

# **THE *EN ÉCHELON* ATTACK IN HISTORICAL PERSPECTIVE**

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The *en échelon* attack appears in several battles in the American Civil War (ACW), although that fact might not be well-known to most readers. Perhaps the most covered and well-known example by a large margin is the Confederate attack on July 2, 1863, the second day of the Battle of Gettysburg. Accounts of the battle often explain the tactic, citing a Civil War battle or two where it was used prior to Gettysburg, but overlook its history and full performance record.

To address this gap, this paper examines the *en échelon* attack from its historical roots through all major battles exhibiting it throughout the war. This paper first discusses the word *échelon* and its meanings and presents a summary of the discussion of this tactic by Baron Antoine Henri de Jomini, the prominent author of the 19<sup>th</sup> century on strategy and tactics. The opinions of authors from standard works on the battle are presented to show the variety of opinions on the tactic. Because of its prominence among *en échelon* attacks, General Robert E. Lee's choice of this tactic is then discussed. Other battles exhibiting this tactic in attack are summarized, and statistics from the group of battles are computed and discussed. Conclusions include a caution for historians writing about the *échelon* attack and its effectiveness.

In discussing the choice of the by Lee on that July afternoon, this paper covers only this tactic and avoids all other controversies surrounding the attack including, but

not limited to, Lee's Sunrise Order, the absence of cavalry, the quality of the reconnaissance, the First Corps' counter-march, and General James Longstreet's supposed slow performance. These have been covered in depth by other authors and need not be covered here.

For those unfamiliar with the battle, note that the choice to discuss in detail the *échelon* attack at Gettysburg is not random. This is the most discussed battle of that war, and all its aspects, including the attack on Day 2, are still under almost microscopic study. Whereas few might argue over the use of this tactic at other battles, such as Mechanicsville or Prairie Grove, odds are that the attack on July 2 will receive scrutiny indefinitely.

### **ECHELONS AND THE ECHELON ATTACK**

The French noun *échelon* derives originally from the Latin noun *scala*, meaning "ladder," through the French noun *échelle*, same meaning. This Latin noun is also the source of the modern English verb *scale*, as in "to climb." In modern French, it has two meanings: the level in an organization (as in "employees at every echelon"), and a military formation. These two meanings persist in English along with the denotation of "a formation of units or individuals resembling such an echelon, (geese flying in a "V")." It also has this meaning as a verb: "to arrange in echelon formation." In precise military terminology, the term echelon means "an arrangement of a body of troops with its units each somewhat to the left or right of the one in the rear like a series of steps."<sup>1</sup>

For the remainder of this paper, unless the term appears in a quote, the anglicized version “echelon” is used for the French *en échelon*. This should result in no loss of comprehension for the reader and produce a more readable product.

It is important to note two things about these definitions of echelon: it is a formation *and* a tactic. The formation can be observed in nature—birds flying in a V-formation are in an echelon formation. It is also a tactic, as defined by Jomini, mentioned above. However, not every echelon formation is an echelon attack. Vehicles in a formal military parade can be in a stepwise formation without attacking as can birds or airplanes flying in a V-formation. Snow plows on a highway or an airport runway use an echelon formation to push snow outward from the center outward off to the side. Because he is central to this discussion, a summary of Jomini’s contribution is warranted.

General Antoine Henri de Jomini, who was Swiss, rose through the ranks of Napoleon's armies and eventually served as his chief of staff. In his *Summary on the Art of War*, published in 1837, Jomini laid out the principles for which he is famous: directing the mass of force to the decisive point, maneuvering to engage a part of the enemy's force, and achieving concentration of effort to overwhelm the enemy. Using examples from the campaigns of Frederick the Great and Napoleon, Jomini taught the basic mechanics: strategy is the art of directing the army to the battle and tactics is the art of applying them on the battlefield to the decisive point.<sup>2</sup>

Lines of operation and formations were geometric: concentric, eccentric, interior, exterior. Battle was a complex, but precise, pattern of lines, points, fronts, pivots, and zones. This intellectual and mathematical form of war was the basis of Lieutenant (later General) Henry Halleck's *Elements of Military Art and Science*, published in 1847, which

became a favored text among officers who would eventually fight against each other from 1861 to 1865.<sup>3</sup>

Jomini had a contemporary and a rival in General Carl Maris von Clausewitz, who served at Waterloo and in the Revolutionary Wars in Germany. Although Clausewitz's reputation eventually overshadowed Jomini's in the 20th century, it was the latter who had the greater effect on military minds in the 19th. It was Jomini that was translated (as needed) and taught in the military academies of Europe and North America.<sup>4</sup> Because this paper covers an ACW tactic, Clausewitz is mentioned here only for completeness.

An example of the detail Jomini offers in his descriptions of tactics is shown by this example (italics added for items featured in later discussions of Lee's options; not all of Jomini's figures are reproduced in this paper):

To accomplish these different objects, it becomes necessary to make choice of the most suitable order of battle for the method to be used.

At least twelve orders of battle may be enumerated, viz.: 1. The simple parallel order; 2. The parallel order with a defensive or offensive crotchet; 3. The order reinforced upon one or both wings; 4. The order reinforced in the center; 5. *The simple oblique order, or the oblique reinforced on the attacking wing*; 6 and 7. The perpendicular order on one or both wings; 8. The concave order; 9. The convex order; 10. *The order by echelon on one or both wings*; 11. *The order by echelon on the center*; 12. The order resulting from a strong combined attack upon the center and one extremity simultaneously. (See Figs. 5 to 16.)<sup>5</sup>

Halleck's translation of the above paragraph follows (italics added):

Military writers lay down twelve orders of battle, viz.: 1st. The simple parallel order; 2d. The parallel order with a crotchet; 3d. The parallel order reinforced on one or both wings; 4th. The parallel order reinforced on the center; 5. *The simple oblique order*; 6th. The oblique order reinforced on the assailing wing; 7<sup>th</sup>. The perpendicular order on one or both wings; 8th. The concave order; 9th. The convex order; 10th. *The order by echelon on one or both wings*; 11. *The order by*

*echelon on the center*; 12th. The combined orders of attack on the center and one wing at the same time.<sup>6</sup>

Both Jomini and Halleck included diagrams of echelon attacks. Jomini's depiction of "Order by echelon upon the two wings" (Figure 1) and "Order by echelon on the center" (Figure 2) appear thus:

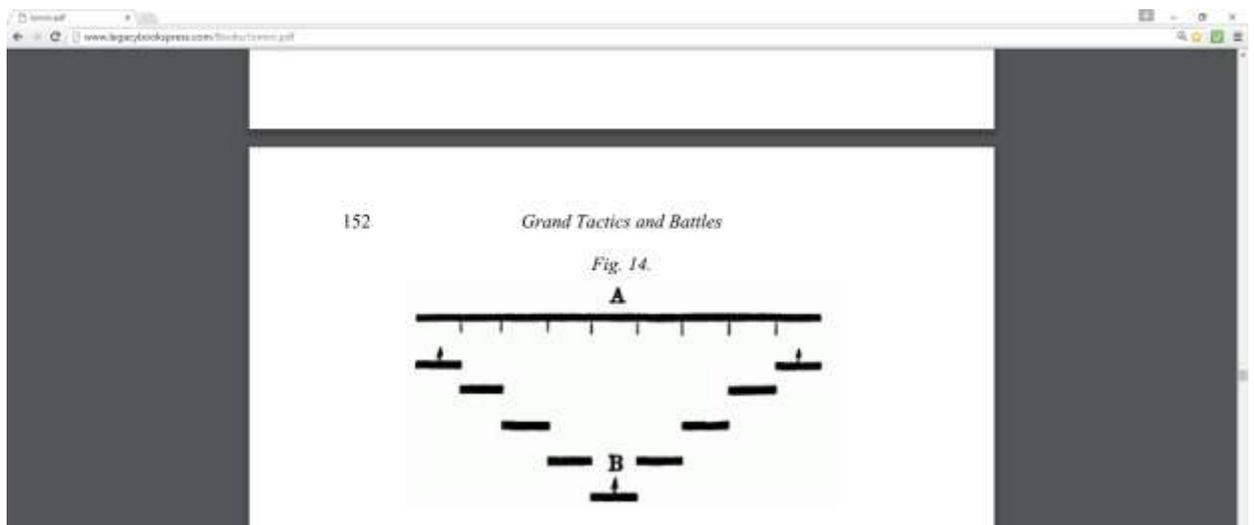


Figure 1. Jomini's diagram of order by echelon upon the two wings.<sup>7</sup>

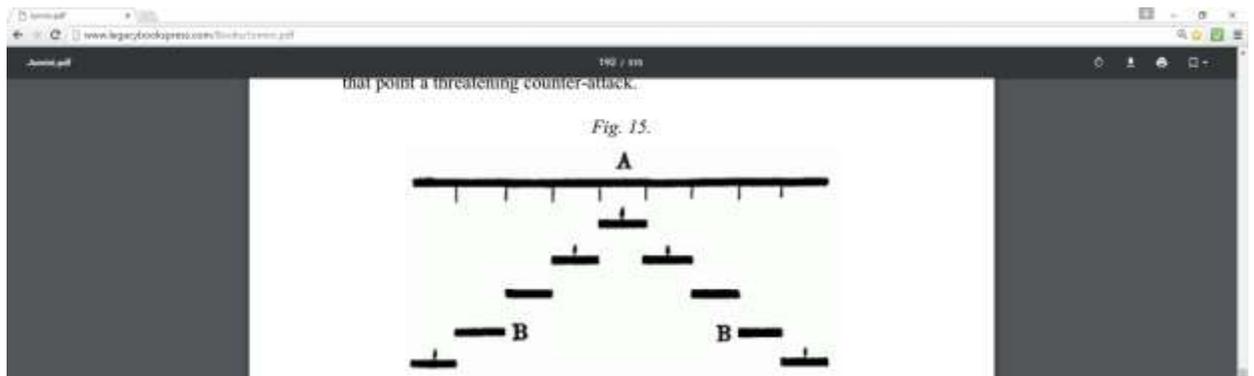


Figure 2. Jomini's diagram of order by echelon on the center.<sup>8</sup>

Halleck's depiction of "Order by Echelon on the center" and "Order by Echelon on a wing" appear thus in Figure 3. His figure numbers for these are 24 and 23, respectively.

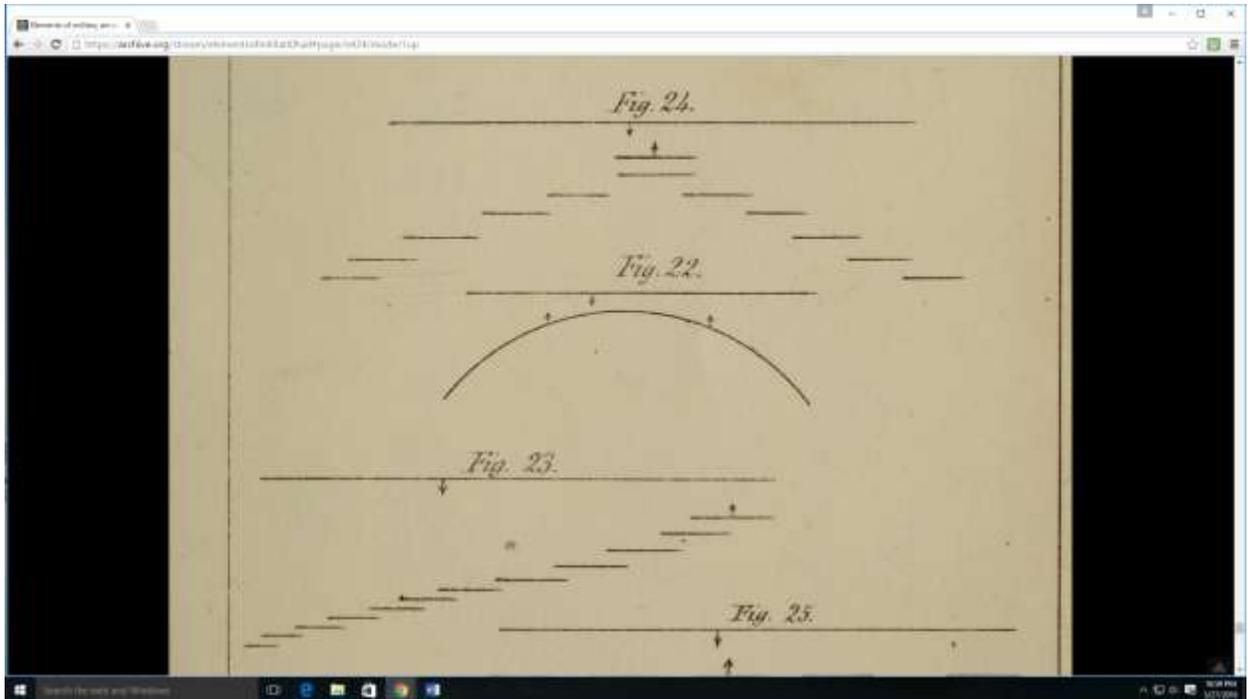


Figure 3. Halleck's echelon attack diagrams—Figures 24 and 23.<sup>9</sup>

Another formation pertinent to Lee's attack on July 2 is the oblique attack. As indicated by the italics above for items featured in later discussions of Lee's options, both Jomini and Halleck describe this type of attack. Jomini's depiction of "The oblique order" (Figure 4) and Halleck's diagram (number 18) of "The simple oblique order" (Figure 5) appear thus:

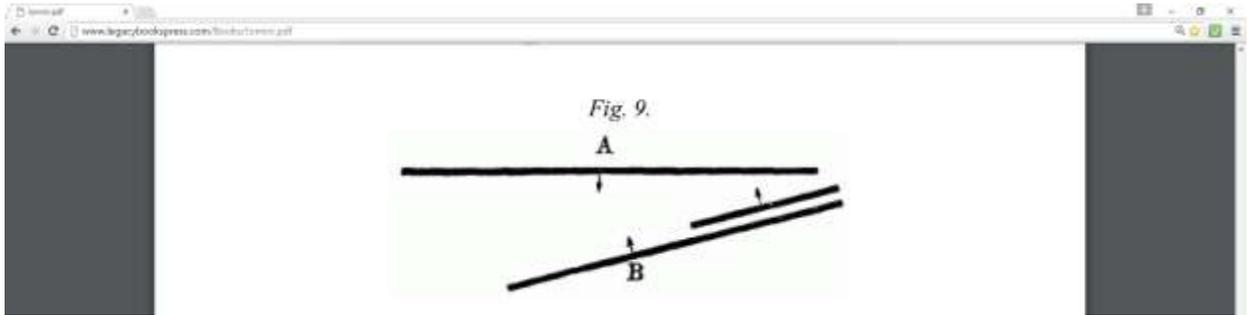


Figure 4. Diagram of Jomini's diagram of the oblique order.<sup>10</sup>

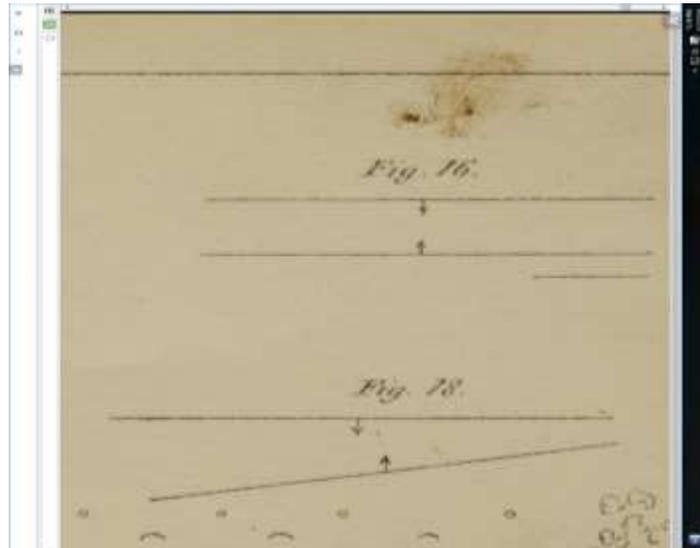


Figure 5. Halleck's diagram of the simple oblique order—Figure 18.<sup>11</sup>

Although Halleck refers to Jomini on approximately 25 pages, he appears to not have acknowledged Jomini as the source of his text; however, the similarities between the two are manifest.

Other definitions of the echelon attack appear in various Civil War works. One example is in *The Civil War Dictionary* by Lieutenant Colonel Mark Boatner III under the entry “Oblique Order” (italics added for items featured in later discussions of Lee’s options):

Also referred to in Civil War literature as an *echelon or progressive type attack*, it involves attacking with one flank refused so that the other flank makes contact with the enemy first. Generally, the plan is to reinforce this advanced wing so as to bring overwhelming strength against the point of the enemy line first encountered, thus crushing this segment of his line and then “rolling up his flank” as successive parts of your own line make contact.<sup>12</sup>

The melding of echelon and oblique attacks makes sense when one realizes that the difference between an attack parallel to the enemy’s line and a flank attack perpendicular to the enemy’s line is 90 degrees. Oblique attacks occur at angles between zero and 90; echelon attacks, in which units are staggered, approximate oblique attacks in this respect.

Earl J. Hess offers a similar definition in his *Civil War Infantry Tactics*:

The echelon formation was designed to protect an exposed flank against possible enemy threats or to more effectively outflank an opposing line. It consisted of units that were separated from the battle line on either flank, placed 200 or 300 yards to the right rear or left rear of the rest of the formation. In fact, an entire brigade or division could be deployed in this fashion to create a serrated formation. The key was that intervals separated the echeloned units from the others to create a forward- or rear-slanting shoulder.<sup>13</sup>

Hess offers examples of echelon attacks from the brigade level to the army level, some of which are expanded in a later section of this paper listing examples of the echelon attack.

The explanation of the echelon attack often includes the theoretical effect on its targets. Allen C. Guelzo in *Gettysburg: The Last Invasion* offers such a description:

The genius of the echelon was the way it forced an enemy to use his own instincts against himself. Attacked on one flank, a defending enemy would shore up that flank by pulling units out of unthreatened parts of the line and sending them in as reinforcements; as the next stage in the echelon threatened the next

part of the line, the defenders would drain still more troops away from the unthreatened parts; by the time the final part of the echelon was launched, the remaining sector of the defenders' line would have been bled so dry of troops that it would break and collapse, and the entire position would come unhinged.<sup>14</sup>

The previous works of Jomini and Halleck are their better-known works, but Jomini wrote an earlier book not normally cited that might have also influenced ACW generals. This earlier work, *Treatise on Grand Military Operations*, was published in 1804 and translated into English by Colonel Samuel B. Holabird, U.S. Army, and published in 1865. Unlike Halleck, Holabird did acknowledge Jomini as the source of his text on the title page.<sup>15</sup>

Jomini (and consequently Halleck) offered many historical examples for each tactic presented, including the oblique and echelon. In *Art of War* Jomini states of the oblique attack:

This order was used by the celebrated Epaminondas at the battles of Leuctra and Mantinea. The most brilliant example of its use in modern times was given by Frederick the Great at the battle of Leuthen. (See Chapter VII. of *Treatise on Grand Operations*.)<sup>16</sup>

This order by echelons was adopted by Laudon for the attack of the intrenched camp of Buntzelwitz. (*Treatise on Grand Operations*, chapter xxviii.) In such a case, it is quite suitable; for it is then certain that the defensive army being forced to remain within its intrenchments, there is no danger of its attacking the echelons in flank. But, this formation having the inconvenience of indicating to the enemy the point of his line which it is desired to attack, false attacks should be made upon the wings, to mislead him as to the true point of attack.<sup>17</sup>

In his *Treatise*, Jomini summarizes an attack parallel to the enemy's line, i.e., at zero degrees:

We believe, generally, that the ancients have much more frequently followed the re-enforced parallel order than the oblique. Turenne made use of the first at Ensheim, and of the second at Sinsheim by his right; but these maneuvers, executed slowly in sight of the enemy, with a single division, would afford the enemy time to establish a parallel line re-enforced at the same point.

Tempelhof can then say truly, that Frederick was the first to appreciate all the advantages of a like order of battle at Leuthen [the oblique]; because until then it had not received a similar application. These advantages are superior to those of other orders of battle that have just been cited, and we believe that they have not yet been stated in a sufficiently intelligible manner.<sup>18</sup>

He then praises Frederick's oblique attack at Leuthen thus:

The results of the open oblique order, though well known, can never be brought too often to the consideration of military men. This order further presents great advantages...Such will be the infallible results of the oblique order, when it is possible to gain the flank of the adversary without being perceived.<sup>19</sup>

In summary, whether in French or English, details on both the echelon and oblique, as well as the entire set of 12 tactics denoted by Jomini and Halleck, appear to have been available to those with formal military training. And they came with an impressive and convincing seal of approval of General Antoine Henri de Jomini.

### **HISTORICAL COMMENTARY ON THE ECHELON ATTACK**

Before discussing the echelon attack in the ACW, it is important to consider commentary thereon. First, even Alexander the Great is not immune from criticism. About Gaugamela, a great victory by the Macedonians under Alexander covered below, one author writes about his echelon attack:

To make such a flank march with a large army presupposes a skill of maneuver that I would, after all, not be willing to attribute to the Macedonians. Furthermore, the movement would be so dangerous that it can be characterized as inconceivable; the enemy would only need to move forward to attack the Macedonian army in a position in which it could hardly defend itself. A flank march so close along the front of the enemy is only feasible when one can be certain that the enemy will remain in his defensive positions. But the Persians...were only waiting for the moment when they could charge forward.

The Persians, however, are supposed to have had the alleged Macedonian flank march take place directly before their eyes, and in order to keep pace with it, to

have made their own movement toward the flank paralleling the Macedonian move. Not only does such skill of maneuver seem even less likely among Persians than it would among Macedonians, but also the movement is completely incomprehensible.<sup>20</sup>

It is clear that this action cannot possibly have taken place in the manner described by Arrian [of Nicomedia] and analyzed militarily by Rüstow-Köchly [19<sup>th</sup> Century German historians Wilhelm Rüstow and Hermann Köchly]. Perhaps the account that has come down to us has confused maneuvers that were carried out during the approach march, before the armies were so close to each other, with the movements on the battlefield itself.<sup>21</sup>

Early commentary on echelon attacks comes from the pen of Jomini. He mentions what is apparently a contemporary dispute on echelon attacks, i.e., that the historical “inventor” of the oblique maneuver is unclear. Jomini in his *Treatise on Grand Military Operations* writes in a footnote about the echelon attack used at Leuthen:

A great technical dispute has arisen about this oblique order; it has been attempted to prove that Epaminondas was the inventor, and that it was used at Leuctra. It has been given to Caesar’s army in the plans of the battle of Pharsalia. We shall have occasion in the following chapter to exhibit the real advantages of a like order of battle, and its relations to the principles of the art.<sup>22</sup>

Boatner comments as follows, referring to Confederate General Edward Porter Alexander, master gunner, and Lee’s chief of artillery at wars’ end:

Epaminondas achieved his classic victory against a superior Spartan force with this maneuver at Leuctra (371 B.C.) and Frederick the Great used it with spectacular results at Leuthen (1757). Although unsuited for use against an enemy who had any battlefield mobility, Confederate generals displayed a curious predilection to try it. Commenting on the failure of the Confederate attacks on the second day at Gettysburg, Alexander writes: We had used this method on four occasions,—at Seven Pines, Gaines’s Mill, Frazier’s [Frayser’s] Farm or Glendale, and Malvern Hill, —and always with poor success. (Alexander, 393) It was used by [General Braxton] Bragg at Chickamauga and by [General John Bell] Hood at Peach Tree Creek.

A clue as to its popularity with Civil War generals may possibly be found in Jomini’s *Treatise on Grand Military Operations*, which first appeared in 1804 and had great influence. In this Jomini rhapsodizes over the oblique order, (See S.B. Holabird’s 1865 translation...pp. 257-262.)<sup>23</sup>

The full text of E. P. Alexander's comment appears below in this section.

The "rhapsodizing" is apparent upon reading the indicated pages. With text and diagrams, Jomini first describes the parallel line formation, and summarizes it thus:

A parallel line, considerably re-enforced at the most important point of attack, is undoubtedly good, since it is conformable to the principle which we have laid down as the base of all operations; nevertheless, it offers some inconveniences.<sup>24</sup>

He then compares the linear formation to the oblique as used by Frederick at Leuthen:

These results of the open oblique order, though well known, can never be brought too often to the consideration of military men. This order further presents great advantages...

Such will be the infallible results of the oblique order, when it is possible to gain the flank of the adversary without being perceived...when the line can be rapidly formed by the simple process of Frederick...<sup>25</sup>

It is doubtful whether Napoleon could have accomplished more, with armies of the best drilled troops, whilst Frederick would have done no less with indifferent ones; so far as their training was concerned.<sup>26</sup>

In stark contrast, perhaps the harshest commentary on this tactic comes from General E. P. Alexander, commander of the Longstreet's Second Corps reserve artillery battalion and present at Gettysburg. His full opinion of echelon attacks follows (italics added for items featured in later discussions of Lee's options):

Offensive battles are always more difficult of control than defensive, and there were two special difficulties on this occasion. First, was the great extent of the Confederate lines, about five miles — and their awkward shape, making intercommunication slow and difficult. Second, was the type or character of the attack ordered; which may be called the echelon, or progressive type, as distinguished from the simultaneous. The latter should be the type for any battle in the afternoon. Battles begun by one command and to be taken up successively by others, are always much prolonged. *We had used this method on four occasions,—at Seven Pines, Gaines Mill, Frazier's [Frayser's] Farm or Glendale, and Malvern Hill, —and always with poor success. Our effort this afternoon will be seen to be a monumental failure.* General instructions were

given to each corps commander, but much was left to their discretion in carrying them out. More than one fell short in performance.<sup>27</sup>

With this background, it is now time to turn to General Lee's echelon attack on July 2, and to evaluate critiques pro and con. These are complicated by hindsight and repute: those of us living after the fact know the result. Therefore, although the result might indicate that Lee chose the "incorrect" tactic, it is not that simple. For it to be so, Lee had to have other, glaring options that he ignored, *within the context of his situation on the morning of July 2*.

The battle started the previous day, July 1, and the Confederate Army of Northern Virginia (ANV) had been successful, having dealt serious blows to two Federal corps. In doing so, they had pushed the Army of the Potomac (AOP) onto the high ground east and southeast of the town. By the morning of July 2, after considering all the options for his next move, Lee decided to stay and fight. (Although not directly related to this paper, it is fair to note that Scott Bowden and Bill Ward in *Last Chance for Victory* offer an extensive, detailed, and balanced analysis of Lee's options leading to the decision to stay and fight.<sup>28</sup> The reader is invited to refer to their excellent treatment.)

Once Lee decided to stay and fight, he then needed to formulate his battle plan. Referring to the paragraphs above wherein Jomini and Halleck outline the "twelve orders of battle," one may condense them to the following groups:

- a. parallel (numbers 1-4)
- b. oblique (5-6)
- c. perpendicular (7)
- d. concave or convex (8-9)

e. echelon (10-11)

f. simultaneous, combined orders of attack on different wings (12)

Because General Richard Ewell, Second Corps commander, faced a formidable obstacle in Culp's and Cemetery Hills, one can rule out item f. Concave or convex *attack* formations were not suitable per Jomini—for instance, Lee was not crossing a river—eliminating item d.<sup>29</sup> (It is important not to confuse the Federal and Confederate *line* formations, which were respectively convex and concave, with a Confederate concave *attack* formation, which would involve an attack along the entire Confederate line.) General Thomas Jackson executed a perpendicular attack on the right flank of XI Corps at Chancellorsville, but he was certain of the Federal position from fresh reconnaissance; at Gettysburg, Lee was unsure of the Federal position and by mid-afternoon had incomplete and stale reconnaissance, eliminating item c. This removes four of the 12 orders of attack: 7, 8, 9, and 12.

Of the remaining eight orders, four are parallel (item a) and four are angular (items b and e); therefore, Lee's set of choices from Jomini reduces to two: some form of straight line attack or some form of angular attack. This does not make his choice a coin toss, but its analysis is not one of multiple options, but two, both of which the ANV had executed with mixed levels of success. Looking at the terrain and Lee's *understanding* of how many Federal corps were present and where the Federal line ended, i.e., just north of Little Round Top with the Round Tops clear of Federals, it is evident that a non-parallel (oblique or echelon) attack offered a *reasonable chance* of reducing the Federal line at its end, or "rolling it up." It was only "reasonable" because in war, nothing is certain.

Upon learning that the Federal III Corps had moved forward to the Peach Orchard, Lee modified the attack to change the opening move from General Lafayette McLaws's division to General John Bell Hood's on the far south and to alter the direction from northeast-to-east, but maintained the attack's angular (echelon) character. Bowden and Ward in *Last Chance* posit that Lee's plan for July 2 was logical, reasonable, and militarily sound, and offer these reasons:

a. An echelon attack was an excellent way of turning [General George] Meade's flank. This concurs with the analysis above.

b. An echelon attack compensated for an army with small staffs by offering commanders the opportunity to use judgment to execute the battle.

c. An echelon attack conformed to Lee's command style which encouraged initiative and flexibility among his officers.

d. Generals defending against an echelon attack often made mistakes and Lee thought his dispositions would allow him to take advantage of this. This was a well-known feature of echelon attacks.<sup>30</sup>

In addition, Bowden and Ward offer this to explain Lee's plan (*italics added for items featured in later discussions of Lee's options*):

An *en echelon* attack allowed Lee's corps and division commanders the flexibility to position their brigades and direct them into action...Although it had not always been successful, Lee had employed the echelon attack on several occasions prior to Gettysburg, *most notably at Gaines' Mill* during the Seven Days' Battles, where his infantry carried a heavily defended position.<sup>31</sup>

The echelon attack is not perfect, however, and nothing in war is perfect. This tactic has definite drawbacks, and some of these are offered in E. P. Alexander's

statement above. Many of these have been echoed by authors ever since. Parsing his quote above produces the following list:

a. Offensive battles are harder to control than defensive, and the July 2 battle offered two special difficulties:

a.1. The extent of the Confederate lines, about five miles, wrapped around a more compact convex Federal line of three miles with the attendant communication problems of a concave line.

a.2. The echelon attack requires more coordination than the simultaneous.

b. Echelon attacks should start early in the day, simultaneous attacks in the afternoon, meaning that the attack on July 2 started too late.

c. Unity of command is essential. Switching from one commander to another during the battle (Longstreet, Second Corps commander to General Ambrose Powell Hill, Third Corps commander) is less efficient and takes longer unless Lee or a staff member is following the attack to ensure a smooth transition.

d. The echelon attack had a low to mediocre success rate, but the ANV continued to use it. The battles of Seven Pines, Gaines' Mill, Frayser's Farm or Glendale, and Malvern Hill are examples.

e. Instructions to the commanders were general (not detailed) and they had too much discretion in their execution. Not all performed well. (E. P. Alexander does not specify which generals underperformed.)

Two other characteristics of the echelon attack require mention. The first is that the initial waves of the attack, the first units to hit the enemy's line, are apt to suffer heavier casualties because they are the "bait" to draw enemy reinforcements to that part

of the line and because their flank toward the enemy's line is exposed with no support. Second, the success of this this tactic requires that the duration between release of attacking units be balanced between being long enough to confuse the enemy of intent and being short enough to provide support on the flank of each attacking unit.

In summary, once General Lee decided to stay and fight on July 2, the positions of both armies and the terrain each held severely limited his choices. He basically had two types of tactics from which to choose: parallel (simultaneous) and angular (of which echelon was one type). He chose the one that he thought gave him the best chance for success; therefore, it was perfectly logical for Lee to choose a tactic over 2,000 years old that should have been familiar to most classically trained generals in 1863.

### **EXAMPLES OF THE ECHELON ATTACK**

This section summarizes historical uses of the echelon attack. It describes and audits these occurrences to indicate the size of the unit involved and whether it succeeded. This will serve as a basis for understanding Lee's decision to use this attack formation. The selections are split among different categories as shown below. Each example is described briefly as to the size of the attacker, the deployment of the echelon attack during the battle, and the result of the attack. Terms and criteria for these battle descriptions are as follows:

1. The identification number for each battle is used throughout the paper, both in text and tables.
2. If the battle is highlighted by an author, it is noted in the entry.

3. If the echelon attack plan was for all or a major part of the army, it is referred to as a “battle.” If the echelon attack plan was for a small part of the battle, such as a division or brigade, it is referred to as an “engagement.”

4. *Planned* indicates that the battle plan was based around an echelon attack before the battle started. *Unplanned* describes an attack that developed into an echelon attack as the action progressed.

5. *Success* of an attack for this analysis is defined as the result of the localized attack in question and not the overall result of the battle. This is because many of the selections involve smaller units, such as brigades, and not entire armies. For example, the result of Example #14a on the Federal Iron Brigade on July 1, 1863, is based only on its success in the attack against General James Archer’s Confederate brigade and not the result of the day’s fighting, which by all measure was a Confederate victory.

5. *Failure* of an attack for this analysis indicates that the echelon attack did not meet its objective. This includes attacks where the echelon movement started, but the echelon attack broke down. These usually transmuted into some sort of simultaneous attack by the end of the battle. Frayser’s Farm is an example of this.

6. *Not Applicable* indicates that, although the battle plan was an echelon attack, such an attack did not even start. These usually started as some sort of simultaneous attack with no trace whatsoever that an echelon attack was planned, such as at Malvern Hill. As such, they cannot be counted as echelon attacks.

#### A. Legacy Echelon Attacks.

Anyone in the 19<sup>th</sup> century who studied either Jomini or Halleck would have read of these battles presented as models of the echelon attack. The Theban Epameinodas is

credited with having invented the tactic of attacking with the strong part of the army while holding back other elements until the attacking force broke the enemy's line, the echelon attack. Its first recorded use in Greek military history is in the Battle of Leuctra.

1. *Leuctra, Boeotia, (modern Greece), 371 B.C., Boeotia versus Sparta.* Both Jomini and Halleck refer to this battle. Epameinodas led the Boeotian army. His plan was to send in a solid mass of Thebans on his left flank against the Spartan right flank, and he held back his center and right comprising Boeotians in line formation. The Spartan right offered a stiff defense under its commander, Cleombrotus, but the Boeotians broke it open and the allied forces defending the center and left retreated in good order when they saw Cleombrotus killed.<sup>32</sup>

The result of this army attack was SUCCESS.

2. *Second Battle of Mantinea, Arcadia (modern Greece), 362 B.C., Thebes and its allies versus Sparta and its allies.* Both Jomini and Halleck refer to this battle. Again, Epameinodas led the Theban army, whose allies included the Boeotians, and again he used the same tactic of attacking first with a strong left wing and refusing his center and right. He also sent a detached body of light troops beyond his right flank to prevent an attack there. This time, the Spartan right flank held its position so firmly that Epameinodas had to lead the final blow. He broke the line and was victorious, but he was killed in the attack.<sup>33</sup>

The result of this army attack was SUCCESS.

3. *Gaugamela (Arbela), Mesopotamia (modern Iraq), 331 B.C., Macedonia versus Persia.* Estimates of Alexander's (the Great) Macedonian army average approximately 40,000 to 50,000 men and those of the Persians over 90,000. Owing to

information from captured Persians, Alexander knew of traps Darius had set for his army, and he developed a plan to neutralize them. In addition, Alexander knew that strengths of his army were better armor and the phalanx (packed linear) formations. His plan involved holding his left flank with his cavalry and striking the left of the Persian line with an echelon formation slanting away backward and to the left. Alexander would lead the echelon attack.<sup>34</sup>

Alexander followed this plan, and Darius sent in cavalry to support his left flank, the location of the Macedonian attack. The cavalry movement left a gap in the Persian line, and Alexander shifted his infantry to the left to exploit this opening. He also supported the infantry with cavalry. This move in turn left a gap in the Macedonian line, into which the Persian cavalry moved and attacked the Macedonian base camp. Reserves turned around to tend to this incursion. By this time, Darius had left the field, Persian resistance started to crumble, and the remnants were chased by Alexander's cavalry.<sup>35</sup>

The result of this army attack was SUCCESS.

4. *Leuthen, Prussian Silesia (modern Poland), December 5, 1757, Prussia versus Austria.* Both Jomini and Halleck refer to this battle. Frederick II of Prussia ("the Great") studied the problems of attacking an enemy with longer lines or more men. His solution was the oblique attack wherein he attacked with a stronger part of his line while holding back weaker wings. He developed this from his experience in early battles, such as Mollwitz, in April 1741, his study of military history, and from tactical experiments.<sup>36</sup>

He learned that timing was extremely important, that his commanders of the waiting units wanted to enter the battle too soon, and that they had to have the discipline to wait to avoid a premature entry into the fighting. This enhanced the ability of the main

attack to remain coherent. Frederick modified the oblique attack at Leuthen by converting it to an echelon attack; as described above, the difference between oblique and echelon attacks is small so this transformation was logical.<sup>37</sup>

Frederick faced Prince Charles of Lorraine and Field Marshal Leopold Daun. Although his army was outnumbered 66,000 to 39,000, Frederick had several advantages at Leuthen. The first was familiarity with the terrain based on previous maneuvers and that terrain offered more benefits for attack than defense. The second was an army trained in rapid movement with supporting artillery moving behind infantry. The third was an enemy's defensive disposition that placed less reliable units on one flank of the army, its left, on ground that offered no benefit for defense. The Prussians staged a purposefully lengthy preparation to give an impression of strength, causing Charles and Daun not to fortify that side of the line, but to move there themselves thinking it was the main attack.<sup>38</sup>

Near midday, Frederick attacked the right flank of the enemy with this weak force as a diversion. As the Austrians defended and later fortified their right flank, the main Prussian force moved around its own right behind low hills placing it on the left flank of the enemy line, which was open, or "in the air." The Prussian move was undetected, and it was launched staggered by battalions, an echelon formation, and supported by artillery brought up behind the infantry. The forces on the left of the Austrian line, the Germans, were the least reliable in the army; they held out for a time against the well-trained Prussian attack, but eventually retreated. Charles finally realized whence the main Prussian attack came, and ordered his entire army to turn left to face it, but it was not trained in such a quick, comprehensive maneuver. An Austrian cavalry

counterattack was met by Prussian cavalry and after a large engagement, the Austrians retreated past the town of Leuthen.<sup>39</sup>

The result of this army attack was SUCCESS.

B. Civil War Echelon Attacks Before Gettysburg.

Having occurred before July 2, 1862, these battles would have been familiar to generals of both armies. They would have of course known the tactics of battles in which they participated; they could of course learn about other battles by reading or word of mouth.

5. *Fair Oaks and Seven Pines*, Virginia, May 31-June 1, 1862, ANV vs AOP. General E. P. Alexander refers to this battle. It was the deepest penetration of General George McClellan's Peninsular campaign. After much delay and hesitation by McClellan, the Federals had advanced from Fort Monroe up the peninsula to within eight miles of the Confederate capital of Richmond. With most of the Federal Army of the Potomac north of the Chickahominy River, General Joseph Johnston's plan was to attack the isolated Federal IV Corps south of the river and destroy it. It envisioned feint attacks on the left by A. P. Hill and General John Magruder, followed by sequential attacks by the divisions of Generals William Whiting, Longstreet, A.P. Hill, and Benjamin Huger.<sup>40</sup>

In a preview of things to come, things did not go as planned. Longstreet got lost and his division took the roads assigned to A.P. Hill and Huger. This confusion delayed the entire attack and resulted in a late attack with fewer divisions than planned, nullifying Johnston's plan. Johnston was wounded in this battle.<sup>41</sup>

The result of this army attack was FAILURE.

6. *Mechanicsville (Beaver Dam Creek), Virginia, June 26, 1862, ANV versus AOP.* The Federals remained within a few miles of Richmond. Lee had been in command only three weeks, assuming command after Johnston's wounding at Seven Pines, and he decided that to avoid a formal siege of Richmond he must assume the offensive. The AOP was positioned on both sides of the Chickahominy River: its right wing on the north side of the river was weaker and offered a better chance for success. Lee decided to attack there.<sup>42</sup> Lee's plan was to attack the AOP en echelon from north-to-south in this order: General James (JEB) Stuart's cavalry, and the divisions of Jackson, General Daniel Harvey Hill, A.P Hill, and Longstreet.<sup>43</sup> His written order stated thus:

At 3 o'clock Thursday morning, 26<sup>th</sup> instant, General Jackson will advance on the road leading to Pole Green church, communicating his march to General [Lawrence] Branch...The four divisions, keeping in communication with each other and moving en echelon on separate roads, if practicable, the left division in advance, will sweep down the Chickahominy...<sup>44</sup>

Longstreet remembered the order from Lee slightly differently, switching the two Hills, but the staggered nature of the attacks is clear:

The general explained his plan briefly: Jackson to march from Ashland by heights between the Chickahominy and Pamunkey, turning and dislodging the Federal right, thus clearing the way for the march of troops to move on his right; A. P. Hill to cross the upper Chickahominy and march for Mechanicsville, in echelon to Jackson; the Mechanicsville Bridge being clear, D. H. Hill's division and mine to cross, the former to reinforce Jackson's column, the latter to file to the right and march down the river in right echelon to A. P. Hill's direct march through Mechanicsville to Gaines's Mill.<sup>45</sup>

The attack did not go as planned. Jackson arrived late at Pole Green Church, noticed that neither Hill was to his right, and decided not to attack. Longstreet's division and D.H. Hill's division were on the same road and both appeared behind A.P. Hill's division.<sup>46</sup> By late afternoon, those Confederates that did attack were under heavy

Federal fire from new positions farther back from their starting line. All the Federals need do was stay put and fire at any advancing Confederates.<sup>47</sup> Despite retaining position, McClellan ordered the AOP to retreat.

Determination of success or failure of this attack is not straightforward because of the Federal's retreat. Some might argue that McClellan's retreat is the equivalent of a defeat so the Confederate attack was a success. In fact, this situation occurs throughout the Seven Days campaign—Union success on the battlefield, Union retreat afterward. Resolution involves the opinion of prominent authors in the field; in this case, Douglas Southall Freeman offers helpful insight. His summary includes phrases such as “responsibility for the slaughter,” “it was the high command that failed,” and “concentration for an en echelon attack down the Chickahominy had not been effected.”<sup>48</sup> Descriptions such as these denote neither success nor an opinion of success.

The result of this army attack was FAILURE.

7. *Gaines' Mill, Virginia*, June 27, 1862, ANV versus AOP. E. P. Alexander refers to this battle. Unlike the unplanned echelon attacks implemented on the spot, Lee formulated an attack plan after the battle started, but which required some time to effect. A brigade of A.P. Hill's division located the Federal army in the morning, which was in an excellent defensive position with a swamp in front of its line. Hill attacked, but could not break the front. Longstreet's division appeared on Hill's right; in front of him were two creeks, Federal sharpshooters, infantry behind improvised works, and long-range artillery behind that.<sup>49</sup>

Lee determined prudently that before Longstreet attacked, it would be better to wait for Jackson to arrive on Hill's *left*, resulting in the order from left to right Jackson,

Hill, Longstreet. This would force the Federals to extend their line to their right to meet Jackson, which might weaken it enough on their left to offer Longstreet's attack a better chance. With Hill already engaged, Lee planned an echelon attack on site, and it all depended on Jackson's arrival. This did not happen as expected: unfamiliarity with the roads and a miscommunication with his guide caused a wrong turn, and Jackson ordered a countermarch anyway to the correct position.<sup>50</sup> Finally arriving at the correct position on the far left, Jackson attacked with 14 brigades at around 5 p.m., the largest number he ever commanded; he also ordered some of these brigades to attack en echelon.<sup>51</sup>

Combined Confederate attacks finally broke the Federal line, and they retreated southward. Lee's and Jackson's improvised echelon attack won the day, but at a cost of 8,000 casualties.<sup>52</sup> Confederate difficulties and errors in getting to the field continued to plague the army. Per Freeman:

Later, when men looked back on the battle, they read into this brief scene [a meeting between Lee and Jackson] a display of confidence on the part of Jackson and of wise, comprehensive planning by Lee. At the moment, there seemed neither confidence nor plan in what was happening. Immeasurably different the realities were from what those civilian soldiers in the swamp and in the woods and along the road had thought a battle would be. They had been raised on stories of Napoleon's great victories; but instead of an assured march, with flapping flags, to a described position, they had seen that day on Boatswain's Swamp groping, foundering, halts, confusion, uncertainty.<sup>53</sup>

Despite this, the ANV carried the day.

The result of this army attack was SUCCESS.

8. *Frayser's Farm (Glendale), Virginia*, June 30, 1862, ANV versus AOP. E. P.

Alexander refers to this battle. After Gaines' Mill, Lee attempted to reform the army and pursue the Federals before they could retreat to Harrison's Landing on the James River.

The Federal line was in the form of an upper case Greek Letter Gamma (Γ) with the long

leg oriented north-south and anchored approximately one mile west of Malvern Hill. The Confederate plan was for all divisions to converge on this line in a somewhat rough form of staggered attack: Jackson was to attack from the north toward the Union refused right flank, Huger was to assault the left flank, Longstreet was to attack the middle. A.P. Hill's division was held back behind Longstreet to rest, but his entry was to come behind Longstreet after the battle had started.<sup>54</sup> Lee attempted here a double envelopment like that at Cannae in 216 B.C., but the ANV proved unprepared for such a maneuver.<sup>55</sup>

Again, the movement of Confederate divisions was retarded by many of the same errors, impediments, and disorder it exhibited throughout the Seven Days campaign. Freeman's description is illustrative:

This, then, was the result of the attempted convergence of all the infantry opposite the line of McClellan's retreat: Holmes had been stopped by superior artillery; the reserve Divisions of Magruder had been worn out to no purpose; Huger had spent the day cutting a road; Jackson had not crossed White Oak Swamp; almost 50,000 Confederate troops, for one reason or another, had done virtually nothing on the day when Lee had hoped to overwhelm his adversary.

To complete the tragedy of the army's failure, Lee had felt compelled to attack in the late afternoon, opposite Frayser's Farm, with the Divisions of Longstreet and of A.P. Hill. The ground was confusing and the prospect of substantial result was small; but a vigorous onslaught with the troops at hand seemed the one alternative to permitting McClellan to march, unhindered and undisturbed, past the Confederate front...when blackness covered the field and stopped the battle, the Unionists held one small part only of their previous line.

The gain was small. All the Army had to show for its effort was a causeway of dead bodies, some hard-won Federal ordinance, and a bit of shell-torn woods.<sup>56</sup>

Once again, Freeman's choice of words—tragedy, failure—denote poor performance; however, although the AOP did retreat from most of its line, it was still intact.

The result of this army attack was inconclusive, which for this discussion is the same as FAILURE.

9. *Malvern Hill, Virginia, July 1, 1862, ANV versus AOP.* E. P. Alexander refers to this battle. After Glendale, the AOP retreated to Malvern Hill, a plateau just north of Harrison's Landing. The easy slope of the hill conceals the full grade and its height. It offered the defending Federals a complete field of fire for 300 to 400 yards, of which they took complete advantage. The Federals lined the rim of the plateau with numerous batteries (up to 100-plus cannon, depending on the source) completely exposed as if inviting attack.<sup>57</sup> Federal gunboats on the James could offer more fire support if needed.

Lee of course obliged, and the order for battle was issued around noon. The basic attack order from east-to-west, by division, was Jackson (brigades not heavily involved in Glendale), Magruder, and D.H. Hill. Because of their exhaustion from Glendale the previous day, Longstreet and A.P Hill were in reserve.<sup>58</sup> It is unclear whether this attack was to be performed en echelon because Lee's report stated that orders were issued for a "general advance."<sup>59</sup>

As infantry moved into position, Confederate batteries started to form along the army's front. Union batteries started firing about 1 p.m. and shattered each forming Confederate battery with concentrated, accurate fire. Once again, no Confederate officers of high rank were familiar with the roads or topography, and units were slow to get into position. Magruder took an incorrect road—there were two local roads known as "Quaker Road," and his guide took the wrong one—and his late arrival delayed the attack until late afternoon.<sup>60</sup>

When the attack started in late afternoon around five, Ewell's division was in place for the absent Magruder. Confederate artillery by this time lacked the overall

command of the field; therefore, between the fire from Federal artillery and the infantry in fortifications, the attack collapsed. Jackson's northern attack was cancelled, Ewell and then Magruder, who finally appeared, were repulsed, and D.H. Hill's attack was murderously reduced. Firing continued until after dark.<sup>61</sup>

Whether the attack was simultaneous or echelon is irrelevant: at day's end the Federals held the heights. Lee wrote in his report:

Owing to ignorance of the country, the dense forests impeding necessary communication, and the extreme difficulty of the ground, the whole line was not formed until a late hour in the afternoon. The obstacles presented by the woods and swamp made it impracticable to bring up a sufficient amount of artillery to oppose successfully the extraordinary force of that arm employed by the enemy, while the field itself afforded us few positions favorable for its use and none for its proper concentration. Orders were issued for a general advance at a given signal, but the causes referred to prevented a proper concert of action among the troops.

The lateness of the hour at which the attack necessarily began gave the enemy the full advantage of his superior position and augmented the natural difficulties of our own.<sup>62</sup>

Freeman's summary again offers much:

It was not war; it was mass murder. As in every action of the campaign, the men in the ranks did all they could to make good the blunders and delays of their leaders; but this time they were sent to achieve the impossible. Valor could not conquer those perfectly served batteries on the crest, nor could fortitude long endure the fire that seemed to sweep every foot of the open ground...In the end, the shattered, bloody wreckage of D.H. Hill's Division slipped back down the hill.<sup>63</sup>

Because the echelon attack never materialized as such, the result of this battle is NOT APPLICABLE.

*10. Antietam (Sharpsburg), Maryland, September 17, 1862, AOP versus ANV.*

This battle illustrates what happens when sequential attacks are separated by too much time. Closely timed and spaced echelon attack segments are meant to cause confusion

and imbalance in the defender's response. If the time between attacks is too large, the defender can move forces from one part of the line to another because the attacker allows him the time to do so. This ability is enhanced if the defender has interior lines. If the period between attacks is too large, then the battle degenerates into what essentially are separate attacks occurring on the same battlefield. This battle offers such an example.

General McClellan's battle plan called for three main attacks starting from the north and progressing southward. There was little overlap in time or space between any two attacks. The northernmost attack over the Corn Field started at dawn and lasted until 9:00 a.m. The second group of attacks on the Confederate center (the West Woods and Bloody Lane) went from 9:00 a.m. and ended between noon and 4:30 p.m. The third attack on the southern areas (Burnside's Bridge) started around 1:00 p.m. and continued until the late afternoon.<sup>64</sup>

The large gaps in time and space between the start of each attack (dawn, 9:00 a.m., and 1:00 p.m.) allowed Lee, Longstreet, and Jackson to shift reinforcements freely among different parts of their line. This does not mean that the ANV's position was not precarious at times because the entire ANV was not assembled and the AOP outnumbered it two-to-one. In the final attack at Burnside's Bridge, the entire IX Corps of around 12,000 men was held up by a force of less than 3,000 and A. P. Hill's division did not make it to Sharpsburg until mid-afternoon after a 17-mile march from Harper's Ferry, West Virginia. However, the large durations between Federal attacks offered little of the benefit of a standard echelon attack. McClellan's poorly planned battle plan resulted in an echelon attack with excessive separation between segments.

The result of this army attack was FAILURE.

11. *Perryville (Chaplin Hills), Kentucky*, October 8, 1862, Confederate Army of Tennessee versus Federal Army of the Ohio. During General Braxton Bragg's invasion of Kentucky, his Confederate Army of Tennessee and General Don Buell's Army of the Ohio maneuvered each other to Perryville. The two armies had formed in roughly parallel lines running north-south. Bragg's battle plan was for General Benjamin Cheatam's wing to start the attack from the north en echelon by brigade and continue south through General William Hardee's wing.<sup>65</sup>

The echelon attack started as planned, but some of the Hardee's wing under General J. Patton Anderson did not receive orders to attack because they were in line separate from Anderson. These brigades were delayed because they did not know where or when to attack. Each attacked eventually without specific orders, but the delay broke up the echelon arrangement.<sup>66</sup> The ensuing battle involved attacks and counterattacks on both sides. Owing to acoustic shadow, however, Buell was unaware of the intensity of the battle and did not commit most of his army, leaving only nine brigades to participate in the battle. The Federals stopped the Confederates before nightfall, and Buell lost an opportunity to inflict a larger defeat on Bragg, who retreated from Perryville into east Tennessee.<sup>67</sup>

The result of this army attack was FAILURE.

12. *Prairie Grove, Arkansas*, December 7, 1862, First Corps, Confederate Army of Trans-Mississippi versus I Corps, Federal Army of the Trans-Mississippi. Hess refers to this battle. This relatively small battle of approximately 10,000 Federals and 11,000 Confederates was fought for control of northwestern Arkansas. After some maneuvering, Confederate General Thomas Hindman's division attacked Federal General Francis

Herron's division in mid-morning and drove them back, but he failed to follow through and set up defensive positions instead. General James Blunt was eight miles away but came to Herron's support when he heard sounds of battle. His attack at first succeeded and then stopped; both sides held their positions overnight, but by morning the Confederates had withdrawn.<sup>68</sup>

There appears to have been no overall battle plan for either side to attack en echelon; however, battle reports of two Confederate brigade commanders reveal that they were ordered to assemble in this way. Colonel Dandridge McRae wrote, "Under orders from Brig Gen'l Shoup I formed my command immediately in rear of General [James] Fagan's in column of echelon..."<sup>69</sup> Colonel Robert Shaver reported, "About 11 o'clock a.m. my command [brigade] was ordered into position en echelon by battalions..."<sup>70</sup> This attack appears to have not suffered from assembly or traffic problems as the ANV encountered repeatedly in the Seven Days campaign, and it appears to have been successful, or close to it, but was halted prematurely by General Hindman.<sup>71</sup> A command decision causing premature discontinuation of an attack should not negate the efficacy of the attack.

The result of this corps attack was SUCCESS.

*13. Stones River (Second Battle of Murfreesboro), Tennessee, December 31, 1862 to January 2, 1863, Confederate Army of Tennessee versus Federal Army of the Cumberland.* Hess refers to the engagement. After his defeat at Perryville, Bragg ordered a concentration near this place. General William Rosecrans was placed in command, replacing Buell after Perryville. Both armies concentrated along a north-south line and both generals decided to attack on December 31. In fact, each general's plan was

to envelop the other's right, the planned start of each attack also roughly coincident at 7:00 a.m.<sup>72</sup>

The Confederate plan involved an echelon movement from south-to-north (left-to-right).<sup>73</sup> This is described by brigade commander General Arthur Manigault of General Jones Withers's 2<sup>nd</sup> Division in the center of the Confederate line:

Dean's brigade to our left...soon became engaged, and our own immediately afterwards, the Thirty-fourth Alabama, Col. Mitchell, (on the left of the brigade line), advancing first in line, the others following by an echelon movement, a distance of about 50 yards between them...<sup>74</sup>

The Federal right was pushed back but held, and its left held and extended its line to the left (north). Bragg attacked the left on January 1, but it held: he started retreating the next day. Rosecrans did not pursue until he started his Tullahoma campaign in June. This battle was a tactical victory for the Confederates, whose attacks were along most of the Federal line, but Bragg lacked the strength to destroy the larger Federal army. Although the Confederate attack was eventually stopped because of the lack of strength, it did manage to push the Federal line back up to four miles.<sup>75</sup>

The result of this army attack was SUCCESS.

#### *D. Civil War Echelon Attacks at Gettysburg.*

14. *Gettysburg, Pennsylvania, July 1-3, 1863, ANV versus AOP.* Once again taking the offensive, Lee invaded the North in a large turning movement that forced the AOP under Hooker to leave camp at Culpepper, Virginia and pursue. In late June, General George Meade took command; three days later the battle started as a meeting engagement outside the town. This category includes three instances of this tactic in the battle itself, one unplanned and two planned.

*14a. Gettysburg, Pennsylvania, July 1, 1863, morning, Iron Brigade, AOP versus Archer's Brigade, ANV.* Bradley M. Gottfried refers to this engagement. The second Federal infantry brigade to arrive on the field was the Iron Brigade of I Corps, General Solomon Meredith commanding. It arrived in mid-morning up the Emmitsburg Road, crossed the fields southwest of town, and then crossed the Fairfield Road (modern PA Route 116). The brigade approached Archer's brigade of A.P. Hill's corps in Herbst's Woods on McPherson's Ridge in column of fours, a marching formation, moving directly north.<sup>76</sup>

Unable to locate First Division Commander General James Wadsworth, Lieutenant Colonel John Kress of Wadsworth's staff ordered each regiment to form two lines and attack the enemy. Owing to the proximity and speed of Archer's brigade as it crossed Willoughby Run, each Iron Brigade regiment changed quickly from the marching formation to battle line. Each regiment approached the Confederates individually, or piecemeal, from right to left in echelon, with the last regiment, the 24<sup>th</sup> Michigan, hitting Archer hard on its right flank.<sup>77</sup> In a short time, Archer's brigade was repulsed with several its soldiers, including Archer, taken prisoner.<sup>78</sup>

The result of this brigade engagement was SUCCESS.

*14b. Gettysburg, Pennsylvania, July 1, 1863, afternoon, General Johnston Pettigrew's Brigade, ANV, versus Iron Brigade, AOP.* Gottfried and Guelzo refer to this engagement. Around 2:00 p.m., Pettigrew's brigade arrived on the field near where Archer's brigade had attacked that morning. This time the Iron Brigade was defending on the east bank of Willoughby Run. Pettigrew's plan was to attack the Iron Brigade in "echelon by battalion" in almost reverse order of the morning attack by the latter: from

left to right.<sup>79</sup> The Iron Brigade was prepared, but Confederate regiments from General John Brockenbrough's brigade joined the attack on the Federal's right flank. The combination forced the Iron Brigade back slowly and it retreated to Seminary Ridge.<sup>80</sup>

The result of this brigade engagement was SUCCESS.

By the end of Day 1, the Confederates succeeded in pushing the Federals through the town and into the hills south and east, on which they assembled as the night wore on. This led to the second day of the battle.

*14c. Gettysburg, Pennsylvania, July 2, 1863, Confederate.* On July 2, after numerous delays, the ANV finally attacked around 4:00 p.m. Lee's final plan was an echelon attack starting with Longstreet's corps in the south against the Federal left flank and ending with Hill's corps toward the center. The objective of this attack was to hit the Federal line, thought to be in the air near the Round Tops, and to "roll it up." Ewell's demonstration on the Federal right flank was ineffective. The attack progressed well through Longstreet's corps, but dissolved three hours later in Hill's corps. Confederate command and staff involvement was average during the attack and almost non-existent toward the end. The echelon attack pushed III Corps back into the line whence it started, but failed to roll up or otherwise destroy the Federal line.

The result of the army attack on July 2 was FAILURE.

By day's end, with the arrival of the Federal VI Corps, the largest in the AOP, the entire army was assembled and stronger than at dawn, setting up for Day 3. The battle culminated in Pickett's Charge on July 3, a simultaneous attack that too was unsuccessful. Both armies were spent: the ANV withdrew on July 4, and the AOP started

its pursuit on July 6. By July 14, the ANV was safely across the Potomac River and in Virginia.

*D. Civil War Echelon Attacks After Gettysburg.*

This category includes battles that had no influence on Gettysburg, but should indicate to historians whether the echelon attack enjoyed success after that battle.

15. *Chickamauga, Georgia*, September, 18-20, 1863, Confederate Army of Tennessee versus Federal Army of the Cumberland. This battle contains two echelon attacks, one Federal, one Confederate. Because each occurs on a different day, splitting the narrative between them is simple.

15a. September 19, Federal. Hess refers to this engagement. After Rosecrans occupied Chattanooga in August, Bragg organized his forces around the town. Bragg was reinforced, but later abandoned the Chattanooga area for Lafayette to the southeast to catch the Federals as they exited the mountain passes. Rosecrans pursued and after a series of maneuvers and fighting on September 18, both sides found themselves astride Chickamauga Creek.<sup>81</sup>

On the morning of September 19, fighting started along the creek and each side called for reinforcements. This started fighting along the entire creek that lasted all day. During one of the battle's confrontations, Rosecrans, Federal commander, ordered General Richard Johnson's division to block a Confederate advance from Cheatam's division. He then ordered the division of General John Palmer to support Johnson on his right. Rosecrans suggested to Palmer that he form his brigades in echelon to his right, which he did placing each brigade approximately 100 yards and to the right of the previous one. This allowed him not only to support Johnson, but to easily swing right

and form a battle line to counter Cheatam coming from the southwest. This movement started the repulse of Cheatam's division.<sup>82</sup> In this case, the echelon movement was defensive and not relevant to this paper.

The result of this engagement is NOT APPLICABLE.

15*b*. September 20, Confederate. After the fighting on September 19, Bragg was reinforced that afternoon by two divisions from Longstreet's corps of the ANV. Because of Longstreet's rank, Bragg had to re-organize the army into two wings, one under General Leonidas Polk, the other under Longstreet. Bragg decided to attack the next day: the plan was for the army to attack in echelon from north-to-south, starting at dawn with D.H. Hill's division under Polk. Polk, however, retired that night without leaving orders for Hill, and Hill apparently did not seek out Polk asking for orders. When everything was finally resolved, Hill attacked after 10 a.m., long after the intended dawn attack. Unhappy with the late start of the assault, Bragg ordered a general advance, thus negating the successive nature of the assault.<sup>83</sup>

A crucial movement order from Rosecrans to General Thomas Wood resulted in an erroneous shift of Wood's division, creating a gap in the Federal line into which poured Longstreet's two divisions. The Federals retreated to Chattanooga, but a stalwart defense by General George Thomas saved the army from ruin. Owing to Bragg's gruff personality and poor coordination among his subordinates, he won a tactical, but Pyrrhic, victory; nonetheless, the Federals retreated to and retained possession of Chattanooga. Although Bragg's original plan was to attack in echelon, the delays caused by Polk and Hill negated Bragg's plan and he ordered a simultaneous attack; therefore, the attack was

planned as echelon, but did not end as one. Assisted immensely by Wood's fortuitous gap, it worked.<sup>84</sup> However, for this paper, it is not applicable.

The result of this attack is NOT APPLICABLE.

16. *Peach Tree Creek, Georgia*, July 20, 1864, Confederate Army of Tennessee versus Federal Army of the Cumberland. Hess refers to this battle. After Kennesaw Mountain, Johnston retreated until he was near Atlanta. President Davis relieved him of command for ceding so much land to General William Sherman and replaced him with Hood, who was known for his aggressiveness. As Sherman's army started to deploy north and east of Atlanta, it turned the Confederates from their defense of the Chattahoochee River.<sup>85</sup>

Hood decided to hit General Thomas's unsupported Army of the Cumberland while it was astride the creek. Hood's plan was for an attack by five divisions en echelon by division east-to-west with two divisions in reserve; however, it did not start until 3 or 4:00 p.m. (depending on the account) because divisions were slow to move into position. The first three divisions were stopped, but the attacks of the last two divisions started successfully. The two federal divisions opposing them refused their right flank exposing the attacking Confederates to enfilade fire. After his reserve divisions failed to break the Federal line, Hood ordered a series of frontal attacks against the Federal line, which held.<sup>86</sup>

The result of this army attack was FAILURE.

17. *Franklin, Tennessee*, November 30, 1864, Confederate Army of Tennessee versus Federal Army of the Ohio. Hess refers to this engagement. After losing Atlanta, Hood remained near this place until he determined that Sherman was not moving farther

south. In October, he devised a plan meant to pull Sherman out of Georgia by threatening Nashville with a turning movement. Intent on marching to the ocean, Sherman instead sent Thomas north with orders to check Hood. Waiting for supplies and cavalry delayed Hood which allowed Thomas time to organize the defense of his department.<sup>87</sup>

General John Schofield's Army of the Ohio stopped at Franklin and entrenched south of the Harpeth River to protect its crossing. Hood ordered a series of frontal attacks in mid-afternoon and evening that enjoyed early success but which were eventually repulsed with heavy loss. Part of that repulse occurred near a breakthrough at the Carter House, which sat at the center of the Federal line. Colonel Emerson Opdycke's brigade of seven regiments sat in reserve approximately 200 yards behind the Carter House. Upon noticing a surge of Confederates rushing past that structure, Opdycke ordered his brigade forward. His regiments rose and charged as he called them, resulting in an echelon attack formation on center forming a Greek Letter Lambda ( $\Lambda$ ). Opdycke pushed the incursion back to and beyond the line, collecting over 350 prisoners in the process. He remained in position until ordered to withdraw after dark.<sup>88</sup> Rather than retreat, Hood ordered his depleted force north.<sup>89</sup>

The result of this brigade engagement was SUCCESS.

### **ANALYSIS OF ECHELON ATTACK EXAMPLES**

Before discussing commentary on the echelon attack, an analysis of the example battles is warranted. In this section, the first tables correspond to their named sections

above and each contains simple totals to allow limited analysis and observations. In all tables, N/A = Not Applicable.

A. Legacy Echelon Attacks (Table 1).

As stated previously, these are some of the battles that the learned military man of the mid-nineteenth century would have studied and retained as ideals for the echelon attack.

TABLE 1. LEGACY ECHELON ATTACKS								
BATTLE	ECHELON ATTACKER		UNIT SIZE	PLANNED		SUCCESS		
	FED	CON		YES	NO	YES	NO	N/A
1. Leuctra, Boeotia, 371 B.C	N/A	N/A	Army	X		X		
2. Second Battle of Mantinea, Arcadia, 362 B.C.	N/A	N/A	Army	X		X		
3. Gaugamela, Mesopotamia, 331 B.C.	N/A	N/A	Army	X		X		
4. Leuthen, Prussian Silesia (modern Poland), 1757	N/A	N/A	Army	X		X		
TOTALS, LEGACY (4 examples)	N/A	N/A	Army = 4	4		4		

Because these battles are not under investigation in this paper, only a couple of observations are warranted. First, as paragons of the echelon attack, it should be no surprise that they are all successful. Second, all are at the army, or major battle, level (for their times). It is safe to assume that ancient scribes did not record minor skirmishes at lower levels in the army, such as the Macedonian equivalent of a brigade or regiment. Third, it is unknown if or how any battle on this list influenced directly any of the commanders of echelon attacks attempted during the ACW.

B. Civil War Echelon Attacks Before Gettysburg (Table 2).

Although small, the sample size of this group is large enough to indicate the popularity of the echelon attack in the first half of the war. It also indicates its performance record going into mid-1863.

TABLE 2. CIVIL WAR ECHELON ATTACKS BEFORE GETTYSBURG								
BATTLE	ECHELON ATTACKER		UNIT SIZE	PLANNED		SUCCESS		
	FED	CON		YES	NO	YES	NO	N/A
5. Fair Oaks and Seven Pines, VA, May 31-June 1, 1862		X	Army	X			X	
6. Mechanicsville (Beaver Dam Creek), VA, June 26, 1862		X	Army	X			X	
7. Gaines' Mill, VA, June 27, 1862		X	Army	X		X		
8. Frayser's Farm (Glendale), VA, June 30, 1862		X	Army	X			X	
9. Malvern Hill, VA, July 1, 1862		X	Army	X				X
10. Antietam (Sharpsburg), MD AOP	X		Army		X		X	
11. Perryville (Chaplin Hills), KY, October 8, 1862		X	Army	X			X	
12. Prairie Grove, AR, December 7, 1862		X	Corps		X	X		
13. Stones River (Second Battle of Murfreesboro), TN, December 31, 1862 to January 2, 1863		X	Army	X		X		
TOTALS, PRE-GETTYSBURG (9 examples)	1	8	Corps =1 Army = 8	7	2	3	5	1

C. Civil War Echelon Attacks at Gettysburg (Table 3).

This battle offers three examples, two at the brigade level and one at the army level. One of the brigade engagements was a rare Federal echelon attack.

TABLE 3. CIVIL WAR ECHELON ATTACKS AT GETTYSBURG								
BATTLE	ECHELON ATTACKER		UNIT SIZE	PLANNED		SUCCESS		
	FED	CON		YES	NO	YES	NO	N/A
14a. Gettysburg, PA, July 1, 1863, Iron Brigade	X		Brigade		X	X		
14b. Gettysburg, PA, July 1, 1863, Pettigrew's Brigade		X	Brigade	X		X		
14c. Gettysburg, PA, July 2, 1863, Longstreet, Hill Corps		X	Army	X			X	
TOTALS, GETTYSBURG (3 examples)	1	2	Brig. = 2 Army = 1	2	1	2	1	0

4. Civil War Planned Echelon Attacks After Gettysburg (Table 4).

This section completes the accounting of echelon attacks during the ACW. The small sample size of one offensive battle plan involving an echelon attack should deter serious conclusion, but it does indicate that in the last two years of the war few generals on either side tried it. Because correlation does not imply causation, it would be irresponsible to claim that Gettysburg Day 2 was the single reason for this.

The two Chickamauga entries are included because it is one of the largest battles of the war, especially in the Western theater, even though both were judged not relevant in the discussion above. The Federal entry, number 15a, was a defensive tactic to support

the flank of another division, and the Confederate entry, number 15b, was a planned echelon attack that emerged a simultaneous advance owing to formation delays.

TABLE 4. CIVIL WAR ECHELON ATTACKS AFTER GETTYSBURG									
BATTLE	ECHELON ATTACKER		UNIT SIZE	PLANNED		SUCCESS			
	FED	CON		YES	NO	YES	NO	N/A	
15a. Chickamauga, GA, September, 19, 1863	X		Division		X			X	
15b. Chickamauga, GA, September, 20, 1863		X	Army	X				X	
16. Peach Tree Creek, GA, July 20, 1864		X	Army	X			X		
17. Franklin, TN Opdycke's Brigade	X		Brigade		X	X			
TOTALS POST-GETTYSBURG (4 examples)	2	2	Brig.= 1 Div. = 1 Army=2	2	2	1	1	2	

5. Totals and Further Analysis.

Totals from Tables 2, 3, and 4 appear in Table 5. As noted previously, the total data set is small; despite this, reasonable observations can be derived from them. These appear below with no order of importance stated or implied.

TABLE 5. CIVIL WAR ECHELON ATTACK TOTALS AT ALL COMMAND LEVELS								
BATTLE	ECHELON ATTACKER		UNIT SIZE	PLANNED		SUCCESS		
	FED	CON		YES	NO	YES	NO	N/A
TOTALS TABLE 2 (9 examples)	1	8	Corps= 1 Army= 8	7	2	3	5	1
TOTALS TABLE 3 (3 examples)	1	2	Brig.= 2 Army=1	2	1	2	1	0
TOTALS TABLE 4 (4 examples)	2	2	Brig.= 1 Div. = 1 Army=2	2	2	1	1	2
TOTAL TABLES 2, 3 AND 4 (16 examples)	4	12	Brig. = 3 Div. = 1 Corps=1 Army= 11	11	5	6	7	3

1. *The use of the echelon attack diminished after Gettysburg.* This number dropped from nine prior to the battle to four afterward. Reasons for this could include, but are not limited to, a continual decrease in the number of formally trained officers as the war continued and that in the last 1.5 years of the war the South was mainly on the defensive. Because Federal armies were attacking more and because Federal generals did not seem to favor the echelon attack, its use naturally decreased. Finally, in the last half of the war, both sides increased the use of field fortifications as compared to the first half: The Wilderness campaign and the siege of Atlanta, both in 1864, are examples of this.

2. *The number of major battles with echelon attack as primary battle plan is small.* Although a list of “major” battles is understandably arbitrary, an acceptable list appears in Paddy Griffith’s *Battle Tactics of the Civil War*: His “All Civil War” list

includes 26 major battles.<sup>90</sup> This list, however, includes one entry for “Seven Days,” which includes at least six major battles: Mechanicsville, Gaines’ Mill, Savage’s Station, Frayser’s Farm, White Oak Swamp, and Malvern Hill. To account for these extra battles, one must add additional battles to Griffith’s total of 26 to arrive at a proper total. Because “Seven Days” is already included in the total, only five more need to be added to 26, resulting in a total of 31 major battles. To this must be added one to account for Peach Tree Creek, which is not in Griffith’s list, but a is battle featuring an echelon attack, as noted above, giving a grand total of 32 major battles.

The number of *planned* army echelon attacks includes those battles where the echelon attack was planned regardless of whether it materialized as such. From Table 5, there are 11. The computation for the percentage of planned echelon attacks during the entire war follows.

$$\begin{aligned}\text{Planned echelon attacks (\%)} &= 11 \text{ planned echelon attacks} / 32 \text{ total major battles} \\ &= 0.34 \times 100\% \\ &= 34\%\end{aligned}$$

This means that in roughly three of 10 major battles, the commander of one army planned an echelon attack. As shown in the ECHELON ATTACKER column of Table 5, these commanders were mostly Confederates.

3. *The number of major battles where the planned echelon attack was executed is small.* The number of *executed*, planned echelon attacks at all command levels includes *only* those battles where the echelon attack was planned and started even though it might have dissolved into a simultaneous attack sometime thereafter. Recalling that the result of “not applicable” indicates that the echelon attack, though planned, did not even

start, from the 11 planned battles in Table 5, subtract the three battles in the N/A column, leaving eight battles. The computation for the percentage of executed echelon attacks during the entire war follows.

$$\begin{aligned}\text{Executed echelon attack (\%)} &= 8 \text{ executed echelon attacks} / 32 \text{ total major battles} \\ &= 0.25 \times 100\% \\ &= 25\%\end{aligned}$$

Therefore, about one of four major ACW battles involved planned echelon attacks that materialized as such. Numbers such as 34% planned and 25% actual echelon attacks, although not overwhelming, are substantial and indicate that in 1863 it would not have been far out of line to *consider* this tactic.

4. *The number of successful army echelon attacks was small.* Table 6 contains all echelon entries at the army level (as opposed to brigade, division, or corps) from Tables 2, 3, and 4, planned or unplanned, successful, or not.

TABLE 6. CIVIL WAR ECHELON ATTACKS AT THE ARMY LEVEL								
BATTLE	ECHELON ATTACKER		UNIT SIZE	PLANNED		SUCCESS		
	FED	CON		YES	NO	YES	NO	N/A
5. Fair Oaks and Seven Pines, VA, May 31-June 1, 1862		X	Army	X			X	
6. Mechanicsville (Beaver Dam Creek), VA, June 26, 1862		X	Army	X			X	
7. Gaines' Mill, VA, June 27, 1862		X	Army	X		X		
8. Frayser's Farm (Glendale), VA, June 30, 1862		X	Army	X			X	
9. Malvern Hill, VA, July 1, 1862		X	Army	X				X
10. Antietam (Sharpsburg), MD AOP	X		Army		X		X	
11. Perryville (Chaplin Hills), KY, October 8, 1862		X	Army	X			X	
13. Stones River (Second Battle of Murfreesboro), TN, December 31, 1862 to January 2, 1863		X	Army	X		X		
<b>SUB-TOTAL, PRE-G-BURG (8 examples)</b>	<b>1</b>	<b>7</b>	<b>8</b>	<b>7</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>1</b>
14c. Gettysburg, PA, July 2, 1863, Longstreet, Hill Corps		X	Army	X			X	
<b>SUB-TOTAL, GETTYSBRG (1 example)</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
15b. Chickamauga, GA, September, 20, 1863		X	Army	X				X
16. Peach Tree Creek, GA, July 20, 1864		X	Army	X			X	
<b>SUB-TOTAL, POST-G-BURG (2 examples)</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>
<b>TOTAL ECHELON ATTACKS (11 examples)</b>	<b>1</b>	<b>10</b>	<b>11</b>	<b>10</b>	<b>1</b>	<b>2</b>	<b>7</b>	<b>2</b>

Of the army attacks prior to Gettysburg, two of eight, or 25 percent, were successful, and starting with Gettysburg, no echelon attack at the army level succeeded. For the entire war, the result is worse, with two of 11 successful, or 18 percent, and almost all these are planned (10 of 11).

5. *Smaller echelon attacks were more successful than larger ones.* Table 7 contains all echelon entries at the brigade, division, or corps level from Tables 2, 3, and 4, planned or unplanned, successful, or not.

TABLE 7. CIVIL WAR ECHELON ATTACKS AT NON-ARMY LEVELS									
BATTLE	ECHELON ATTACKER		UNIT SIZE	PLANNED		SUCCESS			
	FED	CON		YES	NO	YES	NO	N/A	
12. Prairie Grove, AR, December 7, 1862		X	Corps	X		X			
14a. Gettysburg, PA, July 1, 1863, Iron Brigade	X		Brigade		X	X			
14b. Gettysburg, PA, July 1, 1863, Pettigrew's Brigade		X	Brigade	X		X			
15a. Chickamauga, GA, September, 19, 1863	X		Division		X			X	
17. Franklin, TN Opdycke's Brigade	X		Brigade		X	X			
TOTAL NON-ARMY ECHELON ATTACKS (5 examples)	3	2	Brig. = 3 Div. = 1 Corps = 1	2	3	4	0	1	

In this area, any analysis is manifestly constricted by the small sample size, but one result is clear, which explanation follows. The numbers for the attacker (Federal or Confederate) or Planned/Unplanned are too close to call at splits of 3-2 and 2-3, respectively; however, the success result is different. Here the result is heavily in favor of successful, at 4-0, with one N/A not included in the total. Even including in the total

the N/A rating of entry 15a, the Federal defensive action at Chickamauga, the success rate for these echelon engagements is four of five, or 80 percent.

Comparing this result at 80 percent to the previous result for army echelon attacks at 18 percent, smaller echelon actions appear to be more successful than larger ones. One straightforward explanation for this is that smaller unit actions (less than army size) are easier to control once the battle starts. Because the field of battle is smaller for these units, the commander can better observe and control the actions of his unit. Any observation beyond this is less justifiable.

6. *Confederate generals overwhelmingly used the echelon attack.* Table 5 indicates that Confederates used this tactic in 12 battles over the Federals four, a three-to-one ratio favoring the South. Table 5, however, covers battles fought at all command levels. Table 6 tells a different story: at the army level, Confederate generals chose and planned this tactic ten-to-one over the Federals. In fact, in the one battle which illustrates the Federal choice at the army level, Antietam, the echelon attack existed only by extension, was executed poorly, and not well-led.

However, there appears to be no indication why Confederate generals overwhelmingly favored this tactic.

## **SUMMARY AND CONCLUSION**

This paper covered the echelon attack starting with the source of the word and its definitions, its instruction in the works of Jomini and Halleck, and commentary from different authors. It then discussed General Robert E. Lee's choice of an echelon attack of July 2, 1863 utilizing commentary, both pro and con, on his choice. It then presented

its use in a selection of 17 battles from its first recorded use through the ACW, including Gettysburg. An analysis of the 16 examples from 13 ACW battles looked at the success rates of the echelon before, during, and after Gettysburg. Conclusions derived from these discussions follow:

1. The English word “echelon” is both a formation and a tactic, and its recorded history as a tactic reaches back to antiquity. It is also called a progressive attack and has an analog in the oblique attack. The Swiss General Antoine Henri Jomini and Lieutenant Henry Halleck both offered similar descriptions of the echelon accompanied with high praise for its virtues. These works influenced the generation of generals who fought in the ACW and included the 12 orders of battle relevant to conclusion 3 below.

2. Recorded historical examples of the echelon attack start in 371 B.C. in ancient Greece and continue up to the ACW. The record of ACW echelon attacks prior to Gettysburg, as outlined in this paper, shows that it was almost exclusively a Confederate phenomenon and that it was generally unsuccessful at the army level, which agrees with Boatner and E. P. Alexander. The record shows that during battle, both sides were beset with communication problems, traffic jams, wrong directions, and so forth, but when attempting a relatively complicated offensive maneuver such as an echelon attack, these problems were magnified. Often the commander grew tired of the delays and ordered a general (simultaneous) attack along the entire line. The record after Gettysburg is not better, but the sample size is small.

Per the analysis done in this paper, the overall record is not good. The echelon was not used that often, around 25 percent of large battles, and was only about 18 percent successful at the army level. The amount of data is too small for any definite

determination, but the echelon seemed to be more successful when used by smaller units, such as corps, divisions, or brigades.

3. All of this bears on Lee's choice on July 2. Analysis of the 12 orders of battle of Jomini/Halleck eliminates impractical tactics and reduces Lee's choices to two: parallel and angular. Based on the topography and Federal line, a parallel attack like Jackson's at Chancellorsville was not feasible; thus, Lee chose the angular.

Further, Lee was painfully aware of previous failures with the echelon attack in his own command as only one such attack was successful, Gaines' Mill, although at a high cost. His other three echelon attacks of the Seven Days campaign, Mechanicsville, Frayser's Farm, and Malvern Hill, either failed or collapsed before starting. Although successful against the AOP as McClellan continued his retreat to the James River after each battle, systemic problems of communication and coordination plagued the ANV regardless of which tactic it chose. In addition, if Lee was aware of any battle reports from the West, he would have known that the echelon had problems there too.

This was thus not an easy choice for Lee, and he studied it carefully based on experience, training, and the conditions as he saw them. He chose first an oblique attack along the Emmitsburg Road to hit at an angle the end of the Federal line, which he believed to be in the air. However, based the appearance of the Federal III Corps by the Peach Orchard, he modified it to an echelon attack, resulting in a staggered, angular assault. Lee thought that this tactic would win him the battle, and given the correct artillery support and timing, he had no reason to doubt that it would succeed. Hindsight might conclude that it was a bad choice because it failed, but it was reasonable based on the conditions and options.

4. There is a caution here for historians writing about Lee's choice, and that is to present the echelon attack as a tactic with a spotty and costly record. It is one thing to cite its success at Gaines' Mill to support his choice, as do Bowden and Ward above, but unless one includes that battle's high casualty count and the other attacks that failed and why, the argument that it had been used successfully is incomplete. In addition, echelon attacks in the West prior to Gettysburg, that is, Perryville, Prairie Grove, and Stones River, fared slightly better, with two of three successful, but the Confederate force in each suffered from many of the same deficiencies in directions, movement, communication, command, and control that plagued the ANV. Therefore, the record of the echelon attack at best was inconsistent, and even its successes suffered from command and control problems that should have been known, understood, and corrected by Lee on July 2.

One final question remains: If the Legacy Echelon Attacks went so well, why did ACW generals have so much trouble with this tactic? Contrary to one's expectation of technical progress, communication is not the answer. Battlefield communications available to an ACW general were the same as those available to Alexander the Great: flags, drums, bugles, mounted and running couriers, and finally, simply yelling commands, so the 1860s offer no advantage here. Plausible reasons include, but are not limited to:

1. Armies of the past trained and fought together longer than the ANV, and this reduced the elements of error.
2. Legacy battles might have been fought on terrain more suitable for echelon maneuvers.

3. Weapons and equipment in legacy battles were of shorter range than in ACW battles. This reduced the size of the battlefield and allowed for more personal control: Epameinodas and Alexander in the 4<sup>th</sup> century B. C. did not have to deal with observers with binoculars or artillery that could fire hundreds of yards.

In summary, the echelon attack existed for about 2,200 years before the Battle of Gettysburg. By that time, it had enjoyed considerable acclaim from prominent military writers and was well-known among formally trained generals during the American conflict. Although it appears to have a decent record in antiquity, its record in the ACW was inconsistent; nonetheless, it remained viable enough for Robert E. Lee to choose an echelon attack for his July 2 offensive to destroy the Federal line. His choice of an echelon attack on July 2 was reasonable based on his tactical situation and the options open to him. Historians, however, should be more aware of the dismal record of the echelon attack during the ACW in describing Lee's choice.

Remember that the next day General Lee chose a simultaneous attack and Pickett's Charge did no better.

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Much 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. However, they do appear for quotes and for the more obscure items herein.

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<sup>37</sup> Showalter, Dennis, *Frederick the Great: A Military History*, Yorkshire, England: Frontline Books, 2012, Chapter 4—Prussia Ascendant (no page numbers), Google Books web site, accessed September 1, 2016, <https://books.google.com/books?id=WvpiFTmWnaQC&pg=PT127&dq=leuthen+battle+showalter&hl=en&sa=X&ved=0ahUKEwiXibeklvbOAhXIPiYKH9ZBIQQ6AEIJDAB#v=onepage&q=leuthen%20battle%20showalter&f=false>, search on “Leuthen battle Showalter”.

<sup>38</sup> *Ibid.*, Chapter 4 (no page numbers).

<sup>39</sup> *Ibid.*, Chapter 4 (no page numbers).

<sup>40</sup> Boatner, *op. cit.*, p. 272.

<sup>41</sup> *Ibid.*, pp. 272-3.

<sup>42</sup> Freeman, Douglas S., *R. E. Lee: A Biography*, 4 volumes, Vol. 2, New York: Charles Scribner's Sons, 1934, p. 110.

<sup>43</sup> *Ibid.*, pp. 111-2.

<sup>44</sup> *Ibid.*, p. 114.

<sup>45</sup> Longstreet, James, *From Manassas to Appomattox, Memoirs of the Civil War in America*, New York: Konecky and Konecky, 1992, p. 121.

<sup>46</sup> Boatner, *op. cit.*, p. 541.

<sup>47</sup> Freeman, Douglas S., *Lee's Lieutenants*, 3 volumes, Vol. 1, New York: Scribner, 1972, renewal of original copyright, 1944, pp. 514-5.

<sup>48</sup> *Ibid.*, pp. 515-6.

<sup>49</sup> *Ibid.*, pp. 517-23.

<sup>50</sup> *Ibid.*, pp. 523-5.

<sup>51</sup> *Ibid.*, p. 527.

<sup>52</sup> *Ibid.*, p. 536.

<sup>53</sup> *Ibid.*, p. 530-1.

<sup>54</sup> Longstreet, *op. cit.*, p. 536.

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<sup>55</sup> Hattaway, Herman, and Jones, Arthur, *How the North Won: A Military History of the Civil War*, Urbana, Illinois: University of Illinois Press, 1983, 1991, p. 197.

<sup>56</sup> Freeman, *Lieutenants, Vol. 1, op. cit.*, p. 587.

<sup>57</sup> *Ibid.*, p. 593.

<sup>58</sup> *Ibid.*, p. 592.

<sup>59</sup> “Robert E. Lee’s Report on the Seven Days’ Battles,” March 6, 1863, Civil War Trust web site, accessed September 1, 2016, Battle of Malvern Hill section, <http://www.civilwar.org/education/history/primarysources/lees-report-seven-days-from-official-records.html>

<sup>60</sup> Freeman, *Lieutenants, Vol. 1, op. cit.*, pp. 596-8.

<sup>61</sup> *Ibid.*, pp. 599-602.

<sup>62</sup> “Robert E. Lee’s Report on the Seven Days’ Battles,” *op. cit.*

<sup>63</sup> Freeman, *Lieutenants, Vol. 1, op. cit.*, p. 602.

<sup>64</sup> Keegan, John, *The American Civil War, A Military History*, New York: Alfred A. Knopf, 2009, p. 166.

<sup>65</sup> Noe, Kenneth W., *Perryville, The Grand Havoc of Battle*, Lexington, Kentucky: The University Press of Kentucky, 2001, p. 172, Google Books web site, accessed September 1, 2016, [https://books.google.com/books?id=fGikwlZIEPwC&pg=PA216&dq=perryville+echelon&hl=en&sa=X&ved=0ahUKEwi53\\_TWmVbOAhXFkx4KHVBIA2gQ6AEIMTAA#v=onepage&q=perryville%20echelon&f=false](https://books.google.com/books?id=fGikwlZIEPwC&pg=PA216&dq=perryville+echelon&hl=en&sa=X&ved=0ahUKEwi53_TWmVbOAhXFkx4KHVBIA2gQ6AEIMTAA#v=onepage&q=perryville%20echelon&f=false), search on “Perryville echelon”.

<sup>66</sup> Cameron, Dr. Robert S., *Staff Ride Handbook for the Battle of Perryville, 8 October 1862*, Fort Leavenworth, Kansas: Combat Studies Institute Press, pp. 160-1, Google Books web site, accessed September 1, 2016, <https://books.google.com/books?id=vAI3hnlInR8C&pg=PA161&dq=perryville+echelon&hl=en&sa=X&ved=0ahUKEwiyj8i-3fnOAhVIViYKHR73CUMQ6AEIODAD#v=onepage&q=perryville%20echelon&f=false>, search on “Perryville echelon”.

<sup>67</sup> Boatner, *op. cit.*, pp. 643-4.

<sup>68</sup> *Ibid.*, pp. 666-7.

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<sup>69</sup> Report of Colonel Dandridge McRae's Brigade at the Battle of Prairie Grove (labeled as "Shaver's Report on Prairie Grove"), December 9, 1862, from New York Historical Society, The Arkansas in the Civil War Message Board web site, accessed September 1, 2016,

[https://www.google.com/search?espv=2&q=prairie+grove+dandridge+echelon&spell=1&sa=X&ved=0ahUKEwj08KU3\\_nOAhWBQSYKHfKfAAkQvwUIGygA&biw=851&bih=893](https://www.google.com/search?espv=2&q=prairie+grove+dandridge+echelon&spell=1&sa=X&ved=0ahUKEwj08KU3_nOAhWBQSYKHfKfAAkQvwUIGygA&biw=851&bih=893), search on "Prairie Grove Dandridge echelon".

<sup>70</sup> "Shaver's Report on Prairie Grove", December 16, 1862, The Arkansas in the Civil War Message Board web site, accessed September 1, 2016,

[http://www.history-sites.com/cgi-bin/bbs62x/arcwmb/webbbs\\_config.pl?md=read;id=26769](http://www.history-sites.com/cgi-bin/bbs62x/arcwmb/webbbs_config.pl?md=read;id=26769), search on "Prairie Grove Dandridge echelon".

<sup>71</sup> Boatner, *op. cit.*, p 667.

<sup>72</sup> *Ibid.*, pp. 803-5.

<sup>73</sup> Kolakowski, Christopher L., *The Stones River and Tullahoma Campaigns: This Army Does Not Retreat*, Charleston, South Carolina: The History Press, 2011, p. 57, Google Books web site, accessed September 1, 2016, after search on "Stones River Arthur Manigault echelon". This site not currently available.

<sup>74</sup> Spruill, Matt, and Spruill, Lee, *Winter Lightning: A Guide to the Battle of Stones River*, Knoxville: The University of Tennessee Press, 2007, p. 90, Google Books web site, accessed September 1, 2016,

[https://books.google.com/books?id=fY\\_INFQIG8C&pg=PA90&lpg=PA90&dq=stone%27s+river+arthur+manigault+echelon&source=bl&ots=p0vJE7VqGs&sig=fhNVWPkD40wgiy5N5yG0EUcnaU&hl=en&sa=X&ved=0ahUKEwj-o\\_XN5\\_nOAhWBWCYKHTs6ADkQ6AEITjAI#v=onepage&q=stone's%20river%20arthur%20manigault%20echelon&f=false](https://books.google.com/books?id=fY_INFQIG8C&pg=PA90&lpg=PA90&dq=stone%27s+river+arthur+manigault+echelon&source=bl&ots=p0vJE7VqGs&sig=fhNVWPkD40wgiy5N5yG0EUcnaU&hl=en&sa=X&ved=0ahUKEwj-o_XN5_nOAhWBWCYKHTs6ADkQ6AEITjAI#v=onepage&q=stone's%20river%20arthur%20manigault%20echelon&f=false), search on "Stones River Arthur Manigault echelon".

<sup>75</sup> Boatner, *op. cit.*, pp. 805-8.

<sup>76</sup> Gottfried, Bradley M., *The Maps of Gettysburg*, New York: Savas Beatie, 2007, pp. 70-1.

<sup>77</sup> *Ibid.*, pp. 72-5.

<sup>78</sup> Coddington, Edwin B., *The Gettysburg Campaign: A Study in Command*, New York: Charles Scribner's Sons, 1968, p. 271.

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<sup>79</sup> Guelzo, *op. cit.*, p. 195.

<sup>80</sup> Gottfried, *op. cit.*, pp. 94-101.

<sup>81</sup> Boatner, *op. cit.*, pp. 149-51.

<sup>82</sup> Woodworth, Stephen E., *Chickamauga: A Battlefield Guide with a Section on Chattanooga.*, Lincoln, Nebraska, The University of Nebraska Press, 1999, p. 22, Google Books web site, accessed September 1, 2016, <https://books.google.com/books?id=py7hV01Vh5wC&pg=PA22&lpg=PA22&dq=chickamauga+john+palmer+echelon&source=bl&ots=arLFxt1yYd&sig=7xxJec1gng8aVv1HN3ieeuMLLIw&hl=en&sa=X&ved=0ahUKEwjsp5bdnPfOAhVDzSYKHx94BgIQ6AEIKzAC#v=onepage&q=chickamauga%20john%20palmer%20echelon&f=false> , search on “Chickamauga John Palmer echelon”.

<sup>83</sup> Mendoza, Alexander, “The Censure of D.H. Hill: Daniel Harvey Hill and the Chickamauga Campaign,” *The Chickamauga Campaign*, Woodworth, Stephen E., editor, *Carbondale*, Illinois: Southern Illinois University Press, 2010, p. 76, Google Books web site, accessed September 1, 2016, <https://books.google.com/books?id=uxJGDr3QFKgC&pg=PA76&dq=chickamauga+echelon&hl=en&sa=X&ved=0ahUKEwiS5f3YnffOAhXBQiYKHc0gCKgQ6AEINzAC#v=onepage&q=chickamauga%20echelon&f=false> , search on “Chickamauga echelon”.

<sup>84</sup> Boatner, *op. cit.*, pp. 152-3.

<sup>85</sup> *Ibid.*, pp. 625-6.

<sup>86</sup> *Ibid.*, p. 626.

<sup>87</sup> *Ibid.*, pp 306-7.

<sup>88</sup> “Colonel Emerson Opdyck’s Report on His Brigade’s Actions at the Battle of Franklin,” Iron Brigadier web site, accessed September 1, 2016, <http://ironbrigadier.com/2014/11/13/colonel-emerson-opdyckes-report-brigades-action-battle-franklin/> , search on “Franklin Opdycke echelon”.

<sup>89</sup> Boatner, *op. cit.*, p. 308.

<sup>90</sup> Griffith, Paddy, *Battle Tactics of the Civil War*, New Haven, Connecticut: Yale University Press, 1989, p. 200.

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