### ON LEE'S MANAGEMENT OF CAVALRY DURING

#### THE GETTYSBURG CAMPAIGN

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High on the list of reasons for the Union victory at Gettysburg is the erratic performance of the Confederate cavalry. Toxic side effects galore get ascribed to the absence of General James Ewell Brown (J.E.B.) Stuart and his three brigades, especially in the days leading up to the battle. Because of this, the Army of Northern Virginia (ANV) entered the battle blind to the location of the Federal Army and to the topography and cartography of the Gettysburg area. Without a doubt cavalry was scarce where it was needed; blame is normally assigned to cavalry commander Stuart for his dispositions and for placing his command incommunicado with his commander, General Robert E. Lee.

As commander, however, Lee was responsible for the army's operations and was therefore accountable for its defeat despite the errors of his subordinates. Many questions arise concerning Lee's management of the Confederate cavalry, particularly what this paper calls the "proximal cavalry," which remained with the main body of the ANV. Is it true that "Stuart's absence" is equivalent to "Lee had no cavalry," as many interpret? How much of the blame for its dispositions and usage should be assigned to Lee, if any? In addition, could Lee have attempted any correction to his cavalry operations based on hearing no word from Stuart? Finally, how does Lee's performance compare to commanders in other wars who were compelled to use forces considered substandard?

This paper analyzes the command decisions relative to the Confederate cavalry to determine if the forces with Lee were adequate to substitute for the tasks that Stuart

should have done. It covers decisions leading to the deployment of the ANV's cavalry, the paths followed by the cavalry units with the main body of the ANV, and it tries to determine if any of these forces were close enough to the army to substitute for Stuart. Because he arrived in Gettysburg in the afternoon of July 2, the span of this paper ends on the morning of that day. In particular, it shows that, other than Stuart's absence, the failure of the Confederate cavalry during the Gettysburg campaign was the result of a string of small decisions that snowballed into a much larger breakdown of support when needed most.

Some disclaimers are warranted. First, this paper covers neither the orders given by Lee, including any interpretations thereof, nor the actions of Stuart and his three cavalry brigades in their winding arc around the Federal forces. These are accepted as part of the historical situation; they have also been analyzed beyond reproach by almost all students of the battle to no apparent conclusion. Whether Lee's orders allowed discretion or whether Stuart stretched discretion is irrelevant to this discussion: the analysis within covers only Lee's part in the composition of the cavalry accompanying the ANV and his reaction to Stuart's continued absence. Second, Lee himself never left a complete list of reasons for all his actions during the campaign, and this essay does not try to fill that void. Finally, none of the points presented suggest that the ANV was in any way substandard or inferior at that point during this campaign or the war. In summary, it analyzes decisions, not persons.

For comparison, this paper correlates actions and persons to those in other wars, a technique uncommon in Civil War historiography with the notable exceptions of the works of Fletcher Pratt and John Keegan. However, using such an approach can often help cast new light on Civil War topics and serve to explain them better than in isolation. Although many aficionados think that our civil war was fought in a historical vacuum and is unique among world conflicts with *absolutely* no comparison, the similarities are there if one is willing to both look and accept what they reveal.

### **AMERICAN CAVALRY IN THE 1860s**

Depending on prevailing weapons, cavalry's importance on the battlefield waxed and waned. Prior to gunpowder, horse normally prevailed over foot. After gunpowder and with the consequent decrease in wearing armor, cavalry ceded battlefield dominance to the infantry. Final blows to its superiority were the rifled musket and improved artillery. Massed charges against infantry became suicidal because of weapons that could rain accurate destruction up to more than one-half mile away. With grand charges out of the question, cavalry migrated to other functions.

By the Civil War, cavalry performed several tasks: scouting for the army; screening or protecting the army from enemy detection; topographic and cartographic mapping; protecting flanks; and guarding supply trains on the move. Most cavalry operations leading up to Gettysburg were of this type. It had transformed from horsemen fighting similar forces with speed and sabers to mounted infantry (dragoons) that used horses to travel quickly then to fight dismounted. The cavalry of Confederate General Nathan Bedford Forrest in the West is the outstanding example of mounted infantry. Also, Federal General John Buford used his division in this way on July 1, 1863 to great effect causing considerable delay in the advance of General Henry Heth's division toward Gettysburg. The massed cavalry charges of Brandy Station, Virginia, on June 9, and Gettysburg on July 3 were impressive but were uncommon by that time.

### CAVALRY PROXIMAL TO THE ARMY OF NORTHERN VIRGINIA

Seven Confederate cavalry brigades were available for the Gettysburg campaign. For convenience, these may be split into two groups: with Stuart and with Lee. Stuart's division had five brigades, three of which he took on his reconnaissance of the Federal Army of the Potomac (AOP): those of Generals Wade Hampton and Fitzhugh Lee, Robert's nephew, and Colonel John Chambliss, Jr., (commanding the brigade of the wounded and captured General William Henry Fitzhugh Lee, Robert's son). These brigades were considered superior to the other four in the skill and experience of their horsemen and in leadership. Of the brigade commanders, Wade Hampton was considered the most capable subordinate. Because these three brigades were with Stuart on his ride around the AOP and not with Lee, they are mentioned only for historical background.

The four brigades assigned to directly support the ANV were of disparate leadership, skill, and experience. Their commanders or troopers were in Stuart's or Lee's disfavor for varying reasons. Two were part of Stuart's division, both West Point graduates:

General William Jones had been in the cavalry since the start of the war and on raids with Stuart. He was considered competent and inspiring, but extremely irascible both in tongue and manner, engendering the nickname "Grumble." Although he got along with few in the army, he was particularly incompatible with Stuart, his immediate commander. Despite this, Stuart regarded him the best outpost officer in the ANV. (1) His troopers had considerable experience as well.

General Beverly Robertson was considered a good training officer but unreliable and lethargic in the field. His small brigade of two new regiments was fresh from initial training in North Carolina and untested in combat. (2) Unfortunately, he outranked Jones, so Stuart generally dealt with him by giving detailed instructions that tried to cover every contingency. (3) Just to be sure, Stuart often sent further orders to Jones. (4) It should be noted that General D. H. Hill, although protesting the proposed re-assignment of two of General George Pickett's infantry brigades that stayed in North Carolina, offered no resistance to the assignment of Robertson's brigade to the ANV for the Gettysburg campaign. (5)

Two independent brigades were attached to the army for the campaign:

General Albert Jenkins, a lawyer and Congressman before the war, was considered a competent, independent raider. His troopers could collect supplies and disrupt communications; they were valued as good mounted infantry, but not as first-line cavalry. In Pennsylvania, although Jenkins himself acted gentlemanly, they earned a reputation as thugs and looters. They were augmented by Lieutenant Colonel Elijah White's 35th Virginia Cavalry Battalion of about 200 troopers from Jones's brigade.

General John Imboden entered Confederate service in the artillery and transferred to cavalry when promoted to brigadier general. His troopers were considered at best mounted infantry and were ill-equipped, ill-trained, and undisciplined. Both Lee and Stuart held them in low regard. (6)

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Finally, assigned to Lee's headquarters were two companies of the 39th Virginia Cavalry Battalion, approximately 85 troopers. They were used mostly as escorts and couriers. (7)

At the start of the campaign, the number of troopers with Stuart (Hampton, Lee, and Chambliss) was about 6500. The totals for the other brigades are:

Jones	1900
Robertson	975
Jenkins	1500
Imboden	2000

Although the total is 6375 troopers, it is unimportant because they were too far apart to deploy as a combined force. It shows, however, that considerable cavalry was available to Lee.

### LEE'S DECISION TO APPROVE THE CAVALRY'S DEPLOYMENT

Lee ordered Stuart to leave behind 40 percent of his cavalry to support the army. (8) Lee allowed Stuart to decide which 60 percent would constitute the force for his reconnaissance of the AOP. The discourse between Generals Lee, Stuart, and James Longstreet, First Corps commander and second-in-command, occupied two days. However, in a written order Longstreet suggested that Stuart order Wade Hampton to command the cavalry left. (9) This suggestion has three interpretations:

1. Stuart should leave Hampton and his brigade with the main army and take the brigades of Robertson or Jones. This is the generally accepted meaning.

2. Stuart should leave Hampton himself with the main army and take his brigade under the command of someone else, preferably his second-in-command.

3. Stuart should leave Hampton and his brigade with the main army and take only the brigades of Lee and Chambliss.

Regardless, Stuart chose to ignore Longstreet without explanation and took Hampton and his brigade on the march. He left no one behind to command the remaining cavalry and furthermore informed neither Lee nor Longstreet of this. This omission placed Robertson in default command of the remaining cavalry, which neither Stuart nor Lee intended.

As cavalry commander, Stuart had the right to deploy his forces according to his best judgment within his superior's parameters. One could argue that Longstreet should have expected that he would take his three most capable commanders with their brigades on a mission fraught with peril. But despite Stuart having performed major reconnaissance sweeps of the Federal army twice before, he was not in friendly Virginia and wanted his best with him.

However, Stuart was also responsible to ensure proper support for Lee during his absence in case of a delay. There are two parts to this and in both he failed:

1. Ensuring that Lee had cavalry available and capable to perform reconnaissance. Instead he took with him the three most experienced scouting brigades leaving only four brigades in which both Stuart and Lee had less confidence. (10)

2. Ensuring that the far-flung cavalry with the ANV would be monitored to relieve Lee of this task, as Longstreet suggested. A local, interim commander of moderate competence and trust could track the locations of the four brigades and offer

advice to Lee on recalling them if needed. It is difficult to understand why Stuart left no one in such a position.

As army commander, Lee had every right to suggest or order a deployment with which he felt comfortable. Given that the proposed reconnaissance of the AOP would leave Stuart out of contact with him for at least three days, it is difficult to understand why Lee neither ordered nor suggested any modification of Stuart's plan. It is understandable that Stuart wished that his three best commanders and their brigades accompany him on this reconnaissance. Lee approved this and trusted Stuart and his judgment, and in this they both erred. (11) It was Longstreet who wished that Hampton remain: in this case, his well-known caution might have been justified.

Finally, a feature of the deployment was the deplorable command situation between Stuart and both Robinson and Jones. It is inescapable that personalities are involved in such affairs and commanders and subordinates must deal with them, but this was something that Lee should have found intolerable. A commander must insist that his subordinates resolve their differences for the good of the mission. It is unclear if Lee suggested anything, but Stuart's solution of avoiding Jones, yet asking him to act as "guardian angel" for the senior Robertson is awkward, counterproductive, and an unworthy solution from a major general. (12)

Lee, of course, was not an exemplar of effective management of subordinates. He declined to dismiss or re-assign the inept General William Pendleton as his artillery chief because he was a West Point contemporary and friend of President Jefferson Davis—Davis, Lee, and Pendleton graduated in 1828, 1829, and 1830, respectively. Instead, he chose to sidestep the issue by *re-organizing his entire artillery corps* to reduce Pendleton's influence. This restructuring of the ANV in May 1863 went even so far as to eliminate its Artillery Reserve and spread its cannon among the three corps, leaving Pendleton with no actual guns to command. He remained on Lee's staff as nominal Chief of Artillery, but in reality was merely an advisor in this critical area. No one could know at the time that despite this, Pendleton still managed to make decisions detrimental to the army during the battle. Given this draconian but pedestrian solution to a major personnel problem, it should offer no surprise in the context of the Southern code of gentility that Lee found Stuart's awkward solution acceptable.

Historians should note that Lee was not the only American general that had to deal with difficult subordinates. For example, in World War II (WWII), General Dwight Eisenhower in Europe had to contend with the forceful personalities of British General Bernard Montgomery, French General Charles De Gaulle, and his own American General George Patton. In addition, although more agreeable and a West Point classmate of Eisenhower, General Omar Bradley disliked both Montgomery and De Gaulle. Eisenhower's tact in this matter was manifest in December 1944 during the early stages of the Battle of the Bulge. Because the German counteroffensive threatened to split Bradley's 12th Army Group, Eisenhower decided that First and Ninth Armies should be removed temporarily from Bradley and assigned to Montgomery's 21st Army Group north of the bulge. Bradley was furious, but Eisenhower convinced him of the necessity and he followed his orders; both armies returned eventually to his command after the battle. Compared to the size and gravity of Eisenhower's situation, which he managed to victory, Stuart should be held accountable for devising a monstrosity of a command arrangement, and Lee for approving it. With Stuart planning to be east of the ANV and having the most dangerous assignment riding near the AOP, he deemed it reasonable to use the four "lesser" brigades to assist the other flanks of the army. Thus, Imboden covered the west and Jenkins, the north. Robertson and Jones covered the southern flank by protecting two mountain passes in Virginia, Ashby's and Snicker's Gaps. They were to monitor the enemy's progress and protect their own supply line. If the AOP's passage north was assured, they were to leave a token presence at the passes and take the majority of their forces north to join the main body of the ANV.

Finally, the disparate command arrangement for the three cavalry groups shows a lack of concern for unity and coordination that historians tend to ignore. Robertson and Jones received their orders from Stuart, Jenkins from General Richard Ewell, Second Corps commander, and Imboden from Lee. Such a command structure discourages the formation of a combined unit even if they were close during the journey north. Obvious deficiencies at this point are the lack of experienced scouting cavalry with the ANV and the lack of a competent officer of sufficient rank and stature *assigned to Lee* to coordinate or command the cavalry, if needed.

## LEE'S DECISION TO WAIT FOR WORD FROM STUART

In researching the Confederate cavalry at Gettysburg, one learns quickly that the coverage in almost all books could be titled "Jeb Stuart's Ride Plus Debris," the latter being the brigades with Lee. Many books even devote an entire chapter to Stuart's excursion, complete with map. The situation is different for the other brigades. For their activities, one must keep detailed notes of their locations and dates from all sources and

plot them on a map. From this exercise Table 1 was constructed, which appears immediately after this section.

Lee knew from scouting reports that as early as June 22 the AOP had constructed a pontoon bridge at Edward's Ferry near Leesburg and was ready to cross: he received this datum by June 23. Stuart had been on the move since June 24 and sent his last report to Lee from Virginia on June 25, which Lee received about a day later. The expectation was that this foray would keep Stuart incommunicado with Lee for an "unpredictable period of time" as he probed and harassed the AOP. (13) A spy named Harrison informed Longstreet and Lee on June 28 that the AOP had crossed the Potomac River and was well into Maryland, a rate of march unusual for the Federals, upwards of 20 miles per day. This surprised both commanders for two reasons: they did not expect the AOP to move so quickly and did not hear of this from Stuart. It is unknown which was the bigger shock.

As indicated above, Stuart's silence should have not surprised Lee on June 28. As indicated above, he expected him to be out of contact for some time on a dangerous mission to locate the AOP. Even as late as June 28, upon hearing nothing, Lee interpreted "no news" as "no danger," and ordered Ewell to proceed to Harrisburg. (14) The duration between Stuart's last dispatch of June 25 and Harrison's on June 28 arrival is three days, within the limit of the expected outage. Lee's quick orders to his corps commanders for the army to converge on the Cashtown-Gettysburg area indicate the urgency of Harrison's information.

Lee's astonishment at the AOP's celerity is particularly noteworthy, especially because he was aware of its pontoon bridge since June 23. In addition, he knew from the

Battle of Brandy Station that the Federal cavalry had improved greatly from two years before. Further, he understood that Federal cavalry had probed the mountain passes competently and persistently since mid-June resulting in many battles along the way. Therefore, it appears odd that Lee was surprised. A commonly held reason for this is that Lee did not believe that the AOP could or would move fast enough to catch up to his army.

In fact, his entire plan depended on it: the ANV was to expand its range to allow for comprehensive foraging; Stuart would cross the Potomac and presumably find the AOP and report back; and Lee would be free to prowl around Pennsylvania unmolested waiting for the golden opportunity to fight and defeat the enemy. Indeed, the deployment of the ANV on June 28, in an eighty-mile arc from the Maryland border to York does not bellow deep concern for detection or attack. Of course, all of this relied on a lethargic Federal army, but no one informed General Joseph Hooker, AOP commander until June 28, of his part in the plan. It also depended equally on notification from Stuart which was never to arrive. As Freeman writes:

"He had become dependent upon that officer for information of the enemy's position and plans and, in Stuart's absence, he had no satisfactory form of military intelligence." (15)

Thus General Lee's unbridled faith in his cavalry commander lured him into believing that the AOP was indeed following his plan. Not only that, it misled him from formulating an alternate strategy for managing his proximal cavalry, which would have included an alternate commander. This quote, by a Union officer long after the war, shows that this is not a new thought (italics added): "To us, at the present day, the whole scheme seems wild and unreasonable, *only to be made successful by leaving out of the calculation the Army of the Potomac*. But that army was not to be left out of the calculation, and at some time, at some point in his march General Lee was sure to meet it." (16)

An obvious argument here is that on June 24 or 25 Lee did not know that a major battle was one week away. Whereas this is true, the ANV was not in Pennsylvania merely to act as farmhands, harvesting and rounding up cattle: it was there for a fight, and Lee did not explore every avenue to protect his army. He is not at fault for failing at omniscience, but for being careless where mindfulness meant taking action to ensure proper command of cavalry in place of Stuart. (17) To be sure, neither of them seemed concerned about this.

Lee's thought pattern here appears similar to that of the Imperial Japanese Navy at the Battle of Midway in June 1942. Commander of the Japanese carrier battle group Admiral Chuichi Nagumo and his staff were confident in the completeness of their plan. This called for an early attack on the Aleutian Islands off Alaska, a diversion to lure the American carriers from Pearl Harbor northward to repel the enemy and protect the mainland. Thus, *according to their plan*, a day or so later when they attacked Midway Island, the Americans would be on a northward course on their way to Alaska about 1200 miles from the Japanese carriers.

Some background is required. Between the Japanese attack on Pearl Harbor in December 1941 and the Battle of Midway in June 1942, the Imperial Japanese Navy dominated the Pacific in all forms of physical advantage: numbers, equipment, training, and experience. Their morale was at its highest. The main American advantage was that its cryptographers had broken the Japanese naval code unawares, providing unilateral insight into their plans and operations. Naval intelligence informed Admiral Chester Nimitz that the next target was the base on Midway Island, about 1200 miles northwest of Pearl Harbor on Oahu Island.

Nimitz decided to set a trap and his commanders placed their carriers about 200 miles northeast of Midway. This position allowed the American forces to protect both the island and the American West Coast (if necessary) and to surprise the Japanese carriers. The faith of the Japanese in their plan *and in the Americans following it exactly* led them to perform an inadequate, perfunctory aerial reconnaissance of the ocean to their northeast to confirm that those waters were clear of American ships. Although it is true that their scout planes sighted the American fleet after it had already launched its planes, the issue is not the timing, but the *mindset* of the Japanese leadership.

Indeed, on June 4 when a Japanese scout plane reported an American carrier with escort ships about 150 miles to the northeast of the fleet, Nagumo and his staff were stunned. They were supposed to be 1200 miles on their way to Alaska, not within 150 miles poised to attack them. *This was clearly different from their plan in which they believed absolutely*. Because of this mindset, they had no contingency plans to respond. This and the resulting confusion from American aerial attack—from both Midway and the carriers—led to the crucial five minutes when three squadrons of Dauntless dive bombers found the Japanese warships unprotected and proceeded with their destruction.

Similarly, Lee's confidence in Stuart blinded him to the possibility that the AOP could and would move faster than he believed. Because he had no contingency plan, his proximal cavalry was too far for effective recall on June 28. Stuart, who was absent,

albeit acting on Lee's orders, did not put the ANV in this situation. Lee did. The question is why? A few possibilities are:

1. Lee's overconfidence clouded his judgment, as he stated in his after action report to Davis. This exuberance led to an absolute faith in Stuart and the resulting omission of an officer to command his proximal cavalry and a nonexistent contingency plan. The cause of this mindset was a succession of victories, most against lesser commanders, with some like Chancellorsville against extreme odds. Similarly, after WWII, Japanese officers blamed their inattentiveness at Midway to what they called "victory disease," admitted it freely as "self-conceit" and "the sin of hubris." This ailment results when justifiable confidence degenerates into "overweening conceit and contempt for the enemy." (18)

There is reason to believe that Southern leadership suffered from this also. About Lee, Freeman writes:

"This psychological factor of the overconfidence of the commanding general is almost of sufficient importance to be regarded as a separate reason for the Confederate defeat." (19)

For instance, both Lee and Stuart, ignoring the lessons of Brandy Station and recent Federal cavalry actions, believed that they could conduct another unmolested reconnaissance of the AOP, but neither seemed concerned about entering Maryland, which was not friendly Virginia.

2. Lee's distrust of his proximal cavalry and its ability to help his army *in place of Stuart* warped his judgment and thus he approached his adversary with no knowledge of their position. This error is covered more deeply in the next section.

3. Lee was too much of a Southern gentleman to offend Stuart by using substitutes. The book *Last Chance for Victory* by Scott Bowden and Bill Ward presents an exhaustive accounting of General Lee's whereabouts and actions during the battle, presented mainly to blame everyone else. This includes a curious and somewhat repetitive linguistic *apologia* for General Ewell's *mis*-understanding (per the authors) of the term "if practicable." (20) Their argument is based on the contemporary concept of honor.

First, honor during the Civil War was important to both sides because an officer was, above all, a gentleman. Both North and South tried to maintain the dignity of generals who failed honestly: many were sent to lesser commands or assigned to staff positions or state offices. For example, among those whom Lee sent west from the ANV was John Magruder, whose performance at Malvern Hill in July 1862 was deficient. Many such Northern generals were either honorably given command in the West, as was John Pope after the Battle of Second Manassas in August 1862, or sent home "awaiting orders" that never came, as with Ambrose Burnside after the Battle of the Crater in July 1864. On the other hand, generals on both sides whose failure resulted from dereliction of duty were treated accordingly and dismissed: Confederate Gideon Pillow after Fort Donelson and Federal General James Ledlie after the Battle of the Crater are examples of this.

The concept of honor existed among Northern officers too, as when General Gouverneur Warren demanded a court of inquiry after General Philip Sheridan removed him from command at the Battle of Five Forks in April 1865. (It was granted in 1879 and exonerated him.) But in practice, this concept caused little restraint in operational decisions, such as at Gettysburg when AOP commander General George Meade sent General Winfield Hancock to take command of the field until his arrival. Although Meade knew that the commander on the field, General Oliver Howard, outranked Hancock, he felt that sending someone he trusted was better for the army. On the whole, however, although honor was important to both sides, for Southern officers it was more ingrained in their individual and collective psyches.

The basis for this adherence to tradition is the aristocratic Southern code of gentility, which dictated the deportment of Lee and his officers. One did not order a subordinate directly, but used carefully worded deferential language that the subordinate supposedly understood as an order. Other than adding a genteel suffix of "if practicable," another example of this gentleman's language was the signing of a letter to subordinates with "your obedient servant." Rather than suggesting that the writer was literally subservient, this was an expression of good will between gentlemen. Note that this phrase appears in letters sent to opposing commanders on both sides. (21) In addition, Lee was known to edit his reports to avoid blaming or embarrassing any of his officers. Doing so "is unbecoming in a generous people, and I grieve to see its expression," he said. (22)

This Southern code of gentility applies specifically to Lee's orders to Stuart. Lee's June 23 message to Stuart ends with the genteel "be watchful and circumspect in all your movements." This was to tell him to not be heroic, that his mission was to find the AOP and protect the army. (23) Compare this to President Abraham Lincoln's letter to Hooker giving him command of the AOP in January 1863 which he ends with "And now beware of rashness. Beware of rashness, but with energy and sleepless vigilance go forward and give us victories." (24) Both commanders told their subordinates the same thing—*don't be rash*—but Lincoln's was more direct and Lee's followed the Southern code. Accepting that Lee and his generals were Southern gentlemen produces a conclusion that gentility and honor colored some of their actions. For instance, General Richard Garnett longed for a court martial to clear his name of the dishonor of arrest and relief of command by General Thomas Jackson from his unauthorized retreat at the Battle of Kernstown in March 1862; Jackson's death in May 1863 of course precluded this. The need to overcome this dishonor and an injury from a horse kick caused Garnett to lead his brigade in Pickett's Charge on horseback, an obvious target that lead to his death in the assault.

Although it might have been better for the army for Hampton to remain behind to coordinate the proximal cavalry, it would have been a slight to Hampton's honor to be pulled from his command to perform this necessary, but comparative mundane, act. In addition, Lee's sense of honor would not allow him to override Stuart in this matter. Finally, Lee's use of any of the proximal cavalry, all of which were considered substandard in some way, would be a serious blow to Stuart's honor *regardless of whether it assisted the army*. The dishonor would be greater if the substitute cavalry actually found the AOP instead of Stuart. Although it might be unpalatable for some readers, the adherence of Lee and his officers to this code over the army's mission must be considered part of the reason that he managed so badly the proximal cavalry. That said, it is difficult to blame Lee for this characteristic as it was ingrained in him since his childhood in the Virginia Tidewater country. To Southerners, adherence to the code was

a strength that not one of them would have recognized as a weakness. Still, chivalry is no substitute for good leadership and war is not a cotillion.

DATE	IMPODEN	JENKINS	ROBERTSON, JONES	EXTERNAL
JUNE 21	IMBODEN West of Ewell @ Cumberland, MD, (> 90 miles	@ Hagerstown, MD	@ Ashby's, Snicker's Gaps, VA	LAIEKNAL
JUNE 22	from Gettysburg) West of Ewell @ Cumberland, MD, (> 90 miles from Gettysburg)	@ Greencastle		AOP builds pontoon bridge @ Edwards Ferry, VA
JUNE 23	West of Ewell @ Cumberland, MD, (> 90 miles from Gettysburg)	@ Chambersburg		Lee learns of AOP pontoon bridge @ Edwards Ferry, VA
JUNE 24	West of Ewell	Ahead of Ewell	Stuart leaves orders for guarding Ashby's and Snicker's Gaps, VA.	
JUNE 25	West of Ewell	Ahead of Ewell	Guarding gaps	- Stuart sends last report to Lee from VA, and then departs on mission. - AOP starts to cross Potomac @ Edward's Ferry, VA
JUNE 26	West of Ewell	White's 35th VA Battalion @ Gettysburg	Guarding gaps	<u>- Lee arrives @</u> <u>Chambersburg</u> <u>- Lee receives</u> <u>Stuart's last</u> <u>report from VA,</u> <i>- Buford crosses</i> <i>Potomac @</i> <i>Edward's Ferry,</i> <i>VA</i>
JUNE 27	West of Ewell @Hancock, MD	Ahead of Ewell	Guarding gaps	- Stuart starts crossing

JUNE 28	(~70 miles from Gettysburg and ~50 miles from Chambersburg) @Hancock, MD	Ahead of Ewell,	Lee sends order	Potomac @ Rowser's Ford - AOP ends crossing Potomac @ Edward's Ferry, VA - Stuart ends
JUNE 28	(~70 miles from Gettysburg and ~50 miles from Chambersburg)	west of Harrisburg	to go to Gettysburg	- <u>Stuart ends</u> <u>crossing</u> <u>Potomac</u> - <u>Harrison meets</u> <u>ANV @</u> <u>Chambersburg</u> - <u>Lee sends order</u> <u>for ANV to</u> <u>converge.</u> - <u>5th, 6th MI @</u> <u>Gettysburg</u> - <u>Buford @</u> <u>Middletown, MD</u>
JUNE 29	@Mercerburg (~40 miles from Gettysburg and ~20 miles from Chambersburg)	Ahead of Ewell	Receives Lee's order to go to Gettysburg	<u>- Ewell sends</u> <u>order for 2nd</u> <u>Corps to</u> <u>converge</u> <u>- Stuart expected</u> <u>to meet Ewell</u> <u>- Buford @</u> Boonsboro, MD
JUNE 30	@McConnels- burg (~45 miles from Gettysburg and ~25 miles from Chambersburg)	<ul> <li>Receives</li> <li>Ewell's order to converge (1 day late)</li> <li>Gen. Jubal</li> <li>Early sends</li> <li>White's 35th VA</li> <li>Battalion to scout between</li> <li>Gettysburg and</li> <li>Heidlersburg.</li> </ul>	- Departs for Gettysburg - Crosses Potomac @ Williamsport, MD	<u>- Lee departs for</u> <u>Cashtown</u> - Buford @ Gettysburg
JULY 01	Lee orders to Chambersburg		Arrives @ Greencastle	Day 1 of battle
JULY 02		Lee summons to Gettysburg to support Ewell's left (east).		- Day 2 of battle - <u>Stuart arrives</u> @ <u>Gettysburg</u>
JULY 03	Arrives @ Chambersburg, then Gettysburg		Arrives @ Chambersburg, then Gettysburg	Day 3 of battle

Table 1. Selected timetable of actions for brigades with the main body of the ANV. Distances are straight line measures for comparison only. If the state is not indicated, then it is in Pennsylvania. The right-most column indicates activities outside those of the cavalry brigades in the first three columns. In this column, Federal activities are in italics, and Confederate activities are underlined.

### LEE'S DECISION TO NOT USE AVAILABLE CAVALRY FOR RECONNAISSANCE

Often the statement "Stuart was not with the army" is interpreted to mean "Lee had no cavalry." This is untrue: Lee had cavalry. As shown above, four brigades were left with the main body of the ANV as it moved behind the Blue Ridge. Their itinerary in Table 1 produces these facts:

1. Robertson and Jones missed completely the AOP's crossing of the Potomac which finished on June 28. It is unclear how they did this, but they remained in place until June 30, a day after they received Lee's orders to move.

2. Lee called none of the proximal cavalry to him until he heard from Harrison. By then, all were too far to have been of any assistance. A glance at a map of the campaign shows that during the period of June 25-30, a large void of no Confederate cavalry appeared between the right flank of the ANV and the left flank of the AOP, which was Buford's cavalry division. The reader should try this exercise: on a modern road map of Pennsylvania, draw a curve along Interstate 81 from Maryland to Carlisle and continue the curve to York. Perpendicular lines drawn from this line inward produce a focal point, as with a mirror, somewhere in the Gettysburg-Cashtown area. Lee did not need to know when and where the battle would occur; knowing that the AOP would eventually come from the south, he just had to look at the map and use any cavalry that filled the void. Lee missed an opportunity here because White's battalion was in Gettysburg on June 26 and his cavalry escort remained with him all the time.

3. Given that Robertson and Jones were guarding passes in Virginia necessary for the security of the army and its supplies, and were therefore far away, what is striking is how far Imboden's men were sent. Stuart's circumstance was a chance of war, but Imboden was about 50 miles from Ewell on June 28 on orders from Lee. On this foray, he was tearing up railroads and collecting free blacks to send south as slaves, but one wonders if this was required for guarding the flank of the army. This is all the more incredible considering that, unlike the Antietam campaign, the Federal garrison at Harper's Ferry was unmolested this time. All one need do is drive west from Gettysburg on U.S. Route 30 about 50 miles toward McConnellsburg to see how really detached Imboden was.

4. Despite Lee's ordering each corps when to move and to where, there is in fact little indication that he or anyone on his staff kept track of where the proximal cavalry was. For instance, he did not know that Imboden on June 27 was at Hancock, Maryland, about 50 miles from Chambersburg where he himself had arrived on June 26. These brigades were "inferior" and he treated them thus.

5. In contrast to this, General Jubal Early used what cavalry he had to scout for the Federal army on his approach to Heidlersburg. On June 30, as his division approached the area, he sent White's battalion on the York Pike to scout and picket as far out as Mummasburg and Gettysburg. White's small force was busy: it noted Federal infantry and cavalry activity, and even pursued a small squad of horseman. Because of Buford's thick screen, he collected little precise information, but the presence of Federal cavalry in such force was a clear sign that the main army was close. (25)

6. Of special concern is the contention, which appears in every discussion on this topic, that Lee did not trust the four brigades as much as the other three. If true, then Lee assumed a luxury that commanders in war often lack, that is, to pick and choose units to perform certain tasks. He allowed whatever distrust he had for the four proximal brigades to affect his judgment in using them as he would Stuart, that is, to scout and screen for the army.

This is the equivalent of Admiral Chester Nimitz sending a message to Washington, D.C. in June 1942 stating that he did not contest the invasion of Midway Island because the American pilots were inexperienced and he did not trust them. It is hard to imagine Admiral Ernest King, Chief of Naval Operations, or President Franklin Roosevelt accepting this excuse for losing Midway. It is even more difficult to imagine historians accepting this either. Yet, they allow Lee a pass on his choice to not use the available cavalry, stating simply that "he did not trust them as much as Stuart." This judgment should be considered insufficient, and it is unfair to generals in history who *had no choice* but to fight with untrained, untested, or untried men. It indicates a non-critical assessment of Lee's performance in this area.

Further, it is *not* a question of cavalry: it is a question *of command*, which is where the historical comparisons lead. Fortunately, U.S. military history has many examples with which to compare Lee's decision. In all cases, dire military requirements forced the commander to fight with units that were untried or untrained, and in most of these cases, the commanders won. Three stand out. Details of these cases are important to show that in each, the commander was equally as strapped for resources as Lee at Gettysburg and somehow each managed to adapt and prevail.

Returning to the Midway example, the U.S. Pacific Fleet under Nimitz had conducted an ingenious raid on Tokyo in April 1942 using Army bombers, commanded by Army Lieutenant Colonel James Doolittle, launched from the carrier *U.S.S Hornet*. It then stopped the southeast expansion of the Japanese in the Battle of the Coral Sea in May. In addition, Nimitz's carriers launched surprise raids on various Japanese-held islands throughout the winter. However, the United States Navy was a long way from parity and an even longer way from dominance.

As discussed above, naval intelligence informed Nimitz in May 1942, that the Japanese were to attack Midway. He decided to set a trap, but had little time to prepare. Although almost equal in fleet carriers—at three to the Japanese four, with similar numbers of aircraft—there was a considerable gap in the quality of the these and the experience of their pilots, with the Japanese superior in both. The carrier Yorktown had been damaged severely in the Battle of the Coral Sea in early May and, per Nimitz's stern order, the estimated 90 days of repairs were completed in 72 hours so that it could take part in the battle. (The reader should note that this story of the Yorktown, not covered in detail in this paper, is a particularly noteworthy event within this example to emphasize the lengths a commander should go to win a battle.)

The spearhead of the Japanese air fleet was the Zero fighter, an outstanding plane especially in the hands of pilots with years of experience. Many of the American aircraft were obsolete, such as the U.S. Marine Corps's Brewster Buffalo fighters on Midway or the U.S. Navy's Devastator torpedo bombers on the three carriers. During the battle, the three squadrons of Devastators were reduced from 41 planes to 6 while scoring no hits because they attacked without fighter cover and were too slow to evade the faster Zeroes. Yet, despite these deficiencies, at the end of June 4, 1944, the Japanese had lost four carriers and about 250 carrier planes to the Americans one carrier and 150 aircraft of all types. Worse, they lost experienced pilots and irreplaceable maintenance crews. Although Japan tried later offensives, Midway changed the character of the Pacific War until its conclusion in September 1945.

Another example from WWII occurred two years later in October 1944 off the coast of Leyte Island in the Philippine Islands. By this time, the U.S. Navy was the overwhelming force in all categories: numbers, quality of equipment, training, experience, supply, etc. This filtered down to the most mundane of units, shore support. In the Battle off Samar, part of the Battle of Leyte Gulf, an American escort carrier task unit, call sign Taffy 3, was attacked by a far superior surface fleet of Japanese ships and, despite great loss, repelled the attack. The largest American ships, the escort carriers, displaced about 10,000 tons fully loaded. The largest Japanese ship, the battleship Yamato, displaced about 72,000 tons fully loaded. In fact, the total displacement of the entire force of Taffy 3—six escort carriers, three destroyers, and four destroyer escorts was less than that of the Yamato alone. And the rest of the Japanese fleet comprised three other battleships, eight cruisers, and 11 destroyers. Because of the size of the guns, the Japanese ships could fire from 20 miles, but the range of the much smaller American guns was about ten miles. In addition, the crews of the ships or planes of Taffy 3 were not trained for warfare against such a surface fleet. For reasons out of his control and unimportant to this discussion, Admiral Clifton Sprague was caught unawares with the enemy firing from the north 20 miles away, and *he had no choice but to fight with what he had*.

In a textbook example of quick, cool thinking, improvised tactics, stark aggressiveness, and sheer audacity, Sprague ordered the destroyers and destroyer escorts to lay down smoke to hide the carriers, the carriers to steam eastward, and all planes launched to attack. He then notified the two other task units, Taffy 1 and Taffy 2, of the situation and ordered them to launch all their planes to attack. Of the roughly 400 planes from all three Taffy units, many were launched with no ammunition or ordnance at all, but they could draw fire from those that were armed. These carriers were meant for ground support and did not carry much anti-ship armament, but this did not matter to Sprague. After one destroyer attacked on the initiative of its commander, Sprague then ordered the remaining destroyers and destroyer escorts to attack, in essence a suicide mission.

In an extreme David-and-Goliath battle, Taffy 3's ships attacked the Japanese fleet vigorously, managing to get close enough to the larger ships to torpedo and sink three cruisers and to damage three others with gunfire, a spectacular achievement. Two escort carriers were sunk and three damaged, along with two destroyers and one destroyer escort, but Taffy 3's response was so intense that within a few hours, the Japanese commander, Admiral Takeo Kurita thought that he faced the main American navy with its fleet carriers and withdrew. Rarely in naval history has such a small force repelled a force as massive as Kurita's.

The third example is one that Lee would have known about because it is from the American Revolutionary War which he probably studied at West Point—especially because the Colonial commander, General Daniel Morgan, was raised in Virginia. A problem for Colonial commanders was the reliability of state militias fighting with the Continental army. Militia soldiers were not cowards and were proud of their service, but unlike the Continental Regulars, were untrained in European tactics and similarly not equipped. For instance, the muskets of the militias were not fitted for bayonets: their units often broke from the line when the British line approached. This happened at the Battle of Camden in South Carolina in August 1780. The problem for each commander was deciding where in the battle plan to use them.

Morgan solved this tactical problem for the Battle of Cowpens in January 1781. Knowing that the militias had a tendency to break and run, he decided to use this characteristic in his planning. His deployment comprised three battle lines, the first two of militia and one of regulars in the rear. The front most militia line was ordered to fire twice and retreat to the second. That combined line was to fire twice and retreat through the regulars. This was intended to draw the British in to the better-trained forces while the cavalry and the militia attacked on the flanks. The Americans caught the British in a double envelopment that captured or killed hundreds of Lieutenant Colonel Banastre Tarleton's army of about 1100 men.

"Untrained." "Inferior." Unreliable." All four commanders—Nimitz, Sprague, Morgan, and Lee—faced battle with units possessing all or some of these characteristics. Three of them did not shirk from the task and proclaim these "deficiencies" as reasons or excuses for doing so, and all three prevailed. Lee did: he *chose* to not use an "inferior" force to scout for the army. Compared to the command abilities of the commanders in the three examples above, Lee fails. Two questions stem from this. One, why did he do it? Because Stuart died in 1864 and Lee wrote no memoirs, this is unclear. The easy, available answer is that he, like Stuart, considered the proximal brigades "untrained, "inferior," and "unreliable." Lee's logic here was that of the self-fulfilling prophesy. He presumed that these four brigades were poor in some form, he expected little of them and gave them little important to do. Thus, they met his expectation. The verdict of history as shown above, however, disputes this logic because other commanders have committed all available forces regardless of deficiencies real or imagined. Lee must be held accountable for his omission as a failure and not simply as "distrust."

Two, why have historians let Lee off the hook? One answer is that the obvious target for the dearth of cavalry support immediately prior to the battle is Stuart. For reasons that historians have argued since the battle, Stuart was simply not there. He was the cavalry commander and the fault was his, according to this verdict. This has served to deflect most blame from Lee and his proximal brigades, but according to Freeman:

"General Lee, for his part, was at fault in handling the cavalry left at his disposal. He overestimated the fighting value of Jenkin's and of Imboden's brigades, which had little previous experience except in raids, and he failed to keep in close touch with Robertson and Jones, who remained behind in Virginia." (26)

Another reason that other historians tend to exonerate Lee is that they start with the same bad assumption as did Lee. If the historian also assumes that the four brigades were poor and notes further that they accomplished little, then how is Lee at fault for mismanagement of subpar performers? This circular argument coupled with the aforementioned emphasis on Stuart's command felonies has therefore precluded serious investigation of Lee's management of those brigades. However, if one assumes that the proximal brigades could have performed the reconnaissance tasks and were *by design* not used, the way is open for critical analysis of Lee's performance in this area. That is the approach presented in this paper: the reader may decide if Lee should remain off the hook.

#### **LEE'S OPTIONS**

The question arises naturally as to whether General Lee had any options. The answer is not many, but one must be careful in asking or answering this question. Unlike a battlefield decision, where one sees a situation and must make a choice, like Ewell at Cemetery Hill on July 1, Lee's options concerning the proximal cavalry were not so clear. This is because a battle had not yet started and Lee could not possibly know where or when it would be, and decisions were not so immediate. Historians must not look backward from July 1 and indicate what he should have done. Instead, one must look forward each day to what Lee *could have done*. For instance, Lee could decide to wait for word from Stuart today and do the same the next day, and the march would continue. As mentioned above, Lee's options were limited, to wit:

1. Could Lee have somehow improved the reconnaissance capability of the proximal cavalry? This is the test that Lee failed. As commander, he had forces but did not use them. In essence, he decided that no horse was better than some horse. It was not a question of "improving" them because the campaign had started and Stuart was incommunicado. He would have had to use them as they were, warts and all. As stated above, Lee assumed a luxury with this decision, one that history shows other commanders did not take.

That said, if one assumed that the cavalry at hand was untrained or inexperienced at reconnaissance, then the simple solution was to send someone with the cavalry that could do the job, like an engineer. In fact, on June 29, Ewell dispatched Jenkins to Harrisburg to assess its defenses; with Jenkins was an engineer from Ewell's staff, Captain H.B. Richardson. Lee in fact used a similar idea when he sent Engineer Captain Samuel Johnston with a small party to scout the Federal left on July 2. Sending engineers to perform reconnaissance was therefore not unusual and could have provided some of the technical expertise Lee assumed was missing from the four brigades. The ANV had West Point graduates both as commanders and staff officers, and an additional number of autodidactic engineers who could have performed the function.

Finally, another untapped resource and unmentioned by historians was soldiers familiar with the area. This includes any officer who had been assigned to Carlisle Barracks before the war, any soldier who had attended Gettysburg College, such as Colonel James Crocker (27), or any soldier who grew up in the area, such as Wesley Culp. Once again, Lee chose to not pursue any option to augment his proximal cavalry.

2. What is the latest day that Lee could have assigned some cavalry support from the four brigades to the focal point east of the ANV? Table 1 show that on June 26, Lee in Chambersburg received Stuart's last message from Virginia. Based on the location of Robertson and Jones and the estimated location of Imboden and Jenkins, it would take three to four days from the sending of orders from Chambersburg to the arrival of cavalry in the area. This timeframe is confirmed for historians by the actual durations in Table 1 starting on June 28 when Lee sent the order to converge. This would have helped mitigate the void at the focal point and might have provided sufficient warning of the AOP's advance. In addition, White's 35th Virginia Battalion was at Gettysburg near the focal point on June 26; however, because Lee had no reporting system set up, he was unaware of this. This window of opportunity was small and was closed by June 27 for help prior to July 1.

However, even if Lee acted late on June 27, sufficient cavalry would have been present to perform a decent and persistent reconnaissance of the Federal left on July 2. In addition to White's battalion, Imboden was on June 27 seventy miles from the focal point. With a four-day round trip (from sending order to troopers appearing), his brigade could have been in the area by July 1. As it was, the reports by Johnston's small party early in the morning of July 2 provided information that was stale by the late afternoon when Longstreet's corps lined up. Lee's cavalry escort or White's battalion of two or three hundred had a better chance of providing more comprehensive scouting than this and of presenting more current intelligence, but Lee's waiting for Stuart beyond the close of the window prevented a more persistent reconnaissance that morning.

3. What could Lee have done after Harrison reported on June 28? Very little: by that evening, all four brigades were too distant to lend immediate support. Table 1 shows that none arrived in the Gettysburg area until July 2. By then, their arrivals were as pointless as Stuart's which occurred also on that day. However, wherever Lee was, his cavalry escort was with him. Lee could have used this at any time in the campaign, but he declined. As it was with him when Harrison briefed him at Chambersburg, he could have ordered it immediately into the focal point for *some* cavalry coverage. One might argue that prior to Harrison's report, criticizing Lee is over-analyzing because, while waiting for word from Stuart, Lee had no idea that a battle was close. *However, there is*  no excuse for not sending something into the focal point to perform reconnaissance after Harrison's report. He knew that the AOP was close. Whether it would have offended another officer is irrelevant. Whether it would have avoided or changed the battle is pure conjecture, but Lee never gave his immediate cavalry a chance to perform.

### SUMMARY AND CONCLUSION

This paper covered General Robert E. Lee's mismanagement of the cavalry available to him in the Gettysburg campaign. There is no mistake: Stuart's absence is *not* the same as "Lee had no cavalry." Despite the absence of Stuart's three brigades from June 25 to July 2, Lee had adequate numbers of cavalry, four brigades, to provide adequate warning of the location of the Federal army. He chose to not use them. In fact, for all the strategic use he made of them, especially Generals Robertson and Jones, they might not as well have been around. (28)

Lee entered the campaign with two symbiotic trust issues: an utter trust in Stuart and a complete distrust in his proximal cavalry. Although opposites, they are in fact additive, reinforced in Lee's attitude, resulting in his careless deployment and management thereof. The reader may decide how much blame should be assigned to Lee based on the facts presented herein:

Stuart left behind the four brigades with the least reconnaissance experience.
 Each had either a leadership or training problem of some sort. Stuart was remiss here, but Lee did not contest this.

2. Lee suffered an awkward command arrangement among Stuart, Robertson, and Jones with no protest as army commander.

3. Despite General Longstreet's suggestion to leave behind General Hampton to lead the proximal cavalry, Stuart left behind no one to coordinate or command the four brigades. Lee did not contest this and designated no one. In addition, minimal or no arrangements for reporting status or location seem to have existed.

4. After Stuart's departure, the deployment of the four brigades on the march left a sizeable void in cavalry coverage in the focal point of the ANV's arc from Maryland to York, which was in the Gettysburg-Cashtown area. In particular, Imboden seems to have been assigned as far away as possible from the army, over 50 miles at some points. One might think that no one really wanted his brigade around. Somehow Lee thought that "no cavalry" was better than "some cavalry" even if poorly trained.

5. Had Lee been aware of the location of his proximal cavalry, he could have assigned it to fill the void at the focal point and search for the AOP in Stuart's stead. Generals Ewell and Early managed to use their available cavalry for reconnaissance, but Lee did not. Of course, he would, nor could he allow himself to break, the Southern gentleman's code of conduct and insult Stuart with such an act.

6. The final act occurs after Harrison's report on June 28. The result of all the previous decisions, mostly bad, funnels here. With the four brigades too distant and with the Federal army too near, *Lee declined to use any available cavalry or indeed anyone on horseback to try to find the AOP*. This includes his cavalry escort which was with him in Chambersburg when he received Harrison's report. Indeed, it took the import of Harrison's report for Lee to order his army to converge, and it did so brilliantly, but by making no changes to his cavalry deployment he set up the conditions for the meeting engagement three days later.

Several historical comparisons were made between Lee's command decisions and those of commanders in the ARW and WWII. These covered two areas. Lee's surprise at the speed of the AOP can be partly attributed to what the Japanese called reprovingly "Victory Disease," an extreme overconfidence bordering on arrogance. And in refusing to consider using the "inferior" cavalry for reconnaissance, he assumed a luxury that few commanders have, namely, to pick and choose forces for battle. Three examples, two from WWII and one from the ARW, with which Lee must have been familiar, showed that other commanders in similarly dire situations used the forces at hand. He chose not to, resulting in an error of his own making.

One final question remains. Indeed, for some readers this is the only question: would using the proximal cavalry have changed the outcome of the battle? Although neither a method nor a goal of this paper to speculate, questions of this sort arise naturally and must be addressed. Again, looking forward from each day in late June, all one can say is that had some of the proximal cavalry been used, more Confederate cavalry might have been near the focal point. One cannot tell whether they would have been enough, how they would have performed, or whether their presence would have changed the outcome of the battle. The External Column of Table 1 shows that Buford's division, the westernmost of the AOP, was nowhere near any Confederate units nor their paths to the focal point in the days leading up to the battle; therefore, any cavalry in the focal point would have been in the right place to observe Buford's division. The data support no further conjecture.

### POSTSCRIPT

On July 3, Jenkins's brigade fought under Stuart against Federal cavalry and retreated only after depleting its ammunition. (29) After the battle, Lee chose General Imboden's brigade to escort the 17-mile long wagon train of wounded on the retreat to the Potomac. It performed well, keeping the train together and fending off repeated Federal raids. Its high point was digging in at Williamsport, Maryland and holding off Buford's division until reinforcements arrived. (30)

### REFERENCES

Most of the historical information in this paper is of a general nature, and can be

found in most works on the subject; therefore, no footnotes are provided for these data.

Footnotes do appear for quotes and for the more obscure items herein.

1 Longacre, Edward G., The Cavalry at Gettysburg, Lincoln, Nebraska: The University of Nebraska Press, 1993, p. 30.

2 Ibid., p. 41

3 Coddington, Edwin B., *The Gettysburg Campaign: A Study in Command*, New York: Charles Scribner's Sons, 1968, pp. 183-4.

4 Ibid., p. 112.

5 Sears, Stephen, Gettysburg, Boston/New York: Houghton-Mifflin, 2003, p. 139.

6 Coddington, op. cit., Endnote 22, p. 810.

7 Bowden, Scott and Ward, Bill, *Last Chance for Victory: Robert E. Lee and the Gettysburg Campaign*, Cambridge, Massachusetts: Da Capa Press, Perseus Groups Books, 2001), p. 531.

8 Longacre, op. cit., p. 151.

9 Bowden and Ward, op. cit., p. 106.

10 Freeman, Douglas S., *R.E. Lee: A Biography*, Vol. 3, New York: Charles Schribner's and Sons, 1963, renewal of original copyright, 1935, p. 147.

11 Coddington, op. cit., p. 183.

12 Coddington, ibid., p. 183.

13 Coddington, ibid., p. 110.

14 Freeman, op. cit., p. 59.

15 Ibid., p. 147.

16 Trowbridge, Luther, S., "The Operations of the Cavalry in the Gettysburg Campaign," War Papers Read Before the Commandery of the State of Michigan Military Order of the Loyal Legion of the United States, Vol. 1, Detroit: Winn & Hammond, 1893, p. 5. Web site: https://archive.org/details/ach0078.0001.001.umich.edu

17 Freeman, op. cit., p. 147.

18 Prange, Gordon W., Goldstein, Donald M, and Dillon, Katherine V., *Miracle at Midway*, New York: McGraw-Hill, 1982, p. 370.

19 Freeman, op. cit., p. 150.

20 Bowden and Ward, op. cit., pp. 199-209.

21 Ibid., pp. 200-1.

22 Freeman, op. cit., p. 155.

23 Bowden and Ward, op. cit., p. 112.

24 Boatner, Mark Mayo, III, *The Civil War Dictionary*, New York: David McKay, 1959, p. 410.

25 Coddington, op. cit., p. 192.

26 Freeman, op. cit., p. 147.

27 Tucker, Glenn, High Tide at Gettysburg, New York: Konecky & Konecky, 1958, p. 3.

28 Coddington, op. cit., p. 183.

29 Ibid., p 15.

30 Longacre, op. cit., pp. 256-257.

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