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# 1.0 Overview

## Prelude to Another Bull Run

It was summer, 1862. The war had been going on for more than a year. Its largest battle had been fought just months before at Shiloh, in Tennessee. General Robert E. Lee was the newly appointed commander of the Army of Northern Virginia, and had inaugurated his appointment with a successful campaign - the Seven Days Battle - against Gen. George McClellan down the James Peninsula in Virginia. After his success, Lee's men stopped calling him "Granny Lee" and began using a new nickname, "Marse Robert", which he would keep for the rest of the war. Lee's success stemmed from the fact that he had understood well the over-cautiousness of Gen. McClellan.

President Lincoln had seen this too, and decided he needed a new leader. McClellan was left to sit at Harrison's Landing while General John Pope was brought from the west to take command of the forces around Washington. With much bluster and fanfare, Pope took over the combined forces of Irvin McDowell, Ambrose Burnside, and elements of McClellan's army returning from the James Peninsula.

Pope stepped into the position with little support, and was never accepted by his men, due in part to his pomposity and because many in the officer corps retained an intense loyalty to the now-deposed McClellan. McDowell, Pope's second in command, was also disliked due to his failure at the First Battle of Bull Run (Manassas). Even so, Pope decided to attack Richmond by the most direct route possible. In this, President Lincoln encouraged and supported him.

With McClellan now impotent on the Peninsula, Lee decided to face Pope. He gathered in most of his army and marched north between Richmond and Washington, where he found Pope at the Rappahannock River near Rappahannock Station. The opposing forces faced each other across the river, each waiting for the other to move. Lee and his commanders quickly recognized Pope's overconfidence when the latter left his supply lines and depots between Washington and Rappahannock Station weakly defended. Lee decided that Generals "Stonewall" Jackson and J.E.B. Stuart could take advantage of this mistake. While Longstreet's Corps held Pope's attention at the Rappahannock, Jackson and Stuart quickly marched north, northeast, then south, undetected, around Pope's army until they reached Bristoe Station and Manassas Junction, where they derailed several locomotives and "liberated" a vast amount of Federal army stores.

The word that Confederates were in his rear soon reached Gen. Pope, causing him to recognize his tenuous position. He turned his army and retreated it back up its supply line to find and attack the isolated Jackson. Aware of Pope's maneuvers, Jackson withdrew northward from Manassas Junction and established a defensive position not far from the site of the previous year's Battle of Bull Run. Capturing a few misinformed rebel stragglers at Manassas Junction, Pope was given information that led him to believe Jackson's troops had headed *northeast* toward Centreville after leaving the ransacked junction. He therefore issued orders to all of his divisions to immediately converge on that town. Pope had only one thing in mind, and that was to "bag" Jackson.

## **Scuffle at Brawner's Farm 28 August, 1862**

After departing Manassas Junction, Jackson's footsore (but belly-full!) soldiers had taken refuge in the shade trees north of the turnpike near Groveton, lying in wait for some unsuspecting victim. As Union Gen. Rufus King's division came unsuspectingly marching down the Warrenton Turnpike approaching Groveton, it attracted the attention of a lone horseman on a nearby hilltop - "Stonewall" Jackson.

The first shots of the battle are credited to Balthis' battery of Ewell's divisional artillery when it opened fire on King's column snaking its way eastward along the turnpike. The Federal column quickly dispersed, with Gibbon's and Doubleday's brigades taking cover in Groveton woods. At this point John Gibbon was thinking they had been fired on by a lone detachment of Confederate horse artillery, which could be easily driven off by some infantry. To that end he dispatched his only veteran regiment, the 7th Wisconsin. The advancing Wisconsin men were soon awestruck, however, by the sight of Confederates "by thousands", in neat lines of battle with flags waving briskly, emerging from the woods to their north.

These were the men of Jackson's vaunted "Stonewall" brigade, now led by William Baylor. Expecting to sweep the Federals before him, the Confederates instead met stiff resistance from Gibbon's "westerners" from Wisconsin and Indiana - later to be known as the Iron Brigade - in their tall black hats. Soon Jackson was forced to up the ante by committing several more brigades to deal with the surprisingly stubborn Unionists. With the aid of two regiments from Abner Doubleday's brigade, Gibbon's men stood toe to toe with the battle-tested Rebels for more than two hours in the gathering dusk. Once darkness mercifully ended the carnage, Gibbon, with the rest of the now-bloodied division, withdrew southward to the safety of the Union camps at Manassas Junction - but bearing precious information on the whereabouts of the elusive Jackson.

Pope was ecstatic that Jackson had finally been located. In the Union commander's eyes, he only needed to get his widely scattered forces to Groveton and the Brawner's farm area quickly, and he would cut off -and could then destroy - the notorious Confederate general's forces. A glorious victory seemed at hand.

What Pope did not know was that "Stonewall" Jackson had no intention of running, and in fact had been waiting to be found...

## **The Second Battle of Bull Run 29-30 August, 1862**

The next day, as Pope's forces converged on Groveton, Jackson's troops remained in their positions along the unfinished railroad, which was in effect a series of natural trenches and raised embankments ideal for defense. Despite facing what might soon be the entire Union army, Jackson was not worried because he knew Longstreet's corps was approaching from Gainesville to the west. With the two corps thusly combined, Lee, who was accompanying Longstreet, hoped to deliver a blow to Pope that would drive him back to Washington.

Jackson's dispositions along the unfinished railroad ran southwest to northeast, north of and roughly parallel to the Warrenton Pike and just south of Sudley Springs, where the previous year McDowell's men had crossed Bull Run in their flanking attack. Arriving on the field shortly after noon, Pope established his headquarters on Buck Hill, near the intersection of the Warrenton Turnpike and the Sudley-Manassas Road.

Pope's optimism was high. He had reports stating that Porter's strong V Corps, newly arrived from McClellan's Army of The Potomac, was approaching from the southwest and would soon be in Gainesville, cutting off Jackson's retreat. Confident that the wily Jackson was now trapped, he sent his forces headlong into the fight. The last thing he wanted was for the Rebels to disengage before Porter was in their rear. Wave after wave of Federal troops made uncoordinated attacks on various points of Jackson's line. The Rebels fought back tenaciously. The Yankee attacks were especially heavy on the Confederate left, where Maxcy Gregg's brigade was engaged almost continuously; their ammunition was soon nearly exhausted. The Rebel line bent, but did not break.

Unbeknownst to Pope, Gen. Lee, with Longstreet's fresh divisions, had arrived on the field before noon and set themselves on Jackson's right, flanking Pope's line. Pope was warned of this by Porter, whose men ran into and were halted by vanguard units of Longstreet's corps on the Manassas-Gainesville Road. Pope discounted the suggestion that Longstreet could be there, so unexpectedly close to the battle.

Lee encouraged Longstreet to attack immediately in support of Jackson. But Longstreet hesitated, insisting it would be better to wait until all of Pope's reserves were committed. Finally, around sunset, Longstreet authorized Hood's division, supported by several other brigades, to conduct a "reconnaissance-in-force" to establish the Union presence to their front. Reynolds' division of Pennsylvania Reserves quickly gave way, allowing the advancing Rebels to pass through Groveton and beyond. The fighting persisted well beyond dusk, as men shot confusedly at gun flashes in the moonlight. Under cover of darkness, Hood's Confederates withdrew to their start line. Amazingly, Pope was still unconvinced that Longstreet had arrived.

With Porter evidently unwilling or unable to advance from the southwest along the Manassas-Gainesville Road, Pope ordered him to break camp before sunrise on the 30th, backtrack, and approach the battlefield from the south along the Manassas-Sudley Road. As Porter duly obeyed these orders, the Union flanking threat to Longstreet's right was completely removed, freeing Longstreet's corps to carry out Lee's plan unhindered.

Shortly after 3am, R.H. Anderson's Confederate division arrived from the Gainesville area and in the darkness marched right through their own lines into "no man's land". Not realizing the danger, his men lay down there and quickly fell asleep. Their peaceful bivouac was interrupted, however, when Hood was informed of their presence and had them duly roused. As the sun rose, Anderson's ranks were just withdrawing westward to safety along the Warrenton Turnpike. Their movement was not totally unobserved, however: Brig. Gen. Marsena Patrick witnessed the long line of gray-clads moving away along the Pike, and quickly sent word of the evident Rebel retreat to Pope.

Reports of a Confederate retreat were just the kind of news John Pope wanted to hear. Convinced that he had already achieved victory, and still unaware that Longstreet sat astride his open left flank, he made plans for the orderly pursuit of Jackson's "retreating" troops. It was to be one of the shortest pursuits in the history of warfare. Pope called on John Reynolds' division to lead the pursuit. Reynolds knew better, as the night before his men had tangled with a strong band of Rebels, and he considered the idea of a Confederate retreat preposterous. Pope would hear none of it, however, so Reynolds ordered his men to move out westward along the turnpike. Meanwhile, to the north Pope sent other contingents to scout the woods where the Rebels had been before.

The advancing Federals were surprised to find Jackson's troops still manning the railroad cut in force. Most surprised, however, was Pope himself, who spent the next few hours re-evaluating the "changed" situation. Reports kept filtering in of Rebels threatening his left, which he tried his best to discount. After Sigel confirmed Reynolds' reports, Pope finally dispatched McLean's brigade toward Chinn Ridge.

Finally, about 3pm, Porter's corps, supported by Hatch's division, launched a massive attack on Jackson's right near the area of the "Deep Cut", a portion of the unfinished railroad where the raised embankments abruptly ended and a stream ran through. During this furious assault Jackson did something he had not done before: he appealed to Lee for reinforcements. Lee asked Longstreet if he could oblige. Longstreet's answer came in the form of an attack. Having waited quietly for so long, his men were ready. At 3:45pm, as the Federals reeled under the Confederate musketry and long-range fire from S.D. Lee's guns atop "Battery Heights", Longstreet unleashed his 30,000 fresh veterans on the wavering Union right.

The effects were immediate and devastating. Led by Hood's brigade of Texans, the Rebel onslaught was irresistible. McLean's Union brigade, aided by one of Reynolds' brigades, made a valiant but futile stand on Chinn Ridge. It did buy time, however, for the Federals to patch together a defensive line running north-south along the Manassas-Sudley Road. This line held long enough for Pope to realize that he was yet another victim of Confederate "generalship"; he ordered his defeated army eastward across the patched-together Stone Bridge to safety.

With the pressure on them relieved, Jackson's men joined in the attack, but not until about 5pm. And while the Union retreat was not the rout of the previous year's loss, the Federals had been forced once again to abandon the field. Lee lost 1481 men killed and 7627 wounded. Pope had 1724 killed, 8372 wounded and 5958 missing. Lee's army captured 30 artillery pieces and 20,000 small arms.

Pope's worn-out army trudged into Centreville, pitiful and wet from a dismal rain that had begun around 8pm. As one of his soldiers later wrote, Pope "had been kicked, cuffed, hustled about, knocked down, run over and trodden upon as rarely happens in the history of war. His communications had been cut; his headquarters pillaged; a corps had marched into his rear and had encamped at its ease upon the railroad by which he received his supplies; he had been beaten or foiled in every attempt he made to 'bag' those defiant intruders; and in the end he was glad to find a refuge in the entrenchments of Washington, from which he had sallied forth, six weeks before, breathing out threatenings and slaughter".

After a brief engagement at Chantilly, Pope and his defeated army fell back to Washington, DC, where he was soon to be ignominiously replaced by George McClellan. Meanwhile, Lee began planning his first advance into Maryland, which would eventually culminate in the single bloodiest day in American history - the Battle of Antietam.

## 2.0 Map Notes

The Battleground: Bull Run game maps were adapted from the "Troop Movement Maps" produced by the National Park Service (United States Department of the Interior) for both First- and Second-Manassas battles. These maps provide a wealth of information on the terrain as it was in the early 1860's, including location and types of fields, forested areas, as well as the names and sites of the various homesteads in the area.

Additional elevation details, as necessary, were taken from modern U. S. Geological Survey ("quadrangle") maps.

The current Manassas National Battlefield Park encompasses and preserves much, but not all, of the historical battlefields.

One thing that struck me as I walked the grounds of the Park is that today many parts of it are more wooded than they were in 1861 and 1862. For instance, the area between Brawner's farm and Schoolhouse Run is now almost entirely woods. In 1862, when Porter's corps assaulted "Stonewall" Jackson's men along the unfinished railroad, this area was mostly open, thus allowing S.D. Lee's battery (perched on what is today known as "Battery Heights") to fire mercilessly on the Federal ranks. Today the "line of sight" from Battery Heights is severely limited.

The "Stone House" still stands, much as it did in 1861, as does a rebuilt version of Henry House (now the site of the National Battlefield Park Visitors' Center). "Portici", headquarters to J.E. Johnston in 1861 and witness to a sharp cavalry clash in 1862, has disappeared, destroyed by fire a short time after the second battle. The famous "Stone Bridge", spanning Bull Run along the old Warrenton Turnpike, has also been restored and is a favorite tourist attraction.

However, perhaps the most intriguing area of the Park - and maybe the least visited - is the "Unfinished Railroad", a scene of savage fighting during the 1862 encounter. When construction was halted on this railroad in the late 1850's, no rails had yet been laid in the Manassas area, though many "cuts" and "embankments" had been constructed in preparation for the track. These features, sometimes as deep or as high as 10 feet, provided ideal defensive terrain for Jackson's veterans. In some locations (notably at what is now known as the "Deep Cut" and the "Dump") the raised embankments ended abruptly, leaving a large, sometimes marshy gap where a trestle, or continuation of the embankment, had been intended. These gaps in the natural defenses were all scenes of fierce fighting. If you visit the Manassas National Battlefield Park, I strongly encourage you to take along your hiking boots and check out this very interesting feature of American history.

### **3.0 Notes on the Forces**

The strength of most of the Union and Confederate units is known fairly accurately, though that of a few regiments had to be estimated from known brigade strengths and deductive research.

By August of 1862 the rifled musket had become the predominant infantry weapon in both armies, though many regiments (and sometimes whole brigades) were still equipped with the less accurate smoothbore musket. This is especially true on the Confederate side, where access to newer and improved armaments was more restricted. While the smoothbore musket could not shoot nearly as far as its rifled equivalent, it was frequently deadlier at close range, especially when loaded with "buck and ball" which would give a blast similar to that of a shotgun.

As usual, the Confederate batteries were of mixed composition, containing in many instances more than one type of cannon. But instead of breaking each battery down into sections or individual cannons, an average weapon type has been assigned to each battery so that the overall composition comes out more or less historical.

## 4.0 Confederate Notes

When "The Second Battle of Bull Run" scenario opens at 9:40am, "Stonewall" Jackson's Confederates are spread out in a long line along the "Unfinished Railroad" stretching from Brawner's farm to across Bull Run Creek near the hamlet of Sudley. Roughly, from right (at Brawner's) to left (at Sudley), the three divisions of Jackson's "Left Wing" are Jackson's Division (led by Gen. Wm. E. Starke), Ewell's Division (led by Gen. A.R. Lawton) and A.P. Hill's "Light Division". The extreme left, across Bull Run Creek north of Sudley, is guarded by Fitz Lee's brigade of cavalry.

Jackson's men are not to be alone for long, however, as a steady stream of gray-clad reinforcements - Longstreet's "Right Wing", preceded and flanked by Robertson's cavalry brigade - begins arriving almost immediately.

Historically, Robert E. Lee kept this strong body of reinforcements mostly hidden from prying Federal eyes for much of the first day of the battle, letting Pope, the Federal commander, be content with repeated batterings of Jackson's strong defensive line along railroad grade. As long as Jackson's men could continue to maintain their tenuous grip on the railroad, Lee chose to keep his cards in his hand. In fact, it was not until late on the second day of the battle that Longstreet's fresh troops took the offensive, and then only after the Federals had spent themselves in the 3pm assault at the "Deep Cut".

As the Confederate commander in this scenario, you will have to decide when and how best to employ Longstreet's five divisions. Will the Union commander be as naive as John Pope was in August of 1862?

## 5.0 Union Notes

"The Second Battle of Bull Run" opens with Franz Sigel exercising tactical command of the Union forces on the field since John Pope, the Army commander, has yet to arrive. Throughout the morning, Sigel has been maneuvering his I Corps units into various positions in an attempt to better ascertain the strength and dispositions of the Confederate forces. The time is now 9:40am and the first of these probing attacks are set to begin.

Since Federal reinforcements will be arriving continuously from the east and south throughout the daylight hours of the 29th, it will be up to you, as the Union commander, to decide how best to employ them. Should you attempt a battle of attrition against Jackson's line along the "Unfinished Railroad", or perhaps mass your units and attempt a massive rupture of the Rebel ranks? Or should you instead marshal your forces in a strong defensive position in the hope that the Confederates will attack you?

Historically, John Pope was of the opinion that he was facing only Jackson's corps. His goal was to capture the infamous and supposedly isolated Jackson. Pope did not realize that he was actually facing Lee's entire Army of Northern Virginia - until the truth became painfully obvious. By then the battle was lost.

One thing in your favor as the Union commander is that you already know a lot more than John Pope was ever willing or able to comprehend - until it was too late for him and the Union cause.

## 6.0 Weapon Descriptions

### Code Description

#### **B Sharps .52-caliber Breechloading Rifle**

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 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.

#### **K 6-pounder Rifled Cannon**

These guns were a rare commodity in the Confederate army during the early period of the war. Most were converted from smoothbores using the James system of 15 grooves. The 6-pounder rifled gun had the same muzzle velocity as the 6-pounder smoothbore, but because its projectile spun during flight it was more accurate and had a greater range.

#### **L 6-pounder Smoothbore Cannon**

The 6-pounder smoothbore was a muzzle-loading cannon with a bore diameter of 3.67 inches. Early battlefield experience demonstrated that it was a relatively ineffective piece beyond 1500 yards due to the projectile's rapid loss of velocity.

## **M Smoothbore Musket**

Percussion muskets were widely used during the early part of the war. The 1842 Percussion Musket, also known as the Harper's Ferry Musket, was a .69-caliber smoothbore that fired a 1-ounce spherical ball. It weighed 9.2 pounds and was 57.75 inches in length. So desperate was the need for arms during the early months that many obsolete flintlock muskets were pressed back into service. This was especially true for the Confederates. Amongst these were the 1822 Flintlock Musket, a .69-caliber smoothbore that was converted to percussion in the 1840s and 1850s. It weighed 9.33 pounds and was 57.7 inches in length.

By the middle of the Civil War, the Smoothbore Musket would be replaced almost entirely by the rifled musket. Even though the smoothbore could be loaded faster, it was accurate only to about 100 yards.

## **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 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*, and its soldiers used mostly captured Colts and Colt copies made in the South. In addition, it acquired several types of European revolvers, the most popular being the Adams .49-caliber Dragoon, the Tranter .44 revolver, the Lefauchaux 11mm pinfire revolver, and the Le Mat. Almost all Confederate-made revolvers were

imitations of the .36-caliber Colt 1851 Navy, of which less than 12,000 were made.

## **R Rifle Musket**

Although a great variety of small arms saw use during the war, the principal weapon on both sides was the .58-caliber 1861 Model Springfield Rifle Musket. This muzzle-loading 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.

The .577-caliber Enfield 1853-Pattern Rifle Musket was one of the best of the foreign arms. It weighed 8 pounds, 14.5 ounces, had a barrel 39 inches long, and was about 54 inches in overall length. Both sides supplemented their arsenals with the Enfield during the early months of the war. Some 428,000 were purchased by the U.S. Government, while the Confederacy received approximately 400,000.

## **T Rifled Cannon**

The majority of rifled cannons in Civil War artillery batteries were 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.

## **V 20 and 30-pounder Rifled Cannons**

The 20-pounder Parrott was a muzzle-loading gun made of cast iron, with a 3.64-inch bore. These large pieces were quite accurate and proved deadly at long range counter-battery fire. The 30-pounder had a bore diameter of 4.2 inches and, in one account, had an amazing range of 8,453 yards when fired with an 80-lb. hollow shot. Lieutenant Hains, U.S. Army, fired the opening round of the First Battle of Bull Run from a 30-pounder Parrott.

## 7.0 References

***Return To Bull Run: The Campaign and Battle of Second Manassas***

John J. Hennessy  
Simon & Schuster  
1993

***Second Manassas Battlefield Map Study***

John J. Hennessy  
H. E. Howard, Inc.  
1989

***Troop Movement Maps: Battle of Second Manassas, August 28-30, 1862***

1981

***Brave Men's Tears: The Iron Brigade at Brawner Farm***

Alan D. Gaff  
Dayton  
1985

***The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies***

Series I, Volume xii, Parts 1 & 2  
United States War Department  
Washington, D.C.  
1880-1901

***Generals in Blue - Lives of the Union Commanders***

Ezra J. Warner  
Louisiana State University Press  
1964

***Generals in Gray - Lives of the Confederate Commanders***

Ezra J. Warner  
Louisiana State University Press  
1959

***More Generals in Gray***

Bruce S. Allardice  
Louisiana State University Press  
1995

***Time-Life Books Series***

1984

***The Official Military Atlas of the Civil War***

Fairfax Press  
1978

## 8.0 Parameter Data

### Miscellaneous Data

First Move: Union

### Time and Visibility Data

#### Time:

Dawn: 5:00      Day: 6:00      Dusk: 19:00      Night: 20:00

#### Visibility:

Day: Unlimited      Dawn & Dusk: 4 Hexes      Night: 1 Hex

#### Minutes Per Turn:

Dawn, Day, Dusk: 20      Night: 60

### Movement Allowance Data

Infantry: 12      Supply Wagon: 10  
Artillery: 12      Dismounted Cavalry: 12  
Cavalry: 24      Unlimbered Artillery: 0

### Stacking Data

Maximum infantry/cavalry that can be in a hex is 1000.

Maximum cannon that can be in a hex is 20.

Maximum regiments, batteries and/or supply wagons that can be in a hex is 8.

Exception: Only one supply wagon is allowed per hex.

### Fatigue Data

Maximum Fatigue: 9

Day Fatigue Recovery: 5%      Night Fatigue Recovery: 20%

Fatigue from Fire: 1      Fatigue from Loss: 1      Fatigue from Melee: 1

### Command Radius

#### Brigade Radius:

Union: 2      Confederate: 3

#### Division Radius:

Union: 4      Confederate: 6

### Breastworks

Breastwork Construction: 18%

Breastwork Movement Penalty: +1

Breastwork Defensive Value: -1

### Movement Costs

Hex	Infantry (Line)	Infantry (Column)	Cavalry Mounted	Artillery Limbered	Supply Wagon
Clear	2	2	2	2	3

<b>Forest</b>	4	4	6	8	8
<b>Orchard</b>	3	3	4	6	6
<b>Marsh*</b>	4	4	8	P	P
<b>Town</b>	4	1	2	2	2

\* Unit becomes automatically disrupted when entering a Marsh hex

<b>Hexside</b>	<b>Infantry (Line)</b>	<b>Infantry (Column)</b>	<b>Cavalry Mounted</b>	<b>Artillery Limbered</b>	<b>Supply Wagon</b>
<b>Trail</b>	*	2	2	2	2
<b>Road</b>	*	1	1	1	2
<b>Pike</b>	*	1	1	1	1
<b>Rail</b>	*	2	2	2	2
<b>Stream</b>	1	1	2	2	2
<b>Creek</b>	P	P	P	P	P
<b>Embankment</b>	2	2	3	6	6
<b>Up Elevation</b>	1	1	2	2	2
<b>Breastworks</b>	+1	+1	+1	+1	+1

#### Notes

\* = Unit in Line formation gets no benefit when crossing this hexside

# = 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.

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

<b>Unit</b>	<b>Change Formation</b>	<b>Change Facing</b>	<b>About Face</b>
<b>Infantry:</b>	4	2	2
<b>Cavalry:</b>	6	3	2
<b>Artillery:</b>	6	2	2

Rearward Movement Penalty: +1

#### Ammunition Loss Values

Each time an Infantry or Cavalry unit uses ranged fire, there is a 4% chance its ammo status will change. The first supply status loss is called "Low Ammo" and the second supply status loss is called "Out of Ammo."

Each time an Artillery unit is captured, the former owner's Artillery Ammo Level is reduced by three.

#### Weapon Effectiveness Table

Range	Weapon Class										
	B	C	H	K	L	M	N	P	R	T	V
1	8	8	12	6	6	6	12	1	4	9	9
2	4	3	6	3	3	1	6	*	2	6	6
3	2	1	2	2	2	*	3	*	1	3	3
4	1	*	1	2	2	*	2	*	1	2	2
5	*	*	1	2	2	*	2	*	1	2	2
6-8	*	*	1	2	2	*	2	*	*	2	2
9	*	*	1	1	1	*	1	*	*	2	2
10	*	*	*	1	1	*	1	*	*	1	1
11-12	*	*	*	1	*	*	1	*	*	1	1
13	*	*	*	1	*	*	*	*	*	1	1
14-15	*	*	*	*	*	*	*	*	*	1	1
16-18	*	*	*	*	*	*	*	*	*	1	1
19-21	*	*	*	*	*	*	*	*	*	*	1

# is the multiplier of weapon type firing.  
 \* means the weapon has no effectiveness at that range.

#### Weapon Types:

- B: Sharps .52-caliber Breechloading Rifle
- C: Sharps & Burnside Carbine
- H: 12-pounder Howitzer
- K: 6-pounder Rifled Cannon
- L: 6-pounder Smoothbore
- M: Smoothbore Musket
- N: 12-pounder Napoleon
- P: Pistol
- R: Rifle
- T: Rifled Cannon
- V: 20 and 30-pounder Rifled Cannons

#### Fire Results Table

Factor/Roll	1	2	3	4	5	6	7	8	9	10	11	12
1-2	0	0	0	0	0	0	0	0	F	F	F	1
3-4	0	0	0	0	0	0	0	F	F	F	1	1
5-6	0	0	0	0	0	0	F	F	F	1	1	1
7-8	0	0	0	0	0	F	F	F	1	1	1	1
9-10	0	0	0	0	F	F	F	1	1	1	1	1
11-14	0	0	0	F	F	F	1	1	1	1	1	2
15-18	0	0	F	F	F	1	1	1	1	1	2	2
19-24	0	F	F	F	1	1	1	1	1	2	2	3
25-30	F	F	F	1	1	1	1	1	2	2	3	3
31-38	F	F	1	1	1	1	1	2	2	3	3	4
39-46	F	1	1	1	1	1	2	2	3	3	4	4
47-56	1	1	1	1	1	2	2	3	3	4	4	5

<b>57-64</b>	1	1	1	1	2	2	3	3	4	4	5	5
<b>65-74</b>	1	1	1	2	2	3	3	4	4	5	5	6
<b>75-84</b>	1	1	2	2	3	3	4	4	5	5	6	6
<b>85-96</b>	1	2	2	3	3	4	4	5	5	6	6	7
<b>97-108</b>	2	2	3	3	4	4	5	5	6	6	7	7

Numeric result indicates strength loss  
F indicates increase in fatigue

**Fire Results Modifiers**

Fatigue: -1 if firer has Low Fatigue; -2 if firer has High Fatigue  
Quality: +1 if firer is A/B Quality; -1 if firer is E/F Quality  
Enfilade: +2 if firer gets enfilade bonus  
Column: +2 if target is infantry in column formation  
Mounted: +4 if target is mounted cavalry

**Hex Side Modifiers:**

Breastworks: -1	Trail: 0	Road: 0
UpElevation: -1	Rail: 0	Pike: 0
Embankment: -2	Stream: 0	Creek: 0

**Terrain Modifiers:**

Clear: 0	Town: -1	Orchard: 0
Forest: -1		Marsh: 0

**Melee Table**

Diff	1	2	3	4	5	6	7	8	9	10	11	12
<b>-4</b>	1/-1	1/-2	1/-3	1/-4	2/-5	2/-6	2/-7	2/-8	3/-9	3/-10	3/-11	3/-12
<b>-3</b>	-2/1	-1/1	1/-2	1/-3	1/-4	2/-5	2/-6	2/-7	2/-8	3/-9	3/-10	3/-11
<b>-2</b>	-3/1	-2/1	1/-1	1/-2	1/-3	1/-4	2/-5	2/-6	2/-7	2/-8	3/-9	3/-10
<b>-1</b>	-4/1	-3/1	-2/1	1/-1	1/-2	1/-3	1/-4	2/-5	2/-6	2/-7	2/-8	3/-9
<b>0</b>	-5/2	-4/1	-3/1	-2/1	1/-1	1/-2	1/-3	1/-4	2/-5	2/-6	2/-7	2/-8
<b>1</b>	-6/2	-5/2	-4/1	-3/1	-2/1	1/-1	1/-2	1/-3	1/-4	2/-5	2/-6	2/-7
<b>2</b>	-7/2	-6/2	-5/2	-4/1	-3/1	-2/1	1/-1	1/-2	1/-3	1/-4	2/-5	2/-6
<b>3</b>	-8/2	-7/2	-6/2	-5/2	-4/1	-3/1	-2/1	1/-1	1/-2	1/-3	1/-4	2/-5
<b>4</b>	-9/3	-8/2	-7/2	-6/2	-5/2	-4/1	-3/1	-2/1	1/-1	1/-2	1/-3	1/-4
<b>5</b>	-10/3	-9/3	-8/2	-7/2	-6/2	-5/2	-4/1	-3/1	-2/1	1/-1	1/-2	1/-3
<b>6</b>	-11/3	-10/3	-9/3	-8/2	-7/2	-6/2	-5/2	-4/1	-3/1	-2/1	1/-1	1/-2
<b>7</b>	-12/3	-11/3	-10/3	-9/3	-8/2	-7/2	-6/2	-5/2	-4/1	-3/1	-2/1	1/-1

12/ 11/3 10/3  
3

Absolute value are in terms of defender-losses/attacker-losses.  
Negative result indicates losing side.

### **Leader Casualty Values**

Fire Wound Value: 2%  
Fire Kill Value : 3%  
Melee Wound Value : 3%  
Melee Kill Value : 4%  
Capture Value : 5%

### **Elevation Information**

#### **Terrain Elevations (feet):**

Clear: 0	Forest: 50	Orchard: 15
Marsh: 0	Town: 30	Breastwork: 0

## 9.0 Optional Parameter Data

		Fire Results Table																
Factor/ Roll	1	2	3	4	5	6	7	8	9	1	1	1	1	1	1	1	1	1
										0	1	2	3	4	5	6	7	8
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	F	F	F
5	0	0	0	0	0	0	0	0	0	0	0	0	0	F	F	F	F	F
6	0	0	0	0	0	0	0	0	0	0	F	F	F	F	F	F	F	F
7	0	0	0	0	0	0	0	F	F	F	F	F	F	F	F	F	F	F
8	0	0	0	0	0	F	F	F	F	F	F	F	F	F	F	F	F	F
9	0	0	0	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
10	0	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
11	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
12	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
13	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
14	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	1	1
15	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	1	1	1
16	F	F	F	F	F	F	F	F	F	F	F	1	1	1	1	1	1	1
17	F	F	F	F	F	F	F	F	F	F	1	1	1	1	1	1	1	1
18	F	F	F	F	F	F	F	F	F	1	1	1	1	1	1	1	1	1
19	F	F	F	F	F	F	F	F	1	1	1	1	1	1	1	1	1	1
20	F	F	F	F	F	F	F	1	1	1	1	1	1	1	1	1	1	1
21	F	F	F	F	F	F	1	1	1	1	1	1	1	1	1	1	1	1
22	F	F	F	F	F	1	1	1	1	1	1	1	1	1	1	1	1	1
23	F	F	F	F	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24	F	F	F	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25	F	F	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26	F	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27	F	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
31	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2
32	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2
33	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2
34	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
35	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
36	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2
37	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2
38	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2
39	2	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	3
40	2	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	3	3
41	2	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3



13	F	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
14		1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2
15		1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2
16		1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2
17		1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2
18		1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
19		1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
20		1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2
21		1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	3
22		1	1	1	1	1	1	2	2	2	2	2	2	2	2	3	3
23		1	1	1	1	1	2	2	2	2	2	2	2	2	3	3	3
24		1	1	1	1	2	2	2	2	2	2	2	2	3	3	3	3
25		1	1	1	1	2	2	2	2	2	2	2	3	3	3	3	3
26		1	1	1	2	2	2	2	2	2	2	3	3	3	3	3	3
27		1	1	2	2	2	2	2	2	2	3	3	3	3	3	3	3
28		1	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3
29		1	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3
30		2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	4
31		2	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4
32		2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4
33		2	2	2	2	3	3	3	3	3	3	3	3	4	4	4	4
34		2	2	2	3	3	3	3	3	3	3	3	4	4	4	4	4
35		2	2	3	3	3	3	3	3	3	3	4	4	4	4	4	4
36		2	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4
37		2	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4
38		3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
39		3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5
40		3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	5
41		3	3	3	3	4	4	4	4	4	4	4	4	4	5	5	5
42		3	3	3	4	4	4	4	4	4	4	4	4	5	5	5	5
43		3	3	4	4	4	4	4	4	4	4	4	5	5	5	5	5
44		3	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5
45		3	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5
46		4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5
47		4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5
48		4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	6
49		4	4	4	4	4	5	5	5	5	5	5	5	5	5	6	6
50		4	4	4	4	5	5	5	5	5	5	5	5	5	6	6	6
51		4	4	4	4	5	5	5	5	5	5	5	5	6	6	6	6
52		4	4	4	5	5	5	5	5	5	5	5	6	6	6	6	6
53		4	4	5	5	5	5	5	5	5	6	6	6	6	6	6	6
54		4	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6
55		4	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6
56		5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6
57		5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	7
58		5	5	5	5	6	6	6	6	6	6	6	6	6	7	7	7

<b>59</b>	5	5	5	5	5	5	6	6	6	6	6	6	6	6	7	7	7
<b>60</b>	5	5	5	5	5	6	6	6	6	6	6	6	6	6	7	7	7
<b>61</b>	5	5	5	5	6	6	6	6	6	6	6	6	6	7	7	7	
<b>62</b>	5	5	5	6	6	6	6	6	6	6	6	6	7	7	7	7	
<b>63</b>	5	5	6	6	6	6	6	6	6	6	7	7	7	7	7	7	
<b>64</b>	5	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	
<b>65</b>	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	
<b>66</b>	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	8	
<b>67</b>	6	6	6	6	6	6	7	7	7	7	7	7	7	7	8	8	
<b>68</b>	6	6	6	6	6	7	7	7	7	7	7	7	7	8	8	8	
<b>69</b>	6	6	6	6	7	7	7	7	7	7	7	7	8	8	8	8	
<b>70</b>	6	6	6	7	7	7	7	7	7	7	8	8	8	8	8	8	
<b>71</b>	6	6	7	7	7	7	7	7	7	8	8	8	8	8	8	8	
<b>72</b>	6	6	7	7	7	7	7	7	8	8	8	8	8	8	8	8	

Numeric result indicates strength loss  
 F indicates increase in fatigue

Note: All fire modifiers are multiplied by 3.

### Melee Table

Diff	2	3	4	5	6	7	8	9	10	11	12
<b>-3</b>	4/-9	4/-8	3/-7	2/-6	1/-5	1/-5	1/-5	2/-6	3/-7	4/-8	4/-9
<b>-2</b>	-4/8	3/-7	2/-6	1/-5	1/-4	1/-4	1/-4	1/-5	2/-6	3/-7	4/-8
<b>-1</b>	-3/7	-2/6	1/-5	1/-4	1/-3	1/-3	1/-3	1/-4	1/-5	2/-6	3/-7
<b>0</b>	2/-6	1/-5	-1/4	-1/3	-1/2	1/-2	1/-2	1/-3	1/-4	1/-5	2/-6
<b>1</b>	1/-5	1/-4	-1/3	-1/2	-1/1	-1/1	1/-1	1/-2	1/-3	1/-4	1/-5
<b>2</b>	-6/1	-5/1	-4/1	-3/1	2/-1	-2/1	2/-1	2/-1	-4/1	-5/1	-6/1
<b>3</b>	-7/2	-6/1	-5/1	-4/1	-3/1	-3/1	2/-1	3/-1	-5/1	-6/1	3/-2
<b>4</b>	-8/3	-7/2	-6/1	-5/1	-4/1	-4/1	-4/1	-5/1	2/-1	3/-2	4/-3
<b>5</b>	-9/4	-8/3	-7/2	-6/1	-5/1	-5/1	-5/1	-6/1	-7/2	4/-3	5/-4
<b>6</b>	-10/4	-9/3	-8/3	-7/2	-6/1	-6/1	-6/1	-7/2	-8/3	-9/3	-10/4

Absolute value are: defender-losses/attacker-losses.  
 Negative result indicates losing side.

Note: "Dice rolls" on this Melee Table use two 6-sided dice.

## **10.0 Order of Battle**

### **Army of Virginia**

**Major General John Pope**

#### **I Corps**

**Maj. Gen. Franz Sigel**

##### **1st Division (Schenck)**

**Brig. Gen. Robert C. Schenck**

###### **1st Brigade (Stahel)**

**Brig. Gen. Julius Stahel**

8th New York

41st New York

45th New York

27th Pennsylvania

###### **2nd Brig (McLean)**

**Col. Nathaniel C. McLean**

25th Ohio

55th Ohio

73rd Ohio

75th Ohio

###### **Division Artillery**

Btry K, 1st Ohio Lt

2nd Btry, NY Lt

##### **2nd Div. (von Steinwehr)**

**Brig. Gen. A. von Steinwehr**

###### **1st Brigade (Koltes)**

**Col. John A. Koltes**

29th New York

68th New York

73rd Pennsylvania

**3rd Division (Schurz)**

**Brig. Gen. Carl Schurz**

**1st (Schimmelfennig)**

**Col. A. Schimmelfennig**

61st Ohio

74th Pennsylvania

8th West Virginia

**2nd (Krzyzanowski)**

**Col. W. Krzyzanowski**

54th New York

58th New York

75th Pennsylvania

**Attached**

3rd W.V. Cav. Co. C

**Division Artillery**

Btry F, Penn Lt

Btry L, 2nd NY Lt

Btry I, 1st Ohio Light

**Inde Brigade (Milroy)**

**Brig. Gen. Robert H. Milroy**

82nd Ohio

2nd West Virginia

3rd West Virginia

5th West Virginia

1st W.V. Cav., Co. C, E & L

12th Btry, Ohio Light

**Cav Brig (Beardsley)**

**Col. John Beardsley**

1st Connecticut Btl

1st Maryland Cav.

4th New York Cav.  
9th New York Cav.  
6th Ohio Cav.

**Reserve Artillery**  
Btry I, 1st NY Lt  
13th Btry, NY Lt  
Btry C, WV Lt

## **II Corps**

**Maj. Gen. Nathaniel P. Banks**

### **1st Division (Williams)**

**Brig. Gen. Alpheus S. Williams**

#### **1st Brig (Crawford)**

**Brig. Gen. Samuel W. Crawford**

5th Connecticut Btl  
10th Maine  
28th New York  
46th Pennsylvania

#### **3rd Brigade (Gordon)**

**Brig. Gen. George H. Gordon**

27th Indiana  
2nd Massachusetts  
3rd Wisconsin

### **2nd Division (Greene)**

**Brig. Gen. George S. Greene**

#### **1st Brigade (Candy)**

**Col. Charles Candy**

5th Ohio  
7th Ohio  
29th Ohio  
66th Ohio

28th Pennsylvania

**2nd (Schlaudecker)**

**Col. M. Schlaudecker**

3rd Maryland

102nd New York

109th Pennsylvania

111th Pennsylvania

8th & 12th US

**3rd Brigade (Tait)**

**Col. James A. Tait**

3rd Delaware

1st D.C.

60th New York

78th New York

Purnell Legion

**Corps Artillery**

4th Btry, Maine Lt

Btry M, 1st NY Lt

10th Btry, NY Lt

Btry E, Penn Lt

Btry F, 4th US

**Cav Brigade (Buford)**

**Brig. Gen John Buford**

1st Michigan Cav

5th New York Cav

1st Vermont Cav

1st W.V. Cav

**III Corps**

**Maj. Gen. Irvin McDowell**

**1st Division (Hatch)**

**Brig. Gen. John P. Hatch**

**1st Brig (Sullivan)**

**Colonel Timothy Sullivan**

22nd New York

24th New York

30th New York

84th NY(14 Militia)

2nd US Sharpshooters

**2nd Brig (Doubleday)**

**Brig. Gen. Abner Doubleday**

76th New York

95th New York

56th Pennsylvania

**3rd Brig (Patrick)**

**Brig. Gen. Marsena R. Patrick**

21st New York

23rd New York

35th New York

80th NY (20 Militia)

**Blk Hat Bde (Gibbon)**

**Brig. Gen. John Gibbon**

19th Indiana

2nd Wisconsin

6th Wisconsin

7th Wisconsin

**Artillery Brigade**

1st NH, Indep. Lt

Btry D, 1st RI Lt

Btry L, 1st NY Lt

Btry B, 4th US

**2nd Division (Ricketts)**

**Brig. Gen. James Ricketts**

**1st Brigade (Duryea)**

**Brig. Gen. Abram Duryea**

97th New York  
104th New York  
105th New York  
107th Pennsylvania

**2nd Brigade (Tower)**

**Brig. Gen. Zealous B. Tower**

26th New York  
94th New York  
88th Pennsylvania  
90th Pennsylvania

**3rd Brigade (Stiles)**

**Col. John W. Stiles**

12th Massachusetts  
13th Massachusetts  
83rd NY (9th Militia)  
11th Pennsylvania

**4th Brig (Thoburn)**

**Col. Joseph Thoburn**

7th Indiana  
84th Pennsylvania  
110th Pennsylvania  
1st West Virginia

**Artillery Brigade**

2nd Btry, Maine Lt  
5th Btry, Maine Lt  
Btry F, 1st Penn Lt  
Btry C, Penn Lt

**Cav Brigade (Bayard)**

**Brig. Gen George D. Bayard**

1st Maine  
1st New Jersey  
2nd NY Cav  
1st Pennsylvania

1st Rhode Island

**Attached**

3rd Indiana Cav  
16th Btry, Indiana Lt  
Btry E, 4th US

**Pa. Reserves (Reynolds)**

**Brig. Gen. John F. Reynolds**

**1st Brigade (Meade)**

**Brig. Gen. George G. Meade**

3rd Pa. Reserves  
4th Pa. Reserves  
7th Pa. Reserves  
8th Pa. Reserves  
13th Pa. Bucktails

**2nd Brig (Seymour)**

**Brig. Gen. Truman Seymour**

1st Pa. Reserves  
2nd Pa. Reserves  
5th Pa. Reserves  
6th Pa. Reserves

**3rd Brig (Jackson)**

**Brig. Gen. Conrad F. Jackson**

9th Pa. Reserves  
10th Pa. Reserves  
11th Pa. Reserves  
12th Pa. Reserves

**Artillery Brigade**

Btry A, 1st Penn Lt  
Btry B, 1st Penn Lt  
Btry G, 1st Penn Lt  
Btry C, 5th US

# **Reserve Corps**

**Brig. Gen. Samuel D. Sturgis**

## **1st Brigade (Piatt)**

**Brig. Gen. A. Sanders Piatt**

63rd Indiana

86th New York

## **Attached**

2nd NY Heavy Arty

11th Btry, NY Lt

Btry C, 1st NY Lt

# **IX Corps**

**Maj. Gen. Ambrose E. Burnside**

## **1st Division (Stevens)**

**Brig. Gen Isaac I. Stevens**

### **1st Brigade (Christ)**

**Col. Benjamin C. Christ**

8th Michigan

50th Pennsylvania

### **2nd Brig (Leasure)**

**Col. Daniel Leasure**

46th New York

100th Pennsylvania

### **3rd Brig (Farnsworth)**

**Col. Addison Farnsworth**

28th Massachusetts

79th NY "Highlanders"

## **Artillery**

8th Btry, Mass Lt

Btry E, 2nd US

## **2nd Division (Reno)**

**Maj. Gen. Jesse L. Reno**

### **1st Brigade (Nagle)**

**Brig. Gen. James Nagle**

2nd Maryland

6th New Hampshire

48th Pennsylvania

### **2nd Brig (Ferrero)**

**Col. Edward J. Ferraro**

21st Massachusetts

51st New York

51st Pennsylvania

### **Artillery**

Btry D, Penn Lt

## **Kanawha Division**

**Brig. Gen. Jacob Cox**

### **1st Brig (Scammon)**

**Col. Eliakim P. Scammon**

12th Ohio

23rd Ohio

30th Ohio

Btry L, Ohio Lt

### **2nd Brigade (Moor)**

**Col. A. Moor**

28th Ohio

34th Ohio

37th Ohio

Kentucky Lt Arty

### **3rd Brigade (Crook)**

**Col. George Crook**

11th Ohio  
36th Ohio  
44th Ohio  
47th Ohio

## **Army of the Potomac**

**Maj. Gen. George B. McClellan**

### **III Corps**

**Maj. Gen. Samuel P. Heintzelman**

#### **1st Division (Kearny)**

**Maj. Gen. Philip Kearny**

##### **1st Brig (Robinson)**

**Brig. Gen. John C. Robinson**

20th Indiana

63rd Pennsylvania

105th Pennsylvania

30th Ohio (detach)

##### **2nd Brigade (Birney)**

**Brig. Gen. David B. Birney**

3rd Maine

4th Maine

1st New York

38th New York

40th New York

101st New York

57th Pennsylvania

##### **3rd Brigade (Poe)**

**Col. Orlando M. Poe**

2nd Michigan

3rd Michigan

5th Michigan

37th New York  
99th Pennsylvania

**Artillery**

Btry E, 1st RI Lt  
Btry K, 1st US

**2nd Division (Hooker)**

**Maj. Gen. Joseph Hooker**

**1st Brigade (Grover)**

**Brig. Gen. Cuvier Grover**

1st Massachusetts  
11th Massachusetts  
16th Massachusetts  
2nd New Hampshire  
26th Pennsylvania

**2nd Brigade (Taylor)**

**Col. Nelson Taylor**

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

**3rd Brigade (Carr)**

**Col. Joseph B. Carr**

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

**Artillery**

6th Btry, Maine Lt

# **V Corps**

**Maj. Gen. Fitz John Porter**

## **1st Division (Morell)**

**Maj. Gen. George W. Morell**

### **1st Brig (Roberts)**

**Brig. Gen. Charles W. Roberts**

2nd Maine

18th Massachusetts

22nd Massachusetts

1st Michigan

13th New York

25th New York

### **2nd Brig (Griffin)**

**Brig. Gen. Charles Griffin**

9th Massachusetts

32nd Massachusetts

4th Michigan

14th New York

62nd Pennsylvania

### **3rd Brig (Butterfield)**

**Brig. Gen. Daniel Butterfield**

16th Michigan

12th New York

17th New York

44th New York

83rd Pennsylvania

### **Sharpshooters**

1st US SS

### **Artillery Brigade**

Btry C, Mass Lt

Btry C, 1st RI Lt

Btry D, 5th US

## **2nd Division (Sykes)**

**Brig. Gen. George Sykes**

### **1st Brig (Buchanan)**

**Lt. Col. Robert Buchanan**

3rd US

4th US

12th US, 1st Btln

14th US, 1st Btln

14th US, 2nd Btln

### **2nd Brig (Chapman)**

**Lt. Col. William Chapman**

1st US, Co. G

2nd US

6th US

10th US

11th US

17th US

### **3rd Brigade (Warren)**

**Col. Gouverneur K. Warren**

5th New York

10th New York

### **Artillery Brigade**

Btry E/G, 1st US

Btry I/K, 5th US

## **VI Corps**

**Maj. General William B. Franklin**

### **1st Division (Slocum)**

**Brig. Gen. Henry W. Slocum**

**1st Brigade (Taylor)**

**Brig. Gen. George W. Taylor**

1st New Jersey

2nd New Jersey

3rd New Jersey

4th New Jersey

**2nd Brig (Bartlett)**

**Col. Joseph J. Bartlett**

5th Maine

16th New York

27th New York

96th Pennsylvania

**3rd Brigade (Newton)**

**Brig. Gen. J. Newton**

18th New York

31st New York

32nd New York

95th Pennsylvania

**Artillery**

1st Mass Indep.

Btry A, NJ Lt

Btry D, 2nd US

**2nd Division (Smith)**

**Brig. Gen William Smith**

**1st Brig (Hancock)**

**Brig. Gen. Winfield Scott Hancock**

6th Maine

5th Wisconsin

43rd New York

49th Pennsylvania

**2nd Brigade (Brooks)**

**Brig. Gen. W.T.H. Brooks**

2nd Vermont

3rd Vermont  
4th Vermont  
5th Vermont  
6th Vermont

**3rd Brig (Corning)**  
**Lieut. Col. Joseph W. Corning**

7th Maine  
20th New York  
33rd New York  
49th New York  
77th New York

**Artillery**  
1st Btry NY Indep.  
Btry F, 5th US  
Btry B, Maryland Lt

**Army of Northern Virginia**

**Gen. Robert E. Lee**

**Right Wing, Longstreet's Corps**

**Maj. Gen. James Longstreet**

**R.H. Anderson's Division**

**Maj. Gen. Richard H. Anderson**

**Armistead's Brigade**

**Brig. Gen. Lewis A. Armistead**

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

**Mahone's Brigade**

**Brig. Gen. William Mahone**

6th Virginia  
12th Virginia  
16th Virginia  
41st Virginia  
49th Virginia

**Wright's Brigade**

**Brig. Gen. A.R. Wright**

3rd Georgia  
22nd Georgia  
44th Georgia  
48th Georgia

**Attached Artillery**

Norfolk Artillery  
Moorman's Battery

**D.R. Jones' Division**

**Brig. Gen. D.R. Jones**

**Toombs' Brigade**

**Col. Henry L. Benning**

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

**Drayton's Brigade**

**Brig. Gen. Thomas F. Drayton**

50th Georgia  
51st Georgia  
15th S Carolina  
Phillips' Ga Legion

**G.T. Anderson's Bde**

**Col. G.T. Anderson**

1st GA Regulars  
7th Georgia

8th Georgia  
9th Georgia  
11th Georgia

### **Wilcox's Division**

#### **Brig. Gen. Cadmus Wilcox**

Wilcox's Brigade

8th Alabama  
9th Alabama  
10th Alabama  
11th Alabama  
Anderson's Va Btry

#### **Pryor's Brigade**

#### **Brig. Gen. Roger Pryor**

14th Alabama  
5th Florida  
8th Florida  
3rd Virginia

#### **Featherston's Brigade**

#### **Brig. Gen. W.S. Featherston**

12th Mississippi  
16th Mississippi  
19th Mississippi  
2nd Miss. Btl  
Chapman's Va Battery

### **Hood's Division**

#### **Brig. Gen. John Bell Hood**

#### **Hood's Brigade**

18th Georgia  
1st Texas  
4th Texas  
5th Texas  
Hampton Legion

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

4th Alabama  
2nd Mississippi  
11th Mississippi  
6th N Carolina

**Divisional Artillery**

Charleston German  
Palmetto Battery  
Rowan Artillery

**Kemper's Division**  
**Brig. Gen. James L. Kemper**

**Kemper's Brigade**

**Col. M.D. Corse**

1st Virginia  
7th Virginia  
11th Virginia  
17th Virginia  
24th Virginia

**Jenkins' Brigade**

**Brig. Gen. M. Jenkins**

1st SC Volunteers  
2nd SC Rifles  
4th SC Battalion  
5th S Carolina  
6th S Carolina  
Palmetto SS

**Pickett's Brigade**

**Col. Eppa Hunton**

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

**Evan's Brigade (Inde)**

**Brig. Gen. N.G. Evans**

17th S Carolina

18th S Carolina

22nd S Carolina

23rd S Carolina

Holcombe Legion

Macbeth Artillery

**Artillery of the Right Wing**

**Washington Artillery**

1st Co, Wash Art

2nd Co, Wash Art

3rd Co, Wash Art

4th Co, Wash Art

**S.D. Lee's Battalion**

Eubanks' Btry

Bedford Btry

Rhett's Btry

Taylor's Battery

Grimes' Battery

Parker's Btry

**Misc. Artillery**

Leake's Battery

Donaldsonville Arty

Loudoun Battery

Fauquier Arty

**Left Wing, Jackson's Corps**

**Maj. Gen. Thomas J. Jackson**

**Jackson's Division**

**Brig. Gen. Wm. E. Starke**

**1st Brigade (Baylor)**

**Col. W.S.H. Baylor**

2nd Virginia

4th Virginia

5th Virginia

27th Virginia

33rd Virginia

**2nd Brig (Johnson)**

**Col. Bradley T. Johnson**

21st Virginia

42nd Virginia

48th Virginia

1st Va Btl

**3rd Brig (Taliaferro)**

**Col. A.G. Taliaferro**

47th Alabama

48th Alabama

10th Virginia

23rd Virginia

37th Virginia

**4th Brig (Stafford)**

**Colonel Leroy A. Stafford**

1st La Volunteers

2nd Louisiana

9th Louisiana

10th Louisiana

15th Louisiana

Coppen's La. Btl

**Divisional Artillery**

Brockenbrough's Btry

Carpenter's Battery

Caskie's Battery

Cutshaw's Battery

Poague's Battery

Raine's Battery

Rice's Battery  
Wooding's Battery

**A.P. Hill's Light Division**  
**Maj. Gen. Ambrose P. Hill**

**Branch's Brigade**  
**Brig. Gen. L.O'Brien Branch**

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

**Pender's Brigade**  
**Brig. Gen. Wm. D. Pender**

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

**Gregg's Brigade**  
**Brig. Gen. Maxcy Gregg**

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

**Archer's Brigade**  
**Brig. Gen. James Archer**

5th Alabama Btl  
19th Georgia  
1st Tennessee  
7th Tennessee  
14th Tennessee

**Field's Brigade**  
**Brig. Gen. C.W. Field**

40th Virginia  
47th Virginia  
55th Virginia  
22nd Virginia Btln

**Thomas's Brigade**  
**Col. Edward L. Thomas**

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

**Divisional Artillery**

Braxton's Battery  
Crenshaw's Battery  
Davidson's Battery  
Fleet's Battery  
Latham's Battery  
McIntosh's Battery  
Pegram's Battery

**Ewell's Division**  
**Brig. Gen. A.R. Lawton**

**Lawton's Brigade**  
**Colonel M. Douglass**

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

**Trimble's Brigade**  
**Brig. Gen. I.R. Trimble**

15th Alabama  
12th Georgia  
21st Georgia  
21st N Carolina

1st NC Battalion

**Early's Brigade**

**Brig. Gen. Jubal Early**

13th Virginia

25th Virginia

31st Virginia

44th Virginia

49th Virginia

52nd Virginia

58th Virginia

**Hay's Brigade (Forno)**

**Col. Henry Forno**

5th Louisiana

6th Louisiana

7th Louisiana

8th Louisiana

14th Louisiana

**Divisional Artillery**

Balthis' Battery

Brown's Battery

D'Aquin's Battery

Dement's Battery

Johnson's Battery

Latimer's Battery

**Stuart's Cavalry Division**

**Maj. Gen. J.E.B. Stuart**

**Hampton's Brigade**

**Brig. Gen. Wade Hampton**

10th Virginia

1st N Carolina

2nd S Carolina

Cobb's Legion

Jeff Davis Legion

**Robertson's Brigade**  
**Brig. Gen. B.H. Robertson**

2nd Virginia

6th Virginia

7th Virginia

12th Virginia

17th Va Btln

**Fitzhugh Lee's Bde**  
**Brig. Gen. Fitzhugh Lee**

1st Virginia

3rd Virginia

4th Va "Black Horse"

5th Virginia

9th Virginia

**Horse Arty (Pelham)**

Pelham's battery

Hart's battery

