

Version 2010

Carnage & Glory II



Windows Version
System Manual

THE
COMPUTER
MODERATED
WARGAME
SYSTEM

FOR USE WITH
MINIATURES

By
Nigel P. Marsh

Napoleon's Wars,
1796-1815



Dedicated to
Kelly, my wife, who is always supportive and generous
And
Tati

Version 2010
Carnage & Glory II

**Napoleon's Wars
1796-1815**

**The Computer Moderated Wargame System
For use with miniatures**

Windows Version



“There are no precise of determined rules; everything depends on the character which nature has bestowed upon the commander; on his talents and his defects, on the temper of the troops, the disposition of forces, the season of the year, and a thousand contingencies which make no two actions alike”.

Napoleon Bonaparte



Credits

Game Designer: Nigel P. Marsh

Special thanks to the playtesters and to everyone that has supported Carnage&GloryII and offered guidance over the years.

CARNAGE&GLORYII

Computer Moderated Wargame Systems

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Carnage & Glory II

Introduction

Carnage&GloryII is a Windows based computer-moderated simulation of warfare for use with miniature figures.

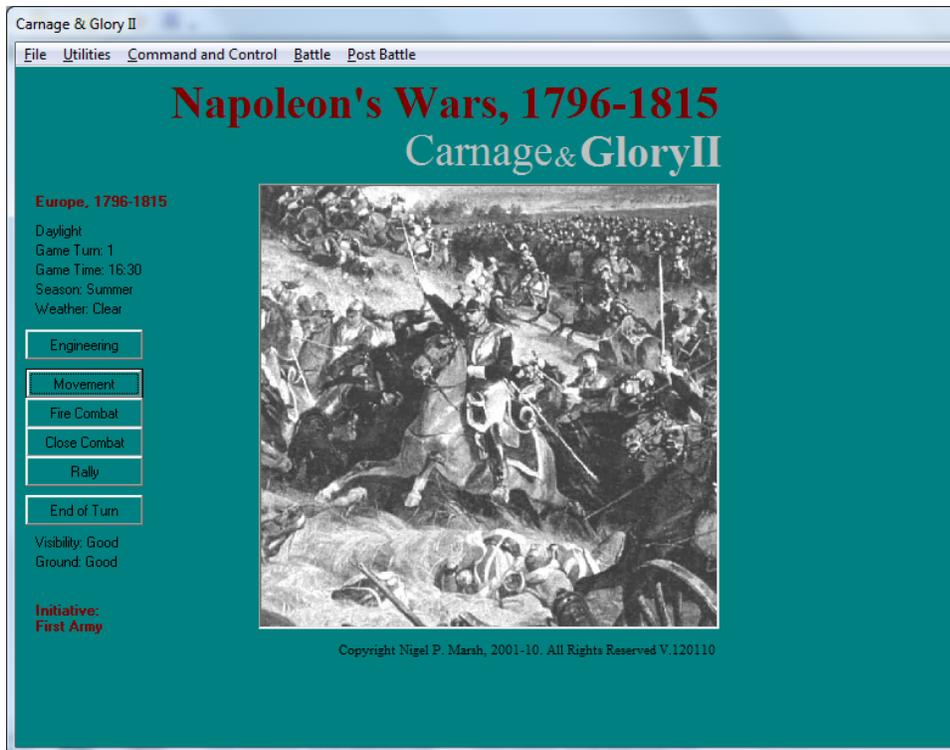


Figure 1
Carnage & Glory II main screen

Carnage&GloryII eliminates the traditional reliance upon charts and dice. Carnage&GloryII effectively eliminates the tedium of wargaming. Enabling the wargamer to concentrate his entire mental effort to the consideration of the tactical deployment of your miniature forces, whilst the system tracks the morale, fatigue and combat strength of your miniature combat units and general officers.

Without the traditional complexities of chart and dice based wargame rule systems, Carnage&GloryII makes the simulation of warfare through the medium of table-top wargaming accessible to both novice and experienced wargamer.

General System Requirements

To use your Carnage&GloryII system you must have:

- PC-compatible computer
- Windows operating system

And optionally

- Printer

Starting Carnage&GloryII

Carnage&GloryII will demand a little of your time and attention before you become totally familiar with its operation, but please be patient, the rewards will hopefully amaze you. It is recommended that you read through this manual whilst at your computer, the manual will guide you through step by step the tasks required to operate Carnage&GloryII. Take your time, and within a few hours, you can call yourself a veteran of the fields of Carnage & Glory.

Carnage&GloryII will self install itself onto your computer. See inside back cover of the product packaging for complete installation instructions. It will create a directory for each system as required. Once you have completed the installation of Carnage&GloryII to run the system:

At your computer Windows desktop click **Start**, select **Programs**; select **Carnage&GloryII** and select **cgntii**. The Carnage&GloryII main menu screen will be displayed [see figure 1].

The main screen menu bar has five options, which include:

- **File**
- **Utilities**
- **Command and Control**
- **Battle**
- **Post Battle**

Tip

Although all commands can be selected using the mouse, it is also possible to select the menu command by pressing the Alt+and the associated underlined character key.

For example, Alt+F will select the file menu.

You will not be required to press Alt to select any option within the drop down menu. For example, C will select the Create New File option, and A will select the New Army List file

Currently only the File option will be enabled or accessible. The other options will become enabled only as we access different system options.

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Section One: File Menu

The **F**ile Menu has eight options which include:

- **C**reate New Files
- **O**pen Existing Files
- **E**dit Existing Order of Battle
- **S**ave File As
- **D**uplicate File
- **D**elete Existing Files
- **P**rinter Setup
- **E**xit

Let's review each of these options

Create New Army List - Officer Details

Your first task will be to create a number of different files that contain information relating to your miniature armies. The first file will be an Army List file [AL]. To create a new army list file:

- Click **F**ile at the main screen menu bar [see Figure 1].
- Click **C**reate New File
- Click **C**reate New **A**rmy List

An Open File dialog box will appear. Carnage&GloryII comes pre-loaded with sample Army Lists. So you can choose to open a sample file or create a new file.

For our example click and open the pre-loaded file '[101] 1809-French'. The Officer Detail form will now appear [see Figure 2]. The Officer Detail form enables you to set various characteristics for

The screenshot shows the 'Officer Details - Carnage & Glory II' window. It contains the following information:

- ID #: 101
- Nationality: France Post-1807
- Name: Louis Friant
- Rank: General de Division
- Command: Division
- Superior: Louis Friant
- Status: Active
- File Path: C:\cgnt2\1809-French.alo
- Officers in File: 5
- Leadership: Inspirational[-]
- Tactical Ability: Superior[-]
- Portrait of Louis Friant
- Buttons: Print Army List File, Randomize, <Previous, Next>, First, Insert, Last, Delete, New, Jump, Combat Units/Exit
- Time: 3:39:42 PM

Figure 2
Officer Details form

each officer as follows:

- ID # [This is typically pre-set depending on nationality and becomes the unique identity number for each officer and combat unit in your army list. It must be a three digit number 000-999.]
- Nationality
- Name
- Rank
- Command
- Zone of influence [see figure 3]. This chart identifies the respective ‘zone of influence ’ or ‘command radiuses’ for the various grades of officer. These are relevant during the rally phase of the game, and identify the distance that an officer must be within to attempt to rally a combat unit.
- Leadership [Nine different pre-sets are available]

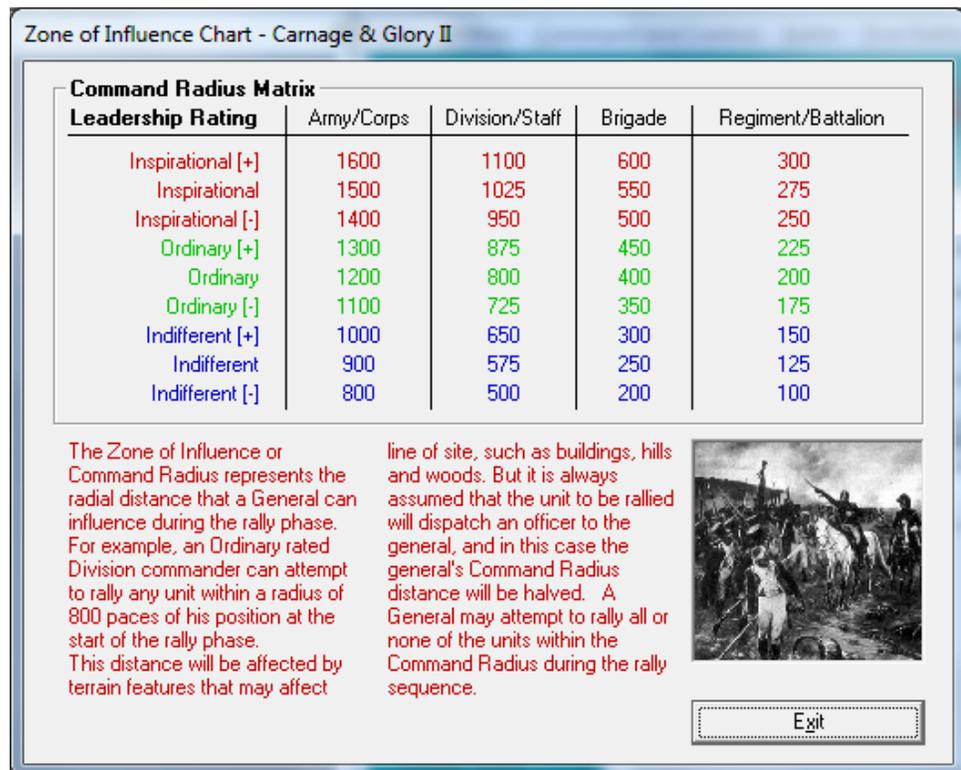


Figure 3
Zone of Influence form

- Tactical ability [Nine different pre-sets are available]
- Superior [The officer commanding the currently listed officer]. When creating a new file this will be blank for the first officer in the list.
- Status

If you have reconstituted an army list following a battle you may see a check box to reactivate the officer. This will return the officer, or a renamed officer replacing a killed or mortally wounded officer, to active status.

The commander ratings, leadership and tactical, will influence their command grouping [the units that are directly in their chain of command] or the individual unit they are directly attached to, either jointly or separately. For example:

During the movement phase:

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An attached officer will directly influence a units ability to charge through reference to the tactical rating - the better the rating the greater the positive influence.

During the fire phase:

An attached officer will directly influence a units ability to withstand a charge through reference to the leadership rating - the better the rating the greater the positive influence.

During the combat phase:

An attached officer will influence a unit's ability to fight - but the officer ID is not input, so not recognized explicitly, therefore neither the leadership nor tactical rating is considered. However an officer's presence will always be a positive influence.

During the rally phase:

An attached officer will directly influence a units ability to rally through reference to the leadership rating - the better the rating the greater the positive influence.

During the end of turn phase:

The combined rating of an officer, inclusive of leadership and tactical, will affect the calculation of army initiative - the better the ratings the greater the positive influence.

The combined rating of an officer, inclusive of leadership and tactical, will be considered to determine the morale of the officer, and how his demeanor affects the units that are directly in his immediate chain of command.

If a unit has an opportunity to rally during the end of turn phase, an attached officer will directly influence the units ability to rally through reference to the officers leadership rating - the better the rating the greater the positive influence.

During the pregame army initiative calculation:

The combined rating of an officer, both leadership and tactical, will affect the calculation of army initiative - the better the ratings the greater the positive influence.

During the issuance of orders:

The leadership rating will affect the officer's ability to receive and comprehend an order or message - the better the rating the greater chance of an immediate response to any order or message.

A number of command buttons are also available including:

- **Print Army List File** – Click this command to obtain printed hard copy of the working army list. A printer must be available and online.
- **Randomize** – Click this command to randomize the officer's leadership and tactical ability ratings.
- **Next** – Click to view the next officer in the list
- **First** – Click to view the first officer in the list
- **New** – Click to enter details for a completely new officer
- **Last** – Click to view the last officer in the list
- **Previous** – Click to view the previous officer in the list
- **Insert** – Click to insert a new officer at the current point in the list, each existing and subsequent officer will receive new consecutive ID number
- **Jump** – Select any available general officer ID number
- **Delete** – Click to delete current officer from the file. Remaining officers will receive new consecutive ID numbers
- **Combat Units** – Click to load the Combat Unit details form

Note that by clicking Next, First, New, Last, Previous, Insert, Jump, Delete or Combat Units the system will automatically save the details that are currently listed on screen to the open file.

Unit Details - Carnage & Glory II

ID #: 101 Points value: 232 C:\cgnt2\1809-French.alu
Units in File: 23

Nationality: France Post-1807 Print Army List File

Name: 6/7eme Artillerie a Pied

Strength: 200 +/- Eight :Sub-Units

Type: Artillery [Foot] Combat Rating: Average

Weapon: 8 Pounder [Medium] Fire Rating: Good

Class: Line :Howitzers Two Randomize

Experience: Veteran

Superior: Louis Friant

Artillery Train Crew:
 Militarized Civilian

<Previous Next> First Insert Last Exit
Delete New Repeat Jump General Officers

Figure 4
Unit Details form

Create New Army List – Unit Details

Click the **Combat Unit** command and the Unit detail form will now appear [see Figure 4]. The unit detail form enables you to set various characteristics for each combat unit as follows:

- ID # [This is typically pre-set depending on nationality and becomes the unique identity number for each officer and combat unit in your army list]
- Nationality
- Name
- Strength [This is the number of actual men – not figures. When inputting an artillery unit each cannon is crewed by twenty-five men, who include specialists, non-specialists and train crew. Therefore if you are representing a unit with six cannon, you should input 150 men].
- Sub-Units [The number of companies, squadrons or artillery sections present in the combat unit. An artillery section is typically two cannon].
- Type [Nine type options are available].
- Combat rating [Five different pre-sets are available – reflecting how well the unit will engage in combat action. Excellent = 1].
- Weapon
- Fire rating [Five different pre-sets are available – reflecting how well the unit will engage in fire action. Excellent = 1].
- Battalion Guns or Howitzers [Optional depending on unit type. If the unit is an artillery unit the number of howitzers is not in addition to the number of cannon, but represents a proportion of the total number. For example, if you input one-hundred men crewing four cannon and then input one howitzer. Three of the cannon will be of the type selected under weapons and one will be a howitzer. The advantage of having a howitzer will be to enable incendiary action with the battery].
- Class [Five different morale classifications are available].

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- Experience [Four different experience classifications are available].
- Superior [The officer commanding the currently listed combat unit].
- Standards [Optional depending on unit type].
- Artillery Train Crew [Optional depending on unit type – select Civilian for many pre-1800 Nationalities and some post 1800, for example, Spanish Foot Artillery for the period 1796 through 1812].
- Skirmishers [Optional depending on unit type – select ‘Yes’ for any unit that has an integral skirmish company, for example a French voltigeur company, or third-rank skirmishers]. Note this is different from the adoption of open order, which is a formation in which a unit will increase its frontage by increasing spacing between the files. Skirmishers represent a chain of troops in advance of the close [or open] order formation, where distances between files is significantly greater than when in open order.

Although all nations technically could field or deploy some form of skirmish screen in advance of the parent formation their abilities would vary enormously. If we consider the five major antagonists:

- Austrian: Select yes for all except Grenadier units, and allow the skirmishers to operate defensively. [Third-rank skirmishers]
- British: Select yes, and allow the skirmishers to operate offensively. [Light company skirmishers]
- French: Select yes, and allow the skirmishers to operate offensively. [Voltigeur company skirmishers]
- Prussian: Select yes, and allow the skirmishers to operate defensively. [Third-rank skirmishers]
- Russian: Post 1810 select yes, and allow the skirmishers to operate defensively. [Post 1810 Light platoon skirmishers]

If a unit is permitted to operate offensively, the unit may fire with their skirmish screen during the fire phase. Typically, as the enemy will also have skirmishers deployed, this protective screen will reduce the effect of the offensive fire. A unit that is permitted to operate defensively is not permitted to fire with their skirmish screen during the fire phase.

The skirmish chain was a detachment of light troops or third-rankers placed in advance of the main body of troops who would then engage the enemy in fire. This fire was intended to disrupt their opponent at minimal loss to themselves, whilst protecting the parent unit from the attentions of the enemy skirmishers.

A number of command buttons are also available including:

- **Print Army List File** – Click this command to obtain a printed hard copy of the working army list. A printer must be available and online
- **Randomize** – Click this command to randomize the combat and fire ratings.
- **Next** – Click to view the next unit in the list
- **Repeat** – Click to view the next available unit with identical characteristics as the currently listed unit. This is useful when inputting data for a multiple battalion regiment of infantry.
- **First** – Click to view the first unit in the list
- **New** – Click to enter details for a completely new unit
- **Last** – Click to view the last unit in the list
- **Previous** – Click to view the previous unit in the list
- **Insert** – Click to insert a new unit at the current point in the list, each existing and subsequent unit will receive a new consecutive ID number
- **Jump** – Select any available combat unit ID number
- **Delete** – Click to delete current combat unit from file. Remaining combat units will receive new consecutive ID numbers
- **Exit** – Click to return to the main menu screen
- **General Officers** – Click to return to the Officer detail form

Note that by clicking Next, Repeat, First, New, Last, Previous, Insert, Jump, Delete, General Officers or Exit the system will automatically save the details that are currently listed on screen to the open file.

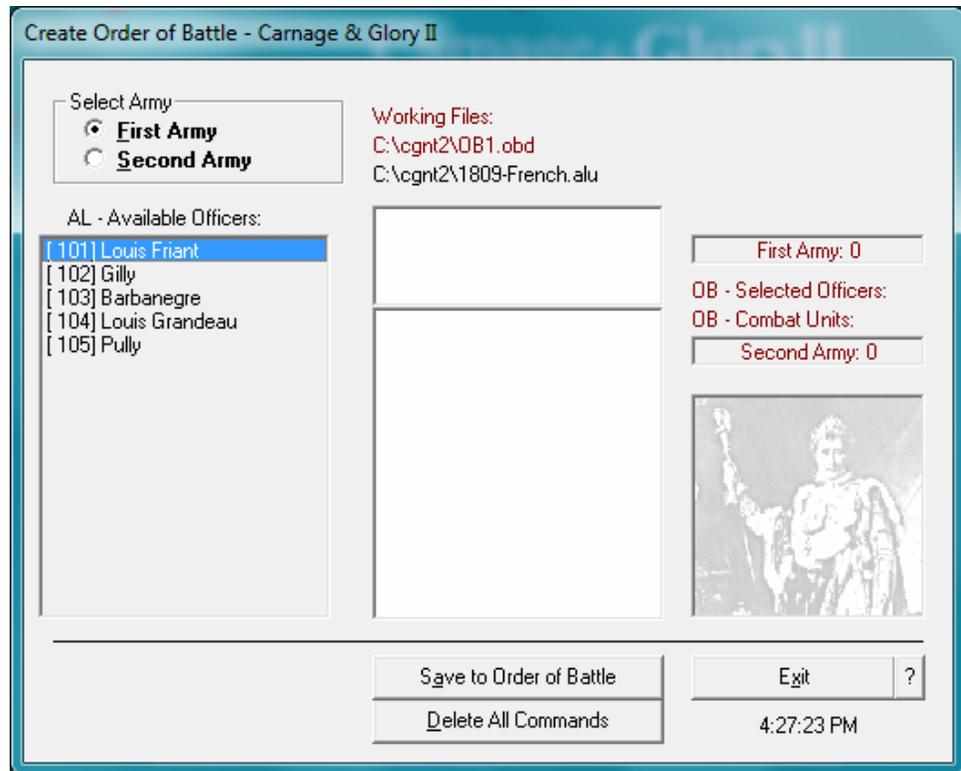


Figure 5
Create Order of Battle form

Create New Order of Battle

Having created the AL files that represent the miniatures in your wargame collections you are ready to create your first Order of Battle file [OB]. To create a new OB file:

- Click **F**ile at the main screen menu bar.
- Click **C**reate New File
- Click **C**reate New **O**rders of Battle

An Open Order of Battle File dialog box will appear [see figure 5]. In the File Name box type **ob1**, this will represent the name of the OB file, and click Open or press any key. Now an Open Army List File dialog box will appear. Click and open the pre-loaded file '1809-French'. The Create Order of Battle form will now appear [see figure 4]. To click the officers to be transferred to the OB file from the AL file scroll the AL-Available Officers list until you highlight a required officer and click or press enter. That officer and his associated combat units will be

Tip
Various drop down menu commands also have shortcut keys. For example, pressing Ctrl+O will open the Create New Order of Battle file option

Tip
The majority of forms also have an on screen help file to guide you through the forms various commands and methods. This can be viewed by either clicking on the picture in the lower right of the form or pressing the ? command next to the **Exit** command.

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transferred to the OB file. Having clicked all the required officers, click the command **Save to Order of Battle**. You will be prompted to click the commanding officer, which is normally the first officer clicked within the list.

If you have made a mistake by entering an unwanted officer, highlight that officer in the OB-Selected Officers box and click or press enter. Alternatively, click the command **Delete All Commands** to erase all the officers and combat units.

Having entered the details for the first army the Open Army List File dialog box will reappear. Click and open the pre-loaded file '1809-Austrian' and repeat the process to transfer the second army officer and combat units to the OB file. You are now ready to return to the main menu screen, to do this click the command **Exit**.

Having returned the main menu screen you will notice that the five menu bar options are now enabled, game and environmental information has been listed to the screen and that six additional commands are on screen that includes:

- **Engineering**
- **Movement**
- **Fire Combat**
- **Close Combat**
- **Rally**
- **End of Turn**

Although you could start engaging in battle immediately, let's try to avoid the temptation and investigate some of the other options available first.

Open Existing Files – Army List

So far you have reviewed how to create AL and OB files, as your miniatures collections grow you will want to amend your original AL files to include the new officers and combat units that you add to your collections. To edit an existing army list file:

- Click **F**ile at the main screen menu bar.
- Click **O**pen Existing File
- Click Existing **A**rmey List File

An Open File dialog box will appear. Click and open the required AL file, the Officer Detail form will now appear [see Figure 2]. You can now enter new details or edit existing details as required.

Open Existing Files – Order of Battle

Tip

Most commands or text boxes displayed on screen will have an associated tip text box. To view these simply rest the mouse over the command or text box.

Not all tabletop battles can be played out in the course of one evening. It is often necessary to suspend the action in mid battle. The system continually updates the battle data as you play the game, so it is safe to stop the battle and turn off your computer at any point – although it is

recommended that you play out the end of turn sequence ready to start a new turn when you recommence. To open an existing OB file:

- Click **F**ile at the main screen menu bar.
- Click **O**pen Existing File
- Click Existing **O**rdery of Battle

An Open File dialog box will appear. Click and open the required OB file, you can now continue the battle.

Edit Existing Order of Battle

OB files can be reused again and again [see Post Battle - Reset Order of Battle]; however, you may decide that you wish to add new officers and combat units to an existing file to increase its size instead of creating a completely new OB file. In this instance, to edit an existing OB file:

Tip
Enter new details consecutively within the open file. As such you should add new details after the last in the list. You can selectively insert details using the **Insert** command.

- Click **F**ile at the main screen menu bar.
- Click **E**dit Existing Order of Battle

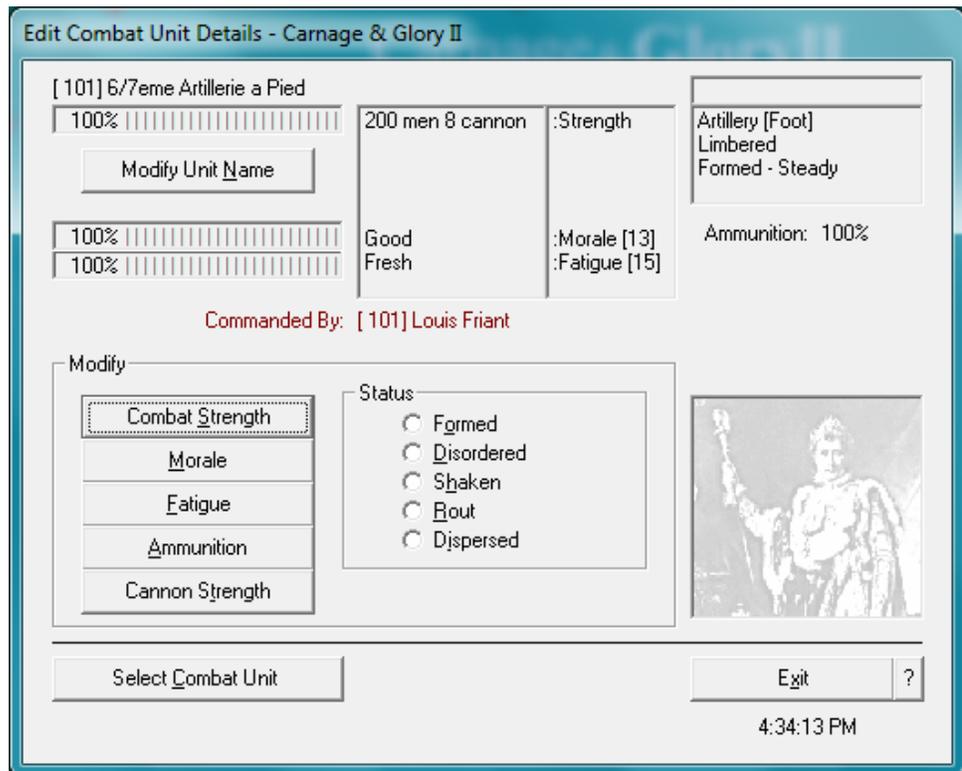


Figure 6
Edit Combat Unit Details form

An Open Order of Battle File dialog box will appear. Click and open the required OB file. An Open Army List file dialog box will appear. Click and open the required AL file. It is important that you open only the original AL file, from which the OB file was initially created; otherwise officers and combat units with matching ID numbers will be over written in the original OB file. The Create Order of Battle form will now appear, click the army to add the required officers and combat units to. The AL-Available Officers list will only indicate those officers currently not in the OB file. Continue as with Create New Order of Battle file above.

You may be required to reassign the new officers that have been added to the existing OB file, to ensure an appropriate chain of command exists. See Reassignments – General Officers below.

Edit Existing Order of Battle – Edit Combat Unit Details

The option enables you to edit various details of a combat unit during a game.

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- Click **F**ile at the main screen menu bar.
- Click **E**dit Existing Order of Battle
- Click **M**odify Combat Unit Details

The Edit Combat Unit details form will now appear [see figure 6].

An example of when this might be useful is to replenish the ammunition supply of a particular unit, or reduce the available ammunition of a battery to reflect the loss of a caisson. Another example may be in the case that a unit has inadvertently suffered losses due to a user error, such as incorrect unit number input. In this instance the losses can be effectively returned to the unit to redress the issue.

Use of this form is for advanced users only and should only be used with extreme caution.

Save File As – Save Army List As

This option enables you to change the name of an existing, open, AL file to something else. To save an existing AL file as another name:

- Click **F**ile at the main screen menu bar.
- Click **S**ave File As
- Click **S**ave **A**rmey List As

The Save As file dialog box will appear, now type the new name for the open AL file. Note an existing AL file must be already open to use this option. As a precaution you will notice that all open files, both AL and OB will be automatically closed at this time.

Save File As – Save Order of Battle As

This option enables you to change the name of an existing, open, OB file to something else. To save an existing OB file as another name:

- Click **F**ile at the main screen menu bar.
- Click **S**ave File As
- Click **S**ave **O**rdery of Battle As

The Save As file dialog box will appear, now type the new name for the open OB file. Note an existing OB file must be already open to use this option. As a precaution you will notice that all open files, both AL and OB will be automatically closed at this time.

Duplicate File – Duplicate Army List

This option enables you to duplicate an existing, open, AL file as something else, which is useful if you need to create a back up of a particular file. To duplicate an existing AL file as another name:

- Click **F**ile at the main screen menu bar.
- Click **D**uplicate File
- Click **D**uplicate **A**rmey List

The Duplicate file dialog box will appear, now type the new name for the open AL file. Note an existing AL file must be already open to use this option. As a precaution you will notice that all open files, both AL and OB will be automatically closed at this time.

Duplicate File – Duplicate Order of Battle

This option enables you to duplicate an existing, open, OB file as something else, which is useful if you need to create a back up of a particular file. To duplicate an existing OB file as another name:

- Click **F**ile at the main screen menu bar.
- Click **D**uplicate **F**ile
- Click **D**uplicate **O**rders of **B**attle

The Duplicate file dialog box will appear, now type the new name for the open OB file. Note an existing OB file must be already open to use this option. As a precaution you will notice that all open files, both AL and OB will be automatically closed at this time.

Delete Existing File – Delete Army List File

This option enables you to delete an existing AL file. To delete an existing AL file:

- Click **F**ile at the main screen menu bar.
- Click **D**el~~e~~te **E**xisting **F**ile
- Click **E**xisting **A**rm~~y~~ **L**ist **F**ile

The Delete file dialog box will appear, now type the name for the required AL file. As a precaution you will notice that all open files, both AL and OB will be automatically closed at this time.

Delete Existing File – Delete Order of Battle File

This option enables you to delete an existing OB file. To delete an existing OB file:

- Click **F**ile at the main screen menu bar.
- Click **D**el~~e~~te **E**xisting **F**ile
- Click **E**xisting **O**rders of **B**attle

The Delete file dialog box will appear, now type the name for the required OB file. As a precaution you will notice that all open files, both AL and OB will be automatically closed at this time.

Warning

Use the **Delete Existing File** option with caution. Deleting a file is irreversible, unless you have previously also duplicated the file under another name.

Printer Setup

This option enables you to make adjustments to the setup of your default printer, such as page orientation and number of copies. To access the printer setup option:

- Click **F**ile at the main screen menu bar.
- Click **P**rinter **S**etup

Exit

This option enables you to exit Carnage&GloryII and return to the Windows environment. Any battle data or change you have made to AL or OB files is automatically saved. To exit Carnage&GloryII:

- Click **F**ile at the main screen menu bar.
- Click **E**xit

Section Two: Utilities

The Utilities Menu has ten options which include:

- **Environmental Conditions**
- **ArmY Initiative**
- **Scouting Action**
- **Change Army Name**
- **Name of Battle**
- **Preset Combat Formations**
- **Preset Fatigue Levels**
- **Preset Ammunition Levels**
- **Reserve and Flank Forces**
- **Master Sequence Description**

Let's review each of these options

The screenshot shows the 'Environmental Conditions - Carnage & Glory II' dialog box. It features several controls: a 'Season' dropdown menu set to 'Summer'; a 'Prevailing Weather' dropdown menu set to 'Clear'; a 'Ground Conditions' dropdown menu set to 'Good'; a 'Retain Selected Weather Throughout Battle' checkbox which is unchecked; a 'Heat Exhaustion' section with radio buttons for 'High', 'Normal Conditions' (which is selected), and 'Low'; and a 'Time' section with 'Time: Hour' set to 16 and 'Time: Minutes' set to 30. On the right side, there is a small image of a soldier in armor. At the bottom, there is an 'Exit' button and a timestamp '4:37:35 PM'.

*Figure 7
Environmental Conditions form*

Environmental Conditions

Battles were rarely fought on perfectly clear cloudless summer days. Carnage&GloryII not only offers you the choice of seven weather types, but the four seasons and three different ground conditions. To initiate the environmental conditions form:

- Click **Utilities** at the main screen menu bar.
- Click **Environmental Conditions**

The Environmental Conditions form will now appear [see figure 7].

The weather conditions will be altered automatically throughout the game in accordance with the time of day, season and previous weather conditions. If however you are re-fighting an historical battle in which the weather conditions were known to be constant throughout, you can check the **Retain Selected Weather throughout Battle** option.

You may notice that certain weather conditions are not available during certain seasons, for example, during winter, moderate or heavy rain will automatically become light rain.

The status of the ground conditions can affect movement and artillery bouncethrough. Providing the conditions are favorable, poor ground will dry out in about two hours, moderate in half that time.

The default conditions are summer, clear and good for season, weather and ground conditions respectively.

You can also preset the game time at this form, both hours and minutes. The minutes can be preset in fifteen-minute increments, which reflect the fifteen-minute turn sequence. The lighting conditions for the battle, such as sunrise, nightfall and night will vary depending on the season and time of day selected. The default time is eight in the morning.

Battles were typically begun either in the morning or afternoon. Commanding generals would

Army Morale - Carnage & Glory													
Game Move / Time:	1 / 16:30												
Weather Conditions:	Clear												
Visibility:	Good												
Ground Conditions:	Good												
Army Initiative:	First Army has army initiative!												
<input checked="" type="checkbox"/> Use Army Morale													
Army Morale Break													
First Army	75												
Second Army	75												
<table border="1"> <thead> <tr> <th>First Army</th> <th>Second Army</th> </tr> </thead> <tbody> <tr> <td>Strength: 100%</td> <td>100% :Strength</td> </tr> <tr> <td>Fatigue: Good</td> <td>Good :Fatigue</td> </tr> <tr> <td>Morale: Good</td> <td>Good :Morale</td> </tr> <tr> <td>Total: 100%</td> <td>97% :Total</td> </tr> <tr> <td>Officers: Excellent[-]</td> <td>Competent[-] :Officers</td> </tr> </tbody> </table>		First Army	Second Army	Strength: 100%	100% :Strength	Fatigue: Good	Good :Fatigue	Morale: Good	Good :Morale	Total: 100%	97% :Total	Officers: Excellent[-]	Competent[-] :Officers
First Army	Second Army												
Strength: 100%	100% :Strength												
Fatigue: Good	Good :Fatigue												
Morale: Good	Good :Morale												
Total: 100%	97% :Total												
Officers: Excellent[-]	Competent[-] :Officers												
Exit													
5:13:56 PM													

Figure 8
Utilities Army Morale form

attempt to avoid conflict around noon to avoid any excessive heat associated with the midday sun that might be typical during the spring or summer campaigning seasons. However, you are given the option to select specific Heat Exhaustion conditions to reflect different climatic condition, or known circumstances in a particular battle. Selecting 'high' will reflect conditions in excessively warm climates. Selecting 'low' will reflect conditions in cooler climates. The default is normal conditions when the heat of the sun is typically only felt during the midday period – the length of heat exhaustion due to the sun will vary by season, and can be viewed by placing the cursor over the selection.

Carnage & Glory II

Click the command **Exit** to return to the main menu screen.

Army Initiative

This option calculates the comparative mental and physical fatigue, morale and physical strengths of both contending armies, then based upon these results and the degree of difference between them the system will give its recommendation as to which army has the initiative. To initiate Army Initiative:

- Click **Utilities** at the main screen menu bar.
- Click **Army Initiative**

The Army Morale form will now appear [see figure 8].

You can elect to discontinue using the Army Morale option by unchecking the **Use Army Morale** option. This only disables the effect of loss of morale

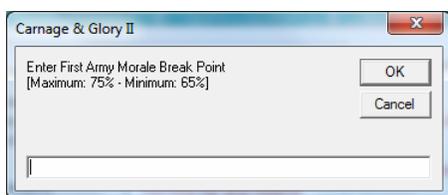


Figure 9
Army Morale Break Point Dialog Box

suffered by the combat units of the army whose army morale has dropped below the threshold at which the army morale breaks. This level is by default 75%; however, it is possible to adjust this percentage manually. This can be useful to adjust one or both army's morale break point, if the specific game scenario suggests that one or both had a lower break point than the default. Clicking the respective button enables you to alter the break point. Lowering the number will give the army more resilience.

Alternate Movement

Army Initiative is used to facilitate an alternate move system during the movement phase, which eliminates the typical problems inherent with simultaneous movement. The alternate move sequence works as follows. The army with the initiative has the choice of which army conducts its movement first. They can elect to move themselves or have their opponents move first. Having made this choice, and before any movement or formation changes are enacted, the charge declaration phase takes place. To keep both sides honest, it is recommended that both sides write down their proposed charge and cavalry reacts. Having written down or similarly marked the required charges for both sides, the army that is to move first declares their charges followed by the army to move second. Once all charges are accessed normal movement and formation changes can take place.

Click the command **Exit** to return to the main menu screen.

Scouting Action

Prior to any battle each army would deploy troops to scout ahead and to the flanks of the main body in an attempt to determine the enemy's whereabouts and strength. Depending on the efficiency of these scouts, the knowledge of the respective commanding officers would vary, often giving one army a marked advantage over their opponents.

Scouting Action calculates the scouting capability of each army and advises whether either of the armies has been out scouted and should therefore be deployed before its opponent. If one army has out scouted the other that army should be permitted to flank march against both the out scouted enemies' right and left flanks. If neither army is out scouted, it is recommended that both armies draw maps of the battlefield indicating their troop dispositions before simultaneously placing their commands on the tabletop. In this case both armies may elect to make flank marches against their opponent's left or right flank. If it is determined that both flank marches would be marching on

intercepting routes, the decision must be made to either delay the arrival indefinitely or by a pre-determined number of turns, to represent any possible off field conflict that might occur between the two opposing flank marches. To initiate scouting action:

- Click **Utilities** at the main screen menu bar.
- Click **Scouting Action**

You can obtain a printed hard copy of the scouting action results at this time, which may be kept as part of your battle records. Printed copy can only be obtained if you have a printer connected to your computer and the printer is switched on.

Change Army Name

Carnage&GloryII defaults the name 'First Army', for the first and 'Second Army', for the second army's respectively. But it is possible to customize these names as follows:

- Click **Utilities** at the main screen menu bar.
- Click **Change Army Name**
- Click either **First Army Name**, or **Second Army Name**

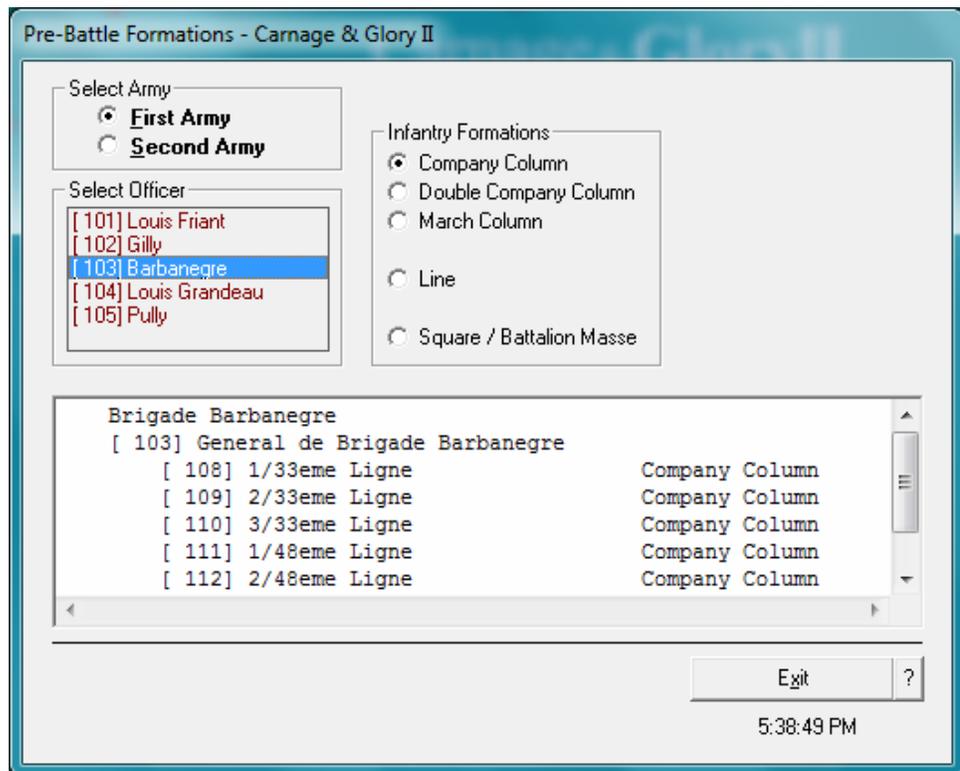


Figure 10
Pre-Battle Formations form

Enter the required name and click **OK** to return to the main menu screen.

Name of Battle

Carnage&GloryII defaults the battle name as 'Europe, 1796-1815'. But it is possible to customize this name as follows:

- Click **Utilities** at the main screen menu bar.

Carnage & Glory II

- Click **N**ame of Battle

Enter the required name and press OK to return to the main menu screen.

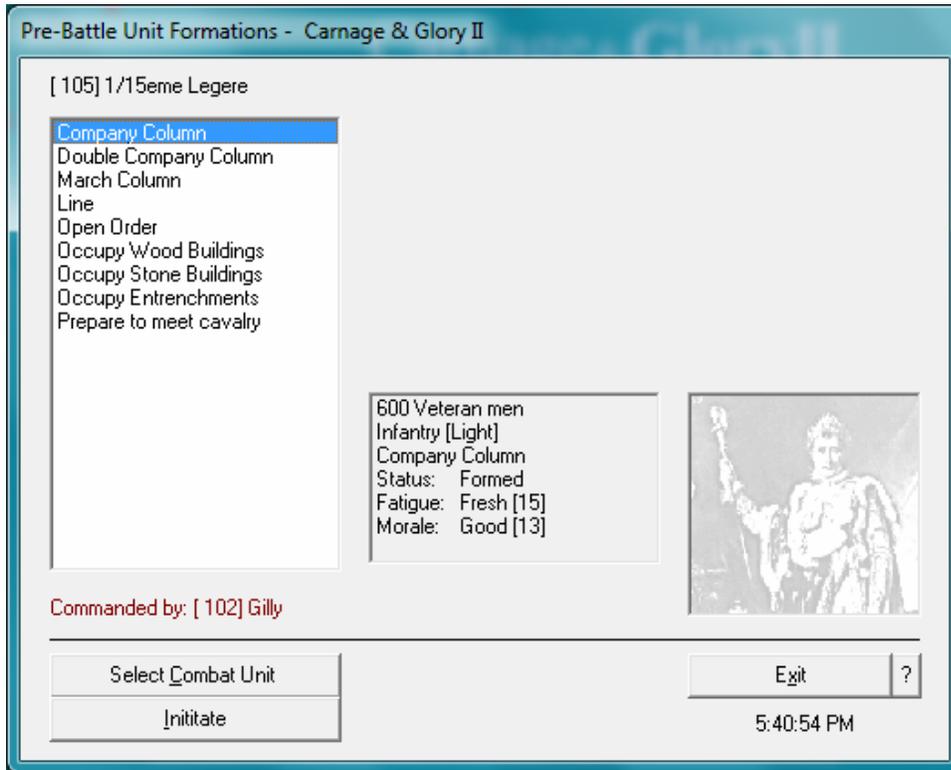


Figure 11
Pre-Battle Unit Formations form

Preset Combat Formations

Tip

Preset the highest ranking command structures prior to setting the minor command formations, for example, preset the Corps commander with all units in line formation, before you preset his subordinate brigade commander with his units in column.

To set multiple command structures to multiple formations, click to the other Army in between each formation setting. This will save the current changes, but not implement them on the next command.

This option enables you to preset the combat formations of the combat units either individually or as a command grouping. Depending on which type of preset option you select, not all formations will be available. For example you will not be able to select cover if changing formation by command grouping. Not all formations will be available based upon period and nationality. For example not all units will be permitted to deploy to double company column. [Defaults are company or double company column, squadron column and limbered for infantry, cavalry and artillery

respectively]. To preset combat formations by command structure:

- Click **U**tilities at the main screen menu bar.
- Click **P**reset Combat **F**ormations
- Click **B**y **G**eneral Officer

The Pre-Battle Formations form will now appear [see figure 10].

Click the army you wish to work with then select the required officer from the command structure whose combat units wish to change formation. Now click the required formations. You can scroll through the command structure list to verify the required formations have been adopted.

Using the method above complete corps, divisions and brigades can be quickly changed into the required combat formations; however, there are times when individual combat units may wish to adopt different formations to the rest of their brigade or other command. To make individual unit formation changes:

- Click **Utilities** at the main screen menu bar.
- Click **Preset Combat Formations**
- Click **By Combat Unit**

The Pre-Battle Unit Formations form will now appear [see figure 11].

Click the command **Select Combat Unit** and type the required combat unit ID number. Now scroll through the combat formation lists highlight the required formation and either press enter or click the command **Initiate** to enact the formation change. Note: Fatigue will not be incurred by combat units using the pre-battle formation change methods. It is assumed that these changes take place before the battle begins and that the troops have time to recuperate any fatigue, either mental or physical that might be incurred.

Click the command **Exit** to return to the main menu screen.

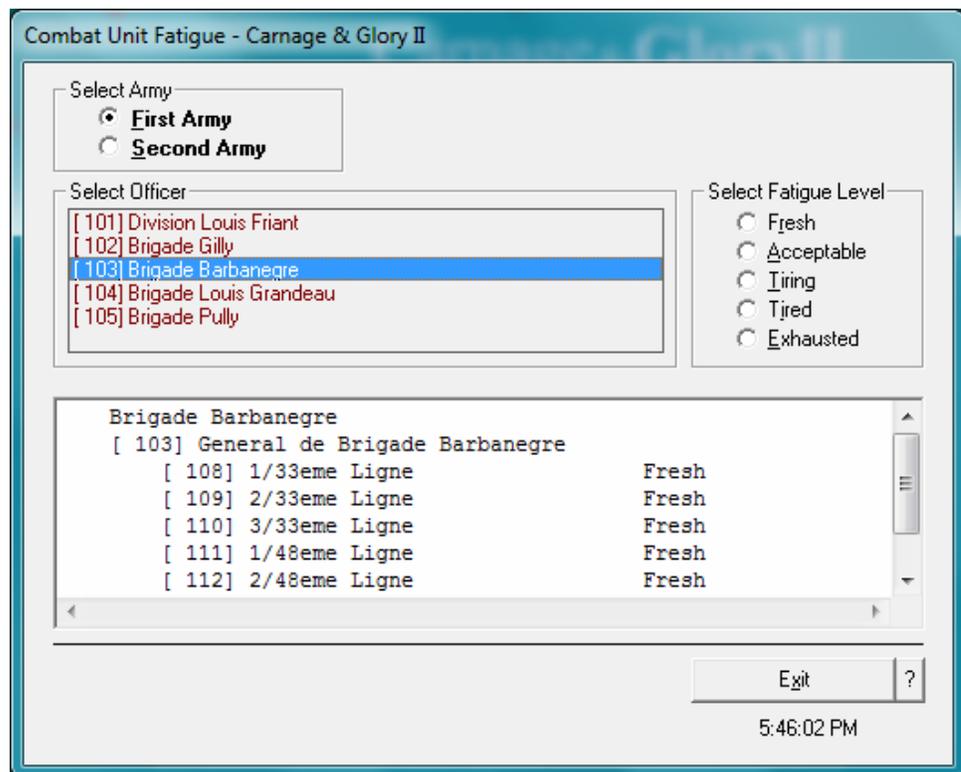


Figure 12
Combat Unit Fatigue form

Preset Fatigue Levels

Fatigue is measured on a fifteen point scale (1-15). This option enables you to preset the relative fatigue levels of the command groupings of your army. This can be useful to preset the fatigue of a

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command that was force marched to the battlefield. However, this is not necessary when using the Reserve and Flank Force option outlined below, as fatigue will be automatically incurred using this option. To preset fatigue levels:

- Click **Utilities** at the main screen menu bar.
- Click **Preset Fatigue Levels**

Tip

In the event that a combat unit exhausts its ammunition during the course of a battle, you can simulate ammunition resupply by including an officer who is nominally in command of the Artillery Park Reserve. Any unit that runs low on ammunition can then be reassigned to this officer and then resupplied using the Preset Ammunition Levels option. The unit can then be reassigned to his original brigade commander to continue the battle.

The Combat Unit Fatigue form will now appear [see figure 12].

The relative fatigue levels expressed as points are as follows: Fresh [13 or higher], Acceptable [10-12], Tiring [7-9], Tired [4-6] and Exhausted [3 or less]. Click the army you wish to work with then highlight the required officer from the command structure whose combat units wish to change there default fatigue levels [default is Fresh]. Now

click the required fatigue level. You can scroll through the command structure list to verify the required fatigue levels have been adopted

Click the command **Exit** to return to the main menu screen.

Preset Ammunition Levels

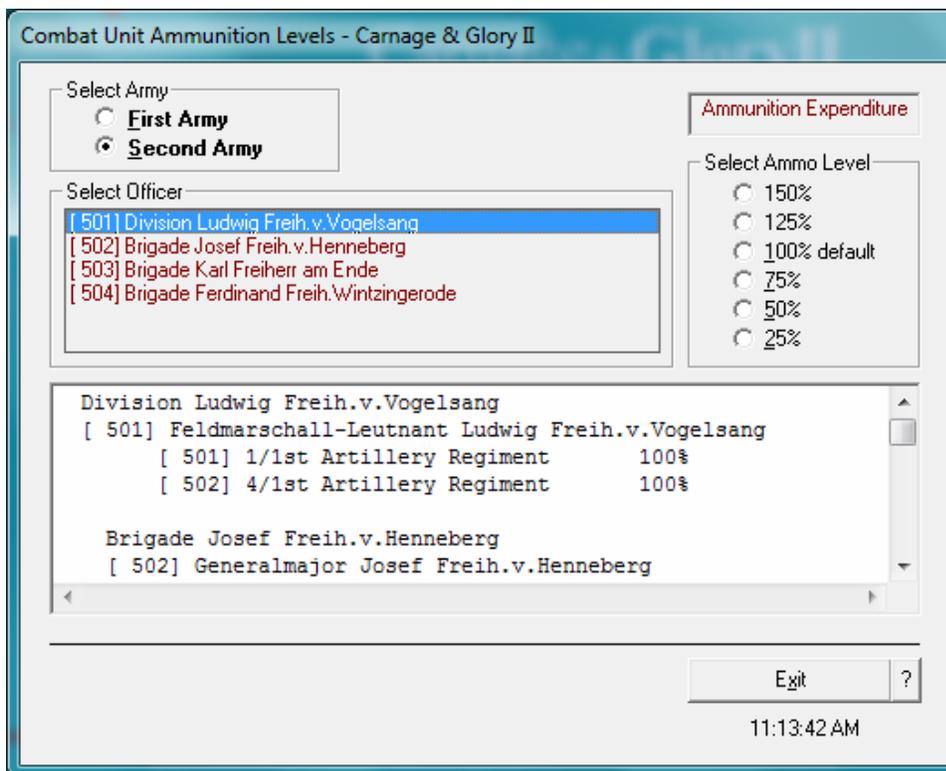
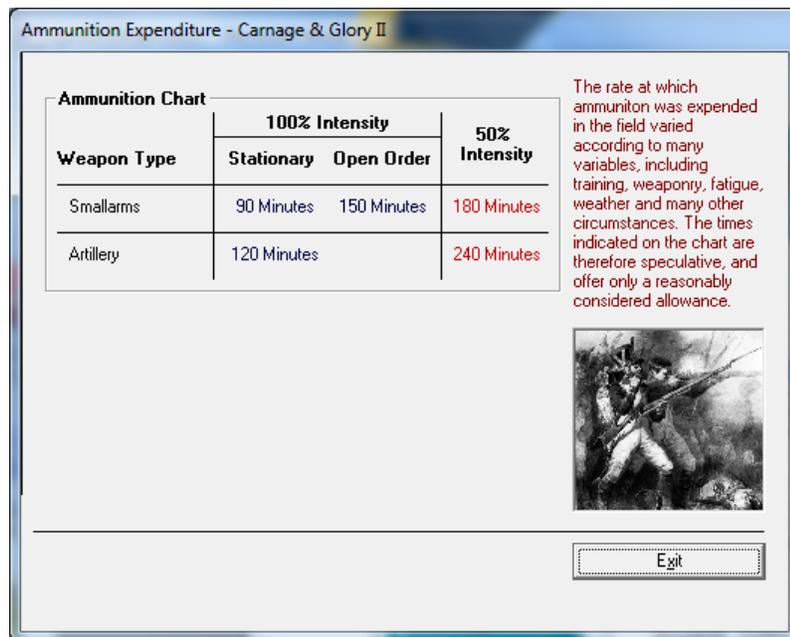


Figure 13
Combat Unit Ammunition Levels form

Ammunition is measured in percentages. This option enables you to preset the relative ammunition levels of the command groupings of your army. This can be useful to preset the ammunition level of a command that is low on ammunition at the beginning of the battle. To preset ammunition levels:



- Click **Utilities** at the main screen menu bar.
- Click **Preset Ammunition Levels**

The Combat Unit Ammunition Levels form will now appear [see figure 13].

Click the army you wish to work with then highlight the required officer from the command structure whose combat units wish to change there default ammunition levels [default is 100 percent]. Now click the required ammunition level. You can scroll through the command structure list to verify the required ammunition levels have been adopted. Ammunition will be consumed by units that engage in fire action during the course of the game. Different weapon types will consume ammunition at varying levels. Consumption can be controlled most effectively by varying

the rate of fire. This is achieved by reducing the percentage of the unit committed to actual fire action. For example, if a unit consumes 12% of its available ammunition firing at 100% each turn,

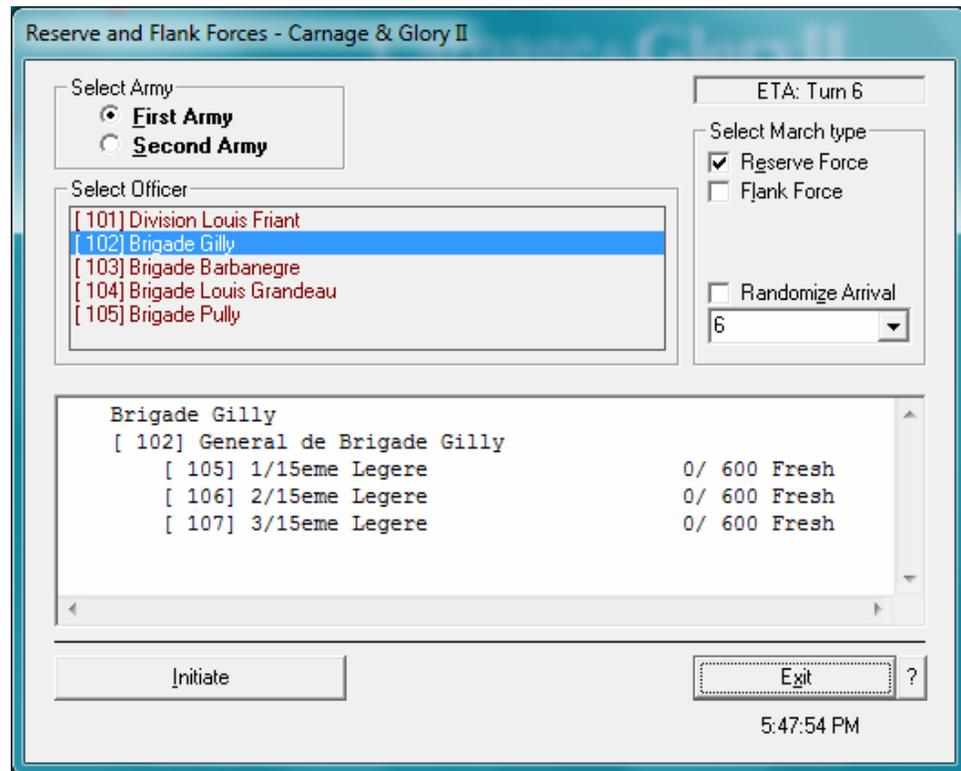


Figure 14
Reserve and Flank Forces form

you can reduce the consumption to 6% by only firing with 50% of the unit each turn.

Click the command **Exit** to return to the main menu screen.

Reserve and Flank Forces

This option enables you to select specific command groupings within your army to act either as reserve forces, out of range of your opponents cannon shot, or as flank marches, marching against your opponents flank or rear. In the case of flank marches you can select either normal or forced march options. If the flank march is forced, depending on the quality of troops employed, your combat units may suffer losses as men are left on the roadside. All troops will suffer from fatigue. However, the troops *should* arrive earlier than requested. To preset Reserve and Flank Forces:

- Click **U**tilities at the main screen menu bar.
- Click **R**eserve and Flank Forces

The Reserve and Flank Forces form will now appear [see figure 14].

Click the army you wish to work with then highlight the required officer from the Select Officer list. Now check either **R**eserve Force or **F**lank Force. If you check Flank Force, click either **N**ormal or **F**orced march pace then select the required game turn for arrival. You can randomize the arrival time by checking the **R**andomize Arrival box. Now click the command **I**nitiate to enact the reserve or flank march. The estimated turn of arrival will now be displayed and you can scroll through the command structure to review the straggler losses and incurred fatigue loss.

Click the command **E**xit to return to the main menu screen

Master Sequence Description

This option enables you to review the game master sequence on screen. To select the Master Sequence Description:

- Click **U**tilities at the main screen menu bar.
- Click **M**aster Sequence Description

The Master Sequence Description form will now appear.

The form describes the various phases of the game sequence, including Movement, Fire Combat, Close Combat, Rally and End of Turn phases.

Additional information is available by pressing the command **?** buttons.

Section Three: Command and Control

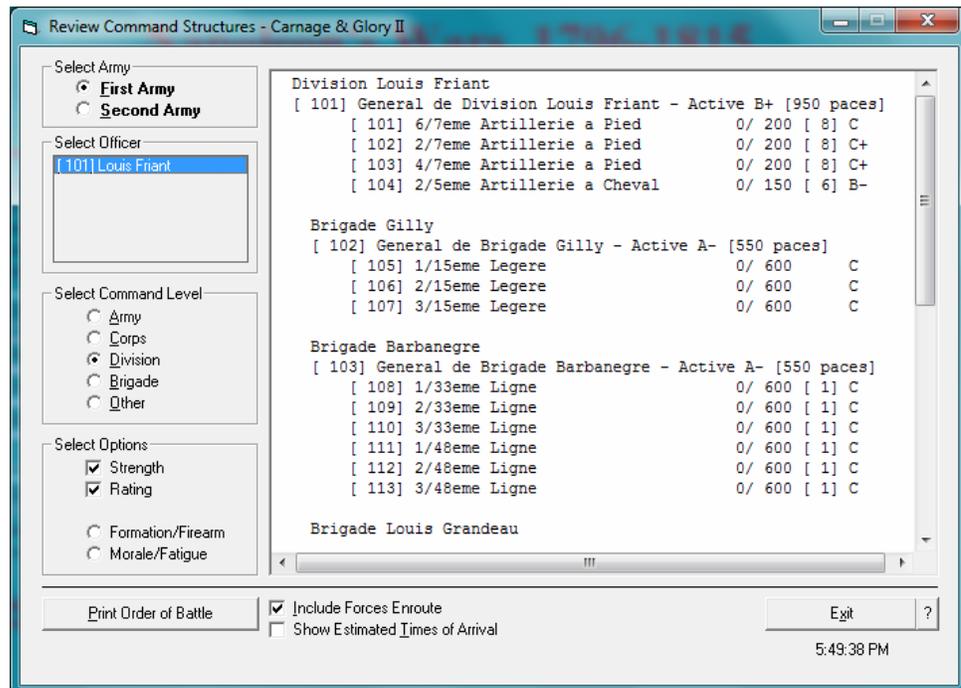


Figure 15
Review Command Structures
form

The **Command and Control** Menu has three options which can be used at any time during play. This is particularly useful when a gamer requests status on a particular officer or combat unit outside of the Rally phase.

These are:

- **Review Commands**
- **Reassignments**
- **Issue Orders**

Let's review each of these options

Review Commands – Order of Battle

This option enables you to get a snapshot of the strengths, condition and ratings of the command groupings of your OB, including both officers and combat units. You can elect to review the complete or partial command structure, an individual officer or individual combat unit. To review the complete Order of Battle:

- Click **Command and Control** at the main screen menu bar.
- Click **Order of Battle**

The Review Command Structures form will now appear [see figure 15].

Click the army you wish to work with then highlight the required officer [default will be the first highest-ranking officer in the overall chain of command] from the Select Officer list. Now click the required options [default will be strength and

Tip

The order of battle can be copied and pasted to other programs, such as Word, for additional word processing if this is required. Simply move the cursor into the text box, right-click your mouse and **Select All**, then use the **Copy** and **Paste** commands as required. To retain the text formatting, use either the 'Courier' or 'New Courier' fonts.

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rating]. You can scroll through the command structure list to verify status and organization of the order of battle. The rating value is a composite of the morale, experience, fire and combat ratings that were preset in the AL file.

If you change the selected command level the select officer list will automatically change displaying only those officers present in the OB at that command level. A printed hard copy of the listed order of battle can be obtained by pressing the command **Print**, providing you have a printer connected to your computer which is also online.

Click the command **Exit** to return to the main menu screen

Review Commands – General Officer

Review General Officer Status - Carnage & Glory II

[103] General de Brigade Barbanegre
Commanded By: [101] Louis Friant

Rank:	General de Brigade
Nationality:	France Post-1807 / Brigade
Abilities:	Inspirational[] and tactically Superior[-]
Current Orders:	Attack
Status:	Active

Attached to Unit: Unattached

Change Unit Attachment

- [108] 1/33eme Ligne
- [109] 2/33eme Ligne
- [110] 3/33eme Ligne
- [111] 1/48eme Ligne
- [112] 2/48eme Ligne
- [113] 3/48eme Ligne

Select Officer for Review

Exit ?

5:51:05 PM

Figure 16
Review General Officer Status form

To review the status of an individual officer:

- Click **Command and Control** at the main screen menu bar.
- Click **General Officer**

The Review General Officer Status form will now appear [see figure 16].

Select the required officer by pressing the command **Select Officer for Review** and typing the required officers ID number when prompted. That officers current details will now be displayed.

This form also indicates the officer's attachment status within his command, in other words which, if any, of the units in his command that the officer is currently attached to. This can be changed by clicking **Change Unit Attachment** and inputting the new unit number when prompted. Most attachments are automatically set during the charge sequence and fire or rally phases. Click the command **Exit** to return to the main menu screen

Review Commands – Combat Unit

To review the status of an individual combat unit:

- Click **C**ommand and Control at the main screen menu bar.
- Click **C**ombat Unit

The Review Combat Unit Status form will now appear [see figure 17].

Select the required combat unit by pressing the command **S**elect Unit to Review and typing the required combat unit ID number when prompted.

The immediate fatigue loss/increase, indicates the units percentage loss or gain in fatigue incurred during the current game turn, due to movement, fire or combat action. The fatigue of a unit is a reflection of its physical and mental fatigue status.

Click the command **E**xit to return to the main menu screen.

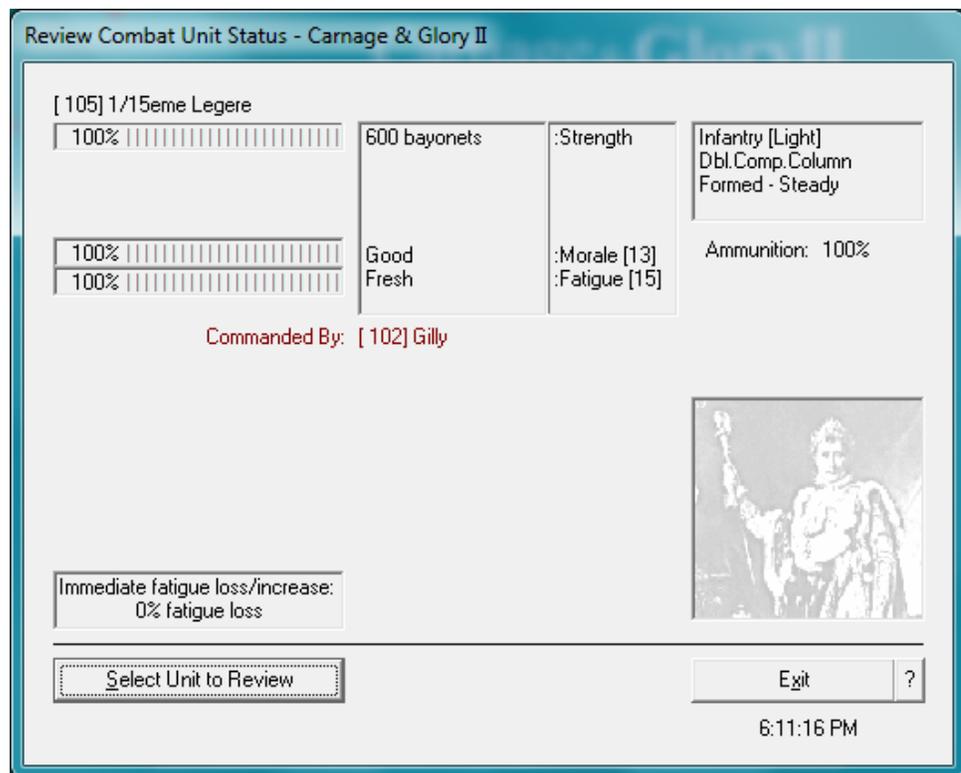


Figure 17
Review Combat Unit Status form

Reassignments – General Officer

This option enables you to reassign individual officers at any point during the course of the game. This can become necessary when an officer needs to be replaced or placed under the command of another superior. It is also sometimes necessary to reassign officers that have been added into an OB file using the Edit Order of Battle option described above. In this case, you may find that you have added an officer that is not originally assigned to the current chain of command. For example, your original OB contained the officers and combat units associated with General Friant's forces; you have added a brigade of infantry. However, when you review the command structure, the new brigade does not appear. This is because the officer not assigned correctly. You should reassign this officer to Friant in order that he can become visible within the chain of command.

Carnage & Glory II

To reassign individual officers:

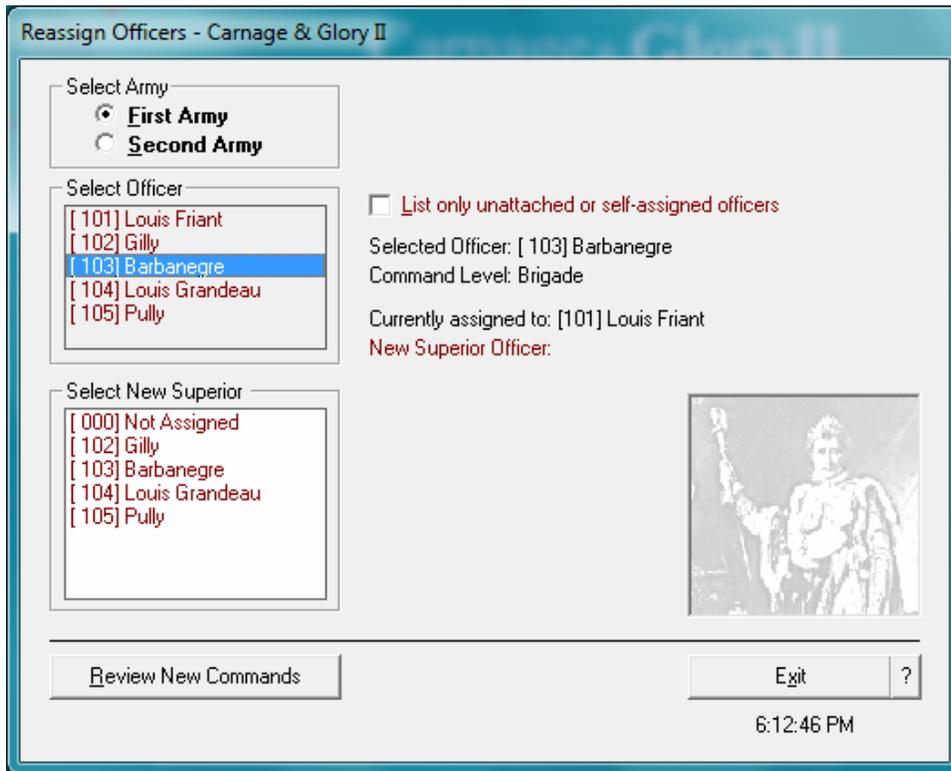


Figure 18
Reassign Officers form

- Click **C**ommand and Control at the main screen menu bar.
- Click **R**eassignments
- Click **G**eneral Officers

The Reassign Officers form will now appear [see figure 18].

Click the army you wish to work with then highlight the officer that you wish to reassign from the Select Officer list. Now highlight the officer to become the new superior from the Select New Superior list. If you wish to review the new command structure, click the command **R**eview New Commands

Click the command **E**xit to return to the main menu screen.

Reassignments – Combat Units

This option enables you reassign individual combat units at any point during the course of the game. This can become necessary when a combat unit needs to be placed under the command of another superior to reinforce another officer's command or to create a special force. To reassign individual combat units:

- Click **C**ommand and Control at the main screen menu bar.
- Click **R**eassignments
- Click **C**ombat Units

The Reassign Combat Units form will now appear.

Click the army you wish to work with then highlight the combat unit that you wish to reassign from the Select Combat unit list. Now highlight the officer to become the new superior from the Select New Superior list. If you wish to review the new command structure, click the command **Review New Commands**

Click the command **Exit** to return to the main menu screen.

Issue Orders

Before the beginning of any battle or at any time during the course of the game you have the opportunity to issue combat orders to the various command elements of your armies. To issue new

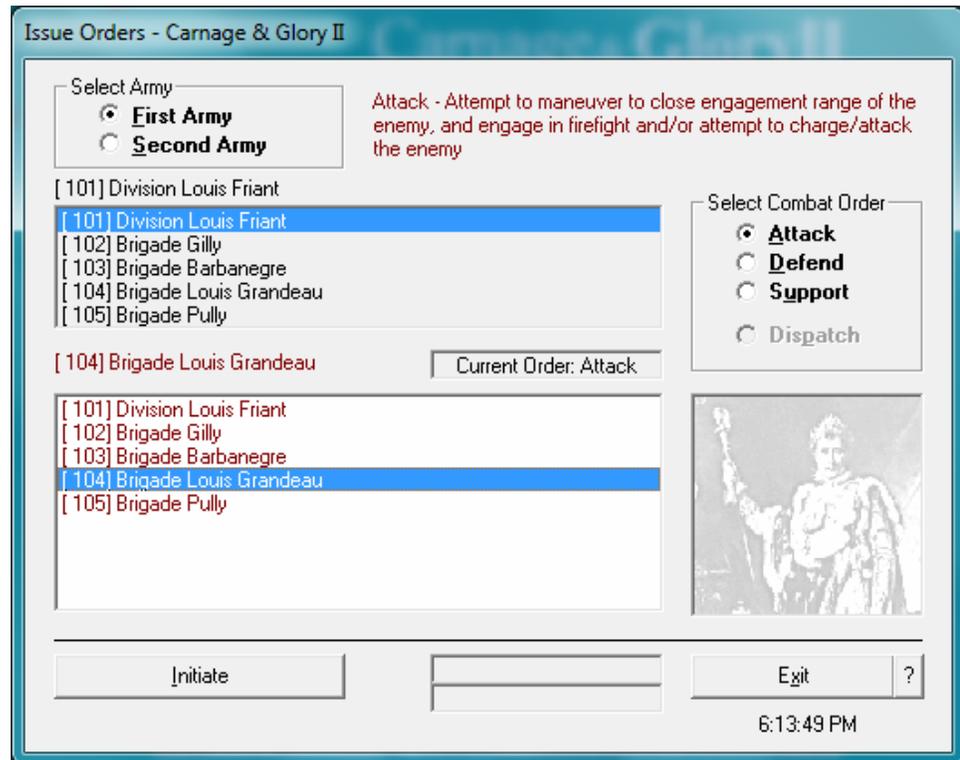


Figure 19
Issue Orders form

or revised orders:

- Click **Command and Control** at the main screen menu bar.
- Click **Issue Orders**

The Issue Orders form will now appear [see figure 19].

Click the army you wish to work with then highlight the officer that you wish to issue the new orders from the Issuing Officer list. Now highlight the officer to receive the new order from the Receiving Officer list. That Officers current order status will be displayed. Now select the required combat order type. Following game turn one you will be able to send dispatches to individual officers. A definition of each combat order will be displayed as you click the different options. Once you have completed these tasks, click the command **Initiate**. The number of couriers available to the different command levels will vary; simulating the staff size attached to the officer's headquarters. The efficiency of that officer's staff will be a reflection of the officer's own leadership standing.

Carnage & Glory II

When, and if, you are prompted to input the travel distance of the courier, this distance must be the shortest route, and must traverse rivers only at appropriate river crossings, such as bridges or fords. A courier may not cross an enemy controlled bridge, nor pass within 200 paces of any enemy unit to reach his destination, under any circumstances.

Tip

An infantry unit that wishes to engage in a charge that is not acting under an Attack order must have an officer present with the combat unit at the beginning of the movement phase. It is therefore advisable to move that officer to the unit during the preceding Rally phase.

Remember combat unit movement precedes officer movement; therefore an officer can only influence a charge move or assist a unit under a no advance movement restriction if he is present at the beginning of the movement phase.

Although on occasion it was historically accurate for commanders to issue orders indirectly bypassing the normal chain of command, it is recommended that all orders be issued through the correct chain of command. Please note that this is only necessary after game turn one. If orders are issued before the game commences, the orders may be automatically chained through the command structure, without the need for couriers. This simulates the council of war that might typically be held prior to a battle, with all officers present. This, however, does not guarantee that the orders as outlined at the council of war were

necessarily heard, or understood. To simulate the council of war the original orders should be issued directly from the highest level of command to the same officer. Any subordinate that is to receive alternative orders can then be issued those orders separately. For example, on game turn one click officer **[101] Division General 'A'**, from the Issuing Officer list. Then click **[101] Division General 'A'** from the Receiving Officer list. Now click **Defend** from the Combat Order list, and click the command **Initiate**. Click **OK** when prompted to chain order through the chain of command. All officers directly in General 'A's chain of command will now receive the defend order. Now click **[102] Brigade General 'C'** from the Receiving Officer list, click **Attack** from the Combat Order list and click the command **Initiate**. This time do not chain the order through the chain of command. Now all the officers in General 'A's division have defend orders, except General 'C' who has been ordered to attack.

If you feel that elaboration of the basic Attack, Defend or Support orders are required, it is recommended that these instructions or qualifications be written down and handed to the receiving officer directly at the appropriate time.

Click the command **Exit** to return to the main menu screen.

Order Definitions

The available orders are defined as follows:

- **Attack**
Attempt to maneuver to close engagement range of the enemy [within charge range], and engage in firefight and/or attempt to charge/attack the enemy.
- **Defend**
Attempt to hold current positions. You may return fire, but may not charge/attack enemy unless in compulsory pursuit or with an attached officer.
- **Support**
You may maneuver in support of front line combat formations. Unit may not attempt to charge/attack the enemy unless you are mounted or to perform a counter-charge.

The preset default order will be Attack for both sides. Order status will affect morale status during the charge sequence and fire action, for example a charging unit will benefit from an attack order, and a defending unit will benefit from a defend order.

Section Four: Battle

The **B**attle Menu has seven options which include:

- **R**eset Game **O**ptions
- **E**ngineering
- **M**ovement
- **F**ire Combat
- **C**lose Combat
- **R**ally
- **E**nd of Turn

The last six options are available in strict consecutive order. For instance all movement must be completed before you continue to fire combat, and all fire combat must be completed before you proceed to close combat. If you do not require a particular option, skip it and go to the next. Only enter fire or combat action if you know that a unit wishes to fire, or that two units wish to engage in combat.

If you accidentally exit movement, fire or combat action prior to completing all desired tasks, click the command **Reset Game Options**, or select **F1**. This will allow you to return to the required phase to complete any unfinished tasks.

A number of compulsory move markers will also be required to record compulsory reactions that occur during fire and combat action and during the end of turn phase. Simple colored counters or pompoms may be used – white to represent “no advance”, red to represent “halt” or “retire” and yellow to represent “rout”. These markers are important, as they offer visual clues to the status of the combat units. It is recommended that a unit receiving two consecutive rout/yellow counters be considered as dispersed and removed from the battle.

1.0. Engineering

Figure 20
Engineering Tasks form

Engineering Tasks - Carnage & Glory II

[105] 1/15eme Legere

600 Veteran men
Infantry [Light]
Company Column
Status: Formed
Fatigue: Fresh [15]
Morale: Good [13]

Engineering Officer is attached to Unit

Engineering Task

- Set unoccupied wooden structures alight
- Set unoccupied stone buildings alight
- Construct light linear defenses
- Demolish unoccupied wooden structures
- Demolish unoccupied stone structures
- Remove light linear defenses
- Remove medium linear defenses
- Remove heavy linear defences

Set Wooden Structure alight
Use incendiaries to alight wooden buildings, thatch roofed buildings, wooden bridges, and wooded areas

Select Combat Unit

Initiate

Exit ?

12:40:27 PM

1: What is the ID number of the unit that wishes to engage in engineering activity?

2: What engineering task is required?

There will be occasions in the course of a battle that simple engineering tasks may need to be undertaken, such as setting fire to structures, demolition work and construction of light defenses.

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You can simulate these types of task by selecting the Engineering option. Performing engineering tasks may impact a units fatigue and preclude subsequent formation changes or non-standard movement during the same turn.

To perform engineering tasks

- Click **B**attle at the main screen menu bar
- Click **E**ngineering

Or

- Click the command **E**ngineering on the main screen

The engineering task form will now appear [see figure 20].

Click the command **S**elect **C**ombat **U**nit and type the combat unit ID number required. A list of available engineering tasks will be displayed. Select the required task, and click the command **I**nitiate.

The performance of a unit will be improved if an engineering officer is attached. An artillery officer could be considered the equal of an engineering officer if necessary.

The various engineering options are as follows:

- **Set unoccupied wooden structures alight [available to infantry, cavalry and artillery units]**
Use incendiaries to alight wooden buildings, thatched roof buildings, wooden buildings and wooded areas.
- **Set unoccupied stone buildings alight [available to infantry, cavalry and artillery units]**
Use incendiaries to alight stone buildings.
- **Construct light lineal defenses [available to infantry and artillery units]**
Use hand tools to construct lineal light cover, including abatis.
- **Demolish unoccupied wooden structures [available to artillery units]**
Use explosives or other methods to demolish wooden buildings and bridges.
- **Demolish unoccupied stone structures [available to artillery units]**
Use explosives or other methods to demolish stone buildings and bridges.
- **Remove light lineal defenses [available to infantry, cavalry and artillery units]**
Use hand tools to remove lineal light cover, including hedgerows and fence structures.
- **Remove medium lineal defenses [available to infantry units]**
Use hand tools to remove lineal medium cover, including low stone walls.
- **Remove heavy lineal defenses [available to infantry units]**
Use hand tools to remove lineal heavy cover, including high stone walls.

The efficiency and performance of the unit undertaking the selected task will equate directly to the strength, type and relative fatigue of the unit. Performing engineering tasks will prohibit the opportunity to conduct movement or formation changes during the same move.

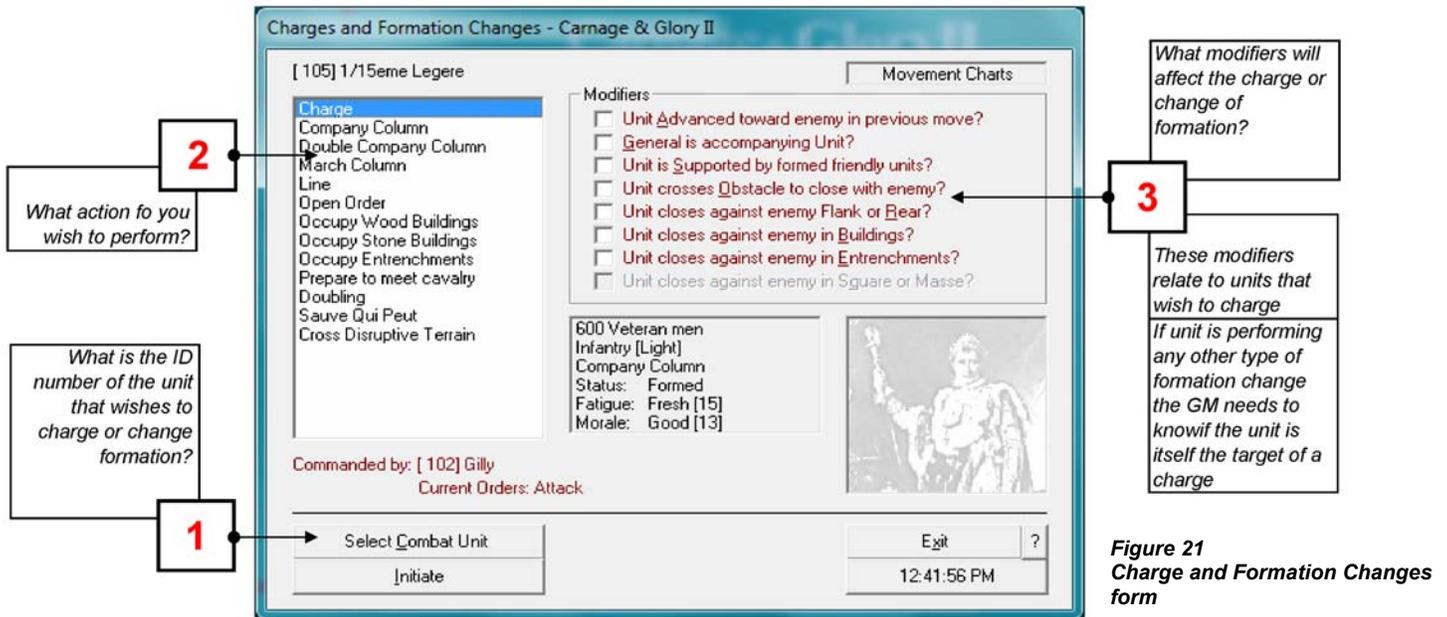
Click the command **E**xit to return to the main menu screen.

2.0. Army Morale and the Alternate Move Sequence

In an effort to avoid the common pitfalls of traditional simultaneous movement, Carnage&GloryII incorporates an alternate movement system which is linked directly to the relative army morale of the two opposing sides. The alternate move sequence works as follows. The army with the initiative has the choice of which army conducts its movement first. They can elect to move themselves or have their opponents move first. Having made this choice, and before any movement or formation changes are enacted, the charge declaration phase takes place. To keep both sides honest, it is recommended that both sides write down their proposed charge and cavalry reacts. Having written down or similarly marked the required charges for both sides, the army that is to move first declares

their charges followed by the army to move second. Once all charges are accessed normal movement and formation changes can take place, with the movement and formation changes of one side being completed before the second side performs its movement and formation changes.

3.0. Movement



The movement phase is used whenever a combat unit wishes to engage in any non-standard movement. Non-standard movement includes any formation change, making voluntary routs [Sauve Qui Peut], wheeling a line beyond 45 degrees, doubling, deploying or limbering artillery, performing a passage of lines or attempting to enter cover, performing an about face and crossing disruptive terrain.

Not all formation changes are automatic; not all charges are possible. All practical factors will be considered by Carnage&GloryII to determine the outcome of your orders. Combat unit morale, status, physical and mental fatigue and prevailing weather conditions will all take their effect.

To charge, change formation or initiate any non standard movement:

- Click **B**attle at the main screen menu bar.
- Click **M**ovement

Or

- Click the command Movement on the main screen
- The Charges and Formation Changes form will now appear [see figure 21].
- Click the command Select Combat Unit and type the combat unit ID number required. A list of available formations and non-standard movement options will be displayed. Highlight the required formation or non-standard movement options, check any applicable modifiers, and click the command Initiate.

Tip
Click the box at the top right of the form with the text 'Movement Charts' to view the standard movement allowances for Infantry, Cavalry and Artillery.

Tip
Click the Clock function at the bottom right of the form to set an alarm. This is useful to keep track of time during the course of the game.

3.1. Movement Modifier Definitions

Units attempting to perform any formation change other than a charge or attack:

1. Unit is target of an enemy charge

Select if unit is target of a charge, pursuit or attack. Further select whether the charge/attack is either from infantry or cavalry unit[s]

Units attempting to charge or attack may select from the following modifiers:

2. Unit Advanced toward enemy in previous move

Select if unit wishing to charge/attack made a minimum 75 pace forward movement in previous turn if infantry, and 150 paces if cavalry or mounted.

3. General is accompanying Unit

Select if general is currently attached to unit. To be attached officer must be in physical contact with the unit, and officer can only accompany one combat unit.

4. Unit is Supported by formed units of the same Bde/Regt [Brigade/Regiment]

Units must be within 200 paces and in good order. Units with no advance, halt, retire or routs are not considered to be in good order. Supporting units can be forward of, in rear of, or to the flank of the unit that is to consider itself as supported.

5. Unit Crosses Obstacle to Close with Enemy

Obstacles include: Linear obstacles, hedges, walls, fences, watercourses, embankments, gullies, any disruptive terrain and a unit of deployed artillery. The modifier is only selected if the charging/attacking unit physically crosses such terrain during the course of the advance. If the obstacle is being physically defended by the target of the charge/attack, then it should not be selected.

6. Unit closes against enemy Flank or Rear

Unit must begin charge in position in line with enemy flank or rear. See also diagram 2.

7. Unit closes against enemy in Buildings

Select when attempting to engage enemy occupying built-up areas. Units must be physically occupying the buildings, whether stone or wooden. If the target unit that is simply moving through a built-up area, without actually adopting the cover [loop holing the buildings themselves], then this modifier should not be selected.

8. Unit closes against enemy in Entrenchments

Select when attempting to engage enemy occupying fieldworks and other forms of entrenchments. Select even in the situation when the charge/attack is directed against the entrenchments against an unprotected rear or flank, in this instance also select 'Unit closes against Flank or Rear?'

9. Unit closes against enemy Square or Masse

Select if target enemy unit begins the turn in Square/Masse formation. The target unit may still attempt to change formation to adopt Square/Masse should the need arise, however in this case the unit must also input as a target of charge. Masse formation was peculiar to late war Austrian and Prussian forces, but was used by most protagonists when necessary.

3.2. Charges

All charges must be determined before any formation changes, as the formation change is normally only restricted by the possibility of a charge upon the unit. Charges are separate from Close Combat. Charging is the actual movement of troops toward the enemy, whether they make contact or not.

To initiate a charge:

- Click **B**attle at the main screen menu bar.
- Click **M**ovement

Or

- Click the command Movement on the main screen

The Charges and Formation Changes form will now appear [see figure 21].

For any infantry unit attempting to make a charge that is not acting under an 'Attack' order, it is necessary for a general officer to be accompanying the unit, both at the time the order is issued and during the charge itself. What constitutes 'accompanying unit' should be established before the game. For example you may decide an officer must be physically

Definition

Placing a cavalry unit on react entitles that unit to charge only if charged or if a unit it is supporting is charged. Otherwise the unit may not move or perform any formation changes.

touching a unit, alternatively the officer may need to be within 25 paces – the choice is yours! But be consistent. [However, it is strongly recommended that the officer should be touching the unit – as an officer can accompany only one combat unit at any one time]. If the unit is acting under 'Attack' orders, the officer is not strictly required; however, it can be beneficial to have an officer 'accompanying' a unit that is attempting to charge.

A unit attempting to contact another unit deployed in cover may, depending on the type of cover occupied by the target, infiltrate the cover. In which case, the attacking unit will automatically adopt cover formation. This is obviously of benefit to the attacking unit.

Your unit may charge, attack or refuse to advance depending on the circumstances relating to the unit. An attack has less impetus than a charge. If a unit refuses to advance and is not accompanied by a general officer, the unit should be marked appropriately [no advance, white marker].

It is useful to mark the limit of a unit's charge. In the case that a defending unit breaks before contact in the fire combat phase, supporting units within the arc of charge could become the new targets of charge. These 'secondary' charge targets will fire upon the charging unit with 50% of their available firepower. This process will continue up to the maximum extent of the charging units charge distance.

3.3. Charge Phase: Declaration of Charge

Having determined which side moves first the move sequence is broken into three phases, the charge phase, and each side's respective movement phase.

1. Write down or mark charge moves. Charge decisions should be written down or marked [placing counters next to charging or reacting units] simultaneously at the beginning of each game turn.
 - a. The unit to be charged must be visible to the unit wishing to initiate the charge or attack. To be charged the target must be visible, within normal charge range and within the arc of charge. So stick to the idea that Line of Sight for a charge is measured from the center of the unit to the nearest part of the target unit [providing that is within the charge arc].
 - b. A unit that wishes to charge an opponent within wooded areas, from either within woods or from outside of the woods, must be able to see the target unit, therefore the target must be within 75 paces of the charging unit or the edge of the wooded area.
 - c. Charges are permitted to infantry and cavalry units deployed in column [including march column when assaulting a bridge or defile feature], line and open order formations only.
 - d. The charge must be made within an arc of 22.5 degrees to the charging unit's original facing [see Diagram1].
 - e. Units may not change formation and charge, nor about face and charge.
 - f. Infantry may not charge enemy cavalry unless that unit has a halt, retire or rout marker, and is within the charge arc of an infantry unit.
 - g. Charging units may not move through other friendly, formed units, whether steady, unsteady, disordered or shaken, other than deployed artillery during a charge move.

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- h. Charging from an off-table position to engage an enemy unit is not allowed. A unit must be on the table first. This goes for reserve troops attempting to charge onto the table too - not to be permitted.
2. Declare charge moves. These charges or reacts are then declared, first by the side that has either elected or been deemed to move first, followed by the second army. Remember, charge movement is all conducted simultaneously. It is not that the army with initiative moves all its available movement, before the other army, as is the case with normal movement.
3. Move successful charging/attacking units to within 25 paces of the target unit and mark the full extent of charge move, including charge bonus. For the purposes of prorating any charge movement, the side moving first will be assumed to move 75 paces if foot, or 150 paces if mounted, before the opposing side begins to move. This may result in one side being caught 'flat-footed', in which case that unit is not permitted to declare a charge. If a unit moved forward in the preceding game turn, and therefore had some forward momentum, it will not be caught "flat-footed".

Charges are adversely affected by:

1. Heavy combat losses
2. Poor Morale
3. Poor Fatigue
4. Crossing disruptive terrain

Charges are positively affected by:

1. Presence of competent officer
2. Prior forward movement [momentum], which must be 75 paces for infantry and 150 paces for cavalry.
3. Supporting friendly units – the supporting unit must be visible to the charging unit, in good order (no white, red or yellow markers) and within 200 paces of the flank or rear of the charging unit. The intent is to show that the unit is not isolated and acting independently, but has mutually supporting units close by. The distance is always measured at the beginning of the charge
4. Proximity of target at beginning of charge [shorter distance improves chances of defending unit breaking prior to contact]

3.4. Charge Reacts and Supporting Reacts

There are two types of react that a unit can be placed under:

1. A 'charge react' can only be declared against a target that is a legitimate charge target [within charge arc at beginning of the move], and the target must be attempting to charge the unit declaring the charge react. Any unit that declares a charge react, which is not charged, may not move or change formation during the normal movement phase, and is therefore 'flat-footed' for the next turn.
2. A 'supporting react' can be declared in support of another friendly unit that becomes the target of a charge. It must be clearly identified which unit is being supported by the declaring unit, this may be either written down or called out. The target need not be in the normal charge arc of the supporting unit at the beginning of the charge. Any unit that declares a supporting react, which is not required to charge, may not move or change formation during the normal move phase, and is therefore 'flat-footed' for the next turn.
3. Only mounted units can be placed on a 'charge react'. Both mounted and foot units can be placed on a 'support react'.

3.5. Multiple Charge Declarations

It is often the case that an attacking player will attempt to declare more than one charge against a single defending unit. It should be remembered that each turn accounts for fifteen real minutes, during which time an attacking side may be capable of launching multiple attacks against the same

unit, either simultaneously or separately. In each case the attacked unit must attempt to defend itself, and its resources and energies will be stretched accordingly. However, there is a limit to the number of simultaneous or separate attacks the unit should be required to defend against. This is best calculated by determining the exposed frontage of the defending unit, and measuring this against the attacking unit's frontage. In all cases the flank of a unit can only ever be attacked by one attacking unit, even if it appears that more than one unit can close against it. It should be remembered that depths are often exaggerated by the restrictions of the gaming figures used. Typically attacking units should be required to maintain a 50 pace separation between units of different type or different brigades, divisions or corps. It is assumed that units represented from the same regiment can be coordinated closely enough such that simultaneous or separate attacks can be placed against the same target with only minimal separations of 25 paces. Historically, it was very important that combat units maintained correct deployment distances, in order that they could deploy from column to line without causing disruption or intermingling with adjacent units. This was the prime concern of the commanding officer, and should be of the player too. However, in the smoke and confusion of the battlefield it must have been the case that units strayed into the deployment zones of other friendly units, but it is wrong to think that this was done deliberately in order to achieve a local supremacy at a particular point on the battlefield.

3.6. Charge Movement

1. A charge or pursuit move is equal to the normal charge move plus and may include additional charge bonus, which varies according to unit type and fatigue. No charge may be initiated unless the distance to the target is within the normal charge move prior to the addition of any additional charge bonus and no change of facing greater than 22.5 degrees is required.
2. The oblique is a movement where the units plane of frontage does not change [the front remains parallel to its original position], whilst the forward movement is angled at 22.5 degrees to the right or left. This was fairly complicated to perform and certainly could not be undertaken as a charge.
3. All charging or pursuing units are advanced to 25 paces from the target unit. After all fire action has been resolved, the charging or pursuing unit may then be moved into or out of contact accordingly.
4. A mounted unit may conduct a feint charge. This will be declared and input into the system as a normal charge. The charging unit must move a minimum of 300 paces and must halt a minimum of 200 paces away from the target. If these criteria cannot be met, then the unit must complete its charge and close with the target.
5. An infantry unit that charges, whose advance would require them to cross an obstacle to contact a defending unit may elect to suspend its' advance at the near side of the obstacle if the defender abandons that obstacle during the defensive fire phase. Alternatively, the unit can elect to cross the obstacle and advance up to the full extent of its charge distance plus bonus. In all cases the infantry unit must advance a minimum of 100 paces, not including any deduction for crossing an obstacle. Therefore if the unit takes 75 paces to reach the obstacle, it will be required to cross the obstacle and advance a minimum of 25 paces further.
6. Mounted units which are the target of a charge are allowed to attempt to evade. The movement may be either a normal non-compulsory retirement move or a 'Sauve qui peut' (voluntary rout) move as preferred.
7. An infantry unit whose target has broken or retired during the fire action phase, and who, as a result, can no longer contact the target, must advance to the furthest limit of its marked charge move.
8. A cavalry unit whose target has broken or retired during the fire action phase, and who as a result can no longer contact the target, can rein in, as long as it has moved the 300 pace minimum charge distance and maintains a 200 pace distance from the succeeding target unit.
9. If the target unit breaks or retires beyond a supporting unit and this supporting unit is within the charge distance it will become the target unit. This will continue until the charging unit reaches the limit of its total charge move distance.

advantage by being able to close on an opponent that was unaware of or accidentally or inadvertently missed the threat. Historically, the defensive reaction of a unit to form square or deploy its guns was, realistically, automatic once a threat had been perceived. However, this does not preclude the possibility of a mounted unit ‘surprising’ foot units, if the mounted unit appears from behind a terrain feature, such as a wood, buildings, or crest line. Remember the distance is measured from where the threatening movement is first visible, it is also important to note that this movement must be unbroken and continuous. For example, if the mounted unit started to advance at 1000 paces, moving to within 600 paces of the foot unit then remained stationary for a game turn and then subsequently declared its charge. In this instance the ‘visible’ charge distance is 600 paces and not 1000 paces. The visible distance may also be affected by current weather conditions, such as rain, snow or mist. In which case the distance is input as the maximum visibility or actual movement distance, whichever is the lesser distance.

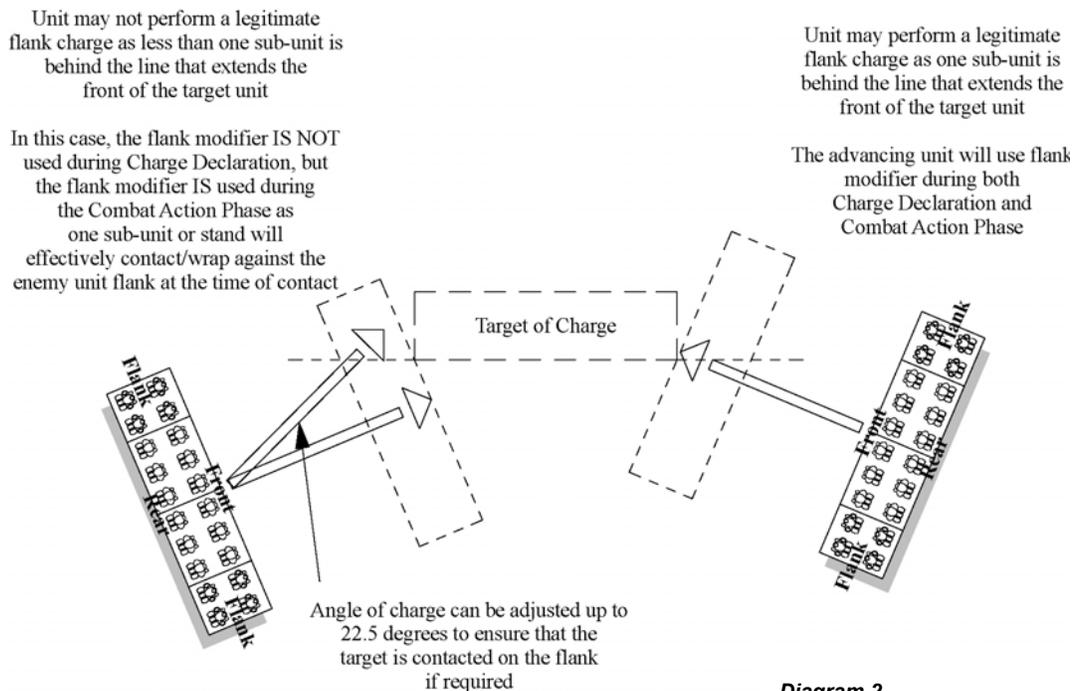


Diagram 2
Charging Flank Diagram

1. A unit charging through a friendly deployed artillery unit will be visible through these units. The distance measured to where the first visible movement was perceived will be measured past the passed-through unit, and 150 [foot unit] or 300 [mounted unit] paces will be added to the distance traveled to account for the passage through the deployed artillery.
2. Charges are affected by difficult ground. Take deductions for terrain effects during a charge.
3. Formation changes should always be made during the formation change phase - the defending units must make their decisions at this time. Remember also to treat the supporting unit attempting to change formation as a possible target of charge - but increase the distance to the threat by 150/300 paces to account for the time taken for the first unit to possibly break and pass back through the supporting unit.
4. Infantry and Foot Artillery units that are the target of a frontal charge are considered pinned and cannot move except as permitted by a formation change or by performing a ‘Sauve qui peut (voluntary rout). Pinned units may not move or adjust their positions to provide better fields of fire. They may not attempt to change formation as an attempt to evade contact. It is important to remember that the ‘pinning’ capability of any unit is only invoked when an actual charge is declared. Pinning of all defending units within the charging unit’s arc is not the intent of the rule, as this would be too restrictive on the defender.

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5. Non-primary target units [i.e. those directly within the arc of charge, but not the primary target] are considered as 'pinned' and may not maneuver to improve their fire potential against a charging unit. However, 'unpinned' units [those out of arc] may maneuver to close onto a flank of an attacking unit, but they are not allowed to fire during the same turn. There simply wouldn't have been enough time available to coordinate the movement and fire action.
6. As a reaction to a charge, the refusal of flank will be made at the time of the declaration of the charge. For the charge, but not the close combat, the charging unit still counts as closing against a flank, even if it has been refused.
 - a. A unit charged or attacked in the flank or rear may attempt to change front provided it is not being charged, attacked or engaged in combat directly to its front at the same time. All movement must be pro-rated against the movement of the charging/attacking unit.
7. In order to simulate the disorder caused by performing a hasty change of front in response to a charge make a formation change for the target unit during the movement phase, but retain the existing formation.
 - a. For example, if the unit is in line, input 'line' formation, and select the modifier that the unit is being charged. If the unit fails to make the formation change, due to distance, then the unit is taken in rear. If however, the unit makes the formation change it will probably be disordered and will have incurred a little fatigue, but will not be considered as taken in rear during the combat phase. I use a similar technique when crossing watercourses or other 'difficult' linear obstacles. It helps to simulate a little disorder and accumulate some fatigue.

3.8. Normal Movement

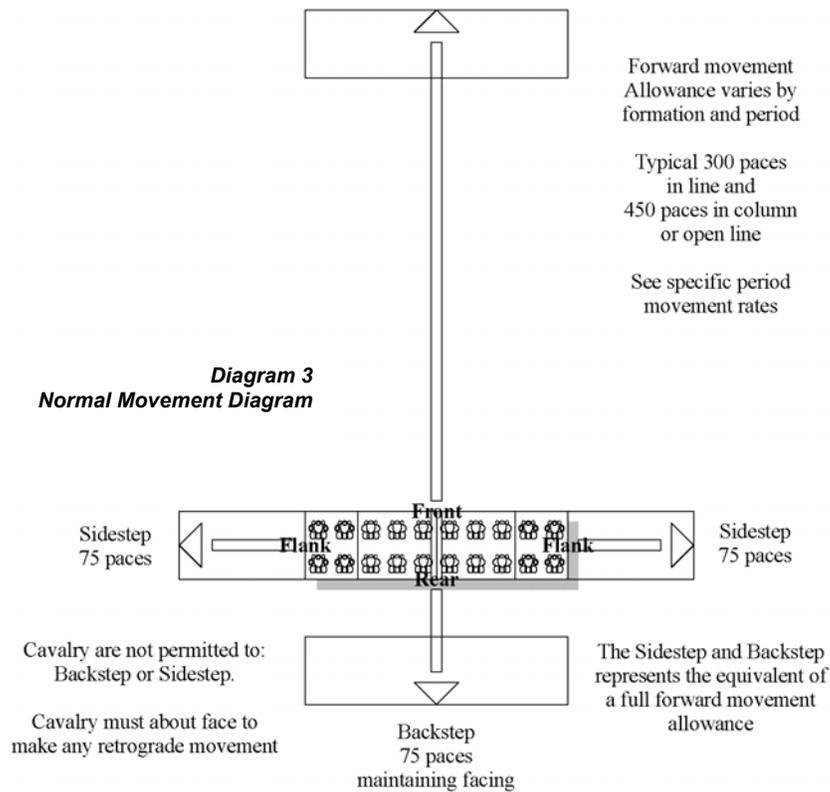
See Normal Movement Diagram 3.

1. It is very important that any change of formation is declared and entered into the system.
2. If you elect to employ Army Initiative regular movement will be alternating; otherwise all movement will be simultaneous.

Tip

Depending on which formation or non-standard movement option is highlighted, the list of modifiers will only enable those that are appropriate.

3. If a formation change or non-standard movement is successful, you will be advised of the new combat unit formation, status and deployment. You will also be advised of the maximum movement allowance available to the combat unit. This will include forward movement and movement to the side or rear. The movement allowance will be adjusted in respect to the experience, training and current physical fatigue of the unit. The allocated movement allowance should be considered as a maximum, therefore the unit can be move all, part or none of the allowed distance.
4. Changing formation will incur mental and physical fatigue. Multiple changes of formation by a unit can reflect either indecision or over-reaction on the part of the commanding officer and will do little to instill confidence in the troops, hence the increase in stress and mental fatigue resultant upon the unit. To reduce unit stress it is recommended that formation changes be kept to an absolute minimum.



3.9. Formation Definitions:

1. Column:

March Column/Route Column:

Infantry or Cavalry units deployed on road width frontage (frontage would vary according to type and relevant width of road). This is not a combat formation, however, it can perform limited charge moves if assaulting across a bridge or against a defended defile. It should be noted that all units engaged in flank marches arrive on table in this non-combat formation.

Column of Companies/ Platoons:

Infantry battalions deployed on single company frontage between four and ten companies deep (dependent on period and nationality). This formation is available to all infantry units, and represents a column at quarter, half, full or closed interval [a full interval being equal to the frontage of a platoon].

Column of Divisions/Double Company/Platoon Column:

Infantry battalions deployed on double company frontage between two and five companies deep (dependent on period and nationality). This formation is only available to units that are French, post-1808 French Allied units, and post-1808 Austrian units, and represents a column at quarter, half, full or closed interval [a full interval being equal to the frontage of a platoon].

Squadron Column:

Cavalry regiments or squadrons deployed on single squadron frontage between two and six squadrons deep.

2. Line:

Infantry battalions deployed in single company depth, normally two or three ranks deep (dependent on period and nationality – in some cases the system will prompt you to select whether you wish the unit to deploy in two or three ranks, the choice is then elective. Typically this will occur with British and Portuguese nationality units).

Cavalry regiments or squadrons deployed in single squadron or company depth, two deep.

Permitted to all infantry and cavalry units.

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3. Open Order:

Infantry or cavalry units deployed with companies in open order. Normal frontages are increased by 100%. Permitted to certain infantry and cavalry units. This formation is advantageous when traversing any form of disruptive terrain as movement is halved, and it is not required to input the movement during the movement phase.

4. Deploy in Buildings or entrenchment:

Permitted to infantry units wishing to occupy and take advantage of available cover.

5. Deploy in Cover:

Permitted to artillery units wishing to occupy entrenchment. Artillery may not deploy in buildings.

6. Double:

Permitted to infantry, cavalry or artillery units wishing to move at increased pace.

7. Prolong/Manhandle artillery:

Artillery may be manhandled [light artillery only] or prolonged to advance, retire or perform a change of front for any deployed artillery units. Prolonging a unit does have disadvantages as it will increase physical fatigue, and decrease the immediate fire potential of the unit. Guns may not be manhandled uphill. Heavy and medium artillery are not permitted to manhandle, and must prolong to perform any unlimbered movement.

8. Charge:

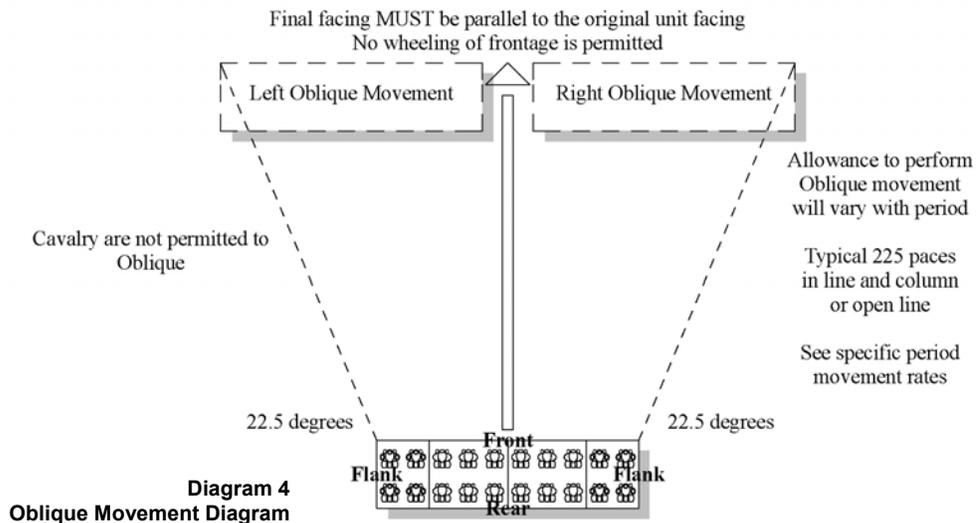
Permitted to infantry and cavalry units deployed in column, line or open order formations only, with the intention of bringing one unit into direct contact with an enemy unit, or forcing that unit to evade or rout prior to actual contact. The charge must be made within an arc of 22.5 degrees to the charging unit's original facing. Units may not change formation and charge, nor about face and charge. Units may not charge through any friendly formed unit's, other than open order formations or deployed artillery units. (Limbered artillery is considered too disruptive to permit charges to pass through).

9. Deploy:

Permitted to artillery units wishing to unlimber their cannon for fire action.

10. Limber:

Permitted to artillery units wishing to move their cannon from one position to another, without



undue fatigue. Limbered artillery regain lost fatigue more rapidly than deployed artillery.

11. Square:

Available to all infantry units and was typical defensive formation against cavalry employed by all nationalities. Essentially the formation was an open box, where companies/platoons would face outwards on all sides, typically with the front rank kneeling, and presenting a hedge of

bayonets, and the second, third ranks giving fire. The companies/platoons would sometimes double up, that is form in four or six ranks.

12. Battalion Masse:

Available to all infantry units and was typical defensive formation against cavalry employed most predominantly by post-1806 Austrian and Prussian nationalities. Essentially the formation was a closed rank column, where all intervals between companies were closed, and the flank files and rear ranks faced outward.

13. Dismount:

Permitted to Dragoon units that are mounted that wish to dismount and engage on foot. The formation will adopt Line. The system will account for horse-holders within the unit as a ratio of one horse-holder for three dragoons in the firing line.

14. Remount:

Permitted to all Dragoon units, when on foot, requiring to remount to horse.

Dragoons may attempt to evade when charged by remounting, if the movement allowance is insufficient to evade the charge of the opponent, then it is possible to cancel the formation change, by selecting Cancel in lieu of OK at the Formation Change Dialog box, see figure 22.

Infantry Movement					
	Normal	Charge	Rout	Double	Retire
in line	300	375+Bonus	600	varies	300
in column	450	525+Bonus	600	varies	300
in open order	450	525+Bonus	600	varies	300
on road	900			varies	
in square	varies				n/a
side or back step	75				n/a
inclining/oblique	225				n/a

Movement Modifiers	
Infantry and Foot Artillery Units that are the target of a FRONTAL Charge/Attack are considered pinned and MAY NOT move to avoid contact, except by performing a 'Sauve Qui Peut/Voluntary Rout'.	
about face or crossing minor linear obstacle in charge	deduct 150

Buttons: Cavalry, Artillery, Exit, Infantry (selected)

3.10. Normal Movement Phase: Alternate Movement Sequence

The army with initiative declares who will move first, and then each army in sequence will:

1. Declare formation changes. The system will calculate how much movement will be permitted to the unit which can be made either before or after the formation change.
2. Perform combat unit normal movement [No computer input is required when

Cavalry Movement					
	Normal	Charge	Rout	Double	Retire
light	900	1050+Bonus	1200	varies	450
light on road	1800			varies	
heavy/lancers	750	900+Bonus	1050	varies	300
heavy on road	1500			varies	
armored	750	825+Bonus	1050	varies	300
armored on road	1500			varies	
staff	2700				

Movement Modifiers	
Cavalry stepping back [not permitted]	n/a
Cavalry about face	deduct 450
Cavalry crossing minor linear obstacle in charge	deduct 300

Buttons: Cavalry (selected), Artillery, Exit, Infantry

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performing normal movement]

3. Perform unattached general officer movement

3.11. Normal Movement:

1. A unit may move all or part of its maximum movement allowance.
2. Doubling a unit may not be performed in consecutive turns.
3. To take full advantage of the cover of buildings it is necessary to adopt that formation. This ensures that the troops will adequately prepare the position for defensive action.

Artillery Movement	Normal	Prolong	Rout	Double	Retire
light/med artillery	450	varies	600	varies	225
light/med on road	900			varies	
heavy artillery	300	varies	600	varies	150
heavy on road	600			varies	
horse artillery	750	varies	1050	varies	225
horse on road	1500			varies	
light manhandled	75				

Movement Modifiers

Infantry and Foot Artillery Units that are the target of a **FRONTAL** Charge/Attack are considered pinned and **MAY NOT** move to avoid contact, except by performing a 'Sauve Qui Peut/Voluntary Rout'.

med/heavy art must prolong to simulate manhandling 75
deployed artillery that wish to wheel >45 must prolong varies

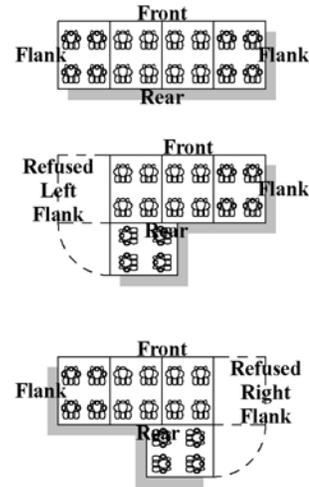
Cavalry Artillery Exit
Infantry

4. To take full advantage of the cover of entrenchments it is necessary to adopt that formation.
5. Assume that a March Column, Company Column, Double Company Column or Squadron Column can perform 180 degree of turn in any one turn. As such the unit is not prohibited in their ability to wheel [unlike the line].

6. The system does permit changes of facing when performing a formation change. A unit can perform a front to flank or similar change during the formation change.
7. Forming line of battle from march column, or vice versa, can be achieved by a front to flank facing change.
8. All normal movement must be measured either directly forward or inclined toward one flank or the other with the final front facing of the unit being parallel to the front facing of the unit prior to movement. Inclining or "performing an oblique" can be up to 22.5 degrees measured from the corner of the unit [See Oblique Movement Diagram Figure 25].
9. If a unit move backwards or sidesteps more than 25 paces it counts as having moved more than 75 paces when it comes to fire combat.
10. All units may conduct a normal move or formation change and fire. Carnage&GloryII will adjust the fire potential of the unit accordingly. Units [other than artillery] may move 75 paces forward or 25 paces to the rear/side and not affect their full fire potential, this includes wheeling.
11. No unit on foot may advance closer than 50 paces to a formed enemy unit directly to its front, unless charging or pursuing. No mounted unit may advance closer than 150 paces to a formed enemy mounted unit directly to its front, and 50 paces to a formed enemy foot unit directly to its front, unless charging or pursuing.
12. Units that perform a formation change and in the same turn cross disruptive terrain do not need to select the 'cross disruptive terrain' option. The formation change will incur the appropriate degree of disorder and fatigue that would be simulated by selecting the 'cross disruptive terrain' option. The movement through or across the disruptive terrain will be impacted by the terrain effect of that being crossed.

3.12. Refusing a Flank

1. Refusing the flank must be a legitimate move; for example, if a unit maneuvers to gain the flank of an opponent during the second move phase the flanked unit may not then refuse the flank, as it has already performed its legitimate movement.
2. A unit will 'Refuse a Flank' typically on two occasions, firstly, to protect itself against a charge/attack threat against an exposed flank, and secondly to protect its flank against fire action against an exposed flank. In the former case, the charging unit will input that it is moving into a flank or rear, and will therefore gain the benefit of closing against a flank or rear if the charge/attack goes home. The act of refusing the flank, gives the defending unit the ability to fire at its attackers. In the latter case, the act of refusing the flank, enables the unit to defend itself with fire action and effectively eliminates the flank threat, thus reducing the morale effect of the flank fire. It should be noted that you can only refuse a flank during your own movement phase, so you cannot react to a flank threat if you have already conducted your movement.



3.13. Manhandling Artillery

1. Light artillery can change frontage by 22.5 degrees at no cost. However, no further movement is permitted during the same phase as this pivot movement is assumed to expend the full 75 paces allocated to manhandling. To wheel artillery beyond 22.5 degrees, to wheel and then advance or retire, or to about face requires that the unit undertakes a prolong formation change movement.
2. Medium or Heavy artillery must prolong to perform any form of 'deployed' movement.
3. It should be noted that batteries [light, medium or heavy] can sidestep their frontage by one section of guns [equivalent of two guns or 40 paces] only by conducting a prolong movement.
4. All batteries [light, medium or heavy] can 'refuse a flank' by turning one section of guns to the flank as necessary to confront a charge at no cost to the unit. See also 'Refusing a Flank'.

3.14. Artillery Civilian Drivers

Before the beginning of the Nineteenth Century all foot artillery employed civilian contractors and teamsters to move the cannon and ammunition to and from the battlefield. These teamsters were not, however, contracted to take any part in the battle. Once they had positioned the artillery, they would hastily retire to the rear and wait out the outcome of the battle. If the artillery was overrun in its position it was normally lost, and in the Eighteenth Century this was considered a consequence of war. To simulate the use of civilian teamsters once a battery is deployed [the default formation for artillery in this system module is 'limbered'], the battery can only attempt to be moved by re-limbering, this will not be possible if the unit is within the charge arc of an enemy unit [whether or not the threat is positive – an implied threat is enough for the civilians]. When, during the course of a battle, the battery is required to be limbered, the limber [or an appropriate marker] should be placed with the battery at the end of the movement phase following all formation changes and normal movement. In the following turn the battery can attempt to limber and perform limbered movement. For the limber to be placed with the battery, the following conditions must apply:

1. The battery must not be the subject of a charge in that turn
2. The battery must be beyond effective light artillery range [400 paces] of any enemy artillery unit in that turn
3. The battery must be beyond 400 paces of the nearest enemy formed infantry or cavalry unit in that turn

3.15. Skirmish and Open Order

1. At all times any unit with light companies or third-rank skirmishers [this includes all units that selected ‘yes’ for skirmishers in the Unit Creation phase], except those deployed in square/masse, buildings or entrenchment, will be assumed to have deployed skirmishers in front of the main body. This is not considered a formation change. The range band for skirmish fire is indicated on the Fire Combat Form [see figure 24]. This band will typically begin beyond maximum small arms range of the parent unit, and the maximum range will vary depending on the presence of enemy skirmishers and the weapon type of the parent unit. These skirmishers may fire independent of the main body and the range to the target will be calculated at close range, which assumes that the skirmishers have closed to that range with the enemy. The percentage of the unit engaged in skirmish fire will vary depending on the nationality of the unit. For example, a typical post-1808 French unit will engage with sixteen percent, which represents one-sixth of the unit, equal to the voltigeur company. The system will account for reserves from this percentage, so it is not assumed that the entire unit will fire at any one time. Some unit types, such as Infantry [Light], or units with greater experience, crack or veteran Infantry [Heavy], may have a greater ability to deploy skirmishers, and in such cases the percentage of skirmishers will increase. When employing skirmish fire the main body will not incur fatigue loss, however, there will be a slight ammunition loss.
2. Optionally, individual figures or bases/stands of paired figures may be used to represent the deployed skirmish screen, and these figures should typically be placed between 125 and 200 paces from the parent unit. They should be dispersed enough to cover the frontage of the parent unit when deployed in line formation. Skirmishers may never be placed closer than 75 paces to an opposing enemy unit, or an enemy skirmish chain. An advancing unit will push an opponent’s skirmish chain. When opposing parent units are at maximum small arms range [typically 200 paces], the skirmish chain will have no offensive or defensive capability, and may be withdrawn to the flank or rear of the parent unit. If the parent unit engages in fire action, the system will assume that the skirmish chain force will bring their weapons to bear in the firefight. The skirmish screen will move at the same rate as the parent unit formation.
3. An entire unit may change formation to open order, if so permitted. The frontage of a unit in open order will increase by 100% [double] at the very least. When deploying a unit into open order all available stands should be deployed. It is not necessary to withhold any stands as a tactical reserve [supporting body]. Carnage & Glory II will automatically calculate a proportion of the unit as a tactical reserve.
4. A unit in open order will always fall back before the advance of a formed main body, but need not fall back when opposed by a unit in open order.
5. A unit in open order will not be required to select ‘cross disruptive terrain’ option, the unit will move at half speed through or across such terrain.
6. A unit in open order may move in all directions at full movement allowance [there are no deductions to about face].

3.16. Preparing to Receive Cavalry and Movement in Square Formation

When attempting to form square [preparing to meet cavalry], or attempting to deploy artillery as an emergency formation change due to a charge declaration, the distance between the charging and defending units is required to be input, in order to determine if adequate time is available to undertake the necessary formation change. It should be understood, however, that this is not the distance between the units at the beginning of the declared charge, but the distance between the units when the threat became evident, in other words when the threatening movement became first visible. This avoids the alternate movement issue whereby units moving second gain an unrealistic advantage by being able to close on an opponent that was unaware of or accidentally or inadvertently missed the threat. This is because, historically, the defensive reaction of a unit to form square or deploy its guns was, realistically, automatic once a threat had been perceived. However, this does not preclude the possibility of a mounted unit ‘surprising’ foot units, if the mounted unit

appears from behind a terrain feature, such as a wood, buildings, or crest line. It is important to remember the distance is measured from where the threatening movement is first visible, it is also important to note that this movement must be unbroken and continuous. For example, if the mounted unit started to advance at 1000 paces, moving to within 600 paces of the foot unit then remained stationary for a game turn and then subsequently declared its charge. In this instance the 'visible' charge distance is 600 paces and not 1000 paces. Furthermore, if a mounted unit is passing through a friendly open order or deployed artillery unit, the distance is measured from the mounted unit when the first visible movement was perceived. In this case it is not considered that the 'visible' movement should be measured from the open order or artillery unit, as it is assumed that the mounted unit could be seen to the rear of the passed through unit.

Historically it is clear that infantry were capable of moving both defensively and offensively in formations designed to protect them from an opposing mounted threat. Austrians forces used the battalion masse effectively in the presence of mounted troops, such as at Aspern/Essling, and the French Middle Guard, according to French accounts, advanced to the Allied ridge at Waterloo in open square formation. Presumably, the French conducted this movement at Waterloo because of the lack of friendly cavalry support, resulting from its weakness following the cavalry assaults of the afternoon. In a majority of cases, during fighting withdrawals, formations would adopt a mobile square formation to defend themselves against pursuing mounted troops, particularly when crossing open terrain. There appears to be no case, however, of square formations being used offensively against mounted forces. In the presence of mounted troops the squares would remain static or would move cautiously away from the perceived threat. Therefore, limitations should be made against movement in square formation when the threat of mounted attack is possible, and any permitted movement allowance should be halved. Squares should under no circumstances be capable of moving directly towards or through a formed enemy mounted formation, however, squares should be permitted to pass around mounted formations, which are either pinned by friendly mounted troops, or are halted, retiring or routing.

The square is primarily a defensive formation, unlike the battalion masse which was employed both defensively and offensively. The battalion masse was clearly capable of movement as is the square; however movement of the both formations is limited by the following conditions:

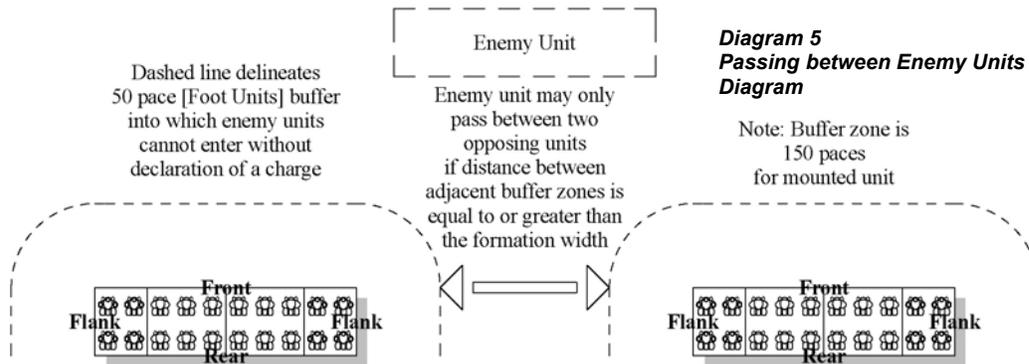
1. For a unit in square or battalion masse, when the threat of mounted attack is possible, any permitted movement allowance should be halved. A mounted threat is defined as being in the charge arc of an enemy cavalry unit that is unengaged and without a 'no advance', 'halt', 'retire' or 'rout' marker.
2. Squares should under no circumstances be capable of moving directly towards a formed enemy mounted formation. However, squares should be permitted to move toward enemy mounted formations, which are halted, retiring or routing.
3. Movement in square or battalion masse formation is possible by selecting 'Prepare to Receive Cavalry' during the movement phase. This simulates any disorder and mental fatigue that may result from the need to redress the formation repeatedly during the movement, and determines what movement allowance is available.

3.17. Passage of Lines

1. All friendly units may move through deployed artillery at all times with no restrictions to movement, except during a charge, at which time 150 [foot unit] or 300 [mounted unit] paces is deducted from the total charge movement allowance, and the artillery unit being considered as a lineal obstacle, and input as such.
2. The unit being moved through is the one impacted by a passage of lines. Any unit in line formation that is passed through by any friendly unit also in any line formation must select 'Passage of Lines' during the movement phase. This is required to simulate disruption caused to the stationary unit whilst being passed through. Only the unit that is passed through is required to select 'Passage of Lines'.

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- Units in column are not permitted to interpenetrate, and must maneuver around the flanks of the friendly unit.
- A unit in line formation that is under a compulsory move restriction, such as halt, retire or rout [excluding 'no advance'] can be passed through by any friendly unit in line formation without the requirement to select 'Passage of Line' during the movement phase.



3.18. Passing between or around enemy units

See Passing between Enemy Units Diagram 5

In all circumstances, the necessary frontage and separation distances must be observed, and in no case can two enemy dismounted units come within 50 paces [150 paces if mounted] of one another without previously declaring a charge. Therefore the 'gap' on a unit's flank must be equal to the width of the moving unit's frontage plus 50 paces [or 150 paces if mounted]. As such if two friendly units are within 100 paces of one another, the enemy unit will be incapable of passing through this 'gap', unless the unit is charging.

It sometimes appears legitimate that a unit can pass around the flank of an enemy unit in order to gain an advantage, particularly when the 'outflanked' unit has already conducted its movement. For the 'outflanked' unit this may appear unfair and unrealistic, as movement is, in reality, conducted simultaneously. This is true to some degree, but doesn't take into account the advantage of 'holding' the initiative, which permits one side to effectively 'react' to their opponent's movement by moving second. However, in order to avoid any unnecessary argument or frustration, all such examples of 'flanking' moves must be shown to be clearly legitimate, and may only be undertaken if the 'outflanked' unit can be shown to be pinned or distracted by another unit to its front. Therefore, under normal circumstances this 'flanking' movement can only be performed when two or more friendly units act in unison.

3.19. Officer Movement

Officers can be moved at two times during the course of a turn. Either during the movement phase following all combat unit movement, or during the rally phase.

Movement Phase:

- Following combat unit movement unattached officers can be repositioned or moved to attach to units [such as to charging units or units that are themselves the target of a charge]. It should be noted that during the movement phase, for an officer to be considered as attached to a unit for charge purposes, the officer must be attached from the beginning of the movement phase.

Therefore, he has to be attached to the unit during the previous turn, either during movement or the rally phase.

- At the end of the movement phase [following all charge declarations/resolutions and combat unit movement] any unattached officer can be attached to any combat unit to assist in defensive fire or combat. Note the officer must be unattached to do this, you cannot move an officer from one unit to another.

Rally Phase:

- An attached officer can be unattached from a unit either remain unattached or to join another unit during the rally phase. Otherwise an attached officer will remain with a combat unit through the end of turn, movement, fire and combat phases. This ensures that the officer will suffer all the potential dangers of combat for the full fifteen minutes of the turn during which he is attached to the unit.
- During the rally phase any attached or unattached officer can be moved as required, up to the extent of their "command radius/zone of influence radius" [See Zone of Influence Form Figure 3]. The selected officers' radius will be listed to the rally screen and to the printed order of battle for player guidance. An officer that attaches to a unit and either successfully or unsuccessfully rallies that unit must then remain with that unit until the following rally phase. This means that the officer will move and fight with the unit during the subsequent end of turn, movement, fire and combat phases, only being capable of unattaching during the next rally phase. An attached officer, as a result of enemy fire or combat action, may be wounded, killed or captured. If the combat unit refuses attempts to be rallied [the unit is in too much disorder to notice the presence of the officer], the system will prompt you to choose whether the officer will remain with or leave the combat unit. In this case it is preferable to leave the officer attached if he is the direct commanding officer of the unit, as in this case he will automatically attempt to rally the unit during the end of turn phase. If, however, the officer is not the direct commanding officer it is preferable to move him away from the unit, as he will not automatically perform an end of turn rally.

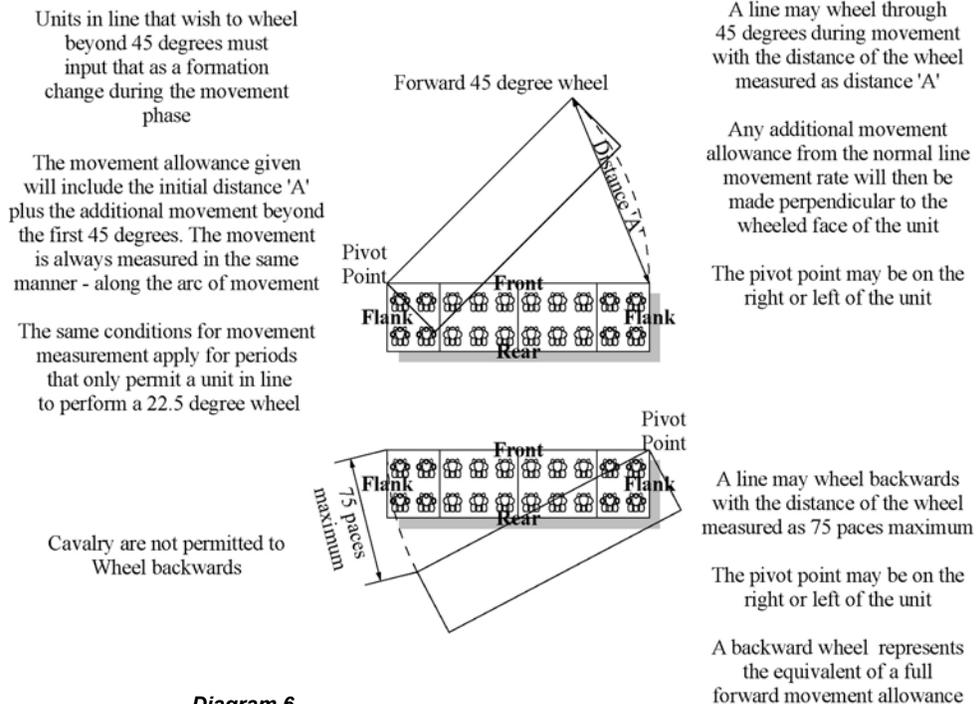


Diagram 6
Wheeling Movement Diagram

that disperses will always remain in combat, and should not be dispersed with the unit. If a unit, with an attached officer, is dispersed [and removed from the

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table], the officer at this point is considered to have done all he can, and he can be unattached and returned to the general action. However, at this point the officer should not be attached to another unit, but should remain unattached, ready to attach during the next rally or movement phase.

4. Officers, when returned to the action having receiving medical attention, should remain unattached ready to attach during the next rally or movement phase. An officer that has been wounded and subsequently returns to the combat will have an improved effect during the rally phase, as the combat units are always impressed by general officers that have been wounded in action.

3.20. Wheeling in Line

1. All units in line that wish to change their facing must do so in the form of a wheeling action. This is done by pivoting the unit on one or other of its extreme flanks and measuring along a line measured up to angle required to the unit's original front. The system permits a unit to wheel through 45 degrees without the necessity of inputting this as a movement option, however, any units in line that wish to wheel beyond 45 degrees from their original facing must do so by selecting the 'Wheel' option during the movement phase. The movement distance, inclusive of the distance to move through the initial 45 degrees is calculated by the system. Any movement allowance in excess of that required by the wheel can, electively, be used before or after the wheel, in a direction perpendicular to the facing of the unit. See also Wheeling Movement Diagram 6.

3.21. About Face Formation Change

1. Infantry and cavalry units may make an about face with detriment to their overall movement allowance. Due to the relative confusion that might result from such movement an infantry unit will deduct 150 paces from its normal movement allowance and a cavalry unit will deduct 450 paces from its normal movement allowance. Deployed artillery wishing to about face must prolong to do so, all movement being expended in the about face. If the artillery unit results in zero movement allowance the about face is not permitted.

3.22. Retirement Moves

1. All units which retire will follow the directions given by the system regarding the distance to be moved and the resultant facing of the unit. The direction of retirement will be away from the perceived threat, but may incline within 22.5 degrees towards protective or disruptive cover, such as buildings or wooded areas.
2. All units in retirement will take the path of least resistance, and will only pass through friendly-formed units if these units are within 75 paces and directly in the line of retirement.
3. If the movement is insufficient to clear friendly units then the retiring unit continues its movement until 50 paces clear of the rear edge of the friendly unit.
4. Retiring units will always pass through friendly artillery formations; artillery units must take reaction tests accordingly by inputting the unit as being passed through during the end of turn phase.
5. A unit moving under a compulsory or voluntary retirement movement makes no terrain movement deductions.

3.23. Rout Moves

1. All units in rout must end up facing away from the enemy.
2. All units in rout will take the path of least resistance, and will only pass through friendly-formed units if these units are within 75 paces and directly in the line of rout. . The direction of movement will be away from the perceived threat, but may incline within 22.5 degrees towards protective or disruptive cover, such as buildings or wooded areas.

3. Routing units will always pass through friendly artillery formations; artillery units must take reaction tests accordingly by inputting the unit as being passed through during the end of turn phase.
4. A unit moving under a compulsory or voluntary rout movement makes no terrain movement deductions.

3.24. Crossing Linear Obstacles

1. The following features represent linear obstacles for the purposes of normal and charge movement: Hedgerows, fence lines, low stone walls, wood lines [edges of wooded areas], stream banks, deployed friendly artillery units. In each case the normal or charge movement will be reduced by 150 paces for foot units and 300 paces for mounted units for each incidence. The purpose behind this is to simulate the actions of the officers and NCOs to organize the unit prior to its redeployment following passage of the terrain obstacle.

3.25. Crossing Disruptive Terrain

1. Combat units that wish to cross terrain features such as watercourses, wooded areas or other terrain features that might disrupt a unit's formation and cohesion requiring the unit to halt and redress its ranks should select the 'Cross Disruptive Terrain' option from the formation list.
2. The following features represent disruptive terrain for the purposes of affecting normal movement; wooded areas [including orchards], watercourses, high stone walls, unoccupied entrenchments, ravines and rough or steep terrain.
 - a. Units may attempt to charge any unit that is defending any of these features, with distances being doubled in woods, orchards, rough or steep terrain. The width of the watercourse should be doubled for purposes of movement. For example, a unit that wishes to charge across a 25 pace wide watercourse, will lose 200 paces from the charge movement allowance in order to cross the feature [$150 + [25 * 2] = 200$ paces]. Therefore, for the charge movement to be legitimate, the measured charge distance to the target unit must be no greater than 175 [$375 - 200$] paces for an attacking infantry unit in line.
 - b. If the target unit is defending a high stone wall or occupied entrenchment, the charging unit will measure the charge distance up to the nearside edge of the terrain feature and not deduct the movement allowance to cross the feature from the charge distance.

3.26. Terrain Features and Movement Restrictions

Terrain Effects are scenario specific, and may vary from scenario to scenario. The following are suggested ways to handle certain terrain types:

3.27. Hills

1. Hills should be categorized prior to the battle as either gentle or steep.
2. Gentle hills present no restrictions to movement or fire action.
3. Steep hills reduce all formed Infantry, Cavalry and Artillery movement in any direction, and should be treated as 'crossing disruptive terrain' and input to the system during the movement phase.

3.28. Rivers and Streams

1. Rivers and streams should be categorized prior to the battle as fordable or impassable. Fords may be situated on the course of any impassable river as required.
2. Fordable rivers and streams can be crossed at any point. To cross such an obstacle a unit should be moved to the bank and then during the movement phase select 'cross disruptive terrain' option. The system will then advise you how far the unit may advance. The unit may take several turns to cross the river in this manner. This formation change simulates the reforming

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of the unit following the disruption of the crossing.

3. Impassable rivers and streams can only be crossed at pre-determined fords or bridges.
4. Infantry and Cavalry units may charge across a bridge whilst in either march column or open order formations. If so agreed before a game, infantry units may also elect to charge across a ford whilst in company column formation.
5. In order to cross an undefended bridge or ford in a combat formation other than March Column or Limbered, approach the bridge, then to cross the bridge, select the same or different formation as a formation change. The unit can then be moved over the bridge, and reformed on the other side. Fatigue and disruption will be incurred by the unit as a result of the formation change. If the movement allowance is insufficient to cross the terrain feature, then the formation change may have to be repeated in the next movement turn, it being assumed that the unit is either mid span, or mid stream.

3.29. Woods

1. Woods should be classified before each game as either light or heavy. A unit of Infantry or Cavalry may move through woods in any formation, they should not adopt cover formation when in such zones; cover formation applies only to buildings or field fortifications.
2. Line of Sight within woods is limited to 75 paces.
3. Unless a unit is in march column, and moving along a designated road or path, select 'Cross Disruptive Terrain' option during the movement phase when moving part or all of the game turn through wooded areas. Movement through woods is made at 50% normal movement rates.
4. All types of units may move through woods, except artillery, which must move along roads or pathways. Units that move through woods along roads or other pathways must be either Limbered or in March Column and will move at normal movement rates.
5. A unit that wishes to charge an opponent within wooded areas, from either within woods or from outside of the woods, is not required to input 'Cross Disruptive Terrain', as the charge movement will incur the associated fatigue and disruption. However, in order to be capable of electing to charge a unit in woods the target must be visible to the attacking unit, therefore the target must be within 75 paces of the charging unit or the edge of the wooded area for either Infantry or Cavalry units.

3.30. Built-Up Areas

1. Each built-up area should be divided into sub-areas capable of holding one unit.
2. Movement through built-up areas can take place in two ways: Either from one sub-area to the next, occupying each area as they pass through or passing through the streets and not physically occupying the buildings.
In the former case, to occupy a built-up area it is necessary to select 'Occupy Wood/Stone Building' during the movement phase. Whilst in the latter case, in order to pass through a built-up area, unless in march column and moving along designated roads or paths, use 'crossing disruptive terrain' and input to the system during the movement phase, think of the troops as moving through the streets, side streets and garden areas of a built-up area. In this instance the unit is merely to passing through the area, without actually deploying into the cover to take advantage of the defensive aspects of the terrain. The unit could therefore be halted within a built-up area without actually entering the buildings. As such they can be charged, and be fired upon; if charged, the unit can react as if defending linear cover, taking advantage of walls and hedge lines within the built-up area, and if fired upon, they would be considered as being in heavy cover.
3. Fire action may only take place between opposing units in adjacent sub-areas, or from and to units within the built-up area and those within range outside. All ranges for fire action within built-up areas are taken to be 75 paces. Measurement should be taken to the edge of a built-up sub area.
4. Close combat may only take place between opposing units within adjacent sub-areas, or between a unit deployed in a built-up sub-area and a unit charging from outside of the built-up

sub-area.

5. All types of units may move through built-up areas, but only Infantry may deploy within them.

3.31. Hedges, Fences, Walls and similar linear obstacles

1. Hedges, fences and walls should be considered as linear obstacles that offer advantages for fire action and close combat.
2. Infantry units will deduct 150 paces to cross hedges, fences and/or walls during normal and charge movement.
3. Mounted units will deduct 300 paces to cross hedges, fences and/or walls during normal and charge movement.
4. Artillery is not permitted to cross hedges, fences or walls unless openings are available [such as gates] or engineering is performed to create such openings. The width of such an opening should be at least 25 paces.

3.32. Swamps

1. All movement through swamp areas will be reduced to 50% [cross disruptive terrain] and no charges may be initiated to begin, end or cross a swamp.
2. In order to engage in close combat within a swamp without charging, the attacking unit is moved to within 25 paces from the defending unit and then waits for the close combat phase. During the combat phase neither side will gain any charge momentum.

3.33. Poor Ground Conditions

1. Heavy ground conditions may result from excessive rain. All movement during periods of poor ground conditions will be reduced. Carnage&GloryII will advise when these conditions exist and indicate the specific movement restrictions.

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4.0. Fire Combat

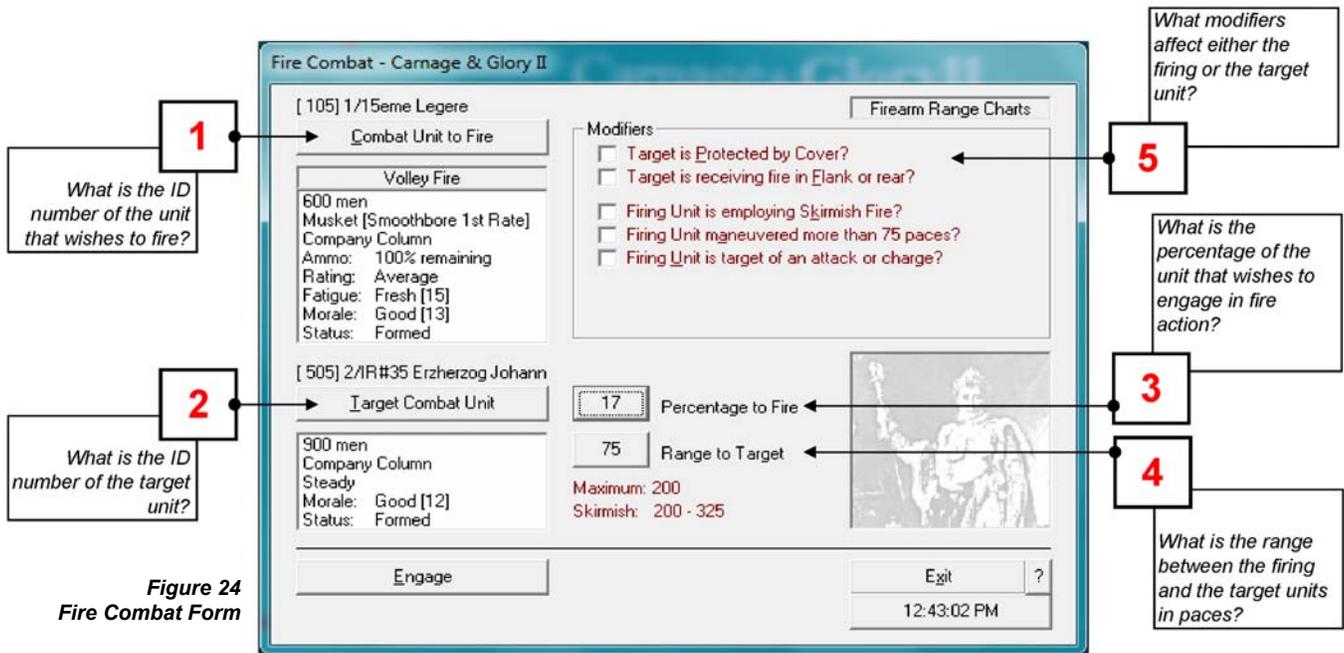
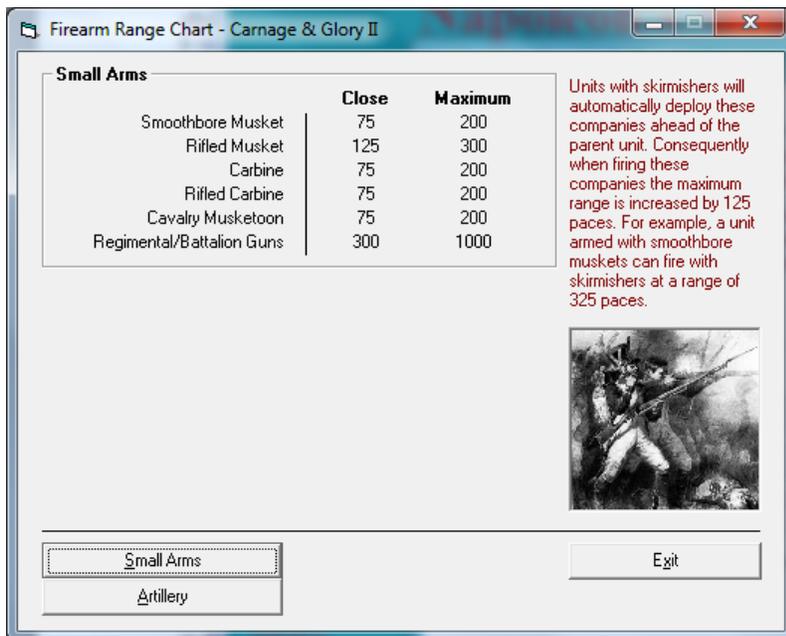


Figure 24
Fire Combat Form

Carnage&GloryII will know which units may or may not fire, or which units have reduced fire effect. You can attempt to fire all units, as you will always be advised if the option is not available. It is imperative that all stationary units, including Infantry, cavalry and artillery, subject to a charge or attack, should attempt to fire. This is necessary to prompt the system to subject the defending unit to a mandatory morale check prior to receiving the charge or attack.



You will be advised of the visibility and weather conditions to offer you guidance to range and possible firing restrictions.

The percentage of the firing unit available will depend on the current formation. Any percentage may fire, up to the allocated maximum for the specific formation, and a firing unit may attempt to fire at multiple targets by splitting its percentage

of fire. The maximum arc of fire is 22.5 degrees to right or left, unless a unit is in Square or

deployed in buildings, when the arc of fire is 45 degrees.

Under normal circumstances the closest any hostile units should be engaged in fire action is 50 paces, however a unit being charged or attacked will default the range to target at 25 paces.

Buildings may be of either stone or wood construction. Wood building will set alight more readily than stone buildings. Lines of entrenchment are incapable of being set alight. Light and Heavy Woods may be set alight by artillery or mortar fire using incendiaries

To fire on an enemy units flank or rear, the firing unit must have at least one full stand behind a line drawn parallel to the front of the target unit.

When firing artillery units equipped wholly or partially with howitzers you can select either direct or indirect fire. Direct fire is any fire by direct line of sight. Indirect fire is any fire overhead or to a target beyond the crest of a hill.

Light Artillery			
	Cannister	Effective	Maximum
Light Howitzer	500	650	1400
3 pounder	300	450	1000
4 pounder	400	650	1200
6 pounder	400	550	1200
Rocket Launcher	650	1250	1900

Medium Artillery			
	Cannister	Effective	Maximum
Medium Howitzer	550	650	1700
6 pounder	400	750	1500
8 pounder	525	750	1500
9 pounder	450	750	1700
12 pounder	500	750	1600

Heavy Artillery			
	Cannister	Effective	Maximum
Heavy Howitzer	550	1050	2000
12 pounder	575	850	1900
18 pounder	600	1150	2200

ARTILLERY UNITS can select either Direct or Indirect fire action - Direct fire is when firing on any target in direct and unobstructed line of sight - Indirect fire includes firing overhead and on targets that are beyond hill crests

Small Arms
 Artillery
 Exit

To engage in fire combat:

- Click **B**attle at the main screen menu bar.
- Click **F**ire Combat

Or

- Click the command **F**ire Combat on the main screen

The Fire Combat form will now appear [see figure 24].

Click the command **C**ombat Unit to Fire and type the required combat unit ID number. Click the command **T**arget Combat Unit and type the required combat unit ID number. Click the command adjacent to Percentage to fire to input the percentage of the firing unit delivering fire, and click the command adjacent to Range to Target to input the range to the target. Check any applicable modifiers. Click the command **E**ngage to calculate the effects of the fire.

The correct input sequence is:

1. Firing unit number
2. Target unit number
3. Percentage to fire
4. Range to target
5. Modifier selection
6. Engage

Click the command **Exit** to return to the main menu screen.

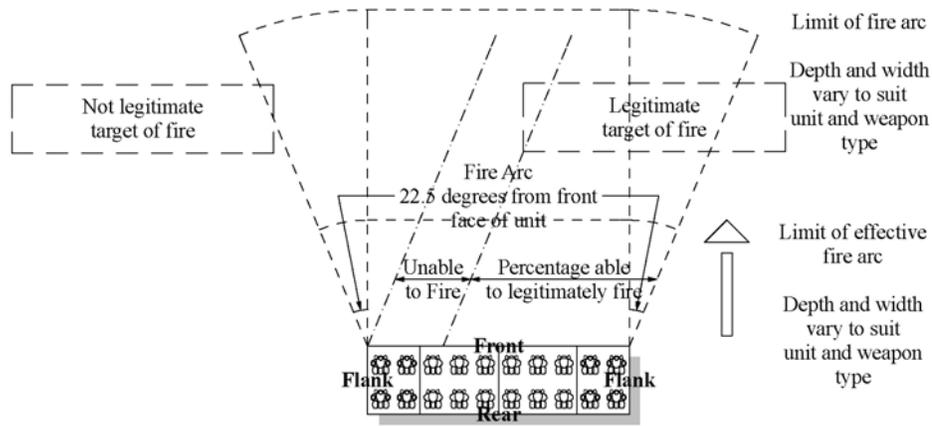


Diagram 7
Fire Arc Diagram

4.1. Modifier Definitions

1. Target is Protected by Cover

Select if target is protected by linear obstacle.
Cover is further modified as either:

2. **L**ight

Which includes; hedgerows and fence lines.

3. **M**edium

Which includes; low stone walls, light woods or abatis in open ground.

4. **H**heavy

Which includes; high stone walls, heavy woods or abatis in wooded areas.

5. Target is receiving fire in Flank or Rear

Select if unit is being fired on in enfilade or rear, including against a refused flank.

6. Firing unit employing Skirmish Fire

[Available to some infantry and cavalry only, and who are not being charged or attacked]

Select if firing unit wished to fire only with the men deployed in advance of the main body as a skirmish screen/chain. This will also preset the percentage of the unit firing [for example, 16%] and the range at which the skirmish screen/chain engages the enemy [typically 75 paces]. To be able to engage the skirmish screen/chain the target must be between 200 and 325 paces [distances will vary according to circumstances, and will be indicated on the Fire Action form] from the parent unit – range is not measured from the figures representing the skirmish screen/chain, but always from the parent unit.

7. Firing unit employing Indirect Fire

[Available to artillery equipped in part or wholly with howitzers]

Select if unit is attempting to engage a target that is not in direct line of sight.

8. Firing Unit maneuvered more than 75 paces

Select if firing unit moved at least 75 paces or greater during the current movement phase. Also select if the unit side or back stepped at least 25 paces or greater during the current movement phase.

9. Firing Unit is target of an attack or charge

Select if unit is being charged or attacked and is attempting to engage in defensive fire action.

Which is then further modified by the following:

10. General is accompanying Unit

Select if general officer is physically accompanying the target unit. The officer may only affect one target unit during the current fire action phase, and should be physically touching the unit.

11. Unit has Supporting unit in its rear or on its flank and/or is defending linear obstacle

To be considered a supporting unit in respect to defensive fire action the unit must be in a direct line to the rear of the target unit, within 200 paces, and in good order without a compulsory movement marker [no advance, halt, retire or rout]. The target is seeking a friendly unit that they can effectively hide behind should they elect to withdraw before contact. To be considered as a supporting unit to the flank, the unit must be within 25 paces of the target unit.

Linear cover includes abatis, embankments, hedgerows, fence lines, low and high walls, and watercourses.

4.2. Fire Combat Phase: Simultaneous

1. Resolve target of charge fire: To insure that these fires are accomplished and the required morale checks are conducted, all units being charged should fire first.
2. Resolve individual fire actions: Simultaneous
3. Perform compulsory movement resulting from fire action and mark affected units accordingly.
4. The effective fire range for small arms is typically 75 paces [Pistols and Bows are 50 paces], firing at or below this range will inflict the most casualties on the enemy. The effectiveness of fire beyond this range will be much reduced, whilst still incurring the same levels of fatigue loss to the unit firing.
5. Canister range is typically the most effective range for artillery. Pass through targets are possible when firing canister.
6. Providing ground conditions are suitable, artillery fire at effective and long range may result in bounce-through targets.
7. Units that perform double moves during the movement phase are not allowed to fire.
8. Infantry units that move up to 75 paces may fire with no reduction in fire potential.
9. Units may elect to fire 50% and incur less fatigue.
10. Units may elect to fire at any number of targets by splitting fire.
11. Ranges should be typically measured from the center of the portion of the unit firing to the center of the target within the arc of fire. Exceptions to this rule may occur during the play of the game, and players and game masters should use their discretion. For example a unit firing into the flank of another has its range measured from the center of the firing unit to the closest part of the target unit.
12. Infantry, cavalry and artillery units have firing angles of 22.5 degrees [see Diagram 7].
13. Units may not fire, with the exception of indirect artillery fire, at targets that are not in line of sight.
14. Infantry deployed in buildings or Square/Battalion Masse formation have an increased firing angle of 45 degrees and a maximum of 25% of a unit can fire out of any one side of either a Square/Battalion Masse or a building. Therefore if a building or square is attacked on two sides, a maximum of 50% of the unit can fire in defence. The system calculates how many men will actually be able to fire according to the formation.
15. Only the actual percentage of frontage that can physically be shown to have a target within its fire arc may engage in fire.
16. If a friendly unit blocks a firing unit such that less than one full stand has a clear and unobstructed line of fire equal to the width of the firing stand, then the firing unit may not fire.
17. A unit that fires at full percentage continuously without break will become progressively fatigued and exhaust its immediate ammunition supply. In such cases the unit may be forced to cease-fire until rested or resupplied. Resting is calculated automatically by Carnage&GloryII. However, it is advisable to withdraw artillery in limbered formation when so prompted by the system.
18. Passing fire is not permitted. Only those units legitimately within the fire arc of a firing unit at the end of the movement phase may be targeted. Exceptions to this rule are at the discretion of

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the GM and players.

4.3. Targets of a Charge

1. Any unit that is the direct target of a charge must attempt to fire, [an artillery unit will automatically deploy a minimum number of cannon in defense if caught whilst limbered] this will invoke the necessary morale check by the charged unit.
2. All units with two or more targets shall fire at charging units first, then the closest additional target unit(s).
3. The distance an attacking unit takes to close on a defending unit will affect the defending unit's ability to withstand the charge. The shorter the distance the less confident the defending unit will be in its ability to stop the charge with small arms defensive fire – the further the distance for the charging unit to cover then the more fire the defending unit can deliver in its attempt to stop the charge. It is therefore more beneficial for a charging unit to declare its charge from as close to the enemy as possible.
4. If the target of charge retires, the charging unit is moved forward up to the limit of its charge - any secondary defensive fire is then undertaken [these secondary units deliver their defensive fire at 50% or as a 'Firing unit maneuvered', as they both reduce the fire the same amount.]. If you haven't moved or changed formation in the turn you should select 'firing unit maneuvered' [that is, moved more than 75 paces]. If the defending unit moved or changed formation and the 'firing unit maneuvered' option is not available the defending unit should input 50% to fire.
5. When all primary and follow-on defensive fire is done - move onto the next charge - and when all charges are completed move onto normal fire.
6. A unit being charged by two or more separate threats will not react cumulatively. The reaction to the threats, stand, withdraw or break will be acted upon following the completion of the units separate defensive fire actions. The worst case response being enacted.
7. Units that are charged in the rear will input 50% to fire.

4.4. Classification of Cover during Fire Action

Carnage&GloryII interprets and understands the following forms of cover:

1. **Wood or Stone Buildings** [establish type before the game]
2. **Entrenchment**

To occupy either buildings or entrenchment will require a formation change.

3. **Built Up Areas:**

4. Any unit fired upon whilst moving through a built-up area, but not deployed in the built-up area should take casualties as if protected by heavy cover.
5. Fire action may only take place between opposing units in adjacent sub-areas, or from and to units within the built-up area and those within range outside. All ranges for fire action within built-up areas are taken to be 75 paces.
6. **Light or Heavy Woods** [establish woods type before the game].
 7. Light woods are considered medium cover
 8. Heavy woods are considered heavy cover.
9. **Linear Obstacles:** Which include walls, fence lines, hedgerows and watercourse banks.
 10. Hedges and fence lines are considered light cover.
 11. Low stone walls are considered medium cover.
 12. High stone walls are considered heavy cover.
13. **Abatis** in open ground is considered medium cover. Abatis in wooded areas is considered heavy cover.
14. Cover that is set on fire due to artillery fire; will burn until an onset of heavy rain.

4.5. Firing in Woods

1. Firing in woods is all about visibility, 75 paces is the maximum visible range within either light or heavy wooded areas.
2. Firing on a unit not in woods from within the woods, requires that the firing unit is on the immediate edge of the wooded area.

4.6. Direct and Indirect Artillery Fire

1. Artillery, except for units equipped wholly or partially with howitzers, should use direct fire and should therefore be restricted to line of sight.
2. Indirect fire is to be used when firing against targets which are in wooded areas, on the rear side of a built up area or behind ridge crests, with no intervening friendly troops. To engage in indirect fire, the target unit must also be visible to a unit friendly to the artillery unit.

4.7. Overhead Artillery Fire

1. Artillery units deployed on hills may fire over the heads of friendly units if the enemy target is on a higher elevation than the intervening friendly unit or firing unit itself. Furthermore the intervening friendly unit should be closer to the firing unit than the target and at least one contour or 'hill level' below the firing unit.
2. All overhead fire is considered as indirect and should be selected as such during the fire phase, therefore only units with howitzers may engage in overhead fire.

4.8. Canister Fire

1. The system will select the type of munitions to be fired based on range and target type. For example, it will always select canister at close order troops that are within canister range, however, you will also get ball range possibilities, such as bouncethroughs when firing at a primary target such as an artillery battery or an open order formation. In this instance the system assumes it will see through the primary target so will also load ball to engage more distant or supporting targets.

4.9. Bouncethrough Artillery Targets

1. Bouncethrough simulates the effect of cannon firing roundshot at low angle trajectories that would result in the actual bounce and roll of the roundshot up to its maximum range. Bouncethrough targets will not be available in certain instances due to range or wet weather conditions.
2. A bounce through target is any target in the direct path of a line taken from the center of the firing unit to the center of the target unit and beyond.
3. A bounce through target unit may not be in cover [other than light cover, such as a hedge, fence or low wall], beyond a watercourse [river or stream] nor uphill of the primary target unit.

4.10. Battalion/Regimental Guns

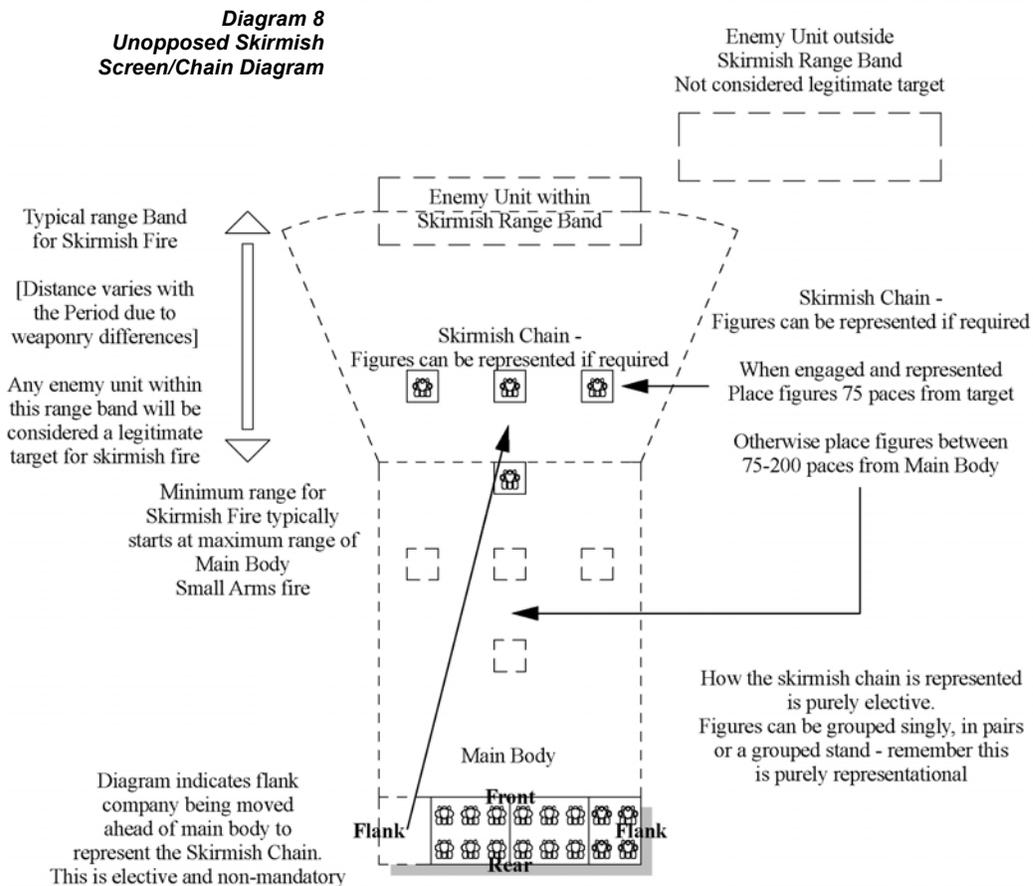
1. Units with attached regimental/battalion artillery pieces can fire these cannon independently up to 1000 paces. Minimal fatigue is incurred by the parent unit; however, due to the caliber and number of guns firing, enemy casualties will be potentially slight. The most practical employment of regimental/battalion pieces is at close range in direct support of small arms fire. At this range the artillery piece will provide supporting canister fire. Ammunition will be consumed when firing regimental/battalion pieces.

4.11. Skirmish Screen/Chain Range

See Unopposed Skirmish Screen/Chain Diagram 8 and Opposed Skirmish Screen/Chain Diagram 9.

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1. The range to the target is always measured from the parent body, and the range band will vary according to the weapons used and the target circumstances, for example, range will be increased if the target unit also has deployed skirmishers. The range will always be measured from the parent body to the target's parent body, however, the actual range at which the casualties are calculated will be typically at 75 paces [varies in respect to weaponry], the assumption being that the skirmish screen/chain has maneuvered into close range of the potential target. The minimum range is set at 200 paces as at this range the parent body will be capable of engaging the target directly.
2. Use of skirmish screen/chain fire against enemy mounted formation should be permitted only if the infantry parent unit can be shown to be out of charge arc of the mounted unit. In this way the mounted unit poses no immediate threat and the skirmish screen/chain would have felt comfortable to engage them as a target. However, if the mounted target is 'head-on' to the parent unit the skirmish screen/chain would, or should, have wisely fallen back seeking the protection of their parent body and not be able to conduct their own fire.



4.12. Reverse slope Tactics

1. Defining the 'Military Crest':

Before the game, define clearly the actual crest of any ridge line. This can be done by using a piece of cotton stretched between pins, or by marking with chalk. Typically and historically the

crest of a ridge might be marked by the route of a path or road, as this was typically the best drained area, so this feature could also denote the crest.

2. **Visibility and the Reverse Slope:**

Any units that are positioned directly along the crest of the ridge line will be visible to enemy units approaching the crest. Infantry units and deployed artillery that are placed 75 paces, or more, beyond the crest are not visible and are assumed to be on the reverse slope. Mounted units that are placed 150 paces, or more, beyond the crest are not visible and are assumed to be on the reverse slope. Individual scenario variations may arise, for example, distances may be reduced on very steep reverse slopes or increased on plateau crests.

3. **Moving Fires:**

Any unit that steps up to the ridge from a reverse slope position will be assumed to be conducting a moving fire. This is to account for the movement uphill even though technically it might only be 75 paces. Artillery must be manhandled to reach the crest from the reverse slope position.

4. **Bounce and Pass-through targets:**

Any unit that is within 75 paces of the crest, either front or reverse slope, can be targeted for fire purposes and will be considered to have bounce or pass-through targets when legitimate. This accounts for over-shoot of shot and shell and the fall of canister rounds.

5. **Opportunity Targets:**

As units present themselves as targets by advancing to the crest, these may be targeted by opposing units, but the firing unit will only be capable of firing a maximum of 50% of their fire potential. This includes units that are the target of a charge.

6. **Spotting from the crest:**

If a unit is capable of occupying any portion of the crest, and has supporting units within 200 paces, to its rear or flank, it is assumed to be capable of alerting these units of potential threats or targets of charge, where normally these targets would not be visible to the defending or reverse slope unit, and so would not be a legitimate 'visible' charge target. Any unit that attempts to charge in such a case will be required to deduct the distance from the 'spotting' unit to the charging unit from the normal charge move allowance, up to a maximum of 200 paces. To attempt to charge the target must be within the normal charge distance less this distance, and less any deductions for crossing linear obstacles.

4.13. Defensive Support Fire

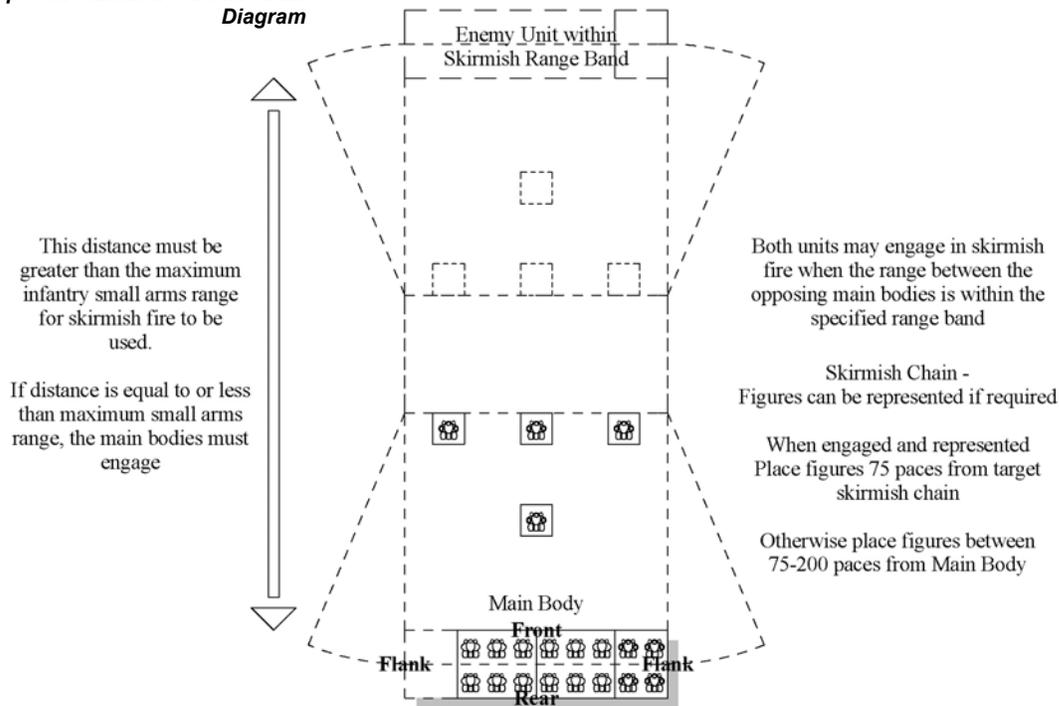
Designer Note: Just as an attacking player will often times attempt to bring more units than are realistically capable of closing upon an enemy unit, the defensive player will also attempt to bring as much defensive fire on the attacker as possible. In reality the ability and opportunity to choreograph the movement of multiple units to defend against an attack was severely limited. Realistically, what could be accomplished was severely restricted. The idea that a commanding officer could prepare his own defense whilst coordinating a wheeling movement of adjacent units to bear upon an attackers flank is quite unrealistic, at this time initiative was not considered a virtue, but more a danger, a commander couldn't see the 'big picture' and would rely on being told what to do by his superior, rather than lose the battle and end his career by being 'bold'. At the moment that the enemy attack begins things would move very fast. Remember a charging unit could be covering anything from 120 to 250 paces a minute, which doesn't leave much time to think and be proactive. Defensive positions were often pre-planned, in which fields of defensive fire were overlapped. But the idea that these positions could be achieved in the time that the enemy launched his assault to the time he made contact is ridiculous. Unfortunately as the gamer has more access to information about the overall tactical situation, this limitation of initiative is often the most difficult element of battle to replicate. So how do we control this on the wargame table?

1. All defending infantry or deployed artillery units that are the direct target of an opponent charge, including those units within 100 paces of either flank of the charged unit, are considered to be pinned, and may not move or adjust their positions to provide better fields of fire. However, they are permitted to change formation, but not as an attempt to evade contact.

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2. Although an unpinned friendly unit may be capable of maneuvering onto an attacking unit's flank, it may not fire in the same turn. The attacking unit is moving very fast, and the defending unit will be incapable of moving fast enough to achieve its desired flanking position before the attacking unit has closed with the target. However, it may attempt to get into position ready to take advantage of the attackers being halted or retiring from contact if their assault was unsuccessful, during a subsequent turn.
3. The primary target of the charge must fire, and must fire all the unit's strength that can bear on the target during the turn. If only 50% of the unit can bear at 25 paces, the remainder of the unit will fire at 75 paces, assuming that the target was in its effective arc at that range. The net result should be that the entire available defending unit has fired if possible. Always calculate the fire at 25 paces first, therefore all further defensive fire will be lost if the target breaks or withdraws. Any subsequent fire from a defending unit forced to withdraw would be calculated from the position it held before it was forced to withdraw.
4. Direct support fire is also possible, but only from units that were in the original charge arc of the attacking unit or immediately adjacent to the target unit. Therefore, a defending unit adjacent to the primary target can fire, but a unit off to the flank or a unit that has been moved into a position to bring fire on the attacking unit cannot fire [in this turn]. The defending unit immediately adjacent to the primary target, is considered pinned by the attack [if it is within 100 paces of the flank of the primary target], and therefore cannot adjust its facing to bring more of its strength to bear on the attacker. The range to the attacking unit should never be at 25 paces [this distance is only used by the primary target], so an intermediate range measured at a point of half the distance from the attackers' start position to its position 25 paces from the primary target is measured. For example, if the attacker moved 300 paces to reach the enemy, the supporting fire will be made at 150 paces. If the attacker moved anything over 400 paces, the supporting unit will elect to fire at 200 paces. Only the eligible percentage strength may fire at the selected distance, so more of the unit may be able to fire at the greater distance.

Diagram 9
Opposed Skirmish Screen/Chain
Diagram



5.0. Close Combat

Figure 25
Close Combat Form

1 What is the ID number of the first army unit to engage in combat?

2 What is the percentage of the unit to be engaged? one opponent = 100% two opponents = 50% etc., and what modifiers affect the first army combat unit?

3 What is the ID number of the second army unit to engage in combat?

4 What is the percentage of the unit to be engaged? one opponent = 100%, two opponents = 50% etc., and what modifiers affect the second army combat unit?

Close combat will occur in any of the following instances:

- If any units have attempted to charge, attack or pursue and succeeded to press home their attacks.
- If any units are in contact following a previous combat.
- If any units are in contact within cover, entrenchment or wooded areas.

Units occupying woods may wish to engage in a more sedate firefight rather than engage in hand-to-hand combat. Generally, all units in base to base contact must engage in close action. Close combat is a loose term covering a number of specific combat types, but it usually refers to close quarter's action where two or more units come very close and as a result of the units' relative strengths, morale and fatigue, one or other unit gives way and quits the scene. Actual physical contact was rare, and normally typical only when completely unavoidable. The weaker side [weaker from the aspect of morale, strength or fatigue] normally took flight immediately before impact. To reflect this Carnage&GloryII normally assesses casualties due to combat action as light. There will be exceptions of course, an infantry unit taken in the rear by a unit of cavalry being an obvious case in point! The sanguinary nature of combat between units deployed in cover is also reflected by Carnage&GloryII. In this instance units deployed in cover that engage in close combat will typically incur greater casualties than the same units would if engaged in the open.

To engage in close combat:

- Click **Battle** at the main screen menu bar.
- Click **Close Combat**

Or

- Click the command **Close Combat** on the main screen

The Close Combat form will now appear [see figure 25].

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Click the command **First Army Unit** and type the required combat unit ID number. Check any applicable modifiers. Click the command **Second Army Unit** and type the required combat unit ID number. Check any applicable modifiers. Click the command adjacent to Percentage to Fight to input the percentage of the unit to engage in combat. It is only necessary to change the default from 100 percent, if one unit is engaged in combat with multiple opponents. Carnage&GloryII will calculate the number of men involved in combat based upon each combat units formation and frontage. However, if one unit is engaged against two enemy units the outnumbered unit should input 50 percent to fight against each, Carnage&GloryII will then calculate the precise number of men engaged. Similarly if one unit is engaged against three opponents the outnumbered unit should input 33 percent to fight against each, whilst the unit's opponents will each input 100 percent to fight. Carnage&GloryII will assess the actual number of combatants physically capable of being engaged in the combats. Click the command **Engage** to calculate the effects of the combat.

Click the command **Exit** to return to the main menu screen.

5.1. Close Combat Modifier Definitions

The following modifiers are associated with any charging, attacking or pursuing combat unit:

1. General is with the Unit

Select if general is physically attached to the unit and accompanying the unit in combat. This will ensure that the combat unit takes courage from the presence of the general during the combat.

2. Closing against enemy uphill or downhill

Select if charging, attacking or pursuing an enemy unit either uphill or downhill at the point of contact with the enemy. This will ensure that the advancing unit is further disordered by the effects of the terrain.

3. Crossing linear obstacle to engage enemy

Select if charging, attacking or pursuing unit physically crossed any type of linear obstacle in order to reach the target unit. For these purposes, a linear obstacle will include normal terrain features, deployed artillery, and disruptive terrain. If the target unit is physically defending a linear obstacle, then the advancing unit should not select this modifier.

4. Closing against enemy flank or rear

Select if charging, attacking or pursuing unit contacts the flank and/or rear of the target unit at the time of contact. The charge may not have been declared against the flank or rear, but the target may have exposed its flank or rear due to involuntary movement, such as a withdrawal or break during fire action.

The following modifiers are associated with any defending combat unit or by both sides in an extended second or greater turn of combat:

5. General is with the Unit

Select if general is physically attached to the unit and accompanying the unit in combat. This will ensure that the combat unit takes courage from the presence of the general during the combat.

6. Defending linear obstacle or abatis

Select if defending unit is behind any linear terrain obstacle, abatis or wooded areas. If the unit is occupying buildings or entrenchments it is not necessary to select this modifier as the system will be aware of the formation and defensive situation of the defending unit.

Linear obstacles, abatis and certain areas of disruptive terrain [wooded areas] are further defined as follows:

7. Light

Select if defending linear terrain obstacles including hedgerows and fence lines.

8. Medium

Select if defending any of the following features, including low stone walls, light woods [including orchards], or abatis in open ground.

9. Heavy

Select if defending any of the following features, including high stone walls, heavy woods or abatis within wooded areas.

5.2. Close Combat Phase: Simultaneous

1. Resolve individual combat actions
2. Perform compulsory movement resulting from individual combat actions and mark affected units accordingly.
3. Officers attached to units in close combat will positively assist a unit; however, if high casualties occur, there is a chance that the officer may become a casualty to enemy action himself.
4. There are three possible results to a cavalry melee:
 - a. One side is defeated and forced to retire away from their opponent, in which case the defeated unit will always face away from the opponent.
 - b. Both sides are locked in combat and the combat will continue into the next turn. During the end of turn phase neither, or one, or both of the units may be required to retire or break
 - c. Both sides will pass through each other - this can also happen if both units fight initially to a draw. The pass through simulates the case where two bodies of cavalry meet, briefly exchanging some cut and thrust sword action or pistol fire, and then continue forward through and past their opponents. The two formations would open files and make this happen - it was rare that two bodies of boot to boot cavalry would smash into one another - as this would cause more devastation to man and horse than the sword would. To avoid this destructive clash, the units would open up and literally pass through one another. Both sides decide that they were well matched and staying around in melee wouldn't result in anything, hence the pass-through. It should be remembered that once passed through the two units will maintain facing and will have their backs to one another at the beginning of the next turn. The separation between the two units following pass-through should be 50 paces.
5. There are two possible results to an infantry melee:
 - a. One side is defeated and forced to retire away from their opponent, in which case they will always face away from the opponent.
 - b. Both sides are locked in combat and the combat will continue into the next turn, or during the end of turn phase, one, or both, of the units will retire or break.
6. The only time that a melee would continue into the next turn would be if a drawn combat resulted in no subsequent movement requirement. It should be noted that only cavalry [and more likely Light Cavalry] will ever achieve a drawn combat combined with the pass through movement.
7. Whenever multiple unit [greater than two units] combat occurs, the unit engaging in multiple combats will divide its' 100% strength by the number of units that it is engaged against and each combat will be fought independently. For example, engaging two units, means its' strength is input as 50% per combat resolution; when engaging three units, its' strength is input as 33%, etc. The opposing force will always be input as 100% [unless it too is engaging two or more enemies].
8. In close combats where one unit is attacked by multiple units the split unit must engage in all combats.
9. In the event that a unit involved in multiple combats wins one melee, but loses another, the unit can be 'temporarily' split. Consider it as if one company or troop has been forced back, while the others push forward. During the end of turn phase the mixed result [win/lose] will resolve itself, the unit will either get a no advance, or halt [where the unit will be regrouped on the winning component], or retire or rout [where the unit will be regrouped and make the compulsory movement from the position of the losing component].
10. If a unit receives a pursuit instruction during the end of turn phase, it must be moved in an attempt to re-engage their last opponent. The unit is not looking for other targets - they are simply attempting to 'hack' their last opponent. If the opponent has already been forced from the table, then the pursuing unit should maintain the pursuit off-table. The pursuing unit will

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remain off-table until it returns to good morale, [no longer required to pursue] at which time the unit can be returned to the tabletop in the same location that it left. If this location is blocked by enemy troops, it will remain off-table for a further move, and re-enter at an open point within one normal move distance of the blocked position.

5.3. Terrain Effects on Close Combat

1. A unit must be fully behind a minor linear obstacle to take advantage of its protection.
2. A unit need not begin its move uphill of its target to take advantage of being up slope at the time of contact. This enables units, being charged or attacked, to advance from a reverse slope to the military crest during a charge.

5.4. Units Contacted in Flank or Rear

1. To contact an enemy in the flank or rear the charging unit must start the charge in a position where at least one stand is completely behind a line drawn parallel to the front of the target unit. [See Charging Flank Diagram 2].

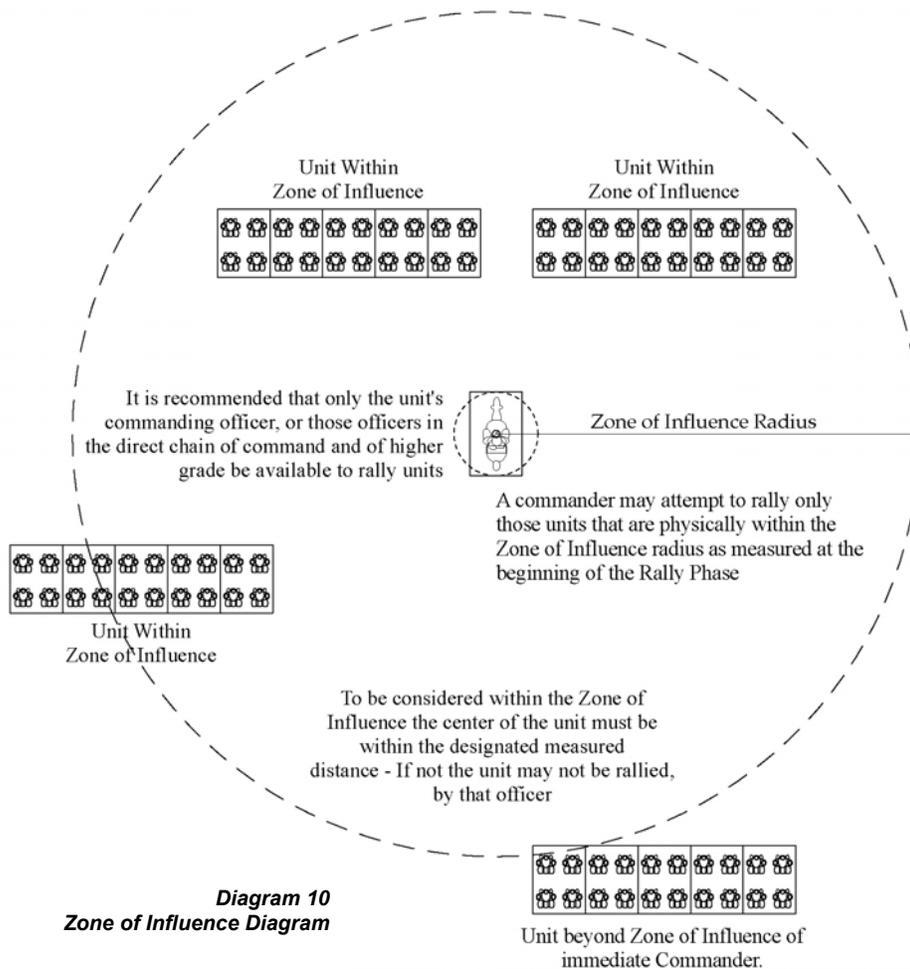


Diagram 10
Zone of Influence Diagram

However, this unit may be rallied by another officer in the direct chain of command

6.0. Rally

The rally option simulates the attempts of your officers to observe the physical and morale condition and effectiveness of the individual units under their command. The officer would approach the unit and seek out its commanding officer. The commanding officer would then report the status of his unit. Obviously the general officer would get a good impression of the combat unit's effectiveness

1

What is the ID number of the unit to be rallied? Only units with 'markers' will require to be rallied. The GM can advise which units these are

2

What is the ID number of the General Officer attached to the combat unit attempting to rally? An officer can only successfully rally one unit during the rally phase

Figure 26
Rally Form

as he rode along the line to meet with this officer.

At times a combat unit would require some opportune vocal steadying at which some generals were better than others. The words of an officer, riding along the line bellowing over the din of battle, calling upon the men to hold firm, probably did more to direct the course of a battle than any previous tactical planning could do at the moment of crisis.

To maintain historical accuracy you should make every effort to only use generals within the unit's direct chain of command [such as his colonel, brigade commander, wing commander, etc]. The system will prompt for the correct officer, and indicate the next level of command above the direct commanding officer [see Rally Form Figure 26 – commanding officer and next senior officer]. Obviously an Army commander should be allowed to rally or observe any unit, but a brigade, wing commander should only rally units within his own command structure. What constitutes “accompanying” should be established before the game begins. As the noise of battle was deafening it is recommended that the term accompanying is established as ‘in physical contact with the unit’, and perhaps placing the officer adjacent to the command stand [the stand with the officer and drummer etc] of a unit is appropriate.

You will notice a number adjacent to the term Honors within the top right-hand box of the rally form. The Honors value reflects the amount of action the unit has undertaken during the current battle. The higher the number the better for the unit, and the number will be used to effect whether the unit improves its morale classification and fire and combat factors at the end of a battle during the Post Battle phase [see below]. Ratings of six and above may result in unit improvements. The Honors value is affected by fire and combat action, routs and retirement and varies according to the initial morale classification of the unit. For example, a conscript unit will receive more Honors

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points than a veteran unit for the same combat experience.

To engage in rallying:

- Click **B**attle at the main screen menu bar.
- Click **R**ally

Or

- Click the command **R**ally on the main screen

The Rally form will now appear [see figure 26].

A list of units that require to be rallied will be displayed on screen. To select these units, click any highlighted unit. Then select the officer to attempt to rally the unit by typing his ID number – you will be advised which officer directly commands the unit and whether he is currently available. Any officer that is successful in rallying a unit is then incapable of rallying further units during the current rally phase, and should be left attached to the unit. Officers that are unsuccessful in rally attempts can be moved from unit to unit at this time, but any officer that remains attached to a unit during the rally phase [whether successful or not] will remain attached throughout the following turn throughout movement, fire and combat until the next rally phase. As a result the officer may therefore become an indirect target of enemy fire or combat action – but that is the risk that any officer had to take. A unit that is incapable of being rallied does not require that the officer attempting to rally remain with that unit, instead the officer can be moved away from the unit as necessary.

It is also useful at this stage to move officers to units that wish to attempt to charge during the next movement phase. [See Zone of Influence Diagram – Diagram 10]. Remember unattached officer movement always follows combat unit movement, so an officer can not affect a units potential to charge unless he is ‘accompanying’ the unit at the beginning of the movement phase.

Click the command **E**xit to return to the main menu screen.

6.1. Rally Sequence

1. Move Officers as necessary to units that require to be rallied [typically identified as those units with compulsory movement markers, such as no advance, halt, retire or rout]. Simultaneous.
2. Move Officers as necessary to attach to units that may wish to attempt to charge in the subsequent turn movement phase. Simultaneous.
3. Under typical conditions an officer can only attempt to rally one unit per turn.
4. Resolve all necessary rally attempts. In order to facilitate this process, it is recommended that you do this methodically, starting with one army [the army that moved and fired first], before moving to the next.
5. Remove any reaction markers, except rout markers.

6.2. Rallying Split Units

A split unit may result from a combat against multiple units, where one part of the unit is obliged to withdraw, whilst the other part remains in position. During the rally phase, a rallying officer can be attached to either component of a split unit. It should be remembered that he will remain attached [unless permitted to unattach by the system] throughout the next end of turn, movement, fire and combat phases.

7.0. End of Turn

During the end of turn phase, Carnage&GloryII assesses the physical and morale damage caused during this and previous turns upon individual general officers and combat units. Considering each officer and unit in turn, it will advise you which officers and units have been affected and to what degree. It will determine which units pursue, which need to be rallied, which become disordered, shaken and fatigued. As an officer's status and morale is reviewed, the result may be either a positive or negative influence upon those units directly within the officer's chain of command; this may result in an apparently unscathed combat unit that has seen little or no action during the current game, obtaining a compulsory movement marker, such as a no advance, halt or in an extreme case retire or rout. It is important, therefore, that the game master and players take note of the officers status as these are displayed during the end of turn phase.

7.1. Army Morale

This option has been incorporated to avoid the situation where an obviously defeated army will miraculously fight on to the bitter end, without any relationship to the reality of the tactical or strategic situation. In other words, the option helps to avoid the case where the wargamer thinks that it is worthwhile continuing the game because he still has one unit still in good order.

The Army Morale feature [see figure 27] calculates the comparative fatigue, morale and physical strengths of both contending armies, then based upon these figures and the degree of difference between them may ultimately reduce the morale of the weaker side, at a point referred to as the Army Morale Break point [typically 75%]. The reduction in morale increases as the relative

Army Morale - Carnage & Glory II	
Game Move / Time:	2 / 16:45
Weather Conditions:	Clear
Visibility:	Good
Ground Conditions:	Good
Army Initiative:	First Army has army initiative!
Army Morale Break First Army at: 75% Second Army at: 75%	
	
	Continue
	5:23:57 PM

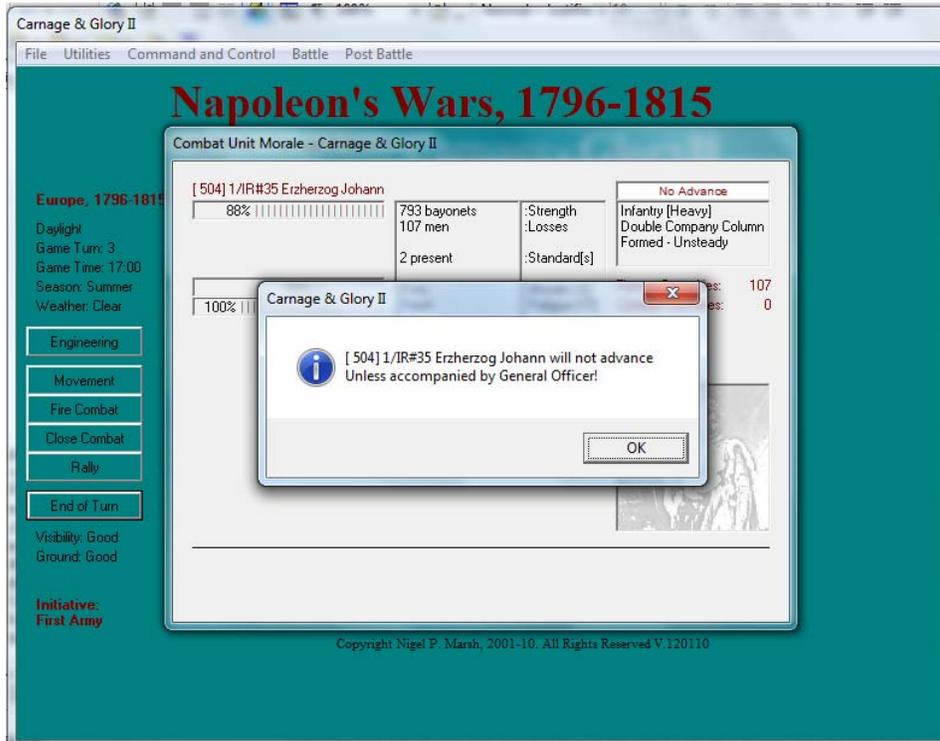
	First Army	Second Army
Strength:	100%	100% :Strength
Fatigue:	Good	Good :Fatigue
Morale:	Good	Good :Morale
Total:	100%	97% :Total
Officers:	Excellent[-]	Competent[-] :Officers

Figure 27
Army Morale form

percentage army morale status decreases. Information relating to the relative morale and fatigue levels of both armies will be displayed, and you will be advised if either army suffers morale loss. Only units that have incurred fatigue loss will be affected by army morale. This enables the weaker side to deploy fresh reserve forces at the critical moment to act as a rearguard.

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7.2. End of Turn Unit Morale



1. Place compulsory reaction markers as instructed by the system. Any compulsory movement is performed during the end of turn phase, as the markers are placed, and this movement replaces voluntary movement during the subsequent turns movement phase.
2. Perform any compulsory movement. This movement prohibits voluntary formation changes or movement in the subsequent turn movement phase.
3. A retire, retreat and rout result are not equal, even though in the former two instances the movement distance may be equal. Typically a retreat or rout movement may be sufficient to disperse the unit. However, if a unit is not asked whether it disperses, and the unit has reached the table edge, the unit can halt at the table edge to enable opportunities to rally the unit further.
4. Units obliged to perform a second consecutive rout are considered suitably dispersed and will be removed from the action. Typically, units are dispersed when they either retreat or rout off the board

7.3. Witnessing a Rout or Retirement

The effect upon friendly units passed through by friendly units routing or retiring could create substantial disorder. Carnage&GloryII simulates this by assessing the witnessing units' present status and calculating the probability of its disruption.

If at any point during the last game move [including fire and combat action and the end of turn] a routing or retiring unit physically passed through another friendly unit, the unit passed through must test for reaction. The only exception is if the unit passed through is itself in rout. To test units' reaction, when prompted, click yes and then type the required unit ID.

The unit will either be affected or unaffected, an affected unit will be considered as shaken for the following game turn. A unit need only test once per turn, even if passed through multiple times.

Section Five: Post Battle

The **Post Battle** Menu has three options which include:

- **V**ictory Status
- **R**eset Order of Battle
- **R**econstitute **A**rmy List

Let's review each of these options

Victory Status

This option can be employed at different times during the course of a game. You can review the **Current** victory status of each side at any point in the game whereas you should review the **End of Battle** victory status only at the conclusion of the game. The Victory Status option serves two functions:

- First: It calculates all losses by type for the two armies engaged, compares these against one another and suggests the probable victory status of the army with the lower casualty rate. [This is available with both Current and End of Battle options].
- Second: On the basis of these figures and the resultant status of each army, it will, if required, calculate returning wounded, reinforcements and desertions for both armies. At which time, in some cases, a unit's morale classification, experience, fire and combat ratings may be altered. [This is available only with the End of Battle option].

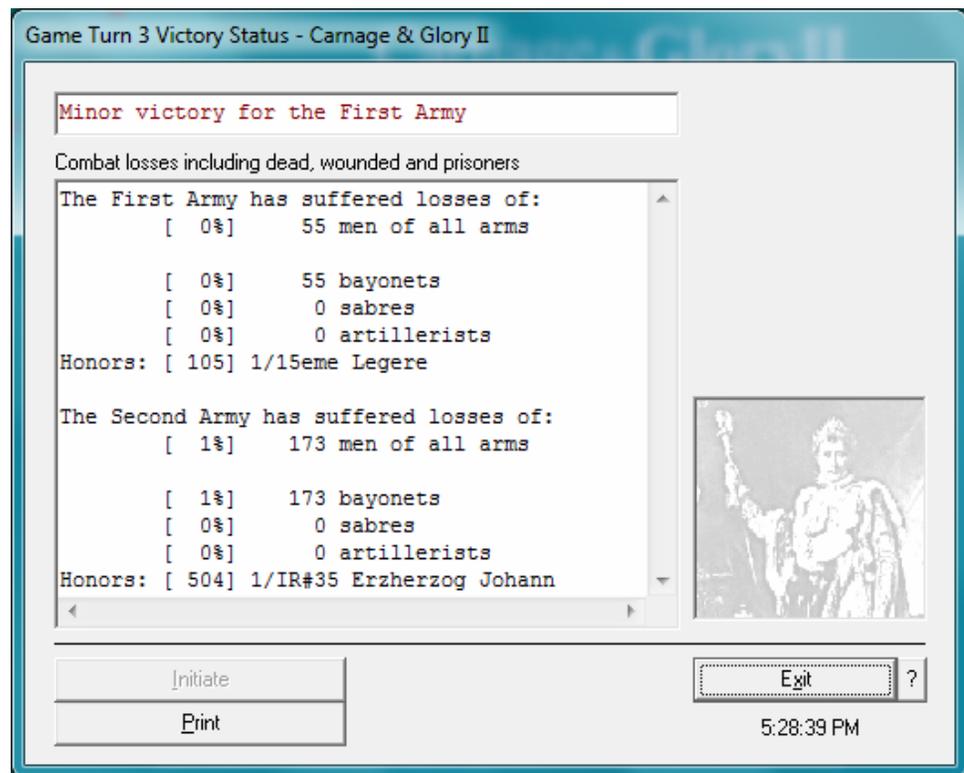


Figure 28
Current Victory Status form

To review the victory status of each army:

- Click **Post Battle** at the main screen menu bar.

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- Click **V**ictory **S**tatus
- Select either **C**urrent or **E**nd of **B**attle

The Victory Status form will now appear [see figure 28].

Click the command **I**nitiate to calculate the victory status of each army. Click the command **P**rint to obtain a printed hard copy for your game records. [You must have a printer available and on line to use this option].

The End of Battle victory status form also gives you the option to select which army holds either a territorial advantage or a victory advantage. The army with the territorial advantage would be the army that controls a majority of the battlefield. Whichever army does not hold this advantage will receive fewer walking wounded in the post battle analysis, as it is assumed the more severely wounded will remain upon the battlefield. The army with victory advantage would be the army that has achieved a greater percentage of the pre-game determined victory conditions. A victory condition might be percentage of enemy casualties inflicted, or the capture of, or holding, terrain features.

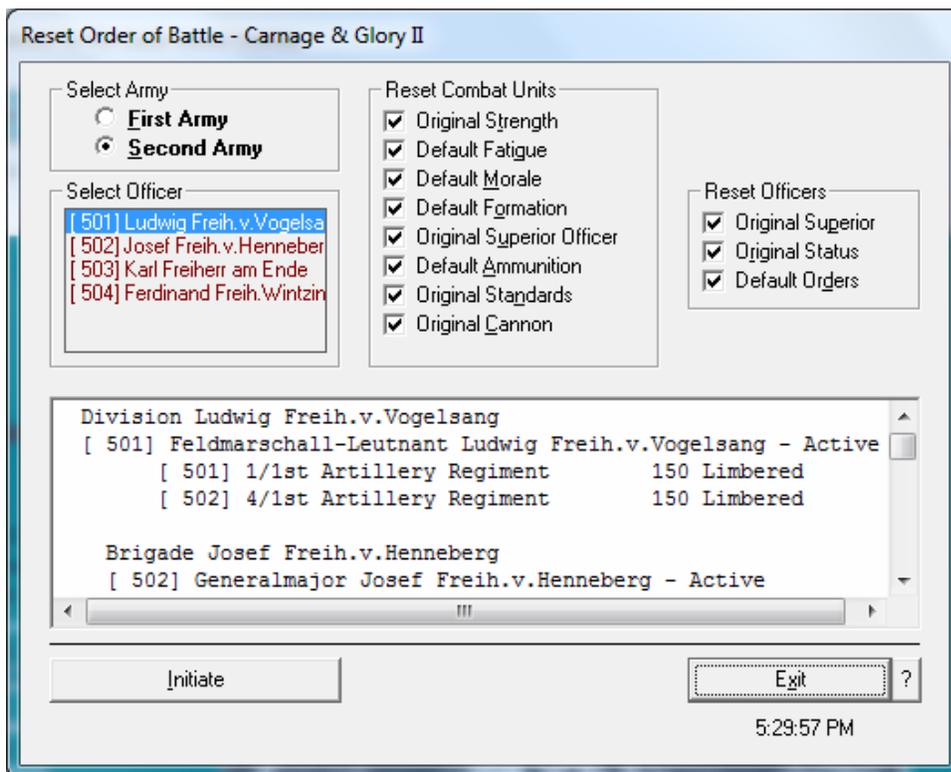


Figure 29
Reset Order of Battle form

Click the command **E**xit to return to the main menu screen.

Reset Order of Battle

This option is useful when you have completed a battle and wish to return the general officers and combat units to their pre-battle status. You have the option to reset a combat unit's original strength, fatigue, morale, formation and superior officer. If you do not check any of these options the combat unit's end of battle status will prevail. Similarly, you have the option to reset a general officer's original superior, status and orders. Reserve and flank marches cannot be reset; these will have to be manually reset.

To reset the original order of battle status for both or either army:

- Click **P**ost **B**attle at the main screen menu bar.
- Click **R**eset **O**rders of **B**attle

The Reset Order of Battle form will now appear [see figure 29].

Click the army you wish to work with, highlight the required officer from the Select Officer list, check the appropriate modifiers, and click the command **I**nitiate to reset the army accordingly. Repeat the operation for both armies as necessary. Although individual officer commands can be reset, it is most often only the highest-ranking officer that requires to be selected. In this case the reset function will automatically reset all the general officers and combat units throughout the entire chain of command.

Click the command **E**xit to return the main menu screen.

Reconstitute Army List

This option is useful when you have completed a battle and wish to return the general officers and

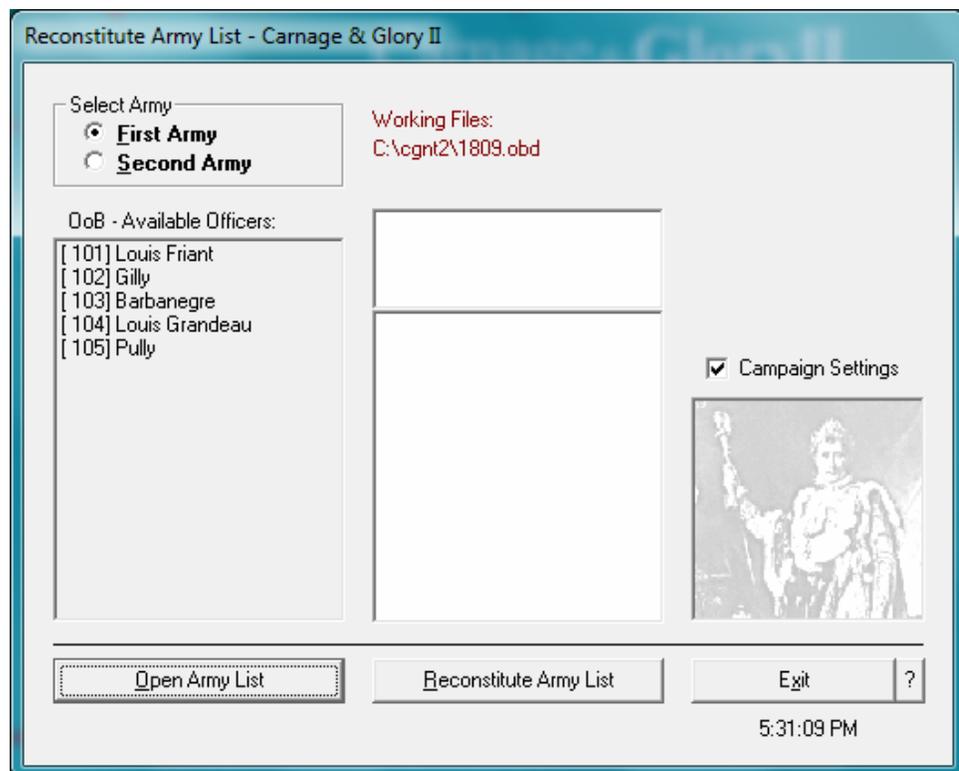


Figure 30
Reconstitute Army List form

combat units in their end of battle conditions, strengths, morale, fire and combat ratings, to their parent army lists, to simulate the effects and attrition of a campaign.

To return the officers and combat units to their parent army lists:

- Click **P**ost **B**attle at the main screen menu bar.
- Click **R**econstitute **A**rrmy **L**ist

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The Reconstitute Army List form will now appear [see figure 30].

Select the required army. Click the command **Open Army List** to open the appropriate parent army list for the selected army. Highlight and select the required officers from the OoB – Available Officer list, and click the command **Reconstitute Army List**. Repeat the procedure for both armies as necessary.

Click the command **Exit** to return the main menu screen.

Section Six: Tactical Rule Supplements and Designer Notes

Using **Carnage&GloryII** the gamer is free to focus entirely on the deployment and tactical engagement of the troops under his command. With **Carnage&GloryII** the gamer is no longer responsible for the calculation, chart checking, book-keeping and accounting usually associated with traditional rule sets. The use of the computer enables complex concepts to be incorporated into your wargames which require no mental effort from the gamer. **Carnage&GloryII** incorporates army initiative, an alternate move system, physical and mental fatigue, variable morale, ammunition supply, seasonal weather and variable ground conditions. Complex fire, combat and moral calculations are effortlessly resolved by the system, each calculation being based accurately upon the information stored within the system data base. Each system module is designed to historically simulate the tactics and formations relevant to the specific period. The gamer that uses common sense, reason and appropriate tactics will be rewarded, the gamer that doesn't will be punished.

The author has been wargaming and researching the Wars of the Seventeenth, Eighteenth and Nineteenth Centuries for nearly forty years, and historical accuracy and realism, combined with ease of play have always been paramount in the continuing development of **Carnage&GloryII**.

Unit Status Definitions

The following status conditions are controlled directly by the system and no markers are required to be placed with the units. However, typically if a unit is disordered, shaken or unsteady it will already have a compulsory movement marker.

Disordered

Unit status satisfactory but the ranks are somewhat disordered. Officers and file closers will be busy getting the men into better order, but this effort should be successful, providing enemy does not push their advantage. Disordered status will also be experienced by any unit conducting a charge, attack or pursuit movement. Disordered status will adversely affect a unit's ability to engage in fire or combat action.

Shaken

Unit cohesion beginning to break down and individuals are beginning to leave the ranks. Officers and file closers are struggling to maintain order. Shaken status will also be experienced by any unit that is physically passed through by a retiring or routing unit. Shaken status will adversely affect a unit's ability to engage in fire or combat action.

Unsteady

Internal unit command and control is disrupted due to open formation or other circumstances. Will self corrects once unit returns to more cohesive battle formation or situation.

Compulsory Movement Markers

Compulsory movement restrictions are marked during the end of turn phase. The presence of a marker is a clear indication that the unit is suffering some form of distress. It also helps locate units requiring to be rallied in the subsequent turn.

No Advance

Indicates the first level of compulsory movement restrictions, typically the affected unit will also be disordered. A previously disordered unit will be shaken. Unit may move away from the enemy and

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may advance if accompanied by an officer; however this officer must already be attached to the unit at the beginning of the movement phase. Unit may conduct fire and fight in combat.

Halt

Indicates the second level of compulsory movement restriction, typically the affected unit will also be shaken. A previously disordered unit will be shaken. No movement or formation changes can be made or attempted during the next movement phase; however, unit may conduct fire or combat action.

Retire/Retreat

Indicates the third level of compulsory movement restriction, typically the affected unit will also be shaken. The compulsory movement conducted during the end of turn phase will replace any movement or formation changes in next movement phase; however, unit may attempt to conduct fire or combat action to defend itself.

Rout

Indicates the fourth level of compulsory movement restriction, typically the unit will also be shaken. The compulsory movement conducted during the end of turn phase will replace any movement or formation changes in the next movement phase. The unit will not be capable of offensive or defensive fire action but may defend itself in combat action. Two consecutive routs means the unit is dispersed and must be removed from the tabletop, the system will tell you when this happens.

Understanding Army Morale and how it works

- Army morale is affected by average unit strength, moral and fatigue values, and is a calculation of these average values across all the units actually engaged upon a battlefield, excluding those units off table in reserve, on flank marches or physically dispersed.
- Army morale controls the ability to determine which side moves first or second during the movement phase. The side that moves first has the ability to seize territorial advantages and get the 'jump' during the charge sequence, which can sometimes catch an opponent flatfooted. The side that moves last can often out-maneuver an opponent and react better to his opponent's movement.
- The side at 75% or less army morale status may be affected adversely. Adverse affects include an automatic loss of morale from units currently less than 100% fatigue. Only units that have less than fresh fatigue [13 or more points] are affected. Typically each unit affected will lose one point of morale when army morale is between 71 and 75%, two points when between 66 and 70% and three points when less than 65%. There must, however, be a two point separation between opposing the army morale levels of the two armies for the lower side to be negatively affected.

What affects army morale?

- Combat losses
- Poor morale
- Poor fatigue

How to avoid army morale and loss of army initiative

- Avoid unnecessary combat losses; for example, avoid leaving troops in exposed positions
- Rally troops with poor morale whenever possible
- Avoid unnecessary action with might result in fatigue loss, such as

- Long range ineffective fire combat
- Frequent and unnecessary formation changes
- Unnecessary double movement, prolongs and other non-standard movement

Understanding Variable Morale

What affects morale during the game?

Morale levels, like fatigue, can go up or down depending on the circumstances relating to the combat unit. Any morale checks that might be taken during the course of the game are calculated from the morale level of the unit at that moment, and not the base morale level with which the unit entered the battle. Many factors can affect morale such as losses, fatigue, order, experience, training, and presence of a general officer, comparative morale of an opponent during a charge, formation of the unit or its immediate opponent and many others.

When is a morale check made?

Morale checks are calculated automatically at the following times:

- During the movement phase for units attempting to charge
- During the fire phase for units being charged and attempting to engage in defensive fire
- During the end of turn phase for units that have sustained strength, fatigue and morale loss during the preceding turn

The end-of-turn phase morale check will be made depending on the unit's current losses, morale level, and fatigue level, state of disorder or order and the level of available ammunition supply.

How do I improve the morale level of a combat unit during the game?

The morale of a unit can be improved at two occasions, and is achieved by the direct attachment of a general officer figure to the required combat unit. The two occasions are as follows:

- During the rally phase, following movement, fire and combat action resolution.
- During the end of turn phase. Only an officer previously attached to a unit during the previous rally phase will be capable of automatically rallying a unit at this time, and in such an instance the officer must be the direct commanding officer of the unit concerned.

During the rally phase any friendly officer can attempt to rally a unit currently in poor morale [the system will determine which units require to be rallied], however it is recommended that the natural chain of command be used to determine which officers can rally a unit. Normally only units under compulsory movement restrictions, such as, no advance, halt, retire or rout moves [which includes units that may have engaged in combat or broken during an attempt to deliver defensive fire against an attacking unit] are required to rally. The leadership qualities of the officer will directly affect the success or failure of rally attempt. A lightly wounded officer will inspire the men better than a non-blooded officer and the unit's direct commanding officer will have more value than an unknown or lower ranked officer. Sometimes multiple officers may attempt to rally a unit. Any officer can attempt to rally a specific unit at this time. The higher in the chain the commander is, the better the potential impact upon the unit's morale. Officers can only successfully rally one unit during the rally phase; unsuccessful officers can be moved to other units to attempt to rally them during the same phase. Successful officers should however be left attached to the rallied combat unit.

It should be obvious that the inclusion of officers in an order of battle is very important, and that the maintenance of the correct chain of command to ensure that the correct officers are available to restore order to their own commands is equally as important.

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The effectiveness of a unit is directly related to its morale status. The morale of a unit can increase or decrease dependent upon the physical circumstances affecting a unit at that moment

Morale can be positively reinforced by the presence of an attached competent officer at the following times:

- When attached to a unit attempting to charge
- When attached to a unit attempting defensive fire
- During the rally phase of each turn
- During the end of turn phase
- When attached to a unit engaged in combat

The ability of an officer to rally a unit is affected by the following:

- His rank
- His competency
- His relative position in the unit's chain of command

Understanding Variable Unit Fatigue

What induces fatigue during the game?

The fatigue level of a combat unit is both a measure of its physical and mental condition; physically how tired or rested a unit is and mentally how relaxed or stressed the unit is. For example, the action of doubling may physically fatigue a unit, whilst engaging in a prolonged firefight may incur mental fatigue due to the increased stress of the unit being in the heat of action. Each of the following will incur some level of fatigue upon a combat unit:

- Performing engineering tasks
- Performing formation changes and engaging in charges or attacks
- Performing fire action
- Performing close combat
- Performing compulsory retire or rout movement

Some tasks will incur more fatigue than others, for example doubling will incur more fatigue than forming column from line. Firing at 100% incurs more fatigue than firing at 50%. Normal movement does not incur fatigue. A rested unit is one with 100% fatigue level, and exhausted unit is one with 0% fatigue

How does a unit recover lost fatigue?

Fatigue levels are recovered simply by not performing or engaging in any form of action other than conducting normal movement. Simply don't change formation or charge, don't fire and don't engage in combat. An artillery unit will recover fatigue faster if limbered, as a deployed battery is potentially under more stress and therefore less relaxed and subsequently less likely to recover fatigue at the same rate as a battery that has limbered and withdrawn from the heat of action.

Fatigue is an ever present factor in the performance of any soldier, affecting both his physical and mental state. Though rarely used with traditional rule systems, due to the book-keeping required to track the fatigue status of the units, Carnage&GloryII effortlessly incorporates this important element into your game. The principles are relatively straight-forward and follow rules of commonsense. Don't expect a unit to perform tirelessly, changing formation, engaging in countless

volleys and then performing the perfect charge without showing any signs of fatigue or stress – that would be unrealistic. Similarly don't expect miracles from your cavalry either – horses can tire too!

- The effectiveness of a unit is directly related to its physical and mental state
- Physical exhaustion is incurred by any form of non-standard movement, such as doubling, prolonging, routing or retiring, and by prolonged fire action and hand-to-hand combat
- Mental exhaustion is incurred by frequent formation changes, routing, retiring, fire action and hand-to-hand combat
- Levels of fatigue loss will be affected by the experience of the unit, for example a conscript unit will incur mental fatigue more easily than a veteran or crack unit under certain circumstances

Recovery of fatigue can be achieved by simply avoiding any activity which might incur fatigue loss, therefore avoid:

- Formation changes and non-standard movement
- Unnecessary fire action, for example inflicting two casualties on an opponent at long range may be more damaging to your own unit and army morale due to fatigue loss than to the enemy who has only suffered minimal loss with no loss of fatigue

A limbered battery will recover fatigue more quickly than a deployed battery due to a relaxation of the level of combat stress on the unit.

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Appendix One: Ground, Figure and Time Scales

Ground scale can be whatever you decide to suit your playing area and miniatures collections. As a guide:

20-40 mm figures -	1 inch or 25 mm equals 25 paces
10-18 mm figures -	1 inch or 25 mm equals 50 paces
6 mm figures -	1 inch or 25 mm equals 100 or 50 paces

I recommend the pace as the practical distance measurement for movement and ranges, because this was traditionally the form of measurement used by military institutions. A unit frontage would be measured in so many paces, and the range of the firearms would be measured in so many paces. And although the measurement typically varied from period to period and nationality to nationality, I have assumed that one pace measures approximately 27 inches, therefore four paces equals three yards. I recommend that you use a calibrated movement and range stick, marked off in 25/50 pace increments. This can be adequately made from a piece of dowel or bass wood appropriately marked off in one inch increments. Alternatively pace stick labels are provided for download in the files section of the Carnage and Glory 2 Yahoo Group:

<http://games.groups.yahoo.com/group/carnageandglory2/>

There are no mandatory figure scales. One miniature figure can be used to represent as many or as few real men as required. However, if you are basing figures for the first time, recommendations for appropriate base sizes are offered in appendix two. Please note that these are only guidelines, and are not necessarily mandatory. But for those of you that do not have based miniatures, they should give an accurate guide to the required deployment distances. If you have been using other rule systems prior to obtaining Carnage&GloryII, there is no need to rebase your miniature's collection. Simply use your old ground and figure scale. Carnage&GloryII understands your combat unit strengths in terms of real men, not the number of miniatures, and understands the ground scale in terms of paces, not inches or centimeters. So if your existing unit represents, for example, five hundred men, input that strength during the Army List Unit Creation phase.

Time scale is represented by each game turn equating to fifteen real minutes.

Unit Markers

For the purposes of the game, each combat unit and officer should be provided with a numbered marker, which represents its unique ID number. This marker should remain with the unit or officer at all times on the wargame terrain. It is recommended that the combat unit ID number tag also carries the ID number of the officer commanding that unit – this helps during the rally phase to identify which officer should best rally which combat unit. It is also recommended that the color of the officer ID number is different to that of the combat units. It is possible that an officer can have the same number as a combat unit, which can result in incorrect input when calling out targets. To avoid any unnecessary confusion it is recommended that you mark the unit ID in black, and the officer number in red.

Appendix Two: Basing Conventions

If you already have figures based, then there is no need to rebase your figures, simply select the appropriate ground scale to suit the figures in your collection [see appendix one], then use the following charts to determine how many men are represented by the physical base frontages.

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Ranks
1784-1815
1" = 25 Paces [1 mm = 1 Pace]

Infantry [Close Order - 22" frontage per file]												
Model Frontages in Inches												
1/8"	1"	2"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
8	61	123	184	245	307	368	430	491	552	614	675	736
12	92	184	276	368	460	552	644	736	828	920	1013	1105

5/8"	3/4"
38	46
58	69

Infantry [Open Order - 48" frontage per file]												
Model Frontages in Inches												
1/8"	1"	2"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
4	56	113	169	225	281	338	394	450	506	563	619	675
8	80	160	240	320	400	480	560	640	720	800	880	960

Cavalry [Heavy/Medium Close Order - 36" frontage per file]												
Model Frontages in Inches												
1/8"	1"	2"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
5	38	75	113	150	188	225	263	300	338	375	413	450

Cavalry [Light Close Order - 48" frontage per file]												
Model Frontages in Inches												
1/8"	1"	2"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
4	28	56	84	113	141	169	197	225	253	281	309	338
8	56	113	169	225	281	338	394	450	506	563	619	675

Cavalry [Open Order - 96" frontage per file]												
Model Frontages in Inches												
1/8"	1"	2"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
2	28	56	84	113	141	169	197	225	253	281	309	338
4	56	113	169	225	281	338	394	450	506	563	619	675

Artillery [20 paces per cannon]					
Number of Cannon					
1	2	3	4	6	8
12	24	36	48	72	96

Model Frontage in Inches					
0.8	1.6	2.4	3.2	4.8	6.4
9.6	19.2	28.8	38.4	57.6	76.8

To calculate how many actual men your bases represent, measure the base frontage, find that on the top line, then find the number of ranks represented by the unit, and where the two numbers intersect that is the number of actual rank and file represented by the unit.

For example:
 Your infantry unit is six inches wide and is in three ranks. That represents 552 rank and file.
 To account for officers, nco's and musicians add 5-10% to the number of rank and file

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Ranks

1784-1815
1" = 50 Paces [1 mm = 2 Paces]

Infantry [Close Order - 22" frontage per file]

Model Frontages in Inches												
1/8"	1"	1.5"	2"	2.5"	3"	3.5"	4"	4.5"	5"	5.5"	6"	
2	15	123	184	245	307	368	430	491	552	614	675	736
3	23	184	276	368	460	552	644	736	828	920	1013	1105

Infantry [Open Order - 48" frontage per file]

Model Frontages in Inches												
1/8"	2"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"	13"
2	7	113	169	225	281	338	394	450	506	563	619	675
												731

Cavalry [Heavy/Medium Close Order - 36" frontage per file]

Model Frontages in Inches												
1/8"	1"	1.5"	2"	2.5"	3"	3.5"	4"	4.5"	5"	5.5"	6"	
2	9	75	113	150	188	225	263	300	338	375	413	450

Cavalry [Light Close Order - 48" frontage per file]

Model Frontages in Inches												
1/8"	1"	1.5"	2"	2.5"	3"	3.5"	4"	4.5"	5"	5.5"	6"	
2	7	56	84	113	141	169	197	225	253	281	309	338

Cavalry [Open Order - 96" frontage per file]

Model Frontages in Inches												
1/8"	2"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"	
2	4	56	84	113	141	169	197	225	253	281	309	338

Artillery [20 paces per cannon]

Number of Cannon						
1	2	3	4	6	8	12
Model Frontage in Inches	0.4	0.8	1.2	1.6	2.4	3.2
						4.8

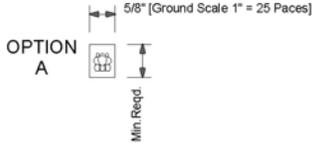
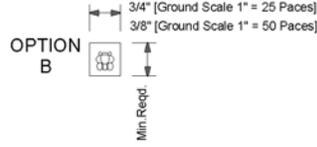
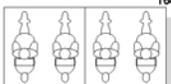
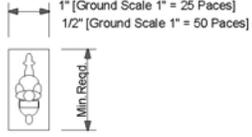
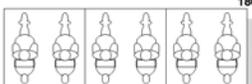
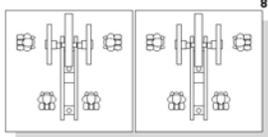
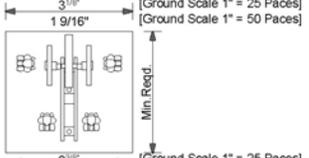
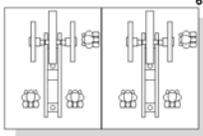
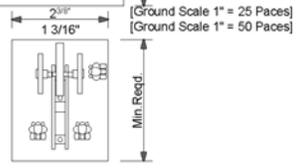
To calculate how many actual men your bases represent. Measure the base frontage, find that on the top line, then find the number of ranks represented by the unit, and where the two numbers intersect that is the number of actual rank and file represented by the unit.

For example: Your infantry unit is six inches wide and is in three ranks. That represents 552 rank and file.

To account for officers, nco's and musicians add 5-10% to the number of rank and file

Early French [1796-1807]:

If you do not have figured already based, or wish to rebase your figures, use the following diagrams to determine how best to base your figures to suit the ground scale and figures you use.

PERIOD	ORGANIZATION	TYPICAL UNIT REPRESENTATION	TYP. SINGLE BASE SIZE
Third and Fourth Coalition and 1807-1808 Peninsular	Three-rank strength	<p>Typical 'Field' Strength 0 63 126 189 252 315 378 441 504 567 630 699 762</p> <p>TACTICAL UNIT French Battalion 9 companies 1796-1808 2-3 Bttns/Regt.</p>  <p>Battalions have integral skirmish companies provided by third-rankers or voltigeur companies [post 1803]</p>	<p>OPTION A</p> 
	Three-rank strength	<p>Typical 'Field' Strength 0 75 150 225 300 375 450 525 600 675 750</p> <p>TACTICAL UNIT French Battalion 9 companies 1796-1808 2-3 Bttns/Regt.</p>  <p>Battalions have integral skirmish companies provided by third-rankers or voltigeur companies [post 1803]</p>	<p>OPTION B</p> 
		<p>Typical 'Field' Strength 0 41 82 123 164</p> <p>TACTICAL UNIT French Heavy Squadron 2-4 Squadrons/Regt. 1805-06 2-3 Squadrons/Regt.</p> 	
		<p>Typical 'Field' Strength 0 30 60 90 120 150 180</p> <p>TACTICAL UNIT French Light Squadron 2-4 Squadrons/Regt. 1805-06 2-3 Squadrons/Regt.</p> 	<p>Note: Infantry and Cavalry strengths represent all Rank and File including an additional 8% to account for Officers, NCO's and Musicians within the unit strength.</p>
	<p>Typical 'Field' Strength 0 1 2 3 4 5 6 7 8</p> <p>TACTICAL UNIT French Foot Battery 6 cannon and 2 howitzers 200 men</p> 		
	<p>Typical 'Field' Strength 0 1 2 3 4 5 6 7 8</p> <p>TACTICAL UNIT French Horse Battery 4 cannon and 2 howitzers 150 men</p> 		

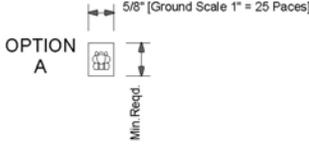
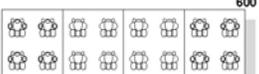
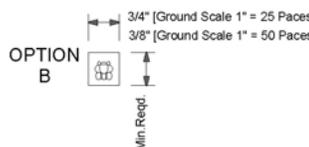
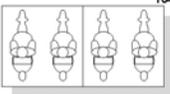
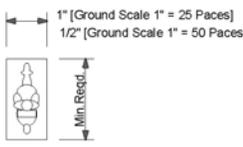
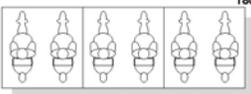
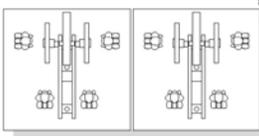
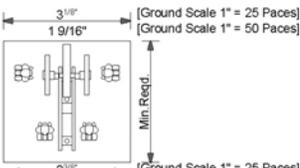
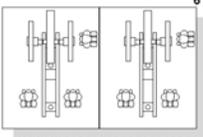
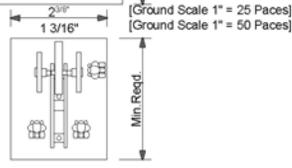
Representation of limbers, horses and teamsters, although not required, can be an attractive and practical addition to your miniature armies. These should be based on minimum width and depth stands, accommodating the limber and one or more horses, in pairs or tanden according to period and nationality.

The presence of the limber stand with the cannon and crew is used to signify that the cannon is limbered and unable to fire. Remove or otherwise position the limber stand to represent that the cannon are deployed and ready for fire action.

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Carnage & Glory II

Late French [1808-1815]:

PERIOD	ORGANIZATION	TYPICAL UNIT REPRESENTATION	TYP. SINGLE BASE SIZE
		<p>Typical 'Field' Strength</p> <p>Three-rank strength 0 63 126 189 252 315 378 441 504 567 630</p>	
1809-1814 Peninsular, Fifth Coalition, Russian Campaign, Sixth and Seventh Coalition	<p>TACTICAL UNIT</p> <p>French Battalion 6 companies 1808-1815 3-4 Bttns/Regt.</p>	 <p>630</p> <p>Battalion guns were employed during the Russian campaign and by some formations during the Fifth Coalition [1809]. These guns can be attached to the battalion or created as independent Regimental batteries.</p> <p>Typical 'Field' Strength</p> <p>Three-rank strength 0 75 150 225 300 375 450 525 600</p>	<p>OPTION A</p>  <p>5/8" [Ground Scale 1" = 25 Paces]</p> <p>Min. Req'd.</p>
	<p>TACTICAL UNIT</p> <p>French Battalion 6 companies 1808-1815 3-4 Bttns/Regt.</p>	 <p>600</p> <p>All Battalions have integral skirmish companies provided by third-rankers or voltigeur companies when present.</p> <p>Typical 'Field' Strength</p> <p>Three-rank strength 0 41 82 123 164</p>	<p>OPTION B</p>  <p>3/4" [Ground Scale 1" = 25 Paces] 3/8" [Ground Scale 1" = 50 Paces]</p> <p>Min. Req'd.</p>
	<p>TACTICAL UNIT</p> <p>French Heavy Squadron 2-4 Squadrons/Regt.</p>	 <p>164</p> <p>Typical 'Field' Strength</p> <p>Three-rank strength 0 30 60 90 120 150 180</p>	 <p>1" [Ground Scale 1" = 25 Paces] 1/2" [Ground Scale 1" = 50 Paces]</p> <p>Min. Req'd.</p>
	<p>TACTICAL UNIT</p> <p>French Light Squadron 2-4 Squadrons/Regt.</p>	 <p>180</p> <p>Typical 'Field' Strength</p> <p>Three-rank strength 0 1 2 3 4 5 6 7 8</p>	<p>Note: Infantry and Cavalry strengths represent all Rank and File including an additional 8% to account for Officers, NCO's and Musicians within the unit strength.</p>
	<p>TACTICAL UNIT</p> <p>French Foot Battery 6 cannon and 2 howitzers 200 men</p>	 <p>8</p>	 <p>3 1/8" [Ground Scale 1" = 25 Paces] 1 9/16" [Ground Scale 1" = 50 Paces]</p> <p>Min. Req'd.</p>
	<p>TACTICAL UNIT</p> <p>French Horse Battery 4 cannon and 2 howitzers 150 men</p>	 <p>6</p>	 <p>2 3/8" [Ground Scale 1" = 25 Paces] 1 3/16" [Ground Scale 1" = 50 Paces]</p> <p>Min. Req'd.</p>
		<p>Representation of limbers, horses and teamsters, although not required, can be an attractive and practical addition to your miniature armies. These should be based on minimum width and depth stands, accommodating the limber and one or more horses, in pairs or tanden according to period and nationality.</p> <p>The presence of the limber stand with the cannon and crew is used to signify that the cannon is limbered and unable to fire. Remove or otherwise position the limber stand to represent that the cannon are deployed and ready for fire action.</p>	

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Austrian [1805 Mack's Reforms]:

PERIOD	ORGANIZATION	TYPICAL UNIT REPRESENTATION	TYP. SINGLE BASE SIZE
Third Coalition	<p>Three-rank strength</p> <p>0 63 126 189 252 315 378 441 504 567 630</p> <p>TACTICAL UNIT Typical Battalion 4 companies 1805 4 Bttns/Regt.</p>	<p>Typical 'Field' Strength</p> <p>630</p> <p>Battalion guns were common prior to 1806. These can be either attached directly to the battalion or created as independent units at brigade or regimental levels</p>	<p>OPTION A</p> <p>5/8" [Ground Scale 1" = 25 Paces]</p> <p>Min. Req'd.</p>
	<p>Three-rank strength</p> <p>0 75 150 225 300 375 450 525 600</p> <p>TACTICAL UNIT Typical Battalion 4 companies 1805 4 Bttns/Regt.</p>	<p>Typical 'Field' Strength</p> <p>600</p> <p>All Battalions have integral skirmish companies provided by third-rankers</p>	<p>OPTION B</p> <p>3/4" [Ground Scale 1" = 25 Paces] 3/8" [Ground Scale 1" = 50 Paces]</p> <p>Min. Req'd.</p>
	<p>Three-rank strength</p> <p>0 41 82 123 164 205 246</p> <p>TACTICAL UNIT Austrian Heavy Division 1805 3 Divisions/Regt.</p>	<p>Typical 'Field' Strength</p> <p>246</p> <p>Two squadrons per division</p>	<p>1" [Ground Scale 1" = 25 Paces] 1/2" [Ground Scale 1" = 50 Paces]</p> <p>Min. Req'd.</p>
	<p>Three-rank strength</p> <p>0 30 60 90 120 150 180 210 240</p> <p>TACTICAL UNIT Austrian Light Division 1805 4 Divisions/Regt.</p>	<p>Typical 'Field' Strength</p> <p>240</p> <p>Two squadrons per division</p>	<p>Note: Infantry and Cavalry strengths represent all Rank and File including an additional 8% to account for Officers, NCO's and Musicians within the unit strength.</p>
	<p>Three-rank strength</p> <p>0 1 2 3 4 5 6</p> <p>TACTICAL UNIT Austrian Foot and Horse Battery 4 cannon and 2 howitzers 150 men</p>	<p>Typical 'Field' Strength</p> <p>6</p> <p>Representation of limbers, horses and teamsters, although not required, can be an attractive and practical addition to your miniature armies. These should be based on minimum width and depth stands, accommodating the limber and one or more horses, in pairs or tanden according to period and nationality.</p> <p>The presence of the limber stand with the cannon and crew is used to signify that the cannon is limbered and unable to fire. Remove or otherwise position the limber stand to represent that the cannon are deployed and ready for fire action.</p>	<p>2 3/8" [Ground Scale 1" = 25 Paces] 1 3/16" [Ground Scale 1" = 50 Paces]</p> <p>Min. Req'd.</p>

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Austrian [1796-1804 and 1806-1815]:

PERIOD	ORGANIZATION	TYPICAL UNIT REPRESENTATION	TYP. SINGLE BASE SIZE
		<p>Typical 'Field' Strength</p> <p>Three-rank strength 0 63 126 189 252 315 378 441 504 567 630 699 762 951</p>	
Fifth Coalition Russian Campaign, Sixth and Seventh Coalition	<p>TACTICAL UNIT Austrian/German Bttn 6 companies 1796-1804 and 1806-1815 3 Bttns/Regt.</p>	<p>762</p>	<p>OPTION A</p> <p>5/8" [Ground Scale 1" = 25 Paces]</p> <p>Min. Req'd.</p> <p>Battalion guns were common prior to 1806. These can be either attached directly to the battalion or created as independent units at brigade or regimental levels.</p> <p>All Battalions have integral skirmish companies provided by third-rankers.</p>
	<p>TACTICAL UNIT Austrian/Hungarian Bttn 6 companies 1796-1804 and 1806-1815 3 Bttns/Regt.</p>	<p>951</p>	
		<p>Typical 'Field' Strength</p> <p>Three-rank strength 0 75 150 225 300 375 450 525 600 675 750 900</p>	
	<p>TACTICAL UNIT Austrian/German Bttn 6 companies 1796-1804 and 1806-1815 3 Bttns/Regt.</p>	<p>750</p>	<p>OPTION B</p> <p>3/4" [Ground Scale 1" = 25 Paces] 3/8" [Ground Scale 1" = 50 Paces]</p> <p>Min. Req'd.</p>
	<p>TACTICAL UNIT Austrian/Hungarian Bttn 6 companies 1796-1804 and 1806-1815 3 Bttns/Regt.</p>	<p>900</p>	
		<p>Typical 'Field' Strength</p> <p>0 41 82 123 164 205 246</p>	
	<p>TACTICAL UNIT Austrian Heavy Division 1796-1809 3 Divisions/Regt. 1810-1815 2 Divisions/Regt.</p>	<p>246</p> <p>Two squadrons per division</p>	<p>1" [Ground Scale 1" = 25 Paces] 1/2" [Ground Scale 1" = 50 Paces]</p> <p>Min. Req'd.</p> <p>Note: Infantry and Cavalry strengths represent all Rank and File including an additional 8% to account for Officers, NCO's and Musicians within the unit strength.</p>
	<p>TACTICAL UNIT Austrian Light Division 1796-1809 4 Divisions/Regt. 1810-1815 3 Divisions/Regt.</p>	<p>240</p> <p>Two squadrons per division</p>	
		<p>Typical 'Field' Strength</p> <p>0 1 2 3 4 5 6 7 8</p>	
	<p>TACTICAL UNIT Austrian Brigade Battery 8 cannon 200 men</p>	<p>8</p>	<p>3 1/8" [Ground Scale 1" = 25 Paces] 1 9/16" [Ground Scale 1" = 50 Paces]</p> <p>Min. Req'd.</p> <p>2 3/8" [Ground Scale 1" = 25 Paces] 1 3/16" [Ground Scale 1" = 50 Paces]</p> <p>Min. Req'd.</p>
	<p>TACTICAL UNIT Austrian Foot and Horse Battery 4 cannon and 2 howitzers 150 men</p>	<p>6</p>	
		<p>Representation of limbers, horses and teamsters, although not required, can be an attractive and practical addition to your miniature armies. These should be based on minimum width and depth stands, accommodating the limber and one or more horses, in pairs or tanden according to period and nationality.</p> <p>The presence of the limber stand with the cannon and crew is used to signify that the cannon is limbered and unable to fire. Remove or otherwise position the limber stand to represent that the cannon are deployed and ready for fire action.</p>	

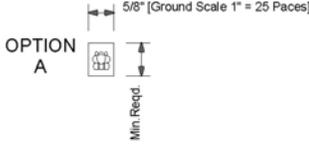
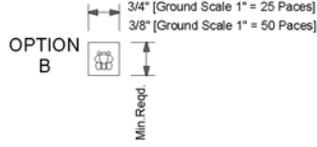
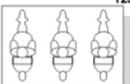
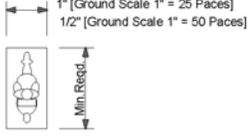
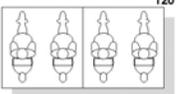
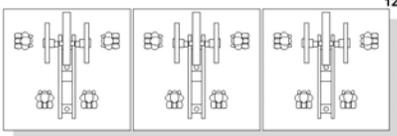
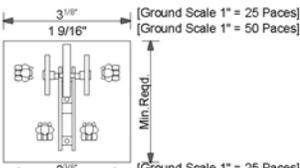
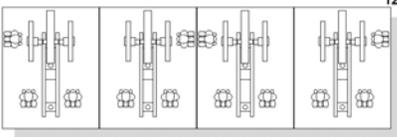
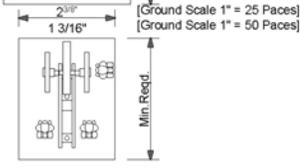
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Russian [1796-1810]:

PERIOD	ORGANIZATION	TYPICAL UNIT REPRESENTATION	TYP. SINGLE BASE SIZE
Third Coalition and Fourth Coalition	<p>Three-rank strength</p> <p>0 63 126 189 252 315 378 441 504</p> <p>TACTICAL UNIT</p> <p>Russian Battalion 4 companies 1796-1807 3 Bttns/Regt.</p>	<p>Typical 'Field' Strength</p> <p>504</p> <p>Battalion guns were common during the Third and Fourth Coalition, and can either be attached to each battalion, or grouped as independent units at Regimental or Brigade level.</p> <p>Typical 'Field' Strength</p> <p>0 75 150 225 300 375 450 525</p>	<p>OPTION A</p> <p>5/8" [Ground Scale 1" = 25 Paces]</p> <p>Min. Req'd.</p>
	<p>Three-rank strength</p> <p>0 75 150 225 300 375 450 525</p> <p>TACTICAL UNIT</p> <p>Russian Battalion 4 companies 1796-1807 3 Bttns/Regt.</p>	<p>Typical 'Field' Strength</p> <p>525</p> <p>Battalions do not have integral skirmish companies</p>	<p>OPTION B</p> <p>3/4" [Ground Scale 1" = 25 Paces] 3/8" [Ground Scale 1" = 50 Paces]</p> <p>Min. Req'd.</p>
	<p>TACTICAL UNIT</p> <p>Russian Heavy Squadron 1796-1807 5 Squadrons/Regt.</p>	<p>Typical 'Field' Strength</p> <p>0 41 82 123</p> <p>123</p>	<p>1" [Ground Scale 1" = 25 Paces] 1/2" [Ground Scale 1" = 50 Paces]</p> <p>Min. Req'd.</p>
	<p>TACTICAL UNIT</p> <p>Russian Light Squadron 2 Battalions/Regt. 1796-1807 10 Squadrons/Regt.</p>	<p>Typical 'Field' Strength</p> <p>0 30 60 90 120</p> <p>120</p>	<p>Note: Infantry and Cavalry strengths represent all Rank and File including an additional 8% to account for Officers, NCO's and Musicians within the unit strength.</p>
	<p>Three-rank strength</p> <p>0 1 2 3 4 5 6 7 8 9 10 11 12</p> <p>TACTICAL UNIT</p> <p>Russian Foot and Horse Battery 8 cannon and 4 howitzers 300 men</p>	<p>Typical 'Field' Strength</p> <p>12</p>	<p>3 1/16" [Ground Scale 1" = 25 Paces] 1 9/16" [Ground Scale 1" = 50 Paces]</p> <p>Min. Req'd.</p>
	<p>TACTICAL UNIT</p> <p>Alternate Russian Foot and Horse Battery 8 cannon and 4 howitzers 300 men</p>	<p>Typical 'Field' Strength</p> <p>12</p>	<p>2 3/16" [Ground Scale 1" = 25 Paces] 1 3/16" [Ground Scale 1" = 50 Paces]</p> <p>Min. Req'd.</p>
<p>Representation of limbers, horses and teamsters, although not required, can be an attractive and practical addition to your miniature armies. These should be based on minimum width and depth stands, accommodating the limber and one or more horses, in pairs or tanden according to period and nationality.</p> <p>The presence of the limber stand with the cannon and crew is used to signify that the cannon is limbered and unable to fire. Remove or otherwise position the limber stand to represent that the cannons are deployed and ready for fire action.</p>			
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Russian [1811-1815]:

PERIOD	ORGANIZATION	TYPICAL UNIT REPRESENTATION	TYP. SINGLE BASE SIZE
Russian Campaign and Sixth Coalition	Three-rank strength	<p>Typical 'Field' Strength 0 63 126 189 252 315 378 441 504</p> <p>TACTICAL UNIT Russian Battalion 4 companies 1808-1815 2 Bttns/Regt.</p>  <p>All Battalions have integral skirmish companies provided by Streki [light] platoon</p>	<p>OPTION A</p> 
	Three-rank strength	<p>Typical 'Field' Strength 0 75 150 225 300 375 450 525</p> <p>TACTICAL UNIT Russian Battalion 4 companies 1808-1815 2 Bttns/Regt.</p>  <p>All Battalions have integral skirmish companies provided by Streki [light] platoon</p>	<p>OPTION B</p> 
	Three-rank strength	<p>Typical 'Field' Strength 0 41 82 123</p> <p>TACTICAL UNIT Russian Heavy Squadron 1808-1812 4 Squadrons/Regt. 1812-1815 3 Squadrons/Regt.</p> 	
	<p>Typical 'Field' Strength 0 30 60 90 120</p> <p>TACTICAL UNIT Russian Light Squadron 2 Battalions/Regt. 1808-1812 8 Squadrons/Regt. 1813-1815 6 Squadrons/Regt.</p> 	<p>Note: Infantry and Cavalry strengths represent all Rank and File including an additional 8% to account for Officers, NCO's and Musicians within the unit strength.</p>	
	<p>Typical 'Field' Strength 0 1 2 3 4 5 6 7 8 9 10 11 12</p> <p>TACTICAL UNIT Russian Foot and Horse Battery 8 cannon and 4 howitzers 300 men</p> 		
	<p>TACTICAL UNIT Alternate Russian Foot and Horse Battery 8 cannon and 4 howitzers 300 men</p> 		
<p>Representation of limbers, horses and teamsters, although not required, can be an attractive and practical addition to your miniature armies. These should be based on minimum width and depth stands, accommodating the limber and one or more horses, in pairs or tanden according to period and nationality.</p> <p>The presence of the limber stand with the cannon and crew is used to signify that the cannon is limbered and unable to fire. Remove or otherwise position the limber stand to represent that the cannon are deployed and ready for fire action.</p>			
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Prussian:

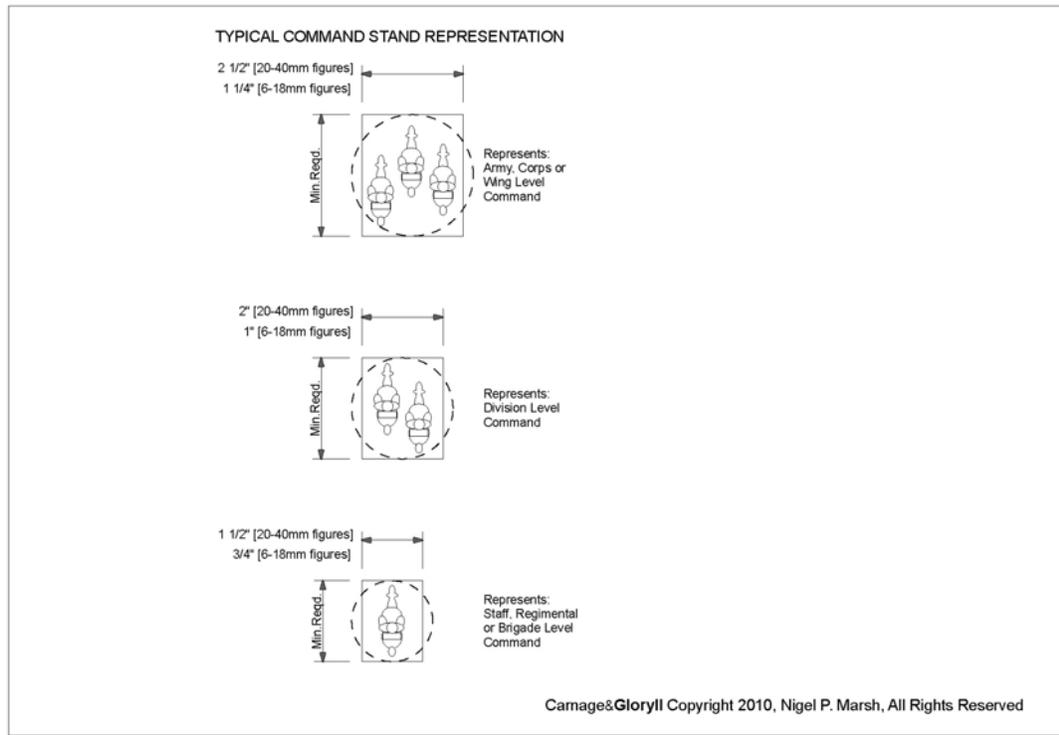
PERIOD	ORGANIZATION	TYPICAL UNIT REPRESENTATION	TYP. SINGLE BASE SIZE
		<p>Typical 'Field' Strength</p> <p>Three-rank strength 0 63 126 189 252 315 378 441 504 567 630</p>	
Fourth Coalition	<p>TACTICAL UNIT Prussian Battalion 4 companies 1796-1807 2 Bttns/Regt.</p>		<p>OPTION A</p> <p>5/8" [Ground Scale 1" = 25 Paces]</p> <p>Min. Req'd.</p>
Russian Campaign Sixth and Seventh Coalition	<p>TACTICAL UNIT Prussian Battalion 4 companies 1808-1815 3 Bttns/Regt.</p>		<p>Battalion guns were common prior to 1808. These can be either attached directly to the battalion or created as independent units at brigade or regimental levels</p> <p>All Battalions have integral skirmish companies provided by third-rankers and attached Schutzen</p>
Fourth Coalition	<p>TACTICAL UNIT Prussian Battalion 4 companies 1796-1807 2 Bttns/Regt.</p>	<p>Typical 'Field' Strength</p> <p>Three-rank strength 0 75 150 225 300 375 450 525 600</p>	<p>OPTION B</p> <p>3/4" [Ground Scale 1" = 25 Paces] 3/8" [Ground Scale 1" = 50 Paces]</p> <p>Min. Req'd.</p>
Russian Campaign Sixth and Seventh Coalition	<p>TACTICAL UNIT Prussian Battalion 4 companies 1808-1815 3 Bttns/Regt.</p>		
		<p>Typical 'Field' Strength</p> <p>0 41 82 123</p>	<p>1" [Ground Scale 1" = 25 Paces] 1/2" [Ground Scale 1" = 50 Paces]</p> <p>Min. Req'd.</p>
	<p>TACTICAL UNIT Prussian Heavy Squadron 1796-1807 5 Squadrons/Regt. 1808-1815 4 Squadrons/Regt.</p>	<p>Typical 'Field' Strength</p> <p>0 30 60 90 120</p>	
	<p>TACTICAL UNIT Prussian Light Squadron 1796-1807 10 Squadrons/Regt. 1808-1815 4 Squadrons/Regt.</p>	<p>Typical 'Field' Strength</p> <p>0 1 2 3 4 5 6 7 8</p>	<p>Note: Infantry and Cavalry strengths represent all Rank and File including an additional 8% to account for Officers, NCO's and Musicians within the unit strength.</p>
	<p>TACTICAL UNIT Prussian Foot and Horse Battery 6 cannon and 2 howitzers 200 men</p>		<p>3 1/16" [Ground Scale 1" = 25 Paces] 1 9/16" [Ground Scale 1" = 50 Paces]</p> <p>Min. Req'd.</p>
		<p>Representation of limbers, horses and teamsters, although not required, can be an attractive and practical addition to your miniature armies. These should be based on minimum width and depth stands, accommodating the limber and one or more horses, in pairs or tandem according to period and nationality.</p> <p>The presence of the limber stand with the cannon and crew is used to signify that the cannon is limbered and unable to fire. Remove or otherwise position the limber stand to represent that the cannon are deployed and ready for fire action.</p>	

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British:

PERIOD	ORGANIZATION	TYPICAL UNIT REPRESENTATION	TYP. SINGLE BASE SIZE
Peninsular and Seventh Coalition	<p>Two-rank strength 0 50 100 150 200 250 300 350 400 450 500 550 600</p> <p>TACTICAL UNIT</p> <p>British Regiment 10 companies 1796-1815</p> <p>Two-rank strength 600 Three-rank strength 900</p>	<p>Typical 'Field' Strength</p> <p>Two-rank strength 0 41 82 123 164 205 246 287 328 369 410 451 492 533 574 615</p> <p>TACTICAL UNIT</p> <p>British Regiment 10 companies 1796-1815</p> <p>Two-rank strength 615 Three-rank strength 922</p>	<p>OPTION A</p> <p>3/4" [Ground Scale 1" = 25 Paces] 3/8" [Ground Scale 1" = 50 Paces]</p> <p>Min. Regt.</p> <p>The Light Company would be detached and incorporated into a Brigade Light Bthn between 1808-1815.</p> <p>However, the parent battalion should still be given skirmish capability, which would be provided by the Grenadier or other company troops.</p>
	<p>Typical 'Field' Strength</p> <p>Two-rank strength 0 41 82 123</p> <p>TACTICAL UNIT</p> <p>British Heavy Squadron 3/4 Squadrons/Regt.</p> <p>Three-rank strength 123</p>	<p>1" [Ground Scale 1" = 25 Paces] 1/2" [Ground Scale 1" = 50 Paces]</p> <p>Min. Regt.</p>	
	<p>Typical 'Field' Strength</p> <p>Two-rank strength 0 30 60 90 120</p> <p>TACTICAL UNIT</p> <p>British Light Squadron 3/4 Squadrons/Regt.</p> <p>Three-rank strength 120</p>	<p>Note: Infantry and Cavalry strengths represent all Rank and File including an additional 8% to account for Officers, NCO's and Musicians within the unit strength.</p>	
	<p>Typical 'Field' Strength</p> <p>Two-rank strength 0 1 2 3 4 5 6</p> <p>TACTICAL UNIT</p> <p>British Foot and Horse Battery 5 cannon and 1 howitzer 150 men</p> <p>Two-rank strength 6</p>	<p>2 3/16" [Ground Scale 1" = 25 Paces] 1 3/16" [Ground Scale 1" = 50 Paces]</p> <p>Min. Regt.</p>	
	<p>Representation of limbers, horses and teamsters, although not required, can be an attractive and practical addition to your miniature armies. These should be based on minimum width and depth stands, accommodating the limber and one or more horses, in pairs or tanden according to period and nationality.</p> <p>The presence of the limber stand with the cannon and crew is used to signify that the cannon is limbered and unable to fire. Remove or otherwise position the limber stand to represent that the cannon are deployed and ready for fire action.</p>		

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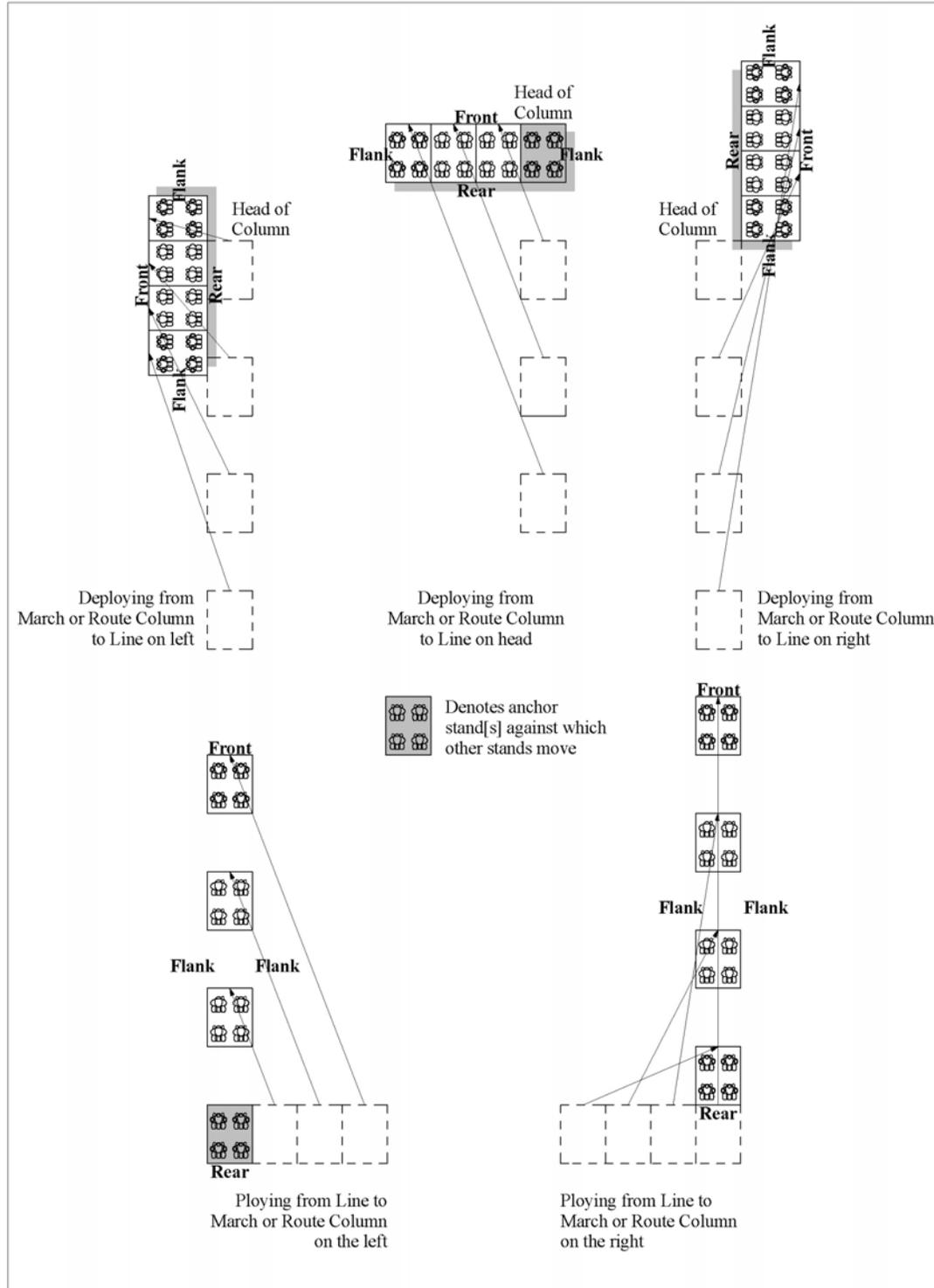
Officers and Staff:**Appendix Three: Formations and Formation Changes**

The following diagrams illustrate typical methods of changing formation during the course of a game. The examples use a basic four stand infantry battalion, but they are equally consistent with smaller or larger numbers of stands. They can also be used to understand how multiple squadron cavalry units would change formation from march column to line, column [of squadrons], or open order and vice versa. The arrows indicate the movement of stands from one formation to another. In some cases certain stands will be anchors upon which the others will regulate their movement.

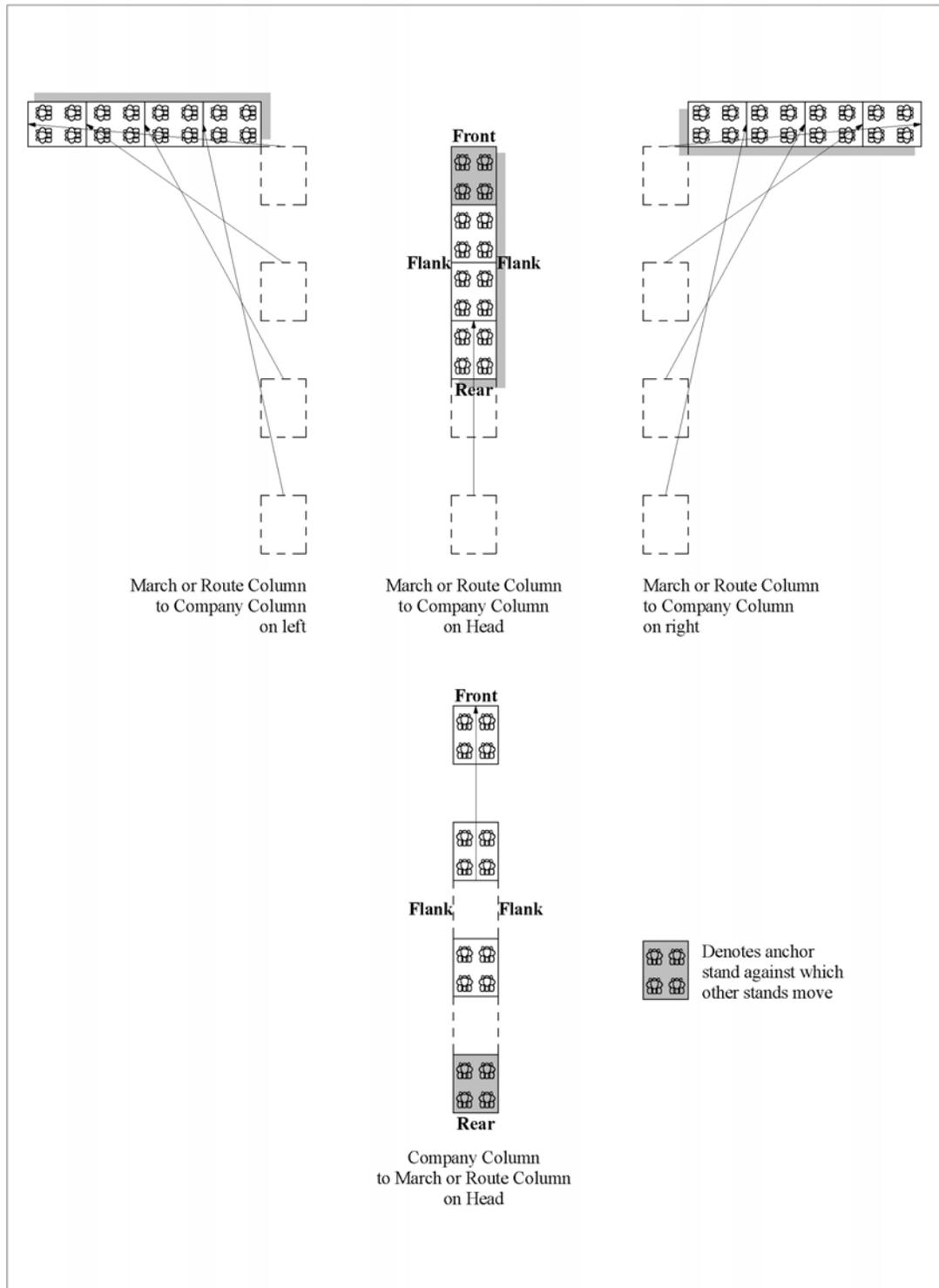
When changing formation and having selected the new formation required, you will be advised of the available movement allowance for the unit. This movement can be made before or after the new formation is adopted, and is in excess of the movement indicated by the arrows indicated in the diagrams.

For example, your French unit wishes to change from double company column to line, you are offered a movement allowance of 250 paces forward, or 50 paces to the rear or side. The 250 paces can be used to maneuver in column prior to changing formation, which might include wheeling to change the facing of the unit, or having changed formation with no change of facing in line. Equally the movement can be broken, and some taken before or after the formation change. The allowance is a maximum and you can elect to only make a partial movement, or no movement at all as required. The 50 pace movement allowance to the rear or side, indicates the movement that can be made by maintaining the original facing but making an adjustment to the rear or to either side as part of the formation change. The system will always consider that the minimum movement allowance of 75 paces has been exceeded during the fire phase.

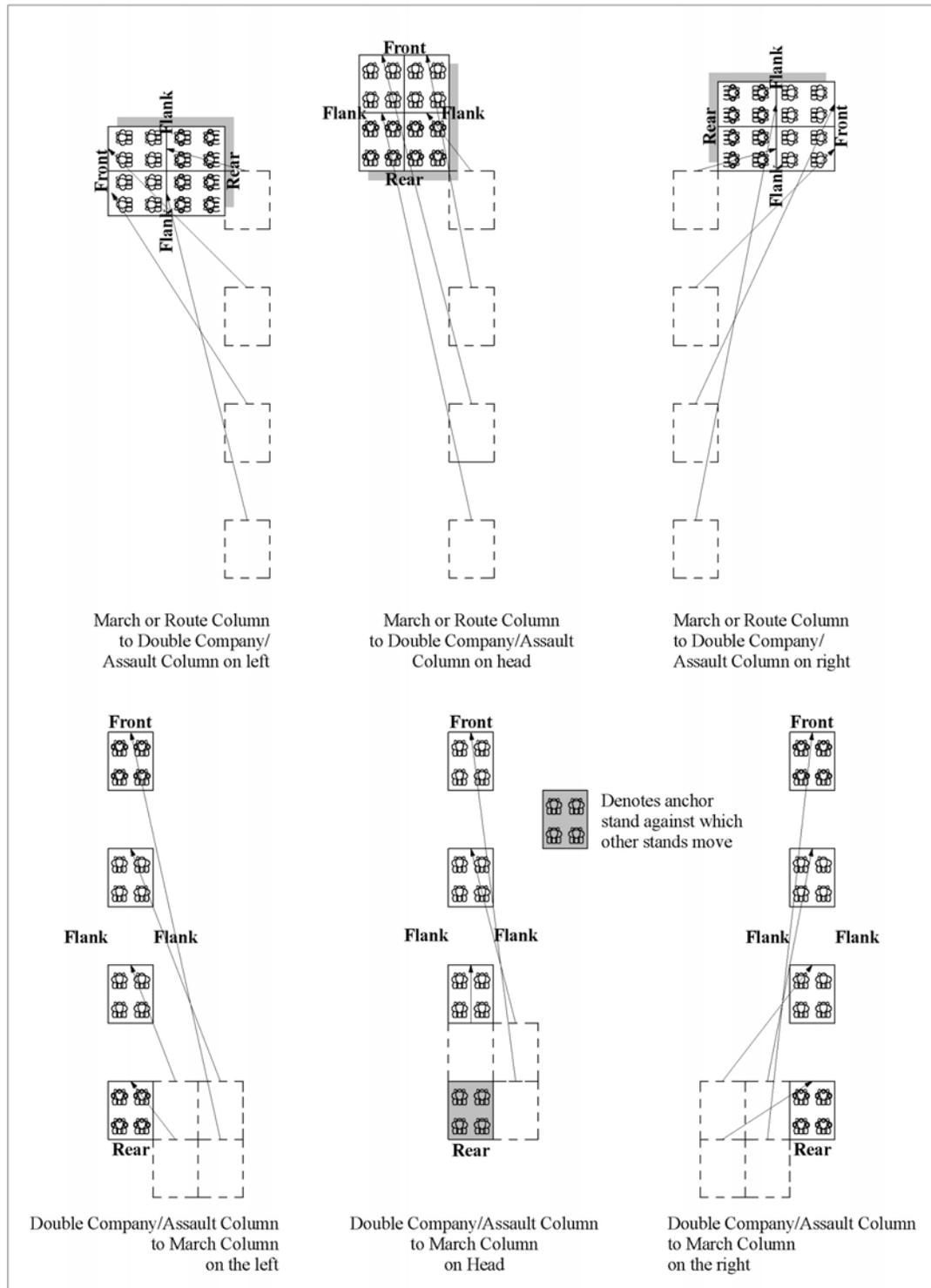
March Column to and from Line



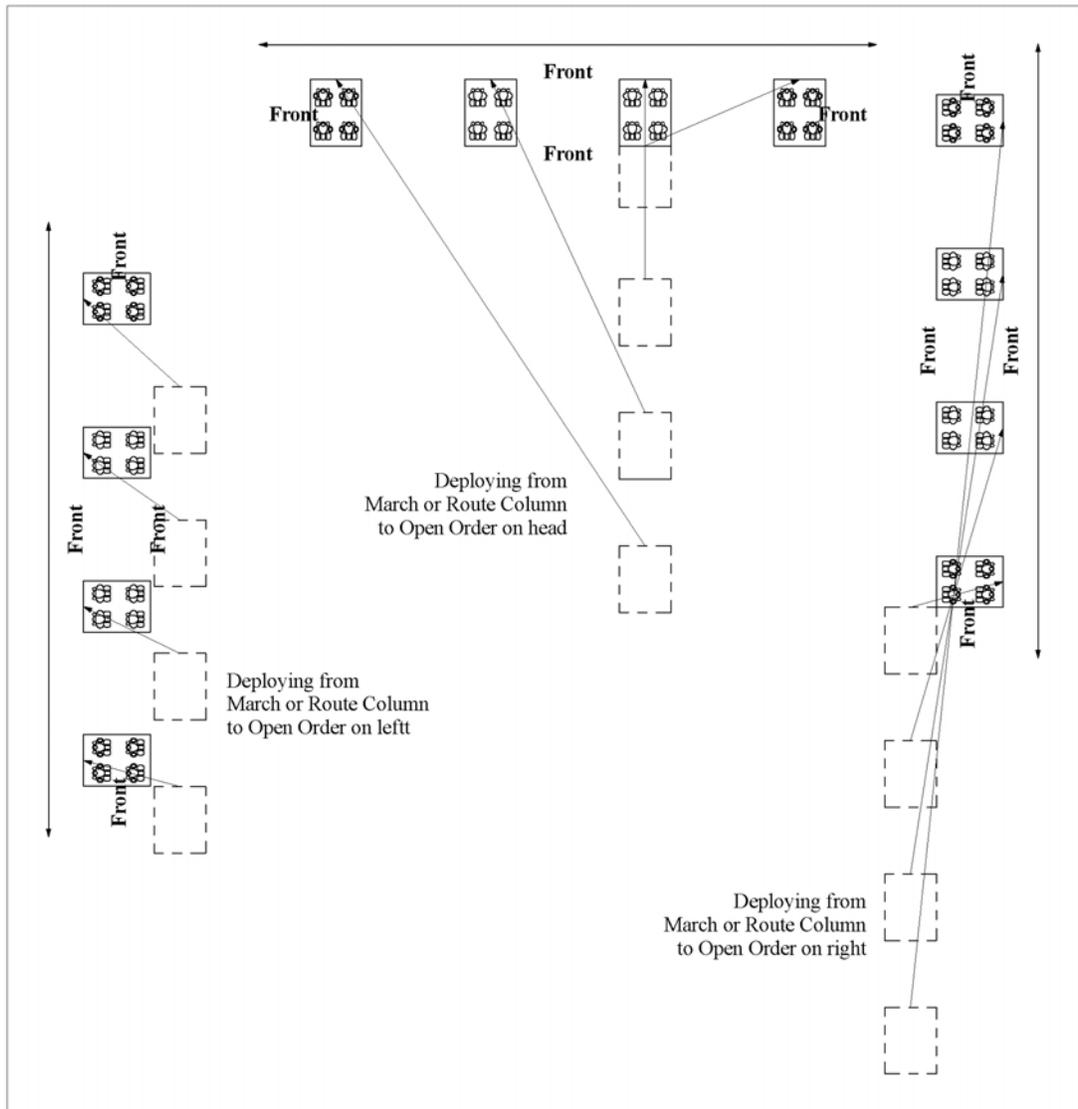
March Column to and from Company Column



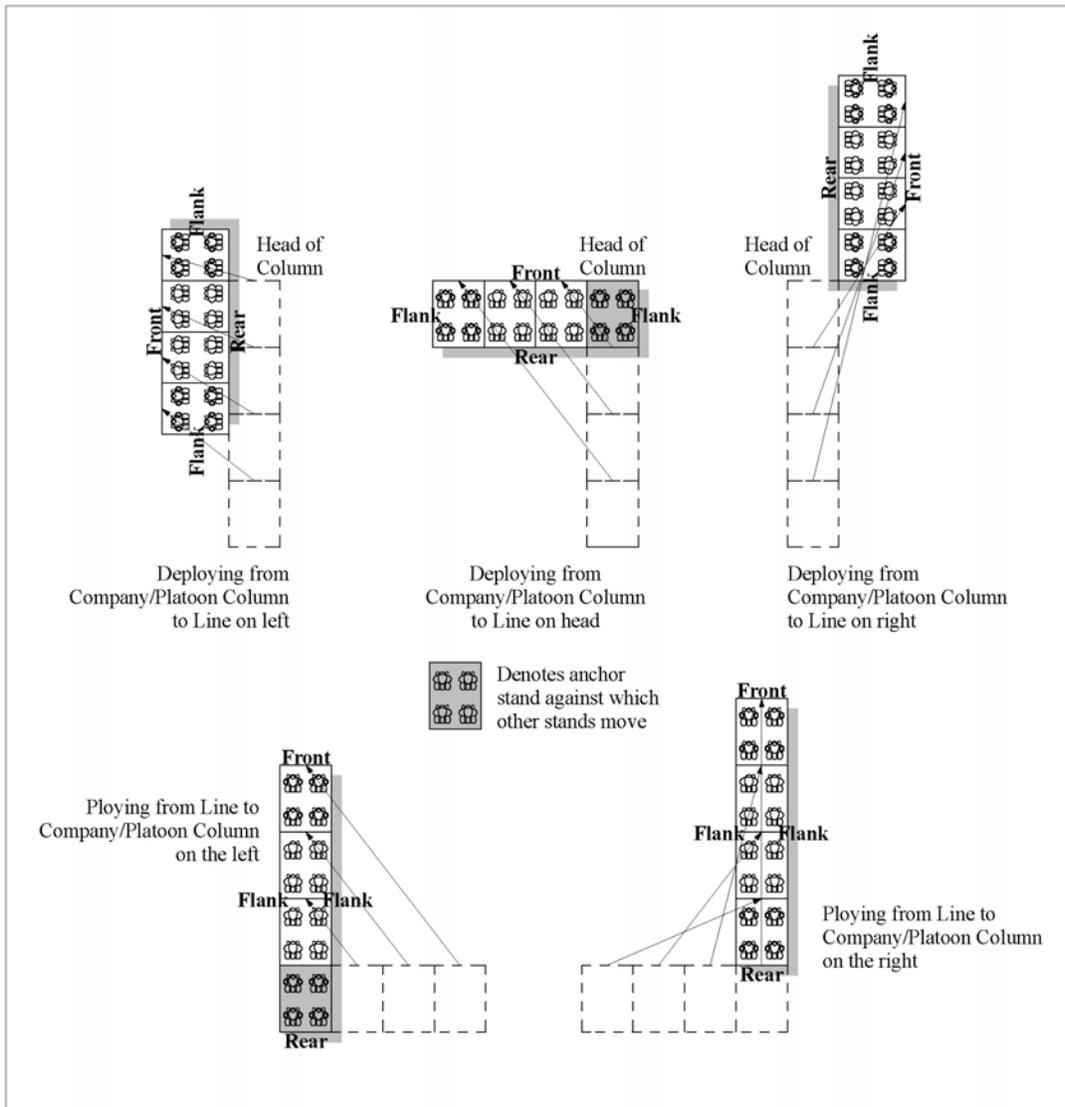
March Column to and from Assault Column



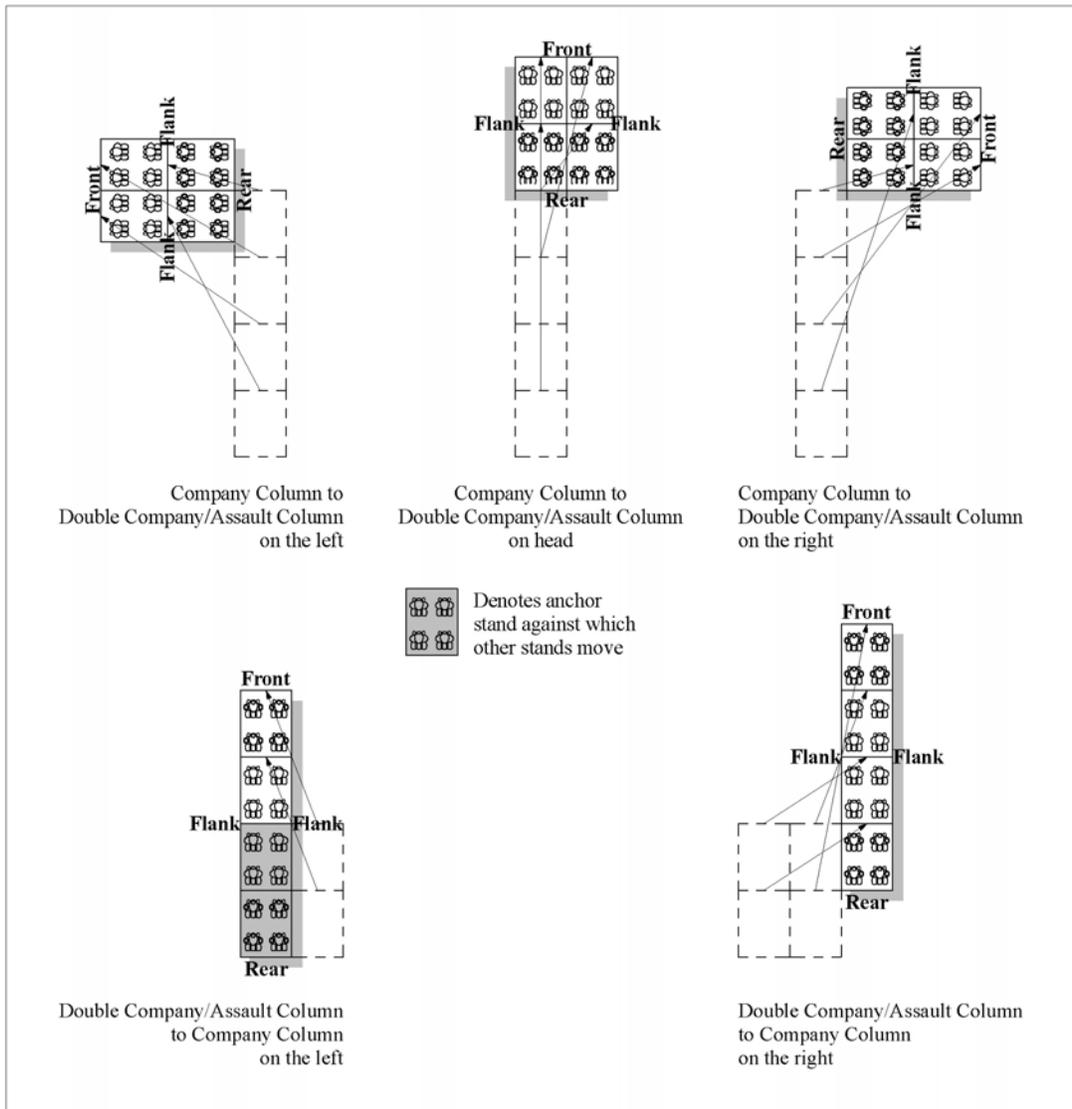
March Column to Open Order



Company Column to and from Line

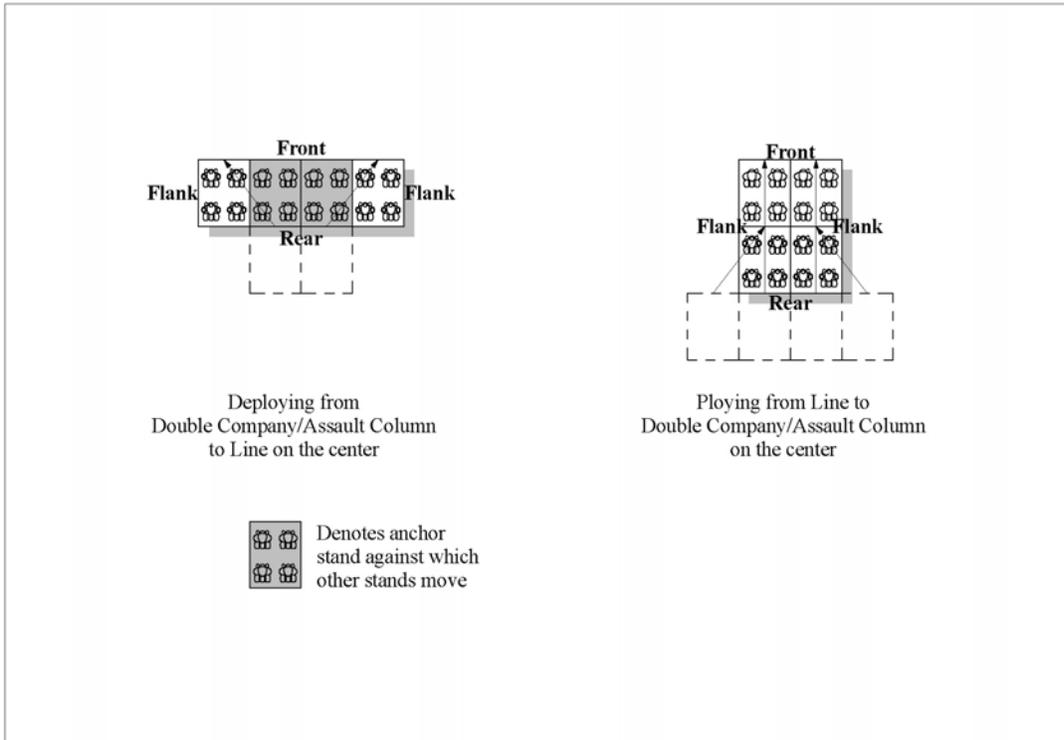


Company Column to and from Assault Column

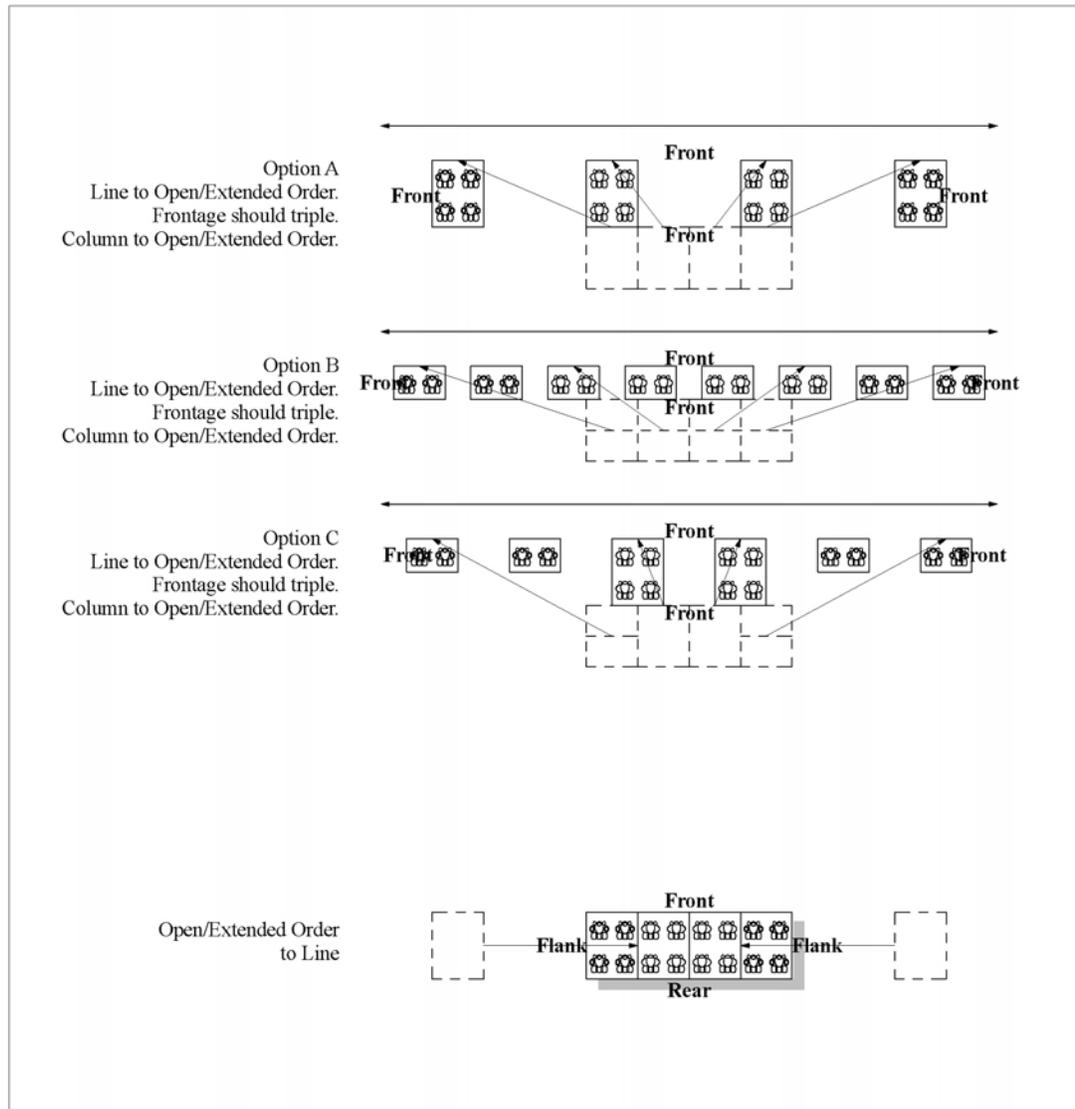


Carnage & Glory II

Assault Column to and from Line

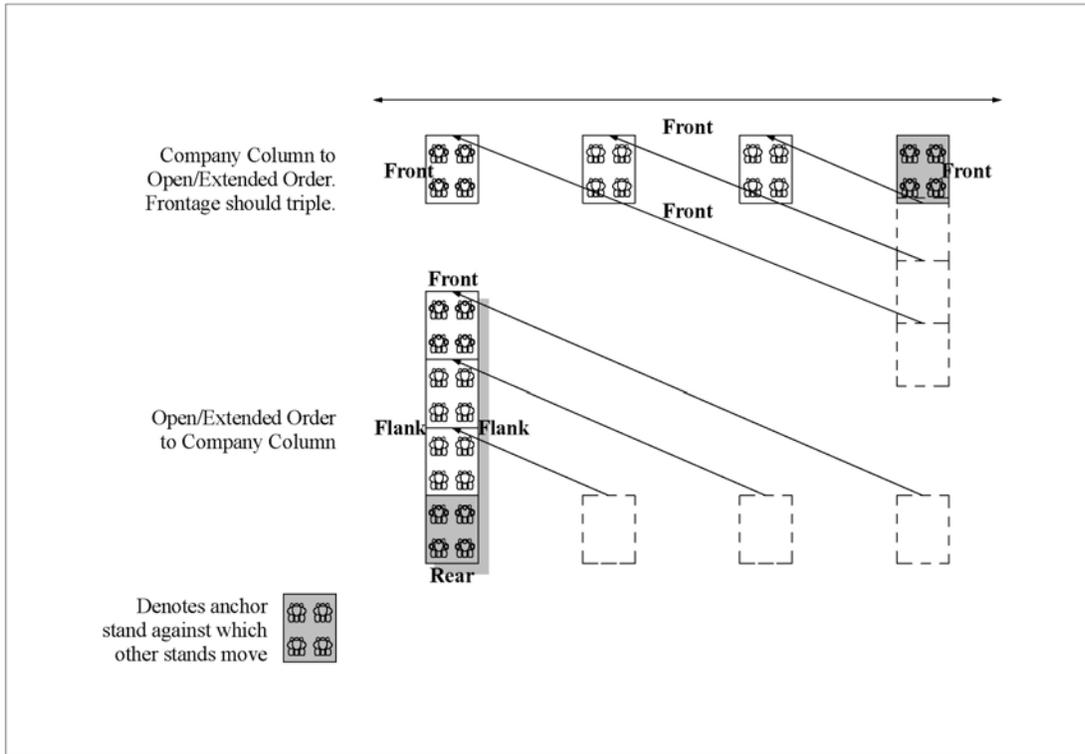


Line to and from Open Order

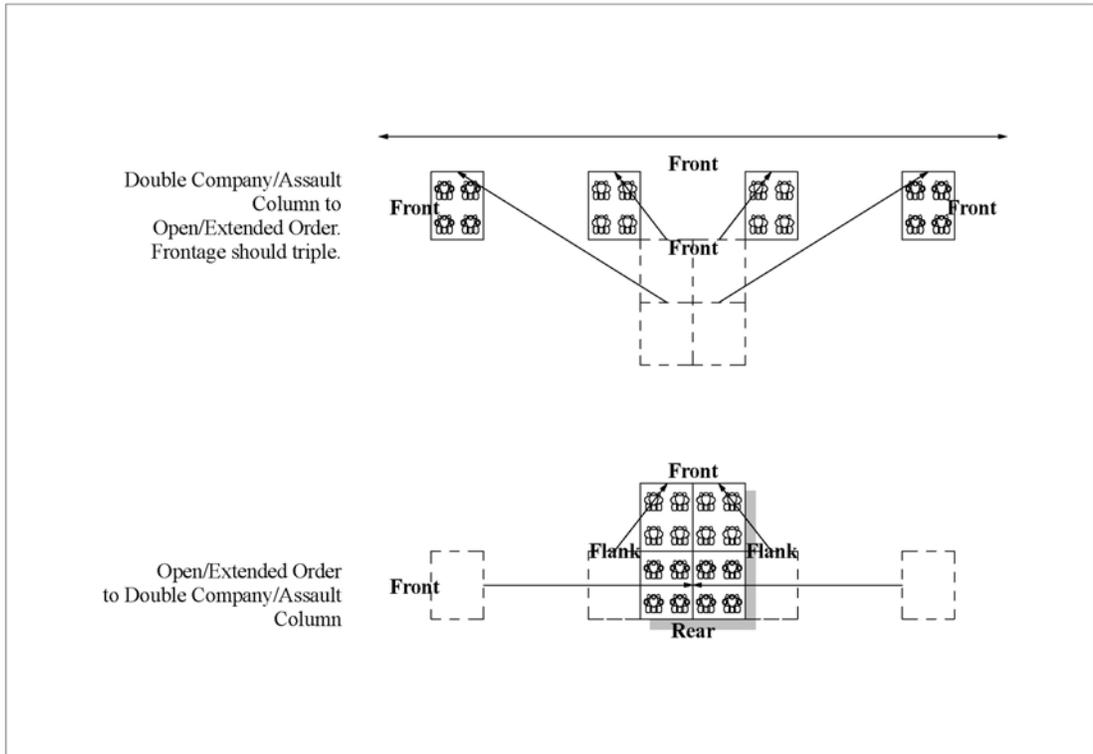


Carnage & Glory II

Company Column to and from Open Order

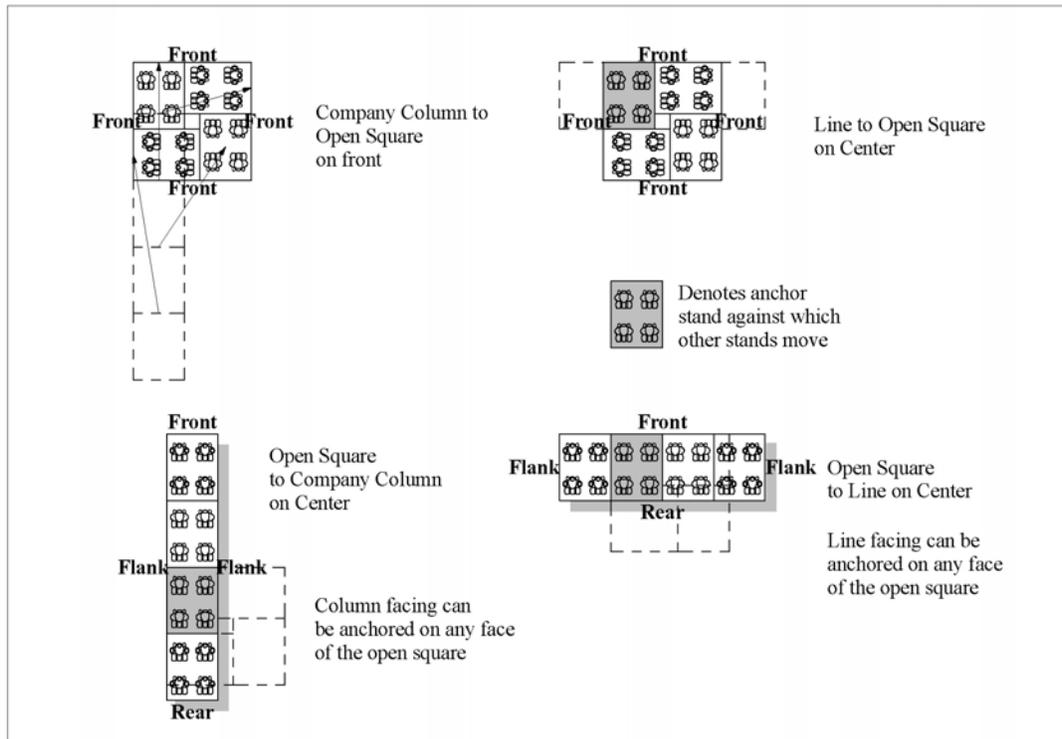


Assault Column to and from Open Order

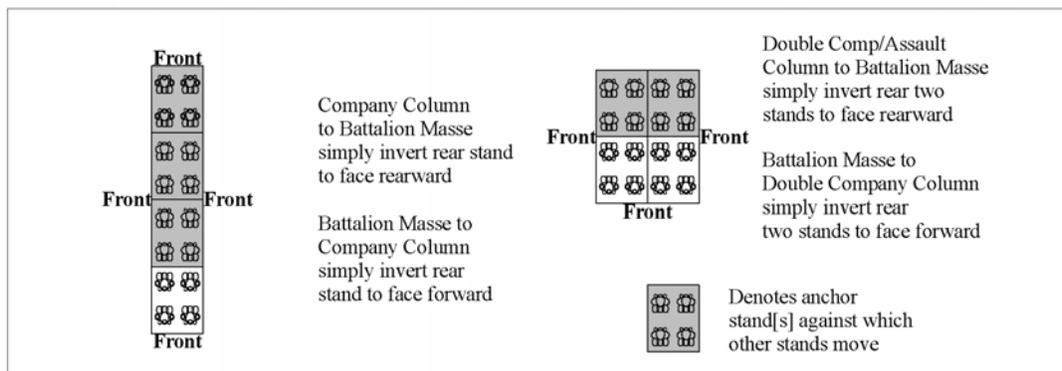


Carnage & Glory II

Company Column/Line to and from Open Square



Company/Assault Column to and from Battalion Masse



Appendix Four: Pre-loaded Army Lists

The following army lists are included with the system software:

- [101] 1809-French
- [501] 1809-Austrian

Representing historical divisional sized forces fielded by the French and Austrian armies in 1809. The unit strengths have been adjusted, and ratings and experience input as defaults, but these can be altered electively by adjusting these within the army lists themselves.

French:

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Division Louis Friant
[ 101] General de Division Louis Friant - Active B+ [950 paces]

Battalion Divisional Artillery Chef
[ 103] Major Divisional Artillery Chef - Active A- [275 paces]
[ 101] 6/7eme Artillerie a Pied          0/ 200 [ 8] C+
[ 102] 2/7eme Artillerie a Pied          0/ 200 [ 8] C+
[ 103] 4/7eme Artillerie a Pied          0/ 200 [ 8] C+

Brigade Gilly
[ 104] General de Brigade Gilly - Active A- [550 paces]
[ 104] 1/15eme Legere                    0/ 626      C
[ 105] 2/15eme Legere                    0/ 626      C
[ 106] 3/15eme Legere                    0/ 626      C-

Brigade Barbanegre
[ 105] General de Brigade Barbanegre - Active A- [550 paces]
[ 107] 33eme Regt. Artillery              0/ 75 [ 3] C
[ 108] 1/33eme Ligne                      0/ 626      C
[ 109] 2/33eme Ligne                      0/ 626      C
[ 110] 3/33eme Ligne                      0/ 626      C-
[ 111] 48eme Regt. Artillery              0/ 75 [ 3] C
[ 112] 1/48eme Ligne                      0/ 626      C
[ 113] 2/48eme Ligne                      0/ 626      C
[ 114] 3/48eme Ligne                      0/ 626      C-

Regiment 33.LIR Colonel
[ 106] Colonel 33.LIR Colonel - Active A- [275 paces]

Brigade Louis Grandeau
[ 107] General de Brigade Louis Grandeau - Active A- [550 paces]
[ 115] 108eme Regt. Artillery              0/ 75 [ 3] C
[ 116] 1/108eme Ligne                     0/ 626      C
[ 117] 2/108eme Ligne                     0/ 626      C
[ 118] 3/108eme Ligne                     0/ 626      C-
[ 119] 111eme Regt. Artillery              0/ 75 [ 3] C
[ 120] 1/111eme Ligne                     0/ 626      C
[ 121] 2/111eme Ligne                     0/ 626      C
[ 122] 3/111eme Ligne                     0/ 626      C-

Regiment 108.LIR Colonel
[ 108] Colonel 108.LIR Colonel - Active A- [275 paces]

Brigade Pully
[ 109] General de Division Pully - Active A- [550 paces]
[ 123] 2/5eme Artillerie a Cheval         0/ 150 [ 6] B-

Regiment 12.CaC Colonel
[ 110] Colonel 12.CaC Colonel - Active A- [275 paces]
[ 124] 1/12eme Chasseurs a Cheval         0/ 181      C+
[ 125] 2/12eme Chasseurs a Cheval         0/ 181      C
[ 126] 3/12eme Chasseurs a Cheval         0/ 181      C
[ 127] 4/12eme Chasseurs a Cheval         0/ 181      C

Regiment 28.D Colonel
[ 111] Colonel 28.D Colonel - Active A- [275 paces]
[ 128] 1/28eme Dragons                     0/ 164      C+
[ 129] 2/28eme Dragons                     0/ 164      C
[ 130] 3/28eme Dragons                     0/ 164      C

Regiment 29.D Colonel
[ 112] Colonel 29.D Colonel - Active A- [275 paces]

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[131]	1/29eme Dragons	0/ 164	C+
[132]	2/29eme Dragons	0/ 164	C
[133]	3/29eme Dragons	0/ 164	C

Strengths:

losses/active	
0/ 9390	Bayonets
0/ 1708	Sabres
0/ 1050	Artillerists
0/ 42	Cannon
0/ 12148	Total of all arms
21	Standards present

Austrian:

Division Ludwig Freih.v.Vogelsang

[501] Feldmarschall-Leutnant Ludwig Freih.v.Vogelsang - Active C [800 paces]

Battalion Division Artillery Commander

[503] Oberst-Leutnant Division Artillery Commander - Active C [200 paces]

[501]	1/1st Artillery Regiment	0/ 150	[6] C
[502]	4/1st Artillery Regiment	0/ 150	[6] C-

Brigade Josef Freih.v.Henneberg

[504] Generalmajor Josef Freih.v.Henneberg - Active C [400 paces]

[503]	5/1st Artillery Regiment	0/ 200	[8] C-
[504]	1/IR#35 Erzherzog Johann	0/ 750	C
[505]	2/IR#35 Erzherzog Johann	0/ 750	C-
[506]	3/IR#35 Erzherzog Johann	0/ 750	D+
[507]	1/IR#42 Erbach	0/ 750	C
[508]	2/IR#42 Erbach	0/ 750	C-
[509]	3/IR#42 Erbach	0/ 750	D+

Regiment IR#35 Colonel

[505] Oberst IR#35 Colonel - Active C [200 paces]

Brigade Karl Freiherr am Ende

[506] Generalmajor Karl Freiherr am Ende - Active C [400 paces]

[510]	6/1st Artillery Regiment	0/ 200	[8] C-
[511]	1/IR#17 Reuss-Plauen	0/ 750	C
[512]	2/IR#17 Reuss-Plauen	0/ 750	C-
[513]	3/IR#17 Reuss-Plauen	0/ 750	D+
[514]	1/IR#36 Kollowrat	0/ 750	C
[515]	2/IR#36 Kollowrat	0/ 750	C-
[516]	3/IR#36 Kollowrat	0/ 750	D+

Regiment IR#17 Colonel

[507] Oberst IR#17 Colonel - Active C [200 paces]

Brigade Ferdinand Freih.Wintzingerode

[508] Generalmajor Ferdinand Freih.Wintzingerode - Active C [400 paces]

[517]	9/1st Artillery Regiment	0/ 150	[6] C-
[518]	2/Mahr Freiwilliger Jager	0/ 750	D+
[519]	1st Jager Battalionen	0/ 750	C
[520]	3rd Jager Battalionen	0/ 750	C

Regiment HR#6 Colonel

[509] Oberst HR#6 Colonel - Active C [200 paces]

[521]	1.HR#6 Blankenstein	0/ 242	C
[522]	2.HR#6 Blankenstein	0/ 242	C
[523]	3.HR#6 Blankenstein	0/ 242	C
[524]	4.HR#6 Blankenstein	0/ 242	C

Strengths:

losses/active	
0/ 11250	Bayonets
0/ 968	Sabres
0/ 850	Artillerists
0/ 34	Cannon
0/ 13068	Total of all arms
16	Standards present

Appendix Five: Select Bibliography

The following books represent some of the books referred to during the development of this module of the Carnage&GloryII computer moderated rule system, and are recommended reading.

Baron Jomini	<i>The Art of War</i>	Greenwood Press	1862
Brent Noseworthy	<i>With Musket, Cannon and Sword</i>	Sarpendon	1996
Carl von Clausewitz	<i>On War</i>	Barnes and Noble	2004
Chris McNab [Editor]	<i>Armies of the Napoleonic Wars</i>	Osprey	2009
Col. H.C.B. Rogers	<i>Napoleon's Army</i>	Ian Allen Weidenfeld & Nicolson	1974
David Chandler	<i>The Campaigns of Napoleon</i>	Nicolson	1981
Digby Smith	<i>The Greenhill Napoleonic Data Book</i>	Greenhill Books Hippocrene Books	1998
F. Loraine Petre	<i>Napoleon at War</i>	Books	1984
George Jeffreys	<i>Tactics and Grand Tactics of the Napoleonic Wars</i>	International Military Books	1986
George Nafziger	<i>Imperial Bayonets</i>	Greenhill Books	1996
Gunther E. Rothenberg	<i>Napoleon's Great Adversaries</i>	Indiana University Press	1982
Gunther E. Rothenberg	<i>The Art of Warfare in the Age of Napoleon</i>	Batsford Military Heritage Press	1977
John Keegan	<i>The Face of Battle</i>	Press	1976
John R. Elting	<i>Swords Around A Throne, Napoleon's Grande Armee</i>	Free Press	1988
Mark Adkin	<i>The Waterloo Companion</i>	Stackpole Books	2001
Michael Glover	<i>Warfare in the Age of Bonaparte</i>	Cassell	1980
Otto von Pivka	<i>Armies of the Napoleonic Wars</i>	David & Charles	1979
Paddy Griffith	<i>French Napoleonic Infantry Tactics, 1792-1815</i>	Osprey	2007
Philip J. Haythornthwaite	<i>British Napoleonic Infantry Tactics, 1792-1815</i>	Osprey	2008
Philip J. Haythornthwaite	<i>Wellington's Military Machine</i>	Ravelin	1989
Philip J. Haythornthwaite	<i>The Napoleonic Source Book</i>	Guild Publishing	1990
Rory Muir	<i>Tactics and Experience of Battle in the Age of Napoleon</i>	Yale University Press	1998
Terence Wise	<i>Artillery Equipments of the Napoleonic Wars</i>	Osprey	1985