Contents

- 1.0 Overview
- 2.0 Map Notes
- 3.0 Notes on the Forces
- 4.0 Confederate Notes
- 5.0 Union Notes
- 6.0 Chronological Order
- 7.0 Weapon Descriptions
- 8.0 Arrival Schedule
- 9.0 References
- 10.0 Parameter Data
- 11.0 Order of Battle

1.0 Overview

The Battle of Gettysburg began the morning of July 1, 1863 when Henry Heth's Division of A. P. Hill's Corps advanced against John Buford's cavalry division on Herr Ridge. As Buford's two brigades fell back to McPherson's Ridge, they were reinforced by two divisions of the Union I Corps. Maj. Gen. John Reynolds was shot and killed while positioning the the I Corps troops.

Both sides received reinforcements during the early afternoon. On the Union side, XI Corps arrived and took position north of Gettysburg on fairly level ground. About 2:30 that afternoon the Confederates attacked again, with Ewell's Corps advancing from the north. The unexpected arrival of Early's Division on the open right flank of the XI Corps caused it to collapse, and the corps' retreat forced the I Corps to fall back from its positions on McPherson's Ridge. The Union forces were able to rally on Cemetery Hill and Ridge, and there received reinforcements.

On the morning of the second day, Ewell's Corps attacked Culp's Hill while two divisions from Longstreet's Corps marched to the battlefield. That afternoon, after marching and countermarching to avoid detection by Union forces on Little Round Top, the divisions of Hood and McLaws attacked the Union III Corps in its exposed position along the Emmitsburg Road. The V Corps rushed to reinforce the III Corps' positions, but after desperate fighting in the Peach Orchard, the Wheatfield (which changed hands six times) and Devil's Den, the Union line gave way and was barely stabilized along Cemetery Ridge and Little Round Top. The 20th Maine in particular played an important role in preventing the Confederates from taking Little Round Top on the Federals' extreme left flank.

On the other flank, Ewell's Corps attacked late in the afternoon in an attempt to capture Cemetery and Culp's hills, but in fighting that went on into the night failed to make any significant gains.

On the third day Lee formed a plan to attack the center of the Union line using Pickett's Division (his last fresh division) and two other divisions that had seen action on the first day. This attack was preceded by a massive artillery bombardment by most of the available Confederate artillery. The 12,000-man assault began around 3 PM, and culminated in fierce fighting along a stone wall at the point that would later be called "The Angle". A minor penetration of the Union line was achieved, but within a few minutes had been eliminated. The Confederates, having taken over 6,500 casualties, retreated to their original positions. The next day the Confederate Army began its retreat back to Virginia.

The Army of the Potomac had numbered about 82,000 and the Confederate Army some 75,000 men at the battle. Total casualties (killed, wounded, captured and missing) according to one source were 23,001 and 20,448 respectively. The engagement is generally accepted to have been the

turning point of the Civil War.

2.0 Map Notes

Since the map is longer in the North-to-South direction, it is oriented with West-to-East running vertically to take advantage of the dimensions of the typical computer screen.

The elevation data for the map are taken directly from United States Geological Survey data. The result differs from some "classical" maps of the battlefield in several ways. As others have noted, Cemetery Ridge is very modest in terms of elevation change and is not nearly as imposing a defensive line as some maps have portrayed it. Likewise, Seminary Ridge is a gentle slope and in fact terminates farther south where it is replaced by Warfield Ridge.

3.0 Notes on the Forces

The main source for the Order of Battle was Nofi's book "The Gettysburg Campaign". It contains detailed information on the number of infantry and cavalry in each regiment and the number and types of cannons in each artillery battery.

The books "Wargaming in History" by Stevenson and "Pickett's Charge" by Stewart are excellent sources on Civil War tactics at the regimental and brigade level. In particular, Stewart's book contains a detailed account of the moves and turns performed by the Confederates during Pickett's charge. The movements by "left oblique" performed by Pickett's Division during the attack are particularly noteworthy since they dictate the necessity for allowing movement into hexes other than the facing hex. The description on page 184 of Stewart's book and the map on page 185 explain the "sidling" done by Pickett's Division quite well.

As always in the Civil War, infantry and cavalry weapon types are based on sketchy information. A few Union units were equipped with smoothbore muskets. In all other infantry units the predominate weapon was the rifle, with some exceptions such as in sharpshooter units. The Union cavalry was equipped with carbines, while a large number of Confederate cavalry had nothing more than pistols. The book "Regimental Strengths and Losses at Gettysburg" was invaluable for its detailed information concerning weapon types in the Union Army.

Although the Union batteries were quite uniform in content, the Confederates tended to have a mixture of different cannon types in each battery. The type assigned to each Confederate battery in the game is based on its predominant weapon type to avoid having to break the batteries up into sections.

Maj. Gen. Isaac Trimble is not represented in the Order of Battle. Although he was a supernumerary in the Confederate Army and led Pender's Division on the third day, the current version of the game does not support the type of dynamic assignments that would support this role. For similar reasons Brig. Gen. Gouverneur K. Warren, the Union engineer officer who discovered that Little Round Top was undefended and rushed reinforcements to it, is not represented.

4.0 Confederate Notes

The Confederates need to be aggressive on the first day, as it will be the only time they enjoy a numerical superiority. They should attack regardless of which positions the Union forces occupy.

Depending on the outcome of the first day's fighting, the Confederates will probably be limited to flank attacks on the second. There will be little or no chance for a successful frontal attack on the Union line unless on the previous day the Confederates suffered lightly while inflicting severe losses on the Federals.

If the Union forces have not been defeated after two days of fighting, the Confederates will have to be watchful of a potential Union counterattack on the third day.

5.0 Union Notes

The biggest decision the Union side will have to make on the first day is whether to attempt to defend the historical line which included McPherson's Ridge, or to fall back before the inevitable attack of the Confederate II Corps to Cemetery Hill/Ridge and Culp's Hill. Given the weakness of the small Union XI Corps, it will be hard pressed to aid the I Corps in a defense of the historical positions.

Assuming that these heights can be held the first day, the Union forces will be reinforced to the point that they should be able to hold the historical second- and third-day lines. By the third day, if the Confederates opt to attack on the flanks and not charge the middle of the Union line, the Union side may be able to consider an attack of its own.

6.0 Chronological Order

July 1, 186	53
5:00 AM	Heth's Division advances.
8:00 AM	Archer's and Davis' Brigades with Pegram's
	artillery attack Buford on Herr Ridge.
9:00 AM	Union cavalry forced back to McPherson's Ridge.
10:00 AM	Reynolds finds Buford on McPherson's Ridge.
10:30 AM	Wadsworth's 1st Division (I) reaches McPherson's Ridge.
11:00 AM	Reynolds is killed. Howard reaches Gettysburg.
11:30 AM	Rowley's 3rd Division (I) minus Stannard's Brigade reaches Union line on the Fairfield Road.
	Robinson's 2nd Division (I) reaches Union line.
12:00 N	Fighting on McPherson's Ridge stops.
	Schurz arrives at Cemetery Hill.
1:00 PM	Schurz's 3rd Division (XI) reaches Gettysburg.
	Barlow's 1st Division (XI) reaches Gettysburg.
2:00 PM	Lee arrives at scene.
	Union XI Corps completes deployment north of
	Gettysburg.
	Steinwehr's 2nd Division (XI) arrives at Cemetery Hill.
2:30 PM	Confederates attack (Rhodes Division and Hill's Corps).
3:30 PM	Early's Division attacks.
4:00 PM	Union line falls back to Cemetery Hill.
4:30 PM	Confederates take Gettysburg.
	Hancock reaches Cemetery Hill.
5:00 PM	Longstreet joins Lee on Seminary Ridge.
	Stannard's Brigade (3/I)arrives.
5:30 PM	XII Corps without William's Division arrives.
	William's 1st Division (XII) minus Lockwood's
7 00 014	Brigade prepares to attack Benner's Hill.
7:00 PM	Slocum arrives and takes command.
7:30 PM	III Corps minus two brigades arrives.
July 2, 186	63
3:00 AM	Hood's Division minus Law's Brigade resumes march to Gettysburg.
4:30 AM	McLaw's Division resumes march to Gettysburg.
6:00 AM	Il Corps arrives.
8:00 AM	II Corps takes position on Cemetery Ridge.
	Lockwood's Brigade (1/XII) minus one regiment arrives.
	Barnes' and Ayres' Divisions (V) arrive.
9:30 AM	Final two brigades of III Corps under Graham arrive.

12:00 N	Crawford's Division (V) arrives. Law's Brigade rejoins Hood's Division. Longstreet begins flanking march.
2:00 PM	Buford's Divison withdraws.
2:30 PM	VI Corps begins arriving.
4:00 PM	Longstreet attacks with Hood's Division.
4:30 PM	15th Alabama attacks 20th Maine on Little Round Top.
5:30 PM	McLaw's Division begins attack.
6:30 PM	Ewell's Corps attacks Culp's Hill.
July 3, 180	63
4:30 AM	Fighting on Culp's Hill renewed.
11:00 AM	Battle for Culp's Hill ends.
1:00 PM	Confederate artillery bombardment begins.
3:00 PM	Pickett's charge.
	Cavalry fight east of battlefield.
5:30 PM	Kilpatrick attacks Confederate right flank.

7.0 Weapon Descriptions

Code Description

B Sharps .52-caliber Breechloading Rifle.

Only three regiments were armed with this weapon at Gettysburg: the 14th Connecticut, and the 1st and 2nd U.S. Sharpshooters. The Sharps breechloading rifle had a barrel length of 30 or 36 inches and the Sharps disc priming device. The "disc primer" held a column of copper priming caps; when the hammer fell, it pushed a primer cap onto the nipple and fired it. When the hammer was re-cocked, another cap was automatically positioned for the next shot. With its disc primer and breechloading mechanism, the Sharps rifle became a very formidable weapon. It was very reliable under adverse conditions and could fire at a very high rate. Total production for the U.S. Government reached 9500.

C Sharps & Burnside Carbine.

The Union cavalry was armed with carbines, the majority of which were the Sharps .52-caliber and the Burnside.

The Sharps carbine was a breechloader with the Sharps disc priming device. It was a .52-caliber single shot weapon with a 21.25-inch barrel. The trooper would lower the trigger guard, which enabled the breech block to drop, thus opening the chamber to allow the insertion of a linen cartridge. Closing the chamber would cause the end of the cartridge to be cut, exposing the powder. The "disc primer" held a column of copper priming caps; when the hammer fell, it pushed the cap onto the nipple and fired it. When the hammer was re-cocked, another primer cap was automatically positioned for the next shot. The Sharps carbine was very reliable, and over 115,000 were made.

The Burnside carbine, designed by Union major-general Ambrose E. Burnside, was one of the most widely used carbines of the war. It was a .54-caliber, single-shot weapon that used a special brass cartridge of Burnside's invention. The brass case contained a charge of black powder with a hole in the base which was exposed to the flame produced by the percussion cap. The case also provided a seal at the joint between the barrel and breech block, preventing the disagreeable blast of hot gas produced by other carbines. Burnside's carbine was a great success, and more than 55,000 were manufactured.

H 12-pounder Howitzer

The 1841 pattern 12-pounder field howitzer was a smoothbore, muzzle-loading howitzer with a caliber of 4.62 inches. In 1862 it was replaced by the Napoleon in the Union Army, but was retained in the Confederate Army for want of anything better. It could fire a 12-lb. shell effectively to a range of 1072 yards, and a spherical case to a maximum range of 1050 yards.

M Smoothbore Musket

By the middle of the Civil War, the Smoothbore Musket had been replaced almost entirely by the rifled musket. Even though the smoothbore could be loaded faster, it was accurate only out to about 100 yards. Some still even had flintlocks, which made them identical to those used during the War of Independence. Only a dozen regiments at Gettysburg were armed with the smoothbore musket.

N 12-pounder Napoleon

The most common field gun in the arsenal of both sides during the Civil War was the 12-pounder Napoleon. From the Napoleonic Wars to around 1850, artillery batteries had a mixture of cannons, usually half field guns and half howitzers, so as to be able to fire explosive shells and solid shot. The Napoleon was a smoothbore, muzzle-loading fieldpiece with a caliber of 4.62 inches, developed under the auspices of Napoleon III, and designed to provide an alternative to the need for mixed types of artillery in batteries. It could fire solid shot against masses of troops 600 to 2,000 yards away, and spherical case shot was used at ranges of 500 to 1,500 yards. A 12-lb. shell could be fired from 300 to 1,500 yards, but was less effective at the lower end of its range. Canister, which emitted a "spray" of golf-ball size projectiles, could be fired effectively vs massed enemy troops at 500 yards or less. The Napoleon's higher rate of fire complemented the rifled field gun's greater accuracy at long range.

P Pistol

The Colt Army Model 1860 was the most widely used revolver of the War. It was a streamlined .44-caliber, single-action weapon. Between 1861 and 1863 over 107,000 revolvers were furnished to the War Department of the United States. In November of 1861, Remington won a contract and began furnishing the Remington New Model Army .44 Revolver.

The Colt 1851 Navy Revolver, also called the Old Model Belt Pistol, was the best known of the Colt revolvers. It was a .36-caliber, single-action piece with an octagonal barrel 7.5 inches long, and weighed only two pounds, ten ounces. It remained more popular in the South and was the prototype of practically all confederate-made revolvers. Over 200,000 were used during the war.

The Starr Army Percussion Revolver was the third most popular revolver of the war. It was a .44-caliber, six-shot, double-action weapon. (Double-action meant that when the trigger was squeezed the hammer rose and fell while the cylinder rotated simultaneously, as opposed to single-action which required that the hammer be cocked manually before the trigger could be pulled.) The Starr weighed almost 3 pounds and was 12 inches long. It fired a self-consuming, combustible cartridge, and could also be loaded with loose powder and ball. Over 50,000 were furnished during the war.

The Confederacy had no standard pistol per se, but captured Colts and Colt copies made in the South were the revolvers its men used most commonly. In addition, it acquired several types of Europeans revolvers, the

most popular being the Adams .49-caliber Dragoon, the Tranter .44 revolver, the Lefaucheux 11-mm pinfire revolver, and the Le Mat. Almost all Confederate-made revolvers were imitations of the .36-caliber Colt 1851 Navy, of which less then 12,000 were made.

R Rifle

Although a great variety of small arms saw use during the war, the principal weapon on both sides was the .58-caliber Springfield Rifle Musket. The North supplemented it arsenal as well with the .577-caliber Enfield 1853-Pattern Rifle Musket. Over 3,500,000 rifles were purchased by the North and South.

The .58-caliber Springfield rifle musket had a barrel 40 inches long and an automatic priming device called the Maynard Tape Primer System. The latter worked like a child's roll-cap pistol, with a paper tape containing fulminate patches that were fed over the nipple by the action of the hammer. The only problem with the system was that if the paper became damp it often failed to work. The rifle fired a minie ball - a lead bullet that expanded to fit the rifling so the bullet would spin.

S Repeating Rifle or Carbine

The Spencer Repeating Carbine fired a .52-caliber copper rimfire bullet. Because the bullet contained its own primer encased in copper, it was much more reliable than ignition systems that required primer caps or tapes. The magazine could hold seven rounds, and was loaded through the center of the buttstock. Ten magazines could be carried in a special box, giving the soldier seventy rounds of readily available ammunition. The carbine had a total length of 39 inches and weighed 8.25 pounds. Because the bullet contained only 45 grains of black powder, the gun lacked range and muzzle power. None of the units at Gettysburg were equipped with the Spencer Repeater.

T Rifled Cannon

The majority of rifled cannons in Civil War artillery batteries comprised the 10-pounder Parrott Gun and the 3-inch Ordnance Rifle. The main function of these guns was to fire at the enemy beyond the shorter range of the howitzers.

The 10-pounder Parrott was a muzzle-loading, rifled gun with a bore of 2.9 inches. It resembled the Napoleon in appearance, save for its black barrel with tell-tell heavy iron reinforcing bands around the breech. Despite its reinforced breech, the Parrott developed a reputation for bursting just ahead of the breech-bands after lengthy use. Its 2,000-yard range made it useful for counter-battery fire. Although the Parrott was rifled, it could still fire canister at charging infantry.

The 3-inch Ordnance Rifle was made of heavy wrought iron, and had a better reputation for dependability than the Parrott. A disadvantage of the Ordnance Rifle was its weight, which made it more difficult to move in soft ground or bad weather.

W 12-pounder Whitworth

The 12-pounder Whitworth was an English breechloading, rifled cannon. The

bore was hexagonal in cross-section, and the projectile was a long bolt with twisting surfaces that conformed to the rifling. It had a caliber of 2.75 inches. Although an explosive shell was made for it, the shape of the projectile did not permit a sufficient amount of powder to make it effective. Therefore, solid shot was the principal ammunition. At an elevation of 5 degrees it had a range of 2,800 yards, and at 35 degrees its maximum range was 10,000 yards. Very few of these guns were used by either side, though the South used them more than the North.

8.0 Arrival Schedule

Each arrival is assigned an entry hex, and an arrival date and time. In addition, each is assigned a protected distance value which is shown in the column entitled **Prot** in the schedules; see 8.1 Arrival Schedule (First Day) and 8.2 Arrival Schedule (Second and Third Days). If this value is other than zero, it indicates that the arrival is "protected". In a protected arrival, the appearance of friendly units in the arrival hex automatically causes all enemy units in that hex to be eliminated and all enemy units within the given number of hexes (i.e., the protected distance) of that hex to become routed. The purpose of this rule is to prevent "crowding" of the arrival hex by enemy units trying to take advantage of the limited movement capabilities near the map edge. A protected distance value of zero means that it is possible for enemy units to prevent the arrival of friendly units by occupying their arrival hex.

The name of the first unit in each arrival group is given in the 8.1 and 8.2 schedules. An arrival group comprising more than one unit is indicated by three dots (...).

8.1 Arrival Schedule (First Day)

```
Side Hex Prot Name
Date
                                         Crenshaw Va Btty, ...
08:00 07/01/1863Rebel (85,0)
                                      0
08:20 07/01/1863Rebel (85,0)
                                      0
                                         Maj. Gen. Henry Heth
08:20 07/01/1863Rebel (85,0)
                                         Brig. Gen. J. J. Pettigrew, ...
                                      5
08:20 07/01/1863Rebel (85,0)
                                         Col. J. M. Brockenbrough, ...
                                      0
09:00 07/01/1863Rebel (85,0)
                                         Donaldsonville La, ...
                                      0
09:00 07/01/1863Rebel (85,0)
                                         Supply Wagon
09:40 07/01/1863Union (0,20)
                                      0
                                         Brig. Gen. J. C. Robinson
                                      5
                                         Brig. Gen. Gabriel Paul, ...
09:40 07/01/1863Union (0,20)
                                      5
09:40 07/01/1863Union (0,20)
                                         Brig. Gen. Henry Baxter, ...
10:00 07/01/1863Rebel (85,0)
                                      0
                                        Lt. Gen. Ambrose P. Hill
10:00 07/01/1863Union (0,20)
                                      0
                                         5th Btty (E) Maine Lt, ...
10:00 07/01/1863Union (0.20)
                                      0
                                         Supply Wagon
10:00 07/01/1863Union (0,20)
                                      0
                                         Maj. Gen. Oliver O. Howard
10:40 07/01/1863Union (0,20)
                                      0
                                         Brig. Gen. Francis Barlow
10:40 07/01/1863Union (0,20)
                                      5
                                         Col. Leopold von Gilsa, ...
                                      5
10:40 07/01/1863Union (0,20)
                                         Brig. Gen. Adelbert Ames, ...
                                      0
11:00 07/01/1863Rebel (85,0)
                                         Maj. Gen. William D. Pender
                                      5
11:00 07/01/1863Rebel (85.0)
                                         Brig. Gen. James Lane, ...
                                      5
11:00 07/01/1863Rebel (85,0)
                                         Brig. Gen. Edward Thomas, ...
                                      0
11:00 07/01/1863Union (44,0)
                                         Maj. Gen. Abner Doubleday
11:00 07/01/1863Union (44.0)
                                      5
                                         Brig. Gen. Thomas Rowley, ...
                                      5
11:00 07/01/1863Union (44,0)
                                         Col. Roy Stone, ...
                                      0
11:00 07/01/1863Union (44,0)
                                         Supply Wagon
11:00 07/01/1863Union (0,20)
                                      0
                                         Supply Wagon
11:00 07/01/1863Union (0,45)
                                      0
                                         Mai. Gen. Carl Schurz
                                      5
11:00 07/01/1863Union (0,45)
                                         Brig. Gen. Schimmelfennig, ...
                                      5
11:00 07/01/1863Union (0,45)
                                         Col. Wladimir Krzyzanowski, ...
                                      0
11:00 07/01/1863Union (0,45)
                                         Supply Wagon
                                      0
                                         Btty I, 1st New York Lt, ...
11:00 07/01/1863Union (0,20)
                                      5
11:20 07/01/1863Rebel (85,0)
                                         Col. Abner Perrin, ...
                                      5
                                         Brig. Gen. Alfred M. Scales, ...
11:20 07/01/1863Rebel (85,0)
                                      0
11:20 07/01/1863Rebel (85,0)
                                         Danville Virginia, ...
11:20 07/01/1863Rebel (85,0)
                                      0
                                         Supply Wagon
12:00 07/01/1863Union (0,45)
                                      0
                                         Brig. Gen. Adolph von Steinwehr
                                      5
12:00 07/01/1863Union (0,45)
                                         Col. Charles Coster, ...
                                      5
12:00 07/01/1863Union (0,45)
                                         Col. Orland Smith, ...
12:20 07/01/1863Union (0,45)
                                      0
                                         13th Btty, New York Lt, ...
12:20 07/01/1863Union (0,45)
                                      0
                                         Supply Wagon
                                      0
                                         Maj. Gen. Robert E. Rodes
12:40 07/01/1863Rebel (89,28)
12:40 07/01/1863Rebel (89,28)
                                      5
                                         Brig. Gen. Junius Daniel, ...
                                      5
13:00 07/01/1863Rebel (89,28)
                                         Brig. Gen. Alfred Iverson, ...
13:00 07/01/1863Rebel (89,28)
                                         Brig. Gen. Stephen Ramseur, ...
```

```
13:20 07/01/1863Rebel (89.40)
                                         Brig. Gen. George Doles, ...
                                      5 Col. Edward A. O'Neal, ...
13:20 07/01/1863Rebel (89,40)
13:20 07/01/1863Rebel (89,40)
                                      0 leff Davis Alabama, ...
13:20 07/01/1863Rebel (89,40)
                                      0 Supply Wagon
13:40 07/01/1863Rebel (85,0)
                                      0 Gen. Robert E. Lee
13:40 07/01/1863Rebel (89,58)
                                      0 Lt. Gen. Richard S. Ewell
13:40 07/01/1863Rebel (89,58)
                                      0
                                        Maj. Gen. Jubal A. Early
13:40 07/01/1863Rebel (89,58)
                                      5
                                         Col. Isaac Avery, ...
                                      5
13:40 07/01/1863Rebel (89,58)
                                         Brig. Gen. Harry T. Hays, ...
                                      5
14:00 07/01/1863Rebel (89.58)
                                         1st Marvland Bn
                                      5
                                         Brig. Gen. John B. Gordon, ...
14:00 07/01/1863Rebel (89,58)
                                      5
14:00 07/01/1863Rebel (89,58)
                                         Brig. Gen. William Smith, ...
14:00 07/01/1863Union (0,20)
                                      5
                                         41st New York
                                      0
                                         Charlottesville Va, ...
14:20 07/01/1863Rebel (89,58)
                                      0
14:20 07/01/1863Rebel (89,58)
                                         Supply Wagon
14:40 07/01/1863Union (0,20)
                                      5
                                         7th Indiana
                                      5
                                         Brig. Gen. Albert J. Jenkins, ...
14:40 07/01/1863Rebel (89,58)
                                      0
15:00 07/01/1863Rebel (85,0)
                                         Lt. Gen. James Longstreet
15:00 07/01/1863Union (0.20)
                                      5
                                         Brig. Gen. George Stannard, ...
                                         Maj. Gen. R. H. Anderson
15:20 07/01/1863Rebel (85,0)
                                      0
                                      5
15:20 07/01/1863Rebel (85,0)
                                         Brig. Gen. Cadmus Wilcox, ...
                                      5
15:40 07/01/1863Rebel (85,0)
                                         Col. David Lang, ...
15:40 07/01/1863Union (0,45)
                                      0
                                         Maj. Gen. Winfield Scott Hancock
                                         Bria. Gen. A. R. Wright, ...
                                      5
16:00 07/01/1863Rebel (85,0)
                                      5
16:00 07/01/1863Rebel (85,0)
                                         Brig. Gen. William Mahone, ...
                                      5
16:20 07/01/1863Rebel (85,0)
                                         Brig. Gen. Carnot Posey, ...
16:20 07/01/1863Rebel (85,0)
                                      0
                                         Company A, ...
16:20 07/01/1863Rebel (85.0)
                                      0
                                         Supply Wagon
                                      0
                                         Brig. Gen. Alpheus S. Williams
16:20 07/01/1863Union (18,69)
                                      5
                                         Col. Archibald McDougall, ...
16:20 07/01/1863Union (18,69)
                                      5
16:20 07/01/1863Union (18,69)
                                         Brig. Gen. Thomas Rugar, ...
16:40 07/01/1863Union (18,69)
                                      0
                                         Brig. Gen. John W. Geary
                                      5
16:40 07/01/1863Union (18,69)
                                         Col. Charles Candy, ...
                                      5
16:40 07/01/1863Union (18.69)
                                         Col. George Cobham, Jr., ...
                                      5
16:40 07/01/1863Union (18,69)
                                         Brig. Gen. George Greene, ...
17:00 07/01/1863Union (18,69)
                                      0
                                         Btty M, 1st NY Lt, ...
17:00 07/01/1863Union (18,69)
                                      0
                                         Supply Wagon, ...
                                         Maj. Gen. David B. Birney
17:20 07/01/1863Union (0,20)
                                      0
                                      5
                                         Brig. Gen. Charles Graham, ...
17:20 07/01/1863Union (0,20)
                                      5
17:20 07/01/1863Union (0,20)
                                         Brig. Gen. J. H. Ward, ...
                                         Maj. Gen. Henry W. Slocum
17:20 07/01/1863Union (18,69)
                                      0
17:40 07/01/1863Union (0,20)
                                      0
                                         Btty B, 2nd New Jersey, ...
                                         Supply Wagon
17:40 07/01/1863Union (0.20)
                                      0
                                         Maj. Gen. Edward Johnson
18:20 07/01/1863Rebel (85,0)
                                      0
                                      5
18:20 07/01/1863Rebel (85,0)
                                         Brig. Gen. Geo. H. Steuart, ...
18:20 07/01/1863Rebel (85,0)
                                      5
                                         Col. J. M. Williams, ...
```

18:40 07/01/1863Rebel (85,0)
18:40 07/01/1863Rebel (85,0)
19:00 07/01/1863Rebel (85,0)
19:00 07/01/1863Rebel (85,0)
19:00 07/01/1863Union(0,20)
19:20 07/01/1863Rebel (85,0)
19:20 07/01/1863Rebel (85,0)
20:00 07/01/1863Union (0,20)
20:00 07/01/1863Union (0,20)
20:00 07/01/1863Union(0,20)
20:00 07/01/1863Union (0,20)
23:00 07/01/1863Union (0,20)

5 Brig. Gen. James Walker, ...
5 Brig. Gen. John Jones, ...
0 1st Maryland Btty, ...
0 Supply Wagon
0 Maj. Gen. Daniel Sickles
0 Amherst Virginia, ...
0 2nd Richmond Howitzers, ...
0 Brig. Gen. Andrew A. Humphreys
5 Brig. Gen. Joseph Carr, ...
5 Col. William Brewster, ...

0 Maj. Gen. George G. Meade

0 Supply Wagon

8.2 Arrival Schedule (Second and Third Days)

```
Side Hex Prot Name
Date
04:00 07/02/1863Rebel (85,0)
                                         Maj. Gen. John B. Hood
                                      0
                                      5
04:00 07/02/1863Rebel (85,0)
                                         Brig. Gen. Jerome B. Robertson, ...
04:00 07/02/1863Rebel (85,0)
                                         Brig. Gen. George Anderson, ...
                                      5
04:00 07/02/1863Rebel (85,0)
                                         Brig. Gen. Henry Benning, ...
                                      0
04:40 07/02/1863Rebel (85,0)
                                         German S Carolina, ...
                                      0
04:40 07/02/1863Rebel (85,0)
                                         Supply Wagon
05:00 07/02/1863Union (0,45)
                                      0
                                         Brig. Gen. John Caldwell
05:00 07/02/1863Union (0,45)
                                      5
                                         Col. Edward Cross, ...
                                      5
05:00 07/02/1863Union (0,45)
                                         Col. Patrick Kelly, ...
                                      5
05:00 07/02/1863Union (0,45)
                                         Brig. Gen. Samuel Zook, ...
                                      5
05:00 07/02/1863Union (0,45)
                                         Col. John Brooke, ...
                                         Supply Wagon
                                      0
05:00 07/02/1863Union (0.45)
                                         Brig. Gen. Alexander Hays
05:20 07/02/1863Union (0,45)
                                      0
05:20 07/02/1863Union (0,45)
                                      5
                                         Col. Samuel S. Carroll, ...
                                      5
05:20 07/02/1863Union (0,45)
                                         Col. Thomas Smyth, ...
                                      5
                                         Col. George Willard, ...
05:20 07/02/1863Union (0,45)
                                      0
                                         Maj. Gen. Lafayette McLaws
05:40 07/02/1863Rebel (85,0)
                                      5
05:40 07/02/1863Rebel (85.0)
                                         Brig. Gen. Jos. B. Kershaw, ...
                                      5
                                         Brig. Gen. Paul I. Semmes, ...
05:40 07/02/1863Rebel (85,0)
                                      5
05:40 07/02/1863Rebel (85,0)
                                         Brig. Gen. William Barksdale, ...
05:40 07/02/1863Union (0.45)
                                      0
                                         Brig. Gen. John Gibbon
                                      5
05:40 07/02/1863Union (0,45)
                                         Brig. Gen. William Harrow, ...
                                      5
05:40 07/02/1863Union (0,45)
                                         Brig. Gen. Alexander Webb, ...
                                      5
05:40 07/02/1863Union (0,45)
                                         Col. Norman Hall, ...
06:00 07/02/1863Rebel (85,0)
                                      5
                                         Brig. Gen. William T. Wofford, ...
06:00 07/02/1863Rebel (85,0)
                                      0
                                         Btty A, 1st N Carolina, ...
                                      0
06:00 07/02/1863Rebel (85,0)
                                         Supply Wagon
                                      0
                                         Btty B, 1st/14th NY Lt, ...
06:00 07/02/1863Union (0,45)
                                      0
                                         Supply Wagon, ...
06:00 07/02/1863Union (0,45)
06:20 07/02/1863Union (0,45)
                                      0
                                         Btty H, 1st U.S., ...
06:20 07/02/1863Union (0,45)
                                      0
                                         2nd Btty, Conn Lt, ...
06:20 07/02/1863Union (0,45)
                                      0
                                         1st Btty, NH Lt, ...
06:20 07/02/1863Union (0,45)
                                      0
                                         6th Btty (F), Maine Lt, ...
                                      5
07:00 07/02/1863Union (18,69)
                                         Brig. Gen. Henry Lockwood, ...
07:20 07/02/1863Rebel (85,0)
                                      0
                                         Ashland Virginia, ...
07:40 07/02/1863Rebel (85,0)
                                      0
                                         1st Company, ...
07:40 07/02/1863Union (18,69)
                                      0
                                         Maj. Gen. George Sykes
07:40 07/02/1863Union (18,69)
                                      0
                                         Brig. Gen. James Barnes
07:40 07/02/1863Union (18,69)
                                      5
                                         Col. William Tilton, ...
07:40 07/02/1863Union (18,69)
                                      5
                                         Col. Jacob Sweitzer, ...
                                      5
07:40 07/02/1863Union (18,69)
                                         Col. Strong Vincent, ...
07:40 07/02/1863Union (0,45)
                                         Brig. Gen. Charles Graham
```

```
07:40 07/02/1863Union (0.45)
                                         Col. P. R. de Trobriand. ...
07:40 07/02/1863Union (0,45)
                                         Col. George Burling, ...
                                      5
07:40 07/02/1863Union (0,45)
                                         4th New York, ...
08:00 07/02/1863Union (18,69)
                                      0
                                         Brig. Gen. Romeyn B. Ayres
                                      5
08:00 07/02/1863Union (18,69)
                                         Col. Hannibal Day, ...
                                      5
                                         Col. Sidney Burbank, ...
08:00 07/02/1863Union (18,69)
08:00 07/02/1863Union (18,69)
                                      5
                                         Brig. Gen. Stephen Weed, ...
08:20 07/02/1863Union (18,69)
                                      0
                                         3rd Btty (C), Mass Lt, ...
08:20 07/02/1863Union (18,69)
                                      0
                                         Supply Wagon, ...
08:40 07/02/1863Union (0.45)
                                      0
                                         5th Btty (E), Mass Lt, ...
                                      0
11:00 07/02/1863Union (18,69)
                                         Brig. Gen. Samuel Crawford
11:00 07/02/1863Union (18,69)
                                      5
                                         Col. William McCandless, ...
11:00 07/02/1863Union (18,69)
                                      5
                                         Col. Joseph Fisher, ...
                                      5
                                         Supply Wagon
11:00 07/02/1863Union (18,69)
                                      0
11:40 07/02/1863Rebel (89,58)
                                         Maj. Gen. J.E.B. Stuart
11:40 07/02/1863Rebel (89,58)
                                      5
                                         Brig. Gen. Wade Hampton, ...
                                      5
11:40 07/02/1863Rebel (89,58)
                                         Brig. Gen. Fitzhugh Lee, ...
                                      5
                                         34th Virginia Bn, ...
11:40 07/02/1863Rebel (89,58)
12:00 07/02/1863Rebel (89.58)
                                      5
                                         Col. John R. Chambliss, Jr., ...
12:00 07/02/1863Rebel (89,58)
                                      0
                                         Breathed's Va Btty, ...
                                      5
                                         Brig. Gen. Evander M. Law, ...
12:00 07/02/1863Rebel (85,0)
15:20 07/02/1863Union (18,69)
                                      0
                                         Maj. Gen. John Sedgwick
15:20 07/02/1863Union (18,69)
                                      0
                                         Brig. Gen. Horatio Wright
                                      5
15:20 07/02/1863Union (18,69)
                                         Brig. Gen. Alfred Torbert, ...
                                      5
15:20 07/02/1863Union (18,69)
                                         Brig. Gen. Joseph Bartlett, ...
                                      5
15:20 07/02/1863Union (18,69)
                                         Brig. Gen. David Russell, ...
15:40 07/02/1863Union (18,69)
                                      0
                                         Brig. Gen. Albion Howe
                                      5
                                         Col. Lewis Grant, ...
15:40 07/02/1863Union (18.69)
                                      5
15:40 07/02/1863Union (18,69)
                                         Brig. Gen. Thomas Neill, ...
16:00 07/02/1863Union (18,69)
                                      0
                                         Maj. Gen. John Newton
16:00 07/02/1863Union (18,69)
                                      5
                                         Brig. Gen. Alexander Shaler, ...
                                      5
16:00 07/02/1863Union (18,69)
                                         Col. Henry Eustis, ...
                                      5
16:00 07/02/1863Union (18,69)
                                         Brig. Gen. Frank Wheaton, ...
                                      0
                                         1st Btty (A), Mass Lt, ...
16:20 07/02/1863Union (18.69)
16:20 07/02/1863Union (18,69)
                                      0
                                         Supply Wagon, ...
16:40 07/02/1863Rebel (85,0)
                                      0
                                         Maj. Gen. George E. Pickett
16:40 07/02/1863Rebel (85,0)
                                      5
                                         Brig. Gen. Richard B. Garnett, ...
                                      5
16:40 07/02/1863Rebel (85,0)
                                         Brig. Gen. James L. Kemper, ...
                                      5
16:40 07/02/1863Rebel (85,0)
                                         Brig. Gen. Lewis A. Armistead, ...
16:40 07/02/1863Rebel (85,0)
                                      0
                                         Fauguier Virginia, ...
16:40 07/02/1863Rebel (85,0)
                                      0
                                         Supply Wagon
16:40 07/02/1863Union (0,45)
                                      0
                                        9th Michigan Btty, ...
18:00 07/02/1863Rebel (85.0)
                                      0
                                         Albemarle Virginia. ...
                                      5
06:00 07/03/1863Rebel (85,0)
                                         11th Mississippi
                                      5
06:20 07/03/1863Union (18,69)
                                         1st Md (Eastern Shore)
13:20 07/03/1863Union (0,20)
                                      5
                                         Brig. Gen. Wesley Merritt, ...
```

13:20 07/03/1863Union (0,20)	0	Btty K, 1st U.S.
13:20 07/03/1863Union (18,69)	0	Brig. Gen. Judson Kilpatrick
13:20 07/03/1863Union (18,69)	5	Brig. Gen. Elon Farnsworth,
13:20 07/03/1863Union (18,69)	0	Btty E & G, 1st U.S.

9.0 References

The Gettysburg Campaign - A Study in Command Edwin B. Coddington Scribners 1968

The Gettysburg Campaign Albert A. Nofi Combined Books, Inc. 1986

They Met At Gettysburg Edward J. Stackpole Bonanza 1956

Unit Organizations of the American Civil War Richard Zimmermann Rafm Co. Inc. 1982

The Civil War Battlefield Guide Frances Kennedy Houghton Mifflin Company 1990

Killer Angels Michael Shaara Ballantine Books 1975

The Illustrated Civil War Atlas Time-Life Books 1991

Regimental Strengths and Losses at Gettysburg Busey and Martin Longstreet House 1994

Wargaming in History: The American Civil War Paul Stevenson Stirling 1990

Pickett's Charge: A microhistory of the final attack at Gettysburg, July 3, 1863 George Stewart Houghton Miffflin

1991

Fairfield, Pa. 1:24000 Topographic Map United States Geological Survey

Gettysburg, Pa. 1:24000 Topographic Map United States Geological Survey

The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies
Government Printing Office
1889

Gettysburg - A Battlefield Atlas Craig L. Symonds The Nautical & Aviation Pulbishing Company 1992

High Tide at Gettysburg Glenn Tucker Morningside 1873

Battles and Leaders of the Civil War, Volume III Century Magazine Thomas Yoseloff 1956

The Civil War Military Machine Ian Drury & Tony Gibbons Smithmark 1993

10.0 Parameter Data

Time:

Dawn begins at: 4:00 (4am). Dusk begins at: 20:00 (8pm).

Each daylight turn equals 20 minutes. Each night turn equals 60 minutes.

Stacking:

Maximum strength points that can be in a hex is 10.

Maximum regiments, batteries and/or suppy wagons that can be in a hex is 4.

In addition to the above restrictions 4 leaders may occupy the same hex.

Exception: Only one supply wagon is allowed per hex.

Fatique:

Maximum Fatigue a unit can acquire is: 9

Fatigue from Fire: 1

Fatigue from Casualties: 1

Fatigue from Engaging in Melee: 1

Fatigue from Losing Melee: 1 Day Fatigue Recovery: 5% Night Fatigue Recovery: 20%

Command Radius:

Union Brigade Leader: 2 Confederate Brigade Leader: 3 Union Division Leader: 4 Confederate Division Leader: 6

Breastworks:

Breastwork Construction: 6% probability per strength factor

Breastwork Movement Penalty: +1 Breastwork Defensive Value: -1

Movement Allowance:

Infantry: 12 Cavalry: 24
Supply: 24 Dismounted Cavalry: 12
Artillery: 12 Unlimbered Artillery: 0

Non-Road Movement Costs:

Unit	Infantry	Cavalry Arti	illery Supp	oly			
Hex	L-C	Mounted	Limbered	Wage	on		
Clear:	2 - 2	2		2		3	
Water:	Р	- P	Р		Р		Р
Forest:	4	- 4	6		8		8
Orchard:	3 - 3	4		6		6	
Marsh:	4	- 4	8		Р		Р
Town:	4 - 1	2		2		2	
Rough:	4	- 4	8		Р		Р

Unit	Infantry	Cavalry Art	illery	Supp	ly
Hexside	L-C	Mounted	Limb	pered	Wagon

Stream:	1 - 1	2	2	2
Creek:	P - P	Р	Р	Р
Wood Fence:	1 - 1	2	2	2
Stone Wall:	1 - 1	2	6	6
Rail Cut:	P - P	Р	Р	Р
Up Elevation:	1 - 1	2	2	2
Breastworks:	+1	+1	+1	+1

NOTES:

= Movement Point Cost to enter hex or cross hexside.

P = Prohibited. Unit cannot enter hex or cross hexside.

+# = Additional Movement Point Cost to cross hexside.

L = Infantry in Line Formation.

C = Infantry in Column Formation.

Dismounted Cavalry move as Infantry in Line Formation.

Dismounted Leaders move as Infantry in Column Formation.

Mounted Leaders move as Mounted Cavalry.

Road Movement Costs:

Unit	Infantry	Cavalry Arti	llery Supply	
Hex	L-C	Mounted	Limbered Wagon	
Trail:	* - 2	2	2	2
Road:	* - 1	1	1	2
Pike:	* - 1	1	1	1
Rail:	* - 2	2	2	2

NOTES:

= Movement Point Cost to enter hex via Road Movement.

* = Unit does not get benefit of using Road Movement.

L = Infantry in Line Formation.

C = Infantry in Column Formation.

Dismounted Cavalry move as Infantry in Line Formation.

Dismounted Leaders move as Infantry in Column Formation.

Mounted Leaders move as Mounted Cavalry.

Formation/Facing Change Costs:

Change of Formation		Change	of Facing	About Face
Infantry:	4	2	2	
Cavalry:	6	3	2	
Artillery:	6	2	2	
Rearward I	Movement Penalty	<i>'</i> : +1		

Ammunition Loss Values:

Each time an Infantry or Cavalry unit ranged fires there is a chance its ammo supply status to change. The first supply status loss is called "Low on Ammo" and the second supply status loss is called "Out of Ammo."

Small Arms Loss Probability: 1/24 (4%)

Each time and Artillery unit is captured the former owner's Artillery Ammo

Level is reduced by the number of guns captured times three.

Weapon Effectiveness Table:

	V	∕leap	on							
Range	В	C	Н	M	N P	R	S	Τ	W	
1	8	8	12	6	12	1	4	12	9	0
2	4	3	6	1	6	0	2	8	6	0
3	2	1	3	0	3	0	1	3	3	1
4	1	0	1	0	2	0	1	2	2	1
5	0	0	1	0	2	0	1	1	2	1
6-8	0	0	1	0	2	0	0	0	2	1
9	0	0	1	0	1	0	0	0	2	1
10-12	0	0	1	0	1	0	0	0	2	1
13-15	0	0	1	0	1	0	0	0	1	1
16-20	0	0	1	0	0	0	0	0	1	1
21-70	0	0	0	0	0	0	0	0	0	1
		_		_						

is the multiplier of weapon type firing.

0 means the weapon has no effectiveness at that range.

Weapon Types:

B: Breech-loading rifles.

C: Carbines.

H: 12-pounder howitzers.

M: Smoothbore muskets.

N: 12-pounder Napoleon cannons.

P: Pistols.

R: Rifled muskets.

S: Spencer repeating rifles.

T: Rifled cannons.

W: 12-pounder Whitworth cannons.

Fire Results Table

Factors:Roll	1	2	3	4	5	6	7	8	9	10	11	12
1-3	0	0	0	0	0	0	0	0	F	F	F	1
4-6	0	0	0	0	0	0	0	F	F	F	1	1
7-9	0	0	0	0	0	0	F	F	F	1	1	1
10-12	0	0	0	0	0	F	F	F	1	1	1	1
13-15	0	0	0	0	F	F	F	1	1	1	1	1
16-18	0	0	0	F	F	F	1	1	1	1	1	1
19-24	0	0	F	F	F	1	1	1	1	1	1	1
25-30	0	F	F	F	1	1	1	1	1	1	1	1
31-36	F	F	F	1	1	1	1	1	1	1	1	2
37-42	F	F	1	1	1	1	1	1	1	1	2	2
43-48	F	1	1	1	1	1	1	1	1	2	2	2
49-54	1	1	1	1	1	1	1	1	2	2	2	2
55-60	1	1	1	1	1	1	1	2	2	2	2	2
61-66	1	1	1	1	1	1	2	2	2	2	2	2
67-72	1	1	1	1	1	2	2	2	2	2	2	3

```
73-78
        1 1 1 1 2 2 2 2 2
               2
                  2
                    2
                       2
                         2
                            2
        1 1 1
79-84
               2 2 2 2
                         2
             2
                            3
                              3
85-90
        1 1
                                 4
               2
                    2
             2
                  2
                       2
91-96
        1
                         3
                            3
            2
                2 2 2 2
              2
                          3 3
97-102
```

= "#: Amount of Strength loss (casualties) inflicted on defender.

F = Defender's Fatigue increased by one

Fire Results Die Roll Modifiers

Enfiladed modifier: +2

Attack vs. Mounted cavalry modifier: +4

Attack vs Routed Unit modifier: +2

Hexside Modifiers:

Breastwork: -1

Rail Cut: +4 (If firing across into adjacent lower-level hex)

Stone Wall: -2 Up Elevation: -1

Terrain Modifiers:

Forest: -1 Rough: -2 Town: -1

Melee Table

Diff:Def/Att	1	2	3	4	5	6
-4	1/-1	0/-1	0/-1	0/-1	0/-2	0/-3
-3	1/-1	1/-1	0/-1	0/-1	0/-1	0/-2
-2	-1/1	1/-1	1/-1	0/-1	0/-1	0/-1
-1	-1/1	-1/1	1/-1	1/-1	0/-1	0/-1
0	-1/1	-1/1	-1/1	1/-1	1/-1	0/-1
1	-1/1	-1/1	-1/1	-1/1	1/-1	1/-1
2	-1/0	-1/1	-1/1	-1/1	-1/1	1/-1
3	-1/0	-1/0	-1/1	-1/1	-1/1	-1/1
4	-2/0	-1/0	-1/0	-1/1	-1/1	-1/1
5	-2/0	-2/0	-1/0	-1/0	-1/1	-1/1
6	-3/0	-2/0	-2/0	-1/0	-1/0	-1/1

Absolute value is strength loss

Negative result indicates losing side

Melee Strength Modifiers

If no attacking unit fired in the preceding Offensive Fire Phase: +1 to attacking side's strength.

If any attacking unit is suffering from Low or High Fatigue: -1 or -2 to attacking side's strength respectively.

If any attacker advanced across a wall or breastwork hexside: -x (for that terrain modifier) to attacking side's strength.

If any attacker advanced uphill: -x (for the greatest number of levels ascended)

to attacking side's strength.

Disrupted/Routed defender: strength of each such unit is halved.

Friendly leader in hex: +1 to that side's strength.

Leader Casualty Values

The chance for Leader Casualty is the fire or melee value over the base value.

Leader Casualty Base Value:

Mounted: 50 Dismounted: 100

Fire Wound Value: 2
Fire Kill Value: 3

Melee Wound Value: 3

Melee Kill Value: 4 Melee Capture Value: 5

Elevation Information

Terrain Elevations (feet):

Rough: 10 Clear: 0 Forest: 50

Orchard: 15 Marsh: 0 Breastwork: 0 Wall: 0 Town: 30 Elevation Level: 30

11.0 Order of Battle

Army of the Potomac

Maj. Gen. George G. Meade

I Corps

Maj. Gen. John F. Reynolds

1st Division (Wadsworth)

Brig. Gen. James S. Wadsworth

1st "Iron" (Meredith) Brig. Gen. Solomon Meredith

19th Indiana 24th Michigan 2nd Wisconsin 6th Wisconsin 7th Wisconsin

> 2nd Brigade (Cutler) Brig. Gen. Lysander Cutler

7th Indiana 76th New York 84th NY (14th Militia) 95th New York 147th New York 56th Pennsylvania

2nd Division (Robinson)

Brig. Gen. J. C. Robinson

1st Brigade (Paul) Brig. Gen. Gabriel Paul

16th Maine 13th Massachusetts 94th New York 104th New York 107th Pennsylvania

2nd Brigade (Baxter)

Brig. Gen. Henry Baxter

12th Massachusetts 83rd NY (9th Militia) 97th New York 11th Pennsylvania 88th Pennsylvania 90th Pennsylvania

3rd Division (Doubleday)

Maj. Gen. Abner Doubleday

1st Brigade (Rowley)
Brig. Gen. Thomas Rowley

80th NY "Ulster Grd" 121st Pennsylvania 142nd Pennsylvania 151st Pennsylvania

> 2nd "Pa Bucktail" Col. Roy Stone

143rd Pennsylvania 149th Pennsylvania 150th Pennsylvania

> 3rd "Paper Collar" Brig. Gen. George Stannard

12th Vermont 13th Vermont 14th Vermont 15th Vermont 16th Vermont

Artillery Brigade

2nd Btty (B) Maine Lt 5th Btty (E) Maine Lt Btty E & L, 1st NY 1st Pa Lt Btty B, 4th U.S.

II Corps

Maj. Gen. Winfield Scott Hancock

1st Division (Caldwell)

Brig. Gen. John Caldwell

1st Brigade (Cross)
Col. Edward Cross

5th New Hampshire 61st New York 81st Pennsylvania 148th Pennsylvania

> 2nd "Irish" (Kelly) Col. Patrick Kelly

28th Massachusetts 63rd, 69th, 88th NY 116th Pennsylvania

> 3rd Brigade (Zook) Brig. Gen. Samuel Zook

52nd New York 57th New York 140th Pennsylvania 66th New York

> 4th Brigade (Brooke) Col. John Brooke

25th Connecticut 2nd Delaware 64th New York 145th Pennsylvania 53rd Pennsylvania

2nd Division (Gibbon)

Brig. Gen. John Gibbon

1st Brigade (Harrow) Brig. Gen. William Harrow

19th Maine

15th Massachusetts 1st Minnesota 82nd NY (2nd Militia)

> 2nd "Phil" (Webb) Brig. Gen. Alexander Webb

69th Pennsylvania 71st Pennsylvania 72nd Pennsylvania 106th Pennsylvania

3rd Brigade (Hall)
Col. Norman Hall

19th Massachusetts 20th Massachusetts 7th Michigan 42nd NY "Tammany" 59th New York

3rd Division (Hays)

Brig. Gen. Alexander Hays

1st Brigade (Carroll)
Col. Samuel S. Carroll

14th Indiana 4th Ohio 8th Ohio 7th W Virginia

> 2nd Brigade (Smyth) Col. Thomas Smyth

14th Connecticut 1st Delaware 12th New Jersey 108th New York

3rd Brigade (Willard)
Col. George Willard

39th NY (Garibaldi) 111th New York 125th New York 126th New York

Artillery Brigade

Btty B, 1st/14th NY Lt Btty A, 1st Rhode Island Btty B, 1st Rhode Island Btty I, 1st U.S. Btty A, 4th U.S.

III Corps

Maj. Gen. Daniel Sickles

1st Division (Birney)

Maj. Gen. David B. Birney

1st Brigade (Graham) Brig. Gen. Charles Graham

57th Pennsylvania 63rd Pennsylvania 68th Pennsylvania 105th Pennsylvania 114th Pennsylvania 141st Pennsylvania

> 2nd Brigade (Ward) Brig. Gen. J. H. Ward

20th Indiana 3rd Maine 4th Maine 86th New York 124th New York 99th Pennsylvania 1st US Sharpshooters 2nd US Sharpshooters

> 3rd (de Trobriand) Col. P. R. de Trobriand

17th Maine 3rd Michigan 5th Michigan 40th NY "Mozart" 110th Pennsylvania

2nd Divison (Humphreys)

Brig. Gen. Andrew A. Humphreys

1st Brigade (Carr) Brig. Gen. Joseph Carr

1st Massachusetts 11th Massachusetts 16th Massachusetts 12th New Hampshire 11th New Jersey 26th Pennsylvania 84th Pennsylvania

2nd Brig (Brewster)
Col. William Brewster

70th New York 71st New York 72nd New York 73rd New York 74th New York 120th New York

3rd Brigade (Burling)
Col. George Burling

2nd New Hampshire 5th New Jersey 6th New Jersey 7th New Jersey 8th New Jersey 115th Pennsylvania

Artillery Brigade

4th New York Btty D, 1st New York Btty B, 2nd New Jersey Btty E, 1st Rhode Island Btty K, 4th U.S.

V Corps

Maj. Gen. George Sykes

1st Divison (Barnes)

Brig. Gen. James Barnes

1st Brigade (Tilton)
Col. William Tilton

18th Massachusetts 22nd Massachusetts 1st Michigan 118th Pennsylvania

> 2nd Brig (Sweitzer) Col. Jacob Sweitzer

9th Massachusetts 32nd Massachusetts 4th Michigan 62nd Pennsylvania

3rd Brigade (Vincent)
Col. Strong Vincent

20th Maine 16th Michigan 44th New York 83rd Pennsylvania

2nd Divison (Ayres)

Brig. Gen. Romeyn B. Ayres

1st Brigade (Day) Col. Hannibal Day

3rd U.S. 4th U.S. 6th U.S. 12th U.S. 14th U.S.

> 2nd Brigade (Burbank) Col. Sidney Burbank

2nd U.S. 7th U.S. 10th U.S. 11th U.S. 17th U.S.

> 3rd Brigade (Weed) Brig. Gen. Stephen Weed

140th New York 146th New York 91st Pennsylvania 155th Pennsylvania

3rd Divison (Crawford)

Brig. Gen. Samuel Crawford

1st Brig (McCandless)
Col. William McCandless

1st Pa Res (30th Pa) 2nd Pa Res (31st Pa) 6th Pa Res (35th Pa) 13th Pa Res "Bucktails"

> 3rd Brigade (Fisher) Col. Joseph Fisher

5th Pa Res (34th Pa) 9th Pa Res (38th Pa) 10th Pa Res (39th Pa) 11th Pa Res (40th Pa) 12th Pa Res (41st Pa)

Artillery Brigade

3rd Btty (C), Mass Lt Btty C, 1st NY Lt Btty L, 1st Ohio Lt Btty D, 5th U.S. Btty I, 5th U.S.

VI Corps

Maj. Gen. John Sedgwick

1st Divison (Wright)

Brig. Gen. Horatio Wright

1st Brigade (Torbert) Brig. Gen. Alfred Torbert

1st New Jersey 2nd New Jersey 3rd New Jersey 15th New Jersey

> 2nd Brig (Bartlett) Brig. Gen. Joseph Bartlett

5th Maine 121st New York 95th Pennsylvania 96th Pennsylvania

> 3rd Brigade (Russell) Brig. Gen. David Russell

6th Maine 49th Pennsylvania 119th Pennsylvania 5th Wisconsin

2nd Divison (Howe)

Brig. Gen. Albion Howe

2nd Brigade (Grant)
Col. Lewis Grant

2nd Vermont 3rd Vermont 4th Vermont 5th Vermont 6th Vermont

> 3rd Brigade (Neill) Brig. Gen. Thomas Neill

7th Maine 33rd New York 43rd New York 49th New York

3rd Divison (Newton)

Maj. Gen. John Newton

1st Brigade (Shaler) Brig. Gen. Alexander Shaler

65th New York 67th New York 122nd New York 23rd Pennsylvania 82nd Pennsylvania

> 2nd Brigade (Eustis) Col. Henry Eustis

7th Massachusetts 10th Massachusetts 37th Massachusetts 2nd Rhode Island

3rd Brigade (Wheaton)
Brig. Gen. Frank Wheaton

62nd New York 93rd Pennsylvania 98th Pennsylvania 102nd Pennsylvania 139th Pennsylvania

Artillery Brigade

1st Btty (A), Mass Lt 1st Btty, New York Lt 3rd Btty, New York Lt Btty C, 1st Rhode Island Btty G, 1st Rhode Island Btty D, 2nd US Btty G, 2nd US Btty F, 5th US

XI Corps

Maj. Gen. Oliver O. Howard

1st Division (Barlow)

Brig. Gen. Francis Barlow

1st Brig (von Gilsa) Col. Leopold von Gilsa

41st New York 54th New York 68th New York 153rd Pennsylvania

> 2nd Brigade (Ames) Brig. Gen. Adelbert Ames

17th Connecticut 25th Ohio 75th Ohio 107th Ohio

2nd Division (Steinwehr)

Brig. Gen. Adolph von Steinwehr

1st Brigade (Coster) Col. Charles Coster

134th New York 154th New York 27th Pennsylvania 73rd Pennsylvania

> 2nd Brigade (Smith) Col. Orland Smith

33rd Massachusetts 136th New York 55th Ohio 73rd Ohio

3rd Division (Schurz)

Maj. Gen. Carl Schurz

1st (Schimmelfennig)

Brig. Gen. Schimmelfennig

82nd Illinois 45th New York 157th New York 61st New York 74th Pennsylvania

> 2nd (Krzyzanowski) Col. Wladimir Krzyzanowski

58th New York 119th New York 82nd Ohio 75th Pennsylvania 26th Wisconsin

Artillery Brigade

Btty I, 1st New York Lt 13th Btty, New York Lt Btty I, 1st Ohio Lt Btty K, 1st Ohio Lt Btty G, 4th U.S.

XII Corps

Maj. Gen. Henry W. Slocum

1st Division (Williams)

Brig. Gen. Alpheus S. Williams

1st Brig (McDougall) Col. Archibald McDougall

5th Connecticut 20th Connecticut 3rd Maryland 123rd New York 145th New York 46th Pennsylvania

> 2nd Brig (Lockwood) Brig. Gen. Henry Lockwood

1st Md (Potomac Home)

1st Md (Eastern Shore) 150th New York

> 3rd Brigade (Rugar) Brig. Gen. Thomas Rugar

27th Indiana 2nd Massachusetts 13th New Jersey 107th New York 3rd Wisconsin

2nd Division (Geary)

Brig. Gen. John W. Geary

1st Brigade (Candy)
Col. Charles Candy

5th Ohio 7th Ohio 29th Ohio 66th Ohio 28th Pennsylvania 147th Pennsylvania

> 2nd Brigade (Cobham) Col. George Cobham, Jr.

29th Pennsylvania 109th Pennsylvania 11th Pennsylvania

> 3rd Brigade (Greene) Brig. Gen. George Greene

60th New York 78th New York 102nd New York 137th New York 149th New York

Artillery Brigade

Btty M, 1st NY Lt Btty E, Penn Lt Btty F, 4th U.S.

Cavalry Corps

Maj. Gen. Alfred Pleasonton

1st Division (Buford)

Brig. Gen. John Buford

1st Brigade (Gamble)
Col. William Gamble

8th Illinois 12th Illinois 3rd Indiana 8th New York

> 2nd Brigade (Devin) Col. Thomas Devin

6th New York 9th New York 17th Pennsylvania 3rd W. Virginia

> Reserve Brig (Merritt) Brig. Gen. Wesley Merritt

6th Pennsylvania 1st US 2nd US 5th US 6th US

2nd Division (Gregg)

Brig. Gen. David Gregg

1st Brig (McIntosh)
Col. John B. McIntosh

1st Maryland 1st Massachusetts 1st New Jersey 1st Pennsylvania 3rd Pennsylvania 2nd Brigade (Huey) Col. Penn Huey

2nd New York 4th New York 6th Ohio 8th Pennsylvania

3rd Brigade (Gregg)
Col. J. Irvin Gregg

1st Maine 10th New York 4th Pennsylvania 16th Pennsylvania

3rd Division (Kilpatrick)

Brig. Gen. Judson Kilpatrick

1st Brig (Farnsworth) Brig. Gen. Elon Farnsworth

5th New York 18th Pennsylvania 1st Vermont 1st W. Virginia

> 2nd Brigade (Custer) Brig. Gen. George Custer

1st Michigan 5th Michigan 6th Michigan 7th Michigan

Horse Artillery

1st Brigade

9th Michigan Btty 6th New York Btty Btty B & L, 2nd U.S. Btty M, 2nd U.S. Btty E, 4th U.S.

2nd Brigade

Btty E & G, 1st U.S. Btty K, 1st U.S. Btty A, 2nd U.S. Btty C, 3rd U.S.

Artillery Reserve

1st Regular Brigade

Btty H, 1st U.S. Btty F & K, 3rd U.S. Btty C, 4th U.S. Btty C, 5th U.S.

1st Volunteer Brigade

5th Btty (E), Mass Lt 9th Btty, Mass Lt 15th Btty, New York Lt Btty C & F, Pa Lt

2nd Volunteer Brigade

Btty B, 1st Conn Hvy Btty M, 1st Conn Hvy 2nd Btty, Conn Lt 5th Btty, New York Lt

3rd Volunteer Brigade

1st Btty, NH Lt Btty H, 1st Ohio Lt Btty F & G, 1st Pa Lt Btty C, W Virginia Lt

4th Volunteer Brigade

6th Btty (F), Maine Lt Btty A, Maryland Lt 1st Btty, New Jersey Lt Btty G, 1st New York Lt

Army of Northern Virginia

Gen. Robert E. Lee

I Corps

Lt. Gen. James Longstreet

McLaws Division

Maj. Gen. Lafayette McLaws

Kershaw's Brigade Brig. Gen. Jos. B. Kershaw

2nd SC "Palmetto" 3rd S Carolina 7th S Carolina 8th S Carolina 15th S Carolina 3rd SC Bn "James"

> Semmes' Brigade Brig. Gen. Paul J. Semmes

10th Georgia 50th Georgia 51st Georgia 53rd Georgia

> Barksdale's Brigade Brig. Gen. William Barksdale

13th Mississippi 17th Mississippi 18th Mississippi 21st Mississippi

> Wofford's Brigade Brig. Gen. William T. Wofford

16th Georgia 18th Georgia 24th Georgia Cobb's Ga Legion Phillip's Ga Legion

Cabell's Battalion

Btty A, 1st N Carolina Pulaski Georgia 1st Richmond Howitzers Troup (Georgia)

Pickett's Division

Maj. Gen. George E. Pickett

Garnett's Brigade Brig. Gen. Richard B. Garnett

8th Virginia 18th Virginia 19th Virginia 28th Virginia 56th Virginia

> Kemper's Brigade Brig. Gen. James L. Kemper

1st Va "Williams' Rfls" 3rd Virginia 7th Virginia 11th Virginia 24th Virginia

> Armistead's Brigade Brig. Gen. Lewis A. Armistead

9th Virginia 14th Virginia 38th Virginia 53rd Virginia 57th Virginia

Dearing's Battalion

Fauquier Virginia Hampden Virginia Richmond Fayette Lynchburg Virginia

Hood's Division

Maj. Gen. John B. Hood

Law's Brigade Brig. Gen. Evander M. Law

4th Alabama 15th Alabama 44th Alabama 47th Alabama 48th Alabama

> Robertson's Brigade Brig. Gen. Jerome B. Robertson

3rd Arkansas 1st Texas 4th Texas 5th Texas

> Anderson's Brigade Brig. Gen. George Anderson

7th Georgia 8th Georgia 9th Georgia 11th Georgia 59th Georgia

> Benning's Brigade Brig. Gen. Henry Benning

2nd Georgia 15th Georgia 17th Georgia 20th Georgia

Henry's Battalion

Branch's N Carolina German S Carolina Palmetto S Carolina Rowan N Carolina

Artillery Reserve

Alexander's Battalion

Ashland Virginia Bedford Virginia Brooks S Carolina Madison Louisiana Lt Parker's Virginia Taylor's Virginia

Washington La Art

1st Company 2nd Company 3rd Company 4th Company

II Corps

Lt. Gen. Richard S. Ewell

Early's Division

Maj. Gen. Jubal A. Early

Hays' Brigade Brig. Gen. Harry T. Hays

5th Louisiana 6th Louisiana 7th Louisiana 8th Louisiana 9th Louisiana

> Smith's Brigade Brig. Gen. William Smith

31st Virginia 49th Virginia 52nd Virginia

> Hoke's Brigade Col. Isaac Avery

6th N Carolina 21st N Carolina

57th N Carolina

Gordon's Brigade Brig. Gen. John B. Gordon

13th Georgia 26th Georgia 31st Georgia 38th Georgia 60th Georgia 61st Georgia

Jones' Battalion

Charlottesville Va Courtney Virginia Louisiana Guard Staunton Virginia

Johnson's Division

Maj. Gen. Edward Johnson

Steuart's Brigade Brig. Gen. Geo. H. Steuart

1st Maryland Bn 1st N Carolina 3rd N Carolina 10th Virginia 23rd Virginia 37th Virginia

> Stonewall Brigade Brig. Gen. James Walker

2nd Virginia 4th Virginia 5th Virginia 27th Virginia 33rd Virginia

> Nicholls' "La Tigers" Col. J. M. Williams

1st Louisiana 2nd Louisiana 10th Louisiana 14th Louisiana 15th Louisiana

> Jones' Brigade Brig. Gen. John Jones

21st Virginia 25th Virginia 42nd Virginia 44th Virginia 48th Virginia 50th Virginia

Latimer's Battalion

1st Maryland Btty Allegheny Virginia Chesapeake Maryland Lee Virginia Btty

> Rodes' Division Maj. Gen. Robert E. Rodes

Daniel's Brigade Brig. Gen. Junius Daniel

32nd N Carolina 43rd N Carolina 45th N Carolina 53rd N Carolina 2nd N Carolina Bn

> Iverson's Brigade Brig. Gen. Alfred Iverson

5th N Carolina 12th N Carolina 20th N Carolina 23rd N Carolina

> Doles' Brigade Brig. Gen. George Doles

4th Georgia 12th Georgia 21st Georgia 44th Georgia

Ramseur's Brigade Brig. Gen. Stephen Ramseur

2nd N Carolina 4th N Carolina 14th N Carolina 30th N Carolina

> O'Neal's Brigade Col. Edward A. O'Neal

3rd Alabama 5th Alabama 6th Alabama 12th Alabama 26th Alabama

Carter's Battalion

Jeff Davis Alabama King William Va Morris Virginia Orange Virginia

Artillery Reserve

1st Vir Art (Dance)

2nd Richmond Howitzers 3rd Richmond Howitzers Powhatan Virginia Rockbridge Virginia Salem Virginia

Nelson's Battalion

Amherst Virginia Fluvanna Virginia Georgia Btty

III Corps

Lt. Gen. Ambrose P. Hill

Anderson's Division

Maj. Gen. R. H. Anderson

Wilcox's Brigade Brig. Gen. Cadmus Wilcox

8th Alabama 9th Alabama 10th Alabama 11th Alabama 14th Alabama

> Wright's Brigade Brig. Gen. A. R. Wright

3rd Georgia 22nd Georgia 48th Georgia 2nd Georgia Bn

> Mahone's Brigade Brig. Gen. William Mahone

6th Virginia 12th Virginia 16th Virginia 41st Virginia 61st Virginia

> Perry's "Florida" Col. David Lang

2nd Florida 5th Florida 8th Florida

> Posey's Brigade Brig. Gen. Carnot Posey

12th Mississippi 16th Mississippi 19th Mississippi 48th Mississippi

Sumter Bn (Lane)

Company A Company B Company C

Heth's Division

Maj. Gen. Henry Heth

1st Brig (Pettigrew) Brig. Gen. J. J. Pettigrew

11th N Carolina 26th N Carolina 47th N Carolina 52nd N Carolina

> 2nd (Brockenbrough) Col. J. M. Brockenbrough

40th Virginia 47th Virginia 55th Virginia 22nd Virginia Bn

> 3rd Brigade (Archer) Brig. Gen. James Archer

13th Alabama 5th Alabama 1st Tennessee 7th Tennessee 14th Tennessee

> 4th Brigade (Davis) Brig. Gen. Joseph Davis

2nd Mississippi 11th Mississippi 42nd Mississippi 55th N Carolina

Garnett's Battalion

Donaldsonville La Huger Virginia Lewis Virginia Norfolk Lt Blues

Pender's Division

Maj. Gen. William D. Pender

1st Brigade (Perrin)
Col. Abner Perrin

1st S Carolina 1st SC Rifles 12th S Carolina 13th S Carolina 14th S Carolina

> 2nd Brigade (Lane) Brig. Gen. James Lane

7th N Carolina 18th N Carolina 28th N Carolina 33rd N Carolina 37th N Carolina

> 3rd Brigade (Thomas) Brig. Gen. Edward Thomas

14th Georgia 35th Georgia 45th Georgia 49th Georgia

> 4th Brigade (Scales) Brig. Gen. Alfred M. Scales

13th N Carolina 16th N Carolina 22nd N Carolina 34th N Carolina 38th N Carolina

Poague's Battalion

Albemarle Virginia Charlotte N Carolina Madison Miss Lt Warrenton Va Btty

Artillery Reserve

McIntosh's Battalion

Danville Virginia Hardaway Alabama (A) Hardaway Alabama (B) 2nd Rockbridge Va Richmond Va Btty

Pegram's Battalion

Crenshaw Va Btty Fredericksburg Btty Letcher Va Btty Pee Dee S Carolina Purcell Virginia

Stuart's Division

Maj. Gen. J.E.B. Stuart

Hampton's Brigade Brig. Gen. Wade Hampton

1st N Carolina 1st S Carolina 2nd S Carolina Cobb's Ga Legion Jeff Davis Legion Phillips Ga Legion

> Fitz Lee's Brigade Brig. Gen. Fitzhugh Lee

1st Maryland Bn 1st Virginia 2nd Virginia 3rd Virginia 4th Virginia 5th Virginia

> Robertson's Brigade Brig. Gen. Beverly Robertson

4th N Carolina

5th N Carolina

Jenkin's Brigade Brig. Gen. Albert J. Jenkins

14th Virginia 16th Virginia 17th Virginia 34th Virginia Bn 36th Virginia Bn Jackson's Va Btty

> Jones' Brigade Brig. Gen. William Jones

6th Virginia 7th Virginia 11th Virginia 35th Virginia Bn

> W.H.F. Lee's Brigade Col. John R. Chambliss, Jr.

2nd N Carolina 9th Virginia 10th Virginia 13th Virginia

Stuart Horse Art (Beckham)

Breathed's Va Btty Chew's Va Btty Griffin's Md Btty Hart's SC Btty McGregor's Va Btty

> Imboden's Command Brig. Gen. J. D. Imboden

18th Virginia Cavalry 62nd Va Inf (mounted) Virginia Partisan Rangers McClanahan's Va Btty