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Introduction



"Who knows but it may be given to us, after this life, to meet again in the old quarters, to play chess and draughts, to get up soon to answer the morning roll call, to fall in at the tap of the drum for drill and dress parade, and again to hastily don our war gear while the monotonous patter of the long roll summons to battle? Who knows but again the old flags, ragged and torn, snapping in the wind, may face each other and flutter, pursuing and pursued, while cries of victory fill a summer day? And after the battle, then the slain and wounded will arise, and all will meet together under the two flags, all sound and well, and there will be talking and laughter and cheers, and all will say: Did it not seem real? Was it not as in the old days?" -- Sergeant Berry G. Benson, 1st South Carolina Volunteers, Army of Northern Virginia

Take Command: 2nd Manassas (TC2M) is a first person, real-time tactical strategy game. The setting is Virginia in the second year of the American Civil War (1861-1865). The historical 2nd Manassas Campaign began in mid-July 1862 and ended on

September 2nd 1862. It included the major battles of Cedar Mountain, 2nd Manassas, and Chantilly/Ox Hill as well as a number of minor actions. A short history of this campaign is found later in this manual. This game puts the player into the historical battles of that campaign as commanders of various units on both sides and with the historical orders. There is also an open play option with computer-generated battles.

The player Takes Command of an actual Civil War unit and directs its combat actions on a 3D battlefield. The player can command Union or Confederate units ranging in size from a small regiment of about 100 men to a large army with over 60,000 men. Regardless of the size of the command, the player is **The Commander** and his physical presence on the battlefield is represented in the game. Like his real-world counterpart, the player can move around the battlefield to observe the nature of the terrain, view the activities of enemy forces, and influence the actions of his subordinate commanders and units.

TC2M was designed to be as realistic as possible. To play the game is to get a chance to experience what it was like to command troops during the Civil War—as it was “in the old days”. More often than not, there will be other friendly forces present in the fight with a superior commander orchestrating the whole battle. Your command will be part of this whole so it is important for you to follow orders.

Remember—YOU are the commander of a unit in **TC2M**. It is YOUR command. YOU are responsible for everything it does or fails to do. YOUR men will live or die based on YOUR decisions. YOUR nation is depending on YOU to bring a victorious end to this fratricidal conflict. If you are prepared to accept these responsibilities, then strap on your spurs, buckle your sword, and **Take Command!**

What's New

If you have played **Civil War: Bull Run (CWBR)** it is important to know that quite a few items have been added to the **Take Command** game system...artillery with double canister...trees that allow you to follow your troops without obstructing your view.

A number of new uniforms are included, and in addition, an option to use High-Resolution uniforms has been added. There are new weapons and weapon updates. There are new commands for the cavalry troops that allow them to scout, screen, or engage etc. The supply wagons are now capable of resupplying artillery units. Troops can now assume the prone position to allow some protection from artillery fire. You can tailor the graphics to suit your computer specifications. You can keep all casualties from disappearing. You can choose to continue with a scenario after it has ended. The game loads much more quickly than the first game. It takes about 45 seconds or less for my game to load. There are corn, broomsedge and wheat fields that add to the game realism. This game is more exactly to scale than **CWBR**.

About the Armies

The armies in the Civil War were quite variable in size and organization. At the beginning of the ACW, the trained officers on both sides were products of the U. S. Army Military Academy at West Point. The U. S. Army was very small and scattered in units of regiment size or smaller. There were no officers with experience in training, maneuver or combat with division, corps or an army. The only available training was from the manuals written by European authors and there was little there on this subject. The methods for large-scale combat had to be learned by trial and error on the drill field, on the march, and in battle.

There were a number of structures that were tried as the war went on. These were mostly at the higher levels of organization. The army structures in **TC2M** are historically correct for this campaign. Other structures were in use at other times and most can be modeled in the **Take Command** system.

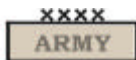
Armies are a very structured organization. This provides a way to move units of various sizes as needed and makes very clear who is entitled to give orders to whom. In addition, it provides a clear path for who is required to move up in rank to replace an officer who becomes a casualty. The rank systems used by the two armies are quite similar. The Union insignia followed standard U.S. Army pattern and the C.S. Army used the same names, but

adopted the somewhat more logical insignia system from the Austrian Army [see Insignias & Ranks, page 15].

Army Structure

The structure of the armies varied significantly over time and among different armies on both sides. In general, an army and corps were combined arms groups with infantry, cavalry, and artillery. At some times, artillery and/or cavalry were brought together in separate structures at the corps level. There was also considerable flexibility in organization depending on the mission. A smaller infantry unit such as a regiment detached on an independent mission might have artillery and/or cavalry attached for that specific mission.

The command levels had specific grades of officers that were in command. However in battle, an officer might end up commanding a unit several levels above his rank due to casualties above. For example, Captain W. F. Brown, who commanded a single company of the 12th Georgia, found himself in command of his entire brigade in the midst of battle on the 29th of August, 1862 because all of the officers above him had been killed or wounded.



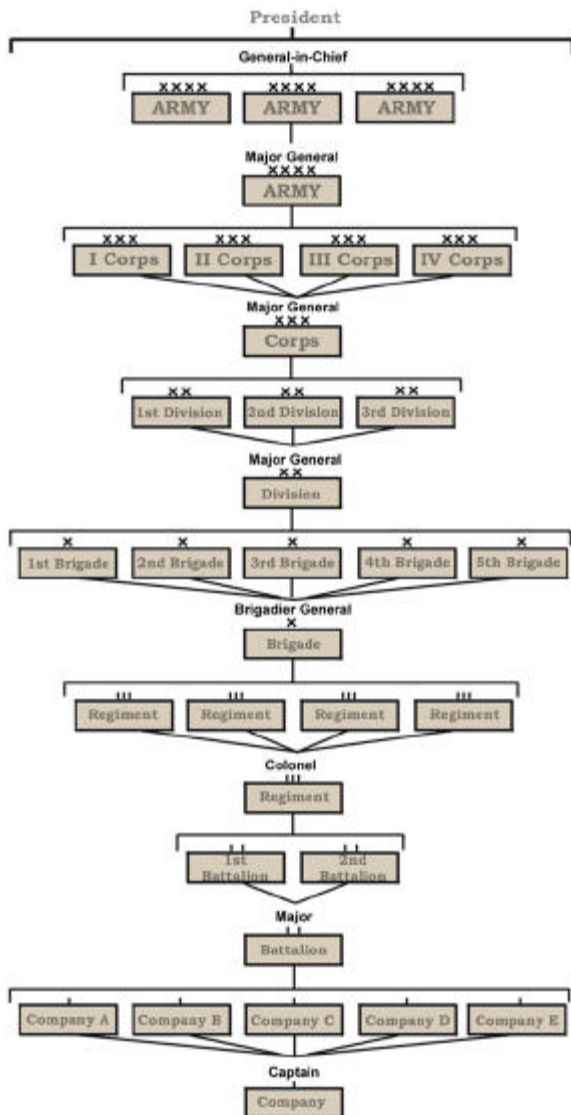
An army in the Civil War generally consisted of 40,000 – 100,000 men and was made up of 2 to 8 Corps. Army command was always at the Major General level or above.



A corps consisted of 8,000 – 20,000 men and was made up of 2 to 5 Divisions. A corps was sometimes referred to as a "Wing" (Left or Right) of an army. A corps commander was usually a Major General, although occasionally a Brigadier General would serve at this level.



Divisions were usually 2,000 – 8,000 men strong and formed of 2 to 5 Brigades. The division commander was usually a General, either a Brigadier General or Major General.



Infantry Organizations



Brigades were the basic fighting force and numbered anywhere from 400 – 3,000 men and consisted of 2 to 6 Regiments. The brigade commander was normally a Brigadier General although Colonels often commanded as promotions in fact often lagged behind promotions in duty.



Regiments were authorized 1,000 men, but more often than not, because of disease, desertion, and casualties, many regiments only fielded 200 – 600 men. It was common for newly formed regiments to have high numbers at first, but after a few battles those numbers thinned out. A regiment was normally commanded by a full Colonel.



A Battalion is supposed to be half a regiment or 500 men. Under strength regiments would often be referred to as a battalion since the number of men was more in line with the definition of a battalion. The commander was a major or Lieutenant Colonel. Later in the war, experience showed that the optimal balance between firepower and maneuverability was about 200-400 men. New regiments with much larger numbers would be split up into two or three battalions for efficient maneuvering on the battlefield.



A company was authorized 101 men. On average it was: 3 Commanders, 15 NCOs (non-commissioned commanders), and 82 privates. Companies were normally commanded by a captain, but lieutenants or even sergeants might command due to combat losses.

Artillery Organizations

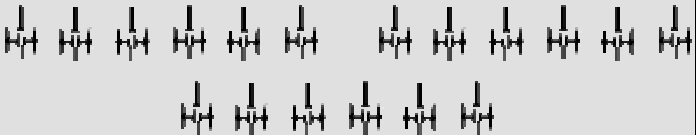
At the beginning of the Civil War, artillery was organized into **batteries** which were attached to infantry brigades or cavalry brigades. As the war continued, artillery was grouped into larger groupings, such as battalions, and eventually became an independent organization within the army.

An artillery **battery** consists of 4-6 cannons organized in **sections**, and **pieces** of cannons with horses and men. The sizes of these groups are summarized below.

Battalion

3-5 Batteries

Commanded by a Lt. Colonel or Major

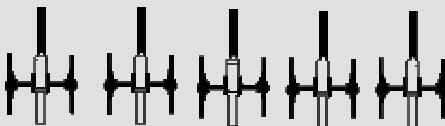


12-30 guns, 150 - 400 artillerymen, 50-300 horses

Battery

Basic Organization

Commanded by a Captain

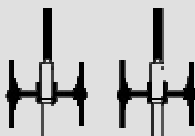


4 - 6 guns, 40 -100 artillerymen, 70+ horses

Note: A typical Union battery would contain 4 or 6 of the same type of cannons, but a typical Confederate battery would usually contain 3 or 4 cannons – often of two or three different types.

Section

Batteries consisted of Left, Center, and Right sections
Commanded by a Lieutenant



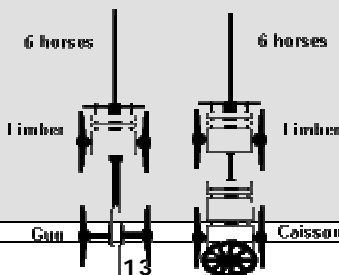
2 guns (+ limbers and caissons), 16 artillerymen, 12 drivers and 24 horses

Piece / Gun

Commanded by a Sergeant



1 gun, 8 artillerymen, 6 drivers



12 horses plus limbers and caisson

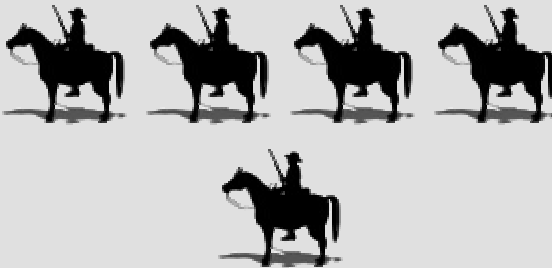
Cavalry Organizations

During the Civil War, the cavalry was organized into **divisions**, **brigades**, **regiments**, and troops or **companies** of soldiers with horses. The sizes of these groups are summarized below.

Division

2-5 Brigades

Commanded by a Brigadier or Major General

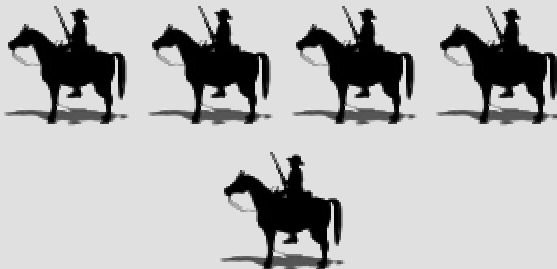


400 – 18,000 cavalymen

Brigade

2-5 Regiments

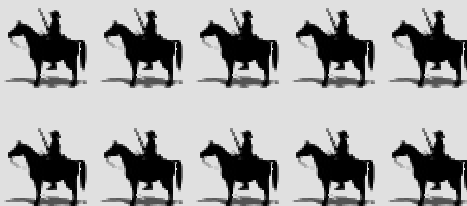
Commanded by a Colonel / Brigadier General



1,200 – 3,800 cavalrymen

Regiment

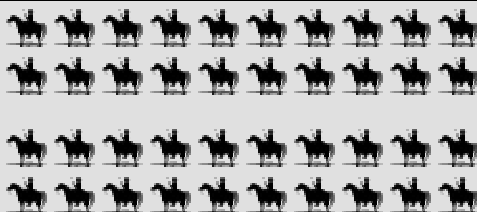
Normally 10 companies
Commanded by a Colonel



400 – 1,000 cavalrymen

Troop or Company

Commanded by a Captain



40 – 100 cavalymen

Insignias & Ranks

UNION ARMY:























RANKS

(Show Me Insignias For Soldiers)

	ARTILLERY	CAVALRY	INFANTRY	
Colonel				
Lieutenant Colonel				
Major				
Captain				
Lieutenant				
Second Lieutenant				

Confederate Army:

RANKS (Color insignia not included)

	ARTILLERY	CAVALRY	INFANTRY	
Colonel				 Lt. General
Lieutenant-Colonel				
Major				 Major General
Captain				
Lieutenant				 Brigadier General
Second Lieutenant				 Hat Patch - General

HAT PATCHES (Embroidered on black felt)



Brothers in Arms

Regiments in the Civil War were nearly always composed of men from the same state and often the same region within a state. This is why a regiment's name had the number and the state it was organized in: e.g. 9th New York Volunteers. The fact that these men would march, eat, sleep, drill, and live together for sometimes years on end meant that they were a fiercely loyal group.

Regiments carried flags to help the men find their unit in the smoke of combat. They were also used as a rallying point if the regiment was disorganized in combat. These flags were regarded as the soul of a regiment and were highly prized trophies if captured from the enemy. Usually a Union regiment would carry two flags into battle; a national flag and a state flag.



The state flag was generally a state seal or coat-of-arms that was embroidered or hand painted and given as a gift to the regiment from the people in the region that the regiment was formed in. The name and number of the regiment would also be on the flag. As time went on, the names of battles the regiment fought in were added as well.



A Confederate regiment often carried only one battle flag. The design varied regionally, but most units in the Army of Northern Virginia carried a flag based on the design of General P. T. G. Beauregard. The example to the left is that of the 28th North Carolina regiment, part of Branch's Brigade, Light Division, Jackson's Corp.

Getting Started

This section describes how to install **TC2M** on your computer and then how to select the appropriate options to optimize the performance of the game. Finally, the Tutorials are highly recommended for those not familiar with the gaming system from playing the first game in this series, Civil War: Bull Run.

Installation

Autorun:

- 1) Turn the computer on and start Windows 98/ME/2000/XP. Please close any other programs that you have running.
- 2) Place Take Command: 2nd Manassas CD in the CD-ROM drive and wait 15 seconds. The install screen should appear.
- 3) Follow on-screen instructions.

NOTE: If the Autorun feature is disabled or does not work properly, please follow one of the manual installation methods below.

Manual Installation #1:

- 1) Turn the computer on and start Windows 98/ME/2000/XP. Please close any other programs that you have running.
- 2) Place Take Command: 2nd Manassas CD in the CD-ROM drive.
- 3) Select [Start] then select on [Run].
- 4) Type the letter of your CD-ROM drive (usually "D") followed by a colon (:) and the word "SETUP". Then select the [OK] button. (Example: "D:SETUP")
- 5) The install screen should appear. Follow the on-screen instructions.

Manual Installation #2:

- 1) Turn the computer on and start Windows 98/ME/2000/XP. Please close any other programs that you have running.
- 2) Place Take Command: 2nd Manassas CD in the CD-ROM drive.
- 3) Double-click on the [My Computer] icon from your desktop.
- 4) Double-click on the CD-ROM icon labeled [**TC2M**].
- 5) Double-click on the [Setup] icon.
- 6) The install screen should appear. Choose "Install" and follow the on-screen instructions.

Getting Started After Installation:

- 1) Place Take Command: 2nd Manassas CD in the CD-ROM drive.
- 2) Select on [Start], then select [Programs].
- 3) Select Take Command: 2nd Manassas to start the game.

System Requirements

Minimum

(must run in low video mode)
P3 1000
64MB Video Card (DX9 Compatible)
256MB RAM
DirectX 9 (On CD)
Win 98/ME/2000/XP

computer and is recommended for higher performance computers (CPU faster than 2 GHz) with a high amount of system RAM (2GB).

High Resolution Flags. If selected, this setting enables the display of high-resolution flags in the game. This is also recommended only on higher performance systems.

Use Minimum Uniforms. This setting will use one uniform type per side. It can be used along with either the Hi-Res or Low-Res uniform settings so that a player can choose only one uniform per side but use Hi-Res units for that one uniform.

Low Resolution Maps. If selected, this setting will remove many of the 3D terrain models (mostly fences and corn) that can slow down the performance of low-end machines.

Low Density Terrain Foliage. If selected, this setting reduces the percentage of foliage that the game draws. Reducing the percentage of terrain foliage displayed can increase CPU performance for low-end computers.

Wrap Trees Off Map. This setting displays trees that are beyond the edge of the game map. This capability adds to the impression that the **TC2M** 3D environment is “boundless” and thus enhances “immersion” in the game. Turning this option off can increase CPU performance for low-end computers.

Show Road Paths. If selected, this option enables the display of small gray icons that show the path of a selected unit using a road. This setting provides an informational aid for the player. It does not affect CPU performance.

Keep All Dead Bodies. This setting toggles on/off the capability of showing ALL dead bodies that accumulate over the course of a scenario. Since the dead bodies can reach a large number for big battles, reducing the percentage of dead displayed can increase CPU performance for low-end computers.

No Flag Effects. This toggles on/off the informational icons that appear over the unit flags. If players do not like to see these they can turn them off. This setting provides informational aids for the player. The display of these icons does not affect CPU performance.

Max Drawing Distance. This option sets the maximum distance the game will draw terrain features and units. The default setting is 900 yards. Reducing the max drawing distance will increase CPU performance for low-end computers.

Max Transparent Forest. This sets the transparency radius for displaying woods (only). This distance is set in yards from the position of the camera. The default setting is 200 yards. This setting provides the player the opportunity to see and fight in wooded terrain without losing the visual appeal of the **TC2M** 3D battlefield.

Sound Options. This option allows ambient sounds to be turned on or off. Ambient sounds are large files that loop throughout the game. Turning off ambient sounds can increase CPU performance for low-end computers.

Difficulty. These settings allow the player to decrease or increase the level of difficulty in playing the game. The levels change the numbers of soldiers in enemy infantry and cavalry units, and the skill levels of both the soldiers and of the enemy commanders.

- ?? **Easy** – Easier renditions of the battles of 2nd Manassas campaign – this setting is for beginning tacticians.
- ?? **Normal** – The most accurate representations of these historic battles – this setting is for seasoned tacticians.
- ?? **Hard** – More challenging versions of the battles – this setting is for expert tacticians.
- ?? **Groggnard** – Very, very difficult! ‘Groggnard’ is slang for war game fanatics (it means “Grumblers” – the name given to Napoleon’s veteran troops).

AI Performance. This setting determines how many times the AI runs its “think” loops per second. The higher the setting, the faster the AI thinks—but at the cost of a player’s frame rate. The lower the setting, the easier it is on a CPU but it delays the AI’s processing rate. The low setting is recommended for low-end machines.

With regards to game play, the biggest thing that you’ll notice in lowering the AI Performance setting is that it will take longer for units to see each other in larger battles or to react to a visible enemy. For example, if a unit is moving in a clearing (between two sets of woods) and there is an enemy unit in range, then there is a chance it won’t see

that enemy if the AI checks do not occur before they cross the clearing. Increasing the AI checks insures a better chance of them seeing that enemy.

IMPORTANT: The AI in **Take Command** is used by both friendly and enemy commanders and units! As such, you play against—and are assisted by—the AI.

Fail Grade Settings. *This setting only affects Open Play scenarios.* The player sets his grade level for ending the game based on the level of command he has chosen for himself in the Open Play game. These values set the levels at which an Open Play game will automatically terminate. This will happen when the grade level for either the player or the AI reaches the appropriate level. The Levels of Command and default settings are:

ARMY	-1500
CORPS	-1000
DIVISION	-750
BRIGADE	-500
REGIMENT	-100

Show Target List. If this setting is on, a list of visible targets and the ranges to them will be displayed in the upper left part of the game screen. This list is for the unit currently selected in the game. This option can be toggled on or off. The display of the target list does not affect CPU performance.

Autosave. This option allows the player to set the time interval for automatically saving the game while playing. A setting of 0 will disable autosave.

The Tutorials

There are a total of four tutorials in **TC2M**. These tutorials are designed to be played from top (Brigade) to bottom (Corps). Each tutorial introduces you to the various game concepts and functions as they relate to



the different echelons of command. If you are new to the **Take Command** game series, we highly recommend that you work your way through each of these instead of jumping right into battle. Besides that—they're fun to play!

Brigade Tutorial. This tutorial teaches the basics of movement, formations, and tactical commands associated with playing an infantry brigade. Generally, the basic maneuver element of a brigade is the regiment. A regiment can have anywhere from approximately 100 to 1,000 men. But typically, regiments will average around 350 men. A brigade is made up of two to seven regiments and is the basic force for taking or holding a position. Near the end of this tutorial, the player will have the opportunity to command his brigade in a small battle.

Artillery Tutorial. This tutorial teaches the basics of movement, formations, and tactical commands for employing an artillery battery. Batteries are made up of four to six cannons. Cannons (or guns) can be devastating on the battlefield if used wisely. Open, elevated terrain is the perfect place for deploying a battery or several batteries together. As artillery moves slowly and takes time to set up (unlimber) or break down its gun (limber) in preparation for movement, a good commander anticipates where and when he will need artillery support and gets his batteries moving to these critical locations as early as possible.

Division Tutorial. This tutorial teaches the basics of movement, formations, and tactical commands for controlling a division. A division is made up of two to eight brigades. A division is often an "All Arms" force (meaning it has infantry, artillery, and cavalry units assigned to it). A good general must know how to use all three branches of service in a combined manner to maximize strengths and minimize weaknesses inherent to these units if they operate alone. This tutorial introduces the player to issuing orders (assigning "Stances") to his subordinate commanders and using the **Take Command** button.

Corps Tutorial. This tutorial teaches the fundamentals of coordinating divisions and conducting a large scale battle. A Corps is made up of two to five divisions. It is a large, sprawling force and requires a significant amount of time to deploy—but it is powerful. Do you attack with all divisions? Do you hold some divisions back as a reserve and wait for the enemy to commit its forces before you? The field of battle will be your judge.

From the Main Game Screen, select TUTORIALS, and then select the tutorial you wish to play. When it is finished loading, the **PRESS ANY KEY TO BEGIN** message will be displayed at the bottom of the screen.

Note: A mouse and keyboard are required to play *TC2M*. When instructed to “select”, or “press” an item, you should click on it with the left mouse button, unless specifically instructed to “right click”.

On-Line Help



Visit our website <http://www.MadMinuteGames.com> for additional information about *TC2M*, including, additional modding information, downloads, game reviews, updates, patches and user created scenarios by players from all over the world. Also, be sure to drop by our

helpful forums (<http://www.madminutegames.com/MadMinuteBB/index.php>) for answers to any questions you may have and to learn hints, tips, and strategies on how to beat those darn Rebs / Yanks.

The Game Interface

This section describes the various components of the game interface; the ways that the player interacts with the game. These capabilities are grouped into two categories—Game Menus and Tool bars.

The Main Game Screen



The main game screen is the front entrance to all game functions. Each of the menu items leads to one of the secondary menus described below.

The background art is from the painting “The Diehards” by the noted Civil War artist Don Troiani. It depicts the

defense of the unfinished railroad by the Louisiana Brigade of Col. LeRoy A. Stafford on August 30th, 1862. Soldiers who ran out of ammunition threw stones at the attacking Union forces. See Don Troiani’s website at: (<http://www.historicalartprints.com/>).

Battles Screens

General. There are four Battles Screens that list all the historical and historical variant scenarios available in **TC2M**. These scenarios cover the three most significant battles fought during the 2nd Manassas Campaign. Read these screens from left to right to follow the time-lines. They



start with the Battle of Cedar Mountain, continue through the three days of fighting of 2nd Manassas, and culminate with the battle at Chantilly/Ox Hill.

Along the top of the screen are the dates of the various battles. In the column below these dates are the scenarios (boxes with flags) that are available for play and listed in chronological sequence.

Clicking on the gold arrow at the top of the screen (by the *Battles* title) will allow the player to cycle through the scenarios of the 2nd Manassas Campaign. The player can select and play any scenario at any time (not counting the carryover scenarios). Another way to quickly access all the Battles Screens is to use the four map buttons at the bottom right portion of the display. These allow the player to jump/skip to any Battles Screen.

Note: A (v) designation next to a commander's name on the Battles Screen means that the scenario is a historical variant.

Carry Over Scenarios. Many of the scenarios use our new carry over feature whereby a player is the commander that will lead the same command through a series of connected scenarios; any losses suffered carrying over into the next battle. The carryover scenarios are depicted on the Battle Screen using arrowed lines that connect buttons with the same name to the right of the starting battle. You will notice that if you try to select a carryover scenario (any scenario without a flag next to the name), nothing will happen. Carryover scenarios require a previous linked scenario be successfully completed before the carryover scenario can be loaded. In other words, they are locked until the player completes the first battle in the series and gets either a minor or major victory. The number of points needed to get to these victory levels are set by the scenario designer and varies among the different scenarios.

Scenario Description. Clicking on any active scenario box will show the name of the commander the player will represent in that scenario. The Scenario Description section at the bottom left of the display allows the player to scroll through the details of each scenario to get more information. This section contains the battle date, location, and weather conditions of the scenario, the time of day the scenario starts, and how long it takes to play. It also states what the player's command will be, the mission to be accomplished, the friendly forces available, and a short statement about the situation the player is facing. Finally, it provides a short biographical sketch of the actual historical commander.

Note: High scores will be shown below the scenarios that have already been played. The Service Record button is a high score screen and shows more detail.

Select **START** to **Take Command!** When the scenario is finished loading, the **PRESS ANY KEY TO BEGIN** message will be displayed at the bottom of the screen. The next key you press sends you into battle in 1862.

Open Play Screen



If you want to hone your skills as a military tactician without having to battle through the historical scenarios—then Open Play is for you. These battles can be played over and over because every one is different and completely unscripted!

There are two ways to generate a scenario using Open Play; Random Battle and Design Your Own.

Random Battle. Select the Random Battle button at the bottom right portion of the Open Play Screen. This will automatically select the Side, Battlefield, OB, Commander, Engagement Type, Size, and game Length. Selecting the Random Battle button will also automatically

load the game. When it is finished loading, the **PRESS ANY KEY TO BEGIN** message will be displayed at the bottom of the screen.

Design Your Own Battle. To design your own Open Play scenario, follow these steps:

- ?? Choose to play as the Confederate or Union army by clicking on the appropriate flag.
- ?? Choose a battlefield to play on from the list of maps displayed.
- ?? Choose an Order of Battle to play from the list of OBs displayed.
- ?? Choose the Leader (Commander) you'd like to play.
- ?? Choose one of the six Engagement Types to play:
 - **Attack.** Attempt to assault an enemy position. A maximum of nine divisions per side can be employed in an Attack Open Play scenario.
 - **Defend.** Hold a position against an enemy attack. A maximum of nine divisions per side can be employed in a Defend Open Play scenario.
 - **Meeting Engagement.** Beat the enemy to the Victory Positions (VPs) and try to hold them. A maximum of 14 divisions per side can be employed in a Meeting Engagement Open Play scenario
 - **Meeting (No VPs).** There are no VPs to go after; it's all about killing the enemy. A maximum of 14 divisions per side can be employed in a Meeting Engagement (No VPs) Open Play scenario.
 - **Strategic Engagement.** Classic Take Command open play. Start away from the enemy; find and destroy them while capturing and holding VPs. There is no limit to the number of divisions per side in a Strategic Engagement Open Play Scenario.
 - **Strategic (No VPs).** There are no VPs to go after. It is classic Take Command open play. Start away from the enemy. Find them and destroy them. There is no limit to the number of divisions per side in a Strategic Engagement (No VPs) Open Play Scenario.
- ?? Choose the size of the battle (Division, Corps, or Army).
- ?? Choose the time length of the game you want to play. If there are no VPs, then **Short** scenarios last approximately one

hour, **Medium** scenarios about two hours, and **Long** scenarios last around three hours. In scenarios with VP sites, the player must hold these VPs for 30 minutes in **Short** scenarios, 40 minutes in **Medium** scenarios, and 60 minutes in **Long** scenarios. **Note:** Despite these time limits, the player can continue the fight for as long he wishes by returning to the battle after the End Screen is displayed.

Then select the Start button to **Take Command!** When the Open Play scenario is finished loading, the PRESS ANY KEY TO BEGIN message will be displayed at the bottom of the screen.

Note: There are three Open Play Orders of Battle (OOBs) included in **TC2M**. These OOBs have had alterations made to the historical unit structure in order to provide more balanced game play at all the levels of command. In addition, players can make any number of new OOBs and add them to the Open Play Folder. The OOB will then show up on the list.

Custom Scenarios Screen



Take Command: 2nd Manassas was designed with the scenario designer in mind. The Custom Scenario list will show all the scenarios that are not part of the main game. As people create scenarios and you copy them to your scenarios directory, you will use this screen to launch

them.

As a scenario designer, you can choose to have your scenario written around a specific character or allow the player to choose from the entire OB, which commander they want to play. The commander list will show either the one commander highlighted, or a list of all of the commanders in the scenario. In this case, you can choose of the command you wish to play in the scenario.

Then select the Start button to **Take Command!**

Load Game Screen



If you've saved one of your games in mid-battle, this is where you go to load that game and continue the fight!

Select your saved game from the list on the left and hop back into the fray.

TC2M automatically creates a save game at the start of each battle in case you want to restart that battle with the same battle criteria at a later date. This file is always named Restart Current Level.sav. If you have any value other than zero in the Autosave entry on the Options screen, the program will automatically save a game at intervals of the number of minutes you have specified. If you have 5 there, the game saves every 5 minutes. The filename is always _autosave.sav and overwrites previous Autosaved games. To change this setting, see Options/Autosave.

Service Record Screen



The Service Record Screen shows the highest score the player has achieved for each scenario played to completion as shown by reaching the Victory Screen (see below). If the player exits a scenario without completing it, he will not receive a score for that scenario on his Service

Record.

Tutorials Screen

Credits Screen



This screen shows the people responsible for the various aspects of creating **TC2M**.

In-Game Tool bar and Popup Menus



After you have started your battle, you will see most of the screen showing the site of the battle and the soldiers of your command and possibly units from other commands as well. The lower portion of the screen is the tool bar. This section of the manual will cover the items directly in view and those that can be displayed as popup menus by clicking on various items on the tool bar.

During play, one of the player's main interfaces with the game is the tool bar. All Commanders and Units have a tool bar. From these tool bars, the player can issue commands to his Subordinate Commanders and Units. He can also access the mini-map, review the messages he has received, view the scenario Order of Battle and the status of units, and access the Main Menu. This section provides an overview of how to use the various tool bars.

In-Game Menu Screen



To access the In-Game Menu, select the MENU button on the tool bar. To close the In-Game Menu without leaving the game, select the X in the upper right hand corner or press the esc key. To leave the game and return to the Main Menu Screen, select Quit.

Note: The game will pause when the In-Game Menu is selected.

Battle Info. Selecting this button displays the text of the scenario introduction information if you are playing a scenario from the Battle Screen (see Battle Screen description, pg 24). In an open play battle, this displays important information about the scenario including the type of engagement, the name and current timer value for the major VP, and the number of men needed to control the VP and start or keep the timer running for the player's side.



Save Battle. Saves the current battle. To access the Save Game screen select the menu button on the tool bar and then select save or press the '+' on the NUMPAD. To save a game, either type a new name in the list or select a previous saved game to overwrite. There is no confirmation for overwriting previously saved games. Select Save to save the game or select cancel to leave this screen without saving.



Load Battle. Loads a game from the Saved Games list or restarts the same scenario at the beginning. To access the Load Game screen select the menu button on the tool bar

and then select load or press the '/' on the NUMPAD. Loading is very fast when in the game. It will take much longer to exit the game and load from the Main Menu Screen. Select the game you want to load from the list, the name will appear below the list, and select load.

To leave this screen without loading a game, select the cancel button. Only those games saved using the current scenario will appear on the list. To load a game from another scenario, you must exit to the Main Menu Screen. Notice that every time you start a new scenario, an automatic save is created so that you can restart without going back to the Main Menu Screen.

End Battle. Selecting the End Battle button allows the player to end the scenario currently in play. Once selected, an End Game Screen will appear for the player to review all the grades and data for recorded for both sides up to the point the scenario was ended. There is no player penalty for ending a scenario. However, any grade levels achieved by the player will not be recorded, and thus will not count towards player promotion.

Help. The Help displays a list of all the available in-game help information. To access the Help system, select the help button on the in-game menu or press the 'H' key on the keyboard. This will bring up a scrollable list of help topics. Select the topic that you want to read about and then select the Show Help button, or select cancel to leave this screen.

Quit. Quits the game and goes straight to the Main Menu Screen.

Tool bars

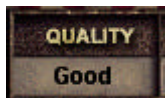


During play, one of the player's main interfaces with the game is the tool bar. All Commanders and Units have a tool bar. From these tool bars, the player can issue commands to his Subordinate

Commanders and Units. He can also access the mini-map, review the messages he has received, view the scenario Order of Battle and the status of units, and access the Main Menu. This section provides an overview of how to use the various tool bars.

Note: The player may find it convenient during game play to turn the tool bars off. To do this, use the **Hotkey: 'U'**. This will toggle the tool bar on and off.

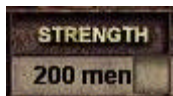
Quality



Commanders, infantry, cavalry, artillery, couriers and supply wagons all have a quality rating. The quality Rating determines how well a Commander or Unit perform in battle. Units with higher quality ratings will fight longer and lose morale more slowly. In **TC2M**, quality cannot be changed by any action of the player. Quality is set as a value in the OOB file. There are eight (8) quality ratings. These ratings are listed here in descending order (from best to worst):

Crack
Elite
Veteran
Good
Regular
Fair
Trained
Green

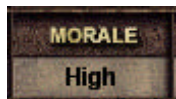
Strength



This section shows the current number of men in the unit or for a commander in all of the units under the command of that officer. The indicator bar change shows what fraction of the original

strength of the unit the current strength represents. In this example the regiment has 200 of the 260 men present at the start of the battle.

Morale



Morale is the primary indicator of your soldiers' willingness to fight. As they fight, this will rise and fall. The lower it is the more likely they are to break and run. By keeping a commander and other units nearby (see icons), the player will give the unit morale bonuses which will help in it's willingness to fight.

Morale Levels. There are 10 morale levels; they are listed here in descending order from best to worst:

High
Confident
Good
Willing
Uneasy
Shaken
Wavering
Panicked
Broken
Routed

The initial morale is always high unless set differently by the scenario designer to reflect historical information. Unit quality and unit strength can provide additional initial morale value. The loss of morale is primarily caused by casualties. A number of factors can affect morale in either a positive or negative way; some of these factors are shown by small indicators on the tool bar (see below).

Morale is checked when a unit suffers a certain percentage of casualties. This check is based on a unit's strength at the beginning of a scenario. The actual percentages of loss that require these checks can be found on the Morale Table found on the tables.csv. As an example, a regiment that starts a scenario with 400 men will make its first mandatory morale check as soon as it suffers eight casualties ($400 \times 2\% = 8$).

Once the casualty percentile threshold has been reached, then this percentile is indexed with the unit's Quality Rating to determine the chance of having to make a fall back or retreat check.

If a unit fails this morale check it will next check to see if it will be forced to fall back 100 yards or retreat 500 yards.

Morale Recovery. Morale will recover if units are out of combat. Units should recover morale very slowly to a point where they can at least march if they are broken (even if a leader is not nearby). Commanders can increase morale in two ways. The first is their presence; this provides an increase in morale only as long as the commander is within his support range of the unit. The amount of morale provided to a single unit is not affected by the number of units within range of a commander's influence. Multiple commanders can provide morale to a single unit. The second way that a commander can increase unit morale is by rallying. This is a non-volatile increase in morale that occurs when the commander 'pumps up' the troops by word and example. The amount of morale support is affected by the ability, leadership, and loyalty ratings of the commander. The range at which the commander can provide support of either type is affected by his quality rating.

Fatigue



A unit's Fatigue Level greatly affects its movement speed, and its ability to conduct Fire Combat and Melee Combat. The lower this level gets, the less capable the unit becomes.

Additionally, when a unit reaches the *Exhausted* level it can no longer *Double Quick* or *Charge* the enemy until it has had the opportunity to rest. The rate at which a unit lowers its fatigue is based on the immediate commander's grade.

Fatigue Levels. There are seven fatigue levels. The initial fatigue level for a unit is established at the beginning of a scenario—but this level can change during play based on what the unit does. Each fatigue level has a number of fatigue points assigned to it—think of these as “energy” points. A unit can lose or gain fatigue (energy) points by the activities it performs. The Fatigue Levels

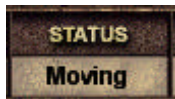
and the Fatigue points for each level are listed below in descending order from best to worst:

Rested	100
Fresh	95
Okay	85
Winded	70
Tired	45
Weary	20
Exhausted	10

Fatigue points are reduced primarily due to movement and to combat. The amount of fatigue reduction with movement depends on the type of terrain the unit is currently located in or on. This is reported in the Location item, discussed below. The numerical losses for each terrain type are specified in the *mapname.csv* file.

Fatigue Recovery. A unit can recover from fatigue if allowed to rest. A unit will rest if it is not moving and not engaged in combat. The unit can be standing or prone.

Status



This section of the tool bar indicates the status of the selected unit. Possible values are:

Resting. The unit is not moving and not in combat.

Moving. The unit is in motion.

Engaged. The unit is now engaged in combat.

Taking Cover. The unit is lying down, primarily used to reduce casualties from artillery fire.

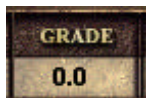
Retreating. The unit is currently retreating and will not respond to commands until it has reformed.

Unlimbering. Artillery only, this shows that the unit is in the process of unhitching the guns from the limbers and getting ready to open fire. An indicator bar shows the progress of this activity.

Limbering. Artillery only, this shows that the unit has ceased fire and is loading up ready to move. An indicator bar shows the progress of this activity.

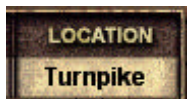
Rallying. This is only for commanders and indicates that they are rallying troops to provide morale support.

Grade



This is the current numerical score for this unit or the cumulative score for all units under the selected commander. The score for the players character is the value used to determine victory levels at the end of the battle. The factors that go into calculating the grade are extensively discussed in the section "Winning the Game" below.

Location



This reports the type of terrain that the unit is currently in or on. This is determined by the location of the unit flag. The type of terrain affects visibility and fatigue effects with movement.

Status Icons

Another source of unit information available on the tool bar is the status icon. Study these carefully so that you can recognize them at a glance. There are 11 of these; six are favorable and five are unfavorable indicators of the status of your units. These icons are only displayed on *unit* tool bars; they are not used nor displayed on the *commander* tool bars.

Favorable Unit Status:



Morale Bonus from Commander. This icon is displayed when the selected unit is receiving a Morale Bonus from

nearby commander. Only one star is displayed even if the unit is getting a Morale Bonus from several nearby commanders.



Morale Bonus from Unit. This icon is displayed when the selected unit is receiving a Morale Bonus from nearby friendly unit.



Defensive Terrain Bonus. The *Defensive Terrain Bonus* icon is displayed when the selected unit is receiving Fire Combat from the enemy and is located on terrain that yields a defensive bonus. Examples of defensive terrain are woods, stone walls, and fences.



Elevation Attack Bonus. The *Elevation Attack Bonus* icon is displayed when a selected unit is initiating fire combat from a higher elevation than the enemy. The elevation attack bonus increases the closer the range. This bonus does not apply to melee combat.



Unit Resting. This icon is displayed when the selected unit is resting. To be eligible to rest, a unit must not be moving; it can be standing or prone. In addition, the unit cannot be engaged in combat.



Unit Rallying. This icon is displayed when the selected unit is rallying. To be eligible to begin rallying, a unit must have a morale level of Uneasy or worse. It must be out of combat (i.e. not under fire and no targets that it can fire at) and resting (standing or prone). Finally there must be a leader within morale support range whose status is Rallying.

If all of these conditions are met, then the unit will **automatically** begin the rallying process. As long as these conditions exist, units will continue to rally until their unaided morale level reaches “**Willing**”. The unaided morale level is the unit’s morale level **without** including any additional morale benefits that might possibly be received from a nearby commander and/or supporting unit. Once a unit has rallied to a morale level of “**Willing**”, the Unit Rallying Status Icon will disappear.

Unfavorable Unit Status:



Unit is visible to the enemy. This icon is displayed when the selected unit has been spotted by at least one enemy unit.



Flank Warning. The *Flank Warning* icon is displayed when the selected unit is being attacked from the flank by enemy Fire Combat.



Target is Blocked. The *Target is Blocked* icon is displayed when a friendly unit is blocking the line fire between the selected unit and an enemy unit.



High Fatigue Warning. The *High Fatigue Warning* icon is displayed when the fatigue level of the selected unit equals *Tired*, *Weary*, or *Exhausted*.



Low Morale Warning. The *Low Morale Warning* icon is displayed when the morale level of the selected unit equals *Shaken*, *Panicked*, *Broken*, or *Routed*.

Common Command Buttons

The tool bar Command Buttons are located on the right side of the tool bar. These buttons are used to issue orders to your subordinate commanders and units. The following buttons are common to two or more Commander or Unit type tool bars.

Common Unit Movement Commands:



Turn Right/Turn Left. Used to change the direction of the selected unit. You should note that clicking the wheeling button changes the facing of your Commander. Continue to rotate the Commander if he is not facing in the desired direction. Once your Commander is facing the desired direction, click on the formation icon you wish your regiments to deploy in. You will find they automatically take up position around the Commander facing in the same direction.



Use Roads. This button causes the selected unit to use the roads to move to their destination and to move in

road march column until they move into the final formation. This is preferred when making a longer movement as marching on roads is less tiring than cross-country movement.



Halt Regiment/Battalion/Gun. Use this button to stop the movement of a selected individual unit at its current location



Advance. Selecting this button will order the selected unit to move towards the enemy while still firing. Movement towards the enemy is done at a much slower rate than just marching forward in line. When "advance" is selected, the unit will fire at the enemy as it moves forward in 25 yard increments.



Fall Back. Selecting this button orders the selected unit to fire at the enemy as it slowly withdraws 50 yards. The *Fall Back* command is only available for commanders, infantry, and cavalry units.



Double Quick. Selecting this button orders an infantry unit to run, or orders a cavalry, artillery, or supply wagon unit to gallop. This allows a unit to get to its destination twice as fast. However, a running unit will also lose fatigue points twice as fast—so be careful how you use this capability.



Charge. Selecting this button will order the selected unit to charge *the closest enemy unit* and engage in Melee Combat. Once this command is initiated, the men cannot be stopped until they have reached their target. They will engage in Melee Combat until they either win the fight or are defeated and retreat. A unit with a fatigue level of "exhausted" will not charge. Cavalry can only charge and melee while mounted.



Retreat. This command orders an infantry or cavalry unit, or the guns of a battery to withdraw 300 yards to the rear. Once this command is initiated, the men and/or guns cannot be stopped until they have

withdrawn/run 300 yards.

Common Unit Subordination Commands:



Take Command. This is the ultimate micro-management button! Activating the *Take Command* button takes “total” control of a unit and overrides the friendly unit AI. A player is completely responsible for everything the unit does or does not do—even wheeling! If you ever want to hand control back to the AI just toggle the *Take Command* (TC) button off and the AI will take over the basic controls again. When you TC, you cancel any stance previously assigned to unit. A new stance order should not be ordered until after you have toggled the Take Command function back off.

Note: Unless you are constantly watching, units you have *Taken Command* of may be destroyed or routed while your head is turned away. They are no longer thinking on their own. So use it wisely.



Attach / Detach. Selecting this button allows a player to detach a unit and move that unit individually without being called back or included in the commander’s orders.

Note: The benefit of detaching a unit is that it will not respond to any movement or formation commands issued by the superior commander from whom the unit was detached. However, be aware that the unit is still under friendly AI control and will respond to the presence of the enemy. It will move and/or wheel as it sees fit to respond to its particular situation to protect itself or fulfill its stance order.

Common Unit Formation Commands:



Column. The **column** is the basic movement formation for all infantry and cavalry units. It gives the unit a movement bonus when marching and thus, is much faster than a unit moving in line formation. The *Column* command is not available for artillery or supply wagon units.



Line. The **line** is the basic fighting formation for all infantry and cavalry units. It brings maximum firepower to bear on the enemy. Units in line formation move at a slower rate than those in column formation.



Skirmish. While in **skirmish** formation (also known as “open order”), the men of the selected infantry or cavalry unit spread out to minimize the amount of damage they can take from enemy fire. Units deployed in skirmish formation can be used to slow down the advance of enemy forces by causing them to deploy from column into line.

Units in skirmish formation will attempt to maintain their distance from advancing enemy units. If a friendly unit in skirmish formation is approached by an enemy infantry or cavalry unit to within 100 yards, the unit in skirmish formation will automatically retreat 100 yards. Likewise, if a friendly unit approaches an enemy unit in skirmish formation, then that enemy unit will retreat 100 yards. Causing a unit in skirmish formation to retreat does not earn grade points for the side causing the retreat.

Common Unit Administrative Commands:



Re-Supply Ammunition. Selecting this button will cause an infantry or cavalry unit to march to the location of its division ammunition wagon. Upon arrival, the unit will automatically draw ammunition. After replenishing its ammunition supply, the unit will march back to the location of its brigade commander. Artillery units can be resupplied with ammunition by moving a supply wagon adjacent to the battery.

Commander-Specific Command Buttons

As a commander in the Civil War, you will have many men under your command. They are all thinking and moving on their own. You give them orders and they execute those orders as they see fit. Sometimes you may get angry at your commanders when they make decisions you disagree with. This may lead your family members to ask why you are yelling at someone who has been dead for 150 years.

There are four types of orders that can be given by a division commander or above to subordinate commanders. These orders dictate the response or level of aggression towards any visible enemy. Many factors go into determining the extent to which a brigade will carry out these orders (i.e. commander personality, enemy strength, etc.).



Attack. A brigade will attempt to get closer to the enemy to improve its firing effectiveness. This order is used if a player wants his brigade to attack—with extreme prejudice!



Probe. A brigade will only advance to the outer ranges of its firing effectiveness. This order is good to keep the enemy occupied without the potential for heavy losses.



Defend. A brigade will only attack a unit that is weaker, at a closer range than “probe”, and not drive the attack home. This is a defensive order that keeps the brigade in a smaller area.



Hold. A brigade will only attempt to defend itself and will not venture out beyond a 50 yard radius. This order is for holding a specific location.

These commands are sent to subordinate commanders by courier unless the commander issuing the stance order is within 50 yards of the subordinate getting the orders.

If you want to take complete control of a brigade, set the orders to *Take Command*. This turns the AI off (except for unit wheeling), so the player needs to micro-manage much more. If you want to turn command back over to the AI, turn off the *Take Command* button (i.e. de-select it).



Halt Unit. Halts the command in its current position.



Leader Doubletime. Causes the selected commander to move at the double. Does not affect subordinate units.



Leader Use Roads. Causes the selected commander to move via roads. Selection of this command does not affect subordinate commanders or units.

Brigade Command Formation Buttons

These buttons are used to order an infantry or cavalry brigade into a specific formation either in their current location or at the end of a movement order.



Battle Line. Selecting this button orders the subordinate units of the brigade to deploy into battle line formation with regiments deployed on line.



line.

Double Line. Selecting this button orders the subordinate units of the brigade to deploy into battle line with half the regiments deployed on line in front and the other half deployed on line and to the rear of the front



Maneuver Columns (Infantry only). Selecting this button orders the subordinate units of the brigade to deploy into column formation with regiments deployed on line.



Deploy Skirmishers (Infantry only). Selecting this button orders the subordinate units of the brigade to deploy into battle line formation with regiments deployed on line and one regiment forward.

Note: If a brigade is ordered to Deploy Skirmishers, the regiment that should form in skirmish line actually forms into line instead. To get this regiment into skirmish formation, select the regiment and then select the skirmish button.

Division Command Formation Buttons

These buttons order the brigades and batteries of the division into various formations either in their current location or at the end of a march.



Battle Line. This will place all of your infantry and cavalry brigades in line abreast with the artillery behind the main line. A good choice when you need to cover the maximum frontage, but leaves you with no reserves.



needed.

Battle Line with Reserves. Selecting this button orders a division to place two infantry brigades in line and the rest behind in a reserve position. This is a good formation where space is limited or defense in depth is



Battle Line with Flank Support. Selecting this button orders the division to place a single brigade in front with the remaining units in supporting positions to the left and right and in depth.



Assault Lines. This places your units in a column of brigades or batteries. Useful in very restricted locations or where repeated assault will be needed.



Defensive Depth. Places all of your infantry and cavalry in a single line of brigades with each brigade in Double Line formation.



Reserve Columns. Places all units in a compact formation with each brigade in maneuver column formation.

Note: There are no formation command buttons for corps and army commanders. When playing at these levels, the player must issue formation commands to his divisions via subordinate division commanders.

Unit Specific Command Buttons

The following buttons are unique to each particular unit tool bar (i.e. infantry, cavalry, and artillery).

Infantry Unit Tool bar Buttons:



About Face. Selecting this button makes an infantry unit change its facing 180 degrees. The infantry unit must be stationary (not a single soldier moving) to use the About Face command.



Lie Down (Take Cover). Selecting this button makes an infantry unit lie down and take cover. Sometimes a unit will lie down automatically if it is under fire from enemy artillery. While prone, the chances of suffering losses to enemy artillery fire are reduced by half (fire from enemy infantry and/or dismounted cavalry is unaffected). The drawback to lying down is that the *unit cannot fire*, and it takes time for an infantry unit to get back on its feet to return fire. The actual time required for a unit to get back on its feet depends on its drill rating. It is recommended that you use the *Lie Down* command only when enemy infantry is out of range of the friendly unit assuming this posture.

Note: A unit that is in the process of rising to its feet from the prone position cannot be ordered to lie down back down again until all the men in the unit are standing.

Cavalry Unit Tool bar Buttons:



Mount / Dismount. This toggles cavalry units between mounted and dismounted modes. Cavalry can only melee while mounted, and can only fire while dismounted.



Scout. Detaches the cavalry unit and sends it out on a mission (under AI control) to find enemy units and follow them while staying beyond enemy rifle range.



Screen. Detaches the cavalry unit and sends it out on a mission (under AI control) to find the enemy and engage in long range skirmishing.

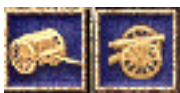


Raid. Detaches the cavalry unit and sends it out on a mission (under AI control) to find and attack or capture weakened or unprotected enemy targets (e.g. wagons, cannons, etc.).



Guard. Detaches the cavalry unit and attaches it to guard any friendly unit (e.g. wagons, artillery, leaders, etc.). If the guarded unit moves, then the cavalry unit will automatically move with it.

Artillery Unit Tool bar Buttons:



Limber / Unlimber. The *Limber* command orders a gun to prepare to move by hooking up to its limber and horses. The *Unlimber* command orders a gun to prepare to fire by unhooking from its limber and horses. The button that will be displayed on the tool bar will be the opposite of the artillery unit's current state. So if an artillery unit is un-limbered in the game, then the Limber button will be displayed on the tool bar. The opposite will be true if the battery is currently limbered in the game; then the unlimber button will be displayed.



Guns Fall Back. This command orders the battery to fall back 25 yards while continuing to fire. The guns will not limber to execute this movement command.



Solid Shot. Select this button to order a gun to fire solid shot. This artillery round is a solid iron projectile that is used for long distance shooting. It shoots the same distance as shell and shrapnel but has a better chance at hitting its target. However, less damage is done because it's a single projectile.



Shell. Select this button to order a gun to fire shell. A shell projectile is just that...a hollow "shell" filled with gunpowder. This projectile incorporates a fuse mechanism that explodes on the ground sending shell fragments into the enemy.



Canister. Select this button to order a gun to fire canister. Canister is a hollow cylinder projectile packed with sawdust and iron balls. This ammunition is for firing at close range—approximately 300 yards or less. The closer the better! At less than 75 yards, the gun will automatically fire double canister. Canister was extremely deadly and was the main cause of artillery inflicted casualties during the Civil War.



Shrapnel. Select this button to order a gun to fire shrapnel. Shrapnel is a hollow, spherical projectile filled with small iron balls that spray out when the charge detonates. It has a timed fuse that causes it to explode in mid-air and send the contents all over the enemy.



Conserve Ammo. Issue this order when the ammunition levels are getting low and you don't want the cannon to waste its remaining ammunition on targets that are too distant. The gun will always switch to canister and protect itself if threatened by enemy infantry or cavalry.



Target Troops. This command instructs the AI to fire only at infantry and cavalry and ignore artillery.



Target Artillery. This command instructs the AI to only shoot at enemy cannons/batteries and ignore infantry and cavalry (unless these unit types get within 250 yards).



Auto Target. This command instructs the AI to choose whatever target it thinks is best to engage.



Combat Report Pop-up Screen

Commanders have an insatiable desire for up-to-

date information that is quickly and easily understood. The Combat Report provides you with a quick snap shot of the status of any one of your units. There are two types of Combat Reports; one report format presents the status of infantry and cavalry units, the other report format presents the status of artillery units. There are no Combat Reports for Commanders or Supply Wagons.



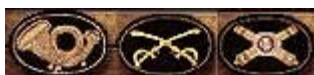
Infantry/Cavalry Combat Report. To view the Combat Report of an infantry or cavalry a unit, select the flag of the unit, and then select the bullet graphic on the tool bar.

To close the Combat Report, select the small X in the upper right hand corner of the dialog box.

Note: Although the game is still running you cannot interact with it while the Combat Report is open.

The Combat Report for infantry and cavalry has two sub-components; the Casualty Report and the Weapon Report. The Casualty Report provides a summary of enemy casualties caused by the selected unit. It also shows the number and types of casualties suffered by the selected friendly unit in killed, wounded, and missing. The Weapon Report shows the type of weapon carried by the selected unit, the Open Fire Range (in yards), and the number of rounds of ammunition remaining in the unit—*per man*.

Use the Weapon Report to make smart decisions on the placement of your men



relative to the enemy. When an enemy is at or within the Open Fire Range of the selected unit's weapon, the enemy unit name and range (in yards) will appear in the upper left hand portion of the game screen. To increase the effectiveness of a friendly unit's fire, advance the unit closer to the enemy.

Artillery Combat Report.

The Combat Report for artillery has three sub-components; the Gun Report, the Range Table,

and the Ammunition Supply Report. Although the Artillery Combat Report shows casualties in the same way as infantry and cavalry, it also shows a breakdown of the best ranges to use a specific type of ammunition and the different types of available ammunition it has left.

Gun Report

Casualties:	0	15	Killed:	0
			Wounded:	0
			Missing:	0
Enemy Losses:	0			

Range Table

Solid	200 yds	1600 yds
Shell	200 yds	1200 yds
Shrapnel	200 yds	1200 yds
Cannister	0 yds	200 yds

Ammunition Supply

TOTAL: 120			
47	17	45	11
Solid	Shot	Shrapnel	Cannister

Commander Skills Pop-Up Screen

To view the Commander Skills Pop-up screen, select the patch (branch insignia) on the tool bar. Close this dialog by selecting the small X in the upper right hand corner. The Commander Skills Pop-up Screen has two sections; Objectives and Attributes.

The Objectives section lists all active and completed objectives.

The Attributes section shows how the selected commander's personality is rated. Every commander in the game has a unique personality—including you. That personality is defined by four different attributes: Initiative, Leadership, Loyalty, and Ability. These traits affect how the men under your command fight and react to your orders. The further the blue bar is to the right in the attributes box, the better that commander is in that particular area.

Note: Although the game is still running while this screen is open, you cannot interact with it.



Unit Skills Pop-up Screen

Each unit has its own special training, experience,

and abilities. By clicking on the branch patch on the tool bar while a unit is selected you can view these skills.

These skills and training are set by the scenario designer and do not change.

Close this dialog by selecting the small **X** in the upper right hand corner.

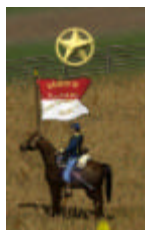
Note: Although the game is still running, you cannot interact with it while this screen is open.

Note: In upcoming **MMG** releases, these skills will be dynamic and based on the unit's success in battle.



The Unit Skills Pop-up Screen has two sections; Commanding Officer and Training.

Flag Icons



Commander and Unit Informational Icons



Superior
Commander



Player
Commander



Subordinate
Commander
(Selected)



Subordinate
Commander
(Not selected)



Enemy unit
in range



Unit within
Commander
Support
Radius



Commander
controlling VP
site timer



Command
in Trouble

Selected Unit Morale Level Icons



Green
High
Confident
Good



Yellow
Willing
Uneasy



Orange
Shaken
Wavering
Panicked



Red
Broken
Routed



Gray
Subordinate
Unit
(Not
selected)

Playing the Game

If you are new to real-time tactical wargames, it's best to play through the tutorials first to get a feel for the game interfaces and the ebb and flow of a battle. Battles can get hectic and the tutorials give you the basics for controlling your troops and give you an understanding of the way in which Civil War armies fought. The purpose of this section is to introduce some additional elements of the **TC2M** game system and show how they work in the flow of the game.

After you start a scenario or open play game, you will see the battle screen with the tool bar at the bottom. In scenarios you are likely to receive a message that gives you your orders.

Messages

There are three types of messages that are important to the player. The **Advisor** and **Courier Messages** are *sent to the player* and are designed to provide information or to issue orders for the player to follow. The third type of message is the **Request Message**. It is *sent by the player* to his superior commander to request reinforcements or new orders.

Advisor Screen

Generally, the **Advisor Screen** is only displayed during the tutorials. It is used to instruct the player on game components, concepts, and how to play.

Note: The game is paused while the Advisor Screen is displayed.

Courier Screen



Normally, a scenario or Open play game will begin with the receipt of orders delivered to you by a courier. Your superior commander (AI controlled) will give his orders to a courier and this courier will

come and find you. When the courier reaches you, the orders will be displayed for you to read using the **Courier Screen**.

It is suggested that you follow these orders if you ever want a promotion in the future.

If the orders pertain to a destination, an objective identifier (a gold arrow) will appear above the terrain over the destination.

This will also appear on your map as an “X” icon in order to aid you in reaching the destination and fulfilling your orders.



Note: The game is paused while the Courier Screen is displayed.

Send Courier Screen (Open Play Only)

Pressing the ‘C’ key while in an Open Play scenario accesses this screen.

When you play a Division or Brigade Commander in Open Play, you may receive couriers with orders from your superior commander.



These orders come in three major types:

- ?? Secure An Area
- ?? Secure A Location
- ?? Take An Objective Site

The location of the order will be marked on your map. It is up to you to follow through with those orders. When you have completed the assigned task, you can use the Send Courier screen to tell your commander that you are done and that you need new orders. A courier will be dispatched and it will go to your commander. If he has new orders, he will then dispatch a courier with your new orders.

If you select the wrong button, no courier will be dispatched. For example if you have been told to take an objective site and you try to send a courier saying that you have secured an area. The courier will not respond. No sending fake dispatches to your commander!

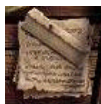
The other order that you could receive is to hold in reserves. In this case, you will have to wait around until one of your fellow commanders gets in trouble and requests help. Of course, you don't have to follow your orders...that choice is up to you.

If you are in trouble, there is one more button that you can use: Request Support. This button will send a dispatch to your commander and tell him to send any reserves that he has

available. Sometimes there are no reserves or minimal reserves, so don't use this button unless you really need to.

Note: Although the game is still running, you cannot interact with it while the Send Courier Screen is open.

Message Log Screen



The message log records all messages that have been delivered to you by a Courier or an Advisor. To review these messages, select the graphic on the left. When the **Message Log Screen** appears, you will see a list of messages that you have received. To read a message, click on the title of the message, and then select **Display**. This will bring up either the Courier or Advisor Screen depending on the type of message selected. To close Message Log Screen, select the small "X" in the upper right hand corner of the dialog box.

Note: The game is paused while the Message Log Screen is displayed.

Movement

Movement in **TC2M** is relatively simple. First, left click on a flag to select that unit. If the unit that you have selected is under your chain of command i.e. control, you can then left double click on the ground of where you want them to go. A flag will appear at this location until they arrive. You will also see a green arrow above the flag; this symbolizes the direction they will face after they arrive. Use the wheeling buttons while the unit is moving to change the direction you want them to face after they arrive. Selecting the wheeling buttons while the unit is stationary will turn the unit immediately. Left double click on ground to set a destination for the selected unit. A flag on the ground symbolizes the selected unit's destination. A gold arrow shows the arrival direction. Left click on the wheeling buttons to rotate the arrival direction. You should note that clicking the wheeling button changes the facing of your Commander. Continue to rotate the Commander if he is not facing in the desired direction. Once your Commander is facing the desired direction, click on the **formation icon** you wish your regiments to deploy in. You will find they

automatically take up position around the Commander facing in the same direction. Movement is discussed in more detail below.

Navigation

Looking Around. Take Command takes place in a fully 3D world. You can look just about anywhere. To look around hold down your right mouse button while moving your mouse. You'll notice that the mouse cursor has disappeared to signify that you are in viewing mode. Move the mouse forward and backward to look up and down. Move the mouse side to side to turn.

When you are looking around you cannot see nor hear any enemy that is not seen by someone that is a member of your army. Enemy units that are hidden from your army's eyes will remain hidden to you as well.

Navigation Compass. In the upper right hand corner of the 3D game screen is the Navigation Compass. This is one of the several means available to the player to assist him in maintaining awareness of his location and orientation on the battlefield. The compass heading (top of the screen) is the cardinal direction the camera is facing (i.e. North, South, East, West and points in between). The compass graphic is dynamic; it will rotate as the player changes the orientation of the camera in the 3D environment.



Mouse Commands:

Left mouse click - select unit/click button

Mouse wheel - move up or down to scroll text

Left mouse double click - move the selected commander or unit to a new location

Right mouse hold down - look around with the camera

Move mouse cursor to the edge of screen - move camera around

Pausing the Game

Press the 'P' key to pause the game. While the game is paused, you can move about the 3D game environment to orient yourself to the battlefield, the situation, and begin to conceive your plan.

Map Screen (mini map)



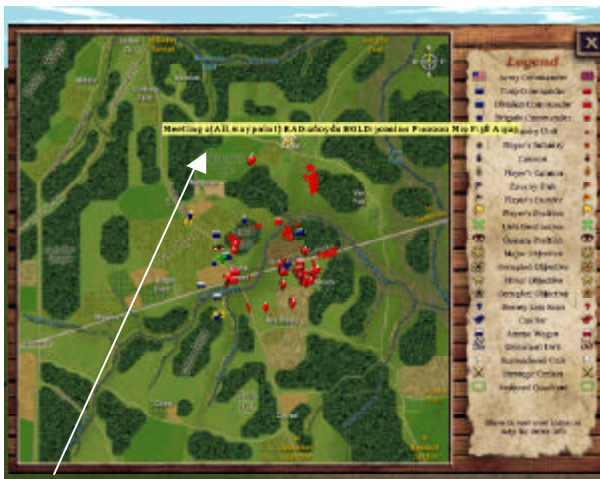
To access the Map Screen, select the map graphic button on the left side of the tool bar. You can also press the 'm' key to bring this map up. NOTE that the game does not pause while you are looking at the map.

The map may be the most useful screen in the game, as it's very easy to get lost in a 3D world. It displays a live update of all known units in the game. You can see every unit that is a member of your army on this screen, whether they are visible to your character or not.

Note: You can **only** see enemy units that are visible to any unit of your army.

If an enemy unit was visible, but now is not, you can see their last known position marked by a red or blue question mark icon. Your own units are very easily picked out on the map, as they have a yellow border around them. Every unit with a yellow border is directly under your command and you can control them. You do not have control over any unit that does not have a yellow border.

Other useful information on the map is the depiction of objectives that you have either achieved or are currently assigned to you. You can also see if a courier is moving towards you to give you orders from your superior commander. The map also displays the location of any supply wagons—a good thing to know if your units are getting low on ammunition.



By moving the mouse cursor over a map symbol, you can read the name of the unit that symbol represents. Use the legend at the side of the map to identify the different symbols and what they represent.

- ?? **VP site name:** This is the name of the VP site that is displayed to the player. This name is used on the strategic map, the objective countdown timer, and the Commander Skills Pop-up Screen.
- ?? **VP assigned:** VPs can be assigned to the player only, a particular side, or both sides. In other words, it is possible that friendly and enemy forces may have different “levels of interest” in taking possession of a VP site.
- ?? **VP Type:** *Waypoint* – Means the site **MUST** be held for the amount of time specified. However, once won, they disappear from the map. *Hold* – Means the VP site must be held at the end of the scenario to win the game. A hold site can be won multiple times unless the number of points won triggers the end of the game.
- ?? **RAD:** The radius that a side must be within to activate the VP site. This is the radius of an invisible circle surrounding the VP site. The only units that are counted

in determining who is holding VP site are those that are within the circle defined by this radius. If the enemy is also within this circle, the VP site will be considered open and remain contested until one side drives the other away.

- ?? **HOLD:** The number of minutes required to hold the VP site to obtain the grade points and/or associated bonuses of that VP site. The objective countdown timer starts as soon as the conditions are met.
- ?? **P:** The number of points added to the grade of the commander that holds the VP site for the allotted number of minutes.
- ?? **M:** Morale bonus awarded for holding the VP site for the allotted number of minutes. This is the number of morale points added to all of the fighting men that are subordinate to the commander that won the objective.
- ?? **F:** Fatigue bonus awarded for holding the VP site for the allotted number of minutes. This is the number of fatigue points added to all of the fighting men that are subordinate to the commander that won the objective.
- ?? **A:** Ammunition bonus. The number of rounds per man awarded for holding the VP site for the allotted number of minutes. This amount of ammunition is added to all infantry and cavalry units that are subordinate to the Commander that won the objective.

Note: It is much better to hold an objective with a high ranking commander as many more units will be eligible to receive the Morale, Fatigue, and Ammunition bonuses.

It is very useful to check the map after you have received new orders. If the orders contain any objectives they will appear on the map. In addition, the map helps you make sure that you are moving in the right direction to fulfill your orders. The top of the map is north. Use the compass in the upper right hand portion of the game screen to get your bearings.

The map screen can also act as a jump map. By clicking on a location on the map, your view in the 3D environment is changed to that location—unless there are restrictions on your camera movement (point of view) as defined by the scenario.

Note: Although the game is still running, you cannot interact with it while the Map Screen is open.

Moving the Camera (Point of View)

Moving the Commander's Point of View (Camera). To make moving the camera around as easy as possible we have adopted a typical keyboard system for 3D worlds. Hopefully those unfamiliar with the system will not have too many problems adapting to it.

Use WSAD to move the camera around:

Hold W - Move the camera forward in the direction you are facing.

Hold S - Move the camera backwards from the direction that you are facing.

Hold A - Move the camera to the left of the direction that you are facing.

Hold D - Move the camera to the right of the direction that you are facing.

Hold Q - Rotate the camera Left.

Hold E - Rotate the camera Right.

Also by moving the mouse to the screen edges you can move:

TOP - Move the camera forward in the direction you are facing.

BOTTOM - Move the camera backward from the direction that you are facing.

LEFT - Move the camera to the left of the direction that you are facing.

RIGHT - Move the camera to the right of the direction that you are facing.

Hold SPACE or Roll Mouse Wheel - Move the camera up.

Hold Left SHIFT or Roll Mouse Wheel - Move the camera down.

Note: None of these keys will change the direction that you are facing; you must use the mouse for that. These camera movements do not affect any of the commanders or units in your army. They only change your point of view.

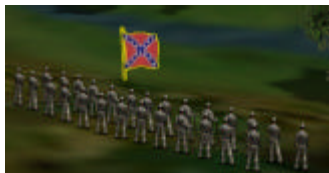
IMPORTANT: Battles scenarios usually have limits to the distance you can move the camera away from the player commander's location. This limit replicates the scenario designer's assessment of the "fog of war" requirements for any particular historical situation represented by

a Battles Scenario. There are no limits to camera movement in Open Play scenarios.

Moving the Commander. There are a few restrictions on where you can move. You cannot move off of the map. The map does have edges, though they are hard to see since it wraps to create a more realistic view. Also, you can not move the camera too far away from your character (the player commander). This adds a little to the realism of the game, as you are not a bird who can fly anywhere; you must move your units there first.

Hotkey: 'F' – The camera will follow the selected commander or unit.

Selecting Commanders and Units



Knowing how to select commanders and units is an important game concept. The only way to issue orders or get information about a “playing piece” is to select it.

To select a commander or unit, left click on its flag in the 3D environment. This will display their tool bar. If the unit is under your command then you will see all of their information displayed on the tool bar. If the selected “playing piece” is a friendly commander or unit—but not under your command—then you will see a smaller set of information. If the selected “playing piece” is an enemy commander or unit, then you will see very little information. These limits on information help replicate “the fog of war” during game play—for both friendly and enemy forces.

IMPORTANT: If the selected commander or unit is under your command, then all button selections from the tool bar will correspond only to the selected commander or unit. In other words, when you are issuing orders, make sure you are issuing them to the intended “playing piece”.

Moving Selected Commanders



To move a selected commander, just **double left click** on the ground where you want them to go. The commander's flag will appear at the selected destination as well as an arrow pointing in the direction he will be facing when he arrives. Select a formation from the tool bar,

and all the flags of his immediate subordinate units will appear with the direction arrows arrayed on the ground based on the formation selected from the tool bar.

Note: Only attached subordinate units will respond to a formation command; detached units, and units that the player has taken command of, will ignore formation commands from their owning commander.

Moving Selected Units

A selected unit is moved in the same manner as a commander. Double left click on the ground where you want them to go and their flag will appear at the destination with a direction arrow showing the unit facing at the destination.

Note: If a selected unit is still attached to its owning commander, it is possible that the commander's AI will countermand your movement orders.

A good procedure to change the facing direction of any one group on the field

- (1) Select commander.
- (2) Rotate view to face the compass point you desire.

- (3) Double click in the center of the screen in the distance.
- (4) Click halt.
- (5) Select the formation you want.

Moving by Road

Commanders and units in **TC2M** can use roads to increase their speed in moving from point A to point B on the battlefield. In addition, using roads reduces the chance of your units becoming fatigued as they move to their destinations. Here's the process for getting a command to march along the road:

- 1) Select the commander of the battery, brigade, or division command that you want to use road movement. **Note:** You cannot order a selected infantry or cavalry unit to move by road—only a battery, brigade, or division commander has the ability to order units to use road movement.
- 2) Select the position you want the commander and his command to move to using either the 2D Strategic Map or within the 3D game environment.
- 3) Select a formation for the command.
- 4) Select the "use roads" icon on the commander's tool bar. A series of gray path finding arrows will appear to show the unit's road path to its destination (unless you have that option turned off. See, Options Screen, Show Road Paths, pg 30).

If you want to change the location or formation of a command that is already in "road mode", make the changes and select the "use roads" icon again.

Once the command is in "road mode", selecting the flag of any unit in that command will display a series of light blue arrows that show the road path of the selected unit.

After selecting the "use roads" button, units will automatically find the fastest route to move from their current location to where you want them to move. If you deselect the "use roads" button, your units will continue moving towards their destination using the most direct route—a straight line.

Combat

This section describes the various ways that the player can engage in combat. Units from all three arms, infantry, cavalry, and artillery, can engage in Fire Combat with varying degrees of effectiveness. Fire combat is simply shooting at each other with the weapons each unit is equipped with. In addition, the infantry and cavalry can also engage in Melee Combat, also known as hand-to-hand combat.

Fire Combat (The Firefight)

Regiments in the Civil War generally fought in a line (two ranks deep); soldiers literally standing shoulder to shoulder. Even though rifle-muskets became much more accurate in the Civil War, actually hitting the enemy during combat was still very hard to do unless the commanders kept their troop formation as tight as possible (touching elbows).

Close battle lines meant that even if the soldiers couldn't shoot accurately, they could still put forth a great deal of firepower. The drawback was that they were only effective in the direction they were facing. That is why forming a regiment into line and "wheeling" (facing) them to engage the enemy at a perpendicular angle is the most effective way to fight during the Civil War. The best attack a regiment could hope to make on the enemy was to attack from the side (flank) or rear. This would mean a regiment could have all its rifle-muskets firing against an enemy with little or no return of enemy fire. They could fire with impunity until the enemy broke and ran.

Cavalry units often acted as mounted infantry and fast moving skirmishers. Most cavalry units were armed with single shot carbines that allowed them to act effectively in this role. Although they lacked the manpower to stand against an infantry unit, they were effective irritants and distractions and can be used to deliver effective flanking fire.

Artillery units provide the long range fire and the close in canister fire deadly to infantry and cavalry. At long range, batteries would usually fire shell, shrapnel or solid shot. At close ranges, usually

under 200 yards, they would switch to canister rounds. These were literally tin cans, filled with 27 iron shot packed in sawdust. These could cause serious damage to infantry formations. At very short ranges, less than 75 yards or so, the gunners would load two tins of canister (double canister) which was the round of last resort against an infantry attack.

The Target List



The Target List is displayed in the upper left hand corner of the game screen. This is a list of enemy units by name and the distance to them is shown in yards. Enemy units will only be listed here if a line of sight exists between them and the friendly selected unit. If the name of the enemy unit is depicted in yellow, then the enemy unit has been spotted. If the name of the enemy unit is depicted in red, then that enemy unit is at or within Open Fire Range of the friendly selected unit.

Red is the closest target, they will usually be the ones getting fired at, however the AI may on rare occasions fire at a different target if it judges it to be more dangerous.

VIS: If you see VIS: **unit name** on the target list it means that this target is partially visible, but is not an available target. You may have both VIS and valid targets on your target list at the same time.

If you do not see VIS: it means that they are a valid target. If they are also in range of the weapon for that unit, they will usually be engaged.

A target will not display red text unless it is in within 'Open Fire' range.



The yellow text shows target enemy units with clear Line of Sight (LOS) that may or may not be in range. If in range, they are 'less dangerous' than the current red text target as judged by the AI. There is a screening process to keep the display manageable in high LOS situations.

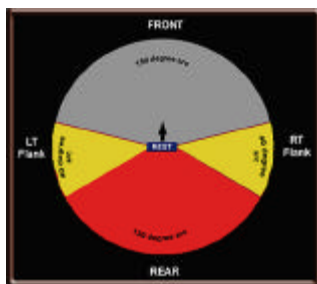
Melee Combat (Hand to Hand)

Melee combat is closing with the enemy and engaging in hand to hand combat. It can be useful for delivering the decisive blow and forcing an enemy to retreat from a position or for capturing his artillery. Infantry and cavalry units can initiate melee combat. To do this, the player should select the charge button on the tool bar of the selected unit. Artillery and supply wagons may not initiate melee combat. However, they will attempt to defend themselves if attacked by enemy units initiating melee combat against them. Melee combat is a very exhausting activity and as a result, participating in a melee could limit a unit's role for the remainder of the battle unless it is given a chance to rest. Also, if a unit loses a melee combat (i.e. the unit retreats or routs), it will take awhile for it to recover its morale.

Danger Zones

The diagram below shows the “danger zones” for a unit during combat in **TC2M**. Receiving enemy fire from the flank (from the side - yellow zones) has a very damaging affect on a unit's morale. Fire received from the rear (red zone) is even more devastating.

Remember this diagram during game play. Don't let your units take too much fire from enemy units located in these zones or your troops will eventually wilt under the pressure, and break and run for the rear; or even worse—rout from the field resulting in a loss of their services to you for the rest of the battle.



Whenever possible, attempt to maneuver your units to try and flank the enemy. Units get bonuses for flank and rear attacks. Even a small unit can wreak havoc on a larger body of troops if they are positioned to attack it from the flank or rear. In combat, an effective tactic is to have one unit keep an enemy force engaged while you maneuver another unit to try and flank it. Just remember, the enemy will be trying to do the same thing to your forces. Always try and protect your flanks while trying to gain theirs!

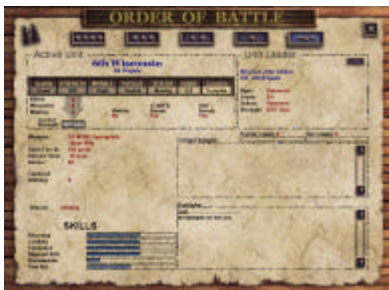
Order of Battle Screen



Selecting the soldier photograph or sword graphic on the tool bar will access the Order of Battle Screen.

The Order of Battle Screen shows a complete summary of your current state as well as the state of any units under your command. This is the best place to go to get a complete picture of your progress in the game.

You can see your grade as well, which is a summation of the grades of all the units under your command. You can use this screen to see if any of your units are getting low on ammunition or if their morale, fatigue or grade is falling



You can easily see which of your units are doing well and which need to rest. This screen is very useful to see where you should move your Brigade Commander in order to give a regiment a much needed morale boost inspired by your presence.

You can also look at the positioning of your units by viewing which are on defensive terrain (which lowers their chances of taking enemy fire), as well as seeing which are on movement terrain (which is easiest to move

across by increasing speed and decreasing the fatigue penalty of marching or running).

End Game Screen



Sooner or later, the battle ends, the dead, wounded, and missing are tabulated and history (eventually) decides the winner of that battle. In TC2M, the tabulations are instant and the verdict of history appears instantly on your screen in the form of a newspaper image. This

gives the result of your generalship as judged by the hard cold numbers. You may investigate the numbers for each side in considerable detail by clicking on the Union or Confederate Battle Record text. This will lead you to the OOB screen for each side and the records for each unit in the battle can be examined.

Levels of Victory. In TC2M, the points are calculated as described below in the 'Winning the Game' section. Victory levels for a scenario are set by the scenario designer and vary quite significantly depending on the specific scenario. In Open Play, the levels of victory are defined on the Options Screen and can be modified by the player. Any changes affect future battles, but do not affect existing saved games.

Major Victory. This means that you have performed very well as a commander and have inflicted a serious defeat on the enemy.

Minor Victory. This is a positive result, but less conclusive than a major victory. A good job, but still some room for improvement.

Draw. This indicates that you and your enemy have performed about equally on the field of battle.

Minor Defeat. This shows that you have been out-generaled by the enemy commander. You were able to maintain some cohesion to your forces and keep the enemy from total domination of the battlefield.

Major Defeat. This is as bad as it gets. The enemy has beaten you like a drum and likely routed nearly all of your forces from the battlefield. The battle plan and tactics have clearly failed this time. Rally your forces and try again another time.



And while my imagination is like the weaver's shuttle, playing backward and forward through these two decades of time, I ask myself, Are these things real? did they happen? are they being enacted today? or are they the fancies of the imagination in forgetful reverie? Is it true that I have seen all these things? that they are real incidents in my life's history? ... But, hush! I now hear the approach of battle. That low, rumbling sound in the west is the roar of cannon in the distance. That rushing sound is the tread of soldiers. That quick lurid glare is the flash that precedes the cannon's roar ... Listen! the soldiers are charging now. The

flashes and roaring now are blended with the shouts of soldiers and confusion of battle ... Lifting the veil of the past, I see manly forms, bright in youth and hope, standing in view by my side in Company H, First Tennessee Regiment. Again I look and half those forms are gone..." – Private Sam R. Watkins, 1st Tennessee Infantry Regiment, Army of the Tennessee



Hotkey Summary

'W' - Moves the camera Forward in the direction you are facing.
'A' - Moves the camera to the Left of the direction that you are facing.
'S' - Moves the camera Backwards from the direction that you are facing.

'D' - Moves the camera to the Right of the direction that you are facing.

'Q' - Rotates the camera Left.

'E' - Rotates the camera Right.

'Z' - Zooms the camera In or Out.

'F' - Camera Follows the selected commander or unit.

Hold SPACE or Roll Mouse Wheel forward- Moves the camera up.

Hold Left SHIFT or Roll Mouse Wheel back - Moves the camera down.

'P' - Pause/un-pause the game.

'T' - Toggle the display of trees and dead bodies on and off.

'U' - Toggle the display of the tool bar on and off.

'H' - Show the Help Menu.

'M' - Show the Map Screen.

'+' - Speed up the game x2, x3, x4 times faster than normal speed.

'-' - Return the game to normal speed (x1 speed).

'C' - Display the Send Courier Screen (for use in open play only).

Enter - OK on most screens.

Esc - Cancel/close on most screens to include the Map Screen.

F3 - Display the Highlights Screen.

F4 - Take a screenshot and save it to the Screenshots folder in the game program directory.

NUMPAD + - Bring up the save dialog.

NUMPAD / - Bring up load dialog.

UP Arrow - Select the immediate superior commander.

DOWN Arrow - Select the immediate subordinate commander.

LEFT/RIGHT Arrow - Navigate through all commanders subordinate to the currently selected commander.

General Game Concepts

This section provides information about the most important game concepts in **TC2M**. These concepts are the foundational components for all the tactical portion of the Take Command series.

The “Playing Pieces”

There are two types of “playing pieces” in **TC2M** to keep in mind—Commanders and Units. Commanders are representations of actual officers from the Civil War. Each commander occupies a specific position within a chain of command that is represented in each **TC2M** scenario. It is important for the player to understand this chain of command as it determines from whom you will receive your orders, how you “fit in” that command’s plan while executing your orders, and finally, it determines who you can issue orders to.

The Units in the game are groupings of men, horses, and equipment that form the typical Civil War organizations. Units are the basic building blocks of a command. There are five types of units represented in the game. They are infantry, cavalry, artillery, couriers, and supply wagons.

An assembly of units under a commander is called a “command”.

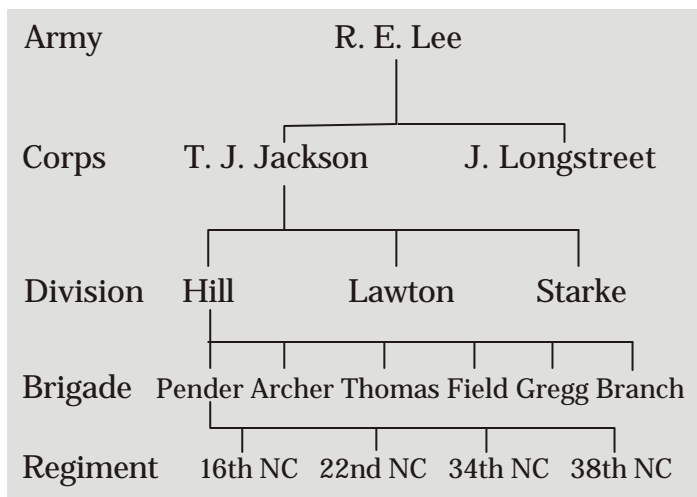
Commanders

The Player is a Commander in **TC2M**. For game purposes, there are three types of Commanders that will be of interest to the player: Superior Commanders, Peer Commanders, and Subordinate Commanders.

Superior Commanders. A Superior Commander is an officer above you in the chain of command. For example, if you are playing as Brigadier General Dorsey Pender, you are a brigade commander in A.P. Hill's Light Division, which is part of Stonewall Jackson's Left Wing (Corps), of Robert E. Lee's Army of Northern Virginia. A.P. Hill, Jackson, and Lee are considered superior commanders to you. A.P. Hill would be your direct superior commander.

Peer Commanders. A Peer Commander is an officer at the same level as the player in the chain of command. Again using Brigade Commander Dorsey Pender as an example, a peer commander of yours would be Maxcy Gregg, who is also a brigade commander in Hill's Light Division.

Subordinate Commanders. A Subordinate Commander is an officer below you in the chain of command. For example, Dorsey Pender and Maxcy Gregg are subordinate commanders of A.P. Hill. The subordinate commanders to Dorsey Pender would be the regimental commanders of the 16th, 22nd, 34th, and 38th North Carolina regiments that make up his brigade. These are not listed by name in the game displays.



Note: The term **Commander** is used throughout the game manual for consistency and clarity of the player's role. The terms "**Officer**" and "**Leader**" are often used in the Tutorials, Help, and SDK game files; these all mean and refer to the same thing--**Commander**.

Command



Each commander in the game has many factors that influence his decisions on the battlefield. As such, your subordinate commanders and units will do not always do what you want them to do. It is possible that while your command is being pounded, you may see reinforcements arrive, but not engage the enemy. This was an intentional design decision to simulate what actually occurred during Civil War battles. It is the representation of the possibility of delayed orders, confusing orders, or no orders at all. It also represents the timidity

or cowardice of a commander, or his limited awareness of what is actually going on around him.

The AI considers each commander's personality and his current orders (stance). Based on these various elements, there is a chance that a commander will deem an attacking force too powerful for his men to handle and will choose to stand fast—waiting for the enemy to come to him. In these cases, the commander will not commit his men until he is attacked or an enemy comes to within range of his rifle-muskets. This adds greatly to the re-playability of **TC2M** scenarios—commanders may react differently each time you play.

Here's the dilemma. It is also important for you to show initiative when the situation demands it. So, remember your orders, watch what the enemy is doing, watch what your fellow commanders are up to, and figure out how your command fits in as the situation develops over time.

Command Radius (base). The amount of influence exerted by the personality attributes of each commander is determined by his command radius. The higher the commander is in the hierarchy of the chain of command, the greater his command radius. All levels of command (brigade, division, corps, and army) are assigned a base radius which can be modified by an individual commander's leadership attribute. The base radii by level of command are listed below:

- 10 yards – Brig
- 25 yards – Div
- 50 yards – Corps
- 65 yards – Army

This is the percentage that is multiplied by the base leader radius for the command level. All of the values are totaled, and then the result is used as a percentage to multiply against the base: So the higher this total, the larger the command radius would be for this leader. Therefore his morale bonus would affect more men.

Rallying. This rating affects how rapidly this leader will be able to raise the morale of units. This is affected by the leader's initiative and loyalty ratings.

Initiative Rating. A Commander's Initiative Rating affects how long it takes to rally a "broken" unit; the better the rating, the faster broken units rally. There are seven possible Initiative Ratings. They are:

Excellent	70
Very Good	60
Good	50
Competent	40
Average	30
Mediocre	20
Poor	10

Leadership Rating. A commander's Loyalty Rating determines size/area of his command radius. **AFFECTED BY:** Combined battle grades of all subordinate units. There are seven possible Leadership Ratings. They are: Poor, Mediocre, Average, Competent, Good, Very Good, and Excellent.

Loyalty. Leader's grade reduces # of deserters from player's routed units. **AFFECTED BY:** Total kill ratio of subordinate units.

Ability. Amount of morale bonus given to leader's units. **AFFECTED BY:** Completing orders/mission goals.

Style. Personality: This is a general indicator of the aggressiveness or lack thereof. These range from Cautious to Daring. Individuals that are on the Cautious end of the scale will be more likely to stand on the defensive, whereas a Daring commander will attack unless the odds are very unfavorable.

Infantry Units



The typical infantry unit in **TC2M** is the regiment. However, there are a few scenarios where you will see infantry wings (half a regiment), battalions (2-5 companies) and/or infantry companies. Generally, several infantry regiments

will be assigned to a brigade level infantry commander. The infantry's primary means of initiating combat in the game is with rifle-musket fire and melee combat. Infantry units will attempt to defend themselves if melee combat is initiated against them by the enemy.

Cavalry Units



The typical cavalry unit in **TC2M** is the battalion. Occasionally, you will see cavalry regiments or companies present in some scenarios. Generally, several cavalry battalions will be assigned to a regimental level cavalry commander. The cavalry's

primary means of initiating combat in the game is with pistol, carbine, and shotgun fire, and mounted melee combat. Cavalry units will attempt to defend themselves if melee combat is initiated against them by the enemy.

Cavalry units have additional capabilities. They can be ordered to scout, screen, guard, or raid.

Note: The AI will only attempt to use the guard command.

Artillery Units



The typical artillery Unit in **TC2M** is the battery. On occasion, you will see artillery sections present in some scenarios. Generally, four to six artillery pieces (also known as guns or cannons) will be assigned to a battery level artillery Commander. The artillery's primary means of initiating

combat in the game is with cannon fire. Artillery units will attempt to defend themselves if melee combat is initiated against them by the enemy.

If the enemy is at or less than 75 yards, from an artillery battery, that battery will automatically fire double canister (assuming the firing battery has canister ammunition available). If infantry units are within canister range and the gun is out of canister, it will automatically retreat to a range where its remaining ammunition types will be effective.

Artillery units ordered to **retreat** will limber much more quickly than normal. Guns will automatically unlimber if they have a target in range—even if the Take Command button is selected.

A gun will automatically retreat if the enemy is within 200yds and it does not have any canister ammunition left. Considering the time it takes to limber, firing solid shot (fusing negates case shot, or shrapnel at such close ranges) would do little in slowing a determined enemy closing in on your position. Better to withdraw to a distance where your longer range ammunition can do its work!

Couriers

Couriers carry orders and messages between commanders and units. When couriers are first sent, they will attempt to use the road network in the game to reach the officer who is supposed to receive the courier. If the courier is killed or otherwise intercepted by the enemy, a second courier will be generated which will take a more direct route to the receiving commander.

Supply (Ammo) Wagons



Generally, there is one supply wagon assigned to each division and cavalry brigade. The primary purpose of the supply wagon is to re-supply infantry, cavalry, and artillery units with

ammunition. Wagon units will attempt to stay in close proximity to their owning commander and will generally follow roads to accomplish this.

Ammunition



Ammunition in **TC2M** is tracked, fired, and resupplied by individual rounds. There are two types of ammunition in the game: small arms ammunition (for pistols, shotguns, carbines, muskets, rifles, and rifle-muskets), and artillery ammunition (shot, shell, canister, and shrapnel). The amount of ammunition carried can vary between units and is generally scenario dependent. However, an infantry soldier will typically carry 40 to 60 rounds and a cavalryman 60-100 rounds. Artillery pieces are different given the four different ammunition types. On average, each gun will have a total from 70-150. A percentage of this total amount is allocated to the various types of artillery ammunition. For example, a 12lb Napoleon would be allocated 40% solid, 15% shell, 35% shrapnel, and 10% canister.

Small Arms Ammunition Resupply. Units that are low on ammunition will resupply if the ammo wagon is brought close to the unit or visa versa. A unit that runs out of ammo will retreat from the line of battle and will not engage in combat until resupplied. Infantry and cavalry units will recover ammunition from friendly casualties. This ammunition is automatically shared among members of the same regiment or battalion.

Artillery Ammunition Resupply. When a gun has below a total of 100 rounds available, then it is eligible to be resupplied. To resupply a gun, either move it to co-locate with a supply wagon or move the supply wagon to co-locate with the gun. Whatever manner is chosen, each gun must be resupplied individually.

Capturing Units

Infantry, cavalry, artillery, and supply wagons can be captured in **TC2M**—yours and the enemies. Captured artillery pieces can be used by their new owner against the enemy. Captured infantry and cavalry units are depicted with a white flag icon. Captured

infantry and cavalry units will disappear from the 3D game environment shortly after they have been captured. Artillery pieces and supply wagons can be recaptured any number of times during the play of a scenario. Commanders and couriers cannot be captured.

The 3D Game Environment



The **TC2M** 3D game environment is a historically accurate representation of the battlefields of Cedar Mountain, 2nd Manassas, and Chantilly / Ox Hill. The game maps were made using actual data from USGS satellite imagery and are very accurate. The woods, roads, buildings, fields, crops, and fence

lines are all based on the research of historical documents and maps from the Library of Congress. Each game map represents approximately 5.4 square miles (2.33 miles long x 2.33 miles wide) of the terrain found at these battlefields. All the 3D models displayed in the game environment were constructed to the same scale as the soldiers. The **TC2M** 3D environment includes the effects of weather and representations of clear, overcast, and night sky conditions. Ambient sounds associated with each map add to the overall feeling that “you are there”. In addition, all fences, fields, woods, roads, weather conditions, etc. will affect soldier and weapon performance in some way or another.

Terrain

Terrain greatly affects game play. The outcome of a battle may be determined by the commander that uses terrain to his best advantage. You can see what type of terrain a selected unit is on by looking at the **location** section of the tool bar.

Note: In all cases, the location of the **unit flag bearer** is what determines the type of terrain the **entire unit** is considered to be on.

Movement Bonus. The following types of terrain give your units a movement rate bonus. A unit on one of these terrain types has its marching and double-quick speeds increased by 120%.

Turnpike
Road
Trail

Sunken Lane
Ford

High Fatigue Penalty. The following terrain types have a high fatigue penalty, meaning that if you march your soldiers through these terrain types they are going to tire much faster, if your soldiers get too tired they cannot run or charge and their fighting effectiveness will start to decrease. The following table shows how many fatigue points are accumulated by infantry, cavalry, and artillery units for every 20 seconds of marching in *High Fatigue Penalty* terrain:

Stream	-10	River Bank	-1
Rail Fence	-10	Cemetery	-1
Creek	-10	Marsh	-1
Pond	-10	Thickets	-1
Ford	-10	Orchard	-1
Stone Wall	-8	Broomsedge*	-1
Swamp	-8	Brush	-1
Corn	-2	Town	-1
Boulders	-2	Wheat	-1
Rough	-2	Sunken Lane	-1
Heavy Woods	-2	Light Woods	-1
Slope	-2	Pine Trees	-1

*Broomsedge is a tall grass native to the Northeastern United States.

Defensive Bonus. The following types of terrain give your units (and the enemy's) a defensive bonus. This bonus decreases the effectiveness of enemy fire against your units while they are in these types of terrain. Likewise, the effectiveness of your fires against enemy units in these types of terrain is also reduced. The

following table shows the percent reduction of effectiveness the type of terrain has on enemy fire:

Stone Wall	45%	Pine Trees	20%
Heavy Woods	40%	Rail Fence	20%
Slope	40%	Town	20%
Boulders	40%	Orchard	15%
Light Woods	30%	Brush	10%
Rough	25%	Cemetery	10%
RR Grade	25%	Corn	10%
Sunken Lane	25%	Thickets	5%

Elevation. Elevation is now a factor of the defensive terrain bonus, since it doesn't fit into the new formulas, ½ elevation bonus is added to the defensive terrain bonus.

Weather and Light Conditions

The effects of weather and light conditions of the battlefield are replicated in **TC2M Battles and Custom Scenarios**. There are 22 possible weather types. The different types of weather can reduce the maximum visibility range. In addition, the firing times and reloading ability of your units can be affected by adverse weather conditions such as rain. Weather can also negatively influence a commander's command radius. If units can't see the commander, they will not have their morale increased.

Maximum Visibility. The maximum range for visibility in the **Take Command** series of games is 1,000 yards. Generally speaking, this distance is used by your units and commanders to check to see if they have a line of sight (LOS) to any enemy units or commanders. If so, these enemy units will be displayed in the 3D environment and represented on the Map Screen. Enemy units beyond this distance cannot be seen and thus cannot be targeted by any weapon within the player's inventory.

Note: In all cases, the locations of friendly and enemy **flag bearers (unit and commander)** are used to determine LOS.

Decreased Visibility. Terrain can also affect the visibility range within a scenario. The following types of terrain decrease visibility. The ranges listed mean that your units and commanders can see

this distance into a particular type of terrain—and no further. In other words, you can hide from the enemy if you are deep enough in them. Of course that also means that the enemy can hide there too.

Heavy Woods	40 yards	Light Woods	60 yards
Slope	50 yards	Pine Trees	70 yards

Note: In all cases, the locations of friendly and enemy **flag bearers (unit and commander)** are used to determine LOS.

Note: Weather and Light conditions in Open Play are Clear; no other types are available.

Winning the Game

Victory or defeat in a **TC2M** scenario is determined using the grade points accumulated by the player. In a scenario from the Battles screen or the Custom Scenarios screen, the rating is determined by the scenario designer. There are no fixed point values, in one scenario +350 points might be a Major Victory, while in another, +1200 points might be a Minor Defeat. In Open play, scenarios where you are supposed to hold or obtain a VP are decided by possession of the VP for the required amount of time. If neither player wins the VP, the battle is decided by the players grade as set battle level *.ini files in the Open Play directory. In OP battles where there is no VP, the points decide the battle.

Winning a Scenario. Generally, a scenario will have five potential levels of success: Major Victory, Minor Victory, Draw, Minor Defeat, and Major Defeat. Each scenario has its own set of minimum grade point requirements assigned to each of these levels of success. The actual grade point level requirements are listed in a scenario's introduction.

TC2M uses a tactical grading system that adds and subtracts **Grade Points** based on a commander's or unit's performance on the battlefield. The loss or accumulation of Grade Points will determine the level of Victory or Defeat in a scenario. Grade Points accumulated during game play are displayed on the unit tool bars and Order of Battle screens.

All commander's and units start a scenario with 0 Grade Points. Grade points are awarded for accomplishing certain tasks during game play like causing an enemy unit to fallback, killing an enemy commander, or capturing an artillery piece. They are also awarded for causing enemy casualties. Likewise, Grade Points are subtracted from a friendly unit's accumulative score if it is caused to do any of these things by an enemy force or suffers casualties. The player can also lose Grade Points due to similar enemy actions.

Grade Points can also be awarded for gaining and retaining an Objective (VP Site) for a specified period of time with a specific sized force (see Map Screen section, page 55, for a detailed discussion of these requirements).

Grade points are added to the player's score the instant a task is completed by a friendly subordinate unit. Grade points are subtracted from the player's score the instant a task is completed by an enemy unit. A commander's score is determined by adding up all the Grade Points accumulated by his subordinate units. The list of tasks that cause Grade Points to be added to or subtracted from the player's grade score is as follows:

Causing an enemy unit to fallback	3
Causing an enemy unit to retreat	5
Causing an enemy unit to break	10
Causing an enemy unit to route	15
Causing an enemy casualty (per man)	0.1
Capturing enemy artillery (per gun)	20
Capturing an enemy infantry/cavalry unit	15
Killing enemy officers	5
Capturing an enemy supply wagon	15
VP Site	per scenario

Note: If the player intentionally orders one of his subordinate units to either fall back or retreat, he will not lose any grade points.

As an example of how the tactical grading system works, let's say the player is a brigade commander and has moved one of his infantry regiments through some woods and pounces on the flank of an enemy artillery battery with four guns. The player orders his regiment to charge this battery.

If this regiment captures one gun, then it receives +20 Grade Points--as does the brigade commander (i.e. the player) because the regiment is one of his subordinate units. Similarly, the enemy will have 20 Grade Points deducted from his score for losing the gun.

Let's also say that the player's regiment lost 75 casualties due to the melee with the gun crew and canister fire received during its charge. To determine the number of Grade Point lost, the game engine calculates $75 \times .1$ which equals 7.5 Grade Points. So in this situation, the player's regiment would have 7.5 Grade Points deducted from its score giving it a net score of 13.5 as the result of this small action. Again, the brigade commander's score is a roll-up of all his subordinate units so his score total at this point would also be 13.5 (assuming all of his other regiments had 0 grade points).

Note: All units and commanders in a scenario receive/lose grade points whether they are under the player's control or not. These scores are for the player's information only. They have no direct impact on the player's ability to win or lose a scenario.

Winning in Open Play. If you look in the Open Play folder you will see different *.ini files for each level of play. These files include the grades and victory conditions for each rank. If you choose, you can edit these files with any text editor to change the points needed to get a specified victory level.

Victory Point / Objective Sites

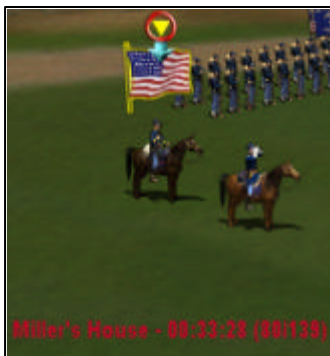


Victory Point Sites (Objectives) are terrain-oriented and are usually located in the vicinity of a key piece of ground. They appear on the 3D battlefield map as a VP Star floating above the terrain. There can be multiple VP Sites active in a scenario.

When an army is in control of the objective location, the VP Star will change color to represent the army that is holding it (Blue for Union; Red for Confederate)

To win an objective, a commander as well as a friendly unit(s) must be within the VP Site radius of the VP Star. To activate the VP Site, the strength of the friendly unit(s) must be equal to or greater than the minimum number of men, and the friendly unit(s) must have a morale level of **Willing or higher**. If the morale level of the friendly unit(s) is **Uneasy or lower**, then the AI will not deem them a stable enough fighting force to control the VP site. In addition, if there are enemy troops within the VP Site radius as well, your forces must outnumber them by two to one. To determine the VP Site radius, select the mini map and put your mouse cursor over the VP Site. In Open Play

Attack, Defend, or Meeting engagement type battles, this information is shown in the Battle Info screen from the Menu popup.



Once you have control of a VP Site, the VP Star will either disappear or start a countdown showing the time remaining in which you must maintain control of the objective.

Miller's House – Objective Name

00:33:25 – Objective Timer -

Shows how long the player has to hold that objective. Counts down time until objective is won and points are awarded.

(80/139) – Objective Distance (yards) - Displays next to the timer. The first number shows how far you are from the objective and the second number shows the maximum distance away that you can get before you lose the objective and it gets reset.

There are two different types of objectives: a Waypoint and a Hold objective. The difference between them is that a Waypoint objective

can only be won a single time and disappears as soon as it is won. A Hold objective can be won as many times as possible before the scenario runs out or you win enough points to end the scenario.

Note: All of the points and bonuses are awarded each time a hold objective won—even if it has been won 100 times previously.

The scenarios do not automatically end like they did in CWBR (unless you get killed). The scenario plays for the number of hours set by the scenario designer, or selected on the Open Play screen. At the end of the time or if sufficient points have been won or lost to trigger an earlier end, the scenario will end and the victory or defeat screen is displayed. You can exit out of the battle at that point or continue for additional time in "extended play". You can continue to play the scenario after the end screen if you like, but you will no longer be able to score points for occupying VP Sites. In other words, they will disappear after the victory or defeat screen appears.

Game Tips



What follows is a collection of tips and hints collected from players posting on the MadMinute Games forum:

<http://www.madminutegames.com/MadMinuteBB/index.php>

It also includes additional thoughts from the hard-working people who test the game while in development.

Using Infantry Effectively

Overview. Infantry combat in the Civil War is all about lines and flanks. Because of the slow reloading time for muzzle-loading guns, it was necessary for the infantry to fight in close formations. Only this way could enough firepower be produced to make it very expensive to directly charge an infantry unit over open ground. The unavoidable consequence of the linear infantry formation is that the line has an end. Infantry is quite vulnerable to fire from the flanks, defined for this game as a 40 degree arc centered on the axis of the line. Even more effective is fire from the rear of a formation.

Movement under fire. Once under fire, a unit in line is hard to move. Attempts to move a unit will cause the unit to cease fire.

Take command of the unit - select the flag icon in the lower right of the toolbar on the battle screen. Order the unit to column, select the destination, then select double time. When the maneuver is complete release the unit from your command - select the flag again. The unit will then again use the AI to move and take stances as appropriate.

Some caution is required in this maneuver. The unit will take fire while being moved and it will suffer a morale loss for pulling back under fire. These two combined can result in the unit routing. Remember to release the unit from command - if you don't it will not move or respond to the enemy on its own, making it easy prey for the enemy AI.

Unit Factors:

Size counts. Size is a big factor in a unit's staying power. Big regiments can hold more ground, take more casualties, and dish more out.

Be aware of the unit weapon type & range. This can be a critical component of your tactics. If you position your longer range rifles with care they can inflict casualties quite well. The old large caliber Belgian rifles are not good for much at all. Older model flintlocks and some of the large caliber weapons are best used at very close range (80 yards or less). They are going to lose most long range firefights.

Long range rifles are excellent flankers. Long range rifles like the Mississippi rifles can be incredibly effective for flanking. Their kill rate is high, so from the flank they are devastating. Most importantly, they break the enemy unit quickly...and that is what you want to do with flanking.

The short range rifles are best used as a pinning force. March them up close enough or position them to engage and keep units busy, while your flankers do the hard work.

Use Leaders Morale Bonus Power. Put your leaders near units that are losing morale. Move them as the situation changes and other units need a morale boost. Take advantage of division and corps commanders as well for providing morale at critical positions.

Post Green Units in the Center for Pinning. Green units are more likely to flee if unsupported or flanked. Put them in the center. Use more experienced/better trained units on the wings. The more experienced unit should be better able to cope with "surprises".

Watch the Smoke. Watch your units to see that the whole unit is firing. If it is not, then you probably need to pivot the unit to bring more guns to bear on the enemy. Or, the unit may be blocked from firing and a small movement laterally will bring them into a valid firing position.

"Take Command" of key units. Use the TC function for brigades near victory objectives and usually all of your artillery units in the division scenarios. This will allow you to ensure VP's are taken and held for the correct periods of time. Once you have the VP cleared of enemy forces, use the 'Hold' stance to keep the unit in position to keep the VP timer running. Note that units in 'Hold' have very limited maneuver options. If enemy forces attack, change their stance to 'Defend' to prevent defeat in detail.

Take your time. In many scenarios, seek to rout as many enemy units as possible before triggering the end of the scenario by holding the final VP. This allows you a chance to increase your score substantially.

Reserves. Try hard to always keep a fresh reserve available to plug gaps at your lines. Additionally, the ability to rotate units in and out of the fight and keep them "fresh" greatly increases both staying power and offensive capabilities. Most non-grognards are used to games that allow even fatigued units to mercilessly chase down broken enemies all over the field with virtual impunity.

TC2M forces you to rest exhausted units, and treat troops previously broken with extreme care.

Patience. Remember that wild aggression will leave you isolated and usually outgunned, however this does have it's time. Use caution when enemy positions (especially flanks) are not yet developed. Be mindful of roads that provide avenues of reinforcement for the enemy, as the surrounding terrain might be swarming with hostiles, and there is almost always a fresh command plodding towards you at all haste.

Avoid melee combat in most situations. Charging will tax your unit's morale and fatigue, not to mention deplete your overall numerical advantages faster then anything else in the game. As a rule of thumb, charging is only acceptable in desperate attempts to take/hold key objective points, or to rout enemy commands from

the field and precipitate "domino effect" roll-ups of all forces on a portion of the field.

Master Defensive Terrain. Realize that units often engage in melee fighting uncontrollably in close quarters woods maneuvering. The AI is notorious for counter charging smaller units attempting to flank in wooded sectors and changing the tide of battle. Additionally, don't overlook the defensive bonus afforded to troops in wooded positions (especially those with a height advantage as well!!!). In most cases, your units seem to have better staying power in wooded sectors then along fence lines and stone walls. When in the open, seek to position your units along fence lines, stone walls or any other terrain giving a defense bonus. Your units will stay longer than they will in open terrain.

Determination. If you are having difficulty with a scenario, and are determined to win a certain way don't give up if all does not go your way. By replaying the scenario, chances are you will encounter situations that are advantageous to your plans. Indeed, the minor adjustment in paths that certain units follow can lead to a complete alteration of previous engagements.

Maintain Mutual Support. A Rule of Thumb if you are trying to maintain mutual support within a brigade is this--try to maintain a distance of no more than two regimental frontages between color bearers.

ALWAYS seek the high ground! Units on high ground receive a fire effectiveness bonus. When you have the option, place your units on high ground.

The flank and spank. Your goal as an infantry commander is to try and maneuver your units to get one or more of into a flanking position on the enemy. This tactic is quite effective and is still taught in military schools worldwide. The idea is to fix the attention of the enemy with direct fire from units ahead while moving other units into a flanking position. If you have enough troops, flanking on both sides is even better, although harder to achieve. Note that the AI knows this tactic and will try and use it on you as well. Be aware!

Using Cavalry Effectively

Use Double Quick. Cavalry's key advantage is mobility. They can chase things down...like enemy officers, or supply wagons. They can get in position rapidly and can be used very effectively as a flanking force against pinned troops.

Take Command to Avoid Charging Infantry. Cavalry are very bad about charging things when you want to move past or apply close flanking fire. Take command so they don't charge against your wishes.

Hide them in the woods to keep them healthy. Cavalry won't last long under infantry or artillery fire. Move them where you want them, placing them in the closest woods for concealment until ready for use.

Take Command to Charge a Battery. When employed manually cavalry companies can rapidly take a battery. If you don't take command, they will stop and trade fire, and get torn up rapidly. Instead, make sure they are rested; then run through the battery using double quick. When you reach each gun, select "charge", they will take the gun almost immediately. Then double quick to the next gun, and select charge again. Repeat until the battery is subdued. A single cavalry company is only good for 4 to 6 guns at most. After that there are too few, and they can be easily spooked.

Keep the commander nearby. Cavalry spook easily, especially after any combat losses or giving up men for captured guns. Keep their unit commander nearby so that they don't rout prematurely.

Avoid fire fights. Cavalry should only be flankers. Avoid using them to face infantry. Use other infantry for that. If you must take on infantry directly use the fallback command to keep units from quickly routing.

Use fallback to escape in a pseudo-skirmish mode. Cavalry can fall back very quickly. If they face an infantry unit with lesser

range let them stand and fire, then start falling back as the enemy approaches their own firing range. Cavalry can do an excellent job of tying up a large regiment this way while taking few losses, and simultaneously pulling the enemy from the main fight or into a trap. Fallback also works when you are flanking with cavalry, and the enemy infantry turns to fight your cavalry. This tactic is especially effective when you have several cavalry battalions taking on a single infantry regiment. Use one battalion to force the infantry to deploy, and then rapidly move the others into flanking positions. Set the facing unit to fallback. When the facing battalion has fallen back out of range, the infantry will face one of the other battalions. Set the new facing battalion to fallback and gallop the first one into a flanking position. Repeat this several times and the infantry regiment will rout off the field. With only a single battalion, you can effectively delay a large infantry unit by repeatedly forcing them to deploy into battle line. This is an excellent tactic when you need time to get your major forces into a good defensive position.

Use cavalry on soft targets and routers. Supply wagons and officers that are too far afield are good examples of soft targets. Use double quick to intercept them when they are not close enough to support. Use cavalry at the rear of the fleeing enemy to chase down flag bearers resulting in a "capture".

Beware when pursuing retreating/broken infantry. On occasion, an enemy infantry regiment that you thought was broken or routed can actually put up a very nasty fight.

Use cavalry to hold/defend isolated rear objectives. This works best with the single company cavalry commands, especially after they have charged batteries and are depleted. Move them to a rear objective to hold it or to prevent the enemy from taking it unobserved.

Using Artillery Effectively

Overview. Artillery is a weapon with two major roles. The first is long range fire to disrupt formations, reduce morale, and make life as miserable as possible for the enemy. This role uses shrapnel, shell, and solid shot. The second role is in short range defense against infantry or cavalry attack. This mode is where canister and double canister are used. Although powerful, artillery units are vulnerable to both cavalry and infantry under the correct

circumstances. There are several factors to consider in placing artillery.

Fields of fire. This is the amount of open space with the LOS to be able to take enemy units under fire. Artillery is most effective when open space around the guns is maximized. The longer the guns have to fire on approaching enemy units, the more damage can be done. Placing artillery in the open also reduces the chances of enemy units sneaking up close through the woods and routing or capturing the battery.

Support. This refers to having infantry or cavalry units close to the artillery battery. Infantry is clearly better for this function, but cavalry units are better than no support at all. The enemy AI places a high priority on attacking unsupported artillery. It is a good idea to have infantry on the side of the battery and a little ahead. This way attacking infantry will engage the infantry as they are the closer target. This leaves the artillery free to engage the infantry with canister, which is highly effective.

Grouping. It is much better to post artillery in groups of batteries than singly. This can be difficult due to the terrain. However, if the space is available, the artillery is much more effective when grouped than when scattered across the battlefield. Utilize your artillery in "grand batteries" for maximum effect- especially at the divisional level. Concentrating fire on individual targets doesn't seem to be individually controllable; yet massing batteries in close proximity seems to produce a similar result automatically. In larger scenarios, you will actually knock out individual units completely in this manner.

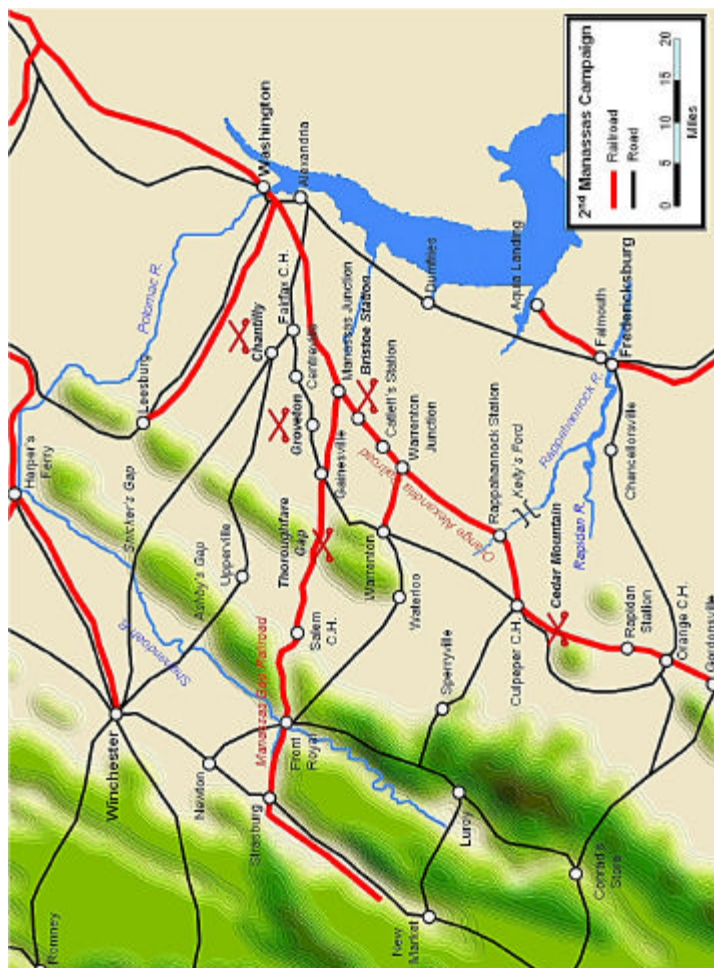
About the 2nd Manassas Campaign

The best description of the 2nd Manassas campaign is the book "Return to Bull Run" by John J. Hennessy. Much of the information here is extracted from that fine work. Names of Union units and leaders are in regular font and Confederate units and leaders are in italic font.

The situation for the Confederacy at the end of June of 1862 had improved from nearly terminal to moderately dangerous. The Army of the Potomac under McClellan had been bluffed into inactivity in its camps on the James River only a few miles from Richmond. However, a new danger was building in Northern Virginia. President Lincoln had appointed Major General John Pope to command the Army of Virginia, newly created out of the hodge-podge of forces that *Jackson* had defeated individually in the Shenandoah Valley campaign. If McClellan resumed offensive operations and Pope moved on Richmond, then *Lee* would either be besieged in Richmond or would be forced to abandon the Confederate capitol. By mid-July, *Lee* felt comfortable enough with McClellan's inactivity to shift *Jackson* back to Gordonsville. Pope was engaged in small scale raids and training his new army.

In late July, *Jackson* was further reinforced by the division of *A. P. Hill* and told by *Lee* "I want Pope to be suppressed." The second week in August, *Jackson* moved north and was attacked by Banks at the Battle of Cedar Mountain on August 10, 1862. The Union forces had good initial success, collapsing the left wing of *Jackson's* lines. However, heavy reinforcements forced the Union corps from the field. Banks lost over 2,000 of the 8,000 in his corps; however, the victory was expensive as *Jackson* lost 1,300 of the 23,000 troops in his half of the Army of Northern Virginia. Pope rapidly concentrated his forces and *Jackson* retreated back to Gordonsville in the face of now superior numbers.

Three days after the battle with firm information that the Army of the Potomac was rapidly leaving the James River, *Lee* moved the remainder of his field army under *Longstreet* to Gordonsville. His intention was to defeat Pope and the Army of Virginia before it was



2nd Manassas Campaign in Northern Virginia, August 1862

joined by the Army of the Potomac. The capture of a copy of Lee's orders during a Union cavalry raid led Pope to withdraw his army back behind the Rappahannock River. This frustrated the original plan of *Lee* to turn Pope's left and prevent forces from the Army of the Potomac from reinforcing Pope. By August 20th, both armies were facing each other across the Rappahannock River, from Kelley's Ford to above Rappahannock Station. For the next several days, *Jackson*, followed by *Longstreet* moved northwest along the river, trying without success to find a way around the Union right flank. Finally, on August 24th, *Lee* proposed a bold move, sending *Jackson* on a wide end run crossing the Bull Run Mountains at Thoroughfare Gap. The objective was to get across Pope's supply line of the Orange and Alexandria railroad and force him back from the Rappahannock River. *Jackson* agreed with enthusiasm and rapidly got his forces on the road. Screened by *Longstreet*, *Jackson* made the risky maneuver and very hard marching brought his forces to Bristoe Station during the night of August 26th.

Learning of *Jackson's* presence in his rear area, Pope attempted to concentrate his forces with the objective of surrounding and destroying *Jackson*. After a huge feast on captured Union supplies, *Jackson* marched up the railroad to Manassas Junction. Two small and uninformed Union forces attempted to recapture the Junction from the 'raiders' without success. On the 27th, *Jackson's* rear guard forces under *Ewell* blocked the advance of Union forces under Hooker at Kettle Run, just south of Bristoe Station. At 9 PM on the 27th, *Jackson* marched north from Manassas Junction and went to ground in the woods along an unfinished railroad just northwest of Groveton, on the edge of the Manassas battlefield of the previous year. *Jackson* was quite familiar with the area, having camped near there following 1st Manassas.

Meanwhile, *Longstreet* and *Lee* were following after *Jackson*, but encumbered with supply trains, they could not maintain the fierce pace of *Jackson's* "Foot Cavalry". Receiving regular dispatches from *Jackson*, they knew his situation and saw no need to force the pace. In the afternoon of the 28th, they arrived at the chokepoint of Thoroughfare Gap at the same time as a blocking force of Ricketts' division. After a stiff fight, the weight of numbers (30,000 vs. 5,000) prevailed and Ricketts was forced back leaving *Longstreet* with a clear path forward through the gap.

Pope, receiving conflicting information on the location of both *Jackson* and *Longstreet*, had forces marching in many directions in the area. About 6 PM on the 28th, the Union division of Rufus King marched along the road near *Jackson's* position. Seeing the opportunity to smash a portion of Pope's army he sent the order "Bring out your men, Gentlemen", thus opening the Battle of Second Manassas. The men of the *Stonewall Division* no doubt expected victory; however the men opposing them were from the west and had been well drilled by their regular army commander, John Gibbon. These men in their distinctive black hats declined to be smashed and fought the Confederate veterans to a standstill until darkness, nearly two hours later. Learning that all of *Jackson's* forces were on his front, King retreated towards Manassas during the night.

On learning of King's battle with *Jackson*, Pope leapt to the unsupported conclusion that *Jackson* was retreating and determined to catch and destroy him. For the morning of August 29th, Pope ordered I Corps of Franz Sigel to attack north of the Groveton-Sudley road while units from Heintzelman's III Corps attacked on Sigel's right. The two corps combined had no more than 20,000 soldiers. *Jackson*, knowing that *Longstreet* was beyond Thoroughfare pass and would be there later that day, need only place his 20,000 troops in a good defensive position and hold on until *Longstreet* and *Lee* arrived. His position along the unfinished railroad was nearly perfect for this purpose. Sigel performed down to the poor standard expected of Union generals and frittered his forces away in poorly coordinated small attacks along *Jackson's* line. He now had a good idea of where most of *Jackson's* forces were, but was unable to generate any significant pressure. In the meantime, the forces of *Longstreet* were arriving and deploying on either side of the Warrenton Turnpike in the woods and out of sight of Union forces. He felt confident of being able to push back Reynolds on his immediate front. However, there was a large but unknown Union force (Porter) along the Manassas-Gainesville road. That force was in position to directly attack the flank of an advance by *Longstreet*. This was the standoff in the early afternoon of the 29th of August. Expecting attacks by Porter and Reynolds that he had not in fact ordered, Pope ordered additional attacks into the center of *Jackson's* lines. These single brigade attacks had better success than might be expected, but without support could not break the Confederate

lines. After the second attack by Nagle's brigade, the Confederate brigades of *Johnson* and *Stafford* attacked on the right and compelled the Union forces to retreat or be surrounded, largely clearing Groveton woods of Union forces. The events on *Jackson's* front were concluded by an attack by Kearny's division. Like the attacks before, it has success, but lacked any support to follow the initial gains. Confederate counterattacks drove the Union forces back over the unfinished railroad yet again.

On the Confederate right, after bolstering the far right of *Longstreet's* lines with *Wilcox's* division, *Lee* agreed with *Longstreet's* suggestion to have *Hood* and *Kemper* advance to be in position for a major attack on the morning of the 30th. *Hood's* advance met an advance by Hatch, who had been told by Pope to expect only a rearguard of retreating Confederates. Their collision just north of Groveton went on into darkness when the superior numbers of *Hood's* division outflanked the Union forces who retreated back up the Warrenton Turnpike. The fight ended with Union forces along the base of Dogan Ridge. This brought the battle of the 29th to a close with the Union forces.

In spite of clear evidence of *Longstreet's* forces being on the battlefield, Pope persisted in his belief that they were miles away and that *Jackson's* forces were beaten and retreating. This delusion persisted for the rest of Pope's life and he never recognized the fact that *Lee* and *Longstreet* were poised on his left flank. His plans for the 30th of August reflected this delusion. During the night, Pope ordered Porter to move to the center of the Union position near Buck Hill.

The morning of the 30th passed with indecision in the Union headquarters and uncertainty among the Confederate leadership. Pope planned a heavy attack on the Union right, but nothing was actually done. *Lee* hoped for a Union attack so that *Longstreet* might sweep up into the flank of troops attacking *Jackson* and rout the entire Union army. None of these happened. Pope received multiple reports from commanders on various parts of the battlefield telling of the presence of the Confederates in strength. Despite all of this he continued to believe that the enemy was retreating. Finally at 11:30 Pope ordered Porter to attack *Jackson* with his entire corps. This was followed by an entirely different order to move along the Warrenton Turnpike in "pursuit" of the enemy. Since Porter's skirmishers had proven *Jackson* was along

the unfinished railroad, this would have been a near suicidal move. In spite of receiving multiple reports of enemy forces along the Union left, Pope placed only Ricketts' division along Chinn Ridge as he largely refused to believe that *Longstreet* was present.

Finally at 3 PM, Porter sent his corps in on the attack from their starting position in the Groveton woods facing west and crossing the Groveton-Sudley highway and wheeling northwest to attack *Starke's* and *Lawton's* divisions along the railroad. The Confederates had two battalions of artillery totaling 34 guns in excellent position to enfilade any Union attack on that part of the line. The attack went in but failed to achieve any significant breakthrough, due to both the well placed artillery and the excellent defensive value of the unfinished railroad. Finally the Union troops fell back through Groveton woods to begin reforming along Dogan Ridge. Finally, to continue the record of poor Union generalship, McDowell ordered the last division south of the Warrenton Turnpike (Ricketts) north to support Porter.

Seeing the Union attackers falling back in disorder, *Longstreet* anticipated *Lee's* wishes and sent his five divisions in on the Union left, defended by only two brigades and a few batteries of artillery. *Longstreet's* attack was to the northeast guiding along the Warrenton Turnpike. Most of the Union forces were north of the Warrenton turnpike and if *Longstreet* could get significant forces on Henry Hill, the Stone Bridge would be unusable and Pope's entire army might well be captured. *Hood's* division had initial success, overrunning Warren's small brigade and then driving Hardin's brigade off of a small knoll in front of Chinn Ridge. There the impetuous *Texans* had to reform and wait for the rest of the Confederate attackers to catch up. After a short pause, and with additional help, they attacked the Union forces on Chinn Ridge; a desperate defense was waged by the Union brigade of McLean, buying time for reinforcements to arrive from across the Warrenton Turnpike. A truly fearsome battle occurred on Chinn Ridge as reinforcements arrived from both sides. The fight finally petered out 90 minutes later as the weight of numbers from units of both *Kemper's* and *D. R. Jones's* divisions pushed the Union forces off the end of Chinn Ridge.

While this fight was raging, Pope had finally realized the full danger his army was in. He spent the time bought with the blood and bone of the brigades of Tower, Stiles, Koltes and

Krzyzanowski by moving men and guns onto the critical position on Henry Hill. First into position were two of Reynolds' Pennsylvania brigades, followed by Sykes' four battalions of U. S. Regulars. Milroy's brigade was sent up the hill soon after. Three batteries of artillery were in position by the time fighting stopped on Chinn Ridge. The strength of this position was known to many in the Union army who had fought on this same hill 13 months before at the battle of 1st Manassas. The advance of the Confederates of *D. R. Jones'* division that drove the last Union forces from Chinn Ridge exposed them to the Union forces on Henry Hill. Reynolds' units advanced, taking *Benning's* brigade in the flank, which then wheeled right as did the following brigade of *G. T. Anderson* and both moved to attack Henry Hill. Additional Confederates from *R. H. Anderson's* division as well as forces from *Wilcox* put tremendous pressure on the Union lines which slowly moved back. Fresh Union troops steadied the line and drove *Benning's* brigade back out of the fight. The firing along the lines, especially on the Union left in the woods continued until darkness called a halt to the third day of battle. In addition to feeding troops into the fight on Henry Hill, Pope had been organizing the retreat of the army to the fortifications at Centreville and doing a fine job at it. In marked contrast to the previous year, units largely stayed together and panic was rarely seen. By midnight, the last of the Union army was safely over Bull Run, and the head of the column already in the fortifications at Centreville.

The 31st of August was a day of rest and reorganization for the Union forces around Centreville. *Lee* on the other hand was determined to keep the initiative. Knowing that a direct attack on the strong fortifications at Centreville was pointless, he returned to an earlier plan. *Lee* directed *Longstreet* to demonstrate in front of Centreville while *Jackson* moved north to the Little River Turnpike, and then east along this fine road and around the defenses at Centreville. *Jackson's* troops, exhausted by three days of combat following a march of 54 miles in a day and a half, made slow progress in a driving rain. Pope dithered all day sending telegrams to Washington, but came to no decisions, although reinforced by the corps of Sumner and Franklin.

On September the 1st, Pope finally convinced Halleck into ordering Pope to retreat to the Washington defenses. Pope started the trains and troops back towards the east. In the mean time, *Jackson* continued down the Little River Turnpike which would

bring him across the Union main line of retreat at Fairfax Court House after a 10 mile march. As the day continued, he repeatedly came into contact with Union units, which suggested that Pope must know of his march. Surmising that surprise was lost, he moved slowly down the Pike, waiting for *Longstreet* to catch up. News of *Jackson's* flanking movement put new energy into Pope's movements. He ordered the small Ninth Corps to move across the Little River Turnpike and attack Jackson. This would give time for defensive positions to be set up at Jermantown which would protect the critical junction where the Union line of retreat down the Warrenton Turnpike met the Little River Turnpike at Fairfax Court House. *Jackson* continued his slow movement until reaching Ox Hill, where cavalry reported Union forces ahead. Skirmishing by the cavalry showed that there was infantry present and not inclined to fall back. These were two regiments of Marsena Patrick's brigade who had been ordered to hold at all cost. Fortunately for them, *Jackson* saw no profit in forcing a stiff fight for the questionable benefit of inserting himself between 2 halves of the already retreating Union army. He brought his half of the Confederate forces to a halt and prepared to wait for *Longstreet* and *Lee* to catch up. However, the Ninth Corps still had orders to move across the Turnpike and block his advance. They moved up farm roads and about 5 P. M. found *Jackson* already there. As heavy storm clouds rolled in, the Union troops attacked. Shortly after battle was joined the heavens opened with a fierce thunderstorm, and a lashing wind whipped torrential downpour. The battle continued, joined by Kearny's division, in the mud and rain until darkness and exhaustion brought this last fight of the 2nd Manassas campaign to a halt.

On September 2nd, Pope's army continued its march back to Washington while *Lee's* army turned north towards the fords across the Potomac into Maryland. There it would meet the reorganized Army of the Potomac along the Antietam Creek.

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Modding Take Command

The entire design of the **Take Command** combat engine was created to facilitate modding. Included on your game CDROM is the **TC2M** Software Development Kit (SDK). You can basically do anything with the SDK except create new maps. But if you look at the map information, you can copy the existing maps and make many changes to them. Some options (very few) are still hard coded in the game. In future revisions of the **Take Command** engine, more and more access to what “goes on under the hood” will be made available.

An introduction to the information needed to mod **Take Command** is found in this section of the game manual. Many of the areas covered may be hard to understand, so if you have questions after you read the pertinent information, please visit our forums. We have additional information on modding on the MadMinute Games website at <http://www.MadMinuteGames.com>.

The SDK gives you the power to create an entirely new game. **ALL** of the artwork can be replaced, even the screens and tool bars. Basically any game that uses a regimental based combat system would work. Since you can specify the size of the regiments, you could even create powerful single men in the infantry units, though they would still have a flag bearer. You could create a fantasy or sci-fi game, there are endless possibilities. Of course anything you create with the **Take Command** engine must be given away for free. You cannot sell anything that you create, but that's what great mod communities are all about—more content for your favorite games.

There are some limitations of course. If we don't support the function that you need, you can't add it. For example some people have been talking about a Napoleonic Mod. We can do almost everything, but one major thing that we can't do is form squares. That's because in our existing formations, all units must face the same direction. You could use our modding to create a square, but once melee started it would fall apart and while still, everyone would face the same direction.

Our directory structure also supports lots of experimenting without worrying about messing up your main files. Go ahead...give it a shot.

Read the following information and instructions and see what you can come up with.

While modding the **Take Command** engine, you will probably encounter many crashes. This is because the modding abilities are so powerful and also because we didn't have enough time to put in all the large number of file check routines that would be required to ensure that any mods are bug free.

When you are finished with your scenario, use the **WarPack** utility to turn it into an MMG file. This is a compressed file format that will zip up all files in your scenario folder. It allows you to distribute your scenarios by email or from a webpage in an easy compressed one-file format. This utility is found in the SDK folder on the CD. To package a custom scenario, copy the warpack.exe file from the CD into the main game folder. Running this program will show you a simple display of the scenario folders available to be packaged. These will show up in the upper left window while existing mmg files will be displayed in the upper right window. Selecting the folder will display all of the files in that directory in the bottom window. Simply select the 'Create MMG File' button and an mmg file with the same name as the folder will be created and written into the scenarios directory.

So have fun. Show us what you can do. Good Luck!

General Notes on CSV Editing

In most of our csv files (unless otherwise specified) the first line contains the headers. The program does not read this line so you can change the headers as you see fit (if another definition of a column makes more sense to you, then change it). Also if the first box on a row is blank, that line is skipped. Unless otherwise specified in the csv definition, you can add all the comments that you want by leaving the first box on the row blank.

To edit the csv files, we highly suggest using a spreadsheet program. These will import and export the csv files while providing a user-friendly environment in which to work on them.

Many of the design decisions, though made to increase flexibility, are a little complicated. This section will hopefully explain how the program chooses files from the directory structure.

At the lowest level we have the scenario. Scenarios are loaded by MMG file **OR** scenario folder--but never both. Even if an mmg file and a scenario folder have the same exact name, they are two separate scenarios as far as the game is concerned and they will **BOTH** show up in the custom scenarios menu. The only mmg files that will not show up are the ones found on the 2nd Manassas Battles Screen. These are hard coded in the game and will not display. An mmg file is a complete entity unto itself and is not affected by the presence or absence of other files. Some files will affect all

At the next level are the main folders. If a needed file is not found in the scenario, then it is looked for in the main folder, the folders in the main directory of the game. If the file is not found here then it is looked for in the **TC2M.mmg** file.

For example: Let's say you have designed a custom scenario and the level.ini file calls for the game to load the map file **2ndM_29th.csv**. First it looks to see if you have a maps directory under your scenario folder. If so, it loads the file from there if it is present. If there is no maps directory, then it looks in the main maps folder. Other files such as Weapons.csv may be in a specific folder, where changes will affect only that scenario. You can add a **Data Files** directory in the main game folder and files here will affect Open Play and scenarios that do not have their own Weapons.csv file. If there is no Weapons.csv file in either location, the information will be read from the TC2M.mmg file.

This design allows you to experiment inside a scenario without ever messing up your main directory. Basically any file that you want replaced in a scenario can be placed in your scenario directory matching the structure of the main directory and it will be picked up when that scenario is run. Use the SDK folder to see where all of the csv files are located. The SDK folder contains all of our source csv and txt files that we used to build our MMG files.

Designer's Notes

From the very start, the concept of the Take Command series was to truly put the player back in time to experience Civil War combat. Our goal is for the player to lose himself in the thought processes of a commander during a battle, even if just for a minute or two. We designed the engine so the player could actually play *any* commander they wanted: from a Lieutenant all the way to Army commander.

We have given all leaders different personality types that “interpret” the orders given to them. We wanted the personalities of the AI leaders to behave very much like a human...unique and flawed. Because of this, during a battle, the player may witness leaders advancing their men into the thick of the fight without waiting for support, or leaders not so anxious to get close to the enemy, and sometimes leaders who just stand there and wait until the moment is just right (and the enemy weakened enough) before they bring their troops into the fray.

The player must work with all the AI commanders’ different personalities to achieve victory. All these factors begin to weigh on the player in some way depending on the command level he selected; either dealing with orders from AI commanders from above him or dealing with subordinate and recalcitrant leaders below him. This model ends up being a very accurate depiction of combat from a human perspective.

Up until now, our games have focused primarily on the tactical aspects of a battle. Our engine is always evolving, and we will always be adding and refining the tactical combat, however, we are ready to broaden the scope of the Take Command Series and branch out into new territory...the strategic (or Big Picture).

Take Command’s Future?

How do you supply, train, equip, and move an entire Army on campaign and fight fighting multiple battles over the course of months? The Take Command series will begin to answer these questions with our next installment: Shiloh (due out late 2007).

Glossary



Brig Gen	Brigadier General
Capt	Captain
Col	Colonel
CSV	Comma Separated Value
CTD	Crash to desk top
Gen	General
Hi Res	High resolution
HUD	Heads up display (commander / unit tool bars)
Lieut	Lieutenant
Lt Col	Lieutenant Colonel
LOS	Line of sight
Low Res	Low resolution
Maj	Major
Maj Gen	Major General
mmg	Mad Minute Games file format
OOB	Order of Battle
TC	Take command

References and Recommended Reading



General Sources

Boatner, Mark M., *The Civil War Dictionary*

Century Magazine, *Battles and Leaders of the Civil War*, Vol. II

Davis, Major George B., *The Official Military Atlas of the Civil War*

Dyer, Frederick H., *A Compendium of the War of the Rebellion*

Government Printing Office, *Official Records of the War of the Rebellion, Series I, Vol. 12, Part I: Jackson's Shenandoah Campaign (Reports)*

Government Printing Office, *Official Records of the War of the Rebellion, Series I, Vol. 12, Parts I & II: Cedar Mountain, 2nd Bull Run (Correspondence/Reports)*

Government Printing Office, *Official Records of the War of the Rebellion, Series I, Vol. 12, Part II Supplement: The Fitz John Porter Court Martial*

Heitman, Francis B., *Historical Register and Dictionary of the United States Army, Vol. I*

Cedar Mountain

Krick, Robert K., *Stonewall Jackson at Cedar Mountain*

Second Manassas

Allen, John O., *The Strength of the Union and Confederate Forces At Second Manassas*, (1993 Master's Thesis, George Mason University)

Hennessy, John, *Return to Bull Run: The Campaign and Battle of Second Manassas*

Hennessy, John, *Second Manassas Battlefield Map Study - w/Maps (Cloth)*

Nolan, Alan T., *The Iron Brigade: A Military History*

Chantilly (Ox Hill)

Taylor, Paul, *He Hath Loosed the Fateful Lightning: The Battle of Ox Hill (Chantilly)*, September 1, 1862

Welker, David A., *Tempest at Ox Hill: The Battle of Chantilly*

Uniforms and Infantry Weapons

Todd, Frederick P., *American Military Equipage 1851 - 1872, volume I & II*

John M. Murphy and Howard Michael Madeus, *Confederate Rifles & Muskets*

Earl J. Coates and Dean S. Thomas, *An Introduction to Civil War Small Arms*

Earl J. Coates, Michael J. McAfee, Don Troiani, *Don Troiani's Regiments and Uniforms of the Civil War*

Artillery

Ripley, Warren, *Artillery and ammunition of the Civil War*

William H French, William F. Barry, Henry J. Hunt, *Field Artillery Tactics 1864*

Jennings Cropper Wise, *The Long Arm of Lee. Volume 1: Bull Run to Fredricksburg*

Naisawald, L. VanLoan, *Grape & Canister, 2nd Edition*

Katcher, Philip, *American Civil War Artillery 1861 - 1865*

Gibbon, John, *The Artillerist's Manual*

Map Sources

Current USGS Satellite Data (for elevations)

Map by Robert Knox Sneden (1832-1918). From the Library of Congress American Memory collection.
(<http://hdl.loc.gov/loc.ndlpcoop/gvhs01.vhs00012>)

Maps from McElfresh Map Co.

Credits



MadMinute Games is our dream of making our own games. Some time ago two guys got together and decided that instead of watching TV at night we were going to write our own computer game. So we've been spending our nights and our weekends / vacations / holidays, writing what we like to call the **War3D**

engine.

MadMinute Games is:

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