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Introduction

Hardtack is a supplement for the *Stargrunt II* science fiction miniatures rules system. The name comes from a cracker eaten by Union soldiers in the American Civil War. It made up a large portion of a soldier's ration. Like it's culinary namesake, *Hardtack* the game is not complete on its own. You must have *Stargrunt II* in order to use this supplement.

This supplement includes information on organizing units, modifying the rules for the American Civil War period, and some suggestions for collecting and basing figures. There is also a set of Designer's Notes to give the reader an idea of where the rules and information came from.

Acknowledgements

Hardtack supplements the *Stargrunt II* science fiction miniatures rules by Ground Zero Games. *Stargrunt II* is the copyright of its author, Jon Tuffley. It is a testament to the quality of *Stargrunt II* that a science fiction miniatures game can be adapted to the American Civil War (while others have created supplements for other eras, such as modern day and World War II).

Additional Materials

For Hardtack, some additional counters/markers are needed.

Markers indicating companies, guns and figures that are reloading (a simple marker with the word "Reload") are needed.

Markers indicating that a company is in *skirmish formation* (marked as "Skirmish").

Artillery requires ammunition type markers. These are counters with either "Shot" or "Canister" written on them. If using the optional artillery types, you will also need counters marked as "Case" and "Spherical Case".

If using the optional "Prepared Fire" rules, counters with "Prepared Fire" written on them are needed.

If using the optional "Ammunition" rules, counters or small dice representing the amount of ammunition available to a company may be used.

Figure Basing and Organization

Hardtack and Stargrunt II Equivalents

Hardtack uses a scale of 1" on the table equalling 10 yards of actual ground, which is essentially the same as *Stargrunt II* (where 1'' = 10 metres). Due to the difference in troop density in the 19th century versus modern combat, a single figure in *Hardtack* can represent between 3 and 5 men. (*Stargrunt II* has one figure representing one soldier).

The manoeuvre element in *Stargrunt II* is the squad, but in *Hardtack* it is the company. In almost all ways, a company in *Hardtack* behaves like a squad in *Stargrunt II*. A *Hardtack* company will have as many figures in it as you would expect in a *Stargrunt II* squad. Whenever there is a rule in *Stargrunt II* that refers to a squad, the rule refers to a company in *Hardtack*. Treat a *Hardtack* company and a *Stargrunt II* squad as the same thing.

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The following table shows organizations in *Hardtack* and their equivalent in *Stargrunt II*. This is a summary of the other rules in this section.

Hardtack Organization	Stargrunt II Organization
Infantry company	Infantry squad
Company commander	Squad leader
Regiment	Platoon
Regimental command staff	Platoon command squad
Brigade	Company
Brigade command staff	Company command squad
Artillery piece and crew	Artillery piece and crew squad
Artillery section	None
Artillery battery	Artillery battery

Figure Basing

If you only intend to use your Civil War figures with *Hardtack*, it is easiest to mount them on individual stands. These stands can be of any size, but 1" diameter stands for infantry is the recommended *maximum* size. If the figures support it, I recommend much smaller stands, such as $\frac{1}{2}$ " or $\frac{5}{8}$ ".

If you plan to use your figures with other games, you can mount your figures on bases (also called "stands") of a width suitable for the other games. The author has 15mm figures based for *Fire and Fury* (which can also be used with *Johnny Reb*). Infantry are mounted on 1" by 3/4" (or 1" by 7/8", or 1" by 1") sized bases, with three infantry to the base.

If you intend to put more than one figure on a base, here are some options for tracking casualties:

- Use a small die near the base, or on the base, to represent the number of figures remaining on that base.
- Use numbered chits near the base to represent the number of figures remaining.
- Place casualty caps on a figure to show that it is dead. When all the figures of a stand are casualties, remove the stand. Casualty caps are plastic caps that fit on the head of a figure. You can buy "casualty caps" from some figure and terrain suppliers, but they can also be found in hardware stores in the screw and bolt section.
- Have some figures available that are mounted individually. If you normally mount your figures three to a base, having 2 extra figures mounted individually per company will let you handle any combination of casualties. If a company takes one casualty, remove a stand of three figures and replace it with two individual figures. If the company takes another casualty, simply remove one of the individual figures. You may also want to mount the company commander on his own. (Note: figure organization, companies, and company commanders are explained, below.)
- The *Johnny Reb* method: use a pipe cleaner to represent casualties on a base. Lie a pipe cleaner down between figures on a base. Any figure to the left of the pipe cleaner (as seen from the rear of the stand) is considered a casualty. When all the figures of a stand are casualties, remove the stand.
- Maintain a roster sheet for each company. As a company takes casualties, keep track of them on the roster sheet. Once a whole stand of casualties have been marked off, remove the stand from the table top.

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Figure Scale

The ground scale in *Hardtack* is the same as in *Stargrunt II*: 1" on the table top represents 10 yards of real ground. However, while in *Stargrunt II* one figure represents one man, in *Hardtack* one figure represents more than one man.

If using 10mm, 15mm, or 20mm figures one figure represents 3 to 5 men. The author usually goes for a 1:3 ratio of figures to men for small battles and 1:5 ratio for battles with more than one regiment or larger regiments. This means a full historical regiment at combat strength would probably require between 100 and 200 figures. If you want to put fewer figures on the table, use a 1:4 or 1:5 ratio of figures to men.

If using 25mm figures one figure represents 5 men.

If using 6mm or smaller figures you have two options. You can divide all measurements in half and let one figure represent 3 men. Alternatively, you can base your figures so that a stand of 10 figures fits on a base of between 1" and 1 ¼" wide and each figure represents 1 man. By basing figures in this way, you have two options for resolving combat. In the first option, one casualty would remove three figures. In the second option, you can resolve fire per stand as though a stand was a *Stargrunt II* squad. Add up the number of figures in the stand, multiply it by the firepower of the weapon being used, and roll the dice. A company of ten stands would require ten combat rolls instead of one with this method. This way is much slower, but allows for a "finer grain" to the combat resolution.

Troop Organization

For historical commentary on unit organization, see the **Designer's Notes**.

Infantry

Soldiers are organized into companies of 6 to 12 figures (although smaller companies are also possible for specific scenarios or for historical scenarios). Each company has a captain or lieutenant acting as a company commander. Treat a "company commander" exactly as you would a *Stargrunt II* "squad leader".

Companies are organized into regiments. A regiment consists of between 2 and 16 squads (with 3 to 10 being common).

A regiment also has a command "company" consisting of a colonel and/or lieutenant colonel and the regimental staff. A stand of between 1 and 3 figures is sufficient to represent the regimental staff, though in reality a regimental staff contained up to 25 men. This regimental staff acts like a *Stargrunt II* command squad.

In rare (i.e. *big*) games, one side may field an entire brigade. A brigade consists of 2 to 6 regiments (3 to 4 is the norm). A brigade is commanded by the brigade commander, usually a Brigadier General. The Brigadier General is part of a brigade staff. This is represented on the table top by a stand of 3 to 5 figures, which behave like a *Stargrunt II* command squad.

Cavalry

Cavalry is organized just like infantry.

The only difference between infantry and cavalry is that cavalry can fight mounted on horses or dismounted. When fighting dismounted, 1 out of every 4 soldiers acts as a "horse holder". He literally holds the reigns for the horses of the other 3 soldiers. This means that only 3 out of every 4 dismounted cavalry figures is free to fire their weapons.

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In order to play with cavalry mounted and dismounted figures are needed. You may also want to include horse holder figures.

If you don't have any horse holder figures, there is a simple method of dealing with this. When cavalry figures are dismounted, simply represent them on the table with fewer figures. *Fire and Fury* puts two mounted cavalry figures on a single base, while dismounted cavalry figures can be mounted 2 or 3 to the base. If you put 3 dismounted figures on a base, then two mounted bases can be represented by one dismounted base.

Artillery

Artillery is organized into sections. Each section has one or two guns (officially there were two guns per section but since artillery can have a major impact on the game, scenarios might require only one gun per section).

Like infantry, each artillery crewman figure represents between 3 and 5 figures. However, each gun miniature represents one gun.

Each gun has a crew of 6 to 10 men operating it - 10 being full strength - a team of horses and a limber. Therefore, each artillery stand would have two or three artillery figures mounted on it. If a section of two guns is used, you can include a commanding officer for the section, representing the section's lieutenant.

In large games, artillery is grouped into batteries of 6 guns. Each battery would be divided into 3 sections of two guns. A battery would have a command squad, much like an infantry regiment. The command squad represents the battery commander and a couple of sergeants. For *Hardtack* purposes sections can be ignored if the player chooses. The individual guns would then be treated like individual *Hardtack* infantry companies, and the batteries can be treated like regiments.

The limber, horse team and drivers are part of the gun section. At full strength, there are 6 drivers. This would be represented by one or two figures, depending on the figure scale used. When the gun is unlimbered, the horse team and drivers are considered to be a detached element. This is exactly the same as when an APC in *Stargrunt II* requires members of a squad to crew the APC. The team follows the detached element rules in *Stargrunt II*. Other artillery movement rules are given in the movement section of *Hardtack*.

Note that if a gun crew takes casualties, drivers can be used as gun crew.

Artillery comes under the command of the infantry or cavalry unit it is assigned to. In a scenario where one side includes artillery along with infantry and/or cavalry, the overall commander of the infantry/cavalry unit is also the commander of the artillery unit. For the purposes of activation and the transfer of actions, treat an artillery battery just like an infantry regiment and treat an artillery gun crew like a *Hardtack* infantry company.

Example: if a scenario has one artillery piece and an infantry regiment, the artillery crew would be activated just like an infantry company. The infantry regiment's commander could transfer an action to the artillery crew as though the crew was an infantry company within the regiment.

Quality

This section of the *Stargrunt II* remains unchanged, though some guidelines should be noted.

With very few examples (such as untrained townspeople) the minimum quality level would be Green.

Elite quality should be incredibly rare, and possibly not used at all.

Most units in the game would be Regular. Units known for excellent historical performance (20th Maine, regiments of the Stonewall Brigade, etc.) would be Veteran. Militia units, or newly raised regiments, would be Green.

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If historical units are used, base the quality on the unit's historical performance and the performance of their opponents.

For simplicity sake all of the companies of a regiment can have the same quality. For more interesting scenarios, though, quality can be mixed within a regiment. A regular regiment, for instance, may have veteran and/or green companies.

Random Sampling of Quality Counters

If a random sampling of unit qualities is needed, the mix will be different for different parts of the war.

In 1861, the mix would be almost entirely Green and Regular troops.

From 1862 until the end of the war the mix would consist of Green, Regular, and Veteran counters in about the proportions that come with the game.

Leadership

Leadership values should be about the same for both sides. At the company and regiment level there wasn't much difference between the Union and the Confederacy.

For historical regiments, give particularly good units better leadership values. Units with above average courage would have leaders with values of 1 and 2. Brittle units would have leaders with values of 2 and 3.

Note that the actual values used aren't as important as the difference in leadership values between opponents. Don't be afraid to give a unit that was historically quite brave a leader with a 2 or 3 rating if they are in a battle that is clearly hopeless. In this case, the leadership values aren't so much an indicator of actual leadership ability but of the unit's brittle morale.

Unit Integrity

The regular *Stargrunt II* unit integrity rules apply.

Formations

In *Hardtack*, infantry and mounted or dismounted cavalry companies are either in one of two *close formations* (*line* and *column*) or *skirmish formation*. Companies in a *close formation* can form into *regimental formations*.

If you use dismounted horse holder figures in your games, they are considered to be in *skirmish formation*.

Artillery units have their own "formations" listed in the artillery section. Artillery crew are considered in *skirmish formation* for the purposes of combat resolution.

Skirmish Formations

Companies that are **not** in a *close formation* (see below) are said to be in a *skirmish formation* or *skirmishing*. *Skirmishing* companies behave like regular *Stargrunt II* squads. They have a "skirmish" marker placed beside them if it isn't obvious from the way they are placed on the table that they are in a *skirmish formation*.

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A company may voluntarily become skirmishers through the use of a Reorganise action. There are some cases, such as right after a close assault, where the company must become skirmishers. See **Becoming Disordered**, below.

Skirmishers shift their firepower die down by one die type.

Skirmishers do not get the Confidence Test bonuses for being in formation.

Skirmishers are immune to the effects of enfilade fire (see the **Enfilade Fire** advanced rules).

Skirmishers affect movement differently than units in a *close formation* (see **Skirmish Formation Movement**).

There are other effects of being in *skirmish formation*. These are detailed in the various rules sections.

Close Formations

Figures in a *skirmish formation* can move into a *close formation* by conducting a Reorganise action. The figures in a close formation are rearranged so that all the figures are 1) touching, 2) in a line or in a column. If the figures are mounted several to a base, the bases must be touching either in a line or a column. Once reorganised, the company loses its "Skirmish" counter.

The company must have a Confidence Level of Confident, Steady, or Shaken in order to go into a close formation.

A line is defined as all the figures of a company standing in a single line or a two-row line, their bases touching side-by-side, and all the figures facing forward.

A column is defined as all the members of a company standing in three or more rows, their bases touching side-by-side, and all the figures facing forward.

Companies in a *line formation* move at the "line" movement rate. Companies in a *column formation* move at the "column" movement rate. In order for companies to move in a *column formation* along a road, the there can be no more 3 figures (if 1 figure = 3 men) or 2 figures (if 1 figure = 4 or 5 men) in a single row. Historically men marched 4 to 6 across when moving along a road.

Companies in *close formations* gain benefits to morale. However, companies in *close formations* are easier to hit. See the Confidence and Reaction Test section and the Combat section of *Hardtack*.

Some actions require a company to lose its *close formation* status automatically. See **Becoming Disordered**, below.

Cavalry Close Formation Considerations

Cavalry companies run into problems when mounted figures take casualties. The mounted casualty could become dismounted due to combat. When this happens the player may choose to do one of the following:

1) Use a Reorganise action to put the entire company into *skirmish formation*.

2) Use a Reorganise action to get the dismounted figure remounted (if a horse is available).

3) Use an action to make the dismounted figure or figures a detached element of the company.

4) Remove the dismounted figure or figures as though they were casualties.

In the case of the figures becoming a detached element, the detached element follows the usual *Stargrunt II* detached element rules. The rest of the company remains in formation.

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Regimental Formations

When two or more companies are in *close formation*, and within 6" of the regimental commander, they may form a *regimental formation*. The 6" measurement is from the centre of the company to the regimental commander figure (or the centre of the regiment's command squad).

Companies in a *regimental formation* gain all the benefits of being in formation. They gain one additional benefit: all of the companies in a *regimental formation* can be activated at once if a regimental commander uses an **Activate Regiment** action. See the **Activate Regiment** action, later in these rules.

A company is not required to take part in a *regimental formation*. For instance, if 5 companies in *close formation* are within 6" a regimental commander, a player may choose to only activate 4 of the companies with the Activate Regiment action, or activate only 2, or activate 3, or activate all 5.

Any number of companies can be in a single *regimental formation*, provided that all of the companies fit the requirements listed above. *Regimental formations* can be formed and reformed at will. No Reorganise action is needed. The regimental commander using up his activation to issue orders to all of the companies in the formation is essentially a Reorganise action.

Regimental formations can be made up of: infantry; dismounted cavalry; mounted cavalry; infantry and dismounted cavalry combined. These are the only combinations allowed. If a cavalry company has some of its units dismounted due to combat results the player may let the company fall out of the regimental formation, or make the dismounted figures become detached elements of the company. See **Cavalry Close Formation Considerations**, above.

Example: there are 2 rows of 5 companies in a single *regimental formation*. On turn 1 all 10 companies may be moved forward with a single Activate Regiment action. On turn 2, the player may wish to activate only the first row of five companies and move it forward. At that point, the player has two regimental formations. On turn 3 he may choose to move the second formation up behind the first. On turn 4, he may decide to move all 10 companies as one big formation.

Regimental Commander Casualty

Whenever the commander of a *regimental formation* is wounded or killed, all the companies in the formation must make a "unit leader becomes casualty" roll as though each company had lost its leader. This is the usual 4/3/1 Threat Level test for Low/Medium/High motivated troops. This is only made by companies in a *regimental formation* (exception: if the regimental commander is in a command squad, that squad makes this test as per the usual *Stargrunt II* rules even if there is no *regimental formation*).

The regimental commander casualty is replaced by a leader figure from one of the other companies in the *regimental formation*. This will be the company leader with the highest Quality (that is, a Veteran will be picked before a Regular, a Regular before a Green, etc.) from a company of Confident, Steady, or Shaken Confidence Level. If more than one company leader has the same quality level, or all the companies are of Broken or Routed Confidence Level, the company leader is picked randomly with a dice roll. The leader of the company that supplied the new company commander is replaced as though the leader of the company had been killed, though no additional Confidence Test is made (the company leader just took over the regiment, he wasn't killed).

Becoming Disordered

When a company becomes disordered it is simply put into *skirmish formation*. This is done automatically and does not cost an action. The player *must* put the company into *skirmish formation*. The company is placed into *skirmish formation* as soon as it becomes disordered, even if this is in the middle of an activation.

A company becomes disordered if it drops to broken or routed morale level. A broken or routed company may not Reorganise into a *close formation* or be part of a *regimental formation*.

A company is disordered after the first round of Close Assault combat.

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A company is disordered after making a combat move.

A company is disordered if it moves through Dense Woods, Swamp, Rivers/Streams or Abatis.

A company in *close formation* becomes disordered if a company moves through it or it moves through another company.

If the figures of a company fall out of integrity, the company becomes "disorganised" (as per the *Stargrunt II* rulebook, page 11). "Disorganised" companies become disordered. The figures can return to unit integrity range by way of a Reorganise action. The company may use the same Reorganise action to bring it back into unit integrity range *and* change the company from *skirmish formation* to a *close formation*.

A company may have figures no longer touching due to casualties. The company is still considered in *close formation* as long as the figures are still within unit integrity range.

Units In Position

The In Position rules are mostly identical to those found in the regular *Stargrunt II* rules.

A company can make a Reaction Test at a TL of +2 to remove an In Position marker while conducting a Reorganise action, but if the test is failed the company wastes it's Reorganise action. This is the same procedure as for a company trying to remove an In Position marker before it tries to move, except it allows a unit to remove an In Position marker while changing formations. The company can still use an action to remove the In Position marker automatically, as per the regular *Stargrunt II* rules.

Cover

The usual *Stargrunt II* cover rules apply. There is an additional cover type in *Hardtack*: fortification. Fortification cover is any cover that would normally be considered hard cover in *Stargrunt* but which affords the troops additional protection by way of firing slits.

For example, an earth and log entrenchment with a "head log" would be considered fortification cover. A blockhouse with firing slits would be considered fortification cover. A stone wall would be considered only hard cover, as would an entrenchment without a head log.

Fortification cover shifts the defender's die up three die types instead of the usual two die shifts for hard cover.

Note that a company can *not* go In Position behind fortification cover. A fortification is essentially hard cover where being In Position is automatic.

Available Actions

The following actions are not used: Fire Support, Special, or Heavy Weapons; Communicate; Remove Suppression.

Limbering and Unlimbering Artillery

Artillery guns are moved slowly when pushed by their crews. They can be moved quickly if they are hooked up to a horse team.

During the process of limbering, and after the gun is limbered, the gun can no longer be fired and the gun and gun crew are attached to the horse team. While limbered, treat the gun crew, the gun, and the horse team as one unit.

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To limber, the team must be within 6" of the gun.

As per the fifth paragraph on page 47 of the *Stargrunt II* rules, under On-Table Artillery Fire, artillery units can not move limbered and fire in the same activation. It takes a Reorganise action to unlimber an artillery piece. This Reorganise action detaches the gun crew and the gun from the horse team. The horse team now follows the rules for a detached unit.

The gun and gun crew may be placed within 6" of the horse team.

Note that there is an exception to the *Stargrunt II* rulebook, page 47, 5th paragraph under "On-Table Artillery Fire". An artillery piece can be moved unlimbered, as listed below under the *Hardtack* movement rules, and fire in the same turn. An artillery gun must be loaded in order to fire, however (see the **Load Artillery Action** section, below).

Mounting and Dismounting Cavalry

Cavalry units may operate dismounted. It takes a Reorganise action to dismount the cavalry. Once dismounted, one out of every 4 figures (or a fraction thereof) acts as a horse holder. That is, a company of 4 or fewer figures requires one horse holder, a company of 5 to 8 requires two, a company of 9 to 12 requires 3, etc. This figure holds the horses of the other figures and can not fire. This figure can move with the company. The horse holder can engage in close assault with the unit if it is attacked, but may not take part in a close assault if the figure's unit initiated it.

To mount their horses also requires a Reorganise action. Dismounted figures are placed on their mounts after a Reorganise action used to mount the figure.

The same Reorganise action used to mount or dismount cavalry can be used to change a cavalry unit's formation as well.

Example: A company of mounted cavalry in a *column formation* can use a Reorganise action to dismount and form a *skirmish formation*.

Reload Action

The reload action removes a reload marker. See the Hardtack Combat rules for more details.

Load Artillery Action

Unless otherwise stated (i.e. in scenario notes), all artillery pieces begin the game unloaded. A Load action must be spent to load the artillery piece.

The Load action lets the player place an artillery ammunition marker beside the gun. This marker is placed face down, and is either a "Shot" marker or a "Canister" marker (if the advanced rules are used, it could also be a "Case" marker or a "Spherical Case" marker). The marker indicates the kind of ammunition loaded into the gun. Once an ammunition marker is placed, a Fire action will fire the gun and remove the ammunition marker.

It takes another Load action in order to change ammunition markers.

See the *Hardtack* **Artillery Fire** rules for more details.

Activate Regiment Action

This action is only carried out by a regimental commander. When the regimental commander uses an Activate Regiment action on a *regimental formation*, all the companies in the formation may be activated at once.

Activating a *regimental formation* uses up both of the regimental commander's two actions.

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All the company commanders of the companies in the formation must all be within the 6" range of the regimental commander.

After a *regimental formation* has been activated, all of the companies in the *regimental formation* have their activation markers flipped over. All of the companies have been activated.

Note that an Activate Regiment action is *not* the same as a Transfer action. The Activate Regiment action activates the regiments in a *regimental formation* that have yet to be activated. A Transfer action essentially gives a company one of the regimental commander's actions for free, even if that company has already been activated.

In very big games, a brigade commander may be present. That brigade commander can transfer an action to a regimental commander, and that regimental commander can be reactivated and use an Activate Regiment action on a second *regimental formation*. This must be another *regimental formation* because once a *regimental formation* is given an order, all of the companies in that regiment are classed as activated.

Commander Moving With a Regiment

If the regimental commander activates a *regimental formation* and that formation moves, the regimental commander (or regimental command squad) may move with the formation for free. He moves the same distance as the formation and keeps his position relative to the formation. This movement is free for the commander.

This movement can be can be in the form of a Move action or a Close Assault action.

If the *regimental formation* makes a combat move, each company rolls individually for the distance they can move. The regimental commander may select any of these rolls for his own movement distance. See **Regimental Formation Combat Moves**, below.

Order of Actions During a Regiment Activation

Activating a *regimental formation* is done in this order:

1) The regimental commander (or regimental command squad) is activated.

2) The regimental commander uses up both of his actions to activate the *regimental formation*.

3) Each company in the *regimental formation* conducts its first action one at a time. Each company conducts this first action in any order, but all companies must complete this first action before any company in the *regimental formation* can do a second action.

4) Each company in the *regimental formation* conducts its second action, one at a time, in any order.

5) All companies in the *regimental formation* have their Activation Markers flipped over to indicate they have been activated.

6) The regimental commander has his Activation Marker flipped over to indicated he has been activated.

Regimental Formation Combat Moves

When a *regimental formation* is ordered to conduct a combat move, each company makes a combat move on its own. That is, each company designates the route it will take and how far it will travel. Each company makes a separate roll for the distance it moves. At the end of a combat move, each company making the combat move is disorganized, meaning it falls into *skirmish formation* automatically.

When making a combat move the regimental commander may select any of the rolls made by any of the companies as the distance he will move. The regimental commander must indicate the route it will take before any of the units in the *regimental formation* make their combat move rolls.

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Example: Three companies in a *regimental formation* make a combat move. The regimental command staff moves with them. The companies make their combat move rolls. The first company rolls a 1, the second rolls a 3, and the third rolls a 5 (for 2", 4" and 6" movement, respectively). The regimental command squad can choose to move 2", 4" or 6".

Losing Regimental Formation Status During a Regiment Activation

It is possible for a company to be disordered in the middle of a Regiment Activation. This can happen if a company moves through a certain type of terrain during its first action, or if it conducts a combat move during its first action, or through a number of other situations.

A company is considered to be in a *regimental formation* for its entire activation. Even though the company may become disordered (thus put into *skirmish formation* and no longer eligible to be part of a *close formation*) during its first action, it is still considered to be part of a *regimental formation* until the end of its second action of the activation.

Likewise, if a company is part of a *regimental formation* but it moves more than 6" away from the regimental commander on its first action, it is still considered part of the *regimental formation* for its second action.

Rally Action

The Rally action can be used on an entire *regimental formation*. The leader must be within 6" of each company commander of each company to be rallied. A roll is made for each company in the *regimental formation* as per the normal Rally rules on page 17 of the *Stargrunt II* rulebook.

This is an addition to the regular *Stargrunt II* rule, and allows an officer to rally more than one company at once.

Reorganise Action

Along with the options given in the *Stargrunt II* rulebook, a Reorganise action is used to change a company's formation. This can be done with the same Reorganise action used to bring figures that are out of unit integrity range back into range.

A Reorganise action is used to change the mounted status (mounted or dismounted) of cavalry units. This can be done with the same Reorganise action used to change a cavalry company's formation.

A Reorganise action is used to change artillery units from limbered to unlimbered status.

Transferring Actions

There are no communication attempts in *Hardtack* for the purposes of transferring actions, etc. The Transfer Action must occur with the command squad or officer within 6" of the company or figure receiving the action.

Communicate Action

There are no communication attempts in *Hardtack* for the purposes of transferring actions, etc. However, there may be cases where a company or regimental leader needs to communicate with another unit or a detached element. For example, a gun crew may find its horse team is no longer within 6" of a gun. In these cases a runner can be sent.

It takes an action to create a "runner", representing the time it takes the company commander to issue orders to a member of his company. This company member then acts as an independent figure as per the *Stargrunt II* rules.

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All the runner can do is go to a unit or detached element and conduct a Transfer Action on that unit or detached element. In other words, the runner is taking a company commander's or regimental commander's orders to another element on the table. Once that is done, the figure must head back to its original unit. Once it is within integrity range of its unit, it is no longer an independent figure; it is once again a part of the original company.

This can be done for the purposes of conducting a Transfer Action. This can *not* be done in order to conduct an Activate Regiment action.

A Reorganise action is not required to reintegrate the runner with the original company. A player can use a Reorganise action to integrate the runner with the new company instead of returning him to the original company.

Confidence and Reaction Tests

Suppression Results

Hardtack does not use Suppression. Instead, whenever a unit would take a suppression marker according to the *Stargrunt II* rules, the unit must make a Threat Level 1/0/NTR Confidence Test (for Low/Medium/High motivation troops). NTR stands for "no test required".

If a company is fired upon and only one of the two dice of the firing unit exceeds the range die, the target unit makes this test.

If a company is fired upon and both of the dice for the firing unit exceed the range die, this Confidence Test *might* be made. First, check for casualties as per the *Stargrunt II* rules. If there were no casualties, the target unit must make a Threat Level 1/0/NTR Confidence Test. If there were casualties, the target unit makes the usual Confidence Test for casualties instead.

Results of Reduced Confidence Levels

Confident, Steady and Shaken Confidence Levels are as per the regular Stargrunt II rules.

Shaken units must still make a Reaction Test to leave cover, even if they belong to a *regimental formation*. Shaken units may *not* move closer to the enemy; shaken units must be rallied to Steady before they may attempt to conduct a close assault.

Broken infantry and cavalry units act as per the *Stargrunt II* rules. Broken units are placed into *skirmish formation* automatically and may not Reorganise into *close formations*.

Broken artillery units must pass a Reaction Test in order to retreat with their guns. If they pass the test they do not have to retreat into cover but may retreat until they are out of Line of Sight of the enemy. If they do not pass the test, the gun crew abandons the gun and retreats without it towards cover.

Routed infantry and cavalry units behave as in *Stargrunt II*. Routed artillery units will abandon their guns automatically. Routed units are placed into *skirmish formation* automatically and may not Reorganise into *close formations*.

Formation Threat Level Modifiers

A unit subtracts one from the Threat Level of all Confidence Test and Reaction tests if it is in a *close formation*.

A unit in a *close formation* subtracts one from the Threat Level of a Close Assault Reaction Test. This applies for units about to conduct an assault and for units about to be assaulted.

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A unit being charged by a unit in a *close formation* adds 1 to the Threat Level of a Close Assault Reaction Test.

Threat Level Table for Confidence Tests

The following is the table of Confidence Tests used in *Hardtack* combined with the usual *Stargrunt II* tests.

	1	Motivatio	n
Circumstances for Test	Low	Med	High
Unit is fired on by small arms or artillery Shot Unit is fired on by artillery Canister Unit takes casualties from fire (added to above tests only)	1 3 +1	0 2 +1	NTR* 1 0**
Unit takes MORE casualties in one attack than it has surviving members afterwards	4	3	1
Unit Leader becomes casualty	4	3	1
Unit is in <i>close formation</i> Unit is charged by an enemy in <i>close formation</i>	-1 +1	-1 +1	-1 +1
Unit is forced to ABANDON WOUNDED	+3	+2	+1
*NTR = No Test Required.			

**A test is required for High Motivation troops.

Panic

Panic is handled as per the Stargrunt II rules. Ignore references to AFVs and terror units.

Movement

Base Mobility Distances

Mobility is similar to *Stargrunt II* rules where figures have normal and combat movement. The base mobility distances are:

Infantry and dismounted cavalry: 6" (Combat movement D6x2")

Mounted cavalry: 12" (Combat movement D12x2")

Limbered Artillery or a detached horse team element: 10" (Combat movement D10x2")

Unlimbered Artillery: **4**" (Combat movement D4x2")

Limbered Artillery Movement

Limbered artillery represents guns moved by a team of horses. A limbered gun with a full team of horses has a movement rate of 10" and a D10 movement die for combat movement purposes.

A full artillery horse team consists of 6 horses. This is represented on the table top by 2 horses. If an artillery horse team takes casualties, shift the movement die of the horse team down one die type to a D8 (8").

See Artillery Horse Team Casualties in the Casualties section for more details.

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Unlimbered Artillery Movement

Unlimbered artillery represents guns moved by a gun crew without the aid of a team of horses. This represents the crew simply pushing the gun into position. Since the gun does not have to be unlimbered, this is the only way a gun can be moved and fired in the same activation.

It also assumes at least 2 figures are available to move the gun. If there is only one figure left to move the gun, the gun can only move 2". If there is only 1 figure left to move the gun, the gun can not make a combat move.

Terrain Effects on Mobility

Note, two new types of terrain are listed: linear obstacle and abatis.

Linear obstacles represent stone walls, and wooden fences. They also represents earthworks built to protect the soldiers.

Abatis represent fieldworks designed to greatly impede soldiers. An abatis, historically, consisted of a felled tree with its branches left on (sometimes sharpened). This acted like an early form of barbed wire.

Infantry

CLEAR = Open, Light Scrub, Slopes, Roads POOR = Rough, Cultivated, Swamp, All Woods, Linear Obstacles DIFFICULT = Rivers/Streams, Abatis IMPASSABLE = Open Water

Cavalry

CLEAR = Open, Light Scrub, Slopes, Roads POOR = Rough, Cultivated, Swamp, Light/Open Woods, Linear Obstacles DIFFICULT = Dense Woods, Rivers/Streams IMPASSABLE = Open Water, Abatis

Limbered Artillery

CLEAR = Open, Light Scrub, Slopes, Roads POOR = Rough, Cultivated DIFFICULT = Swamp, Light/Open Woods IMPASSABLE = Dense Woods, Open Water, Linear Obstacles, Abatis

Unlimbered Artillery

CLEAR = Open, Light Scrub, Roads POOR = Slopes, Rough, Cultivated DIFFICULT = Light/Open Woods IMPASSABLE = Swamp, Dense Woods, Open Water, Linear Obstacles, Abatis

Travel Mode

This mode, listed on page 24 of the *Stargrunt II* rulebook, can be used. It allows a company to move FOUR TIMES its base movement rate on a road. This is available to infantry and cavalry units in *column*

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formation, and for limbered artillery units. The column must be in rows of no more than 3 figures, or one stand of figures, per row for infantry; 2 figures, or one stand, per row for cavalry; and 1 limbered gun for artillery. (This assumes a 1:3 figure-to-man ratio. For 1:5 there would be 2 infantry figures per row.)

Additionally, a squad may move TWO TIMES its base movement rate in clear terrain other than roads. This is available to infantry and cavalry units in *column formation* only.

Formation Movement

Skirmish Formation Movement

Mounted and dismounted figures move as per the *Stargrunt II* rules when in *skirmish formation*. That is, they can make a normal move or a combat move. As per above, they may not use Travel Mode (travel mode is only available for troops in a *column formation*).

Line Formation Movement

Troops in a *line formation* have their movement die shifted down one. For instance, infantry would have a movement rate of 4" in *line formation* as opposed to 6" in skirmish and *column formation*. Troops in *line formation* may not use Travel Mode movement.

Column Formation Movement

Troops in a *column formation* may make use of Travel Mode movement. Otherwise, they move at their normal movement rate.

Movement Through Terrain

A company will automatically drop into *skirmish formation* if it moves through Dense Woods, Swamp Rivers/Streams, or Abatis.

Movement Through Formations

A company in *skirmish formation* may move through another friendly company in any formation. Likewise, a company in a *close formation* may move through a friendly company in *skirmish formation*. A company in *skirmish formation* may move through another friendly company in *skirmish formation*.

A company in *close formation* may not move through another company in *close formation*.

A Broken company will take the shortest route possible to get to cover. If this means it would move through a company in a *close formation*, it will do so. Likewise, a Routed company will retreat by way of the shortest route possible, even if that means it will move through a company in a *close formation*.

Note that this only applies to moving through friendly units. Enemy units can never be touched (let alone moved through) unless part of a close assault (or unless the unit is surrendering).

If a company in *close formation* moves through another company, or has another company move through it, it becomes disordered (and thus automatically changes to *skirmish formation*; see **Becoming Disordered** in the **Formations** section of *Hardtack*).

Regimental Formation Movement

Companies in a *regimental formation* move based on the formation of the regiment, not of the company. For instance, a company of ten men may be in a single row. This would make them a *line formation* and they would move as a line. However, if they were added to 9 other companies in a column, they would be considered in a *column formation* for movement purposes.

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A *regimental formation* is considered to be in *line formation* if there are more figures in a row than there are rows in the formation, **and** there are 4 or fewer rows. Four rows of 10 figures per row would be considered a line. Five rows of 10 figures per row would be considered a column.

A *regimental formation* is considered to be in a *column formation* if it is not in a *line formation*.

Personal Armour

In general, soldiers during the Civil War wore no armour. They would therefore have a D4 armour die.

However, some soldiers did actually try to wear metal breastplates for a short period of time. These were usually abandoned as the weight was unbearable during marches. For completeness sake, if you want to model this rarity these breastplates would give the wearer a D6 armour die.

Small Arms Combat

Sharpshooters

Sharpshooters use the sniper rules from page 27 of the Stargrunt II rulebook.

The sharpshooter's rifled musket has the following statistics:

Firepower D8 Impact D8

After a sharpshooter has fired his weapon, he has a Reload marker placed on him. He may not fire again until he removes the Reload marker with a Reload action.

Generic Weapons Table

Small Arms

Weapon	Restrictions	FP	Imp
Musket		1	D6
Carbine		1	D4
Shotgun	Close Range Only	1	D8
Pistol	Close Range Only	0.5	D4

Support Weapons

Gatling gun

D8 D6

Smoothbore Small Arms

Smoothbore small arms weapons have a shorter effective range than rifled weapons. When firing smoothbore weapons, shift the range die up by one unless the fire is conducted at short range (D4). Note that this die shift is conducted before any others.

Example 1: A regular company armed with smoothbore muskets is firing at an enemy company 10" away behind a wooden fence. The fence is soft cover. The range die would be a D6, but it's shifted to a D8 due to the weapons being smoothbore muskets. The range is then shifted up another 1 due to the target being under cover. The final range die is a D10.

Example 2: A regular company armed with smoothbore muskets is firing at an enemy squad 6" away behind a wooden fence. The fence is soft cover. The range die is a D4, which is close range. The die is *not* shifted up due to the weapons being

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smoothbore since the enemy is at close range. The range is shifted up 1 due to the target being under cover. The final range die is a D6.

Repeaters

For repeating small arms, like Sharps repeaters, double the firepower listed in the table above. You may wish to use the **Ammunition Supply** advanced rules when using repeating small arms.

D2 Firepower

If a company has a firepower of greater than 2, round the Firepower Die up to a D4.

If, however, the company has a firepower of 2 or less, round the Firepower Die up to a D4 but shift the Quality Die down by one.

Example: A company of 3 regular quality infantry armed with rifled muskets would roll a D4 (the firepower of 3 rounded up to a D4) and a D8 (the Quality Die). If the company only had 2 figures in it, the company would roll a D4 for the Firepower Die, but the Quality Die would be shifted down to a D6.

Skirmishing Company Firepower

Skirmish formation companies have their firepower reduced by one die type.

Reloading Small Arms

Small arms need to be reloaded after every fire action, unless the small arms weapons are breachloading weapons or repeaters. Unless they are breachloaders or repeaters, a "Reload" marker is placed on a company after it has fired. A Reload action is required to remove this marker.

Note that if only part of a company fires its weapons in an action, only those figures that actually fired their weapons are indicated as having fired their guns. For simplicity sake, a Reload action counts as one of the company's two actions even if only part of a company needs to be reloaded.

Formation Arc of Fire

Close order formations have a limited arc of fire.

In order to fire at an enemy company, all the members of the firing company in a *line formation* or a *column formation* must have a line of sight to the target. The line of sight must not cross through any other member of the company. The line of sight must be out the front half of the figure. The line of sight is traced to the centre of the enemy company.

This is a pretty easy thing to determine: the company in a *close formation* faces in one direction while standing in a line, the enemy must be in the direction the company is facing, and all the members of the company have to be able to fire at the enemy without firing through one of the other figures in their company.

Companies in *skirmish formation* ignore this arc of fire rule. They are treated like a regular *Stargrunt II* squad.

Small Arms Fire Through Companies

Firing Through Friendly Companies

Skirmishing companies do not affect line of sight to the enemy. A company may freely fire through a friendly company in *skirmish formation* at an enemy company.

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A company may fire through a friendly company in *close formation* only if it is directly behind the friendly company and touching it. This represents one company standing in a line behind another company. Otherwise a company may not fire through a friendly company in *close formation* (that is, the friendly company will block line of sight).

Firing Through Enemy Companies

A company may fire through an enemy company in *skirmish formation* to hit another enemy company behind it. Combat is resolved as normal with the range calculated as being against the target company.

When deciding what figures are casualties, the company in *skirmish formation* is treated as though it was part of the target company if the skirmishing company was not In Position. If it was In Position, the skirmishing company does *not* take casualties. (Note: a skirmishing company that is In Position can still be the target of a company's fire, it just can't take casualties from fire that was targeted against another company.)

If the skirmishing company is in cover, give the target company the same cover benefits.

If the company in *skirmish formation* takes casualties it must make a Confidence Test as usual. If it did not suffer any casualties it does not have to make a Confidence Test.

Example 1: A Union company fires on a Confederate company of 8 figures in *line formation*. Between the two companies is a Confederate company of 4 figures in *skirmish formation*. The Union player calculates the range die to the Confederate company in *line formation* as though the skirmishing company wasn't there. The dice are rolled. The company in *line formation* takes four casualties. The specific casualties are rolled for randomly, but the casualties come from the company in *line formation* and the company in *skirmish formation*. After rolling, one figure in the skirmishing company is hit and three figures from the other company are hit. Both Confederate companies have to make Confidence Tests.

Example 2: A Union company fires on a Confederate company of 8 figures in *line formation*. Between the two companies is a Confederate company of 4 figures in *skirmish formation* and In Position. The Union player calculates the range die to the Confederate company in *line formation* as though the skirmishing company wasn't there. The dice are rolled. The company in *line formation* takes four casualties. The specific casualties are rolled for randomly, but the casualties only come from the company in *line formation*. Since the company in *skirmish formation* is In Position, it can not take casualties from this kind of fire.

Only an enemy company in *skirmish formation* can be fired through. A company can not fire through an enemy company in a *close formation* in order to target another company behind it.

Formation Targets

When a company in *line formation* or *column formation* is the target of small arms fire or artillery canister fire, the Range Die is shifted down one. This is an Open Shift. If the Range Die is already a D4, the Firepower Die of the firing unit is shifted up one. This shift is done after die shifts for cover, smoothbores, etc.

This does *not* apply to target companies in *skirmish formation*.

Leader Targets

When company and regimental leaders are single figures, follow the rules in the *Stargrunt II* rulebook on page 26 under the **Firing at Independent Figures** section.

Cavalry Firing While Mounted

Figures firing from horseback conduct small arms fire normally. However, the target's Range Die is shifted up one die type to reflect the difficulty of firing weapons while mounted.

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Artillery Fire

There are two types of artillery ammunition in basic *Hardtack* (and another two types in the **Advanced Rules** section). These are roundshot (shot) and canister. The advanced types are case shot and spherical case shot.

Each type of ammunition behaves differently and is handled somewhat differently. This section of *Hardtack* is divided into three subsections. The **On-Table Artillery** subsection covers all types of artillery fire. The **Shot Fire** subsection contains rules for firing roundshot. The **Canister Fire** section contains rules for firing canister.

See the **Advanced Rules** section for firing artillery that isn't on the table, and the other two types of ammunition, case shot and spherical case shot.

On-Table Artillery

On-table artillery refers to artillery fired by guns that have cannon and gun crew miniatures placed on the table top. This usually covers shot and canister projectiles.

In general, follow the On-Table Artillery Fire rules on page 47 of the *Stargrunt II* rulebook. The exceptions to this section of the *Stargrunt II* rulebook are:

- Artillery in *Hardtack* can only fire at units in line of sight of the artillery unit.
- It takes only 1 action to fire artillery in *Hardtack*, but once the gun has fired it loses its ammunition marker. It takes a Load action in order to load the gun with ammunition. See the **Load Action** section earlier in these rules.
- As per the *Stargrunt II* rules, it takes a Reorganise action to unlimber a gun from its horse team (the gun is treated as towed artillery). However, the gun *can* be moved in the same activation as it is fired. The gun crew can move the gun themselves. This follows the movement rates and terrain effects in the **Movement** section earlier in these rules.

Arcs of Fire

Artillery guns have a 30 degree arc of fire, just like a fixed arc heavy weapon as listed in the *Stargrunt II* rules on page 32.

Gun Crews

Guns are assumed to be manned by crews of 6 to 10 men, not including the drivers in charge of the horses. The following gun crew rules apply.

Partially Crewed Guns

If a gun crew only has 1 figure left, it takes both actions of an activation to fire the gun, and it takes both actions of an activation to reload the gun.

Captured Guns

If a gun is abandoned by its crew and enemy troops come in contact with the gun, the enemy has captured the gun.

Captured guns can be moved by the troops that capture it. The gun can also be used by the troops that capture it.

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If the gun is captured by an artillery crew, the enemy artillery crew can use the gun normally. If there are 2 or more crewmen figures, the gun fires normally. If there is only 1 crew figure, it is classed as a partially crewed gun.

If the gun is captured by regular infantry, the enemy infantry can use the gun but at a disadvantage. If there are 2 or more infantry figures manning the gun, they can use the gun as though it was partially crewed (see **Partially Crewed Guns**, above). If there is only 1 figure manning the captured gun, the gun can not be fired (but it can be moved).

Unlimbered Artillery Movement

This section is copied from the **Movement** section of Hardtack.

Unlimbered artillery represents guns moved by a gun crew without the aid of a team of horses. This represents the crew simply pushing the gun into position. Since the gun does not have to be unlimbered, this is the only way a gun can be moved and fired in the same activation.

It also assumes at least 2 figures moving the gun. If there is only 1 figure in the gun crew, the gun can only move 2". If there are fewer than 2 figures, the gun can not make a combat move..

Shot Fire

To fire shot ammunition from an artillery piece, a modification of the *Stargrunt II* **On-Table Artillery Fire** rules is used.

Shot Fire Accuracy

The player places a marker where the artillery shot is supposed to hit. To hit that point, the Quality die of the gun crew is rolled. If it exceeds the Leadership Value of the gun crew, the shot has hit the location where the marker was placed. If the roll does not beat the Leadership Value, the shot deviates. Note that this is the same as firing an artillery piece over open sites (as found on page 47 of the *Stargrunt II* rulebook).

Shot Fire Damage

The final location of the shot represents the impact point of the cannon ball. Shot fire results in a damage area $\frac{1}{2}$ " wide by 2" long. This area is centred on the impact point, with the long axis of the impact area pointing along a line from the impact point to the cannon.

Any figures within this area are potential casualties.

Each potential casualty rolls armour versus an impact number. The impact number is a D10, but it can be shifted down (see **Shot Bouncing**, below).

Figures in woods shift their armour rolls up one for cover.

Any companies in the damage area of the weapon will make a 1/0/NTR Confidence Test for Low/Medium/High motivation troops. This applies even if there were no casualties, and it applies to initial shots as well as bounced shots.

Treat casualties as you would for small arms fire.

Shot Bouncing

Shots can bounce once they hit the ground. Whether or not a shot bounced depended on the angle at which the shot hit the ground, the type of ground it hit, and whatever else it might have hit.

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For a shot to bounce, it must have landed in open terrain or a road. It will not bounce if it hits any other terrain or hits the side of a hill. If it hits terrain that allows bouncing but the ground was wet, muddy or covered in snow the shot won't bounce. A scenario can indicate that no shots are allowed to bounce depending on the weather.

To determine if the shot bounced, the Quality die of the gun crew is rolled. If it exceeds the Leadership Value of the gun crew + 2, the shot has bounced.

The shot then travels along a straight line from the cannon, through the original point of impact and beyond to a new target point. The new target point will be along this straight line. Measure the range from the cannon to the original impact point and divide the number in half (rounding down to the nearest inch). This is the distance the cannon ball will travel from the original impact point to the new target point.

Determine the new impact point by rolling a D12 and a D4 for deviation from the new target point. The D12 is the clock face direction the shot will deviate towards, and the D4 is the number of inches it will deviate.

Once the shot's second impact location is determined, check for casualties again. The Impact Die is shifted down 1 for every bounce.

This new impact point can result in yet another bounce. The attacker rolls the quality die again, this time the attacker must exceed the Leadership Value of the gun crew + 4. Each new bounce adds 2 to the Leadership Value of the previous bounce. The direction of each new bounce is taken along a straight line from the most recent impact point to the previous impact point. (The author uses golf tees to mark the impact points.) Each bounce travels half as far as the bounce before it. Each bounce has the Impact Die of the previous hit shifted down 1.

The shot will continue to make bounces until:

- 1. It is obvious that further bounces wouldn't hit any figures.
- **2.** The shot bounces off the table top.
- 3. The shot lands in terrain that does not allow a bounce.
- **4.** The gun crew's Leadership Value + the modifiers for previous bounces make it impossible for the shot to bounce.
- 5. The Impact Die for the current impact point was D4.

Shots only affect the figures at the impact point. Other figures between the gun and the impact point, or between one impact point and another impact point after a bounce, are assumed to be missed. The shot flew over their head or otherwise missed completely.

If a shot encounters a hill, the point where it hits the hill slope becomes the new impact point and there are no more bounces. If a shot encounters a building, it would do damage to the building as per the *Stargrunt II* **Buildings and Fortifications** rules (page 56). If a shot hits woods, the impact point would be the edge of the woods, and the shot would deviate from there.

Shot Fire Example

Here is an example of Shot Fire:

A cannon with a Regular quality crew with a 2 leadership value fires roundshot at a formation 45" away. The Quality Die is rolled, with a 1 result. This is not greater than 2, so the shot deviates from the point where it was aimed. A D12 and a D8 are rolled as deviation dice, the result being an 11 and a 5, respectively. The impact point 5" away and off to the left of the original aim point.

The target player checks for casualties. Each figure roles an armour die of D4 versus an impact die of D10. The first figure rolls on his armour die 4 versus 6 on the armour die, and is wounded. The second figure rolls a 2 versus a 9, and is killed. The company must make a Confidence test. This test would normally be at a TL of 0, but since they took casualties the TL is 1.

The firing player checks for a shot bounce. The attacker rolls his Quality Die, a D8. He must beat his Leadership Value + 2. He rolls a 5 and the shot bounces. The distance to the cannon is measured, and it is now 49". The bounced shot will travel another 24" ($49 \div 2 = 24\frac{1}{2}"$, rounded down). As luck would have it, there is a company lurking about at that end of the table.

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A D12 and a D4 roll is made for deviation. The results are 12 and 1, respectively, so the shot moves 1" towards the 12 o'clock facing. The damage area lands on top of this company. Four figures are potential casualties.

The figures are in light cover. This time the figures roll a D6 armour die (D4 shifted up 1 due to cover) versus a D8 (the D10 impact die shifted down 1 due to a bounce). Two figures are wounded. These figures would have to make a TL1 Confidence Test.

This new location is on firm ground, so the firing player rolls to see if the shot bounces. The attacker must beat his Leadership Value + 4 this time. He an 8 on his D8. The shot bounces a second time.

Since the shot bounced, it would travel an additional 12" along the board (the distance from the first impact point to the second is $24" \div 2 = 12"$). This would take the shot off the board. However, there is a building 3" beyond this second impact location, near the edge of the table. Before the shot can go off the table, it hits the building. Damage to the building is determined, with the shot having an impact die of D6 (D10 impact shifted down 2 due to two bounces). This is the shot's last bounce.

Canister Fire

Canister fire is resolved much like small arms fire.

Note that infantry coming under canister fire has to make a 3/2/1 Confidence Test for Low/Medium/High motivation troops. This only applies if the company could have taken damage from the cannon (i.e. it has a range die of D12 or less), even if the cannon misses.

When a gun fires canister, a target location is picked. This location is always a figure in a company. This figure must be within the 30 degree arc of fire of the gun firing canister. The target of the canister round will be the figure's company.

When a gun fires canister, it rolls a quality die and two firepower dice (instead of one) versus the target's range die. This is resolved just like small arms fire. The results are handled exactly the same way.

The firepower die and the size of the range bands are based on the type of artillery piece being fired. The range band size is not determined by the gun crew's quality. Instead it is found on the following chart. Also on the chart is the gun's firepower dice and impact die. The designation (SB) indicates a smoothbore cannon.

Field Piece	Range Band Size	Firepower Dice	Impact Die
20lb Rifle	6″	2xD12	D12
12lb Napoleon (SB)	8″	2xD12	D12
10lb or 3" Rifles	6″	2xD10	D12
6lb (Rifle or SB)	4″	2xD8	D12

Formations as Targets of Canister Fire

When a formation is the target of small arms fire or artillery canister fire, the Range Die is shifted down one. This is an Open Shift. If the Range Die is already a D4, the Quality Die of the firing unit is shifted up one. This shift is done after die shifts for In Position, cover, etc.

Companies in *skirmish formation* do not shift the range die down one.

Canister Fire Through Companies

Firing Through Friendly Companies

Canister can not be fired through friendly companies.

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Firing Through Enemy Companies

A company may fire through an enemy company in *skirmish formation* to hit another enemy company behind it. Combat is resolved as normal with the range calculated as being against the target company.

When deciding what figures are casualties, the company in *skirmish formation* is treated as though it was part of the target company if the skirmishing company was not In Position. If it was In Position, the skirmishing company does *not* take casualties.

If the skirmishing company is in cover, give the target company the same cover benefits.

If the company in *skirmish formation* takes casualties in this manner it must make a Confidence Test as usual. If it did not suffer any casualties it does not have to make a Confidence Test.

Only an enemy company in *skirmish formation* can be fired through. A company can not fire through an enemy company in a *close formation* in order to target another company behind it. However, canister fire can blast through the first company to hit a second company.

Canister Fire Blast Through

Canister fire can blast through the initial target company and hit companies behind it.

If canister fire misses a company (that is, none of the attacker's dice exceeds the defenders Range Die), there is no more blast through. If canister fire hits a company, then a company behind it can be subject to blast through. This continues until the canister fire misses a company, or until the Range Die is shifted up beyond a D12 (in which case it is impossible to do damage to the company, as per the regular *Stargrunt II* rules).

After the fire on the initial company is resolved, a figure in the company behind the first company is chosen. A line is drawn from the cannon to the first figure targeted by the canister blast. This line is extended backwards and is $\frac{1}{2}$ wide. Any figure along this line can be targeted for canister fire blast through, and its company can be affected by blast through.

The range die to this second company is calculated as for normal canister fire (see above), except that the range die is shifted up one for every company in front of the current target that has taken damage.

Canister Fire Example

The following is an example of canister fire:

A Confederate regiment forms up in the open in order to charge a Union 3" Rifle loaded with canister. In front of the *regimental formation* is a company in *skirmish formation*. It is 17" away from the cannon. The lead company of the *regimental formation* is 22" away from the cannon. The cannon crew is of Regular quality and happens to activate first.

The 3" gun has 6" range bands. The Union player decides to aim at the lead company in the *regimental formation* instead of the company in *skirmish formation*. The distance is 22" which is 4 range bands away, but this is shifted down 1 due to the target being in *close formation*. The cannon rolls a D8 and two D10s, while the target squad rolls a D8. The cannon rolls a 6, a 4 and a 9. The squad rolls a 2. This is a major hit, and there are casualties.

There are 2 potential casualties and a 3 out of 8 chance of there being a third casualty. A D8 is rolled a 3, so there are three potential casualties. Since the fire went through the skirmishing company, potential casualties can come from it and the company in the formation that was the actual target. The casualties are chosen at random. Two end up coming from the company in *line formation* and one from the company in *skirmish formation*.

Each casualty rolls a D4 versus a D12 impact die. The figures roll 3, 4 and 1 versus 6, 5 and 3, respectively. This results in one dead figure and one wounded figure from the company in *line formation*, and one dead figure from the skirmishing company. Confidence Tests.

There is another company in the *regimental formation* behind the lead company and the skirmishing company. Since the lead company took damage, this other company is subject to blast through. This time the range die is a D8 (D8 range band shifted up 1 for the one company already attacked, but down 1 for being in formation). This time the cannon rolls a 4, 3, and 1 on its D8 and two D10s. The range die rolls an 8. There is no damage to the company, and so there is no more blast through. The company must still make a Confidence Test for being fired on by canister fire.

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After rolling the dice, the gun crew loses its Canister counter. They use their second action to reload canister.

Casualties

Treatment of Wounded Troops

All figures that have been hit and fail their armour die rolls are treated as wounded. No treatment is given to them, and no Reorganise roll is used. If the impact die was double or more the roll on the armour die, the figure is dead as per the regular *Stargrunt II* rules. Otherwise the figure is wounded and left where he is. Wounded figures still affect Confidence Levels if they are abandoned to the enemy.

After the battle, the regular D6 treatment roll can be made to see if the figure is okay, wounded, or killed.

Mounted Casualties

When mounted cavalry units and mounted officers are wounded, roll randomly for each mounted rider — as normal — to determine who is wounded in the company. Before marking a figure as a casualty, roll a D10. On the roll of a 1 to 6 the horse has been hit, on a roll of 7 to 10 the rider was hit.

If the horse is hit, roll immediately to see if it is dead, wounded, or okay. If it is dead or wounded, replace the horse and rider with a dismounted rider.

If the rider is hit, replace the rider with a dismounted rider that is marked as wounded. The horse, however, is not dead. A wounded soldier can be carried on his horse, and so the company is not counted as encumbered when it moves a wounded soldier.

If a company commander loses his horse, he is still the leader. Leaders are only replaced if they are killed or wounded, not if their mount is killed.

Artillery Horse Team Casualties

When an artillery horse team is fired on by small arms fire or artillery, check each horse in the team for casualties. If a horse is a casualty, check immediately to see if the horse is killed, wounded, or okay.

If a horse is killed, the unit must cease moving if it was hurt during movement (this will only happen as a result of the *Stargrunt II* reaction fire rule, or if the optional *Hardtack* **Prepared Fire** rules are used).

It will take a Reorganise action to remove the dead/wounded horse from the team. Once that is done, shift the movement die of the horse team down one die type.

If all the horses of a horse team are killed, the gun is still considered Limbered. The horses are removed by the gun is unable to move (it is still attached to the dead horses). To detach the gun from the dead horses the unit must take an Unlimber action. Once unlimbered, the gun can be moved as an unlimbered gun.

Artillery Piece Damage

The rule that indicates how a crew-served weapon can take damage when the gun and crew are fired upon (*Stargrunt II* rules, page 30) applies to artillery pieces and their crews. However, it applies only when the gun and the crew are casualties due to shot, case shot, and spherical case shot artillery fire.

Whenever a cannon and its crew are fired on by artillery (other than from canister fire), follow this rule to see if the field piece is hit and damaged. If an artillery crew is fired on by small arms or by canister fire, only check the soldier figures and the horse figures for casualties as the gun will be immune to small arms and canister fire.

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Note that horses can be potential casualties, as listed above in the **Artillery Horse Team Casualties** section of *Hardtack*.

Close Assault

Close Assault Reaction Test Modifiers

Formation Reaction Test Modifier

Whenever a reaction test is made by a unit attempting to Close Assault, the Threat Level is reduced by 1 if the assaulting unit is in a *close formation* (either an individual company in *line formation* or *column formation*, or a *regimental formation*).

If a defending unit is checking to see if it stands firm against a Close Assault and it is in a *close formation*, the Threat Level is reduced by 1.

Cavalry Reaction Test Modifier

Increase the Threat Level by 1 if the defending unit is attempting to stand firm against a cavalry charge and the defending unit is not a mounted cavalry unit (in other words, this test is made by infantry, artillery, and dismounted cavalry).

Regimental formation Close Assault

An entire *regimental formation* may conduct a close assault. Follow the rules for **Combined Close Assault Activations** on page 43 of the *Stargrunt II* rulebook. Remember to decrease the Threat Level for the companies being in a formation as per the **Formation Reaction Test Modifier**, above.

Losing Close Formation in Close Assault

After the first round of Close Assault, both the attacking unit and the defending unit are automatically changed to *skirmish formation*.

Close Combat Weapon Values

These values could be interpreted from the rules given on page 42 of the *Stargrunt II* rulebook. They are included here for clarity.

Close combat weapon values are:

No specific close combat weapon (soldier has just ranged combat weaponry	
or improvised weapons)	No die shift.
Pistol	Shift up ONE die type.
Sword, sabre	Shift up ONE die type.
Shotgun	Shift up TWO die types.
Soldier is mounted	Shift up ONE die type.

Note that if defenders are in cover or In Position, the defenders get a die shift up by one type. This applies for the FIRST ROUND of Close Assault *only*. This is stated on page 42 of the *Stargrunt II* rulebook.

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Mounted Troops in Close Combat

Mounted Close Combat Die Shift

As listed above, mounted troops get a positive die shift for being mounted. Note that if a cavalry trooper is dismounted, he does not get this modifier until he is remounted.

Mounted Casualties in Close Combat

Mounted figures treat close combat casualties as listed in the **Casualties** section under **Mounted Casualties**. There is, though a difference in the chance of the horse being hit during close combat.

When mounted cavalry units and mounted officers are hit in close combat, roll a D10.

- If the attacker is not mounted, on the roll of a 1 to 6 the horse has been hit, on a roll of 7 to 10 the rider was hit.
- If the attacker is mounted, on a roll of 1 to 4 the horse has been hit, on a roll of 5 to 10 the rider was hit.

If the horse is hit replace the horse and rider with a dismounted rider. On the next round of Close Assault only, the rider receives a die shift DOWN 1. This represents the disadvantage of being physically dismounted.

If the rider is hit, treat the figure as a regular close combat casualty.

If a company leader loses his horse, he is still the company leader. Leaders are only replaced if they are killed, not if their mount is killed.

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Advanced Rules

The following are rules that increase the realism in *Hardtack* or allow the modelling of particular historical effects. These add complexity to the game and can (but not always) slow down play. Players should feel free to use some, any, or all of these rules.

Advanced Artillery Rules

Artillery Shot Ranges

The artillery rules assume that every artillery piece, regardless of calibre, has the same range bands. This is a reasonable simplification, based on the size of the average *Stargrunt II* battlefield. For more historical accuracy, this rule adds ranges for artillery.

There are three artillery shot ranges: short, medium, long.

Short range adds 1 to the die roll for shot accuracy. That is, if a gun crew has a leadership value of 2, it normally needs to roll a 3 or better to hit without a deviation roll. At short range, 1 is added to the die, so a 2 or better would hit.

Medium range does not modify the die roll.

Long range subtracts 1 from the die roll for shot accuracy. That is, if a gun crew has a leadership value of 2, it normally needs to roll a 3 or better to hit without a deviation roll. At long range, 1 is subtracted from the die, so only a 4 or better would hit.

The distances given below are the maximum distances for each range band. "SB" indicates a smoothbore cannon.

Field Piece	Short	Med	Long
20lb Rifles	45″	90″	200″
12lb Napoleons (SB)	30″	60″	150″
10lb or 3" Rifles	40″	80″	180″
6lb gun (SB)	25″	50″	140″

Rifled Artillery Bounces

Due to the nature of rifled artillery, add a +2 modifier to the Leadership Value of a cannon crew firing a rifled cannon when resolving shot bounces.

Off-Table Artillery

Hardtack assumes that most artillery is on-table. There may be scenarios that allow for off-table artillery support, representing guns that are supporting the miniatures on the table top but are actually located well off the table.

Due to the nature of Civil War combat, off-table artillery behaves much the same way as on-table artillery in *Hardtack*. It does *not* follow the regular *Stargrunt II* rules for off-table artillery.

Off-table artillery can not be moved or turned. In most cases, miniatures for the gun and gun crew are not needed.

Off-table guns are activated like any other unit. They are assigned a Leadership value and a Quality Value just like any other unit. Off-table artillery must still reload after firing. However, an off-table gun may *not* have actions transferred to it by the commander or a command squad.

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An off-table artillery piece is indicated as being a certain number of inches from a specific point on a table edge. All distance measurements and line of sight determinations are made to this point.

The range is determined as follows. 1) Measure the distance from the place on the table to the point on the table edge. 2) Add to this measurement the distance the gun is from the table edge.

Centred on the gun's measurement point on the table edge is a fire arc "band". The length of this fire arc band is equal to half the gun's distance from the table. The gun may only fire at any target that is within a 15 degree arc of either side of this band.

Example: a Confederate 12lb gun is 700 yards away from the table edge. This translates to 70". A spot on the table edge is picked as the gun's aim point at the beginning of the scenario. The fire arc band is centred on this spot, and is 35" long.

During the game, the Confederate player wants to fire the gun at a point on the board. First, he determines if it is within an arc that extends 15 degrees from either side of the fire arc band. It does. He checks to see if the gun has line of sight to the measuring point. It does.

The player measures the distance to the measuring point. It is 15". The gun is 70" from the board edge, so the final range is 85".

Note: this will produce some minor errors. Technically speaking, all distances and line of sight determinations should be made from the gun's actual position. If the gun is, say, 50" off the table edge, the distances should be measured from that point. This can be difficult, though. It's entirely possible that the artillery piece would end up in another room of the house, or on the other side of a basement wall! This system makes it easier to measure artillery that is off the table top.

Case Fire and Spherical Case Fire

"Case fire" is the term given to firing case shot in *Hardtack*. "Spherical case fire" is the term given to firing spherical case shot in *Hardtack*.

Case shot and spherical case shot can not be fired at a point less than 50" from the gun. This means that in most games case fire and spherical case fire can only be used with the optional **Off Table Artillery** rules, above.

Case Fire and Spherical Case Fire Accuracy

The player places a marker where the artillery shot is supposed to hit. To hit that point, the Quality die of the gun crew is rolled. If it exceeds the Leadership Value of the gun crew, the shell has hit the location where the marker was placed. If the roll does not beat the Leadership Value, the shot deviates. Note that this is the same as firing an artillery piece over open sites (as written on page 47 of the *Stargrunt II* rulebook).

Case Fire and Spherical Case Fire Damage

Case fire and spherical case fire damage works the same as regular *Stargrunt II* artillery, as defined on page 47 of the rulebook. Any squads in the burst area of the weapon will make a Confidence Test instead of receiving a Suppression Marker (as *Hardtack* doesn't use suppression).

The main difference between case shot and spherical case shot is in the shape and size of the burst area.

For case fire, the burst area is a circle of a specific radius, centred on the aim point.

For spherical case fire, the burst area is a rectangle. This rectangle is centred on the aim point. The long edges of the rectangle must be pointed back towards the cannon that fired the shot.

The following table lists Burst Radius for case fire, the Impact Die for case fire, the Burst Area for spherical case fire and the Impact Die for spherical case fire. It includes the most common artillery pieces of the war. The "SB" rating beside a gun indicates it is a smoothbore.

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		VCI 310	11 1.5
Ca	ise	Spheric	al Case
Burst Radius	Impact Die	Burst Area	Impact Die
11/2	D10	8" x 1"	D8
1″	D8	6″ x 1″	D6
1″	D8	6″ x 1″	D6
1/2″	D6	4″ x ½″	D4
	Burst Radius 1½ 1″ 1″	Radius Die 1½ D10 1″ D8 1″ D8	Case Spheric Burst Impact Burst Radius Die Area 1½ D10 8" x 1" 1" D8 6" x 1" 1" D8 6" x 1"

Ammunition Supply

Small Arms Ammunition

Each time a company conducts a Fire action, subtract one from the number of ammunition loads available to the company. When a company runs out, it may not conduct a Reload or a Fire action.

A Union company with single shot weapons can fire up to 10 times with a full load of ammunition. A Confederate company with single shot weapons can fire up to 6 times. A company with repeaters uses up two ammunition points every time a shot is fired (so a Union company with repeaters would be able to fire 5 times with a full load of ammunition).

A company can scrounge around for extra ammunition by using a Reorganise action. This action gives the company two more loads of ammunition for single shot weapons or one more load for repeaters.

Ammunition can be recorded on a piece of paper. Alternatively, each company can have one or two small dice beside it representing the amount of ammunition remaining. Use a green or white die to represent the initial ammunition supply for Union companies. When that runs out, replace it with a red die showing the number 6. Confederate companies would start with a red die. When a company conducts the Reorganise action, change the red die to show the number 2. When a company has run out of this supply of ammunition, remove the die.

Note that a scenario may give a company more or less than a full load of ammunition. The above numbers are based on an average of 50 rounds for a Union company and 30 rounds for a Confederate company. To calculate different ammunition loads, 1 ammunition load in *Hardtack* is equal to 5 actual rounds, historically. Therefore, a company with 40 rounds would have 8 loads of *Hardtack* ammunition.

Artillery Ammunition

Normally players need not worry about the ammunition supply for artillery pieces in *Hardtack*. However, a scenario may give an artillery piece less than a full load of ammunition, in which case it would be necessary to keep track of the artillery piece's ammunition. Unless stated in a scenario's rules, assume artillery pieces have an unlimited supply of ammunition.

Enfilade

Enfilade fire is fire that comes from the sides or rear of a unit. This unexpected fire has bad effects on morale.

Companies in *skirmish formation* are immune to enfilade fire.

If some or all of a company can fire on the rear half of an enemy company in *close formation*, the enemy company has to apply the enfilade modifier when making a Confidence Test for that fire.

The enfilade modifier is +3/+2/+2 for Low/Med/High motivation troops.

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Note that an additional case is made when deciding target priority. A unit will target the closest enemy unit (as per the *Stargrunt II* rules). If there are two equally close units by range band (that is, two enemy units are in the same range band), a company will target a unit facing it *before* it will target a unit that it can fire on with enfilade fire. The unit facing the company is more dangerous than the unit facing away from the company.

First Volley

The first time a company fires the attack is called a First Volley. When a company fires its First Volley shift the company's Firepower Die up 1. This is an *open shift*, so if the Firepower Die is already D12, shift the defender's Range Die down 1.

The First Volley also has substantial morale effects. A unit hit by a First Volley adds 3/2/1 to the TL of any Confidence Tests made due to taking casualties, for Low/Medium/High motivation troops, respectively. For instance, if a Medium Motivation unit takes casualties from a first volley, it must make a Confidence Test with a TL of 3, rather than the usual TL of 1. A Low Motivation unit in the same circumstances would make a Confidence Test with a TL of 4.

It is necessary to mark units that have not fired their first volley. This can be done with a "First Volley" marker. If using the **Ammunition Supply** rules, above, it is easy to tell when a company has not fired its first volley (it still has all of its ammunition).

First Volley only applies to small arms fire.

First Volley only applies to Confident and Steady companies. A company that is Shaken or worse can not make use of the First Volley effects. If using markers, as soon as a company becomes Shaken, Broken, or Routed it should lose its First Volley marker. If using dice to mark ammunition, a marker needs to be placed beside such a company until after it fires for the first time. A suggested marker is the unused "Suppression" markers in the *Stargrunt II* counter set.

The Grand Gesture

A Grand Gesture may be made in conjunction with trying to Rally or when trying to Close Assault with either a *regimental formation* or an individual company. This can only be done by a regimental commander or a brigade commander (or higher).

The Grand Gesture does not count as an action. It is considered part of a Rally or Close Assault action.

To conduct a Grand Gesture, the commander must be: 1) in line of sight of all the companies that he wishes to motivate, and 2) in line of sight and within range of an enemy unit.

For the purposes of this rule only, any friendly company not in line of sight of a commander but which is touching a squad in line of sight of the commander is, itself, considered to be in line of sight. This usually means the commander must be out in front of the *regimental formation*. In the case of motivating a single company, the commander may be attached to the squad.

An enemy unit is within range of the commander if it is within line of sight and, after all modifiers are applied, the unit still has a chance of hitting the commander. For instance, a Confederate regular company 39" away from a Union commander out in the open would have a D12 range die, so they would qualify as being "in range". If the commander was in light cover, the Confederate company would be unable to hit the commander, so he would not qualify. Hidden units can not count as the enemy unit.

The Grand Gesture shifts the quality die type used in a test up one. In the case of a Rally attempt, each squad in the *regimental formation* would shift their quality die up one. For a Close Assault Reaction Test, the die type of the company or the commander — whichever is being used, as per the *Regimental Formation* Close Assault rules, above — would be shifted up one.

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The negative effect to the Grand Gesture is that if the commander becomes a casualty, all of the companies that received the Grand Gesture bonus must make a Reaction Test as though the company leader was killed (as mentioned in the **Regimental formation** rules). This Reaction Test is further modified with a +1 TL.

Example: A Union regiment in *column formation* consisting of three rows of two companies per row is preparing to close assault a Rebel defensive position. The formation is made up of Regular and Green units. The regiment's Colonel attaches himself to a company in the front row of the formation.

On the commander's next activation, he does an Activate Regimental Formation action to close assault with the entire formation. He also conducts a Grand Gesture. He is within line of sight of the company he is in, the company beside his, and the company behind him. The company behind and to the right of his company is touching a company beside him, so it counts as being in line of sight, too. The last two squads in the column are touching a company considered to be in line of sight, so they, too, are in line of sight.

A Veteran Rebel company is within line of sight of the commander's attached company and is 10" away, so it is in range.

The commander makes the Grand Gesture along with the Reaction Test for all of the companies to attack in close assault. The Green units roll a D8 quality die instead of a D6, and the Regular units roll a D10 instead of a D8 due to the Grand Gesture. The TL is further modified by -1 due to the units being in *close formation*.

All the companies except one in the rear make their rolls and go on with the assault. The companies end up missing the combat moves, so that they are still some 4" away from the enemy after movement. The Rebel units receiving the charge made their Reaction Tests and stayed where they were. They fire on the Union soldiers.

As luck would have it, the Colonel is killed. Now all the units must make a Confidence Test as though they lost their squad leader. This test is at +1 TL due to the Grand Gesture.

Morale Modifications

This rule is the author's house rule used in all *Stargrunt II* games. It makes morale results more realistic.

Whenever a squad has lost a running total of 50% or more of its original Full Strength complement, it must make a Threat Level 4/3/1 Confidence test for Low/Medium/High motivation troops. For instance, a company that originally had 8 figures would make this test when it was reduced to 4 or fewer figures. This test is made when the company has lost half of its figures *and for every figure lost thereafter*.

Morale Modifications Example: We have a company of 8 figures. In three separate attacks, it takes 2 casualties each time.

In the original *Stargrunt II* rules, this would result in the unit having to make 3 Threat Level 2/1/0 Confidence Tests, even though at the end of it the unit would have suffered 75% casualties. One more casualty would result in another TL 2/1/0 test, in spite of the fact that only one figure would be left in the company.

With this rules modification, the unit would make a TL 2/1/0 Confidence Test when it lost the first 2 figures, a TL 4/3/1 test when it lost the next 2 figures (it would be down to half strength at this point), and a TL 4/3/1 test each time it took any more casualties.

This test is pretty simple to understand. The only wrinkle is when a unit that has taken casualties is combined with another unit that has taken casualties. What is this new unit's Full Strength complement? The new unit would have a Full Strength complement equal to the original Full Strength complement of the largest unit, or the number of figures in the new unit, whichever is greater.

Full Strength Complement Example 1: Assume you have two units, a company with 8 figures and a company with 6 figures. Assume that they take casualties, and the two companies are combined, forming a new company with 7 figures in it. The new company's Full Strength complement would be 8, not 7, because the largest of the two original companies had 8 figures in it.

Full Strength Complement Example 2: Assume you have two units, a company with 8 figures and a company with 6 figures. Assume that they take casualties, and the two companies are combined, forming a new company with 9 figures in it. The Full Strength complement of the new company would be 9. This is because the new company is larger than either of the two original companies.

Prepared Fire

This rule is part of the author's house rules used in all Stargrunt II games.

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The Prepared Fire Action allows a unit to prepare to fire during an enemy unit's activation. A unit that conducts a Prepared Fire action receives a Prepared Fire marker. A Prepared Fire Action uses up both of the unit's two actions for that activation. The unit is now classified as having been activated.

Whenever an enemy unit conducts an action within line of sight of a unit with a Prepared Fire marker, the Prepared Fire marker can be "spent" and the "prepared" unit can conduct a Fire action at the enemy unit. This action is like a regular fire action, except that the range band to the target is shifted up one due to the "hastiness" of the fire.

Artillery units can only use Prepared Fire with canister rounds.

Spending a Prepared Fire marker is the only way a unit that has already been activated can conduct a Fire action without having a leader transfer an action.

A unit that has a Prepared Fire marker loses that counter the next time it is activated.

This Prepared Fire marker can be spent while the enemy unit is in the middle of its own movement. The enemy unit completes its action *after* the Prepared Fire is resolved. The Prepared Fire action can only be done after an enemy unit conducts an action, or while the enemy unit is doing a Move or Reorganise action. If an enemy unit is conducting a Fire action, for instance, the Fire action is resolved before the Prepared Fire action can take place.

A hidden unit *can* receive a Prepared Fire marker as an action and still remain hidden.

Example: A company of Confederate cavalry, dismounted, is in *skirmish formation* on a ridge. They conduct a Prepared Fire action and get a Prepared Fire marker.

A Union company marches through a gap between two houses 2 range bands away. The Confederate cavalry waits until the unit is in the middle of the gap, and spends its Prepared Fire marker. The range die rolled by the Union player is normally a D6 since it's 2 range bands away, but in this case the range band is shifted up one to a D8 due to it being Prepared Fire.

After the fire is resolved, the Union company can continue to finish its move. It is not required to move where it had intended unless it was making a Combat Move. For instance, it could use its remaining movement to move towards the newly revealed Confederate Cavalry.

Quick Combat Resolution Option

This optional method of resolving combat is recommended.

Stargrunt II has a "Quick Combat Resolution" system, recommended for large games or when time is short. *Hardtack* uses a similar system.

Follow the normal combat resolution system up to, and including, the point where you determine the number of potential casualties. However, instead of rolling impact versus armour for each casualty, treat each casualty as wounded.

When a unit moves, it can choose to take the wounded with them. This follows the usual rules for a company carrying wounded men. However, the company can only carry a number of figures equal to the number of unwounded figures. If any wounded are left behind, the company still suffers from the modifier to their Confidence Test for abandoning wounded.

Example: if a company of 10 figures takes 6 casualties and retreats, it can only take 4 of those casualties with them. The other two are left on the field, abandoned.

A Reorganize Action works exactly as in normal *Stargrunt*. Roll for each casualty. On a 1 or 2, the casualty is dead. On a 3 to 5, the casualty is wounded and can no longer fight. On a roll of 6, the casualty is okay and can return to fight with the unit.

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Signal Stations

Some scenarios may include signal stations. Signal stations were simply a group of soldiers who would look out for enemy movement and use signal flags to communicate the information to troops on their side (though these signals were often seen by the enemy).

Signal stations communicate using the regular communications rules in *Stargrunt II*. The only difference is that the team doing the signals must be within line of sight of the unit receiving the signals.

Quiet Mutiny

This rule is intended for use with veteran (in the historical sense) units from 1864, on. This rule could be used from 1862 onward with any units that, at the players' discretion, have seen extensive action.

The first time a Regular or Veteran unit is ordered to move in clear terrain towards the enemy, a special test is made. The unit rolls its Quality Die and *adds* its leadership value to the roll. If the total is 9 or greater, the unit is immediately changed to a Confidence Level of Shaken.

Regimental Colours

Each regiment has a set of regimental colours. Regimental colours are the flags carried by a regiment. They will consist of one figure carrying a flag, representing the "colour guard". These soldiers can not take part in small arms fire, but can take part in close combat.

If the figure with the colours is a casualty, the colours fall. A Reorganise action is conducted to recover the colours.

If the colours are not recovered, they are left marked on the table where the fell. They can be captured if an enemy figure comes in contact with the colours and does a Reorganise action.

If the colours are captured, all companies in the regiment (regardless of whether or not they are in a *regimental formation*) suffer a +1 modifier to all Confidence Tests and Reaction Tests.

Science Fiction and the ACW

One of the reasons for creating *Hardtack* was for playing scenarios based on Harry Turtledove's novel *Guns of the South*. If mixing science fiction or conventional weapons with *Hardtack* use the following rules.

Modern/future weapons do not need to be reloaded; ignore the reload rules for modern/future weapons.

The firepower ratings of modern/future weapons are those listed in *Stargrunt II*, but multiplied by the men-to-figure ratio used in your rules. So, if one figure equals 3 men and the weapon's firepower is 2, each figure would have a firepower rating of 6.

Figures with modern/future weapons can operate in squads if desired. A squad would consist of between 1 and 4 figures. A squad is activated like a *Hardtack* company. If the troops using modern/future weapons are organized like a Civil War army (such as the AK-47 armed Confederates in *Guns of the South*), they do not have a squad leader. They would still have a *Hardtack* company commander.

Companies with modern/future weapons do not lower their firepower die if they are in *skirmish formation*. They do still decrease the range die if they fire on a formation.

Companies that take fire from modern weapons add 1 to the Threat Level of any Confidence Tests they have to make. Companies that take fire from future weapons add 2 (or more, at the discretion of the person writing the scenario) to the Threat Level of any Confidence Tests they have to make. These modifiers include the Confidence Test made in lieu of receiving a suppression marker for companies in *close formations*.

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Modern/future weapons companies firing on companies in *skirmish formation* place suppression markers, as per the usual *Stargrunt II* rules. If the skirmishing company is armed with American Civil War weapons, that company is suppressed *and* must make its Confidence Test for taking fire as per the usual *Hardtack* rules.

Example 1: a Confederate squad armed with AK-47s (firepower 2 x 3 men per figure) fires on a Union company in *skirmish formation*. There are 3 figures in the Confederate squad, which is Regular quality, and the Union company is in the second range band. The Confederates roll a D8 Quality Die and a D12 Firepower Die. The Union troops roll a D6 Range Die. The Confederates roll a 3 and a 6, the Union rolls a 4. The Union company would have to make a Confidence Test even though there are no casualties, and it would receive a Suppression Marker. The Confidence Test would be made with a TL modified by -1.

Example 2: a Confederate squad armed with AK-47s fires on a Union company in *line formation*. There are 2 figures in the Confederate squad, which is Regular quality, and the Union company is in the second range band. The Confederates roll a D8 Quality Die and a D12 Firepower Die. The Union troops roll a D4 Range Die (normally it would be a D6, but because they are in *close formation* the Range Die is shifted down one). The Union company rolled a 2, the Confederate squad rolled a 4 and a 7. The Union company would have to make a Confidence Test due to casualties. The Confidence Test would be made at +1 to the Threat Level due to the modern weapons, but also with a -1 TL for being in formation. The Union company would not receive a Suppression Marker.

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Combined Threat Level Table for Confidence Tests

The following is the table of Confidence Tests used in *Hardtack*, including all of the advanced rules.

		Motivation		
Circumstances for Test	Low	Med	High	
Unit is fired on by small arms	1	0	NTR*	
Unit is fired on by artillery Shot	1	0	NTR*	
Unit is fired on by artillery Canister	3	2	1	
Non-cavalry unit is fired on by artillery Case or Spherical Case	2	1	0	
Cavalry unit is fired on by artillery Case or Spherical Case	3	2	1	
Unit takes casualties from fire (added to all of the above tests only)	+1	+1	+0**	
Unit takes casualties from First Volley (small arms only)	+3	+2	+1**	
Unit takes AS MANY OR MORE casualties in one attack than it has surviving				
members afterwards	4	3	1	
Unit has lost a running total of 50% or more of its original Full Strength				
complement	4	3	1	
Unit Leader becomes casualty	4	3	1	
Unit is under Enfilade attack	+3	+2	+2	
Unit is in <i>close formation</i>	-1	-1	-1	
Unit's Regimental Colours were captured	+1	+1	+1	
Unit is forced to ABANDON WOUNDED	+3	+2	+1	
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Unit is fired on by modern weapons	+1	+1	+1	
Unit is fired on by future weapons	+2	+2	+2	

*NTR = No Test Required.

**A test is required for High Motivation troops.

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Designer's Notes

Figure Availability

The American Civil War is one of the most popular eras for wargaming, and figures are plentiful.

A number of manufacturers make quality 25mm figures. I have used Old Glory and RAFM 25mm ACW figures. Old Glory has the more extensive line, with figures running about US\$25 for 30 figures.

HO scale plastic figures are available from a number of companies, including IMEX, ESCI/ERTL, Revell and Airfix. The soft plastic is a problem in that it bends far too easily, resulting in paint chipping. A way around this is to spray the figures heavily afterwards with a sealant to stiffen them. While the figure poses are somewhat limited, a box of 40 to 50 figures runs from US\$5 to \$10.

By far the most common figure scale is 15mm. There are a wide variety of 15mm figure manufacturers, such as Stone Mountain and Minifigs, but I only have experience with Essex, Battle Honors and Old Glory. Some players contend that 15mm is *the* way to play *Stargrunt II*; 15mm is the most common scale for American Civil War wargames.

Smaller scales are also available. GHQ makes 10mm ACW figures and Irregular Miniatures makes 6mm and tiny 2mm ACW figures. It is theoretically possible to play *Hardtack* with 6mm figures (I know of someone who plays *Stargrunt II* with 6mm figures), but it takes some ingenuity or book keeping to keep track of individual casualties at this scale. If you are brave enough to try *Hardtack* in 2mm, I would definitely like to hear about it!

Design Commentary

I've always felt that designer's notes should be required in all strategy games, particularly those based on history. It's the only way for a player to know the thinking behind the rules. It's the only way a player can make an informed decision when it comes to expanding or altering a set of rules.

These designer's notes are a little different in the sense that I didn't write *Stargrunt II*, I only wrote this supplement. The notes will be a combination of historical commentary and thoughts on rules.

Design Criteria

The intention was to create a supplement to allow the playing of *Stargrunt II* in the American Civil War. The idea of doing this first arose when I was reading Harry Turtledove's novel *Guns of the South*. In the novel, time travelers attempt to destroy the United States by furnishing AK-47 assault rifles to the Confederacy during the American Civil War. The idea of using this as a science fiction wargame scenario was appealing but I wasn't sure that *Stargrunt II* could handle the Civil War aspects, so I shelved it.

In the fall of 2000, I bought a copy of *Brother Against Brother*, the skirmish rules published by H. G. Walls. I was struck by the similarity the game had to *Stargrunt II*. There are a lot of differences, but the similarities were intriguing. The basic unit in *Brother Against Brother* is the squad. Leaders affect what they can do when activated. The squad activation rules are different than those in *Stargrunt II*, but they can result in the same sort of alternate activation. Even the scales of the game are similar, although *Stargrunt II* turns are shorter in time and the distances about twice as long. While not exact by any means, it acted as a "proof of concept" that *Stargrunt II* could be used for the American Civil War.

Most of the rules in *Hardtack* are my own interpretation of how to do something in *Stargrunt II*. I tried to remain true to the rule mechanics in *Stargrunt II*. When I've deviated it's been to give particular emphasis to something that was important historically. I have "stolen" rules from other sources, when needed.

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In the end, *Hardtack* should be capable of two things: 1) American Civil War and other 19th century skirmish games; 2) mixed era games, where science fiction or modern day weapons are used against "primitives" armed with Civil War era weaponry.

Hardtack should also play more quickly than regular *Stargrunt II* with the same number of figures. The formation rules make it possible to move and activate large numbers of figures at once. The figures are mostly unarmoured, which will result in a nasty bloodbath. There is no suppression, but far more morale rolls. A lot of things should be happening, and happening quickly, in a game of *Hardtack*.

Figure Scale

Through most of *Hardtack's* development, I had one figure representing one man. I decided to change this after a great deal of playtesting. The problem was one of ground scale. Ten figures in *Hardtack* took up an area roughly equivalent to a company in real life. A rough rule-of-thumb is one man taking up one yard of frontage. This works out to about 9 or 10 men per 1" scale inch on the table top. I use figures based for *Fire and Fury*. This worked out to three 15mm figures on a 1" wide base taking up the space of about 9 men in real life.

By having a 3:1 man-to-figure ratio, I was able to do something else: I was able to have a *Stargrunt II* squad represent a company in the American Civil War. Since the formation rules in *Hardtack* let a player handle 100 to 150 figures per side relatively easily and quickly compared to *Stargrunt II*, I was able to use *Hardtack* to represent battles between two regiments. As a result, *Brother Against Brother* could be used for skirmishes, *Fire and Fury* or *Johnny Reb* could be used for clashes between brigades and divisions, and *Hardtack* could be used for companies and regiments fighting each other.

Organization

The typical volunteer infantry regiment (and cavalry regiments, which were organized similarly) on paper was about 1,025 men, organized into 10 companies plus a headquarters section. This is what it was "on paper", anyway. Early in the war the number of men actually in the regiment could be relatively high, particularly soon after it was established. Regiments of over 1,000 men were common. In July of 1861, the 36th Illinois regiment had 1,151 men in ten companies of infantry and two of cavalry. The 14th Indiana had 1,134 men in its ten companies. When the 66th Georgia regiment was formed in 1864, it had 1,500 men, forming 1 "regiment" of ten companies and an attached "battalion" of 3 companies.

It didn't take long, though, for those sizes to deteriorate. Men left the regiment before battle due to disease, desertion, or because they were just plain unfit for duty. Once a regiment saw battle, casualties would drop the numbers before they could be replaced. On May 11, 1864, the 13th Massachusetts regiment could muster only 107 men. The 20th Maine regiment had 386 men at the Battle of Gettysburg (July 1 to 3, 1863), but was reduced to 80 men by late 1863. At Antietam, the 17th Virginia could put only 55 soldiers into the line.

This organization was the case with most Union and Confederate regiments throughout the war, which were volunteer regiments. Regular Army units were organized differently. A Regular Army regiment was a regiment that existed as part of the pre-war United States Army. Any Regular Army units used in the war were on the side of the Union as Southerners in the Regular Army either fought for the Union or resigned and joined Confederate volunteer regiments. The typical Regular Army regiment consisted of three battalions. Each battalion consisted of 8 companies of about 100 men. Like their volunteer counterparts, these were the numbers "on paper" and were reduced due to disease, desertion, and combat losses.

The "average" size for a seasoned regiment is given as 400 men. The miniatures game *Johnny Reb* creates "average" regiments of 360 or 480 men. In other words, it's possible to create a scenario with companies, and regiments of pretty much any size required by a scenario and still be within the realm of historical accuracy.

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Cavalry regiments were organized much like other infantry regiments. There were also combined regiments of infantry and cavalry, but in practice the cavalry was usually split into a separate unit and placed within specialized cavalry brigades.

The Union had artillery regiments consisting of 12 batteries. Each battery was made up of 3 sections with 2 guns per section. Artillery tactics were "behind the times" for much of the war. Instead of utilizing artillery in large formations for strategic purposes, Civil War artillery was doled out by the battery down to particular brigades and regiments. This put them under the command of the brigade, regimental, or even company commander. Instead of artillery being used as a mass for the "common good", it was used as a support weapon at the regimental level. By Gettysburg, this had begun to change (and even earlier there are incidents where artillery was massed against the enemy) but for most of the war it was common for artillery to work as a direct support weapon for small infantry units. For this reason, *Hardtack* artillery units fall under the command of the overall infantry or cavalry commander.

Artillery crews consisted, on paper, of about 20 men per crew. This accounted for the men operating the gun, men moving ammunition from the limber to the gun, and men handling the horses. In actuality this was rarely attained and 10 men per gun was more common. For peak performance at firing a gun there were 6 to 8 men plus the NCO Gunner. However even 1 person could fire a cannon by himself.

The Confederates did much the same thing with their artillery, except that their artillery was organized in batteries of 4 guns (2 guns per section, 2 sections per battery).

Technically there should be a commander in charge of each section and a command squad in charge of each battery, but this level of organization is ignored in *Hardtack*. If players want to add it for a particular scenario, they can. However it would have to be a big scenario to put more than a section of artillery on the board.

Troop Quality

This can be a contentious issue. There is a popular perception that early in the war the Union troops were heavily supplied by men from the cities while the more heavily agrarian Confederacy had armies of farmers who were more used to a rough, outdoors life. They were also more used to horseback, in the case of cavalry. In actuality, both the North and the South were heavily rural.

At the regimental level, the quality difference between the North and the South is less noticeable Both Northern and Southern soldiers talk of bravery, valour, and ferocity found in their opponents. For the most part the difference in quality lay with the brigade, division, corps, and army commanders, as well as the organization and utilization of the soldiers.

By 1863 the quality issue had become tangible. The Confederacy was running into problems feeding its men. From 1863 until 1865 the Confederate soldiers were veterans but poorly equipped and fed. The Union had a number of regiments at the beginning of the war where the men were signed up for terms of service of 2 years and 3 years. After the Seven Days battles, the Union also had regiments raised for 9 months. The two year and nine month regiments had their terms of enlistment end in late spring, early summer of 1863. These troops were usually, but not always, of lesser quality when they had to fight near the end of their terms. This happened at Chancellorsville, where a number of units mutinied over the exact date of their terms of enlistment. These units should be treated as Green units for the sake of quality.

Earlier in the war, there was no doubt that Confederate cavalry was more effective than northern cavalry. It's a fallacy to think that Northern horsemen were inferior. Some of the best cavalry in the war were Regular Army cavalry units, though these were used to suppress Indians on the frontier. The biggest problem was organizational. Union cavalry was doled out to the corps and divisions of the army instead of being organized, like the Confederate cavalry, on its own. Cavalry was thus wasted (and in the case of horses, almost literally) in picket duty and as messengers. This was exasperated by poor commanders, many of whom were political appointees. In 1863, Union cavalry organization (grouping them together as

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one large force), tactics (using cavalry more as highly mobile infantry) and the greater availability of repeating rifles and carbines evened up the cavalry quality issue.

When designing scenarios, I suggest that you reflect leadership and quality based on the requirements of the scenario (if the scenario is fictional) or the historical situation (if the scenario is based on a real life incident). With historical units, consider how the unit performed and less on the unit's actual experience. The 20th Maine, for instance, was the least experienced regiment on Little Round Top, July 2, 1863, during the battle of Gettysburg. Much of it would technically be classed as Green, with the rest termed as Regular. However, due to the regiment's historical performance, you could reasonably give the regiment Veteran status.

Close Order Formations

I got the idea for close order formations from *Brother Against Brother*. I had been thinking of ways to handle the movement of whole regiments of troops in *Stargrunt*. This method seems to work well. It gives units in formations an inherent advantage, but it also gives them some (somewhat) offsetting disadvantages. Normal *Stargrunt II* squad formations represent *skirmish formations* and are still very useful.

The bulk of the formation advantages come from forming individual companies into formations. There are offsetting disadvantages (like being easier to hit) but the biggest advantage is the ability to form "regimental formations".

I called them regimental formations because they would most usually be used at the regiment level. In *Brother Against Brother* they are called "company formations". In *Hardtack* they can consist of only a couple of companies right up to an entire regiment. Regimental formations allow troops to move and activate much like they did in real life. The disadvantage to using them is that activating a regimental formation uses up both of a regimental commander's actions, which means he can't do anything else that turn.

The order in which things are resolved when activating a regimental formation is pretty straightforward. The regimental commander is activated, he activates the regimental formation, and then each company in the formation does one action, then each company in the formation does another action.

I let the regimental commander move with the formation for free, as it accurately simulates a commander marching along side a formation while barking out orders. Activating a regimental formation costs the company commander two actions because it is a powerful tool.

Reloading

The idea for reloading came from *Brother Against Brother*. In *Stargrunt II*'s time scale, a squad could *easily* fire a couple of times per activation. If you consider the combat to be abstracted over this period of time, the requirement to reload muskets simulates the lack of mobility and firepower problems with muzzle loading muskets. In other words, it doesn't simulate the rate of fire so much as it simulates a limitation in movement when firing.

Suppression and Confidence Tests

Suppression is a big thing in *Stargrunt II*. However, I didn't feel it was right for *Hardtack*. Suppression represents fire that forces the members of a squad to duck behind cover or otherwise get out of harm's way. In comparison, Civil War troops were drilled to fire from a standing up position, with little cover. The enemy's weapons fired slowly, and at intervals. The suppression value of modern automatic weapons isn't there.

Suppression is replaced by Confidence Tests. These tests represent the effects on morale by men constantly under fire. The test is the same as the "suppressed for the first time" test in *Stargrunt II*, except that it occurs every time a company is fired on.

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The other changes to the Confidence Tests are mostly "chrome". Fired on by a formation is nastier than being fired on by a squad in *skirmish formation*. This represents the effects of massed volley fire. The enfilade modifier gives bonuses to players who play historically and try to enfilade an opponent's formations. Regimental colours modifiers give a reason for having regimental colours in a game.

One note about enfilade fire. Troops will fire at units facing them before they will fire at troops that they can enfilade. This is natural, as the unit that faces the company is more dangerous than the unit not facing it. This results in players forming battle lines, as happened historically.

Small Arms Fire

Most of the decisions in this section of the rules should be obvious. The smoothbore die shift is to reflect the lack of accuracy in smoothbore weapons fired at a target further than close range.

The D2 Firepower rule, though, needs a little explanation. In *Stargrunt II*, most small arms have a firepower of 2 or 3. You multiply the number of figures by the firepower, giving you the firepower die. If the number is odd, you round the number down to the nearest die type to a minimum of 4. This means that you will end up with a D4 firepower die when you are down to one figure (for firepower 3 weapons), or one or two figures (for firepower 2 weapons). In *Hardtack*, the weapons have a much lower firepower rating. Following regular *Stargrunt II* procedures, a company of 4 figures with muskets would have the same firepower die as a single figure with a musket: a D4. With carbines and their lower firepower die, the effect is even more pronounced. The D2 Firepower rule allows greater variation in firepower dice based on company casualties.

Companies in *skirmish formation* lower their firepower die to represent the lack of discipline normally associated with squads in *close formation*.

The small arms and artillery fire on cavalry reflect the fact that often horses would be shot out from underneath mounted men.

Artillery

Artillery was the area that required the most innovation. Artillery in *Stargrunt II* represents modern (i.e. 20th Century and later) artillery. Civil War artillery was still a direct fire weapon, but one that fired either round shot or explosive shells at range, or canister rounds at close range.

Originally I had roundshot, case shot, and spherical case shot abstracted into one "shot" type of artillery fire. This proved to be too ahistorical, with artillery resolution looking too much like modern artillery. Instead, I went with a different system for the three ammunition types.

Shot and canister are the only rounds listed in basic *Hardtack*. This is because case shot and spherical case shot were limited – because of primitive fuses – to ranges of 500 yards or longer, which scales down to a range greater than the size of the average wargame table. Since case shot and spherical case shot are important, I put them into the advanced rules section along with rules for off table artillery.

In the artillery manuals of the period, shot was considered the main anti-infantry artillery projectile against densely packed formations. While some accounts have a single projectile striking 30 or more men, 6 was considered average. An interesting feature of shot artillery is the ricochet. Artillerists would bounce the shot across hard packed earth. The result was a ball that skipped close to the ground, becoming more lethal. The rules handle this situation.

Canister rounds were essentially large shotgun rounds. They were gunpowder charges packed with musket balls. Against formed units they were devastating. To represent canister rounds I felt that the small arms fire resolution offered the best model. So, a cannon firing canister is resolved like an infantry company firing at the unit.

On a historical note, you will notice that the rifled cannons have a worse ability with canister rounds than smoothbore artillery. This is historically accurate. Among other effects, the rifling in the rifled cannons

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tended to make the musket balls spiral outward, lowering the effectiveness of canister fire. While many have talked about the effectiveness of rifled artillery at long range, most engagements were at shorter range where the rifling was actually at a disadvantage. As a result, the armies on both sides (but particularly the Union) tried to get rid of some of its rifled artillery in favour of smoothbores.

Case shot is resolved much like *Stargrunt II* artillery. The small burst radius of case shot in *Hardtack* takes into account the reduced accuracy of these projectiles. Historically shells were lighter than shot. They were hard to manufacture, so the weight was not evenly spaced throughout the centre of the shell. This caused them to wobble in flight. Case shot had more of an effect on morale than roundshot. This is taken into account in the Confidence Table. Case shot were considered particularly suitable for firing at cavalry.

Spherical case shot, however, was a very potent projectile. It acted much like a canister round thrown at a distance. Like case shot it still required the accurate setting of a fuse. The shot would explode just above, or amongst, the troops, causing horrible wounds. If the fuse was set to go off too soon, the shot would explode too high up to cause much damage. Likewise, if the fuse went off too late the shot would be imbedded in the ground, and damage would be greatly reduced.

Wounds

No roll is made to check on the condition of wounded troops. A wounded figure stays wounded until after the battle. This is for a couple of reasons. First, the nature of Civil War combat made it pretty obvious if a soldier was wounded, okay, or killed due to fire. The idea of a Reorganise action being needed to check out the soldier is more of a modern concept, with visions of a squad NCO crawling around in the bush or mud checking on his team, or a company medic patching up the wounded. During the Civil War, soldiers were usually wounded or killed within sight of another member of the company.

Second, the weapons used during the Civil War were — compared to modern weapons — of slow velocity and large calibre. When they hit the human body, they did terrible damage that often could be helped very little with "first aid". On the other hand, the slow velocity resulted in some weird occurrences. Confederate General Henry Heth was struck in the head by a minie ball at Gettysburg, but suffered only a concussion. He had stuffed his new hat, which fit improperly, with newspaper and this is what saved his life.

Due to the larger number of figures in a game of *Hardtack* (compared to *Stargrunt II*), the horrible nature of the wounds caused by the era's weapons, and the higher degree of visibility of figures in a Civil War company, I decided to forgo the die roll for treating wounded soldiers. A wounded soldier lies where he is hit and is treated after the battle. This speeds up the game while not compromising historical accuracy.

Advanced Rules

These rules add to the complexity of the game.

Rifled artillery had a tendency not to bounce. Rifled artillery shot was more oblong than round, and tended to burrow into the ground when it hit.

Ammunition supply is used for those who wish to keep track of the number of times a company can fire. An average number of rounds per solider was about 50 rounds for the Union and 30 for the Confederacy at the start of a battle. A rifled musket could fire at a top pace of about 3 rounds per minute, but actual rate of fire was much less. According to one source I read, artillery could fire about 9 times in 7 minutes. Each 6 pounder had an ammunition case of 50 rounds of all types, and a caisson that could carry 4 cases. A 12 lb. Napoleon, on the other hand, had the same size case so it could only have 32 rounds. Either way, it shows that a fully supplied artillery piece would have more than enough ammunition to get through a typical *Hardtack* game.

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First volleys in the game are more devastating because during the war the first volley was usually the best aimed, and the most disciplined. The very first volley usually halted a regiment in its tracks, represented in *Hardtack* by units dropping to Shaken morale status. There are numerous accounts of an advancing regiment halted in its tracks due to the initial volley by an enemy regiment. I made the first volley more accurate to represent the volley being aimed and under control. The increased Threat Level represents the shock of receiving such a well disciplined shot. Since discipline is needed to fire this effective "first volley", only Confident and Steady troops can use this advantage.

The Prepared Fire rule is a version of an overwatch rule I've used in regular *Stargrunt II* games. I think it adds more realism to the game, but it does add some complexity which some players may not want. I recommend its use. Without it, a regimental formation can move forward and then fire on a defender. With this rule, the regimental formation can move forward and then be fired upon by the defenders before it has a chance to fire. This was more accurate, historically.

My morale additions, though, do not add much in the way of complexity. They do make Confidence Tests "nastier". In regular *Stargrunt II* games, these rules work well. The combination of these house rules and the changes in the rest of *Hardtack* result in a game where morale is more important than in regular *Stargrunt II* games. The result is a game that better models American Civil War combat. If, in the end, you find that troops are too brittle with all the morale rolls being made, use regular *Stargrunt II* morale.

Quiet Mutiny

An interesting addition is the "quiet mutiny" concept (a term I first encountered in an article titled "The Infantryman in Combat" by Reid Mitchell, in *North & South* magazine, Volume 4, Number 6). As the war rolled on it became harder to order veteran soldiers into yet another seemingly pointless — and suicidal — frontal assault. During Grant's Wilderness campaign of 1864, veteran Union units, from squad size to regiment size, refused to charge enemy fortifications. More commonly units would head into the assault only to dive for cover the moment they came within range of the enemy's weapons. Entire companies and regiments would do this, spontaneously. This "quiet mutiny" became more problematic as soldiers learned hard lessons that went ignored or unnoticed by their commanding generals.

At the same time, inexperienced troops were often enthusiastic about entering combat. They hadn't been subjected to months or years of inconclusive warfare. They still held romantic notions of combat and bringing a quick(er) end to the war. They were more likely to rush into an assault, often after ignoring the warnings of the "old lags". (Note that this phenomenon was not unique to the American Civil War. Stephen Ambrose describes something similar in his book *D-Day* both when explaining why well trained but inexperienced soldiers made up the bulk of the troops sent in to the Normandy beaches, and also when describing the exhausted state of the British army.)

In *Stargrunt* terms, these "old lags" seem to exhibit the same confidence level as shaken units. This is the inspiration for the "quiet mutiny" rules in *Hardtack*. This test is only made by Regulars and Veterans. Veterans are more likely to fail the test than Regulars. Units with poor leaders are more likely to fail the test. Elites and Greens are immune to the test (Elites because they are "above" such acts of "cowardice"/self preservation, Greens because they don't know any better.)

While "quiet mutiny" was most prevalent in 1864 onwards, it can be used with any troops that have seen a lot of hard fighting. It was a problem during the assault on the sunken road on Marye's Heights at the Battle of Fredericksburg in December, 1862. Successive waves of Union troops went to ground more rapidly than the troops that went before them, resulting in thousands of otherwise effective soldiers sheltering themselves in whatever cover they could find in the "dead zone" between the town and the wall. This phenomenon was most prevalent with Union troops, but this is because the Union was the side making most of the frontal assaults during the war.

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Contacting the Author

The author would like to hear your comments about *Hardtack*, and will happily answer any questions you might have. You can contact Allan Goodall by e-mail: agoodall@hyperbear.com