was fitting that he approach Gregg to

coordinate with the latter's responsibilities on the right, even as Buford had guarded the left before he exited for Westminster. Gregg updated Kilpatrick on the threat, who immediately accepted the responsibility and assured he would take care of it. Kilpatrick reported, "Reached the battlefield at 2 p.m. Received orders from headquarters Cavalry Corps, through Brigadier-General Gregg, to move over to the [York] road leading from Gettysburg to Abbotstown, and see that the enemy did not turn our flank."²⁴⁷ Kilpatrick then rode north along Low Dutch Road to its juncture with the York Road, and beyond on the northern extension of Low Dutch known as Shriver's Corner Road, also viewed as the eastern most prolongation of Black Gap Road, one of Lee's three primary lines of communication. There, Kilpatrick learned that Brigadier General George A. Custer had already engaged Confederate cavalry, skirmishing with them a couple miles west on Black Gap Road at the Harman Farm in the direction of Hunterstown. In keeping with Pleasonton's original order to Gregg, Kilpatrick ordered Custer to "ascertain" whether this unknown cavalry force was screening the much larger infantry force viewed from Little Round Top at 1:30 PM. That is all Custer needed to hear to develop the skirmishing into something bigger.

5.4 North Rock Creek and Conewago Creek Meet at Hunterstown

Custer could not have known the unintended consequences of his mission that he delayed Confederate cavalry at Hunterstown so they could not relieve the 2nd Virginia at Brinkerhoff Ridge to attack Culp's Hill. His orders simply revolved on attacking Confederate cavalry in the immediate area to see if they screened a larger infantry force, and he wasted little time in pressing the issue. It was only an hour after

the signal station reported an unaccounted for enemy force of 10,000 that Custer was checking it out in the direction of Hunterstown. His 1st, 5th, 6th, and 7th Michigan cavalry

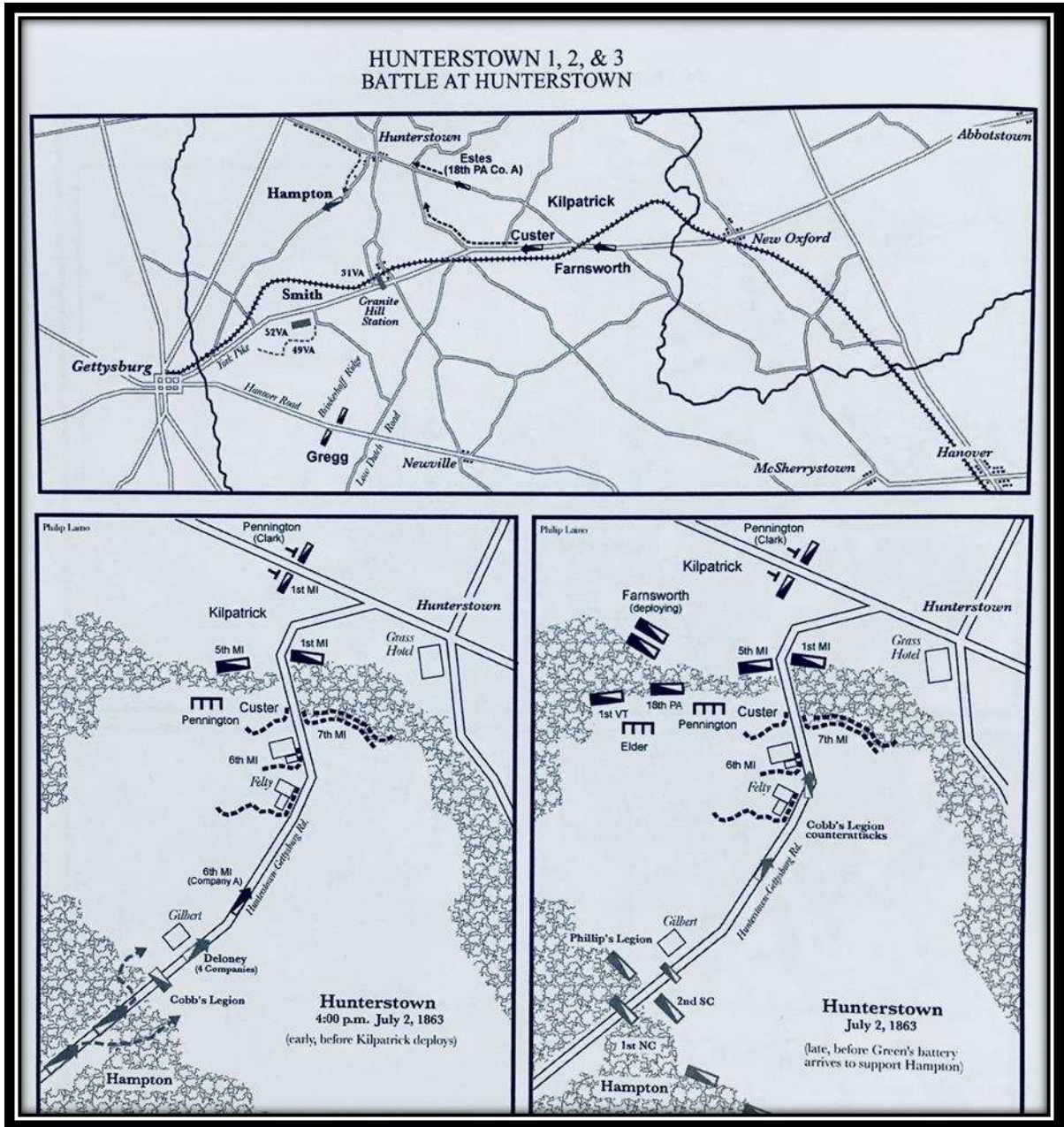


Fig. 28 – Hunterstown 1, 2, & 3, Battle At Hunterstown by Philip Laino. The Brinkerhoff Ridge Line Ran North from Gregg's Position at Hanover Road to Hunterstown. Kilpatrick Covered Rail Repair East of New Oxford. Custer Ascertained Confederate Strength at Hunterstown.

reached the town square, then turned south on the Hunterstown Road in the direction of Southern cavalry riding to Ewell's flank. Meanwhile, Brigadier General Elon J. Farnsworth's cavalry brigade of Kilpatrick's division reconnoitered the crossroads at Heidlersburg before marching south to Hunterstown in search of any evidence of a major Southern flanking force. The only element of Kilpatrick's division that discovered the enemy turned out to be Custer, but how should he engage the enemy more fully? He did this by dismounting his Michigan units in the tall wheat on either side of the Hunterstown Road, behind Felty-Tate Ridge. Some of his best marksman posted on the second floor of the J. Felty Pennsylvania bank barn, lying-in wait for Custer to provoke a fight. If he could stir the Confederate rearguard to turn and make a stand, then he could ascertain their strength, perhaps learn their mission and hopefully detain them from their destination, wherever that might be.

The significance to Custer's actions were threefold. One, at Hunterstown, he was contesting the furthest point north on the Rock Creek line originally defended by Buford on July 1. Hunterstown is about 1 ½ miles north of where Rock Creek ends and it is where the Conewago Creek begins, or where Monocacy's headwaters begin to flow south, and the Susquehanna's headwaters flow north. Secondly, Black Gap Road, which runs from west to east through Hunterstown, was one of Lee's three lines of communication east of South Mountain, to go along with the Cashtown and Fairfield Roads, and it was one of two lines that sustained Early's march from South Mountain to York thirty miles east. Thirdly, Hunterstown was 1 ½ miles north of York Road and on the Gettysburg-Hanover Line. The USMRC was repairing that line even as Custer's

brigade contested Confederate cavalry at Hunterstown. Whether 10,000 Confederates with wagon trains followed the Southern cavalry spotted there remained to be seen, but Custer had to press the issue to find out, particularly when the Black Gap Road offered the only direct access north of Gettysburg from the federal left to right flank.

The charismatic leader of the Michigan brigade was up to the task when he assembled forty to sixty mounted troopers of Company A, 6th Michigan cavalry, placing them in the Hunterstown Road, tightly fitted into post and rail fences on either side. He knew their width, and thus field of fire could not exceed more than three, perhaps four columns in that narrow space. As it stood, a three horse front would bounce off the fences enough to restrict the advance, so it was necessary to limit how many mounted men should stack behind them. Too many stacked in a row behind a narrow front invited entrapment and a potential for stampede in the wrong direction. Custer understood that a small company size force could close the gap to the Confederate rear quickly, make hard contact, raise the enemy's ire, then turn and retreat by design to Felty-Tate Ridge, where his dismounted cavalry waited in ambush. Custer nearly lost his life in the melee that followed in front of the Gilbert Farm with Cobb's Georgia legion, but enough violence ensued with saber and pistol that when his 6th Michigan retreated, the Georgians were eager to pursue. Racing horse to tail back to the Felty Farm, Company A led them directly into the trap. If the crossfire was not bad enough, rifled artillery pieces readied to fire from a concealed position behind the barn. At close range, these guns fired canister into horses and men, making for a fierce fight that produced eighty to ninety casualties in less than an hour. After breaking contact, both sides

separated by a mile to counterbattery fire from 5:00 PM until sunset at 7:15 PM. Orders came less than three hours later for federal cavalry to withdraw under the cover of darkness to Two Taverns.

In the clash at Hunterstown, it became clear to Custer, Farnsworth, and Kilpatrick that Brigadier General Wade Hampton's cavalry brigade did not cover 10,000 infantry with ambulances, but the violent encounter did permit Kilpatrick an opportunity to make contact with a portion of Stuart's cavalry division for the first time since the Battle of Hanover on June 30. The fierceness of the exchange at Hunterstown attests to federal embarrassment that Stuart had eluded them for two days. It also points to orders that Custer had to ascertain intent of the cavalry brigade in front of him, particularly in light of the signal station sightings between 1:30 and 2:00 PM. He had to hit Hampton hard enough to force a turn, a stand, an increased commitment, and entanglement to a position other than the one intended. As important, he needed to determine enemy cavalry strength, location, and morale, along with any potential infantry force behind their screen. The viciousness of the attack may have partly stemmed from Kilpatrick's frustration in losing contact with Stuart for two days, but it was also grounded in orders that demanded an answer to signal station warnings of a much larger flanking maneuver.

From a Confederate perspective, the unintended fight at Hunterstown delayed Hampton's brigade in relieving the 2nd Virginia Infantry guarding Ewell's flank at the E. Deardorff and Brinkerhoff farms, preventing them from joining the July 2 fight at Culp's Hill. Brigadier General Alfred G. Jenkins' Virginia cavalry had the same assignment, but

Jenkins' unexpected wounding along the Heidlersburg Road also prevented his brigade from relieving the 2nd Virginia. Together, these two failed cavalry assignments prevented Walker's entire Virginia infantry brigade of nearly 1,600 men from attacking the 12th Corps at Culp's Hill, because they had to cover for absence of cavalry. Likewise, Brigadier Generals William Smith's Virginia and John B. Gordon's Georgia brigades of Early's division had to march east on the York Road at approximately 2:00 PM to fill cavalry gaps between the 2nd Virginia on the Hanover Road and Hampton's cavalry brigade north on the Hunterstown Road. In playing the role of cavalry, Smith and Gordon were pulled away from supporting the assault on East Cemetery Hill, while Walker was diverted from Culp's Hill. Federal cavalry had detained three Confederate infantry brigades from assaulting key positions at a critical moment in the three day battle.

5.5 One Continuous Line North of Town: Rock Creek and Brinkerhoff Ridge

The intriguing aspect to Smith, Gordon, and Walker's infantry brigades guarding the eastern flank of the Confederate army was the environmental connection that held them together. That is, there are two common geographic denominators that connected the infantry and cavalry brigades east of Gettysburg, which are Brinkerhoff Ridge and Rock Creek. If we examine points further north and northeast, the Conewago Creek can be included on this list. In any case, the historiography has had nothing to say on these geographic features as a baseline of alignment for any units during the three day battle, much less for stationed troopers and troops arranged on a perfect north-south justification line intersecting the Hunterstown, York, and Hanover Roads. This is true of the battle itself, in that the natural and manmade environments have never fully

meshed with dispositions of units and overall strategies that determined location. Someone by now should have noticed the connecting thread holding together so many Federal and Confederate infantry brigades on the same longitudinal line north of Gettysburg, because the geographic features are strikingly evident, and consistent with preserving the Cemetery Ridge line. First, Brinkerhoff Ridge does not begin and end in its cross-section with Hanover Road, but instead continues due north, with some irregularity all the way to Hunterstown, where Custer made his attack after 4:00 PM on July 2. In fact, Hampton's forward position on the Gilbert Farm, where he initially repulsed Custer, is the southern slope of the ridge named after the Albert Brinkerhoff Farm of Hunterstown, whose family homestead rested on the western slope. If surnames determine the nomenclature for some battles, then the clash at Hunterstown could rightfully be called the battle for Brinkerhoff Ridge-North. This is even more so considering that Brigadier General Fitzhugh Lee's cavalry brigade arrived on the road from Carlisle to form in right-rear echelon to Hampton between the Hunterstown and York Roads. His cavalry brigade bridged the gap between Hampton at Brinkerhoff Ridge-North, and Smith and Gordon's infantry brigades guarding the York Road to the south. Smith and Gordon extended the line further south to link with Nadenbousch's 2nd Virginia Infantry of Walker's Brigade at Hanover Road. Thus a mix-match, hodge-podge of Confederate cavalry and infantry covered access to their left flank and rear over a four mile longitudinal stretch, along Brinkerhoff Ridge. For the federals, Brinkerhoff Ridge overlapped Wolf Hill north-south at Hanover Road to provide double concealment for elements of the 12th and 5th Corps where Meade planned his decisive attack on the

morning of July 2. Furthermore, Wolf Hill extended federal cover and concealment another five miles south to the Baltimore Pike, making the Brinkerhoff Ridge to Wolf Hill line nine miles long. This wall from Hunterstown to the Baltimore Pike demanded attention from both armies throughout the three day battle. It constituted the fault line upon which fortunes for both armies turned.

5.6 Gettysburg's Fault Line and Maginot Line

Running parallel to these two overlapping natural geographic curtains of Wolf Hill and Brinkerhoff Ridge was the army's water supply, Rock Creek. The creek at its juncture with the Baltimore Pike sustained the army's position by serving as the staging area for several arriving infantry corps and their corps' hospitals that included 30,000 horses and mules attached to army wagon trains, artillery reserve, ordnance wagons, medical supply wagons and ambulances. From there, Rock Creek marked a due north course flowing along the bases of Culp's, Wolf's, Benner's, and Hospital Hills and Barlow's Knoll where the Confederates either shared, or controlled, access to it. Likewise, it mirrored the Table Rock Road north of Barlow's Knoll for four miles to the intersection with Black Gap or modern day Shrivvers Corner Road at Hunterstown. Its northerly intersection with the latter road marked an intersection with one of Lee's primary lines of communication, between Lee's escape route west at Cashtown, and the crossroads of Hunterstown to the east. In one respect, the creek itself marked the fault line between the two armies' positions at Gettysburg, and in another respect the literal breakwaters that neither army wanted the other to cross. Union cavalry held that line on July 2 understanding it to be the fulcrum point for an attack on the federal right. That

is, both cavalry divisions available on the afternoon of July 2 at Gettysburg, or roughly two-thirds of Pleasonton's cavalry corps were placed on the tactical right to guard the Hanover, York, Black Gap, Hunterstown, and Heidlersburg road accesses to the federal right. If one widens scope to locate the remaining third of Pleasonton's corps, namely Buford's division, it was in transition to the federal operational base of Westminster to the right-rear of Gettysburg. Numbers do not lie about a general's fears, which was that in response to the Little Round Top Signal Station and overall worries about covering logistics, Meade gradually permitted his entire cavalry corps to guard the army's tactical and operational right, from Rock Creek to Pipe Creek.

5.7 Rail Repair East of Rock Creek and Brinkerhoff Ridge

Another dynamic going on along the Rock Creek, Brinkerhoff Ridge line northeast of the apex position at Cemetery Hill was ongoing repair of rail links between Westminster, York, Hanover, and Gettysburg. USMRC laborers worked to make the connection with Gettysburg all throughout the battle. Herman Haupt announced to Meade by memorandum at 3:00 PM on July 2 that "the position of the enemy would not permit the reconstruction and operation of the Gettysburg Branch of that line" and that he could not repair links to Gettysburg proper until, "after we have full and undisturbed possession."²⁴⁸ Two days later, he added in regard to relocating wounded, "If Gettysburg is in our possession, and no enemy east of it, I can soon reconstruct [the]



Fig. 29 - Hanover Junction, Pennsylvania in November 1863 where the Hanover-Gettysburg Line Began. Targeted by Early's Confederates in Late June 1863. Transfer Point to Gettysburg for President Lincoln on November 18, 1863. National Archives.

Gettysburg Branch, but this was not the case at my last advices.”²⁴⁹ The key words are, “no enemy east of it,” referring to Confederate infantry and cavalry pressuring the federal right east of Gettysburg. Even so, federal engineers and laborers worked to make the connection all the way to Gettysburg. That is why Kilpatrick’s division of cavalry stationed themselves at New Oxford, Pennsylvania about eight miles east of Gettysburg on the York Road, and why Custer first made contact with Hampton on the Black Gap Road near Hunterstown. They were not only guarding the road that would prompt Smith and Gordon’s Confederate infantry brigades to occupy that eastern corridor, but also the Hanover – Gettysburg line at its juncture with New Oxford.

As for the scope of the railroad repair going on east of Kilpatrick's position on July 2, Engineer of Construction, J.B. Clough had written hours earlier to Haupt, "Just returned from New Oxford and Hanover Junction. There are nineteen bridges destroyed between York Haven and Hanover Junction. Between Hanover Junction and Gettysburg there are two small ones gone, and one partially. I think these three bridges can be put up in from one to two days."²⁵⁰ The task was daunting, but Haupt was known for prefabricating bridges behind the lines and hauling them directly to the damaged areas for quick repair. As stated earlier, he also employed the method of replacing one tie for every four missing ones to hurry along the process. Because the USMRC made connections to Gettysburg on July 5, only twenty-four hours after Lee's army evacuated Gettysburg, then we can presume the USMRC had nearly completed repairs to New Oxford by 3:00 PM. Two divisions of federal cavalry guarding the Brinkerhoff Ridge line then remained on high alert, not only to prevent a Confederate flanking maneuver against their right at Culp's Hill, but to prevent interference with rail repair east of New Oxford. Had the entirety of Stuart's cavalry arrived on Ewell's left July 2, as federal cavalry commanders feared, the figurative Maginot Line along Brinkerhoff Ridge, which constituted the last geographic barrier to contain movement of Confederate cavalry brigades, would have been compromised. Beyond that line lay twenty-four miles of unguarded space between the tactical right at Culp's Hill and the main operational depot at Westminster. Lee played into these fears on July 3 when ordering Stuart west of this line, a subject to be visited in detail later. As for July 2, Meade had to prepare for

a worst case scenario both to the left and right of his army. It was well past noon, with the day largely spent, and he still did not know Lee's intentions.

Before the main Confederate attack opened with artillery on Sickles' front around 3:30 PM, Meade was holding a council of war at army headquarters to consider his next move. At that hour, Union cavalry on his right were trying to verify signal station reports of a Confederate infantry corps maneuvering to attack the right. For the moment, Buford's division had nothing alarming to report on the operational left at Emmitsburg where Wesley Merritt's federal cavalry brigade had the primary role of guarding the northwest-southeast running Waynesboro-Emmitsburg turnpike leading to the operational rear. Adding to Meade's concerns a few minutes before the main assault struck the left on Sickles' front, Haupt's message arrived stating that rail links to Gettysburg could not be completed due to Confederate forces east of Gettysburg. This left Meade in a quandary. Should he once again consider the option of attacking on his right to pave the way for rail and telegraph communications from Hanover, Carlisle and, Harrisburg in one direction and Westminster, Baltimore, and Washington in the other, and at the same time undo whatever Lee was planning? Should he sit and wait? Should he fall back? Sitting idle when Lee had, for whatever reason, temporarily surrendered the initiative to him ran counter to military protocol. He knew that 10,000 Confederates with ambulances had maneuvered from the signal station's view, and could be on his right. What could Lee be doing, and where was his main attack force? Meade did not know, but he held the initiative which meant he was expected to make the next move, whether it be attack or fall back. Falling back was certainly a possibility, but it had to

involve assuming a stronger position, while not resembling a retreat, an important concern for his army's morale.

5.8 Primary Versus Alternative Direction

At 3:00 PM, Meade's concern remained on his right, where his water, rail, and primary road lay. For the same reasons, his left represented the alternative direction for Confederate attack because it was the unexpected one, not directly protecting logistics. That is why Meade's least trusted subordinate Major General Daniel Sickles was placed on the left, and why the majority of Buford's cavalry was permitted to leave the left for Westminster, namely because it was not considered the primary avenue of attack on July 2. Once Meade walked away from his exploratory attack plan on his left, he reverted to focusing on his right. He essentially left others to worry about Sickles' position and the absence of cavalry on his left, while he personally worried about the gathering storm of Confederate infantry and cavalry brigades on Brinkerhoff Ridge, several of them visible from the Cemetery Hill, Culp's Hill, and Powers Hill signal stations. He would have worried about Smith and Gordon's brigades maneuvering on the York Road. Within full view of the same signal stations, Major Joseph W. Latimer's sixteen artillery pieces drove into position along the crest of Benner's and Hospital Hills adding to the mounting evidence of an attack on Meade's right, which were reinforced by the progression of Lee's first day attacks that extended from Meade's left to right. Fighting had begun on McPherson Ridge before spreading clockwise to Oak Hill, to Barlow's Knoll, and finally to deployments across Benner's and Hospital Hills, Wolf Hill, and Brinkerhoff Ridge. Fitting in logically with this pattern was the unknown position of

Stuart's Confederate cavalry. Until Custer discovered Hampton's brigade of Stuart's cavalry corps near Hunterstown sometime after 3:00 PM, the latter was unaccounted for two days into the battle. He had disappeared from federal surveillance twelve miles east of Gettysburg, after the June 30 cavalry fight at Hanover, leaving federal commanders to worry his eventual reappearance would be on their right at an importune moment. From a Confederate perspective, the reports make it clear the building-up of their forces on Brinkerhoff Ridge, their clandestine placement of artillery on Benner's and Hospital Hills, and the eventual bombardment they opened there at 4:00 PM were all part of a grand "diversion" to play into Meade's worst fears of an attack against his right, as well as precautionary moves to protect their own left.²⁵¹ And, though it can probably never be proven, the appearance of Longstreet's two divisions of 10,000 troops moving north, within clear sight of the Little Round Top Signal Station, might have been a deliberate ploy too. Longstreet's goal was to reach Sickles' front well to the south, so marching north in full view of the signal station may have been intentional. It has never made sense that his two divisions turned-around to avoid being seen from Little Round Top, only to retrace ground that led them to the Hall House in full view of the signal station facing north. Whether accidental or intentional, the Little Round Top sighting of his corps at Hall House played into Meade's same fears of an assault directed at his right. All the indicators at 3:00 PM, July 2, pointed to the primary attack on his right.

Therefore, since Meade's biggest concern lay with his right, his offensive and defensive options needed to address that part of the field. Whether he adopted a

preemptive strike, or fell back on a stronger position, his plan would have to cover the right. Although the greater danger revealed itself on his left, it was not so clear before the main attack showed itself at 3:30 PM. He understood that often both offense and defense can be achieved with one move, that offense and defense are merely the flip sides of the coin. If he attacked on his right, it was equivalent to attacking to maneuver logistics on his right to stabilize his own line. Attacking would allow the USMRC to complete their work essentially making his position at Rock Creek formidable with modern transportation and communication systems reinforcing his positions. If he fell back too far, he ran the risk of abandoning his rail link in Pennsylvania.

5.9 Neither Here nor There, Littles Run Line

Meade's Chief of Staff Daniel Butterfield, his assistant Brigadier General Seth Williams, and his 2nd Corps, 2nd Division commander Brigadier General John Gibbon all mentioned a contingency for retreat on July 2. Seth Williams testified to Congress that he saw the rough draft, before it disappeared from the record a few days after the battle. He testified before the congressional subcommittee on April 18, 1864,

In regard to the order of the 2nd of July, to the best of my recollection and belief, the chief of staff [Butterfield] either handed to me or to my clerk an order looking to a contingency which possibly might happen of the army being compelled to assume a new position.... The particular order was never distributed; no vestige of it is to be found among any records of my office, and it must have been destroyed within a day or two after it was prepared...The order was never recorded, or issued in any sense. I do not remember the exact tenor of the order, but to the best of my belief it was an order which, if carried out, would have involved a retrograde movement of the army.²⁵²

Second Corps division commander John Gibbon, who also proved to be quite loyal to Meade similarly stated,

General Butterfield did not say that General Meade did intend to leave; he merely said something to the effect that it was necessary to be prepared, in case it should be necessary to leave, or some remark of that kind. He then showed me the order, and either he read it over and I pointed out the places on the map, or I read it over and he pointed out the places to which each corps was to go. When he got through, I remarked that it was all correctly drawn up.²⁵³

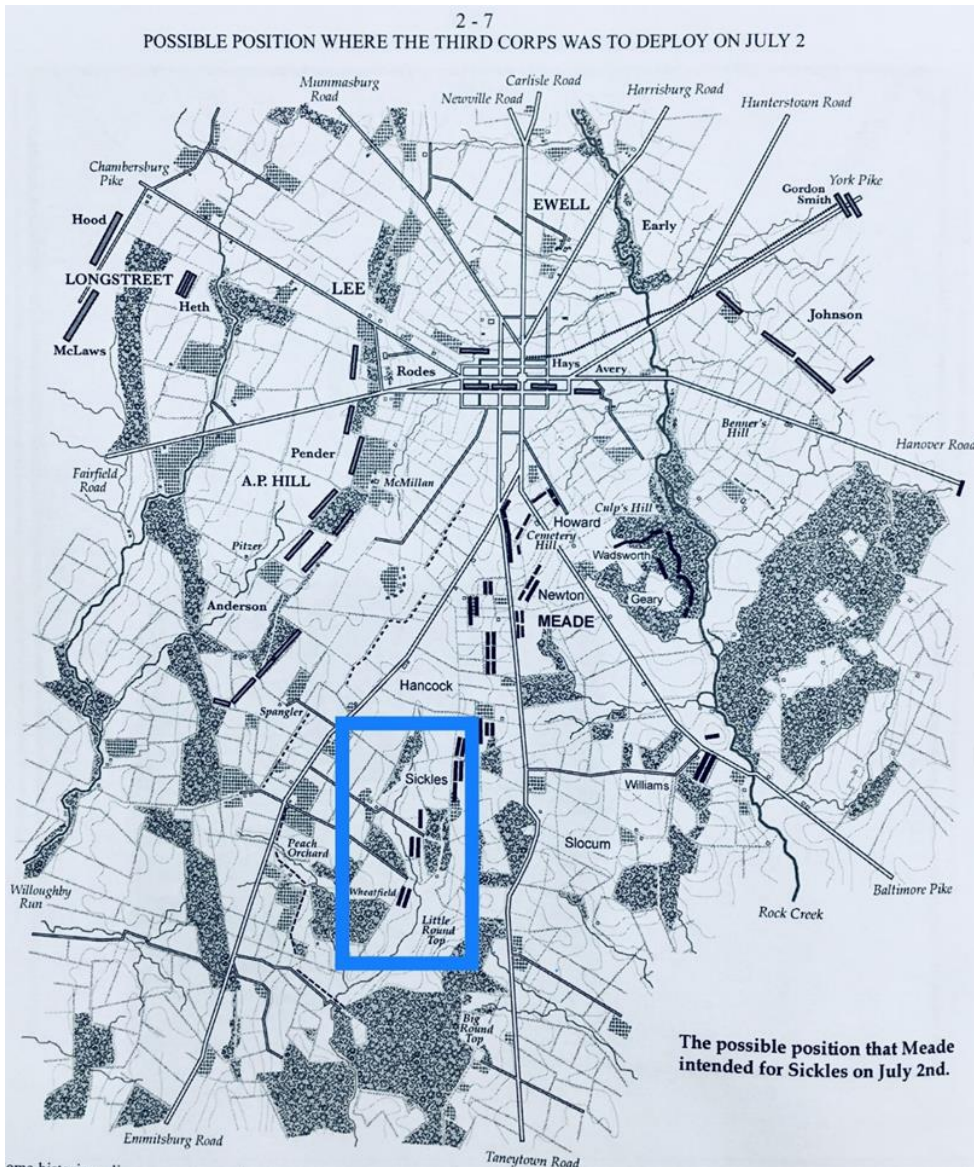


Fig. 30 – 2-7 - Possible Position Where (Sickles') Third Corps Was To Deploy July 2, by Philip Laino.

Gibbon then he added,

Until very recently I supposed that the order which General Butterfield showed me was an order in regard to the army falling back to a position which I heard General Meade had selected on Pipe Clay creek. But I am satisfied now that order must have been some different order from the one I had been thinking it was. Being firmly convinced, as I was at the time, that General Meade had no idea of falling back from the position there, it struck me as very remarkable that his chief of staff should be making out an order to retreat; and I still think so.²⁵⁴

As the accounts suggest, plans for withdrawing from Gettysburg remained a sensitive subject during the hearings several months after the battle, and continued to stir emotions in post-war years when pro-Hooker supporters echoed that a retreat order did exist, even as Meade supporters denied it. One of the retreat instigators, in the months surrounding the hearings, became *Historicus*, an anonymous writer to the *New York Herald* supporting Sickles' perspective on the battle. The pseudonym permitted the author, perhaps Sickles himself, to question Meade's intent on July 2, 1863, going so far as to imply that an advance to the Peach Orchard position complicated Meade's plans to retreat. *Historicus* stated, "It has since been stated, upon unquestionable authority, that General Meade had decided upon a retreat, and that an order to withdraw from the position held by our army was penned by his chief of staff, General Butterfield, though happily its promulgation never took place. This order is probably on record in the Adjutant-General's Office."²⁵⁵ Losing little time in protecting his reputation, Meade wrote the Adjutant-General three days later stating, "I cannot resist the belief that this letter was either written or dictated by Maj. Gen. D.E. Sickles.... The prominence given to General Sickles' operations in the enclosed communication,

the labored argument to prove his good judgment and my failings, all lead me to the conclusion he is directly or indirectly the author.”²⁵⁶ Meade proceeded to relate Sickles’ grievance to official language in the final report stating, “In my official report I deemed it proper to state that this position [Peach Orchard] was a false and untenable one, but I did General Sickles the justice to express the opinion that, although he had committed an error of judgment, it was done through a misapprehension of orders, and not from any intention to act contrary to my wishes.”²⁵⁷

So much attention is given in the historiography to Sickles insubordination in advancing to the Peach Orchard, or of his new position jeopardizing the army’s existence, or of Little Round Top then left uncovered that the central point of the controversy is missed that Meade worried about his right flank more than Sickles’ front at 3:00 PM. Sickles knew that Meade was noncommittal to the Peach Orchard position, and was likely correct that Meade considered withdrawing his front altogether for two reasons. First, Meade stated to the Assistant Adjutant-General that the Peach Orchard position was “a false and untenable one,” at the time Sickles occupied it, which was after 1:30 PM. This statement confirms Meade had moved-on from his earlier strategy to secure the Peach Orchard for offensive purposes. That idea had passed when the Little Round Top Signal Station warned of Confederate movements toward Meade’s right around 1:30 PM. Secondly, abandoning the Peach Orchard was strategically a bad move if Meade intended to hold his position as presently constructed along Cemetery Hill and Ridge, because it represented the only defensible position on that part of the battlefield. It offered the only ground to position a corps size artillery front of at least

forty pieces, with cover and concealment for an entire corps and more. It constituted the only position that provided enough fields of fire for elements of several corps to support. It formed the only position with prospects for offense and defense. It also provided the only place to defend Little Round Top by covering the dead spaces in front of it, and through building a layered defense around it. It represented the only position that provided enough frontage for two or three corps to deploy on the front lines with Little Round Top as an anchor point. It placed Plum Run tributary in protective status behind Sickles' line of defense beyond immediate reach of the enemy. Finally, and most importantly, federal occupation of the Peach Orchard prevented Lee from occupying it to employ all the same advantages in reverse against Meade.

In contrast to the Peach Orchard line, starting a defense at Little Round Top conceded all of the ground in front of it. The round tops collectively, along with neighboring Munshower's Knoll proved to be too broken, too steep, too inaccessible and too heavily timbered to permit continuity with fields of fire for a corps frontage. The contrast in the 500 foot elevation of Little Round Top to the cavernous Plum Run Valley immediately below offered endless nooks, crannies and blind spots from which enemy sharpshooters could snipe away. Furthermore, the steep grade of Little Round Top, coupled with the parabolic trajectory of rifled cannons provided a 500 yard safe haven radius beneath those guns. Compromised spacing between guns and their caissons wedged into rocky clefts, limitations to battery accessibility and maneuverability, and difficulty of resupply on the steep wooded back-slopes made for a bad artillery platform. A strip of woods bordering the Wheatfield position, only 500

yards west, compromised mutual infantry support by locking-in small arms fields of fire directly in front of the round tops, even as marshy ground below Munshower Knoll froze their movement. To the south, heavy timber engulfed Big Round Top eliminating fields of fire in all directions, while the small truncated platform on Munshower Knoll, to the north, reduced artillery frontage to eight pieces.

There were more problems in relinquishing the Peach Orchard position such as giving up the Emmitsburg Road with its numerous connections to avenues of approach south of the round tops for enemy flanking maneuvers. Several roads offered multiple Emmitsburg Road accesses to the federal flank and rear. Moreover, abandonment of the Emmitsburg Road conceded to Confederates the primary branch of Marsh Creek proper, and it risked Rock Creek's southern prolongation to Horner's Mill five miles south of Gettysburg. Therefore, relinquishment of the Peach Orchard ridge opened avenues of approach to the federal flank and rear, namely cross-ties that linked the Emmitsburg and Taneytown Roads, along with the Monocacy River merger point for Marsh and Rock Creeks three miles south of Big Round Top.

There is a certain environmental agency that goes with deployments and movements of Civil War armies along creeks, rivers, and streams as they align with field roads, farm lanes, and major arteries. All Confederate movements involving Longstreet's Corps depended on the Marsh Creek and its primary branch of Willoughby Run to navigate into position across the Emmitsburg Road. Colonel Edward Porter Alexander's artillery movements, Major Generals John Bell Hood and Lafayette McLaw's infantry marches, and Colonel John L. Black's 1st South Carolina cavalry escort followed

the water path toward attacking the Emmitsburg Road position. Alexander's 300 plus horses pulling sixty cannons and ammunition wagons required 3000 gallons of drinking water daily, while artillery pieces needed upwards of 10,000 pails of water for sponging between rounds for two hours. Likewise, the water course ran through the lowest ravines providing concealment to artillery vehicles, infantry, and cavalry escort from Union observation points at Cemetery Hill and Little Round Top to the east and Jack's Mountain twelve miles west. Abdicating the Emmitsburg Road position to Longstreet was ill-advised, because it invited Confederate movements to maneuver along Marsh Creek Road well behind the federal flank and rear, even severing the federal position from water courses for infantry and cavalry on the federal left.

Therefore, Meade's explanation that the Peach Orchard position was too advanced was tantamount to writing-off the Emmitsburg Road, which was equivalent to opening numerous road accesses to the flank, rear, and a primary water source, altogether an admission that he had begun to rethink Sickles' position and the federal left east to the Taneytown Road. In short, by 3:00 PM, July 2, Meade objected to Sickles in the Peach Orchard, because he had conceded that part of the battlefield in favor of resecting his left, from the Emmitsburg to Taneytown Road, preparing the way for an equilibrium shift to his right centered on the Baltimore Pike and Hanover Roads equally. It was not so much that Sickles was wrong; rather Meade changed his mind. Balancing his army evenly across the Baltimore Pike covered the army's wagon trains, the logistical center at Westminster, and the road to Washington, D.C. It also covered the Littlestown Railroad Link in the direction of Westminster and the Littles Run Branch

of the Monocacy. Likewise, the Hanover Road covered ongoing reconstruction of the Hanover-Gettysburg line east of New Oxford. The new frontage would balance, across the Baltimore Pike and Hanover Road collectively, from the Taneytown Road on the west to the York Road on the east.

In summary, in this presumed view, Meade had to let go of the Emmitsburg Road to have enough frontage to cover, from northeast to southwest, the York, Hanover, Baltimore, and Taneytown roads. Letting go of the Emmitsburg Road was thus necessary to guard ongoing reconstruction of the Hanover-Gettysburg Railroad on the far right, while still covering the Baltimore Pike with all of its supply trains at Union Mills, and direct accesses to the operational logistical center at Westminster. This also meant the left had to reach the Taneytown Road as far south as Horner's Mill to guard access roads and anchor on Rock Creek. On the far right, federal cavalry pickets needed to remain on the York Road at New Oxford to assure rail repair, while cavalry pickets continued to guard the extreme left on the Waynesboro-Emmitsburg turnpike eight miles south of Gettysburg. A cavalry contingent had to guard the latter because it gave direct road approach to the main supply depot at Westminster. There is no other, environmentally and topographical way to interpret Meade's rejection of Sickles' Peach Orchard position than abandonment of the Emmitsburg Road in favor a shift to the right. By 3:00 PM, the Emmitsburg Road had begun to be expendable by the commanding general.

In review, the road which Meade's contingency position had predetermined to eliminate in the event of a fallback was the Emmitsburg Road. This was quite evident at 1:30 PM with only Merritt's cavalry brigade guarding it eight miles south of Gettysburg,

too far away to be of much help. Added to this was Meade's objection to Sickles' advance, making it clear the commanding general had excluded the road from a defensive scenario for his left flank. Meade understood that several corps were needed



Fig. 31 – Little Run, Two Taverns - Logical Contingency Viewed by Gibbon, S. Williams. USGS.

to either hold the expansive frontage of the Emmitsburg Road, or to advance against the Confederate position at Warfield-Seminary Ridge, and he was not prepared to do this with so much at stake on his logistical right. He understood that to agree with Sickles'

forward move was paramount to an equilibrium shift of his army from its primary water, rail, and road utilities on the right to the Emmitsburg Road on the left. The irony of Sickles' advance then is that it committed the army to a defense of Emmitsburg Road at the very moment that Meade's contingency for fallback had eliminated it. The essence of the Meade-Sickles controversy is rooted in Meade's decision to sacrifice the Emmitsburg Road in favor of covering his logistical right, and of Sickles refusing to let go.

So what did this fallback look like exactly? Gibbon testified before the Congressional subcommittee that when Butterfield first showed the draft to him during the afternoon of July 2, he presumed it then, and in the months leading-up to his testimony to be a retrograde south to Pipe Creek, until recently when he realized it must be something different. His official statement also noted that Butterfield informed him the plan was a contingency, not a given. He also said that it displayed the avenues to be used by each corps all of which appeared logical and sensible to him. When this information is considered with the reprimand for Sickles advancing to the Emmitsburg Road, the ongoing work of the USMRC at 3:00 PM, July 2, the need to cover all wagon trains on the Baltimore Pike with its direct access to Westminster, the shift of Buford's cavalry division to Taneytown to guard the army's flank and rear, and the unchanging necessity of water in the army's redeployment, then we have a reasonably clear picture of what the retrograde needed to do to preserve the army and its logistical underpinnings. If covering water, rail, and road were unnegotiable in the decision making process of where to relocate, the breadth of the operational retrograde needed to span about thirteen miles, northeast to southwest, from the Hanover to Baltimore to

Taneytown roads, with the ability to condense to a tactical front of no more than three miles once the enemy revealed his plans.

Meade could make that decision work rather quickly by using Low Dutch and Two Taverns roads to shift reinforcements east-west from Hanover Road to Baltimore Pike, while at the same time using several roads to shift west-east from Taneytown

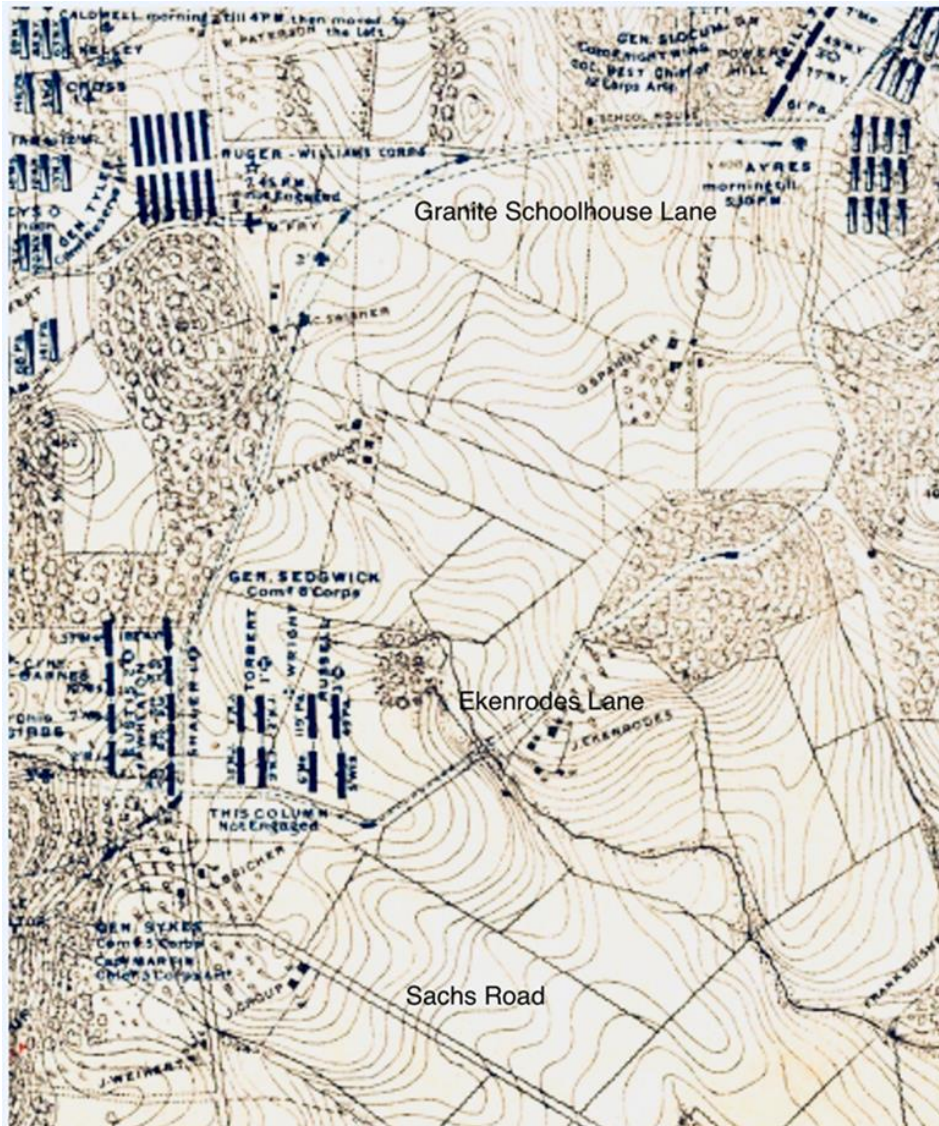


Fig. 32 – John Bachelder Map, July 2. Granite Schoolhouse Lane, Ekenrodes Lane, and Sachs Road Egresses on Meade’s Left. Since These Roads Were Used to Advance, They Would Also Be Used to Withdraw.

Road to Baltimore Pike. In pulling back, his left-center needed to rest at Two Taverns on a tributary of Rock Creek known as Littles Run, not only for water, but also to block direct enemy access to the main supply depot at Westminster and Littlestown Railroad that fed northeast into the Gettysburg – Hanover line. Meanwhile his extreme left had to anchor on Rock Creek proper along the Taneytown Road where the little town of Barlow emerged after the war. In the other direction, his right-center needed to deploy four miles east of Gettysburg on the Littles Run branch of Rock Creek at Bonaughtown to block direct Confederate access to the Gettysburg – Hanover line. Finally, his far right had to extend with cavalry pickets several miles east to the New Oxford rail depot on the York Road to prevent enemy flanking access to the Gettysburg – Hanover line. In short, his infantry line would extend along the Littles Run branch of Rock Creek from Bonaughtown to Two Taverns, covering the Hanover Road and Baltimore Pike respectively. Meanwhile, federal cavalry would be required to place patrols on the extreme left at Emmitsburg to guard against enemy maneuvers along the Waynesboro – Emmitsburg Turnpike toward Westminster.

Again, the anchor points for the fallback logically needed to be the Hanover – Gettysburg rail crossing of the York Road at New Oxford on the right, the center had to be at Two Taverns due to water resources and vital crossroad access in both directions, and the left had to extend at least to Horner’s Mill because of access to Rock Creek there. The northwest to southeast roads leading to these locations for each corps on Meade’s map began with the major ones, as in Taneytown, Baltimore, and Emmitsburg roads, but also included the lesser known Two Taverns, Low Dutch, White Run, and

Highland Avenue roads on the right, along with Granite Schoolhouse, Ekenrodes, and Sachs lanes or roads on the left. As noted earlier, such field roads and farm lanes were revealed to Meade's staff through local guides, usually farmers paid to show staff officers around. Precise locations of such local roads appeared on William Paine's map for original deployment of each corps, and undoubtedly appeared on the pre-order, retrograde contingency draft. This is the "neither here nor there" retrograde that Seth Williams and John Gibbon saw. The above roads are the ones that Gibbon had to approve retrograde movements on.

5.10 Longstreet's Main Attack Shifted the Pendulum Left

When the main attack showed on Sickles front about 3:30 PM, the contingency fallback remained in pre-order status, never rising to the level of duplication and distribution, as Seth Williams testified, and then disappeared from the record a couple days later according to the impartial, if not supportive to Meade, witness, Seth Williams. Whether Sickles' advance before 3:00 PM was premeditated solely to end Meade's retrograde is debatable, but that his move ended the possibility of a retrograde is because elements of five federal corps, specifically the 2nd, 3rd, 5th, 6th, and 12th corps, were employed to defend the left, between 3:30 PM and 6:30 PM. One might argue that Meade then overcommitted to his left at the expense of defending his right, but once Longstreet's corps announced its intent with 40 artillery pieces around 3:30 PM, Meade's instincts told him that attacks on other parts of his line amounted to decoys and would not present the same threat. The first Confederate artillery rounds that fired against his left, though two miles from his headquarters, immediately informed him the

main assault had begun on his left. His extensive military background and battle experience trained his ears to recognize what forty to sixty artillery pieces sounded like in unison, and to know such a barrage denotes a corps size attack, and finally to reason that such a barrage does not emerge from the alternative or logistically less significant direction without being real. Demonstrations, fairs, decoys do not need to be conducted from the alternative direction, because the defender is less worried there. Therefore, as Meade ended his 3:00 PM council of war, and left army headquarters to respond to the intense artillery noise on his left, he ordered George Sykes to send the 5th Corps, or the army's entire reserve to the sound of the guns. He must have felt both apprehension of what lay ahead, and relief the guessing game was over.

5.11 William Paine Map Position for Sickles

The fighting on the left has been the subject of many books and articles, so it is not the focus of this work, other than to state that an advance to the Peach Orchard was beyond Meade's intentions at 3:30 PM, not only in his original defensive orders for the 3rd Corps early in the morning, but permanently after 1:30 PM when Little Round Top signalmen spotted Longstreet's Corps presumably maneuvering from the federal left to the extreme right. Intriguingly, there is one consistent pattern that emerges about where Meade expected Sickles to be deployed, both in the earlier William Paine map circulated to corps commanders, and in the position where all reserves were thrown to save Sickles line during the battle from 4:00 to 6:30 PM.²⁵⁸ It is the same position that Meade referred to in his subcommittee hearing testimony as a visible ridge that

naturally extended south of Cemetery Ridge from the 2nd Corps line on July 2. The ridge

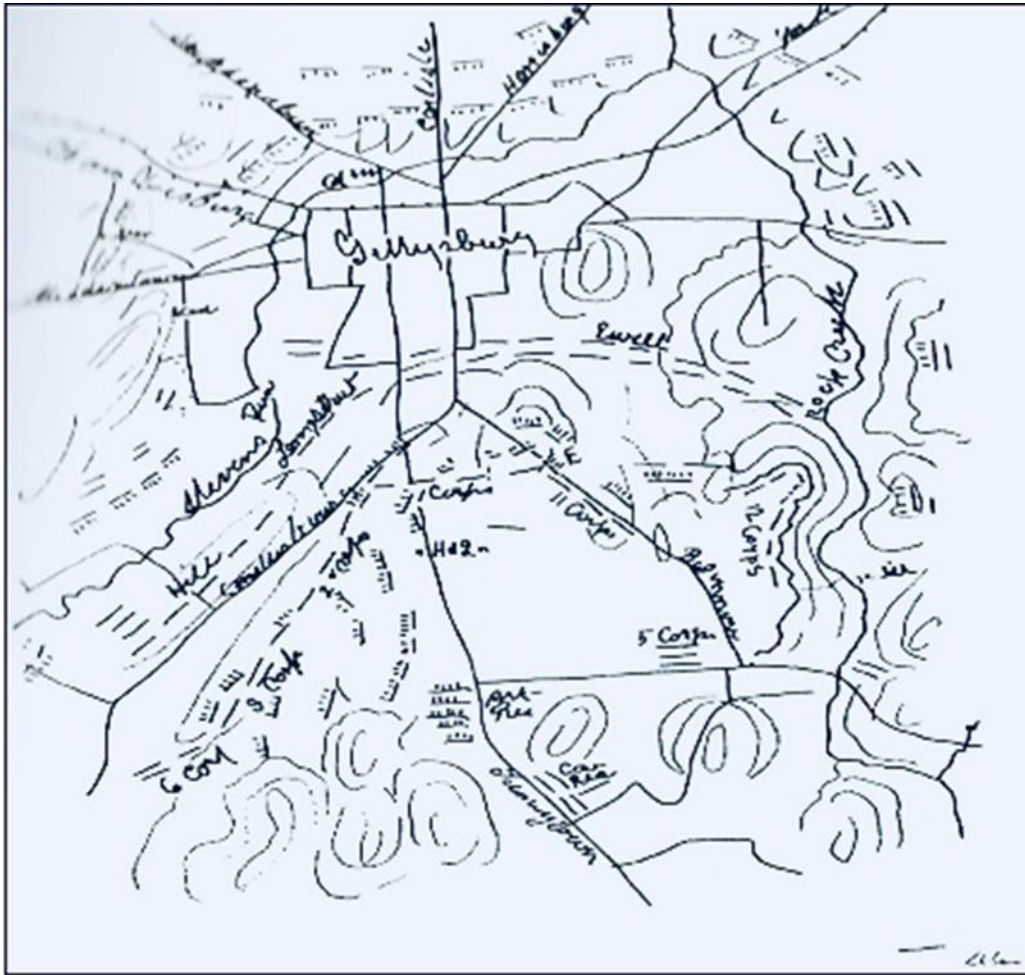


Fig. 33 - William Paine Map of Sickles' Original Orders, National Archives.

identified both on the Meade authorized Paine Map, along with the actual destination point for of all reserves sent to help Sickles on July 2, began as a refused left flank along Houck's Ridge at Devils Den, and ran northwest on the same geographic ridge line through the Wheatfield to Stony Ridge, where it turned due north through Trostle woods to Abram Trostle farmhouse before terminating in a swale known as Codori thicket. Again, if one examines the Meade authorized Paine Map for Sickles' intended deployment, and cross-reference it with where 2nd, 5th, 6th, and 12th Corps

reinforcements deliberately deployed to stabilize Sickles' position, then one finds the Wheatfield to Trostle farm house the only designated line of defense. In fact, none of the other corps' reinforcement brigades, rushing to Sickles aid advanced to the Peach Orchard on the Emmitsburg Road. This indicates that Meade had concluded sometime after 1:30 PM to fight defensively on his left at best, or at worst planned to withdraw the 3rd Corps a mile east to anchor the operational left on the Taneytown Road, as the army shifted its equilibrium away from the Emmitsburg Road.

5.12 Fishhook Merely a Refused, Layered Defense of Rock Creek

The shift to the right is particularly valid through the operational emphasis of water, rail, and road, and through this perspective the deeper tactical meaning of Meade's defensive posture on July 2 is revealed. That is, the defensive purpose of the Cemetery Hill and Ridge line was not rooted in holding the Emmitsburg Road, but rather resigned in conceding it to Lee. Instead, Meade's tactical defense committed itself to holding the Taneytown Road and everything east of it. That is why the majority of Buford's' division temporarily redeployed at Taneytown on July 2, before moving to Westminster. For the reasons enumerated earlier, the Cemetery Ridge line was a defense of the Taneytown Road, Baltimore Pike, and Hanover Road to protect the army's logistical infrastructure of water, rail, and road. The Baltimore Pike directly protected Rock Creek, but the Taneytown Road marked by Cemetery Hill, Cemetery Ridge, and Round Tops covering it amounted to a defense-in-depth, a cushion, a layer of protection west of the Rock Creek position. Likewise, the Baltimore Pike provided a secondary layer of hills in East Cemetery Hill, Powers Hill, and McAllister Hill to directly

buffer Rock Creek west and north with its infantry reserves, artillery, ordnance and ambulance parks, and direct avenue of approach to Westminster and Washington D.C. Further east, the combined wall of Wolf Hill and Brinkerhoff Ridge insulated Rock Creek south and the Baltimore Pike, along with providing cover and concealment for maneuver toward enemy positions along the Gettysburg-Hanover line and Rock Creek north. Operationally, it represented more of the same in defense of Pennsylvania and Washington, D.C.

Going back to July 1, insulation of water, rail, and road remained central to tactical decisions. If one considers Meade's tactical defense of Gettysburg as a continuation of Reynolds stand on July 1, it was one of a series of buffered layers west of Rock Creek beginning west with Belmont Schoolhouse Ridge and rippling east to Herr Ridge, McPherson Ridge, Seminary Ridge, Cemetery Hill and Ridge largely to buffer the central spinal cord of the Rock Creek line along the Baltimore Pike. And, when Ewell's Corps eclipsed the Rock Creek line to violate the army's logistical nervous system from its eastern sector of the battlefield, then Meade employed Brinkerhoff Ridge, and Wolf Hill to insulate the spinal cord east to west. Moreover, a series of unnamed ridges intersected the Hanover Road east of Brinkerhoff Ridge to conceal movements closer to the battlefield and resist movements in the other direction toward the Gettysburg – Hanover line. Finally, the Rock Creek Baltimore Pike spinal cord had protective barriers to the south and north as in Wolf Walk Ridge, McAllister Hill, Powers Hill and Cemetery Hill respectively, with the option of extending the barrier northerly to Benner's and Hospital Hills. As for the Emmitsburg Road Ridge on Sickles' front, during the late

afternoon of July 2, Meade had determined it to be expendable toward defense of the central nervous system around Rock Creek south and Baltimore Pike. A tactical defensive ridge extending south – north through the Wheatfield was as far southwest as the commanding general wanted to commit by 3:00 PM on the second day of the battle.

When Lee's main attack revealed itself on Meade's left, the commanding general disproportionately shifted his army to Sickles front, expanding the 9,500 defenders there to 35,000 between 3:30 and 6:00 PM. The decision to do so blunted, fragmented, and redirected Longstreet's deliberate attack plan toward Cemetery Hill to such an extent that Confederate attacks closer to the main hill hesitated to advance, entered the fray haphazardly, or stopped altogether. One could successfully argue that Meade overcommitted his army left in the urgency of the hour, leaving his center and right woefully thin, but that is what a surprise attack will do to the defender. Longstreet's countermarch, Ewell's infantry, cavalry, and artillery demonstrations on the federal right, to go along with Meade's predisposal to protect his right had achieved enough deception on the left to buy the Confederates thirty minutes element of surprise once the attack began. In short, Meade's preoccupation with Lee's presence south of the Gettysburg-Hanover line created a scenario where Meade had to overreact on his left.

5.13 Council of War and the Rock Creek Line

A council of war held at Meade's headquarters after 7:00 PM on the evening of July 2 provided the stage for final resolve in holding the Rock Creek line. Each of the corps commanders, still in the saddle and able to attend, joined Meade at the Lydia

Leister house to discuss the possibilities, potentialities, and pitfalls of fighting a third day in the present location and condition. The setting offered challenging conditions with so many corps commanders and division leaders crammed into a tiny farmhouse, trying to communicate with deafening noise emanating from Culp's Hill just a mile to the east. Johnson's division assaulted the 12th Corps there for four hours, coincidentally during the entirety of the meeting, in the effort to take advantage of Meade overcommitting to his left. This formidable noise was not only loud but intimidating to those who had to decide the army's next move.

On the agenda stood three options gleaned from the following questions found in Meade's notes that were probably taken by Butterfield: "1. Under existing circumstances is it advisable for this army to remain in its present position, or to retire to another nearer its base of supplies? 2. It being determined to remain in present position, shall the army attack or wait the attack of the enemy? 3. If we wait attack, how long?"²⁵⁹ These were essentially the same ones on the table before the main attack revealed itself around 3:30 PM, and are best summarized in the following way. Should the army adjust the line through pulling back some portion of it onto a stronger position that also shortened lines of communication? Should the army adjust the line by attacking, and if so, then when? Should the army defend the line the way it currently existed without modifications, and if so, then how long before assuming the offensive? Butterfield presented these options to the council, thereby opening each scenario to discussion.

The first of these options revolved on defense, and relied on a reconnaissance conducted by 1st Corps Artillery Chief Colonel Charles Wainwright earlier in the day. Wainwright recalled Meade's reservations about the federal position in its current form stating,

General Meade does not altogether like our position here. He thinks that a better one would have been on the ridge some half a mile farther back, where the line would have been nearer straight. General Hunt came over this morning and explained it to me, adding that it had been determined to hold our present position, but if driven from it we should then take up the other. He desired me to ascertain well the ways of getting there, as, if we were forced back, everything would depend on the artillery holding the new line until the infantry could be formed. This proposed line would have its right on Wolf Hill, instead of Culp's, and could be covered along nearly its whole front by Rock Creek, a small stream.²⁶⁰

Wainwright had done this reconnaissance for Hunt and Meade in the morning, perhaps related to the contingency retrograde that Seth Williams and John Gibbon saw in print. If so, it provides additional insight into what a retrograde looked like not only earlier in the day, but for the council that evening when they discussed defensive and offensive options. For defensive purposes, Wainwright visited four artillery platforms perpendicular to the Baltimore Pike, all of them covering branches of Rock Creek. The forward one, Powers Hill, overlooked the Guinn Run branch made more formidable by its confluence with Rock Creek behind the massive stone dam for McAllister's Grist Mill. After heavy rains, the overflow from the run filled Spangler Meadow on the southern base of the lower Culp's Hill causing maneuvering there to be risky at best. As a result of Wainwright's morning reconnaissance, sixteen federal artillery pieces at Powers Hill

covered these marshy crossings before the 6:00 PM Confederate assault against Culp's Hill.

Immediately south of Powers Hill and parallel with Granite Schoolhouse Lane stood the second artillery platform at Artillery Reserve Park, where all the extra artillery trains sat before distribution to the front lines. The artillery ridge there also marked the

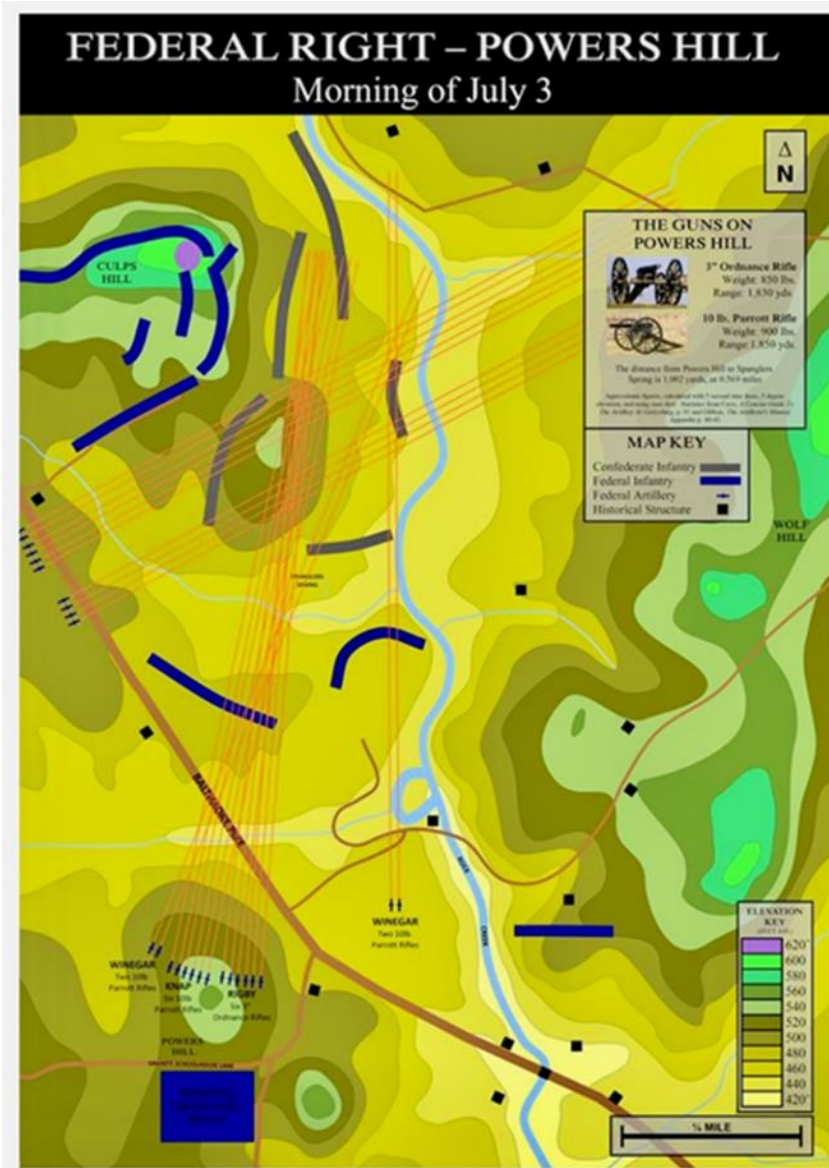


Fig. 34 – Federal Right – Powers Hill, Morning of July 3rd by Britt Isenburg

sharpshooter hideouts in the four Tawney Farmhouses and making fording of the creek doubly hazardous. Artillery Ridge, Powers, and McAllister's Hills collectively brought intersecting fields of fire onto Baltimore Pike's most northern bridge at Guinn Run.

Finally, a mile south of Powers and McAllister's Hills stood Wolf Walk Ridge overlooking the Baltimore Pike's most southerly bridge at Rock Creek. The ridge, with its forward plateau became the stopping point for 6th Corps artillery arriving at intervals during the afternoon of July 2, and a commanding position overlooking crossing points of the lateral running creek. Colonel Charles H. Tompkins' artillery battalion had a sweeping field of fire along the full breadth of Rock Creek to force a choke point at the southerly bridge, and a cross fire on the bridge itself to buy time in the event of a federal withdrawal down the Baltimore Pike. Because Meade's army never had to retreat, this last contingency remained inactive, and therefore is overlooked in discussions, but Bachelder's hourly troop maps shows Tompkins' artillery dispositions just the same. Though several of his battalion guns moved to the front lines, the contingency remained in place for two remaining critical days of battle.²⁶¹

These are the defensive positions that Wainwright investigated for Hunt and ultimately Meade in the event of retreat from Cemetery Hill and Ridge on July 2 or 3. More than theoretical exercises, his investigations evolved into real positions that sealed the Baltimore Pike on the federal right and contributed to the defense of Culp's Hill for two days. During the July 2 assault on Culp's Hill, each of these artillery platforms worked in unison with Wainwright's 1st Corps guns on East Cemetery Hill to form concentric rings of fire around Johnson's approaches to the Baltimore Pike and Rock

Creek on the federal right flank and rear. Altogether, forty-four artillery pieces surrounded Rock Creek Valley Ravine with intersecting fields of fire, making its low-lying defile accesses to the pike treacherous with solid shot and explosive shell. Moreover, the 5th, 6th, and 12th Corps established Rock Creek, at its intersection with the Baltimore Pike, as the army's primary staging area. Barnes and Ayres divisions of the 5th Corps had arrived at this juncture in stages and, "These two divisions, with two brigades of the Third division under Crawford, which arrived about this time, were massed in rear of the center near the point where the Baltimore Pike crosses Rock Creek."²⁶² Likewise, "Sedgwick's Sixth Corps, the largest in the army, after a long night march from Manchester, thirty-four miles distant, reached Rock Creek at 4 P.M." to replace the 5th Corps there as army reserve.²⁶³ Wainwright's contingency reconnaissance, in fact, matured into a real framework that circumscribed Confederate movements around Culp's Hill and insulated the Baltimore Pike for two days. The artillery platforms at Artillery and Wolf Walk Ridges combined with Powers and McAllister's Hills logically represented the secondary defensive position discussed by the Council of War on July 2.

The tactical issue at hand for the Council of War in considering a retrograde involved whether to permit Lee an opportunity to bring critical mass against the apex at Cemetery Hill. Colonel George Sharpe of the Bureau of Military Intelligence briefed everyone at the council that Pickett's division bivouacked south of the Chambersburg Pike on Marsh Creek only four miles west of the battlefield. This information not only completed the checklist accounting for each division of Lee's army, but revealed Lee to be massing his forces in front of Cemetery Hill. Likewise, the horrific crashing of artillery

and musketry fire only a mile east from the Council of War at Culp's Hill signaled Lee's intent to press the same position from the other direction. The intense combat there on July 2, from 7:00 to 11:00 PM, testified to the council that Lee would spare nothing to bring concerted fire on the Cemetery Hill apex another day if necessary.

For this reason, Chief of Staff Butterfield raised the question to the council whether the army should fall back under the cover of darkness onto a stronger position. In review, such an adjustment at the tactical level would involve pulling the center back until the apex straightened across the Baltimore Pike, in all certainty to Powers Hill, McAllister's Hill, Artillery and Wolf Walk Ridges, all natural choke points restricting enemy movements south on the Baltimore Pike, and positions that covered the army's trains and water supply. These hills formed the contingency positions explored by Wainwright and fortified by Hunt earlier in the day. When presented with this defensive option, the council prudently rejected it on grounds of army morale, with so many troops having sacrificed over the same ground for two days, the time had passed for willful retrograde. Slocum contributed to the final decision stating to the council, "Stay and fight it out," along with warnings the army should not make any defensive moves that resembled a retreat.²⁶⁴ It is ironic that Slocum would warn the council on pulling back considering he had withdrawn two corps to Culp's Hill a few hours earlier against the commanding general's orders. Even so, his opinion carried weight as senior corps commander in the room, as well as the corps commander in charge of fighting at Culp's Hill. His assertions ended discussions that evening of a defensive position behind Rock Creek.

Once the council settled on maintaining the position as is, Butterfield then brought offense into the discussion as a second option. The offensive option, like the defensive one, revolved on Rock Creek. If we look at Wainwright's account closely, it ends with the offensive option in question stating, "This proposed line would have its right on Wolf Hill, instead of Culp's, and could be covered along nearly its whole front by Rock Creek, a small stream."²⁶⁵ If one considers this to be a reference to Wolf Hill proper on the Hanover Road, or the George Wolf Farm on Hospital Hill, then Wainwright's account may also describe Meade's earlier offensive plan on the right. This is a reasonable assumption if Wainwright's investigation was conducted before Meade gave his decisive attack order at 10:00 AM, operating under the impression 5th and 12th Corps remained east of Wolf Hill. Warren reconnoitered Rock Creek Valley Ravine after 10:00 AM, and Slocum informed Meade between 10:30 and 11:00 AM that he had taken up a new line. Meade did not move to options on his left until 12:00 Noon, making it probable that Wainwright examined artillery positions along Rock Creek while decisive attack still remained an option on the right. In this scenario, Wainwright's East Cemetery Hill guns planned to act in concert with artillery placed on the seized positions of Benner's and Hospital Hills, along the northern prolongation of Rock Creek, to cover both the Hanover Road and Hanover-Gettysburg Rail line.

Regardless of how far Wainwright's reconnaissance extended, offensive options discussed in the Council of War had to consider the gathering presence of Stuart's cavalry, between the York and Hunterstown Roads, while the USMCR repaired the Hanover-Gettysburg line. Moreover, the corridor opened to the Baltimore Pike by

Johnson's breach of the federal position at lower Culp's Hill made matters on the right of great urgency. One-third of Ewell's Corps not only had begun to wedge the Culp's Hill position from Rock Creek and the Baltimore Pike, but Johnson's lodgment severed federal infantry at Culp's Hill from Gregg's cavalry support on the Hanover Road prompting both Kilpatrick and Gregg to fall back to Two Taverns five miles south of Gettysburg in an attempt to reestablish the same line with infantry along the Baltimore Pike. By the end of July 2, the federal right flank was vulnerable.

Therefore the council had their work cut out for them. Whether they discussed defense or offense, the first order of business involved reinforcing protection of the Baltimore Pike with 6th Corps reserves. In the event of defense, at least one 6th Corps division needed to augment 12th Corps defense of Culp's Hill and build a human bridge along the Baltimore Pike toward Gregg and Kilpatrick's divisions of cavalry, which is what they eventually did. However, had the council agreed on offense, these same 6th Corps reserves needed to maneuver with cavalry around Johnson's flank and rear to turn his division back to Benner's Hill. This maneuver could be executed on Highland Avenue, White Run, and Low Dutch Roads under the cover of darkness, starting after the council meeting at 11:00 PM and ending before sunrise at 4:15 AM, positioning them ready at dawn to take the enemy in reverse. In both offensive and defensive scenarios, 6th Corps reserves stood ready near the juncture of Baltimore Pike and Rock Creek.

According to Chief of Staff Butterfield's pencil notes found in Meade's papers in 1881, the council chose not to pursue offensive measures at least for another day. Had

they seriously considered offense, the above description offered the most logical opportunity to hold the Rock Creek line at its confluence with the Baltimore Pike and Hanover-Gettysburg Rail Line. With regard to Butterfield's "good of the order" proposals for correcting the line through fall back, or attack, or maintaining the line as is, Meade recorded corps commander responses as follows:

Page 2, Replies. Gibbon: 1. Correct position of the army, but would not retreat. 2. In no condition to attack, in his opinion. 3. Until he moves. Williams: 1. Stay. 2. Wait attack. 3. One day. Birney: Same as General Williams. Sykes: "[1st Corps, Major General John] Newton: 1. Correct position of the army, but would not retreat. 2. By all means not attack. 3. If we wait it will give them a chance to cut our line. Page 3. Howard: 1. Remain. 2. Wait attack until 4 P.M. tomorrow. 3. If don't attack, attack them. Hancock: 1. Rectify position without moving so as to give up field. 2. Not attack unless our communications are cut. 3. Can't wait long; can't be idle. Sedgwick: 1. Remain. [2.] and wait attack. [3.] At least one day. Slocum: Stay and fight it out. [On the back, or *first* page of the sheet]: Slocum stay and fight it out. Newton thinks it a bad position; Hancock puzzled about practicability of retiring; thinks by holding on *inviting* to mass forces and attack. Howard favor of not retiring. Birney don't know. Third Corps used up and not in good condition to fight. Sedgwick *doubtful whether we ought to attack...* Minutes of Council, held Thursday, P.M., July 2d, 1863. D.B., M.G., C. of S. [Daniel Butterfield, Major-General, Chief of Staff].²⁶⁶

5.14 One Unacknowledged Adjustment

When viewed together, these recorded notations from the Council of War reveal a consensus among federal corps commanders to maintain the position as is, but not without with a few caveats. The biggest alarm came from recently appointed 1st Corps Commander Major General John Newton who warned, "If we wait it will give them a chance to cut our line," southeast of Gettysburg. His vast engineering experience made his concerns that much more convincing when he talked about vulnerabilities on the operational left leaving that flank to be turned towards Westminster and even

Washington. Though only this gist of his speech survived, it is not difficult to realize why he found an attentive audience. The council fully understood the context of his warnings. First, the fear of having communications cut to the main supply depot at Westminster, or the federal capital beyond was in keeping with military protocol. Frederick the Great warned,

After serious deliberation on these objects, and after having calculated the chances of enterprise on the part of the enemy, your plan is to be arranged, either for the purpose of encamping on one of his flanks, approaching the provinces whence he draws his subsistence, cutting him off from his capital, threatening his depots, or in short, taking up any position by which you deprive him of his provisions.²⁶⁷

Secondly, they knew Longstreet's main attack had struck the tactical left with such force and magnitude on July 2, that a renewed attack was not hard to imagine, particularly with so many of Major General John B. Hood's Confederate regiments still in close contact with Big Round Top. Making this thought more disturbing to the council was that both Union cavalry divisions guarded the right flank east and northeast of Culp's Hill, leaving communication lines vulnerable on the left. Brigadier General Wesley Merritt's cavalry brigade of Buford's division guarded the operational left at Emmitsburg, but that was eight miles south of Gettysburg. When Newton warned of susceptible communication lines, he was reminding of the numerous access roads south of Round Top connecting the Emmitsburg and Taneytown roads known as Ridge, Knight, and Marsh Creek Roads, along with the improved Waynesboro – Emmitsburg turnpike that led directly to Westminster. Building on Bureau of Military Intelligence Chief Colonel George Sharpe's news to the council that Pickett's division rested only four

miles west of the battlefield, Newton did not need to remind them that Lee had a fresh division to turn the federal left. Newton essentially scared everyone into expecting the main thrust against the federal left the next morning.

How can one determine that Newton's warnings resonated with the council? The tangible answer is that Meade, through Pleasonton, recalled both available divisions of cavalry from the right immediately after the council ended around 11:00 PM, and sent them to cover the precise area that Newton warned of on the left. Kilpatrick withdrew under the cover of darkness from Hunterstown at 11:00 PM, even as Gregg evacuated the Hanover Road, and both rode five miles south of Gettysburg to Two Taverns on the Baltimore Pike. Two Taverns covered avenues of approach to the Baltimore Pike from multiple directions, while providing a water source at Littles Run and local pastures for grazing. Meanwhile, Colonel J. Irvin Gregg's brigade, of Brigadier General David M. Gregg's division, detached closer to the battlefield along the Baltimore Pike, watching for Confederate movements along Highland Avenue and White Run roads toward the federal right. To remain alert on the left, Pleasonton personally assigned Colonel William E. Doster's 4th Pennsylvania cavalry to secure Ridge, Knight, Barlow-Greenmount, Chapel, and Marsh Creek roads, between the Emmitsburg and Taneytown roads, and report directly to him.²⁶⁸ Doster reflected on the assignment stating, "Pleasanton seems to be anxious to guard the rear from attack. I again report to Pleasanton and he orders me to picket [guard] the left flank beyond the infantry."²⁶⁹

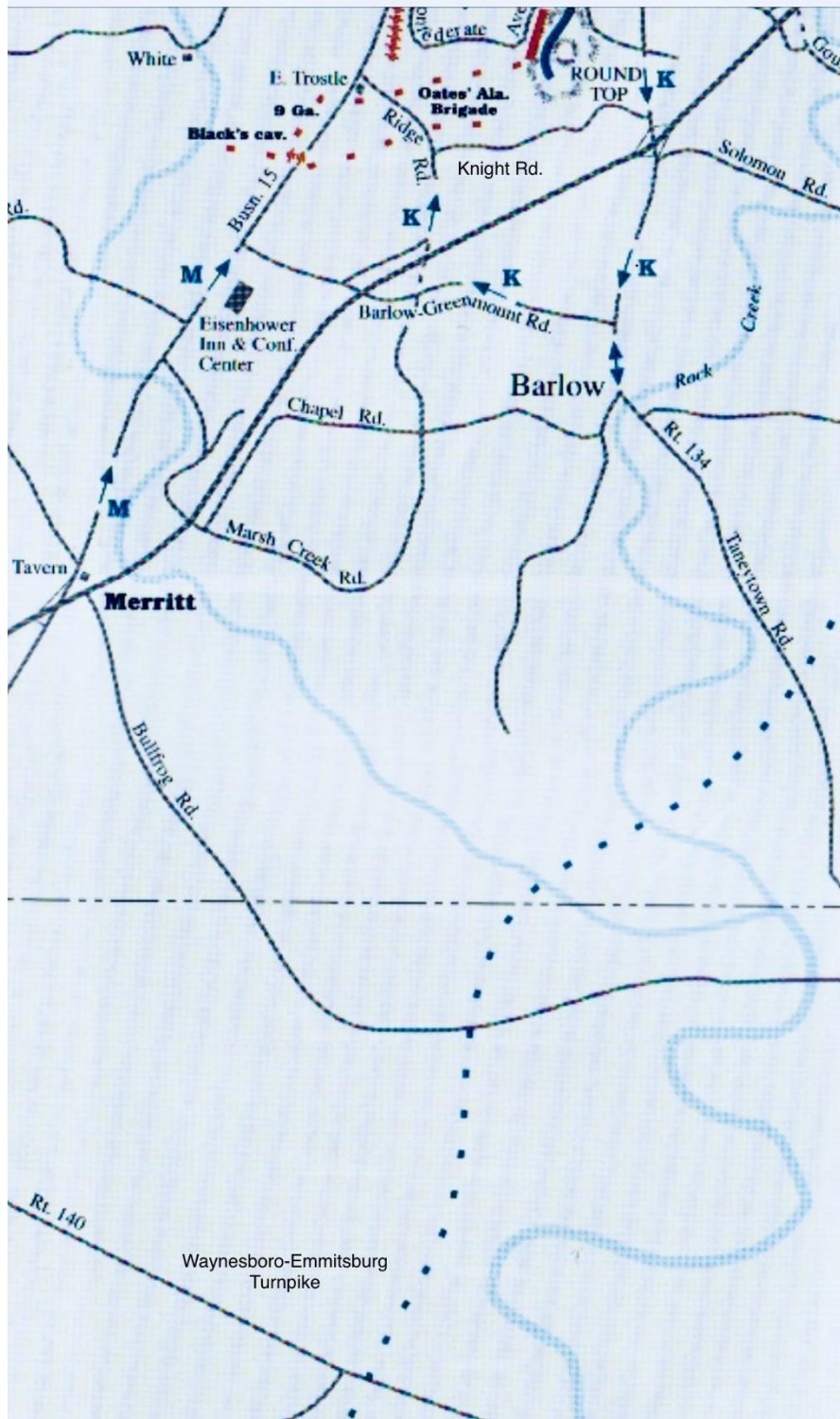


Fig. 36 – Excerpted from, “South Cavalry Field Tour/Battle Map #1-July 3, 1863-to 11:00 AM,” *Blue & Gray Magazine*. Connector Roads between the Emmitsburg and Taneytown Roads. Bold Diagonal Line = Bypass 15. M = Merritt, and K = Kilpatrick. Dots = Federal Cavalry Vedettes.

In response to 4th Pennsylvania cavalry findings, Colonel Lewis A. Grant and Brigadier General David A. Russell's two 6th Corps brigades refused or bent back the federal left at Little Round Top after 3:00 AM on July 3. The shifting of both federal cavalry divisions to the Littles Run branch of Marsh Creek, the reconnoitering and picketing of Doster's 4th Pennsylvania Cavalry between the Taneytown and Emmitsburg Roads and the 3:00 AM deployment of two 6th Corps infantry brigades behind Little Round Top were a direct outgrowth of Newton's warnings to the council.

5.15 Doster's Adventure and Longstreet's Scouting Parties

Doster had more to say about his mission the night of July 2, and of the troublesome indicators that Newton might be correct. Doster noted in his diary,

The night is dark. I have no knowledge of the locality. No one can tell me where the line is. Pleasonton does not know. I must find out myself. I enter the first road turning to my left. First we run into ambulances, then into infantry, then again know we are among the wounded by their groans, and so, groping our way between the pickets of the two armies, we finally run some kind of [mounted cavalry] line by one o'clock, but whether it runs inside the rebels or inside our wagon trains, I cannot tell. Morning arrives and I visit the line. It is all right—the men, being old picketers, have disposed themselves in hailing distance of one another and beyond the infantry. Soon after daybreak I am ordered to withdraw my line within the infantry.²⁷⁰

In all probability the Confederate infantry that Doster's men encountered in "groping our way between the pickets" included scouts sent by Longstreet to find ways around the federal left, the very thing that Newton predicted. Longstreet provided clues in his writings as to where his flanking maneuver intended to go, and as a result, where his scouts reached. He recorded that his scouting parties reached a point on the federal

left closer to Westminster than Meade's left, a point that he hoped to extend the army flank if Lee could be persuaded to break contact and maneuver the army in that direction. Longstreet stated,

General Meade was then with General Sickles discussing the feasibility of withdrawing his corps to the position to which it was originally assigned, but the opening admonished him it was too late. He [Meade] had just sent a cipher telegram to inform General Halleck, commander-in-chief, that in the event of his having no opportunity to attack, and should he find the Confederates moving to interpose between him and Washington, he would fall back on his supplies at Westminster. But my right division was then nearer to Westminster [than Meade's left], and our scouting parties of infantry were within rifle range of the road leading to that point and to Washington. So it would have been convenient, after holding our threatening attitude till night, to march across his line at dark [Taneytown Road], in time to draw other troops [Ewell and Hill's Corps] to close connection before the next morning.²⁷¹

Longstreet rhapsodized over this in the post-war years that such a maneuver, at the operational level, allowed a substantial portion of the Confederate army to interpose between the federal position and Washington, thus requiring the latter to attack the former on ground of their choosing. Such a maneuver demanded that Ewell withdraw from the town and points south of the Gettysburg-Hanover line to align Lee's three corps west of Gettysburg for an extension of the Confederate right. Leaving Ewell east of Gettysburg detached and isolated, while the remainder of the army marched south was not an option, so Lee would have to be convinced of the matter to make the operational move work. Longstreet would have settled for a limited tactical version of flank attack with the addition of Pickett's Division on July 3, but the more involved operational move occupied his imagination three decades later as his book indicates.

Kilpatrick's early morning cavalry skirmish with unidentified Confederates at the J. Thompson House and modern day Pete Bocek Farm on Barlow – Greenmount Road, followed by another contest in front of the J. Beamer Farm, on Ridge Road, points to Longstreet's scouting parties reaching the Taneytown Road.²⁷² Colonel Black's one hundred mounted men of the 1st South Carolina Cavalry, detached from Hampton's brigade to Longstreet's staff, qualified as the most likely Confederate suspects in these two contests, as did the 1st Texas that guarded the defile access to Ridge Road, near the Beamer Farm. Other nearby Texas and Alabama regiments were eligible to help such as the 5th Texas that actively participated in guarding the Confederate right flank. Major J.C. Rogers of the 5th Texas Infantry reported, "During the day, constant skirmishing was kept up with the enemy, which resulted in the loss to us of many of our best scouts."²⁷³

5.16 Close of July 2

The day had begun with Meade focused on launching a decisive attack against two hills on his right that would effectively uncoil the federal right flank, form it into a straight line north-south along Rock Creek, and eliminate Confederate presence east of Gettysburg. This attack was also to be decisive in allowing completion of the New Oxford to Gettysburg section of the Hanover-Gettysburg line, in securing federal ambulance and artillery trains along the Baltimore Pike, and in covering the main supply depot at Westminster. Most importantly, this attack was to be decisive in pinning Lee's army to South Mountain, and thus ushering in the offensive phase of the campaign necessary for the federal army to bring operations to a close. When the attack did not happen due to Slocum's withdrawal and entrenchment on Culp's Hill, Meade briefly

considered a decisive attack on his left that would turn Lee's flank at Seminary Ridge, and threaten his communications along the Fairfield Road. However, the attack plan on Meade's left ended between 1:30 and 2:10 PM when the Little Round Top Signal Station warned of Confederate columns maneuvering north of Gettysburg to strike his right flank at Culp's Hill. Instead, the main Confederate attack showed on Meade's left requiring the commanding general put aside concerns for the army's logistics on his right, and throw every available resource at the emergency on his left. The day ended with Confederates in close proximity to Little Round Top, and Meade's left in danger of being turned at the Taneytown Road. After a council of war, Meade was so concerned about his left flank that he ordered both of his available cavalry divisions from the Brinkerhoff Ridge line northeast of Gettysburg to Two Taverns five miles south of town to cover approaches to Westminster from his left and right. The cavalry covered road accesses to the army's logistics in both directions to be ready for wherever Lee attacked next, but where would that be?

Chapter 6: Day 3 – Focus Shifts to Center of Rock Creek Line

The answer to where Lee would attack next was answered at sunrise on July 3 when Ewell renewed Confederate assaults against the federal right at Culp's Hill. The fighting there raged for seven hours, commencing at 4:00 AM and continuing until 1:00 PM when Ewell was finally forced to withdraw across Rock Creek to Benner's and Hospital Hills. During this same timeframe, Lee ordered Stuart's cavalry division of over 4,000 troopers to threaten Meade's logistics on his right by attacking toward the Low Dutch Road, which was the principle access to the Baltimore Pike. Stuart's several dismounted and mounted cavalry attacks were finally repulsed at 3:00 PM permanently ending Lee's threat to Meade's logistics on the right flank. Ewell and Stuart's simultaneous pressure on Meade's right was intended to pull federal strength away from Longstreet's main Confederate attack on the federal center at Cemetery Hill, known as Pickett's Charge. Lee intended for all three attacks to come together in critical mass around the apex of the Union fishhook and dislodge the federal army permanently from its water, road, and rail connections between Cemetery Hill and Culp's Hill. What Lee did not realize is that Longstreet had other plans based on his late night reconnaissance of the federal left along the Taneytown Road. Longstreet had found, in his estimation, a way to turn Meade's left flank rather than assault his position directly.

Acting on the findings of his scouting parties, Longstreet ordered a tactical extension of his right flank beyond the Round Tops, with the mission of finding the flank on the federal side and driving it in on the center at Cemetery Hill. Based on his after

south while attacking diagonally north was understandable, but within the parameters of Lee's orders for "partially enveloping" the Union left and driving it in on Cemetery Hill.²⁷⁴ Longstreet likely started the flanking maneuver at the tactical level hoping to convince Lee to broaden it to an operational one, or at least rescue his plan by sending more infantry and cavalry to sustain a newly adopted position. As it turned-out, Lee arrived sometime after sun-up at 4:15 AM, perhaps as late as 6:00 AM, and countermanded Longstreet's order for a tactical flank extension. Longstreet reported that,

...our arrangements were made for renewing the attack by my right, with a view to pass around the hill [Round Top] occupied by the enemy on his left, and to gain it by flank and reverse attack. This would have been a slow process, probably, but I think not very difficult. A few moments after my orders for the execution of this plan were given, the commanding general [Lee] joined me, and ordered a column of attack to be formed of Pickett's, Heth's, and part of Pender's divisions, the assault to be made directly at the enemy's main position, the Cemetery Hill.²⁷⁵

The two men argued for a while as Longstreet made his case against Pickett's Charge stating "that no fifteen thousand men ever arrayed for battle can take that position,' pointing to Cemetery Hill."²⁷⁶ Lee insisted "The general plan was unchanged," which meant Longstreet had to abandon his flanking maneuver at both the tactical and operational levels.²⁷⁷

So how did Pleasonton react to Confederate scouting against his flank under the shroud of darkness? He responded rather strongly by sending a brigade of Kilpatrick's division to fill access roads linking the Emmitsburg and Taneytown Roads, and ordered Merritt's cavalry brigade of Buford's division up from Emmitsburg to challenge

Longstreet's flank and rear. Furthermore, Colonel Lewis A. Grant and Brigadier General David A. Russell's 6th Corps infantry brigades refused or bent back the flank at Little Round Top, while the 4th Pennsylvania cavalry buffered them to the south. How precisely did the 4th Pennsylvania cavalry inform Pleasonton of Longstreet's strength and location? The precision was such that Kilpatrick left Custer's brigade of his division at Bonaughtown to strengthen David Gregg's advanced position along the Hanover Road.²⁷⁸ This tells us the night scouting mission not only probed Longstreet's outlying picket lines, but they helped Pleasonton determine that Brigadier General Elon J. Farnsworth and Brigadier General Wesley Merritt's cavalry brigades were enough to protect the left flank on July 3. To accomplish this, Merritt was ordered up from the critical Waynesboro – Emmitsburg road juncture at Emmitsburg to join Farnsworth, indicating federal cavalry night probes had gaged the Confederate threat on the federal left to be a tactical move at worst. Conversely, the joining of Custer's brigade with Gregg's two brigades along the Hanover Road informs that Pleasonton had correctly surmised the Confederate cavalry threat to his right. There was some second guessing about keeping Custer's brigade with Gregg around 10:00 AM, but Stuart's cavalry showed themselves in force soon after thereby confirming that Pleasonton had estimated correctly in placing three brigades of cavalry on the right and two on the left. The 4th Pennsylvania had done good work.

For Meade, the threat had shifted back to his right, center and left-center by 11:00 AM on July 3. The process of elimination regarding Confederate options had made this clear. Federal cavalry had ruled out a turning maneuver on Meade's left,

while also locating the majority of Confederate cavalry east of the Brinkerhoff Ridge line indicating concentration of Lee's forces around the apex of the Union line from Cemetery Ridge to Cemetery Hill to Culp's Hill. The seven hour fighting on Culp's Hill beginning at 4:00 AM had made this more obvious, as did a noontime visit by Meade and Hunt to the observation point of Little Round Top that revealed a strengthening circle of Confederate artillery around the Cemetery Hill bend. As for federal chances to oppose successfully, the council's decision to "stay and fight it out" committed the army to withstand encirclement one more day. All other options were suspended at least until Lee relinquished the initiative.

6.1 Taking the Enemy in Reverse

An all or nothing proposition offered a tremendous bonus though if the line held. That is, if the attacker of a salient concentrates all of his fire directly on the salient point, it usually means he has overcommitted his resources against the center, making him susceptible to envelopment on one or both wings. Through intelligence and process of elimination, Meade knew by noon the assault would come at any time against his left-center and center, meaning he had to decide which flank gave him the best opportunity to envelop the enemy, and therefore on which flank he needed to place reserves for an attack in reverse at the moment of repulse. In considering both flanks, his right flank had become even more problematic for such an assault, not only because of rugged terrain, but also because Lee deployed all of Stuart's cavalry on that side, east of Brinkerhoff Ridge. That left Meade one option for counterattack on July 3, namely his left flank, where federal cavalry was unopposed. Not only did federal cavalry dominate

the left, but Patterson and Weikert Hills, Munshower Knoll and Round Tops formed a wall of concealment that stretched a mile north to south, ideal for concealing 10,000 reserves, the number that Meade committed to that position within forty-five minutes after the repulse of Pickett's Charge. Understanding the attack would likely come against his left-center and center, he had to first repulse the attack, which meant holding layers of reserves in readiness behind Cemetery Hill and Ridge long enough to secure the position, and then shift them to the federal left. The counterattack would have to begin with 2nd Corps troops, supported by Williams' division, 12th corps, following on the heels of Pickett's retreating Virginians, to exploit the gap created in their line from the failed charge. Immediate pursuit would force Hood and McLaws' divisions of Longstreet's corps to shift north of the Peach Orchard to cover the gap, thereby prompting federal reserves on Meade's left to push out to the Emmitsburg Road and take them in reverse, not unlike the plan Meade briefly considered in the early afternoon of July 2.

Testimony before the Joint Committee on the Conduct of the War eight to ten months after the battle revealed that Meade began planning a counterattack on his left the evening of July 2, going so far as to prep Hancock in the event of an assault against the center. He briefed Hancock to be ready and made him operationally in command of the army's left wing that included the 5th and 6th Corps for such a counteroffensive. Chief Engineer Gouverneur K. Warren also testified to the same plan stating, "General Meade had so arranged his troops on our left during the third day that nearly one-half of the army was in reserve in that position...it was a good sheltered position, and a

convenient one from which to re-enforce other parts of the line.”²⁷⁹ Hancock had this option fully ready to go when Pickett’s Division made contact with his front.

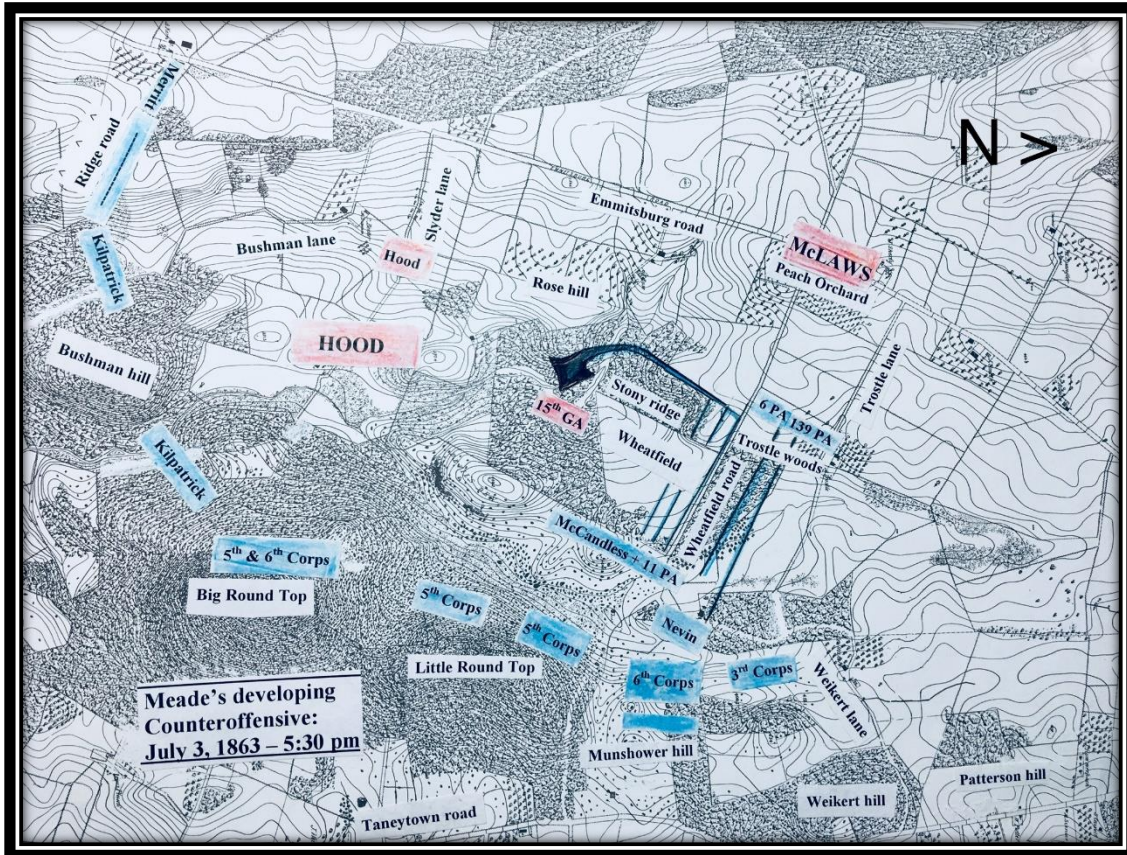


Fig. 38 – Meade’s Developing Counteroffensive by Troy Harman.

Longstreet’s Assault or Pickett’s Charge, as the last major Confederate attack is commonly called, struck the Union line precisely where Meade expected them to with Pickett’s Virginians assaulting the left-center at Cemetery Ridge, and successive attacks building on it toward the center at Cemetery Hill. The tactical purpose of echelon or successive attacks is to bait the defender into overcommitting reserves to the first, and second attacks, until the third and fourth ones break through. In this fashion, Pickett’s attack jumpstarted a chain reaction of echelon attacks sequentially south to north that included brigades belonging to Brigadier General James J. Pettigrew and Major General

Isaac Trimble in succession toward the main Cemetery Hill. Meanwhile, Ewell's forces demonstrated at the base of Culp's Hill even as Stuart's cavalry maneuvered and attacked in the direction of the Baltimore Pike to pull Union 12th and 6th Corps away from Longstreet's main assault, the goal being to dislodge Meade from the Cemetery Hill position and then pursue. Lee chose a perch directly opposite where the echelon attacks were to culminate on Cemetery Hill and where A.P. Hill would release his reserves if a favorable opportunity for decisive action presented itself. Hill's reserves also constituted a second wave ready to exploit any advantages gained by the main attack and Lee was where he needed to be to make that call.

Meade was ready for it, however, and his artillery helped drive-in both Confederate flanks for federal infantry to surround and crossfire them in front of Hancock's center. Hancock received a serious wound advancing the 13th, 14th, and 16th Vermont in the decisive turning maneuver against Pickett's flank. General Gibbon, who was second in command also suffered a wound leaving a void in command on the left where the tactical maneuver began. Critical momentum was lost before Meade realized his leaders there were down and that he must personally direct the counteroffensive. With the cheers of victorious 2nd Corps troops ringing in his ears, Meade rode to the left to investigate the situation for himself. He was accompanied by Pleasonton, who in later years claimed to have urged the commanding general to go forward with the left wing. They rode together to the top of Little Round Top where a council of war convened on the northern slope that included Meade's staff, 5th Corp commander Major General George Sykes, Pennsylvania Reserves division commander Brigadier

General Samuel W. Crawford, 6th Corps commander Major General John Sedgwick, and Chief Engineer Gouverneur K. Warren. After consultation with Sykes, in particular, two 5th Corps brigades were ordered to sweep west through the Wheatfield, Stony Ridge, and Trostle woods to determine enemy location, morale, and strength. Ordered forward as an armed reconnaissance, the option existed to engage the enemy upon contact, with the overarching purpose of helping to determine the feasibility of a multi-corps counteroffensive. Simultaneously, Pleasonton ordered Kilpatrick to force the issue with Brigadier General Elon J. Farnsworth's cavalry brigade against Texas and Alabama troops in close proximity of the Round Tops, while Brigadier General Wesley Merritt's cavalry brigade did the same against Georgia infantry near the Emmitsburg Road and Warfield Ridge. Merritt had been ordered to the battlefield from Emmitsburg to join Farnsworth in skirmishing with Hood's Confederate infantry division for several hours, ultimately preventing Hood from shifting north to join McLaws' division in a supporting role for Pickett's Charge.

6.2 Two Prong Counteroffensive

The role of cavalry changed there after Pickett's Charge. What Meade approved and Pleasonton ordered down through the chain of command to Kilpatrick and then Farnsworth, was a transition from protecting the flank, to an offensive posture where federal cavalry aggressively charged the Confederate rear as Meade's infantry pressed their front, in effect setting up Hood and McLaws in a vice. The decisive attack intended to double envelop the unsecured flanks of both divisions, made possible by missing cavalry protection on one flank, and weakened infantry support on the other from

Pickett's disarray. Hancock believed that had Meade advanced his center in pursuit of Pickett, he would have found a mile wide gap in the Confederate center to continue the rout. In his wounded condition immediately after the charge he wrote, "I have never seen a more formidable attack, and if the Sixth and Fifth Corps have pressed up, the enemy will be destroyed."²⁸⁰ With Pickett's division shattered, Hancock's 2nd Corps supported by Williams' 1st division, 12th Corps threatened to roll-up McLaws's unguarded left flank, even as federal cavalry encircled Hood's right flank and rear. Had Meade ordered these two center corps forward, forcing McLaws to maneuver north to cover the gap left in the wake of Pickett's destruction, then Meade's advance of the 5th and 6th Corps through the Wheatfield, Peach Orchard and Warfield Ridge stood to gain Hood and McLaws rear to the southwest. All preliminary phases of this plan came together in expectation of Meade ordering forward the 2nd and 12th Corps, but the implementation phase fizzled and eventually expired.

There were several reasons why the opportunity for counteroffensive slipped away, the primary one being Hancock's wounding leaving Meade without the general he had prepped. The second reason involved the time required to shift reserves from the center to the left to enable a decisive flanking maneuver. Meade testified that it required some time to shift his strength to the left, enough to undermine the counteroffensive. The argument could be made that he should have started the movement before Pickett's Charge commenced, but the uncertainty of holding the left-center along Hancock's front made it prudent to wait. Specifically, an entire division of the 6th corps stood behind Cemetery Hill, within close proximity of the Baltimore Pike

ready to shift in either direction, but leaned toward Culp's Hill, in response to the ongoing infantry and cavalry threat. Stuart's cavalry stood poised to threaten the Baltimore Pike where all the wagon trains rested, as well as the army's primary escape route. The 6th Corps provided added security to seal off the Baltimore Pike to protect the wagon trains in their current positions, or in a worst case scenario to insulate retreat, by securing key bridges across Rock Creek south of town, Littles Run at Two Taverns, or even Pipe Creek at Union Mills if the retrograde reached Maryland.

In short, though 6th Corps brigades were spread across the entirety of the federal position at Gettysburg, the majority remained in close proximity to the Baltimore Pike, behind Cemetery Hill, poised to cover the right-center at Culp's Hill, the center at Cemetery Hill and left at Cemetery Ridge. Had Pickett's Charge forced a retreat from the left-center, 6th Corps provided the interior layer of insulation to stabilize the line around the wagon trains closer to Powers Hill. Their mere presence non-verbally sent the message to soldiers on the front lines that there was nowhere to go but forward, along with the deeper commitment to hold at all cost. In short, 6th Corps covered the apex of the federal position from every angle of approach to the Baltimore Pike. To add flank insurance, the 16th Pennsylvania Cavalry connected with Brigadier General Thomas H. Neill's 6th Corps brigade on the extreme federal right at Wolf Hill's intersection with the Baltimore Pike to extend it northeast to the Hanover Road. Colonel J. Irvin Gregg recollected, "This line connected with Gen. Neill's line (of infantry) on the left and remained in this position until after dark on the night of the 3d instant; skirmishing with the enemy, whose left appeared to be at Deardorf's."²⁸¹

Chapter 7: Day 4 and 5 – Full Restoration of the Rock Creek Line

7.1 Lee Relinquishes His Grip; Meade Uncoils to Rock Creek

Within a few hours after Pickett's Charge, Ewell pulled-back Johnson and Early's division to the northern end of Seminary Ridge and Oak Ridge, while using Herr Ridge Road to circle wagon trains behind the infantry south to Fairfield where they turned west to retreat toward the refuge of South Mountain and Cumberland Valley beyond. The Confederate infantry flanks guarded by Longstreet on the right and Ewell on the left, gradually folded inward on Hill at the center to march west on the Fairfield Road. As the ends collapsed intentionally on the center, Stuart's cavalry guarded the condensing flanks, not only protecting the infantry, but covering wagon trains behind the lines. Meanwhile, Meade pivoted his right to Benner's and Hospital Hills, even as he approved a cavalry extension on his left toward Frederick, Maryland. As Comte de Paris explained,

On the right, Slocum advances as far as the York road; on the left, Sedgwick occupies the whole battlefield of the 2d; in the centre, Howard, with a portion of the Eleventh corps, comes down from his citadel into the town of Gettysburg. The cavalry is alone pushed forward to feel the enemy. Buford and his first two brigades start from Westminster early in the morning for Frederick; Merritt, with the third, leaves the battlefield to join him at that place, whence they proceed in the direction of Williamsport; Kilpatrick, taking with him Huey's brigade of Gregg's division, besides his own two brigades, marches upon Monterey by way of Emmettsburg; Gregg's brigade watches the right, and presently follows the Cashtown road, the terminus of which McIntosh occupies at the entrance of Gettysburg.²⁸²

Specifically, Williams sent Ruger's brigade, 1st division, 12th Corps on a circular sweep from lower Culp's Hill, around Wolf Hill to the Hanover Road, and then to the Lady Farm,

before marching back to Culp's Hill. Brigadier General David M. Gregg's cavalry brigade pursued Stuart's cavalry north to hold the far right at Hunterstown, even as the 11th Corps marched north, off of Cemetery Hill, into the town to secure it and build a human bridge toward the evolving 12th Corps and cavalry positions in that direction. With these movements, federal troops and troopers not only filled the vacuum between them and their retreating adversaries, but Meade had restored Reynolds' original stance fronting west that pinned Lee's army to South Mountain and froze his movements in the Susquehanna Valley. In pivoting his right flank, Meade also initiated the offensive phase of his campaign, the one that must follow a defensive repulse demonstrated in the three previous days concluding with Pickett's Charge. If Meade hoped for decisive victory, he had to pursue for three reasons. The first one is that Lee was retreating because he had conceded the initiative, equal to Meade determining what happened next. Secondly, if Lee no longer attacked, it indicated that he most likely was unable to do so, meaning Meade had to seize the moment. Thirdly, every successful campaign ends conclusively with an offensive phase. Repulsing Lee for three days is one matter, but completing the task required pursuing until the ANV capitulated.

Before pursuit, Meade had to confirm Lee's intentions; was his retreat only to South Mountain to make a defensive stand in the passes, or did he intend to evacuate to Virginia? Lincoln informed Halleck, "Still later, another dispatch from General Pleasonton, by direction of General Meade, to General French, stating the main army is halted because it is believed the rebels are concentrating 'on the road toward Hagerstown, beyond Fairfield,' and is not to move until it is ascertained that the rebels

intend to evacuate Cumberland Valley.”²⁸³ Custer’s brigade of cavalry, Kilpatrick’s division spearheaded the fact finding mission by riding the vital Waynesboro–Emmitsburg Road to Monterey Pass to ascertain Lee’s intent, and learned in a series of attacks through Fairfield Gap and Monterey Pass that Lee would not stop even to save ambulances containing 1,500 wounded men, or supply wagons intermingled with cattle, hogs, and sheep. Outside of Captain George M. Emack’s 1st Maryland Cavalry Battalion, and their single cannon fighting in tandem with the 6th Virginia cavalry, Ewell’s Corps put up little resistance in their retrograde through South Mountain to the Cumberland Valley around 1:00 AM on July 5. This intelligence made it clear to Meade that Lee did not plan on fighting again north of the Potomac. Had Lee considered doing so, he would have made a stand with several infantry brigades at Monterey Pass. A measured defense usually leads to the opposition responding in like-manner, requiring increased committal to either gain advantage or break contact. The vicious cycle often leads to a general battle, if that is what the commander desires. Lee avoided the cycle altogether, choosing instead to retreat at a loss.

Much was riding on the information that Custer obtained regarding from what direction Meade pursued Lee. Had Lee shown an inclination to fight in the passes, then Meade would be obliged to march in force to South Mountain and drive him out. To do so required his army be resupplied on the Rock Creek line, something not easily done with horse and wagon transportation from Westminster. Rail lines were being repaired by the USMRC, even as Custer’s pre-dawn, July 5 attack at Monterey Pass commenced, but could the track be restored enough to transport supplies quickly up from

Westminster? This had to be done by way of the Northern Central to the Hanover – Gettysburg line, or transported on the Littlestown extension close enough to be

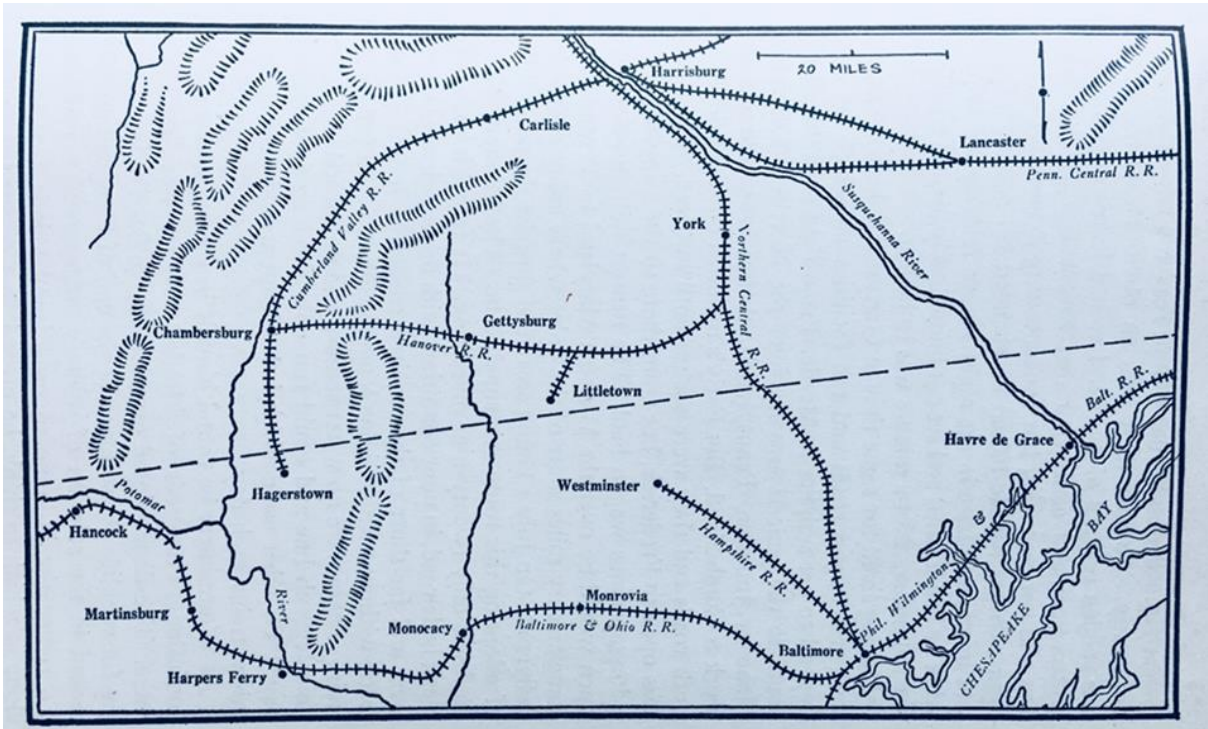


Fig. 39 – Map titled, *Gettysburg*, from George Edgar Turner’s *Victory Rode the Rails*. Frederick is located where the map reads Monocacy.

manually moved to the battlefield by horse or mule. Both lines used the “u” rail, a cheaper track unable to support heavy engines, and neither had storage facilities capable of holding AOPs entire supply of 400 rail cars at Westminster. However, if repaired soon, both railroads could transport enough supplies to give Meade the opportunity to maintain the Rock Creek line as a temporary base to attack Lee at South Mountain. If Lee’s retreat continued unimpeded to Virginia, then Meade must reroute supplies from Westminster to Frederick, Maryland on the recently repaired B&O line to pursue Lee through Fox, Turner, and Crampton passes and contest his crossing of the Potomac around Williamsport.

7.2 Pursuing Lee Downstream

On July 5, the same day that Custer gathered his critical information at Monterey Pass, Hermann Haupt found Meade at his recently relocated headquarters near the Baltimore Pike crossing with Rock Creek, more centered with his north – south operational line from Hunterstown -- Black Gap Road to the Waynesboro – Emmitsburg Turnpike. Haupt informed Meade that he had restored telegraph communication to Washington and that rail lines would soon be completed. Had Meade not learned on July 5 from Custer of Lee's headlong race to the Potomac, the decision to wait on the Rock Creek line another day would have been necessary, followed by continual updates to army headquarters over progress on the Hanover – Gettysburg line. Accelerating the reconstructive process remained a possibility too, but Lee's race to the Potomac determined a supply base shift to Frederick to support a direct federal challenge to Confederate crossings of the Potomac at Falling Waters and Williamsport.²⁸⁴

As with Lee and Meade's advance into the north, so the return south depended on water, rail, and roads for direction and sustenance. Meade's infantry began marching south on the Emmitsburg, Taneytown, and Baltimore roads even as Major General William H. French's federal forces of the 8th Corps secured Frederick for Union supplies arriving on the B&O from Westminster. Meade's infantry corps not only charted their course by rail and road but found their direction again along the main trunk of the Monocacy, east of South Mountain, and eventually Antietam Creek on its west side. Once Lee disconnected from Marsh, Middle, and Toms Creek branches of the Monocacy, his army shifted dependencies to the Conococheague Creek in the retreat to

Falling Waters on the Potomac. The point made earlier holds true that Civil War armies simply could not stray from major water sources and their tributaries. For AOP, the Monocacy sustained their horses, mules, men, artillery, hospitals, and water stations for rail transportation. Water dependencies did temporarily shift to Antietam Creek for the federals on July 13 as Meade and his corps commanders considered an assault on the rearguard of Ewell's corps at Falling Waters, but the Monocacy remained their life blood, their plumb bob or chalk line throughout the campaign.²⁸⁵

As for Lee's escape, Hermann Haupt complained the loudest to Lincoln asking for Meade's removal, mainly because he had worked the hardest to restore rail pursuit options for the commanding general. Amazingly, Haupt had repaired links on the Cumberland Valley Railroad that reconnected Harrisburg with Waynesboro, enabling Brigadier General William F. Smith's Pennsylvania Emergency troops to catch-up to Lee's trains as they turned south into the Cumberland Valley toward Williamsport. While Brigadier Generals Thomas H. Neill and A.T.A. Torbert's 6th Corps brigades pressured Ewell's rear west along the Fairfield Road, Smith's forces worked at right angles to push Ewell south from Waynesboro to Hagerstown. Haupt had also revamped the Northern Central, Western Maryland, and B&O links from Baltimore to Frederick so supplies could be rerouted closer to the staging area for federal attack into the Cumberland Valley near Falling Waters. Along the Western Maryland line, he created side track, added water stations, evenly distributed cargo, increased rolling stock, and enforced schedules with a precision that enabled 400 hundred rail cars of food, shoes, and medical supplies to be

moved from Baltimore to Westminster. As for the whole task at hand, Haupt had warned,

The Northern Central Railroad through to Harrisburg will not be opened before Tuesday. With great exertion, I have impressed 4 teams, and my force of 180 track men is now started to march to Chambersburg. The report of damages leaves me to expect great difficulty in procuring materials to reconstruct the Hagerstown road. I go to Chambersburg tomorrow, and will spare no efforts to open the communication.²⁸⁶

He forwarded provisions of all sorts to the front lines to give Meade the option of attacking,

I am informed by the Quartermaster-General that, in order to reap the fruits of victory, a large number of fresh horses are most urgently required. They are needed to remount the cavalry and restore the batteries to a condition of efficiency. Extraordinary efforts should be made by the officers of all railroads over which horses are transported to push them forward without delay, day and night. Please give this subject prompt personal attention. In no other way can more efficient service be rendered at this time to the country. The enemy must not escape if in our power to prevent it.²⁸⁷

Likewise, he refurbished and upgraded B&O track from Westminster to Frederick to assure the transfer. Haupt's USMRC had restored over a hundred miles of track, giving Meade every opportunity to drive Lee into the Potomac. Meade and his corps commanders reconnoitered Lee's position in front of Falling Waters on July 13 to attack on July 14, but discovered that Lee had retired at night across the Potomac. When the opportunity to attack slipped away, Haupt communicated his anger to Lincoln, calling for the commanding general's removal. The point is not that Haupt was right, but that his sentiments are only understandable when rail is restored to its proper importance in

the Gettysburg Campaign. That is, only when it is understood that availability of rail, or the lack thereof, is equal in strategy discussions, can the campaign can be properly analyzed.

Conclusion

This dissertation has argued against the battle of Gettysburg as an accidental fight in a remote Pennsylvania town, far from strategic centers of importance, but rather a foreseeable battlefield situated between the major Susquehanna and Potomac Rivers, located on the Monocacy River headwaters at the nexus of several improved roads, and linked to the outside world by railroad. Far from the meeting engagement portrayed in other monographs, this work has argued Gettysburg to be the prototypical battlefield dependent on water, rail, and improved roads necessary to sustain an army's presence in one location for more than twenty-four hours, and entirely consistent in location with logical concerns for protecting key symbolic places and strategic communication corridors. In contrast with Gettysburg as an unlikely battle, this work has argued for the Monocacy headwaters as one of a select few places that both army commanders considered a natural place for battle.

As stated in the introduction, this is not the angle taken by other general histories on the battle of Gettysburg that focused on everything but naturally suitable conditions for battle in south central Pennsylvania. The most influential general histories over the last fifty years, Coddington's *Gettysburg Campaign: A Study in*

Command (1963), Sears, *Gettysburg* (2003), Brown's *Retreat From Gettysburg: Lee, Logistics and the Pennsylvania Campaign* (2005), and Guelzo's very recent *Gettysburg: Last Invasion* (2013) have all looked at Gettysburg from the perspective of an unintended fight or accidental meeting engagement. None of them portrayed Gettysburg as a logically, predictable battleground based on the confluence of water, rail, and roads, the central ingredients to every battle location. Their human agency approach offered timeless insights, but left as many unanswered questions on how nature and second nature shaped battle location, and sustained the armies for three days of combat.

In contrast, this work has not tried to eliminate human agency, but rather predicated it based on location of water courses, rail lines, road nexus points, and mountain corridors and passes, so that every phase of the decision making process, from operational to tactical, conforms to needs of both armies for supply, mobility, projectile cover, and line of sight concealment. Examining the battle from this perspective radically changes the complexion of decision making from problems of command, or struggles with hubris, or victory through escape with forage, or even the value of post-war soldier debates -- of who did what when and where -- to discussions of topography and environmental agency. Constraints and restraints imposed by the environment on avenues of approach, distribution of logistics, feasible locations for lines of deployment, proximity to rail supply depots, and protection of symbolic seats of power significantly limited the options of commanders in the field. Armies were simply

too big, systems of supply too vast, and responsibilities of command too complex for generals to move whimsically from place to place.

At the operational level, this work has shown the perimeters that defined the arena for battle. The battle had to take place between the north – south polarities of Harrisburg and Washington, D.C., and the east-west distance between the Susquehanna and Potomac Rivers, and it had to operate between the east-west framework of Northern Central and Cumberland Valley Railroads, the latter reinforced by South Mountain as the primary axis of Confederate advance from Virginia to Pennsylvania and back again. Lee simply could not stray too far from the Blue Ridge Mountain chain and the Cumberland Valley corridor that constituted his line of communications to Virginia. Finally, the Army of the Potomac had to stay true to its namesake and follow the Monocacy which constituted the only branch of the Potomac moving through the north-south, and east-west concordant pairs described here.

The destruction of rail by Lee's army defined the perimeters of his movements, even as Haupt's repair of those same lines brought Meade's army into Pennsylvania. As Meade followed the Monocacy's trunk north from Maryland towards South Central Pennsylvania, his options relied on the counterclockwise branches of the Monocacy from Big Pipe to Little Pipe Creek, to Rock Creek, Marsh Creek, and, if need be, Tom's and Middle Creeks west of Gettysburg. If Meade followed the Monocacy to its most northern headwaters, Gettysburg was unavoidable. Likewise if Lee used the Cashtown, Black Gap, and Fairfield Roads as his primary avenues of approach through South Mountain, and valued protection of his communications back to Virginia, then

Gettysburg's crossroads offered the only realistic point to concentrate his army and offer battle.

Once the two armies established lines of battle, their lines consisted of much more than the two parallel ones on Cemetery and Seminary Ridges. These two ridges, which gain all the historical attention, were merely the frontice pieces for layered defenses of Rock and Marsh Creeks respectively, along with precise cover for major avenues of approach that determined both armies' geographical locations and communications. Contrary to tradition, the federal army would have preferred to hold these respective positions, rather than assume a refused right flank on Culp's Hill, namely because such a defensive position admitted violation of the multilayered Rock Creek line. Refusing the right at Rock Creek, rather than holding it north of town at Benner's and Hospital Hills, opened a four road access to the Baltimore Pike, prevented complete restoration of the Hanover – Gettysburg to York Street, and forced combat across the federal army's water supply.

For Meade, the morning of the second day's battle revolved on bringing the 5th Corps to the field to join the 1st Division, 12th Corps in extending the right from Culp's Hill to the Hanover Road, and once the 6th Corps arrived in supporting distance to begin a decisive attack to take the enemy in reverse at Benner's and Hospital Hills. With this attack, he planned to uncoil the refused right flank to take Johnson and Early's divisions in reverse, thereby straightening the line to restore the vertical, north-south Rock Creek line. Such an attack was correctly referred to by Meade as decisive, because it would involve parts of three corps, or over half the army then available, and if successful,

eliminate Confederate movements east of Gettysburg where all federal lines of communications lay bare to the main supply depot at Westminster and Washington, D.C. beyond. Secondly, seizure of Benner's and Hospital Hills would have reversed all Confederate gains from the battle's first day, north of Gettysburg, and limited their options to fighting a rearguard to retreat through South Mountain. With Lee's back pinned to the mountain, all offensive options would have been over for the Confederate commander.

When the decisive attack option stalled, due to Slocum's withdrawal to Culp's Hill, and the 6th Corps not being as close to the field as anticipated, Meade turned his attention around noon to his left, where he considered a decisive attack there with parts of three corps. His congressional testimonies, along with the Paine Map that he authorized for distribution to the various corps commanders, record that he planned an advanced line of battle in the Peach Orchard with elements of the 3rd, 5th, and 6th Corps for a potential assault and turning maneuver against ANVs right flank at Seminary Ridge. Turning the Confederate flank there meant not only sweeping it towards the Seminary, but threatening Lee's main supply and escape route at Fairfield Road. No less important, the flank assault would adhere to Willoughby Run, along with Marsh Creek proper to logistically support infantry, artillery, and cavalry in their decisive attack. Conversely, the Confederate right flank would become detached from the only water source on that part of the battlefield.

After Meade abandoned this offensive plan around 1:30 PM to respond to signal corps reports of Confederate columns marching to his right, Sickles moved out on his

own with part of the 3rd Corps. He did so understanding the Peach Orchard or Emmitsburg Road Ridge was the only ground on the Union left that provided an artillery platform for forty to sixty cannons and cover for 9,500 infantry. Not advancing to the Emmitsburg Road meant giving up on offensive prospects there. It meant giving the enemy road and water access around the army's left flank. It meant giving the enemy an artillery platform at close range to attack the Cemetery Ridge line. It meant giving the enemy the road to align and guide their attack toward Cemetery Hill. It meant giving Lee a ridgeline that provided cover and concealment for two divisions in middle ground. It meant confining the 3rd Corps to the soggy marsh and morass of Plum Run Valley, perfectly suited for bivouac or encampment, but insufficient for deployment of infantry and artillery.

That Meade objected, on principle, to Sickles advance meant he had lowered status for offense and defense on that part of the battlefield. Meade's earlier offensive plans there documented he understood only the Emmitsburg Road line permitted enough frontage for three or more of his corps to find fields of fire and attack Lee's flank and rear. By not deploying along the Emmitsburg Road, Meade conceded those same advantages to Lee and opened several avenues of approach to his own flank and rear at Taneytown Road. These avenues included Marsh Creek Road and several other roads that provided continuity with Willoughby Run or Marsh Creek. Finally, only the Emmitsburg Ridge Road position overextended Longstreet's frontage beyond his capacity to drive the federal line in toward Cemetery Ridge. His 13,000 troops could not

drive in a position suited for the 35,000 soldiers from five corps that eventually defended it.

The third and final day of the battle revolved on Lee trying to surround and pincer the Cemetery Hill apex through seven hours of continual assaults on its reverse side at Culp's Hill combined with one final direct attack on the western side now known as Pickett's Charge. From Meade's perspective, this required shifting troops within the apex to disrupt coordination of Lee's pincer, and if possible, defeat his uncoordinated attacks in detail, which is what happened. However, there is much more to it than basic tactics of assault and defense as this work has made clear. On the strategic level, Meade had to beware of the growing number of Confederate cavalry on his right between the York and Hanover Roads. Their presence threatened his logistics on the Baltimore Pike, water supply on Rock Creek, and his communication lines back to Westminster. Even a few wagons trains set on fire on the Baltimore Pike, or a few burned bridges on that pike south toward Westminster, threatened his way out, not to mention the effect on his army's morale knowing their escape route was compromised. Furthermore, increased Confederate presence there prevented the USMCR from making final repair links to the battlefield. As long as Stuart's cavalry rested south of York Road, repairs from New Oxford to the Monocacy-Rock Creek line at Gettysburg were impossible.

After Pickett's Charge failed on the western face of Cemetery Ridge and Cemetery Hill, Ruger's brigade of Slocum's 12th Corps received orders to sweep Benner's Hill to check for Johnson's withdrawal, which they did on July 4. The 11th Corps

complemented their movements by advancing off of Cemetery Hill onto Baltimore Street to build a human bridge north to Benner's Hill, even as elements of Gregg's cavalry division moved four miles further north through Hunterstown on the heels of Stuart's cavalry covering Lee's retreat. The 11th and 12th Corps advancements north of Gettysburg, along with Gregg's cavalry sweep through Hunterstown constituted restoration of Meade's Monocacy-Rock Creek line, and the end of Lee's offensive movements in Pennsylvania. Lee realized his limited options required retreat to Virginia beginning within hours of Pickett's Charge.

During the retreat, Meade pressed Lee in two directions, with two 6th Corps infantry brigades pushing west along the Fairfield Road even as Smith's Emergency Pennsylvania troops measured retreat south in the Cumberland Valley halting first in Waynesboro, Pennsylvania and then Hagerstown, Maryland. Still further south, Kilpatrick, Gregg, and Buford's cavalry divisions challenged Confederate cavalry in Blue Ridge Mountain passes and forced Lee's wagon trains at choke points such as the narrow streets of Hagerstown. The overriding point here for this work is the retreat proceeded through the Cumberland Valley under the cover, concealment, and direction of the Blue Ridge Mountains. Both armies followed parallel water courses and predominant rail lines, with Lee's army adhering to the Conococheague Creek and Cumberland Valley Rail Line, while Meade mirrored the Monocacy River to its intersection points with the Western Maryland Railroad in Thurmont, Maryland and eventually with the Baltimore & Ohio in Frederick, Maryland where supplies were shifted from Westminster to aid in pursuit.

The same environmental determinants that brought the two armies together in South Central Pennsylvania would direct them back to Virginia. The same mountain ranges that shielded their movements north, insulated their movements south. The same water courses that guided and nourished their ventures north, did the same on their return south again. The same rail lines destroyed by Confederates to bring the battle to a decision at Monocacy's Headwaters were the same rail lines reconstructed during retreat to put pressure on Lee as he fled in haste to Virginia. In total then, one cannot understand the Battle of Gettysburg in the contextual absence of the ways in which both nature and second nature framed and constrained the actions of early July 1863.

Appendix: *Official Records of the War of the Rebellion (OR), Gettysburg Campaign, Vol. 27, Parts 1, 2, 3, Reports and Correspondences. "Organizational Charts."* Washington, DC: Government Printing Office, 1889.

Abstract from returns of the Army of the Potomac, &c.—Continued.

JULY 10, 1863.

Command.	Present for duty.		Aggregate present.	Present for duty equipped.						Pieces of artillery.
	Officers.	Men.		Infantry.		Cavalry.		Artillery.		
				Officers.	Men.	Officers.	Men.	Officers.	Men.	
General headquarters	39		39							
Provost-guard (Patrick).....	82	1,419	1,734							
Engineer Brigade (Benham)....	21	341	459							
Engineer Battalion (Mendell) ..	7	300	353							
Guards and orderlies (Ingalls)..	2	51	57							
Signal Corps (Norton).....	6		6							
First Army Corps (Newton)....	429	4,363	6,091	372	3,509			18	515	24
Second Army Corps (Hays)....	620	7,625	9,389	583	6,899	2	79	10	503	16
Third Army Corps (French)....	896	13,506	15,779	779	11,543			35	1,079	51
Fifth Army Corps (Sykes).....	668	9,401	11,835	636	8,241			8	432	22
Sixth Army Corps (Sedgwick)...	991	13,654	16,351	926	12,320	5	110	27	955	48
Eleventh Army Corps (Howard)...	412	6,483	8,206			5	35	11	570	24
Twelfth Army Corps (Slocum)...	576	8,503	10,400	545	8,022			12	385	20
Cavalry Corps (Pleasanton)....	612	11,230	13,717			567	10,242	20	672	50
Artillery Reserve (Tyler).....	112	2,882	3,148	37	219			67	2,161	94
Total	5,473	79,758	97,564	3,878	50,753	579	10,466	208	7,272	349

JULY 20, 1863.

General headquarters	37		37							
Provost-guard (Patrick).....	102	1,661	1,982							
Engineer Brigade (Benham)....	22	301	426							
Engineer Battalion (Mendell) ..	9	291	354							
Guards and orderlies (Ingalls)..	2	47	57							
Signal Corps (Norton).....	6		6							
First Army Corps (Newton)....	708	9,122	11,457	651	8,227			15	514	24
Second Army Corps (Hays)....	625	7,731	9,546	598	6,872	2	76	14	622	16
Third Army Corps (French)....	893	13,540	15,772	786	11,489			30	954	48
Fifth Army Corps (Sykes).....	662	9,322	11,727	621	8,191			9	433	22
Sixth Army Corps (Sedgwick)...	983	13,269	15,964	928	12,156	5	110	22	736	42
Eleventh Army Corps (Howard)...	646	10,543	12,741	604	9,677	4	42			20
Twelfth Army Corps (Slocum)...	499	7,619	9,244	471	7,197			13	379	64
Cavalry Corps (Pleasanton)....	596	10,896	13,409			537	9,591	25	903	64
Artillery Reserve (Tyler).....	108	2,607	2,901	36	697	2	47	62	1,861	78
Total	5,898	86,949	105,623	4,695	64,506	550	9,866	190	6,484	330

JULY 31, 1863.

General headquarters	40		40							
Provost-guard (Patrick).....	102	1,693	2,008							
Engineer Brigade (Benham)....	23	320	452							
Engineer Battalion (Mendell) ..	7	310	379							
Guards and orderlies (Ingalls)..	2	45	57							
Signal Corps (Norton).....	6		6							
First Army Corps (Newton)....	530	6,910	9,032	472	6,128			16	515	23
Second Army Corps (Hays)....	525	7,151	8,933	516	6,426		60	13	537	16
Third Army Corps (French)....	764	12,731	15,129	716	10,761			27	922	43
Fifth Army Corps (Sykes).....	603	9,016	11,430	585	8,041			10	267	23
Sixth Army Corps (Sedgwick)...	867	12,833	15,513	825	11,787	5	110	21	765	43
Eleventh Army Corps (Howard)...	542	9,711	11,857	497	8,793	4	37	9	548	20
Twelfth Army Corps (Slocum)...	445	7,328	8,950	412	6,325			12	370	43
Cavalry Corps (Pleasanton)....	598	10,715	13,934			508	8,138	20	754	20
Artillery Reserve (Tyler).....	91	2,160	2,437	18	265	2	47	60	1,750	20
Total	5,145	80,923	100,152	4,041	59,126	519	8,892	188	6,405	326

Consolidated field return of the Army of the Potomac.

JULY 4, 1863.

Command.	Strength.*				
	Infantry.		Artillery.		Aggregate.
	Officers.	Men.	Officers.	Men.	
First Army Corps:					
First Division	144	1,458			1,602
Second Division	124	906			1,030
Third Division	144	2,125			2,269
Artillery Brigade.....			12	517	529
Total First Army Corps†	412	4,489	12	517	5,430
Second Army Corps:					
First Division	152	1,694			1,846
Second Division	170	1,807			1,977
Third Division	209	2,422			2,631
Artillery Brigade.....				475	475
Total Second Army Corps	531	5,923		475	6,924
Third Army Corps:					
First Division	225	2,765			2,990
Second Division	213	2,367			2,580
Artillery Brigade.....			16	544	560
Total Third Army Corps	438	5,132	16	544	6,130
Fifth Army Corps:					
First Division	237	3,235			3,472
Second Division	188	2,534			2,722
Third Division	201	2,414			2,615
Artillery Brigade.....			14	430	444
Total Fifth Army Corps	626	8,483	14	430	9,553
Sixth Army Corps:					
First Division	287	3,886			4,173
Second Division	215	3,209			3,424
Third Division	281	3,947			4,228
Artillery Brigade.....			29	978	1,007
Total Sixth Army Corps	783	11,042	29	978	12,832
Eleventh Army Corps:					
First Division	66	1,116			1,182
Second Division	127	1,982			2,109
Third Division	108	1,620			1,728
Artillery Brigade‡.....			10	484	494
Total Eleventh Army Corps	301	4,718	10	484	5,513
Twelfth Army Corps:					
First Division	275	4,088			4,363
Second Division	167	3,287			3,454
Lockwood's brigade.....	83	1,379			1,462
10th Maine Infantry.....	6	164			170
Artillery Brigades§.....			9	299	308
Total Twelfth Army Corps	531	8,918	9	299	9,757
Grand total ||.....	3,622	48,705	90	3,727	56,139

* Reported by the First, Second, Fifth, and Eleventh Corps as "present for duty;" by the Third Corps as "effective strength," and by the Twelfth Corps as "for duty equipped."
 † One regiment detailed as wagon guard not reported.
 ‡ Does not include Battery K, First Ohio Light Artillery.
 § Does not include Battery M, First New York Light Artillery.
 || General headquarters, the Cavalry Corps and Artillery Reserve not reported.

Consolidated field return of the Army of the Potomac—Continued.
JULY 14, 1863.

Command.	Strength.						Aggregate.
	Infantry.		Cavalry.		Artillery.		
	Officers.	Men.	Officers.	Men.	Officers.	Men.	
First Army Corps (Newton)	651	7,852			16	535	9,054
Second Army Corps (Hays)	575	6,973	3	12	17	725	8,305
Third Army Corps (French)	744	12,232			25	756	13,757
Fifth Army Corps (Sykes)	604	7,995			19	516	9,134
Sixth Army Corps (Sedgwick)	900	12,169	5	110	29	952	14,165
Eleventh Army Corps (Howard)	475	7,811			11	589	8,886
Twelfth Army Corps (Slocum)	546	8,118			12	385	9,061
Cavalry Corps (Pleasanton)			696	11,957	7	484	13,144
Artillery Reserve (Tyler)					88	2,409	2,497
Engineer Brigade (Benham)	21	341					362
Harper's Ferry, W. Va. (Naglee)							3,388
Frederick, Md.							1,500
Maryland Heights, Md. (Briggs)							1,777
South Mountain, Md. (Spinola)							1,723
McReynolds' cavalry							2,184
Total							98,932

Field report of the Cavalry Corps, Army of the Potomac.

JUNE 28, 1863.

Command.	Officers.	Enlisted men.	Horses of officers.	Horses of enlisted men.	Officers sick.	Enlisted men sick.	Horses serviceable.	Horses unserviceable.
Corps headquarters	20	300	60	275			355	
First Division	179	4,019			3	113	4,570	590
Second Division	266	4,347			7	156	4,534	834
Stahel's division	231	3,291			8	331	(*)	(*)
Brigade Horse Artillery	7	484			2	20	736	
Total	703	12,441	60	275	20	620	10,195	1,424

* Major-General Stahel does not report the number of his horses.

A. J. ALEXANDER,
Assistant Adjutant-General.

Artillery in the Army of the Potomac, Brig. Gen. H. J. Hunt, U. S. Army, comdg.

JUNE 30, 1863.

Command.	Batteries.	Present for duty equipped.		Guns.						Total.	
		Officers.	Enlisted men.	Rifled.				Smooth-bore.			
				4-inch.	20-pounder Parrotts.	3-inch.	10-pounder Parrotts.	12-pounders.	6-pounders.		
First Army Corps	5	21	598				16		12		34
Second Army Corps	4	14	537				12		12		30
Third Army Corps	5	19	658					12	12		36
Fifth Army Corps	5	8	547				8	6	12		48
Sixth Army Corps	8	33	1,006				12	18	18		36
Eleventh Army Corps	5	15	629				10		16		30
Twelfth Army Corps	4	12	384					10	10		50
Cavalry Corps*	10	23	831				50			4	110
Artillery Reserve†	23	72	2,139	8	6	40	14		33		362
Total	69	217	7,329	8	6	148	60	136	4	4	

* The "present for duty" given. No report of "present for duty equipped."
† The infantry train and headquarters' guards excluded. The 4-inch guns were not at Gettysburg.

No. 9.

Organization of the Army of the Potomac, Maj. Gen. George G. Meade, U. S. Army, commanding, at the battle of Gettysburg, July 1-3, 1863.

GENERAL HEADQUARTERS.

COMMAND OF THE PROVOST-MARSHAL-GENERAL.

Brig. Gen. MARSENA R. PATRICK.

98d New York,* Col. John S. Crocker.
8th United States (eight companies),* Capt. Edwin W. H. Read.
2d Pennsylvania Cavalry, Col. R. Butler Price.
6th Pennsylvania Cavalry, Companies E and I, Capt. James Starr.
Regular cavalry (detachments from 1st, 2d, 5th, and 6th Regiments).

SIGNAL CORPS.

Capt. LEMUEL B. NORTON.

GUARDS AND ORDERLIES.

Oneida (New York) Cavalry, Capt. Daniel P. Mann.

ARTILLERY.†

Brig. Gen. HENRY J. HUNT.

ENGINEER BRIGADE.‡

Brig. Gen. HENRY W. BENHAM.

15th New York (three companies), Maj. Walter L. Cassin.
50th New York, Col. William H. Pettes.
United States Battalion, Capt. George H. Mendell.

FIRST ARMY CORPS.§

Maj. Gen. ABNER DOUBLEDAY.
Maj. Gen. JOHN NEWTON.

GENERAL HEADQUARTERS.

1st Maine Cavalry, Company L, Capt. Constantine Taylor.

FIRST DIVISION.

Brig. Gen. JAMES S. WADSWORTH.

First Brigade.

Brig. Gen. SOLOMON MEREDITH.
Col. WILLIAM W. ROBINSON.
19th Indiana, Col. Samuel J. Williams.
24th Michigan:
Col. Henry A. Morrow.
Capt. Albert M. Edwards.
2d Wisconsin:
Col. Lucius Fairchild.
Maj. John Mansfield.
Capt. George H. Otis.
6th Wisconsin, Lieut. Col. Rufus R. Dawes.
7th Wisconsin:
Col. William W. Robinson.
Maj. Mark Finnicum.

Second Brigade.

Brig. Gen. LYSANDER CUTLER.
7th Indiana, Col. Ira G. Grover.
76th New York:
Maj. Andrew J. Grover.
Capt. John E. Cook.
84th New York (14th Militia), Col. Edward B. Fowler.
95th New York:
Col. George H. Biddle.
Maj. Edward Pye.
147th New York:
Lieut. Col. Francis C. Miller.
Maj. George Harney.
56th Pennsylvania (nine companies),
Col. J. William Hofmann.

* Not engaged.

† See artillery brigades attached to army corps and the reserve.

‡ Not engaged. With exception of the regular battalion, it was, July 1, and while at Beaver Dam Creek, Md., ordered to Washington, D. C., where it arrived July 3.

§ Maj. Gen. John F. Reynolds, of this corps, was killed July 1, while in command of the left wing of the army; General Doubleday commanded the corps July 1, and General Newton, who was assigned to that command on the 1st, superseded him July 2.

SECOND DIVISION.

Brig. Gen. JOHN C. ROBINSON.

First Brigade.

Brig. Gen. GABRIEL R. PAUL.
 Col. SAMUEL H. LEONARD.
 Col. ADRIAN R. ROOT.
 Col. RICHARD COULTER.
 Col. PETER LYLE.
 Col. RICHARD COULTER.

16th Maine:
 Col. Charles W. Tilden.
 Maj. Archibald D. Leavitt.

18th Massachusetts:
 Col. Samuel H. Leonard.
 Lieut. Col. N. Walter Batchelder.

94th New York:
 Col. Adrian R. Root.
 Maj. Samuel A. Moffett.

104th New York, Col. Gilbert G. Prey.

107th Pennsylvania:
 Lieut. Col. James MacThomson.
 Capt. Emanuel D. Roath.

Second Brigade.

Brig. Gen. HENRY BAXTER.

12th Massachusetts:
 Col. James L. Bates.
 Lieut. Col. David Allen, jr.

83d New York (9th Militia), Lieut. Col. Joseph A. Moesch.

97th New York:
 Col. Charles Wheelock.
 Maj. Charles Northrup.

11th Pennsylvania:*
 Col. Richard Coulter.
 Capt. Benjamin F. Haines.
 Capt. John B. Overmyer.

88th Pennsylvania:
 Maj. Benezet F. Foust.
 Capt. Henry Whiteside.

90th Pennsylvania:
 Col. Peter Lyle.
 Maj. Alfred J. Sellers.
 Col. Peter Lyle.

THIRD DIVISION.

Brig. Gen. THOMAS A. ROWLEY.
Maj. Gen. ABNER DOUBLEDAY.*First Brigade.*

Col. CHAPMAN BIDDLE.
 Brig. Gen. THOMAS A. ROWLEY.
 Col. CHAPMAN BIDDLE.

80th New York (20th Militia), Col. Theodore B. Gates.

121st Pennsylvania:
 Maj. Alexander Biddle.
 Col. Chapman Biddle.
 Maj. Alexander Biddle.

142d Pennsylvania:
 Col. Robert P. Cummins.
 Lieut. Col. A. B. McCalmont.

151st Pennsylvania:
 Lieut. Col. George F. McFarland.
 Capt. Walter L. Owens.
 Col. Harrison Allen.

Second Brigade.

Col. ROY STONE.
 Col. LANGHORNE WISTER.
 Col. EDMUND L. DANA.

143d Pennsylvania:
 Col. Edmund L. Dana.
 Lieut. Col. John D. Musser.

149th Pennsylvania:
 Lieut. Col. Walton Dwight
 Capt. James Glenn.

150th Pennsylvania:
 Col. Langhorne Wister.
 Lieut. Col. H. S. Huidekoper.
 Capt. Cornelius C. Widdis.

*Third Brigade.*Brig. Gen. GEORGE J. STANNARD.
Col. FRANCIS V. RANDALL.

12th Vermont,† Col. Asa P. Blunt.
 13th Vermont:
 Col. Francis V. Randall,
 Maj. Joseph J. Boynton.
 Lieut. Col. William D. Munson.

14th Vermont, Col. William T. Nichols.
 15th Vermont,† Col. Redfield Proctor.
 16th Vermont, Col. Wheelock G. Veazey.

* Transferred, in afternoon of July 1, to the First Brigade.
 † Guarding trains, and not engaged in the battle.

ARTILLERY BRIGADE.

Col. CHARLES S. WAINWRIGHT.

Maine Light, 2d Battery (B), Capt. James A. Hall.

Maine Light, 5th Battery (E):

Capt. Greenleaf T. Stevens.

Lieut. Edward N. Whittier.

1st New York Light, Battery L:*

Capt. Gilbert H. Reynolds.

Lieut. George Breck.

1st Pennsylvania Light, Battery B, Capt. James H. Cooper.

4th United States, Battery B, Lieut. James Stewart.

SECOND ARMY CORPS.†

Maj. Gen. WINFIELD S. HANCOCK.

Brig. Gen. JOHN GIBBON.

GENERAL HEADQUARTERS.

6th New York Cavalry, Companies D and K, Capt. Riley Johnson.

FIRST DIVISION.

Brig. Gen. JOHN C. CALDWELL.

First Brigade.

Col. EDWARD E. CROSS.

Col. H. BOYD MCKEEN.

5th New Hampshire, Lieut. Col. Charles E. Hapgood.

61st New York, Lieut. Col. K. Oscar Broady.

81st Pennsylvania:

Col. H. Boyd McKeen.

Lieut. Col. Amos Stroh.

148th Pennsylvania, Lieut. Col. Robert McFarlane.

Second Brigade.

Col. PATRICK KELLY.

28th Massachusetts, Col. R. Byrnes.

63d New York (two companies):

Lieut. Col. Richard C. Bentley.

Capt. Thomas Touhy.

69th New York (two companies):

Capt. Richard Moroney.

Lieut. James J. Smith.

88th New York (two companies), Capt. Denis F. Burke.

116th Pennsylvania (four companies), Maj. St. Clair A. Mulholland.

Third Brigade.

Brig. Gen. SAMUEL K. ZOOK.

Lieut. Col. JOHN FRASER.

52d New York:

Lieut. Col. C. G. Freudenberg.

Capt. William Scherrer.

57th New York, Lieut. Col. Alford B. Chapman.

66th New York:

Col. Orlando H. Morris.

Lieut. Col. John S. Hammell.

Maj. Peter Nelson.

140th Pennsylvania:

Col. Richard P. Roberts.

Lieut. Col. John Fraser.

Fourth Brigade.

Col. JOHN R. BROOKE.

27th Connecticut (two companies):

Lieut. Col. Henry C. Merwin.

Maj. James H. Coburn.

2d Delaware:

Col. William P. Baily.

Capt. Charles H. Christman.

64th New York:

Col. Daniel G. Bingham.

Maj. Leman W. Bradley.

53d Pennsylvania, Lieut. Col. Richards McMichael.

145th Pennsylvania (seven companies):

Col. Hiram L. Brown.

Capt. John W. Reynolds.

Capt. Moses W. Oliver.

* Battery E, 1st New York Light Artillery, attached.

† After the death of General Reynolds, General Hancock was assigned to the command of all the troops on the field of battle, relieving General Howard, who had succeeded General Reynolds. General Gibbon, of the Second Division, assumed command of the corps. These assignments terminated on the evening of July 1. Similar changes in commanders occurred during the battle of the 2d, when General Hancock was put in command of the Third Corps, in addition to that of his own. He was wounded on the 3d, and Brig. Gen. William Hays was assigned to the command of the corps.

SECOND DIVISION.

Brig. Gen. JOHN GIBBON,
Brig. Gen. WILLIAM HARROW.

First Brigade.

Brig. Gen. WILLIAM HARROW.
Col. FRANCIS E. HEATH.

- 19th Maine:
Col. Francis E. Heath.
Lieut. Col. Henry W. Cunningham.
- 15th Massachusetts:
Col. George H. Ward.
Lieut. Col. George C. Joslin.
- 1st Minnesota:*
Col. William Colvill, jr.
Capt. Nathan S. Messick.
Capt. Henry C. Coates.
- 82d New York (2d Militia):
Lieut. Col. James Huston.
Capt. John Darrow.

Second Brigade.

Brig. Gen. ALEXANDER S. WEBB.

- 69th Pennsylvania:
Col. Dennis O'Kane.
Capt. William Davis.
- 71st Pennsylvania, Col. Richard Penn Smith.
- 72d Pennsylvania:
Col. De Witt C. Baxter.
Lieut. Col. Theodore Hesser.
- 106th Pennsylvania, Lieut. Col. William L. Curry.

Third Brigade.

Col. NORMAN J. HALL.

- 19th Massachusetts, Col. Arthur F. Devereux.
- 20th Massachusetts:
Col. Paul J. Revere.
Lieut. Col. George N. Macy.
Capt. Henry L. Abbott.
- 7th Michigan:
Lieut. Col. Amos E. Steele, jr.
Maj. Sylvanus W. Curtis.
- 42d New York, Col. James E. Mallon.
- 59th New York (four companies):
Lieut. Col. Max A. Thoman.
Capt. William McFadden.

Unattached.

Massachusetts Sharpshooters, 1st Company:
Capt. William Plumer.
Lieut. Emerson L. Bicknell.

THIRD DIVISION.

Brig. Gen. ALEXANDER HAYS.

First Brigade.

Col. SAMUEL S. CARROLL.

- 14th Indiana, Col. John Coons.
- 4th Ohio, Lieut. Col. Leonard W. Carpenter.
- 8th Ohio, Lieut. Col. Franklin Sawyer.
- 7th West Virginia, Lieut. Col. Jonathan H. Lockwood.

Second Brigade.

Col. THOMAS A. SMYTH.
Lieut. Col. FRANCIS E. PIERCE.

- 14th Connecticut, Maj. Theodore G. Ellis.
- 1st Delaware:
Lieut. Col. Edward P. Harris.
Capt. Thomas B. Hizar.
Lieut. William Smith.
Lieut. John T. Dent.
- 12th New Jersey, Maj. John T. Hill.
- 10th New York (battalion), Maj. George F. Hopper.
- 108th New York, Lieut. Col. Francis E. Pierce.

* 2d Company Minnesota Sharpshooters attached.

Third Brigade.

Col. GEORGE L. WILLARD.
Col. ELIAKIM SHERRILL.
Lieut. Col. JAMES M. BULL.

39th New York (four companies), Maj. Hugo Hildebrandt.
111th New York:
Col. Clinton D. MacDougall.
Lieut. Col. Isaac M. Lusk.
Capt. Aaron P. Seeley.
125th New York, Lieut. Col. Levin Crandell.
126th New York:
Col. Eliakim Sherrill.
Lieut. Col. James M. Bull.

ARTILLERY BRIGADE.

Capt. JOHN G. HAZARD.

1st New York Light, Battery B:*
Lieut. Albert S. Sheldon.
Capt. James McKay Rorty.
Lieut. Robert E. Rogers.
1st Rhode Island Light, Battery A, Capt. William A. Arnold.
1st Rhode Island Light, Battery B:
Lieut. T. Fred. Brown.
Lieut. Walter S. Perrin.
1st United States, Battery I:
Lieut. George A. Woodruff.
Lieut. Tully McCrea.
4th United States, Battery A:
Lieut. Alonzo H. Cushing.
Sergt. Frederick Fuger.

THIRD ARMY CORPS.

Maj. Gen. DANIEL E. SICKLES.
Maj. Gen. DAVID B. BIRNEY.

FIRST DIVISION.

Maj. Gen. DAVID B. BIRNEY.
Brig. Gen. J. H. HOBART WARD.

First Brigade.

Brig. Gen. CHARLES K. GRAHAM.
Col. ANDREW H. TIPPIN.
57th Pennsylvania (eight companies):
Col. Peter Sides.
Capt. Alanson H. Nelson.
63d Pennsylvania, Maj. John A. Danks.
68th Pennsylvania:
Col. Andrew H. Tippin.
Capt. Milton S. Davis.[?]
105th Pennsylvania, Col. Calvin A. Craig.
114th Pennsylvania:
Lieut. Col. Frederick F. Cavada.
Capt. Edward R. Bowen.
141st Pennsylvania, Col. Henry J. Madill.

Second Brigade.

Brig. Gen. J. H. HOBART WARD.
Col. HIRAM BERDAN.
20th Indiana:
Col. John Wheeler.
Lieut. Col. William C. L. Taylor.
3d Maine, Col. Moses B. Lakeman.
4th Maine:
Col. Elijah Walker.
Capt. Edwin Libby.
86th New York, Lieut. Col. Benjamin L. Higgins.
124th New York:
Col. A. Van Horne Ellis.
Lieut. Col. Francis M. Cummins.
99th Pennsylvania, Maj. John W. Moore.
1st United States Sharpshooters:
Col. Hiram Berdan.
Lieut. Col. Casper Trepp.
2d United States Sharpshooters (eight companies), Maj. Homer R. Stoughton.

*Transferred from Artillery Reserve, July 1; 14th New York Battery attached.

Third Brigade.

Col. P. REGIS DE TROBRIAND.

17th Maine, Lieut. Col. Charles B. Merrill
 3d Michigan:
 Col. Byron R. Pierce.
 Lieut. Col. Edwin S. Pierce.
 5th Michigan, Lieut. Col. John Pulford.
 40th New York, Col. Thomas W. Egan.
 110th Pennsylvania (six companies):
 Lieut. Col. David M. Jones.
 Maj. Isaac Rogers.

SECOND DIVISION.

Brig. Gen. ANDREW A. HUMPHREYS.

First Brigade.

Brig. Gen. JOSEPH B. CARR.

1st Massachusetts, Lieut. Col. Clark B. Baldwin.
 11th Massachusetts, Lieut. Col. Porter D. Tripp.
 16th Massachusetts:
 Lieut. Col. Waldo Merriam.
 Capt. Matthew Donovan.
 12th New Hampshire, Capt. John F. Langley.
 11th New Jersey:
 Col. Robert McAllister.
 Capt. Luther Martin.
 Lieut. John Schoonover.
 Capt. William H. Lloyd.
 Capt. Samuel T. Sleeper.
 Lieut. John Schoonover.
 26th Pennsylvania, Maj. Robert L. Bodine.
 84th Pennsylvania,* Lieut. Col. Milton Opp.

Second Brigade.

Col. WILLIAM R. BREWSTER.

70th New York, Col. J. Egbert Farnum.
 71st New York, Col. Henry L. Potter.
 72d New York:
 Col. John S. Austin.
 Lieut. Col. John Leonard.
 73d New York, Maj. Michael W. Burns.
 74th New York, Lieut. Col. Thomas Holt.
 120th New York:
 Lieut. Col. Cornelius D. Westbrook.
 Maj. John R. Tappen.

Third Brigade.

Col. GEORGE C. BURLING.

2d New Hampshire, Col. Edward L. Bailey.
 5th New Jersey:
 Col. William J. Sewell.
 Capt. Thomas C. Godfrey.
 Capt. Henry H. Woolsey.
 6th New Jersey, Lieut. Col. Stephen R. Gilkyson.
 7th New Jersey:
 Col. Louis R. Francine.
 Maj. Frederick Cooper.
 8th New Jersey:
 Col. John Ramsey.
 Capt. John G. Langston.
 115th Pennsylvania, Maj. John P. Dunne.

*Guarding corps trains, and not engaged in the battle.

ARTILLERY BRIGADE.

Capt. GEORGE E. RANDOLPH.
Capt. A. JUDSON CLARK.

New Jersey Light, 2d Battery:
Capt. A. Judson Clark.
Lieut. Robert Sims.
1st New York Light, Battery D, Capt. George B. Winslow.
New York Light, 4th Battery, Capt. James E. Smith.
1st Rhode Island Light, Battery E:
Lieut. John K. Bucklyn.
Lieut. Benjamin Freeborn.
4th United States, Battery K:
Lieut. Francis W. Seeley.
Lieut. Robert James.

FIFTH ARMY CORPS.

Maj. Gen. GEORGE SYKES.

GENERAL HEADQUARTERS.

12th New York Infantry, Companies D and E, Capt. Henry W. Rider.
17th Pennsylvania Cavalry, Companies D and H, Capt. William Thompson.

FIRST DIVISION.

Brig. Gen. JAMES BARNES.

First Brigade.

Col. WILLIAM S. TILTON.
18th Massachusetts, Col. Joseph Hayes.
22d Massachusetts, Lieut. Col. Thomas
Sherwin, jr.
1st Michigan:
Col. Ira C. Abbott.
Lieut. Col. William A. Throop.
118th Pennsylvania, Lieut. Col. James
Gwyn.

Second Brigade.

Col. JACOB B. SWEITZER.
9th Massachusetts, Col. Patrick R.
Guiney.
32d Massachusetts, Col. G. L. Prescott.
4th Michigan:
Col. Harrison H. Jeffords.
Lieut. Col. George W. Lumbard.
62d Pennsylvania, Lieut. Col. James C.
Hull.

Third Brigade.

Col. STRONG VINCENT.
Col. JAMES C. RICE.

20th Maine, Col. Joshua L. Chamberlain.
16th Michigan, Lieut. Col. Norval E. Welch.
44th New York:
Col. James C. Rice.
Lieut. Col. Freeman Conner.
83d Pennsylvania, Capt. Orpheus S. Woodward.

SECOND DIVISION.

Brig. Gen. ROMEYN B. AYRES.

First Brigade.

Col. HANNIBAL DAY.
3d United States (six companies):
Capt. Henry W. Freedley.
Capt. Richard G. Lay.
4th United States (four companies),
Capt. Julius W. Adams, jr.
6th United States (five companies),
Capt. Levi C. Bootes.
12th United States (eight companies),
Capt. Thomas S. Dunn.
14th United States (eight companies),
Maj. Grotius R. Giddings.

Second Brigade.

Col. SIDNEY BURBANK.
2d United States (six companies):
Maj. Arthur T. Lee.
Capt. Samuel A. McKee.
7th United States (four companies),
Capt. David P. Hancock.
10th United States (three companies),
Capt. William Clinton.
11th United States (six companies), Maj.
De Lancey Floyd-Jones.
17th United States (seven companies),
Lieut. Col. J. Durell Greene.

Third Brigade.

Brig. Gen. STEPHEN H. WEED.
Col. KENNER GARRARD.

140th New York :
Col. Patrick H. O'Rorke.
Lieut. Col. Louis Ernst.

146th New York :
Col. Kenner Garrard.
Lieut. Col. David T. Jenkins.

91st Pennsylvania, Lieut. Col. Joseph H. Sinex.
155th Pennsylvania, Lieut. Col. John H. Cain.

THIRD DIVISION.*

Brig. Gen. SAMUEL W. CRAWFORD.

First Brigade.

Col. WILLIAM McCANDLESS.
1st Pennsylvania Reserves (nine companies), Col. William C. Talley.
2d Pennsylvania Reserves, Lieut. Col. George A. Woodward.
6th Pennsylvania Reserves, Lieut. Col. Wellington H. Ent.
13th Pennsylvania Reserves :
Col. Charles F. Taylor.
Maj. William R. Hartshorne.

Third Brigade.

Col. JOSEPH W. FISHER.
5th Pennsylvania Reserves, Lieut. Col. George Dare.
9th Pennsylvania Reserves, Lieut. Col. James McK. Snodgrass.
10th Pennsylvania Reserves, Col. Adoniram J. Warner.
11th Pennsylvania Reserves, Col. Samuel M. Jackson.
12th Pennsylvania Reserves (nine companies), Col. Martin D. Hardin.

ARTILLERY BRIGADE.

Capt. AUGUSTUS P. MARTIN.

Massachusetts Light, 3d Battery (C), Lieut. Aaron F. Walcott.
1st New York Light, Battery C, Capt. Almont Barnes.
1st Ohio Light, Battery L, Capt. Frank C. Gibbs.
5th United States, Battery D :
Lieut. Charles E. Hazlett.
Lieut. Benjamin F. Rittenhouse.
5th United States, Battery I :
Lieut. Malbone F. Watson.
Lieut. Charles C. MacConnell.

SIXTH ARMY CORPS.

Maj. Gen. JOHN SEDGWICK.

GENERAL HEADQUARTERS.

1st New Jersey Cavalry, Company L, }
1st Pennsylvania Cavalry, Company H, } Capt. William S. Craft.

FIRST DIVISION.

Brig. Gen. HORATIO G. WRIGHT.

Provost Guard.

4th New Jersey (three companies), Capt. William R. Maxwell.

First Brigade.

Brig. Gen. A. T. A. TORBERT.
1st New Jersey, Lieut. Col. William Henry, jr.
2d New Jersey, Lieut. Col. Charles Wiebecke.
3d New Jersey, Lieut. Col. Edward L. Campbell.
15th New Jersey, Col. William H. Penrose.

Second Brigade.

Brig. Gen. JOSEPH J. BARTLETT.†
5th Maine, Col. Clark S. Edwards.
121st New York, Col. Emory Upton.
95th Pennsylvania, Lieut. Col. Edward Carroll.
96th Pennsylvania, Maj. William H. Lessig.

* Joined corps June 28. The Second Brigade left in the Department of Washington.
† Also in command of the Third Brigade, Third Division, on July 3.

Third Brigade.

Brig. Gen. DAVID A. RUSSELL.

6th Maine, Col. Hiram Burnham.
 49th Pennsylvania (four companies), Lieut. Col. Thomas M. Hulings.
 119th Pennsylvania, Col. Peter C. Ellmaker.
 5th Wisconsin, Col. Thomas S. Allen.

SECOND DIVISION.*

Brig. Gen. ALBION P. HOWE.

Second Brigade.

Col. LEWIS A. GRANT.

2d Vermont, Col. James H. Walbridge.
 3d Vermont, Col. Thomas O. Seaver.
 4th Vermont, Col. Charles B. Stoughton.
 5th Vermont, Lieut. Col. John R. Lewis.
 6th Vermont, Col. Elisha L. Barney.

Third Brigade.

Brig. Gen. THOMAS H. NEILL.

7th Maine (six companies), Lieut. Col. Selden Connor.
 33d New York (detachment), Capt. Henry J. Gifford.
 43d New York, Lieut. Col. John Wilson.
 49th New York, Col. Daniel D. Bidwell.
 77th New York, Lieut. Col. Winsor B. French.
 61st Pennsylvania, Lieut. Col. George F. Smith.

THIRD DIVISION.

Maj. Gen. JOHN NEWTON.†
 Brig. Gen. FRANK WHEATON.

First Brigade.

Brig. Gen. ALEXANDER SHALER.

65th New York, Col. Joseph E. Hamblin.
 67th New York, Col. Nelson Cross.
 122d New York, Col. Silas Titus.
 23d Pennsylvania, Lieut. Col. John F. Glenn.
 82d Pennsylvania, Col. Isaac C. Bassett.

Second Brigade.

Col. HENRY L. EUSTIS.

7th Massachusetts, Lieut. Col. Franklin P. Harlow.
 10th Massachusetts, Lieut. Col. Joseph B. Parsons.
 37th Massachusetts, Col. Oliver Edwards.
 2d Rhode Island, Col. Horatio Rogers, jr.

Third Brigade.

Brig. Gen. FRANK WHEATON.
 Col. DAVID J. NEVIN.

62d New York :
 Col. David J. Nevin.
 Lieut. Col. Theodore B. Hamilton.
 93d Pennsylvania, Maj. John I. Nevin.
 98th Pennsylvania, Maj. John B. Kohler.
 102d Pennsylvania, ‡ Col. John W. Patterson.
 139th Pennsylvania:
 Col. Frederick H. Collier.
 Lieut. Col. William H. Moody.

ARTILLERY BRIGADE.

Col. CHARLES H. TOMPKINS.

Massachusetts Light, 1st Battery (A), Capt. William H. McCartney.
 New York Light, 1st Battery, Capt. Andrew Cowan.
 New York Light, 3d Battery, Capt. William A. Harn.
 1st Rhode Island Light, Battery C, Capt. Richard Waterman.
 1st Rhode Island Light, Battery G, Capt. George W. Adams.
 2d United States, Battery D, Lieut. Edward B. Williston,
 2d United States, Battery G, Lieut. John H. Butler.
 5th United States, Battery F, Lieut. Leonard Martin.

*No First Brigade in division.

†See foot note (§), p. 155.

‡Guarding wagon train at Westminster, and not engaged in the battle.

ELEVENTH ARMY CORPS.*

Maj. Gen. OLIVER O. HOWARD.

GENERAL HEADQUARTERS.

1st Indiana Cavalry, Companies I and K, Capt. Abram Sharra.
8th New York Infantry (one company), Lieut. Hermann Foerster.

FIRST DIVISION.

Brig. Gen. FRANCIS C. BARLOW.

Brig. Gen. ADELBERT AMES.

First Brigade.

Col. LEOPOLD VON GILSA.

41st New York (nine companies), Lieut.
Col. Detleo von Einsiedel.
54th New York:
Maj. Stephen Kovacs.
Lieut. Ernst Both [?].
68th New York, Col. Gotthilf Bourry.
153d Pennsylvania, Maj. John F. Frue-
auff.

*Second Brigade.*Brig. Gen. ADELBERT AMES.
Col. ANDREW L. HARRIS.

17th Connecticut:
Lieut. Col. Douglas Fowler.
Maj. Allen G. Brady.
25th Ohio:
Lieut. Col. Jeremiah Williams.
Capt. Nathaniel J. Manning.
Lieut. William Maloney.
Lieut. Israel White.
75th Ohio:
Col. Andrew L. Harris.
Capt. George B. Fox.
107th Ohio:
Col. Seraphim Meyer.
Capt. John M. Lutz.

SECOND DIVISION.

Brig. Gen. ADOLPH VON STEINWEHR.

First Brigade.

Col. CHARLES R. COSTER.

134th New York, Lieut. Col. Allan H.
Jackson.
154th New York, Lieut. Col. D. B. Allen.
27th Pennsylvania, Lieut. Col. Lorenz
Cantador.
73d Pennsylvania, Capt. D. F. Kelley.

Second Brigade.

Col. ORLAND SMITH.

33d Massachusetts, Col. Adin B. Un-
derwood.
136th New York, Col. James Wood, jr.
55th Ohio, Col. Charles B. Gambee.
73d Ohio, Lieut. Col. Richard Long.

THIRD DIVISION.

Maj. Gen. CARL SCHURZ.

*First Brigade.*Brig. Gen. ALEX. SCHIMMELFENNIG.
Col. GEORGE VON AMSBERG.

82d Illinois, Lieut. Col. Edward S. Sal-
omon.
45th New York:
Col. George von Amsberg.
Lieut. Col. Adolphus Dobke.
157th New York, Col. Philip P. Brown, jr.
61st Ohio, Col. Stephen J. McGroarty.
74th Pennsylvania:
Col. Adolph von Hartung.
Lieut. Col. Alexander von Mitzel.
Capt. Gustav Schleiter.
Capt. Henry Krauseneck.

Second Brigade.

Col. W. KRZYZANOWSKI.

58th New York:
Lieut. Col. August Otto.
Capt. Emil Koenig.
119th New York:
Col. John T. Lockman.
Lieut. Col. Edward F. Lloyd.
82d Ohio:
Col. James S. Robinson.
Lieut. Col. David Thomson.
75th Pennsylvania:
Col. Francis Mahler.
Maj. August Ledig.
26th Wisconsin:
Lieut. Col. Hans Boebel.
Capt. John W. Fuchs.

* During the interval between the death of General Reynolds and the arrival of General Hancock, on the afternoon of July 1, all the troops on the field of battle were commanded by General Howard, General Schurz taking command of the Eleventh Corps, and General Schimmelfennig of the Third Division.

ARTILLERY BRIGADE.

Maj. THOMAS W. OSBORN.

1st New York Light, Battery I, Capt. Michael Wiedrich.
 New York Light, 13th Battery, Lieut. William Wheeler.
 1st Ohio Light, Battery I, Capt. Hubert Dilger.
 1st Ohio Light, Battery K, Capt. Lewis Heckman.
 4th United States, Battery G:
 Lieut. Bayard Wilkeson.
 Lieut. Eugene A. Bancroft.

TWELFTH ARMY CORPS.

Maj. Gen. HENRY W. SLOCUM.*
 Brig. Gen. ALPHEUS S. WILLIAMS.

PROVOST GUARD.

10th Maine (four companies), Capt John D. Beardsley.

FIRST DIVISION.

Brig. Gen. ALPHEUS S. WILLIAMS.
 Brig. Gen. THOMAS H. RUGER.

First Brigade.

Col. ARCHIBALD L. MCDUGALL.
 5th Connecticut, Col. W. W. Packer.
 20th Connecticut, Lieut. Col. William B. Wooster.
 3d Maryland, Col. Jos. M. Sudsbury.
 123d New York:
 Lieut. Col. James C. Rogers.
 Capt. Adolphus H. Tanner.
 145th New York, Col. E. L. Price.
 46th Pennsylvania, Col. James L. Selfridge.

Second Brigade.†

Brig. Gen. HENRY H. LOCKWOOD.
 1st Maryland, Potomac Home Brigade, Col. William P. Maulsby.
 1st Maryland, Eastern Shore, Col. James Wallace.
 150th New York, Col. John H. Ketcham.

Third Brigade.

Brig. Gen. THOMAS H. RUGER.
 Col. SILAS COLGROVE.
 27th Indiana:
 Col. Silas Colgrove.
 Lieut. Col. John R. Fesler.
 2d Massachusetts:
 Lieut. Col. Charles R. Mudge.
 Maj. Charles F. Morse.
 13th New Jersey, Col. Ezra A. Carman.
 107th New York, Col. Nirom M. Crane.
 3d Wisconsin, Col. William Hawley.

SECOND DIVISION.

Brig. Gen. JOHN W. GEARY.

First Brigade.

Col. CHARLES CANDY.
 5th Ohio, Col. John H. Patrick.
 7th Ohio, Col. William R. Creighton.
 29th Ohio:
 Capt. Wilbur F. Stevens.
 Capt. Edward Hayes.
 66th Ohio, Lieut. Col. Eugene Powell.
 28th Pennsylvania, Capt. John Flynn.
 147th Pennsylvania (eight companies),
 Lieut. Col. Ario Pardee, jr.

Second Brigade.

Col. GEORGE A. COBHAM, Jr.
 Brig. Gen. THOMAS L. KANE.
 Col. GEORGE A. COBHAM, Jr.
 29th Pennsylvania, Col. William Rickards, jr.
 109th Pennsylvania, Capt. F. L. Gimber.
 111th Pennsylvania:
 Lieut. Col. Thomas M. Walker.
 Col. George A. Cobham, jr.
 Lieut. Col. Thomas M. Walker.

* Exercised command of the right wing of the army during a part of the battle. But see Slocum to Meade, December 30, 1863, p. 763, and Meade to Slocum, February 25, 1864, p. 769.

† Unassigned during progress of battle; afterward attached to First Division, as Second Brigade. The command theretofore known as the Second (or Jackson's) Brigade had previously been consolidated with the First Brigade.

Third Brigade.

Brig. Gen. GEORGE S. GREENE.

60th New York, Col. Abel Godard.
 78th New York, Lieut. Col. Herbert von Hammerstein.
 102d New York:
 Col. James C. Lane.
 Capt. Lewis R. Stegman.
 137th New York, Col. David Ireland.
 149th New York:
 Col. Henry A. Barnum.
 Lieut. Col. Charles B. Randall.

ARTILLERY BRIGADE.

Lieut. EDWARD D. MUHLENBERG.

1st New York Light, Battery M, Lieut. Charles E. Winegar.
 Pennsylvania Light, Battery E, Lieut. Charles A. Atwell.
 4th United States, Battery F, Lieut. Sylvanus T. Rugg.
 5th United States, Battery K, Lieut. David H. Kinzie.

CAVALRY CORPS.

Maj. Gen. ALFRED PLEASANTON.

FIRST DIVISION.

Brig. Gen. JOHN BUFORD.

First Brigade.

Col. WILLIAM GAMBLE.

8th Illinois, Maj. John L. Beveridge.
 12th Illinois (four cos.), } Col. George H.
 3d Indiana (six cos.), } Chapman.
 8th New York, Lieut. Col. William L.
 Markell.

Second Brigade.

Col. THOMAS C. DEVIN.

6th New York, Maj. Wm. E. Beardsley.
 9th New York, Col. William Sackett.
 17th Pennsylvania, Col. J. H. Kellogg.
 3d West Virginia (two companies),
 Capt. Seymour B. Conger.

Reserve Brigade.

Brig. Gen. WESLEY MERRITT.

6th Pennsylvania, Maj. James H. Haseltine.
 1st United States, Capt. Richard S. C. Lord.
 2d United States, Capt. T. F. Rodenbough.
 5th United States, Capt. Julius W. Mason.
 6th United States:
 Maj. Samuel H. Starr.
 Lieut. Louis H. Carpenter.
 Lieut. Nicholas Nolan.
 Capt. Ira W. Clafin.

SECOND DIVISION.

Brig. Gen. DAVID McM. GREGG.

Headquarters Guard.

1st Ohio, Company A, Capt. Noah Jones.

First Brigade.

Col. JOHN B. McINTOSH.

1st Maryland (eleven companies), Lieut.
 Col. James M. Deems.
 Purnell (Maryland) Legion, Company A,
 Capt. Robert E. Duvall.
 1st Massachusetts,* Lieut. Col. Greely S.
 Curtis.
 1st New Jersey, Maj. M. H. Beaumont.
 1st Pennsylvania, Col. John P. Taylor.
 3d Pennsylvania, Lieut. Col. E. S. Jones.
 3d Pennsylvania Heavy Artillery, Sec-
 tion Battery H,† Capt. W. D. Rank.

Second Brigade.‡

Col. PENNOCK HUEY.

2d New York, Lieut. Col. Otto Harhaus.
 4th New York, Lieut. Col. Augustus
 Pruyn.
 6th Ohio (ten companies), Maj. William
 Stedman.
 8th Pennsylvania, Capt. William A. Cor-
 rie.

*Served with the Sixth Army Corps, and on the right flank.

†Serving as light artillery.

‡At Westminster, etc., and not engaged in the battle.

Third Brigade.

Col. J. IRVIN GREGG.

1st Maine (ten companies), Lieut. Col. Charles H. Smith.
 10th New York, Maj. M. Henry Avery.
 4th Pennsylvania, Lieut. Col. William E. Doster.
 16th Pennsylvania, Lieut. Col. John K. Robison.

THIRD DIVISION.

Brig. Gen. JUDSON KILPATRICK.

Headquarters Guard.

1st Ohio, Company C, Capt. Samuel N. Stanford.

First Brigade.

Brig. Gen. ELON J. FARNSWORTH.
 Col. NATHANIEL P. RICHMOND.

5th New York, Maj. John Hammond.
 18th Pennsylvania, Lieut. Col. William P. Brinton.
 1st Vermont, Lieut. Col. Addison W. Preston.
 1st West Virginia (ten companies):
 Col. Nathaniel P. Richmond.
 Maj. Charles E. Capehart.

Second Brigade.

Brig. Gen. GEORGE A. CUSTER.

1st Michigan, Col. Charles H. Town.
 5th Michigan, Col. Russell A. Alger.
 6th Michigan, Col. George Gray.
 7th Michigan (ten companies), Col. William D. Mann.

HORSE ARTILLERY.

First Brigade.

Capt. JAMES M. ROBERTSON.

9th Michigan Battery, Capt. Jabez J. Daniels.
 6th New York Battery, Capt. Joseph W. Martin.
 2d United States, Batteries B and L, Lieut. Edward Heaton.
 2d United States, Battery M, Lieut. A. C. M. Pennington, jr.
 4th United States, Battery E, Lieut. Samuel S. Elder.

Second Brigade.

Capt. JOHN C. TIDBALL.

1st United States, Batteries E and G, Capt. Alanson M. Randol.
 1st United States, Battery K, Capt. William M. Graham.
 2d United States, Battery A, Lieut. John H. Calef.
 3d United States, Battery C, Lieut. William D. Fuller.*

ARTILLERY RESERVE.

Brig. Gen. ROBERT O. TYLER.
 Capt. JAMES M. ROBERTSON.

Headquarters Guard.

32d Massachusetts Infantry, Company C, Capt. Josiah C. Fuller.

First Regular Brigade.

Capt. DUNBAR R. RANSOM.

1st United States, Battery H:
 Lieut. Chandler P. Eakin.
 Lieut. Philip D. Mason.
 3d United States, Batteries F and K,
 Lieut. John G. Turnbull.
 4th United States, Battery C, Lieut. Evan Thomas.
 5th United States, Battery C, Lieut. Guilian V. Weir.

First Volunteer Brigade.

Lieut. Col. FREEMAN MCGILVERY.

Massachusetts Light, 5th Battery (E),†
 Capt. Charles A. Phillips.
 Massachusetts Light, 9th Battery:
 Capt. John Bigelow.
 Lieut. Richard S. Milton.
 New York Light, 15th Battery, Capt. Patrick Hart.
 Pennsylvania Light, Batteries C and F,
 Capt. James Thompson.

* With Huey's Cavalry Brigade, and not engaged in the battle.
 † 10th New York Battery attached.

Second Volunteer Brigade.

Capt. ELIJAH D. TAFT.

1st Connecticut Heavy, Battery B,* Capt. Albert F. Brooker.
 1st Connecticut Heavy, Battery M,* Capt. Franklin A. Pratt.
 Connecticut Light, 2d Battery, Capt. John W. Sterling.
 New York Light, 5th Battery, Capt. Elijah D. Taft.

Third Volunteer Brigade.

Capt. JAMES F. HUNTINGTON.

New Hampshire Light, 1st Battery, Capt. Frederick M. Edgell.
 1st Ohio Light, Battery H, Lieut. George W. Norton.
 1st Pennsylvania Light, Batteries F and G, Capt. R. Bruce Ricketts.
 West Virginia Light, Battery C, Capt. Wallace Hill.

Fourth Volunteer Brigade.

Capt. ROBERT H. FITZHUGH.

Maine Light, 6th Battery (F), Lieut. Edwin B. Dow.
 Maryland Light, Battery A, Capt. James H. Rigby.
 New Jersey Light, 1st Battery, Lieut. Augustin N. Parsons.
 1st New York Light, Battery G, Capt. Nelson Ames.
 1st New York Light, Battery K,† Capt. Robert H. Fitzhugh.

Train Guard.

4th New Jersey Infantry (seven companies), Maj. Charles Ewing.

No. 10.

Return of Casualties in the Union forces at Brandy Station (Fleetwood), Beverly Ford, and Stevensburg, Va., June 9, 1863.

[Compiled from nominal list of casualties, returns, &c.]

Command.	Killed.		Wounded.		Captured or missing.		Aggregate.
	Officers.	Enlisted men.	Officers.	Enlisted men.	Officers.	Enlisted men.	
CAVALRY CORPS.							
Brig. Gen. ALFRED PLEASANTON.							
FIRST DIVISION.							
Brig. Gen. JOHN BUFORD.‡							
Staff.....					1		1
<i>First Brigade.</i>							
Col. BENJAMIN F. DAVIS.							
8th Illinois.....		1	4	42		3	50
3d Indiana.....		1	1	22			24
8th New York.....	3	9	2	29		7	50
2d U. S. Artillery, Batteries B and L.....				3			3
Total First Brigade.....	3	11	7	96		10	127
<i>Second Brigade.</i>							
Col. THOMAS C. DEVIN.							
6th New York.....			1	3			4
9th New York.....			2	13		1	16
7th Pennsylvania.....			1	2			3
3d West Virginia.....				3			3
Total Second Brigade.....			4	21		1	26
Total First Division.....	3	11	11	117	1	11	154

* Not engaged.

† 11th New York Battery attached.

‡ Had command of the right wing, consisting of the First Cavalry Division and the Cavalry Reserve Brigade, and a brigade of infantry under Brig. Gen. Adelbert Ames.

*Organization of the Army of Northern Virginia, commanded by
General Robert E. Lee, C. S. Army, July 31, 1863.*

FIRST ARMY CORPS.

Lieut. Gen. JAMES LONGSTREET.

M'LAWS' DIVISION.

Maj. Gen. LAFAYETTE MCLAWS.

Wofford's Brigade.

Brig. Gen. W. T. WOFFORD.

16th Georgia, Col. Goode Bryan.
18th Georgia, Lieut. Col. S. Z. Ruff.
24th Georgia, Col. Robert McMillan.
Cobb's Georgia Legion, Lieut. Col. Luther
J. Glenn.
Phillips Georgia Legion, Lieut. Col. E. S.
Barclay.

Barksdale's Brigade.

Col. B. G. HUMPHREYS.

13th Mississippi, Col. J. W. Carter.
17th Mississippi, Col. W. D. Holder.
18th Mississippi, Col. Thomas M. Griffin.
21st Mississippi, Col. Benjamin G. Hum-
phreys.

Kershaw's Brigade.

Brig. Gen. J. B. KERSHAW.

2d South Carolina, Col. John D. Ken-
nedy.
3d South Carolina, Col. James D. Nance.
7th South Carolina, Col. D. Wyatt Aiken.
8th South Carolina, Col. John W. Hena-
gan.
15th South Carolina, Lieut. Col. Joseph
F. Gist.
3d South Carolina Battalion, Lieut. Col.
W. G. Rice.

Semmes' Brigade.

Col. GOODE BRYAN.

10th Georgia, Col. John B. Weems.
50th Georgia.
51st Georgia, Col. E. Ball.
53d Georgia, Col. James P. Simms.

PICKETT'S DIVISION.

Maj. Gen. GEORGE E. PICKETT.

Garnett's Brigade.

Maj. GEORGE C. CABELL.

8th Virginia, Col. Eppa Hunton.
18th Virginia, Col. R. E. Withers.
19th Virginia, Col. Henry Gantt.
28th Virginia.
56th Virginia, Lieut. Col. P. P. Slaugh-
ter.

Kemper's Brigade.

Col. JOSEPH MAYO, JR.

1st Virginia, Col. Frederick G. Skinner.
3d Virginia, Col. Joseph Mayo, jr.
7th Virginia, Lieut. Col. C. C. Flowerree.
11th Virginia, Maj. Kirkwood Otey.
24th Virginia, Col. William R. Terry.

Armistead's Brigade.

Col. W. R. AYLETT.

9th Virginia.
14th Virginia.
38th Virginia.
53d Virginia, Col. W. R. Aylett.
57th Virginia.

Corse's Brigade.

Brig. Gen. M. D. CORSE.

15th Virginia, Col. T. P. August.
17th Virginia, Col. Morton Marye.
29th Virginia, Col. James Giles.
30th Virginia, Col. A. T. Harrison.

HOOD'S DIVISION.

Maj. Gen. J. B. HOOD.

Robertson's Brigade.

Brig. Gen. J. B. ROBERTSON.

3d Arkansas, Col. Van H. Manning.
 1st Texas, Col. A. T. Rainey.
 4th Texas, Col. J. C. G. Key.
 5th Texas, Col. R. M. Powell.

Anderson's Brigade.

Col. W. W. WHITE.

7th Georgia, Col. W. W. White.
 8th Georgia, Col. John R. Towers.
 9th Georgia, Col. Benjamin Beck.
 11th Georgia, Col. F. H. Little.
 59th Georgia, Col. Jack Brown.

Law's Brigade.

Col. JAMES L. SHEFFIELD.

4th Alabama, Col. P. D. Bowles.
 15th Alabama, Col. William C. Oates.
 44th Alabama, Col. William F. Perry.
 47th Alabama.
 48th Alabama, Col. James L. Sheffield.

Benning's Brigade.

Brig. Gen. H. L. BENNING.

2d Georgia, Col. Edgar M. Butt.
 15th Georgia, Col. D. M. Du Bose.
 17th Georgia, Col. Wesley C. Hodges.
 20th Georgia, Col. J. D. Waddell.

SECOND ARMY CORPS.

Lieut. Gen. RICHARD S. EWELL.

RODES' DIVISION.

Maj. Gen. R. E. RODES.

Rodes' Brigade.

Col. C. A. BATTLE.

3d Alabama, Col. C. A. Battle.
 5th Alabama, Col. J. M. Hall.
 6th Alabama, Col. James N. Lightfoot.
 12th Alabama, Col. Samuel B. Pickens.
 26th Alabama, Col. E. A. O'Neal.

Ramseur's Brigade.

Brig. Gen. S. D. RAMSEUR.

2d North Carolina, Col. William R. Cox.
 4th North Carolina, Col. Bryan Grimes.
 14th North Carolina, Col. R. Tyler Bennett.
 30th North Carolina, Col. Francis M. Parker.

Doles' Brigade.

Brig. Gen. GEORGE DOLES.

4th Georgia, Col. Philip Cook.
 12th Georgia, Col. Edward Willis.
 21st Georgia, Col. John T. Mercer.
 44th Georgia, Col. Samuel P. Lumpkin.

Iverson's Brigade.

Brig. Gen. S. D. RAMSEUR.

5th North Carolina, Col. Thomas M. Garrett.
 12th North Carolina, Lieut. Col. William S. Davis.
 20th North Carolina, Col. Thos. F. Toon.
 23d North Carolina, Lieut. Col. R. D. Johnston.

Daniel's Brigade.

Brig. Gen. JUNIUS DANIEL.

32d North Carolina, Col. E. C. Brabble.
 43d North Carolina, Lieut. Col. William G. Lewis.
 45th North Carolina, Capt. T. McGehee Smith.
 53d North Carolina, Col. W. A. Owens.
 2d North Carolina Battalion, Capt. Edward Smith.

EARLY'S DIVISION.

Maj. Gen. JUBAL A. EARLY.

Smith's Brigade.

Col. JOHN S. HOFFMAN.

- 13th Virginia, Lieut. Col. James B. Terrill.
- 31st Virginia, Col. John S. Hoffman.
- 49th Virginia, Lieut. Col. J. Catlett Gibson.
- 52d Virginia, Lieut. Col. James H. Skinner.
- 58th Virginia, Col. F. H. Board.

Hoke's Brigade.

Brig. Gen. R. F. HOKE.

- 6th North Carolina, Lieut. Col. Robert F. Webb.
- 21st North Carolina, Col. W. W. Kirkland.
- 54th North Carolina, Lieut. Col. Kenneth M. Murchison.
- 57th North Carolina, Col. Archibald C. Godwin.
- 1st North Carolina Battalion, Maj. R. W. Wharton.

Hays' Brigade.

Brig. Gen. HARRY T. HAYS.

- 5th Louisiana, Col. Henry Forno.
- 6th Louisiana, Col. William Monaghan.
- 7th Louisiana, Col. David B. Penn.
- 8th Louisiana, Maj. Alcibiades De Blanc.
- 9th Louisiana, Col. Leroy A. Stafford.

Gordon's Brigade.

Brig. Gen. JOHN B. GORDON.

- 13th Georgia, Col. James M. Smith.
- 26th Georgia, Col. E. N. Atkinson.
- 31st Georgia, Col. Clement A. Evans.
- 38th Georgia, Col. J. D. Mathews.
- 60th Georgia, Col. W. H. Stiles.
- 61st Georgia, Col. John H. Lamar.

JOHNSON'S DIVISION.

Maj. Gen. EDWARD JOHNSON.

Stonewall Brigade.

Brig. Gen. JAMES A. WALKER.

- 2d Virginia, Col. J. Q. A. Nadenbousch.
- 4th Virginia, Col. Charles A. Ronald.
- 5th Virginia, Col. J. H. S. Funk.
- 27th Virginia, Col. James K. Edmondson.
- 33d Virginia, Col. F. W. M. Holliday.

Stewart's Brigade.

Brig. Gen. GEORGE H. STEUART.

- 1st Maryland Battalion, Capt. J. P. Crane.
- 1st North Carolina, Col. John A. McDowell.
- 3d North Carolina, Col. William L. De Rosset.
- 10th Virginia, Col. E. T. H. Warren.
- 23d Virginia, Col. A. G. Taliaferro.

Jones' Brigade.

Col. B. T. JOHNSON.

- 21st Virginia, Col. W. A. Witcher.
- 25th Virginia, Col. J. C. Higginbotham.
- 42d Virginia, Lieut. Col. R. W. Withers.
- 44th Virginia, Maj. Norvell Cobb.
- 48th Virginia, Lieut. Col. R. H. Dungan.
- 50th Virginia, Col. A. S. Vandeventer.

Iverson's Brigade.

Brig. Gen. A. IVERSON.

- 1st Louisiana, Col. W. R. Shivers.
- 2d Louisiana, Col. J. M. Williams.
- 10th Louisiana, Col. Eugene Waggaman.
- 14th Louisiana, Col. Z. York.
- 15th Louisiana, Col. Edmund Pendleton.

THIRD ARMY CORPS.

Lieut. Gen. AMBROSE P. HILL.

ANDERSON'S DIVISION.

Maj. Gen. R. H. ANDERSON.

Wilcox's Brigade.

Brig. Gen. CADMUS M. WILCOX.

8th Alabama, Col. Y. L. Royston.
9th Alabama, Maj. J. H. J. Williams.
10th Alabama, Col. W. H. Forney.
11th Alabama, Col. J. C. C. Sanders.
14th Alabama, Col. L. Pinckard.

Wright's Brigade.

Brig. Gen. A. R. WRIGHT.

2d Georgia Battalion, Maj. George W. Ross.
3d Georgia, Col. Edward J. Walker.
22d Georgia, Col. Joseph Wasden.
48th Georgia, Col. William Gibson.

Mahone's Brigade.

Brig. Gen. WILLIAM MAHONE.

6th Virginia, Col. George T. Rogers.
12th Virginia, Col. D. A. Weisiger.
16th Virginia, Col. Joseph H. Ham.
41st Virginia, Col. William A. Parham.
61st Virginia, Col. V. D. Groner.

Perry's Brigade.

Brig. Gen. E. A. PERRY.

2d Florida, Lieut. Col. L. G. Pyles.
5th Florida, Col. T. B. Lamar.
8th Florida, Col. David Lang.

Posey's Brigade.

Brig. Gen. CARNOT POSEY.

12th Mississippi, Col. W. H. Taylor.
16th Mississippi, Col. Samuel E. Baker.
19th Mississippi, Col. N. H. Harris.
48th Mississippi, Col. Joseph M. Jayne.

HETH'S DIVISION.

Maj. Gen. HENRY HETH.

Pettigrew's Brigade.

Col. THOMAS C. SINGELTARY.

11th North Carolina, Col. Collett Leventhorpe.
26th North Carolina, Lieut. Col. John R. Lane.
44th North Carolina, Col. Thomas C. Singeltary.
47th North Carolina, Col. George H. Fari-bault.
52d North Carolina, Lieut. Col. Marcus A. Parks.

Archer's Brigade.

Brig. Gen. H. H. WALKER.

5th Alabama Battalion, Maj. A. S. Van de Graaff.
13th Alabama, Col. B. D. Fry.
1st Tennessee (Provisional Army), Col. Peter Turney.
7th Tennessee, Col. John A. Fite.
14th Tennessee, Col. William McComb.

Walker's Brigade.

Brig. Gen. H. H. WALKER.

22d Virginia Battalion, Lieut. Col. E. P. Tayloe.
40th Virginia, Col. J. M. Brockenbrough.
47th Virginia, Col. R. M. Mayo.
55th Virginia, Col. W. S. Christian.

Davis' Brigade.

Brig. Gen. J. R. DAVIS.

2d Mississippi, Col. J. M. Stone.
11th Mississippi, Col. F. M. Green.
42d Mississippi, Lieut. Col. Hillery Moseley.
55th North Carolina, Col. John K. Con-nally.

PENDER'S DIVISION.

Maj. Gen. W. D. PENDER.

Lane's Brigade.

Brig. Gen. J. H. LANE.

- 7th North Carolina, Col. Edward G. Haywood.
 18th North Carolina, Col. John D. Barry.
 28th North Carolina, Col. Samuel D. Lowe.
 33d North Carolina, Col. Clark M. Avery.
 37th North Carolina, Col. William M. Barbour.

Thomas' Brigade.

Brig. Gen. E. L. THOMAS.

- 14th Georgia, Col. Robert W. Folsom.
 35th Georgia, Col. Bolling H. Holt.
 45th Georgia, Col. Thomas J. Simmons.
 49th Georgia, Col. S. T. Player.

Scales' Brigade.

Brig. Gen. A. M. SCALES.

- 13th North Carolina, Col. Joseph H. Hyman.
 16th North Carolina, Col. John S. McElroy.
 22d North Carolina, Col. James Conner.
 34th North Carolina, Col. W. L. J. Lowrance.
 38th North Carolina, Col. William J. Hoke.

McGowan's Brigade.

Brig. Gen. S. MCGOWAN.

- 1st (Orr's) South Carolina Rifles, Col. F. E. Harrison.
 1st South Carolina (Provisional Army), Col. D. H. Hamilton.
 12th South Carolina, Col. John L. Miller.
 13th South Carolina, Col. O. E. Edwards.
 14th South Carolina, Col. Abner Perrin.

CAVALRY.

Maj. Gen. J. E. B. STUART.

Fitz. Lee's Brigade.

Brig. Gen. FITZ. LEE.

- 1st Battalion Maryland Cavalry, Maj. R. Brown.
 1st Virginia Cavalry, Lieut. Col. R. W. Carter.
 2d Virginia Cavalry, Col. Thomas T. Munford.
 3d Virginia Cavalry, Col. Thomas H. Owen.
 4th Virginia Cavalry, Col. Williams C. Wickham.
 5th Virginia Cavalry, Col. Thomas L. Rosser.

W. H. F. Lee's Brigade.

Col. JOHN R. CHAMBLISS, Jr.

- 2d North Carolina Cavalry (19th N. C. T.), Col. W. G. Robinson.
 9th Virginia Cavalry, Col. R. L. T. Beale.
 10th Virginia Cavalry, Col. J. Lucius Davis.
 13th Virginia Cavalry, Col. John R. Chambliss, jr.
 15th Virginia Cavalry, Col. William B. Ball.

Robertson's Brigade.

Brig. Gen. B. H. ROBERTSON.

- 4th North Carolina Cavalry (59th N. C. T.), Col. Dennis D. Ferebee.
 5th North Carolina Cavalry (63d N. C. T.), Col. Peter G. Evans.

Hampton's Brigade.

Brig. Gen. WADE HAMPTON.

- 1st North Carolina Cavalry, Col. J. B. Gordon.
 1st South Carolina Cavalry, Col. John L. Black.
 2d South Carolina Cavalry, Col. M. C. Butler.
 Cobb's Legion, Col. P. M. B. Young.
 Jeff. Davis Legion, Lieut. Col. J. F. Waring.
 Phillips Legion, Lieut. Col. W. W. Rich.

Jones' Brigade.

Brig. Gen. W. E. JONES.

- 6th Virginia Cavalry, Lieut. Col. J. Shac. Green.
 7th Virginia Cavalry, Col. R. H. Dulany.
 11th Virginia Cavalry, Lieut. Col. O. R. Funsten.
 12th Virginia Cavalry, Col. A. W. Harman.
 35th Battalion Virginia Cavalry, Lieut. Col. E. V. White.

Jenkins' Brigade.

Col. M. J. FERGUSON.

14th Virginia Cavalry, Col. James Cochran.
 16th Virginia Cavalry, Col. M. J. Ferguson.
 17th Virginia Cavalry, Col. William H. French.
 34th Battalion Virginia Cavalry, Lieut. Col. V. A. Witcher.
 36th Battalion Virginia Cavalry, Maj. J. W. Sweeney.

STUART HORSE ARTILLERY.

Maj. R. F. BECKHAM.

Capt. James Breathed's Virginia battery.
 Capt. R. P. Chew's Virginia battery.
 Capt. William H. Griffin's (Second) Maryland battery.
 Capt. James F. Hart's South Carolina battery.
 Capt. Thomas E. Jackson's Virginia battery.
 Capt. William M. McGregor's Virginia battery.
 Capt. M. N. Moorman's Virginia battery.

ARTILLERY.

Brig. Gen. WILLIAM N. PENDLETON.

FIRST ARMY CORPS.

Col. J. B. WALTON.

Cabell's Battalion.

Col. H. C. CABELL.
 Maj. S. P. HAMILTON.

Carlton's (Georgia) battery, Capt. H. H. Carlton.
 Fraser's (Georgia) battery, Capt. J. C. Fraser.
 Manly's (North Carolina) battery, Capt. B. C. Manly.
 1st Richmond (Virginia) Howitzers, Capt. E. S. McCarthy.

Henry's Battalion.

Maj. M. W. HENRY.
 Maj. JOHN C. HASKELL.

Latham's (North Carolina) battery, Capt. A. C. Latham.
 Reilly's (North Carolina) battery, Capt. James Reilly.
 Bachman's (South Carolina) battery, Capt. W. K. Bachman.
 Garden's (South Carolina) battery, Capt. H. R. Garden.

Dearing's Battalion.

Lieut. Col. J. DEARING.
 Maj. J. P. W. READ.

Blount's (Virginia) battery, Capt. J. G. Blount.
 Caskie's (Virginia) battery, Capt. W. H. Caskie.
 Macon's (Virginia) battery, Capt. M. C. Macon.
 Stribling's (Virginia) battery, Capt. R. M. Stribling.

Alexander's Battalion.

Col. E. P. ALEXANDER.
 Maj. F. HUGER.

Moody's (Louisiana) battery, Capt. G. V. Moody.
 Fickling's (South Carolina) battery, Capt. W. W. Fickling.
 Jordan's (Virginia) battery, Capt. T. C. Jordan.
 Parker's (Virginia) battery, Capt. W. W. Parker.
 Taylor's (Virginia) battery, Capt. O. B. Taylor.
 Woolfolk's (Virginia) battery, Capt. P. Woolfolk, jr.

Washington (Louisiana) Artillery.

Maj. B. F. ESHLEMAN.

1st Company, Capt. C. W. Squires.
 2d Company, Capt. J. B. Richardson.
 3d Company, Capt. M. B. Miller.
 4th Company, Capt. Joe Norcom.

SECOND ARMY CORPS.

Col. S. CRUTCHFIELD.

Andrews' Battalion.

Lieut. Col. R. S. ANDREWS.

Brown's (Maryland) battery, First Lieut. John E. Plater.
 Dement's (Maryland) battery, Capt. W. F. Dement.
 Carpenter's (Virginia) battery, Capt. J. C. Carpenter.
 Raine's (Virginia) battery, Capt. Charles I. Raine.

Carter's Battalion.

Lieut. Col. T. H. CARTER.
 Maj. C. M. BRAXTON.

Jeff. Davis Artillery (Alabama), First Lieut. W. J. Reese.
 Carter's (Virginia) battery, Capt. W. P. Carter.
 Fry's (Virginia) battery, Capt. C. W. Fry.
 Page's (Virginia) battery, Capt. R. C. M. Page.

Jones' Battalion.

Lieut. Col. H. P. JONES.
 Maj. J. W. BROCKENBROUGH.

Louisiana Guard Artillery, Capt. C. A. Green.
 Carrington's (Virginia) battery, Capt. James McD. Carrington.
 Garber's (Virginia) battery, Capt. A. W. Garber.
 Tanner's (Virginia) battery, Capt. W. A. Tanner.

Brown's Battalion.

Col. J. T. BROWN.
 Maj. R. A. HARDAWAY.

2d Richmond Howitzers (Virginia), Capt. David Watson.
 3d Richmond Howitzers (Virginia), Capt. Benjamin H. Smith, jr.
 Dance's (Virginia) battery, Capt. W. J. Dance.
 Hupp's (Virginia) battery, Capt. A. Hupp.
 Rockbridge Artillery (Virginia), Capt. A. Graham.

Nelson's Battalion.

Lieut. Col. WILLIAM NELSON.
 Maj. T. J. PAGE, Jr.

Milledge's (Georgia) battery, Capt. John Milledge, jr.
 Kirkpatrick's (Virginia) battery, Capt. T. J. Kirkpatrick.
 Massie's (Virginia) battery, Capt. J. L. Massie.

THIRD ARMY CORPS.

Col. R. L. WALKER.

Poague's Battalion.

Maj. W. T. POAGUE.

Ward's (Mississippi) battery, Capt. Geo. Ward.
 Graham's (North Carolina) battery, Capt. Joseph Graham.
 Brooke's (Virginia) battery, Capt. James V. Brooke.
 Wyatt's (Virginia) battery, Capt. J. W. Wyatt.

McIntosh's Battalion.

Maj. D. G. MCINTOSH.

Hurt's (Alabama) battery, Capt. W. B. Hurt.
 Johnson's (Virginia) battery, Capt. M. Johnson.
 Lusk's (Virginia) battery, Capt. W. K. Donald.
 Rice's (Virginia) battery, Capt. R. S. Rice.

Garnett's Battalion.

Lieut. Col. J. J. GARNETT.
 Maj. C. RICHARDSON.

Maurin's (Louisiana) battery, Capt. V. Maurin.
 Grandy's (Virginia) battery, Capt. C. R. Grandy.
 Lewis' (Virginia) battery, Capt. J. W. Lewis.
 Moore's (Virginia) battery, Capt. J. D. Moore.

Pegram's Battalion.

Maj. W. J. PEGRAM.

Brunson's (South Carolina) battery, Capt. E. B. Brunson.
 Crenshaw's (Virginia) battery, Lieut. A. B. Johnston.
 Fredericksburg (Virginia) Artillery, Capt. E. A. Marye.
 Letcher Artillery, Capt. T. A. Brander.
 Purcell Artillery, Capt. Joseph McGraw.

Cutts' Battalion.

Lieut. Col. A. S. CUTTS.
Maj. JOHN LANE.

Ross' (Georgia) battery, Capt. H. M. Ross.
Patterson's (Georgia) battery, Capt. G. M. Patterson.
Wingfield's (Georgia) battery, Capt. J. T. Wingfield.

Abstract from return of Army of Northern Virginia, General Robert E. Lee, C. S. Army, commanding, for July, 1863; headquarters, Culpeper Court-House, Va.

Command.	Present for duty.		Effective total present.	Aggregate present.	Aggregate present and absent.	Aggregate last return.	Pieces of field artillery.
	Officers.	Men.					
General headquarters	17	*	.....	17	17	17	.....
First Army Corps (Longstreet).....-Staff	10	.....	.....	10	12	13	.....
McLaws' division.....	484	4,633	4,633	5,999	12,246	12,690	.....
Pickett's division.....	344	3,316	3,316	4,591	11,444	9,490	.....
Hood's division.....	504	4,874	4,874	6,386	11,899	12,478	.....
Total.....	1,342	12,823	12,823	16,986	35,601	34,671	.....
Second Army Corps (Ewell)..... Staff	18	.....	.....	18	20	20	.....
Rodes' division.....	471	4,767	4,767	6,207	14,945	15,673	.....
Early's division.....	458	4,223	4,223	5,477	13,025	13,063	.....
Johnson's division.....	480	3,379	3,379	4,650	12,502	12,845	.....
Total.....	1,427	12,369	12,369	16,352	40,492	41,601	.....
Third Army Corps (A. P. Hill)..... Staff	16	.....	.....	16	17	15	.....
Anderson's division.....	506	4,588	4,588	6,159	12,946	13,617	.....
Heth's division.....	260	3,039	3,039	3,957	8,248	12,277	.....
Pender's division.....	416	3,580	3,580	4,267	11,964	13,593	.....
Total.....	1,198	11,207	11,207	14,399	33,175	39,502	.....
Cavalry*.....	.....	.....	.....	.....	.....	.....	.....
Artillery :	.....	.....	.....	.....	.....	.....	.....
First Army Corps.....	96	1,724	1,724	1,996	2,873	2,927	83
Second Army Corps.....	95	1,448	1,448	1,704	2,392	2,590	84
Third Army Corps.....	86	1,564	1,564	1,832	2,727	2,610	62
Total.....	277	4,736	4,736	5,532	7,992	8,117	229
Grand total.....	4,261	41,135	41,135	53,286	117,277	123,906	229

Troops in the Department of Richmond, Maj. Gen. Arnold Elzey, C. S. Army, commanding, July 31, 1863.

RANSOM'S DIVISION.†

Maj. Gen. R. RANSOM, Jr.‡

Ransom's Brigade.

Brig. Gen. M. W. RANSOM.
24th North Carolina, Col. William J. Clarke.
25th North Carolina, Col. Henry M. Rutledge.
35th North Carolina, Col. J. G. Jones.
49th North Carolina, Col. Lee M. McAfee.
56th North Carolina, Col. Paul F. Faison.

Jenkins' Brigade.

Brig. Gen. M. JENKINS.
1st South Carolina (Volunteers), Col. F. W. Kilpatrick.
2d South Carolina (Rifles), Col. Thomas Thomson.
5th South Carolina, Col. A. Coward.
6th South Carolina, Col. John Bratton.
Hampton Legion, Col. M. W. Gary.
Palmetto Sharpshooters, Col. Joseph Walker.

* Not reported on original.
† Temporarily serving in this department.
‡ Leave of absence for thirty days granted, July 18, to Ransom. Jenkins first in command.

¹ Edwin B. Coddington, *Gettysburg Campaign: A Study in Command* (Dayton, Ohio: Morningside Bookshop, Copyrighted in 1963, 64 and 68, 1979), Stephen W. Sears, *Gettysburg* (Boston: Houghton Mifflin Company, 2003), Kent Masterson Brown, *Retreat from Gettysburg: Lee, Logistics, and the Pennsylvania Campaign* (Chapel Hill, North Carolina: University of North Carolina Press, 2005), Allen C. Guelzo, *Gettysburg: Last Invasion* (New York, New York: Alfred A. Knopf, 2013).

² Coddington, *Gettysburg Campaign: A Study in Command*, xiii.

³ In his problems of command approach, he employed the staple sources such as the *Century Magazine* or *Battles and Leaders, Volume 3, Philadelphia Weekly Times* or *Annals of the War Written by Leading Participants, Joint Committee on Conduct of War, Official Records, Volume 27, Parts 1, 2 & 3, Southern Historical Society Papers, 50 Volumes*, and *John Bachelder's Notes* relating to the services of troops at Gettysburg. He consulted papers of major participants such as Edward P. Alexander, UNC; Joshua Chamberlain, LC; Charles Wainwright Journal, Huntington Library; Francis C. Barlow, MHS; Ezra A. Carman, NYPL; Henry L. Benning, UNC; and Daniel E. Sickles, LC. He heavily emphasized officer accounts, reminiscences, memoirs, and biographies as in Richard Bache's *Life of General George Gordon Meade*, Freeman Cleaves' *Meade of Gettysburg*, Frank Haskell's *Battle of Gettysburg*, Walter Taylor's *Four Years with General Lee*, John B. Hood's *Advance and Retreat*, Hermann Haupt's *Reminiscences of Herman Haupt*, Henry Tremain's *Two Days of War: A Gettysburg Narrative and Other Excursions*, Isaac Trimble's *Campaign and Battle of Gettysburg*, John Gibbon's *Personal Recollections of the Civil War*, and John Sedgwick's *Correspondence of Major-General John Sedgwick*, 2 Volumes. Other examples included Carl Schurz's *Reminiscences of Carl Schurz*, 3 Volumes, Regis DeTrobriand's, *Four Years With the Army of the Potomac*, George T. Fleming's *Life and Letters of Alexander Hays*, Walter Harrison's *Pickett's Charge: A Fragment of War History*, Oliver W. Norton's *Strong Vincent and His Brigade at Gettysburg, July 2, 1863*, William C. Oates, *War Between the Union and the Confederacy and Its Lost Opportunities, with a History of the 15th Alabama Regiment* and James A.L. Freemantle's *Three Months in the Southern States: April-June 1863*. He relied on many more such officer accounts, from the ranks of Colonel to Major General to offer illuminating insight into problems of command. Together, these sources helped him to conclude that Meade and his corps commanders defeated Lee through a series of correct battlefield decisions that were rooted in carefully weighed circumstances and sound military reasoning.

⁴ Sears, *Gettysburg*, xiii.

⁵ Sears, xiv

⁶ Sears draws from many of the same primary sources I use to argue environmental agency. He relies on *Century Magazine* or *Battles and Leaders, Volume 3, Philadelphia Weekly Times* or *Annals of the War Written by Leading Participants, Official Records, Volume 27, Pts 1, 2 & 3, Joint Committee on the Conduct of War, Warner's Generals in Blue / Gray, Ladd's Bachelder Papers, Henry J. Hunt Papers, Library of Congress* and *John W. Daniel Papers, University of Virginia*. He consulted participant biographies that include *Alexander's Fighting for Confederacy, Brown's Campbell Brown's Civil War, Osborn's Eleventh Corps Artillery at Gettysburg, Wainwright's Diary of Battle, Gibbon's Personal Recollections, Haskell's Haskell of Gettysburg, Schurz's Reminiscences, Benedict's Vermont at Gettysburg, Fleming's Life and Letters of Alexander Hays, Freemantle's Three Months in the Southern States* and other standard references regularly employed by students of the battle. His sources are staples easily recognized in any viable written work on the battle, and are expected to appear in a worthy general history. What undermines his argument though is the significant number of modern sources as the basis for discussion. If he had incorporated these articles and books into a historiographical discussion that would be more convincing, but instead his book relies on them to make his most vital points.

⁷ Sears, 154

⁸ Brown, *Retreat from Gettysburg: Lee, Logistics, and the Pennsylvania Campaign*, 12.

⁹ Brown, Epilogue, 389-390.

¹⁰ Brown, 390.

¹¹ Guelzo, *Gettysburg: Last Invasion*, xv

¹² Guelzo, xv

¹³ Guelzo, xv

¹⁴ Guelzo, xiv

¹⁵ The following list is indicative of this fascination starting with Patterson's "62nd (Pa) Regiment of Infantry," Shaw's "110th (Pa) Regiment of History," Chamberlin's *History of the One Hundred and Fiftieth (Pa) Regiment*, Clark's *Histories of the Several Regiments and Battalions from North Carolina in the Great War, 1861-'65*, Parker's *Henry Wilson's Regiment: History of the Twenty-second Massachusetts Infantry*, Small's *Sixteenth Maine Regiment*, Wyckoff's *History of the Second South Carolina Infantry*, Weygant's *History of the One Hundred and Twenty-Fourth (NY) Regiment*, Loehr's "The 'Old First' Virginia at Gettysburg," Peck's "78th (NY) Regiment Infantry," Barlett's *History of the Twelfth Regiment, New Hampshire Volunteers in the War of the Rebellion*, "Nineteenth Maine Regiment," Toombs' *New Jersey Troops in the Gettysburg Campaign*, Bane's *History of the Philadelphia Brigade*, Baumgartner's *Buckeye Blood: Ohio at Gettysburg* and Benedict's *Vermont at Gettysburg* just to name a few.

¹⁶ Guelzo, xiv, xv

¹⁷ In perusing his sources, there are archival papers and collections from University of Michigan, North Carolina and Pennsylvania, and Duke and New York universities. There are also files from Carlisle Army War Barracks and Gettysburg National Military Park, each of them offering information on Lee's advance into and retreat through the Cumberland Valley, from Virginia to Pennsylvania and back again. Because Brown widened the scope of the campaign to deal with the retreat in depth, many of his sources are new to general histories on the Gettysburg Campaign. His reliance on an assortment of civilian and soldier accounts pertaining to military actions in the Cumberland and Shenandoah Valleys does not appear in the works of Coddington, Sears, or Guelzo. These accounts include Keller's *Crossroads of War: Washington County, Maryland, in the Civil War*, McDonald's *A Diary with Reminiscences of the War and Refugee Life in the Shenandoah Valley, 1860-1865*, and Williams' *A History of Washington County, Maryland from the Earliest Settlements to the Present Time, Including a History of Hagerstown*, 2 Volumes, Green's "A People at War: Hagerstown, Maryland, June 15-August 31, 1863," Hotchkiss' *City of Staunton, Augusta County, Virginia, and the Surrounding Country: Their Condition, Resources and Advantages*, Hume's *Fanny Hume Diary of 1862: A Year in Wartime Orange, Virginia*, Morton's *Story of Winchester in Virginia: Oldest Town in the Shenandoah Valley*, Williamsport Chamber of Commerce's *Williamsport and Vicinity: Reminiscences*, Hege's *Marion and Environments, Franklin County, Pa.: Historical and Reminiscent*, Hoke's *Reminiscences of the War: Of Incidents Which Transpired in and about Chambersburg during the War of the Rebellion*. He looked at damage claims from Adams County farms to gain a sense of how much forage was gathered in the Gettysburg area. He has all the staple sources such as *Volume 3, Official Records*, *Volume 27, Pts 1, 2 & 3*, Hewett, Trudeau and Suderow's *Supplement to the Official Records of the Union and Confederate Armies*, 39 Volumes, *Joint Committee on the Conduct of the War Committee Testimonies*, *Century Magazine or Battles and Leaders*, *Philadelphia Weekly Times or Annals of the War Written by Leading Participants*, *Blue and Gray: Story of Civil War as Told by Participants*, *National Tribune*, Ladd's *Bachelor Papers*, *Military Order of Loyal Legion of the United States (MOLLUS) War Papers*, *Confederate Veteran* and Busey and Martin's *Regimental Strengths at Gettysburg*.

¹⁸ A review of period manuals on tactics, strategy, and logistics reveals how armies maneuvered and battled in accordance with the environment. Supporting my argument are *Napoleon's Maxims of War*, Clausewitz's *On War*, Cowell's *Tactics at Gettysburg, as Described by Participants*, Duane's *Military Dictionary, or Explanation of the Several Systems of Discipline*, Frederick's *Frederick the Great: Instructions for his generals*, Halleck's *Elements of Military Art & Science* and Jomini's *Art of War*. Strengthening this work are Commanding General George G. Meade's unedited letters scanned from the Army War Barracks and Army War College in Carlisle, Pennsylvania. Meade's Gettysburg letters and correspondences, along with his official battle report and memorandums buttress the whole argument Meade understood the environmental importance of his position.

¹⁹ Thomas A. Desjardin, *These Honored Dead: How the Story of Gettysburg Shaped American Memory* (Boston, Massachusetts: Da Capo Press, 2004). Kenneth Burns, *Civil War* (Walpole, New Hampshire: Kenneth Lauren Burns Productions, Florentine Films, WETA-TV, PBS, 1990).

²⁰ John S. C. Abbot, *History of the Civil War in America: Comprising a Full and Impartial Account of the Origin and Progress of the Rebellion, of the Various Naval and Military Engagements, of the Heroic Deeds Performed by Armies and Individuals, and of Touching Scenes in the Field, Camp, Hospital, and Cabin, Vol. II* (New York, New York: Published by Henry Bill, 1866). William Swinton, *Campaigns of the Army of the*

Potomac: Critical History of Operations in Virginia, Maryland and Pennsylvania from the Commencement to the Close of the War (New York, New York: Charles Scribner's Sons, 1882). Samuel P. Bates, *Battle of Gettysburg* (Philadelphia, Pennsylvania: T.H. Davis & Co., 1875).

²¹ John F. Kasson, *Civilizing the Machine: Technology and Republican Values in America, 1776-1900* (New York, New York: Hill and Wang, 1999, Copyrighted in 1976). *Many Americans worried about monstrous machines that changed natural work rhythms, polluted the environment, imported social ills, and compromised virtues associated with agriculture and the craft tradition. Writers and artists tried to alleviate these fears by placing steam boats and trains in natural settings, and through giving machines human and animal-like characteristics.

²² John B. Bachelder, *Gettysburg: What to See, and How to See it* (New York: Lee, Shepard & Dillingham, 1873 - Reprinted by Gettysburg, Pennsylvania: Hower's Printing Company, 1979). John B. Bachelder, *Popular Resorts, and How to Reach Them: Combining a Brief Description of Principal Summer Retreats in the United States, And Routes of Travel Leading to Them* (Boston: John B. Bachelder, Publisher, 1875).

²³ *Official Records of the War of the Rebellion* (OR), Gettysburg Campaign, Vol. 27, Parts 1, 2, 3, Reports and Correspondences (Washington, DC: Government Printing Office, 1889).

²⁴ Oliver Willcox Norton, *Attack and Defense of Little Round Top: Gettysburg, July 2, 1863* (Copyright 1913 - Dayton, Ohio: Morningside Bookshop, 1983).

²⁵ Douglas Southall Freeman, *R.E. Lee: A Biography, Volumes 1-4* (New York, New York: Charles Scribner's Sons, 1936). Douglas Southall Freeman, *Lee's Lieutenants: A Study in Command, Volumes 1-3* (New York, New York: Charles Scribner's Sons, 1943). Bell Irvin Wiley, *Life of Johnny Reb: Common Soldier of the Confederacy* (New York, New York: Bobbs-Merrill Company, 1943). Bell Irvin Wiley, *Life of Billy Yank: Common Soldier of the Union* (New York, New York: Bobbs-Merrill Company, 1952). Alan Nevins, *Ordeal of the Union, Volumes 1-2*, (New York, New York: Scribner's Sons, 1947). Bruce Catton, *Mr. Lincoln's Army* (Garden City, New York: Doubleday & Company, 1951). Bruce Catton, *Glory Road: Bloody Route from Fredericksburg to Gettysburg* (Garden City, New York: Doubleday & Company, 1952). Bruce Catton, *A Stillness at Appomattox* (Garden City, New York: Doubleday & Company, 1953). *In the two decade lead-up to the centennial, several timeless works of Civil War scholarship appeared. Some of the most prominent ones are listed above.

²⁶ Coddington, *Gettysburg Campaign: A Study in Command*.

²⁷ John W. Shildt, *Roads from Gettysburg* (Shippensburg, Pennsylvania: White Mane Publishing Company, Burd Street Press, 1998). John W. Shildt, *Roads to Gettysburg* (Parsons, West Virginia: McClain Printing Company, 1978). Warren W. Hassler, Jr., *Crisis at the Crossroads: First Day at Gettysburg* (Tuscaloosa, Alabama: University of Alabama Press, 1970).

²⁸ Sears, *Gettysburg*. Noah Andre Trudeau, *Gettysburg: A Testing of Courage* (New York, New York: Harper Perennial, 2003).

²⁹ Harry W. Pfanz, *Gettysburg: Second Day* (Chapel Hill: University of North Carolina Press, 1987). Harry W. Pfanz, *Gettysburg: Culp's Hill and Cemetery Hill* (Chapel Hill: University of North Carolina Press, 1993). Harry W. Pfanz, *Gettysburg: First Day* (Chapel Hill: University of North Carolina Press, 2001).

³⁰ George Edgar Turner, *Victory Rode the Rails: Strategic Place of Railroads in the Civil War* (Lincoln: University of Nebraska Press, 1981, orig. pub. 1953).

³¹ John E. Clark Jr., *Railroads in the Civil War: Impact of Management on Victory and Defeat* (Baton Rouge: Louisiana State University Press, 2001).

³² William G. Thomas, *Iron Way: Railroads, Civil War, and Making of Modern America* (New Haven, Connecticut: Yale University Press, 2011).

³³ Robert Underwood Johnson and Clarence Clough Buel, editors, *Battles and Leaders of the Civil War, Vols. 1-4* (New York, New York: Century Magazine 1884-1887 – Secaucus, New Jersey: Castle Book Sales, 1987).

³⁴ Baron Antoine Henri de Jomini, *Art of War*, Translated by G.H. Mendell and W.P. Craighill, 1804 (Reprint by Philadelphia: J.B. Lippincott & Co., 1862 – Reprint, Mechanicsburg, Pennsylvania: Stackpole Books, 1992). Napoleon Bonaparte, *Napoleon's Maxims of War*, Translated by Lieutenant-General Sir G.C. D'Aguilar, C.B., notes by General Burnod (Philadelphia, Pennsylvania: David McKay Publishers, 1902). Frederick, King of Prussia; Thomas R. Phillips, *Frederick the Great: Instructions for his generals* (Harrisburg, Pennsylvania: Military Service Publishing Company, 1944).

³⁵*The broader scope for Meade and Lee's experience dated back to the Renaissance at least 350 years earlier, with the Humanist Movement that celebrated human potential and the birth of scientific thought. The outgrowth from this was the end of hagiography, the beginning of one point perspective, the rise of an Age of Enlightenment, and a Scientific Age. By the late 1800s, science addressed politics, explained the universe mathematically, and advised on the study of flora and fauna. Hundreds of new patents, innovations, and inventions in the nineteenth century attested to an obsession with science as a solver of the world's problems. By the 1860s, scientific thought had given rise to industrialization and set the stage for the first modern war.

³⁶ Frederick, King of Prussia; Phillips, Thomas R, *Frederick the Great: Instructions for his generals*, Article XVIII.

³⁷ Napoleon Bonaparte, Translated by Lieutenant-General Sir G.C. D'Aguilar, C.B., notes by General Burnod, *Napoleon's Maxims of War*, Maxim LXXVIII.

³⁸ Edward L. Widmer, *Young America: Flowering of Democracy in New York City* (Oxford, England: Oxford University Press, 1999).

³⁹ Dennis H. Mahan, "Salient of the Battle of Gettysburg." *Army and Navy Journal* 3 (26 May 1866): 633.

⁴⁰ General Robert E. Lee, "General R.E. Lee to Confederate President Jefferson Davis, Report of July 4, 1863," *Official Records of the War of the Rebellion* (OR), Gettysburg Campaign, Vol. 27, Part 2, Reports and Correspondences (Washington, DC: Government Printing Office, 1889), 298.

⁴¹ Lieutenant Colonel William Duane, *Military Dictionary, or Explanation of the Several Systems of Discipline of Different Kinds of Troops, Infantry, Artillery, and Cavalry, Principles of Fortification, and All Modern Improvements in the Science of Tactics, Particularly Adapted to the Use of the Military Institutions of the United States* (Philadelphia: Printed and Published by William Duane, No.98, Market Street, 1810), 122.

⁴² Baron Antoine Henri de Jomini, *Art of War*, 179-182.

⁴³ Jomini, *Art of War*, 180.

⁴⁴ Jomini, 186-187.

⁴⁵ Jomini, 187.

⁴⁶ Jomini, 221. Napoleon Bonaparte, *Napoleon's Maxims of War*, Maxim XXVIII.

⁴⁷ Napoleon Bonaparte, Maxim XXVIII.

⁴⁸ Frederick, King of Prussia; Phillips, Thomas R, *Frederick the Great: Instructions for his generals* (Harrisburg, Pennsylvania: Military Service Publishing Company, 1944), Article X.

⁴⁹ Jomini, *Art of War*, 189.

⁵⁰ Jomini, 142-143.

⁵¹ Jomini, 114.

⁵² Jomini, 76.

⁵³ Jomini, 198-199.

⁵⁴ *O.R.*, Vol. 27, Part 2, "General Robert E. Lee to Jefferson Davis, Report of July 31, 1863," 307, and "General Robert E. Lee to Jefferson Davis, Report of January __, 1864, 316.

⁵⁵ *O.R.*, Vol. 27, Part 2, "Lee to Davis, July 31, 1863," 307.

⁵⁶ Jomini, 142-143.

⁵⁷ General R.E. Lee, "Broadside of General Orders No. 72, Issued June 21, 1863," Dickinson College Archives & Special Collections, Carlisle, Pennsylvania, <http://archives.dickinson.edu/>

⁵⁸ Frederick Tilberg, *Gettysburg National Military Park, Pennsylvania* (Washington, D.C: National Park Service Historical Handbook Series No. 9, 1954, Revised 1962), 6.

⁵⁹ John W. Shildt, *Roads to Gettysburg* (Parsons, West Virginia: McClain Printing Company, 1978), 196-197.

⁶⁰ Captain George Meade, editor, *Life and Letters of George Gordon Meade* (New York: Charles Scribner's Sons, 1913), Vol. 2, 25.

⁶¹ Captain George Meade, *Life and Letters of George Gordon Meade*, 33.

⁶² Samuel P. Bates, *Battle of Gettysburg* (Philadelphia, Pennsylvania: T.H. Davis & Co., 1875), 49-50.

⁶³ Abner Doubleday, Brevet Major –General, U.S.A., *Gettysburg Made Plain: A Succinct Account of The Campaign and Battles, With the Aid of One Diagram and Twenty-Nine Maps* (New York: De Vinne Press, Century Company, 1888), 23.

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- ⁶⁴ David L. and Audrey J. Ladd, transcribers, editors and annotators, *John Bachelder's History of the Battle of Gettysburg*, Report of the Committee on the Conduct of War, "Meade telegram to Halleck, Frederick, Md., June 28, 1863, received at 10:00 A.M.," 156.
- ⁶⁵ Gouverneur K. Warren, "Testimony before Congressional Sub-committee in Washington, 1864," *Army of the Potomac, Pt. 1 & 2* (Millwood, N.Y.: Kraus, 1977).
- ⁶⁶ Charles Carleton Coffin, War Correspondent, "Column for June 29, 1863," *Boston Journal, Civil War Sources: A Collection of Primary Documents Taken Directly From the Original Sources*, <http://civilwarsources.blogspot.com/2008/06/newspaper-coverage-charles-carleton.html>
- ⁶⁷ John Auwaerter, *Cultural Landscape Report, Gettysburg National Cemetery*, (Boston: Massachusetts, Olmstead Center for Landscape Preservation, National Park Service, 1st draft, February 2014, 8).
- ⁶⁸ Joseph V. Collins, *Battle of West Frederick, July 7, 1864: Prelude to Battle of Monocacy* (Xlibris Corporation, 2011).
- ⁶⁹ John S. C. Abbot, *History of the Civil War in America: Comprising a Full and Impartial Account of the Origin and Progress of the Rebellion, of the Various Naval and Military Engagements, of the Heroic Deeds Performed by Armies and Individuals, and of Touching Scenes in the Field, Camp, Hospital, and Cabin*, Vol. II (New York, New York: Published by Henry Bill, 1866), 401-403.
- ⁷⁰ *History of Adams County Pennsylvania*, (Chicago: Warner Beers & Co., 1886, reprinted Gettysburg: Adams County Historical Society, 1992), 52.
- ⁷¹ *History of Adams County Pennsylvania*, 52.
- ⁷² *History of Adams County Pennsylvania*, 52.
- ⁷³ *Rock Creek Watershed*, Watershed Alliance of Adams County, Gettysburg, Pennsylvania, www.adamswatersheds.org
- ⁷⁴ John B. Bachelder, *Gettysburg: What to See, and How to See It*, (New York: Lee, Shepard & Dillingham, 1873).
- ⁷⁵ Earl Schenck Mier and Richard A. Brown, "Edward Whittier, *Civil War Papers*, 75-76," *Gettysburg* (New Brunswick, New Jersey: Rutgers University Press, 1948), 93-95.
- ⁷⁶ Captain George Meade (General's son), *With Meade at Gettysburg*, edited by George G. Meade (General's grandson) (Philadelphia, Pennsylvania: War Library and Museum of the Military Order of the Loyal Legion of the United States, MOLLUS, John C. Winston Company, 1930), 72-73.
- ⁷⁷ Kathy Georg Harrison, "Significance of Oak / Seminary Ridge," GNMP Vertical Files, Adams County, General History, 9-1, Folder 2,, VG1, 1.
- ⁷⁸ Henry Hunt, "First Day at Gettysburg," *Blue and Gray*, 597.
- ⁷⁹ James Longstreet, *From Manassas to Appomattox: Memoirs of the Civil War in America* (Philadelphia: Lippincott, 1912 – Secaucus, New Jersey: Blue and Grey Press, 1988), 352.
- ⁸⁰ Brevet Major-General Regis De Trobriand, translated by George K. Dauchy, *Four Years with the Army of the Potomac* (Boston: Ticknor and Company, 1889), 492.
- ⁸¹ Jedidiah Hotchkiss, TOP. ENGR. 2D CORPS A.N.V., "Monday, Feb. 23, 1863," *Make Me a Map of the Valley: Civil War Journal of Stonewall Jackson's Topographer*, edited by Archie P. McDonald, GNMP Vertical Files, V5-Participant Accounts (Dallas, Texas: Southern Methodist University Press, 1973), 116.
- ⁸² Andrew Brown, "Geology and the Gettysburg Campaign," *GEOTIMES: Professional News Magazine* (American Geological Institute, Vol. VI, No. 1, July-August, 1961), 10-11.
- ⁸³ Schildt, 515.
- ⁸⁴ General John B. Gordon, *Reminiscences of the Civil War* (Dayton, Ohio: Press of Morningside Bookshop, 1981 – Copyright, 1903, 1904, by Charles Scribner's Sons), 142.
- ⁸⁵ Kathy Georg Harrison, "Significance of Oak / Seminary Ridge," 2.
- ⁸⁶ "Historic Roads, Locations, & Structures on Adams County Map," GNMP Vertical Files, 9-1, Adams County, General History, Folder 2, #756.
- ⁸⁷ Second nature involves human improvements to nature to make it better for transportation and communication. Early Republic Macadamized Roads, canals, railroads, and mountain tunnels fall into this category. In a more general sense, agricultural fields are another example of second nature.
- ⁸⁸ Jomini, 146.
- ⁸⁹ Henry J. Hunt, "Second Day at Gettysburg," *Battles and Leaders of the Civil War, Vol. 3* (New York, New York: Century Magazine 1884-1887 – Secaucus, New Jersey: Castle Book Sales, 1987, 293.

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- ⁹⁰ A.L. Long, *Memoirs of Robert E. Lee: His Military and Personal History, Embracing A Large Amount of Information Hitherto Unpublished* (Secaucus, New Jersey: Blue and Grey Press, 1983. Originally Published in New York: J.M. Stoddart & Company, 1886), 268.
- ⁹¹ Captain George Meade, *With Meade at Gettysburg*, 52-53.
- ⁹² Brown, "Geology," 11.
- ⁹³ *O.R.*, Vol. 27, Part 2, "Report of Major General Jubal Early, August 22, 1863," 466.
- ⁹⁴ John B. Bachelder, *Popular Resorts, And How To Reach Them: Combining A Brief Description Of Principal Summer Retreats In The United States, And Routes Of Travel Leading To Them* (Boston: John B. Bachelder, Publisher, 1875), 257.
- ⁹⁵ James McClure, "James Latimer Papers, File 12801, York County Heritage Trust, York, Pa.," *East of Gettysburg: A Gray Shadow Crosses York County, Pa.* (York, Pennsylvania: York Daily Record, York County Heritage Trust, 2003), 96.
- ⁹⁶ Gerald Bennett, *Gettysburg Railroad Station: A Brief History*, edited by Dr. Walter L. Powell and Merry V. Bush (Gettysburg, Pennsylvania: Gettysburg Railroad Station Restoration Project, Revised 2006), 12.
- ⁹⁷ James McClure, "James Latimer Papers, File 12801, York County Heritage Trust, York, Pa.," *East of Gettysburg: A Gray Shadow Crosses York County, Pa.*, 97.
- ⁹⁸ McClure, "Broadside, Handbill Address of Gen. Early to the People of York, Pa., June 30, 1863," *East of Gettysburg: A Gray Shadow Crosses York County, Pa.*, 81.
- ⁹⁹ *O.R.*, Vol. 27, Pt. 3, "H. Haupt to Major General Halleck, from Harrisburg June 30, 1863," 69.
- ¹⁰⁰ *O.R.*, Vol. 27, Pt. 1, "H. Haupt's Official Report," 22-24.
- ¹⁰¹ *O.R.*, Vol. 27, Pt. 3, "Quartermaster General M.C. Meigs to Brigadier General R. Ingalls, from Washington D.C. to Army Headquarters of the Potomac, July 1, 1863, 11:20 a.m.," 472.
- ¹⁰² Bennett, *Gettysburg Railroad Station: A Brief History*, 3. *"Led by Thaddeus Stevens' support in the General Assembly, a charter for the Pennsylvania Railroad (locally called the "Tapeworm") was granted in 1835 to connect Wrightsville on the Susquehanna River to the B&O line at Hancock, Maryland on the Potomac River. With the backing of state funding, construction on the railroad bed began in 1835 in Gettysburg heading west toward the Potomac River and the B&O. Progress was slowed by the obstacle of the South Mountain range requiring numerous switch-backs (thus the name "Tapeworm") and bridges. The high cost of the RR engineering and time delays in ascending the mountain proved fatal to the project. In 1838 the state financial support was cancelled and the project had to be abandoned, leaving miles of 'unfinished' railroad bed idle."
- ¹⁰³ Mier and Brown, editors, "Sallie Robbins Broadhead's diary entry for Saturday, June 27, 1863." 41-42.
- ¹⁰⁴ Bennett, 2. *"The grand opening was the culmination of twenty-years of frustration and determination by town and county leaders to gain the means of dramatically expanding the growth of the area's economy...By that time new technology in the form of the steam driven locomotive had been developed to the point where it revolutionized transportation, particularly in the eastern states. There began an active competition among cities and towns throughout the country to gain access to the railroad system and the attending economic benefits. Towns that did not avail themselves of this new transportation service were being passed by those that did."
- ¹⁰⁵ Lieutenant Colonel W.W. Blackford, C.S.A, *War Years with Jeb Stuart* (New York, New York: Charles Scribner's Sons, 1945), 222. *Major General Alfred Pleasonton's newly structured federal cavalry corps successfully attacked Major General J.E.B. Stuart's Confederate cavalry at Brandy Station near Culpeper, Virginia on June 9, 1863. Stuart was particularly embarrassed by the engagement because his cavalry spent valuable preparation time conducting a parade for local citizenry. The Richmond newspapers criticized him for vanity and overall unpreparedness.
- ¹⁰⁶ Blackford, *War Years with Jeb Stuart*, 225.
- ¹⁰⁷ Paul J. Westhaeffer, "Edwin M. Stanton, Secretary of War, War Department, Washington, D.C.: September 17, 1862, 12 p.m.," *History of the Cumberland Valley Railroad, 1835-1919* (Washington, D.C.: National Railway Historical Society, 1979), 74. Also, Westhaeffer, "Thomas A. Scott, Aide-de-Camp to Hon. E.M. Stanton, Secretary of War, September 18, 1862—2:30 p.m.," 75. *On the delivery end, Northern Central Superintendent J.N. DuBarry responded, "The ammunition train for General McClellan was delivered to the Northern Central Railroad, at Baltimore, at 6.57 this a.m., and was delivered to the Cumberland Valley Railroad at 10.20 a.m.; 84 miles—two hours and fifty-three minutes. It will be put

through at same speed to Hagerstown.”¹⁰⁷ Aide-de-Camp Thomas A. Scott added, “Ammunition has been delivered at Hagerstown...at 12:42 p.m.”

¹⁰⁸ “High-Speed Ammunition Run on the Cumberland Valley Railroad.” *Cumberland Valley Rail Trail*, National Recreation Trail, www.cvrta.org

¹⁰⁹ James W. Moss, Sr., edited by, “Rebel Visit to Chambersburg, German Reformed Messenger of the [July] 15th inst.,” *A History of the Civil War: As Presented by The Church Advocate*, Volumes 27-Part of 28, Volume 2, Copyright 2010, 377.

¹¹⁰ *O.R.*, Vol. 27, Part 2, Confederate Reports, “Lee’s Report to Davis, January, 1864,” 316.

¹¹¹ *O.R.*, Vol. 27, Part 2, “Lee’s Report to Davis, January, 1864,” 316. *Second nature involves human additions to nature as in Macadamized Roads, canals, railroads and mountain tunnels.

¹¹² Gettysburg National Military Park, National Park Service, “Henry Thomas Harrison,” <https://www.nps.gov/people/henry-thomas-harrison.html>

¹¹³ James Longstreet, “Lee’s Right Wing at Gettysburg,” *Battles & Leaders of the Civil War: Retreat From Gettysburg* (New York, New York: Castle Books, 1956), 339.

¹¹⁴ Henry Hunt, “First Day at Gettysburg,” *Blue and Gray*, 597.

¹¹⁵ William Swinton, *Campaigns of the Army of the Potomac: Critical History of Operations in Virginia, Maryland and Pennsylvania from the Commencement to the Close of the War* (New York: Charles Scribner’s Sons, 1882), 335.

¹¹⁶ *O.R.*, Vol. 27, Part 1, “Report of Brigadier General John Buford, August 27, 1863,” 926.

¹¹⁷ Editors of *Century Magazine, Battles and Leaders of the Civil War*, Vol. 3, 289.

¹¹⁸ Bill Hyde, *Union Generals Speak: Meade Hearings on the Battle of Gettysburg* (Baton Rouge, Louisiana: Louisiana State University Press, 2003), 211.

¹¹⁹ Assistant Adjutant-General Eminel P. Halstead, “Incidents of the First Day at Gettysburg,” *Battles and Leaders of the Civil War*, Vol. 3, 285.

¹²⁰ Editors of *Century Magazine, Battles and Leaders of the Civil War*, Vol. 3, 289.

¹²¹ *O.R.*, Vol. 27, Part 1, “Memorandum of Brigadier General John Buford to General Alfred Pleasonton, June 30—10:40 PM,” 924.

¹²² Henry Hunt, “First Day at Gettysburg,” *Blue and Gray*, 597.

¹²³ Jacob Hoke, *Great Invasion of 1863; or, General Lee in Pennsylvania* (Dayton, Ohio: W.J. Shuey, 1887 – Reprint by New York: Thomas Yoseloff 1959).

¹²⁴ Captain George Meade, 25.

¹²⁵ Historical Society of Pennsylvania, *Reynolds Memorial Addresses, Delivered Before The Historical Society of Pennsylvania, From the Occasion of the Presentation of a Portrait of Maj.-Gen. John F. Reynolds, March 8, 1880* (Philadelphia, Pennsylvania: J. B. Lippincott & Co., 1880), 27.

¹²⁶ Joseph Rosengarten, “General Reynolds’ Last Battle,” *Blue and Gray: Story of Civil War as Told by Participants*, Henry Steele Commager, editor (New York: Fairfax Press, 1991), Vol. 2, 601. *Rosengarten added, “...while Meade’s concentration behind Gettysburg would have gone easily, and the whole of the Army of the Potomac would have done briefly and effectually what was gained only at the end of three days of hard fighting, with varying successes that more than once threatened to turn against us, and the loss on our side would have been so much less that the pursuit of Lee’s forces could have been made promptly and irresistibly.”

¹²⁷ Historical Society of Pennsylvania, *Reynolds Memorial Addresses*, 27-28.

¹²⁸ Historical Society of Pennsylvania, *Reynolds Memorial Addresses*, 27-28.

¹²⁹ Historical Society of Pennsylvania, *Reynolds Memorial Addresses*, 27.

¹³⁰ *O.R.*, Vol. 27, Part 1, “Report of Major General Oliver O. Howard to Brigadier General Seth Williams, Army Headquarters, August 31, 1863,” 702. *Howard wrote, “I pushed on with my staff by the direct [Emmitsburg] road, and when within 2 miles of Gettysburg received word from General Reynolds....”

¹³¹ Captain George Meade (General’s son), *Life and Letters of George Gordon Meade*, edited by George G. Meade (General’s grandson) (Baltimore: Butternut & Blue, 1994), 2:35-36.

¹³² *O.R.*, Vol. 27, Part 1, “Report of Major General Carl Schurz, U.S. Army, commanding Third Division to Major General Oliver O. Howard, commanding 11th Corps, August 20, 1863,” 727.

¹³³ War Correspondent, “Eleventh Corps,” *National Tribune* (Washington, D.C.: July 21, 1887), (GNMP VF6-NY157).

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- ¹³⁴ *O.R.*, Vol. 27, Part 1, "Memorandum of Brigadier General John Buford to Major General John Reynolds, June 30, 1863--10:30 PM," 923.
- ¹³⁵ *O.R.*, Vol. 27, Part 1, "Report of Major General Abner Doubleday to Brigadier General Seth Williams, Army Headquarters, December 14, 1863," 246.
- ¹³⁶ The most notable back roads used by Humphrey's division were the Bull Frog and Black Horse Tavern Roads.
- ¹³⁷ Harry W. Pfanz, *Gettysburg: Second Day* (Chapel Hill: University of North Carolina Press, 1987), 44-45.
- ¹³⁸ *O.R.*, Vol. 27, Part 1, "Report of Brigadier General Andrew A. Humphreys to Lieutenant Colonel O.H. Hart, Assistant Adjutant-General, Third Corps, August 16, 1863," 531.
- ¹³⁹ *O.R.*, Vol. 27, Part 1, "Major General George G. Meade's Pipe Creek Circular, Taneytown, July 1, 1863."
- ¹⁴⁰ *O.R.*, Vol. 27, Part 1, "Humphreys to Hart," 531. See also, *O.R.*, Vol. 27, Part 1, "Report of Colonel Charles S. Wainwright, Commanding Artillery Brigade, First Army Corps, to General Henry J. Hunt, Chief of Artillery, July 17, 1863," *Wainwright reported, "About 4 miles this side of Gettysburg, the Third Division took a by-road to the left, Captain Cooper's battery of four 3-inch guns following them."
- ¹⁴¹ *O.R.*, Vol. 27, Part 1, "Report of Major General Henry W. Slocum of August 23, 1863," 758. Slocum reported, "...and, agreeably to suggestion from General Howard, the First Division was put in position on the right of our line, near Rock Creek."
- ¹⁴² *O.R.*, Vol. 27, Part 1, "Memorandum of Brigadier General John Buford to Major General John Reynolds, June 30, 1863--10:30 PM," 923.
- ¹⁴³ *O.R.*, Vol. 27, Part 1, "Howard to Williams, August 31, 1863," 701.
- ¹⁴⁴ New York State Monuments Commission, *In Memoriam: Henry Warner Slocum, 1826 – 1894* (Albany: J.B. Lyon Company, Printers, 1904), 176.
- ¹⁴⁵ *O.R.* Vol. 27, Part 1, "Howard to Williams, August 31, 1863," 703.
- ¹⁴⁶ *OR*, Vol. 27, Part 3, "Slocum to Hancock or Howard, July 1, 1863—3:35 p.m.," 465.
- ¹⁴⁷ *O.R.* Vol. 27, Part 1, "Howard to Williams, August 31, 1863," 704. See also Ladd, David L. and Audrey J. Transcribers, Editors and Annotators, *John Bachelder's History of the Battle of Gettysburg* (Dayton, Ohio: Morningside House, 1997), 358. *In note 216, the Ladd's wrote, "He [Slocum] hardly left Powers' Hill and played little role in the battle."
- ¹⁴⁸ D.W. McLaughlin, *Gettysburg Battlefield Monuments: Locations and Inscriptions*, Copyright 1986, 59. *Monument inscription reads "Army of The Potomac, 12th Corps Headquarters, Major General Henry W. Slocum, July 1, 2, 3, 4, 1863, Were located on Powers Hill 280 yards westerly." See also, New York Monuments Commission, *In Memoriam Henry Warner Slocum, 1826-1894* (Albany, New York: J.B. Lyon Company, Printers, 1904), 177. *The New York Monuments Commission recorded, "...Slocum being in charge of the right wing of the army, with his headquarters on Powers Hill, in rear of the Baltimore Pike."
- ¹⁴⁹ Mary E. Young, "Account written to her sister Sarah Catherine Young, 1891," Mary Alice (Jessup) Burchfield, *Burchfield Chronicles in America and their connections to the Young, Criswell, & Hawley Families* (Mary Alice Burchfield, January 1, 1995), 135.
- ¹⁵⁰ Young, *Burchfield Chronicles in America*, 135. *White Run Road was condemned in the 1960s to dam-up the run and make a lake front housing development.
- ¹⁵¹ John B. Bachelder, *Gettysburg: What to See, and How to See it* (New York: Lee, Shepard & Dillingham, 1873, Reprinted by Gettysburg, Pennsylvania: Hower's Printing Company, 1979), 101-102.
- ¹⁵² Brigadier General Alpheus S. Williams, "Letter to John Bachelder, November 10, 1865," *Bachelder Papers: Gettysburg in Their Own Words*, (Dayton, Ohio: Morningside House, 1994), Vol. 1, 212 – 213. * It is important to realize the staff officer knew where to take the 1st division because Slocum sent him. It is equally essential to understand that Williams wrote the 12th Corps official report as acting commander making his statements a composite of Slocum's observations as well as his own. As we will examine in the next chapter, Williams' sweeping descriptions from Benners Hill of enemy deployments in front of the town are from Slocum's advanced reconnaissance to the area at least an hour before the 1st division began ascent of the hill. Once it is understood that Williams report for July 1 is representative of Slocum's scouting mission for corps disposition on the federal right, then the 12th Corps commander's whereabouts for the afternoon become clearer as do his actions on behalf of protecting the army's right flank. Slocum tells the reader where he was vicariously through Williams' official report. This is a profound point

because it not only questions the notion of Slocum maintaining a low profile at Powers Hill, but it opens eyes to another world of options on the army's right wing.

¹⁵³ Newel Cheney, Captain and Brevet Major, *History of the Ninth Regiment, New York Volunteer Cavalry. War of 1861 to 1865. Compiled from Letters, Diaries, Recollections and Official Records* (Poland Center, Jamestown, New York: Martin, Merz & Son, 1901, Republished by Ashville, New York: Berrybook Press, 1998), 115.

¹⁵⁴ Major General Jubal A. Early, "A Review by General Early," *Southern Historical Society Papers*, Volume IV (Richmond, Virginia: Southern Historical Society, December 1877 - Millwood, New York: Kraus Reprint Company, 1977), p. 255.

¹⁵⁵ *O.R.* Vol. 27, Part 1, "Howard to Williams, August 31, 1863," 701.

¹⁵⁶ *O.R.* Vol. 27, Part 1, 702.

¹⁵⁷ *O.R.* Vol. 27, Part 1, 702.

¹⁵⁸ *O.R.*, Vol. 27, Part 1, "Report of Major General Carl Schurz to Major General O.O. Howard of August 20, 1863," 727-728.

¹⁵⁹ *O.R.*, Vol. 27, Part 1, "Report of Major General Henry W. Slocum of August 23, 1863," 758. *Slocum reported, "...and, agreeably to suggestion from General Howard, the First Division was put in position on the right of our line, near Rock Creek."

¹⁶⁰ E. R. Brown, *Twenty-Seventh Indiana* (Washington, D.C: Entered to Act of Congress, 1899 – Reprint by Gaithersburg, Maryland: Butternut Press), 367.

¹⁶¹ Colonel Charles F. Morse, 2nd Massachusetts Infantry, "The Twelfth Corps At Gettysburg," Read in 1916, *The Gettysburg Papers*, Volume II, Compiled by Ken Brady & Florence Freeland (Dayton, Ohio: Morningside Press, 1978), p. 820.

¹⁶² Brigadier General Alpheus S. Williams, "Letter to John Bachelder, November 10, 1865," *Bachelder Papers: Gettysburg in Their Own Words*, (Dayton, Ohio: Morningside House, 1994), Vol. 1, 213.

¹⁶³ Williams, "Letter to John Bachelder, November 10, 1865," *Bachelder Papers: Gettysburg in Their Own Words*, 212 – 213.

¹⁶⁴ Alpheus Williams, *O.R.*, Vol. 27, Part 1, "Report of August 22, 1863," 773. Williams, *Bachelder Papers*, 213.

¹⁶⁵ Williams, *Bachelder Papers*, 212 – 213.

¹⁶⁶ Major Charles F. Morse, 2nd Massachusetts Infantry, "A Paper Read at Officers Reunion in Boston, May 10, 1878" *History of Second Massachusetts Regiment of Infantry*. Gettysburg (Boston: George H. Ellis, Printer, 1882), 7.

¹⁶⁷ Williams, *Bachelder Papers*, 213.

¹⁶⁸ *O.R.*, Vol. 27, Part 1, "Report of Colonel Silas Colgrove, 27th Indiana Infantry, August 7, 1863," 811.

¹⁶⁹ Brigadier General Alpheus Williams, "Oral Statement to John Bachelder," *John Bachelder's History of the Battle of Gettysburg*, transcribed, edited, and annotated by David L. and Audrey J. Ladd (Dayton, Ohio: Morningside, 1997), p. 357.

¹⁷⁰ Williams, *John Bachelder's History of the Battle of Gettysburg*, 357-58.

¹⁷¹ Jubal A. Early, "A Review by General Early," *Southern Historical Society Papers* (Millwood, N.Y: Kraus Reprint Company, 1977), Vol. 4, 255.

¹⁷² Early, "A Review by General Early," *Southern Historical Society Papers*, 255. *This small two letter preposition "on" is pivotal to unlocking battle historiography, not only regarding the location of Williams' division on July 1, but in other matters such as direction of Pickett's famous charge on July 3. For instance, when James Longstreet reported the July 3rd assault was "moving on the same line" so as "to assault the salient at the same moment," it is universally interpreted to mean that the various southern divisions in the attack literally advanced on a fence line that guided the assault directly across the fields to a small clump of trees in the center of the 2nd Corps position.¹⁷² All of the earlier mentioned general histories of the battle embrace this perspective, and each one appears to be right until the preposition "on" is revisited. When one alters the meaning of the word "on" from literally "on top of" to mean "toward," then the whole historical paradigm shifts away from the fence and symbolic trees to the entire Union 2nd Corps front. Reinterpreted, the order reads "moving [toward] the same [Union] line," thereby permitting the whole 2nd Corps line to be the objective rather than one small, symbolic point on it. Substitution of

“toward” in place of “on,” in this instance, changes the paradigm from an attack on a small stone salient angle to a much broader assault against the salient bend in the Union position at Cemetery Hill.

¹⁷³ Williams, *Bachelor Papers*, 213.

¹⁷⁴ James H. Baum, Company F, 46th Pennsylvania Infantry, “A Boy Soldier Tells The Story Of Gettysburg,” *East Liverpool Morning Tribune*, Part 1, July 9, 1910, Timothy R. Brooks Collection, USAMHI, GNMP Vertical Files – 46th Pennsylvania Infantry.

¹⁷⁵ Captain Frank M. Myers, Company A, 35th Battalion Virginia Cavalry, *Comanches: A History Of White’s Battalion*, Virginia Cavalry (Baltimore: Kelly, Piet & Co., Publishers, 1871 – Reprint by Gaithersburg, Maryland: Butternut Press, 1987), 196-197.

¹⁷⁶ Captain Robert Daniel Funkhouser, Company D, 49th Virginia Infantry, *History of the Forty-Ninth Virginia Infantry C.S.A.: “Extra Billy Smith’s Boys,”* by Laura Virginia Hale and Stanley S. Philips (Lanham, Maryland: S.S. Philips and Assoc., 1981), 77-78.

¹⁷⁷ Captain Funkhouser, Company D, 49th Virginia Infantry, *History of the Forty-Ninth Virginia Infantry C.S.A.: “Extra Billy Smith’s Boys,”* 78.

¹⁷⁸ Myers, Company A, 35th Battalion Virginia Cavalry *Comanches: A History Of White’s Battalion*, Virginia Cavalry, 198.

¹⁷⁹ Campbell Brown, “Brown-Ewell Papers,” Box 2a Folder 7 (Nashville: Tennessee State Library and Archives, 1869-70) Gettysburg National Military Park Library, Vertical Files 5 – Participant Accounts – Brown, Campbell).

¹⁸⁰ Brown, “Brown-Ewell Papers.”

¹⁸¹ Early, “A Review by General Early,” *Southern Historical Society Papers*, 255.

¹⁸² Colonel G. J. Fiebeger, Professor of Engineering, *Campaign and Battle of Gettysburg*, Prepared for USMA Cadets (West Point, New York: USMA Press, 1915 – Reprint by Hagerstown, Maryland: Barnwood Books, 1980 – New Oxford, Pennsylvania: Bloodstone Press, 1984), 49.

¹⁸³ *O.R.*, Vol. 27, Pt. 1, “Major-General Henry W. Slocum to Commanding General George G. Meade, December 30, 1863,” 763-765.

¹⁸⁴ *O.R.*, Vol. 27, Pt. 1, “Major-General George G. Meade to Major-General Henry W. Slocum,” 769-770.

¹⁸⁵ *O.R.*, Vol. 27, Pt. 1, “Major-General George G. Meade, Addendum to Report, February 25, 1864,” 120-121.

¹⁸⁶ Major General Alfred Pleasonton, “Campaign of Gettysburg,” *Annals of the War, Written by Leading Participants North and South*, (Dayton, Ohio: Morningside House, 1988 - Originally published in Philadelphia, Pennsylvania: Philadelphia Weekly Times, 1878), 454.

¹⁸⁷ “Quartermaster General M.C. Meigs to Brigadier-General H. Haupt,” *Reminiscences of General Herman Haupt*, Director, Chief Engineer and General Superintendent of the Pennsylvania Railroad, 1901, 215-216.

¹⁸⁸ Russell F. Weigley, *Quartermaster General of the Union Army: A Biography of M.C. Meigs* (New York, New York: Columbia University Press, 1959), 278. *Weigley further explained, “Fortunately, Herman Haupt, the genius of the railroads, was available. He arrived at Westminster on July 1 with orders from Meigs and Stanton to put the Westminster road and the Northern Central to the maximum use possible...The crews and the trains he sent rolling along the Westminster line. Since there could be no passing, the trains were to run in convoys of five each. They would depart from Baltimore every eight hours, affording each convoy time to unload at Westminster and return before the next got under way. Haupt informed General Meigs that from here it was up to the Quartermaster’s Department to get the trains loaded and unloaded rapidly enough to make his schedule work.”

¹⁸⁹ *O.R.*, Vol. 27, Pt. 3, “Major-General Commanding, H.W. Slocum to Major-General Meade,” 468.

¹⁹⁰ Herman Haupt, “H. Haupt, In Charge of United States Military Railroads, to Hon. E.M. Stanton, Secretary of War, July 2, 1863, 3 o’clock,” *Reminiscences of General Herman Haupt*, 216.

¹⁹¹ *O.R.*, Vol. 27, Pt. 1, 22-24.

¹⁹² Ladd, *Bachelor’s History*, “Oral statement of officers of Johnson’s division,” 357.

¹⁹³ *O.R.* Vol. 27, Pt 2, “Report of Lieutenant General Richard S. Ewell to Colonel R.H. Chilton, Assistant Adjutant and Inspector General, _____ 1863,” 446.

¹⁹⁴ *O.R.* Vol. 27, Pt 2, “Report of Ewell to Chilton, _____ 1863,” 446.

¹⁹⁵ Haupt, *Reminiscences of General Herman Haupt*, 216.

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- ¹⁹⁶ *O.R.*, Vol. 27, Pt. 3, Meade's Pipe Creek Circular by Assistant Adjutant-General Seth Williams, July 1, 1863, 459.
- ¹⁹⁷ *O.R.*, Vol. 27, Pt. 2, "Report of Major General Jubal A. Early, August 22, 1863," 470. *Early reported, "I directed General Gordon to move his brigade to the railroad in rear of Hays and Avery, Smith being left, under General J.E.B. Stuart, to guard the York road." See also, *O.R.*, Vol. 27, Pt. 2, "Report of Lieutenant General Richard S. Ewell, _____, 1863," 445. Ewell reported, "...Early entering by the York Railroad at the same time that Rodes came in on the Cashtown road, they together captured over 4,000 prisoners..."
- ¹⁹⁸ Gregory A. Coco, *A Vast Sea of Misery: A History and Guide to the Union and Confederate Field Hospitals at Gettysburg July 1-November 20, 1863*, (Gettysburg, Pennsylvania: Thomas Publications, 1988), 76-77.
- ¹⁹⁹ *O.R.*, Vol. 27, Pt. 3, "Major-General, Commanding H.W. Slocum to Major-General Meade, July 1, 1863 – 9:20 p.m.," 468.
- ²⁰⁰ *O.R.*, Vol. 27, Pt. 3, "George Sykes to Major-General Butterfield, July 2—12:30 a.m.," 483.
- ²⁰¹ *O.R.*, Vol. 27, Pt. 3, "J.B. Clough, Engineer of Construction to Brigadier-General Haupt, July 2, 1863, midnight," 495.
- ²⁰² Haupt, *Reminisces*, 208-211.
- ²⁰³ Westhaeffer, *History of the Cumberland Valley Railroad, 1835-1919*, 82-83.
- ²⁰⁴ Westhaeffer, 82-83.
- ²⁰⁵ Westhaeffer, 82-83.*Westhaeffer noted, "Until Haupt could complete the task, Scott, at his request, put bridge and track gangs of the Pennsylvania Railroad to work on the CVRR, and by July 8 had the railroad operating from Harrisburg as far south as Scotland."
- ²⁰⁶ Timothy J. Reese, *Sykes' Regular Infantry Division: History of Regular United States Infantry Operations in the Civil War's Eastern Theater, 1861-1864* (Jefferson, North Carolina: McFarland & Company, 1990), 240.
- ²⁰⁷ *O.R.*, Vol. 27, Pt. 3, "Assistant Adjutant-General Seth Williams to Commanding Officer 12th Corps, July 2 1863 – 9:30 a.m.," 486.
- ²⁰⁸ *O.R.*, Vol. 27, Pt. 3, "Seth Williams to 12th Corps," 486.
- ²⁰⁹ *O.R.*, Vol. 27, Pt. 3, "Major-General, Chief of Staff Daniel Butterfield to Commanding Officer Twelfth Corps, July 2, 1863," 486.
- ²¹⁰ Peter Cozzens, editor, "Further Recollections of Gettysburg: Generals Daniel E. Sickles, John Newton, and Daniel Butterfield," *Battles and Leaders of the Civil War*, Volume 6 (Chicago: University of Illinois Press, 2004), 258.
- ²¹¹ *It was also the primary access road for Brigadier General Elon J. Farnsworth's ill-fated cavalry charge south of Little Round Top on July 3.
- ²¹² Norton, *Attack and Defense of Little Round Top: Gettysburg, July 2, 1863*, 103.
- ²¹³ *O.R.*, Vol. 27, Pt. 3, "Major-General Sykes to General Howard, July 2, 1863," 486.
- ²¹⁴ *O.R.*, Vol. 27, Pt. 3, "Major-General H.W. Slocum, Commanding to Major-General Meade, Commanding Army of the Potomac, July 2, 1863, 10:30 a.m. (Received 11 a.m.)," 487.
- ²¹⁵ New York Monuments Commission, *In Memoriam Henry Warner Slocum, 1826-1894*, 178.
- ²¹⁶ Major General G.K. Warren, "Congressional hearing testimony of March 9, 1864," *Army of the Potomac, Pt. 1 & 2* (Millwood, N.Y.: Kraus, 1977), 377.
- ²¹⁷ *O.R.*, Vol. 27, Pt. 3, "Major-General H.W. Slocum, Commanding to Major-General Meade, Commanding Army of the Potomac, July 2, 1863, 10:30 a.m. (Received 11 a.m.)," 487.
- ²¹⁸ Edwin B. Coddington, *Gettysburg Campaign: A Study in Command*. Dayton (Ohio: Morningside Bookshop, Copyrighted in 1963, 64 and 68, 1979), 337.
- ²¹⁹ *O.R.*, Vol. 27, Pt. 3, "Major-General H.W. Slocum, Commanding to Major-General Meade, Commanding Army of the Potomac, July 2, 1863, 10:30 a.m. (Received 11 a.m.)," 487.
- ²²⁰ Colonel Charles F. Morse, "Paper Read At Officer's Reunion in Boston, Massachusetts, May 10, 1878," *History of Second Massachusetts Regiment of Infantry, Gettysburg* (Boston: George H. Ellis Printer, 141 Franklin St., 1882), 6.
- ²²¹ Jomini, *Art of War*, 221.
- ²²² *O.R.*, Vol. 27, Pt. 3, "Slocum to Meade, July 2, 1863, 10:30 a.m. (Received 11 a.m.)," 487.

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- ²²³ *O.R.*, Vol. 27, Pt. 3, "Slocum to Meade, July 2, 1863, 10:30 a.m. (Received 11 a.m.)," 487.
- ²²⁴ *O.R.*, Vol. 27, Pt. 1, "Report of Major-General Henry W. Slocum of August 23, 1863," 758.
- ²²⁵ Jomini, *Art of War*, 185, 209-210.
- ²²⁶ Colonel William Brooke-Rawle, "Right Flank at Gettysburg," *Annals of the War: Written by Leading Participants, North and South*, (Philadelphia: Philadelphia Weekly Times – Dayton, Ohio: Morningside House, 1988), 467.
- ²²⁷ Comte de Paris, *Battle of Gettysburg* (Philadelphia: Porter & Coates, 1886, revised in 1907, and reprinted by Baltimore, Maryland: Butternut & Blue, 1987), 143.
- ²²⁸ Jomini, *Art of War*, 184.
- ²²⁹ Paris, *Battle of Gettysburg*, 143.
- ²³⁰ *O.R.*, Vol. 27, Part 1, "Report of Colonel Sidney Burbank to Captain George Ryan, July 21, 1863," 644.
- ²³¹ *O.R.*, Vol. 27, Part 1, "Report of Major Arthur T. Lee, 2nd U.S. Infantry, to Captain J.W. Ames, July 4, 1863," 646.
- ²³² W.H. Sanderson, 2nd U.S. Infantry, "Sykes' Regulars: Part They Took in the Gettysburg Campaign," *Gettysburg in the Pages of The National Tribune*, April 2, 1891 (Baltimore, Maryland: Butternut & Blue Publisher, 1998), 282.
- ²³³ *O.R.*, Vol. 27, Part 1, "Report of Captain Frank C. Gibbs, Battery L, 1st Ohio Light Artillery, July 4, 1863," 662.
- ²³⁴ Myers, *Comanches: A History of White's Battalion, Virginia Cavalry*, 199.
- ²³⁵ Jomini, *Art of War*, 191.
- ²³⁶ Major General George G. Meade, "Testimony before Congressional Sub-committee in Washington, March 11, 1864," *Army of the Potomac, Pt. 1 & 2*, 349. *OR*, Vol. 27, Part 1, 592. Prior to 3 P.M., Sykes was "directed to support the Third Corps." *OR*, Vol. 27, Part 1, 531. Humphreys stated, "Shortly after midday, I was ordered to form my division in line of battle, my left joining the right of...Major General [David B.] Birney...near the foot of the westerly slope of the ridge...."
- ²³⁷ Meade, *Army of the Potomac*, 349.
- ²³⁸ Major General George G. Meade, "Testimony to Joint Committee on the Conduct of War, April 4, 1864," *Army of the Potomac*, Part 1, 438.
- ²³⁹ *O.R.*, Vol. 27, Part 1, "Report of Major General George Sykes, July 31, 1863," 592.
- ²⁴⁰ *O.R.*, Vol. 27, Part 1, "Report of Brigadier General Andrew A. Humphreys, August 16, 1863," 532.
- ²⁴¹ General Henry J. Hunt, "Congressional testimony on April 4, 1864," *Joint Committee on the Conduct of the War, Army of the Potomac (JCCW)*, Part 1 (Washington, D.C.: Government Printing Office, 1865), 450.
- ²⁴² *O.R.*, Vol., 27, Part 3, "Captain Hall, Signal Officer to General Butterfield from Round Top Mountain Signal Station, July 2, 1863, 1:30 p.m.," 488.
- ²⁴³ *O.R.*, Vol. 27, Part 3, "Hall to Butterfield," 488.
- ²⁴⁴ *O.R.*, Vol. 27, Part 3, "Major General Alfred Pleasonton to Brigadier General David M. Gregg, July 2, 1863—10.40," 489. *Because the enemy was not "in heavy force on the road from Heidlersburg" at 10.40, this warning makes more sense at 1:40 PM in the time sequences. It was rare for an a.m. or p.m. designation to be dropped in the official record, as happened here. The order is also recorded sequentially with p.m. memorandums. Dropping or switching the first "O" would allow the order to make sense.
- ²⁴⁵ *O.R.*, Vol. 27, Part 3, "Pleasanton to Gregg, July 2, 1863--1.45," 490.
- ²⁴⁶ *O.R.*, Vol. 27, Part 3, "Butterfield to Pleasanton, July 2, 1863—12:55 p.m.," 490.
- ²⁴⁷ *O.R.*, Vol. 27, Part 2, "Report of Brigadier General Judson Kilpatrick, August 10, 1863," 992.
- ²⁴⁸ Haupt, *Reminisces of General Herman Haupt*, 216.
- ²⁴⁹ *O.R.*, Vol. 27, Pt. 3, "H. Haupt to General Ingalls, Chief Quartermaster, Headquarters of the Army, July 4, 1863," 523.
- ²⁵⁰ *O.R.*, Vol. 27, Part 3, "Engineer of Construction, J.B. Clough to Brigadier General Herman Haupt, July 2, 1863—12 midnight," 495.
- ²⁵¹ *O.R.*, Vol. 27, Part 2, "Report of Ewell to Chilton, _____ 1863," 446.
- ²⁵² Brigadier General Seth Williams, *JCCW Testimony*, April 18, 1864.
- ²⁵³ General John Gibbon, *JCCW Testimony*, April 1, 1864.
- ²⁵⁴ Gibbon, *JCCW Testimony*, April 1, 1864.

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- ²⁵⁵ Historicus, "Battle of Gettysburg—Important Communication from an Eyewitness—How the Victory was Won and How its Advantages were Lost—Generals Halleck's and Meade's Official Reports Refuted, etc." *New York Herald*, March 12, 1864.
- ²⁵⁶ *O.R.*, Vol. 27, Part, "Correspondence of Geo. G. Meade, Major-General Commanding with Col. E.D. Townsend, Assistant Adjutant-General, March 15, 1864,"
- ²⁵⁷ *O.R.*, Vol. 27, Part, "Meade to E.D. Townsend, March 15, 1864,"
- ²⁵⁸ Captain William H. Paine, Map prepared for General George G. Meade on July 2, 1863, National Archives.
- ²⁵⁹ Major-General John Gibbon, "Council of War on the Second Day," *Battles and Leaders of the Civil War*, Vol. 3 (New York, New York: *Century Magazine* 1884-1887 – Secaucus, New Jersey: Castle Book Sales, 1987), 314.
- ²⁶⁰ Allan Nevins, editor, *Diary of Battle: Personal Journals of Colonel Charles S. Wainwright, 1861-1865* (Gettysburg, Pennsylvania: Stan Clark Military Books, 1962).
- ²⁶¹ John B. Bachelder, *Map of the Battlefield of Gettysburg, July 1-3, 1863. Compiled and Added for the Government...from the Official Records, Consultations on the Field, Private Letters, and Oral Explanation of the Officers of Both Armies*. Boston, Massachusetts: 1876 - Reprint, Putney, Vermont: Reed's, 1980.
- ²⁶² Oliver Willcox Norton, *Attack and Defense of Little Round Top: Gettysburg, July 2, 1863* (Copyright 1913 – Dayton, Ohio: Morningside Bookshop, 1983), 262.
- ²⁶³ Henry J. Hunt, "Second Day at Gettysburg," *Century Magazine, Battles and Leaders of the Civil War* (Secaucus, New Jersey: Castle Book Sales, 1987), 294.
- ²⁶⁴ Major-General John Gibbon, "Council of War on the Second Day," *Battles and Leaders of the Civil War*, Vol. 3 (New York, New York: *Century Magazine* 1884-1887 – Secaucus, New Jersey: Castle Book Sales, 1987), 314.
- ²⁶⁵ Nevins, editor, *Diary of Battle: Personal Journals of Colonel Charles S. Wainwright, 1861-1865*, 1962.
- ²⁶⁶ Major-General John Gibbon, "Council of War on the Second Day," *Battles and Leaders of the Civil War*, Vol. 3, 314.
- ²⁶⁷ Frederick, King of Prussia; Phillips, Thomas R, *Frederick the Great: Instructions for his generals* (Harrisburg, Pennsylvania: Military Service Publishing Company, 1944), Article XVIII.
- ²⁶⁸ William E. Doster, Provost Marshall of Washington, *Lincoln and Episodes of the Civil War*, "Diary entry for Thursday, July 2-3, 1863" (New York: G.P. Putnam's Sons, 1915), 218.
- ²⁶⁹ Doster, *Lincoln and Episodes of the Civil War*, 218.
- ²⁷⁰ Doster, 218, 219.
- ²⁷¹ Longstreet, *Manassas to Appomattox*, 369.
- ²⁷² Andie Custer, "Into the Mouth of Hell: Farnsworth's Charge Revisited," *Blue and Gray Magazine* (Columbus, Ohio, Spring 2006), 20. *Custer's research documents that dropped Sharps carbine rounds and pistol bullets turned-up on the Pete Bocek Farm, while Confederate Enfield and Gardner drops were discovered on the J. Thompson Farm. Finally, fired Sharps carbine rounds and .69 caliber bullets were found behind the Barlow Fire Hall on Taneytown Road.
- ²⁷³ *O.R.*, Vol. 27, Part 2, "Report of Major J.C. Rogers, Fifth Texas Infantry of July 8, 1863," 413.
- ²⁷⁴ *O.R.*, Vol. 27, Part 2, "Report of Robert E. Lee, January 1864," 318.
- ²⁷⁵ *O.R.*, Vol. 27, Part 2, "Report of Lieutenant General James Longstreet, July 27, 1863," 359.
- ²⁷⁶ General James Longstreet, *Philadelphia Weekly Times, Annals of War: Written By Leading Participants North and South*, 1878 (Dayton, Ohio: Morningside Press, 1988), 429.
- ²⁷⁷ *O.R.*, Vol. 27, Part 2, "Report of Lee, January 1864," 318.
- ²⁷⁸ Paris, 224.
- ²⁷⁹ JCCW, 378; Bill Hyde, ed., *Union Generals Speak: Meade Hearings on the Battle of Gettysburg* (Baton Rouge: Louisiana State Press, 2003), 169.
- ²⁸⁰ *O.R.*, Vol. 27, Part 1, 366.
- ²⁸¹ Col. J. Irvin Gregg, "Letter to Col. J.B. Bachelder, October 18, 1884" *Bachelder Papers: Gettysburg in Their Own Words*, Volume II, September 6, 1880 to April 12, 1886, David L. and Audrey J. Ladd editors (Dayton, Ohio: Morningside House, 1994), 1074.
- ²⁸² Paris, 233.

²⁸³ *O.R.*, Vol. 27, Part 3, Correspondences, "A. Lincoln to Major-General Halleck, Soldiers' Home, Washington, July 6, 1863, 7 p.m.," 567.

²⁸⁴ Brown, *Retreat from Gettysburg*, 260. *Brown was the first modern historian to directly relate Custer's attack at Monterey Pass with Meade's pending decision to shift rail supplies to either Gettysburg or Frederick.

²⁸⁵ *O.R.*, Vol. 27, Part 1, "Report of Major General George G. Meade, October 1, 1863," 118. *Meade reported, "The 13th was occupied in reconnaissances of the enemy's position and preparations for attack, but, on advancing on the morning of the 14th, it was ascertained he had retired the night previous by a bridge at Falling Waters and the ford at Williamsport."

²⁸⁶ *O.R.*, Vol. 27, Part 3, Correspondences, "H. Haupt to General R. Ingalls, U.S. Military Telegraph, War Department, Washington, D.C., July 11, 1863," 654.

²⁸⁷ *O.R.*, Part 3, "H. Haupt to Presidents of the following Railroads, Washington City, July 6, 1863," 568.

*Boston and Worcester, Boston, Mass.; New Haven, Hartford and Springfield, Hartford Conn.; Camden and Amboy, New York; Philadelphia, Wilmington and Baltimore, Philadelphia, Pa.; Cleveland and Toledo, Cleveland, Ohio; Pittsburgh, Columbus and Cincinnati, Steubenville, Ohio; Pennsylvania Central, Philadelphia; Indiana Central, Dayton, Ohio; Cleveland and Pittsburgh, Cleveland, Ohio; New Jersey Railroad Transportation Company, New York; New York and New Haven, New York City; Michigan Southern, Toledo, Ohio.

Railroad References:

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American-Rails.com. Courtesy of National Archives. Copyright 2007-2017. Image #1 of USMR crewman posing next to the 4-4-0 "General Haupt," circa 1863. Image #2 of the "General Haupt" locomotive and crew assisting in construction of a wye at Devereux Station, Orange & Alexandria Railroad. General Haupt is seen standing with a black hat, circa 1863. Image #3 of Hanover Junction, Pennsylvania in November 1863.

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Vita

Education

Ph.D. ****Dissertation Draft Approved**** Scheduled to Graduate Doctor of Philosophy, History Major at Lehigh University on May 21, 2018.

MA - Shippensburg University. History Major. 1998.

BA – Lynchburg College. History Major, Speech Communications Minor. 1987.

Experience

*Penn State University – Adjunct Professor - History 20 – American Civilization to 1877, History 21 – American Civilization, 1877 to Present, History 120 – Europe after 1848, History 144 – World at War, 20th C. Main & World Campus Online. 2014-Current

*Delaware Valley University – Adjunct Professor -Non-West Societies

LA-4037-340 2016

Harrisburg Area Community College, Gettysburg Campus - Adjunct Professor - Western Civilization 201 & 202. 2000 - 2015

Gettysburg National Military Park – Interpretive Park Ranger. 1989 - Current

Independence National Historical Park – Interpretive Park Ranger. 1987 - 1989

Fredericksburg & Spotsylvania National Military Park – Interpretive Park Ranger. 1987

Mammoth Cave National Park – Interpretive Park Ranger. 1986

Appomattox Court House National Historic Park – Interpretive Park Ranger. 1984-1985

Publications

Cemetery Hill: "General Plan was Unchanged" Butternut & Blue, 2001

Lee's Real Plan at Gettysburg, Stackpole, 2003

"It Was Their Intention, While Entangling Us, To Cut Us Off From the Town:" 11th Union Army Corps at Gettysburg and Battle North of Town. *Gettysburg Campaign and First Day of Battle*. Gettysburg, PA: Gettysburg National Military Park, 2005

"In Defense of Henry Slocum on July 1." *Leadership in the Campaign and Battle of Gettysburg*. Gettysburg, PA: Gettysburg National Military Park, 2002.

"Gap: Meade's July 2 Offensive Plan." *Gettysburg Campaign and Second Day of Battle*. Gettysburg, PA: Gettysburg National Military Park, 2007.

"Richard Ewell, Robert E. Lee, and Cemetery Hill." *High Water Mark: Army of Northern Virginia in the Gettysburg Campaign*. Gettysburg, PA: Gettysburg National Military Park, 1999.

"Great Revival of 1863: Effects Upon the Army of Northern Virginia." *American Civil War in 1863*. Gettysburg, PA: Gettysburg National Military Park, 2001.

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"Was Gettysburg the Turning Point of the War?" *North & South Magazine*, Vol. 8, No. 4. Tollhouse, CA: June 2005.

"Preservation Alert: Gettysburg's Last Great Frontier." *North & South Magazine*, Vol. 8, No. 7. Tollhouse, CA: January 2006.

"Crossfire: Gettysburg Point-Counterpoint." *North & South Magazine*, Vol. 8, No. 5. Tollhouse, CA: September 2005.

"Black Labor at Pine Grove & Caledonia Furnaces, 1789-1860." *Adams County Historical Society Journal*, Vol. 14 pp. 31-45, 2008.

"Future of Civil War History." Conference paper for 150th Anniversary of the Civil War held at Gettysburg College. UNC Press: Chapel Hill.

*In the pipeline.

"Lee's Whereabouts at Gettysburg." *Comparative Analysis of Lee and Meade at Gettysburg*. Gettysburg, PA: Gettysburg National Military Park, 2018.

Presentations

C-Span – Panelist for Future of Civil War Parks at Gettysburg College.

Spoken in Civil War Round Tables, seminars and symposiums in Indianapolis, Indiana; Cleveland, Ohio; Monroe, Michigan; Houston, Texas; Louisville, Kentucky; Portland, Maine, Lynn Massachusetts; Albany, NY; Spartanburg, SC; Asheville, NC; Wheeling, WV; Knoxville, TN; Atlanta, GA; Pittsburgh, PA; Philadelphia, PA; Princeton, NJ; Wilmington, DE; Baltimore, MD; and Lynchburg, VA.

PA Cable Network (PCN) – 30+ Gettysburg Battlefield tours and interviews.

Numerous historical lectures available online through YouTube, Vimeo and NPS Facebook.

Research Experience

Researched, prepared and presented hundreds of programs at Gettysburg National Military Park, Independence NMP, Fredericksburg & Spotsylvania NMP, and Appomattox Court House National Park. 1984 - Present

Researched and wrote captions for over 400 photographs for the “Wall of Faces” for GNMP photography collection. 1994 - 2008

KOCCOA (Key Terrain, Observation Points, Cover and Concealment, Obstacles, Avenues of approach) research for GNMP general management plan, Restoration of West Cemetery Hill. 2000

Researched the 3rd day of the battle for exhibits in the GNMP new interpretive museum. 2003-2004

Teaching Experience

*Penn State University 2014- Present

*Delaware Valley University 2016

*Harrisburg Area Community College 2000- 2015

Professional Development

Training

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January 2000 – August 2013. Annual Harrisburg Area Community College in-service trainings on technology in the classroom, teaching/learning skills, assessment awareness, and disability accommodations.

April 2013, Department of Interior Leadership Training, Gettysburg National Military Park.

February 2008 - September 2013, Annual NPS training on Privacy Records management, Ethics, Discrimination and Whistleblowing, Safety and Charge Card.

February 8-17, 2006, Interpretive Operations for First-Line Supervisors, Mather Center, WVA.

April 27-29, 2004, Introduction to Conflict Resolution (CORE), Equal Employment Opportunity (EEO) Counselor Refresher Training, Boston, MA

March 2003, Module 311: Assessment Rubric for Full Performance Benchmark Competency, Interpretive Media Development, Gettysburg, PA.

October 22-24, 2002, EEO Update and Refresher for EEO Counselors, Philadelphia, PA.

March 27-28, 2001, EEO Counselor Refresher Training, Philadelphia, PA.

March 8-9, 2000, Diversity and Equal Opportunity for Supervisors, Gettysburg, PA.

May 8-9, 2000, The Interpretation of the Civil War
Symposium, Ford's Theater, Washington, D.C.

February 16-19, 1999, Basic EEO Counseling, Graduate
School: US Dept. of Agriculture, Washington, D.C.

November 2-3, 1999, EEO Counselor Refresher Training,
Philadelphia, PA.

November 20, 1998, Critical Issues in History Education &
Interpretation, Gettysburg, PA.

April 8-10, 1997, Presentation Techniques for Curriculum-
based Programs, Lowell Nat. Historical Park, Lowell, MA.

March 1996, How to Effectively Audit an Interpretive
Program, Fort McHenry NM&HS, Baltimore, MD.

May 19, 1995, I-200 Incident Command System, Catoclin
Mountain Park, Thurmont, MD.

August 7-8, 1991, Interpretation for Children, Delaware
Water Gap, Bushkill, PA.

November 5-9, 1990, Interpretive Skills II: Training Course,
Gettysburg, PA

December 12-14, 1988, Basic Firefighting: S-130 & S-190
Courses

September 12-16, 1988, Interpretive Skills I: Personal
Services Interpretation Course, Front Royal, VA.

Awards/Distinctions

Monetary Award in Interpretation” for 22 straight years from 1995-2017 at Gettysburg National Military Park (GNMP)

“Recognition of Exemplary Supervision” from University of Massachusetts-Amherst on November 19, 1988. *Supervising a UMASS student at GNMP.

“History Meets the Arts Judge” December 18, 2006. *Only two judges for an event, which overtakes Gettysburg the second week in April. Famous artists participate.

“Penn Ambassador” for South-Central Pennsylvania from March 2006 – March 2007. *Designated by a state representative to partner with state parks in area preservation.

“Bachelor Award for Original Research” from the Senate of Pennsylvania, October 27, 2003. *Listed as a “noted historian” and credited with helping to preserve land associated with right flank of the Federal army.

Seventeen “Plaques & Certificates,” for speaking at Civil War Round Tables, Seminars, Symposiums, and Special Events.

National Park Service - 30 Year Service Plaque, September 3, 2016.

Harrisburg Area Community College - 15 Year Valuable Service Plaque – 2016

Barnes & Nobles Book Talk held on January 25, 2003 in Cranberry Township, greater Pittsburgh area. *Special gathering to discuss my book.

Phi Alpha Theta, “Recognition of Conspicuous Attainments and Scholarship in the Field of History,” October 5, 1985.

Interests

Traveled to China, Russia, Egypt, Italy, Greece, England, Scotland, Ireland, France, Spain, Bahamas, Mexico and Canada.

Traveling to Germany and Switzerland in May of 2018.