

Dustup

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INTRODUCTION

Dustup is a squad based miniatures game for playing science fiction battles between platoon sized infantry forces. It is designed for use with any range of miniatures and a variety of typical science fiction and near contemporary settings.

Dustup is first and foremost a game. It is intended to represent those aspects of combat the author feels are important to reflect the tactical decisions a squad leader or platoon commander might make, and introduces enough obstacles into the player's plans to make the game a challenge.

Acknowledgement

This set of game rules is based on the Stargrunt II rules created and published in 1996 by Jon Tuffley and Ground Zero Games (GZG)¹, presented here with additional rules and materials by Todd Mason. All material taken from the Stargrunt II rules is reproduced here with permission but remains the copyright of Jon Tuffley and GZG. Stargrunt and Stargrunt II are trademarks of GZG.

Background

The original game, Stargrunt II, is a set of rules with a gritty, near future feel. Some have likened it to "Vietnam in space". The game included a number of innovative mechanics and has influenced many subsequent rules. It works very well for human versus human combat, but the long awaited rules for aliens were never published. Dustup collects the author's modifications to the original rules adapted over many years to accommodate alien races.

The principle change is to the close combat rules. These have been changed to bring them more in line with the ranged combat rules and offer variations that reflect aliens with a variety of teeth, claws and other nasty melee weapons. The vehicle rules have also been modified to accommodate large alien creatures.

Overview

Dustup uses an "integrated turn" mechanic where players alternate activating one unit at a time. It also reflects different equipment and unit capabilities and circumstances by using different polyhedral die types to represent different probability distributions.

Dustup emphasises suppression as a means of enabling manoeuvre and the importance of command in synchronising combat power and maintaining cohesion.

Assumptions

Dustup makes a number of assumptions in the way it models combat and human (or alien) behaviour. It is worth explicitly noting some of these to establish an understanding of the perspective of the author(s).

The game focuses on the unit leaders such as a rifle squad leader. When the unit takes a "shoot" action, this represents the leader coordinating the fire and thus improving its effectiveness. When the leader is doing something else, such as communicating with a higher headquarters, the riflemen may well still be shooting or doing other activities but it is not effective enough to warrant adjudication.

Similarly, quite a few other real world elements are simply dealt with by the inclusion of random elements. For example, the battlefield is assumed to offer some cover and concealment at any point², but only significant features are reflected in the rules. Random die rolls are used to account for the small deviations in mobility, protection and obscuration.

The way in which the different game elements interact produces some interesting and subtle effects. The effectiveness of a weapon is not just represented by its firepower and impact values, but also the user's training level and ancillary systems, such as stabilisation and fire control.

¹ The original rules are still available as a free download from <https://shop.groundzerogames.co.uk/>

² The "prop" action explicitly relies on this and represents the unit actively making use of micro-terrain to provide protection.

Equipment

Figures

The game works with any scale of miniatures, but the usual scales are 15 or 28mm. Each miniature represents a single soldier or vehicle.

Battlefield

Dustup is intended to be played on a tabletop, however a floor could be used. Effective weapon range is 48 inches, but most weapons have no maximum range. Infantry units may have a footprint anywhere from 3 inches to 12 inches. Therefore a minimum area of 3 x 3 feet is suggested, but 6 x 4 feet is recommended. The tabletop should be liberally covered by terrain such as hills, vegetation or buildings that block lines of sight or provide concealment.

If using 15mm figures or smaller, it is possible to substitute centimetres for inches and therefore play on a smaller area.

Dice

Dustup uses polyhedral dice from four to twelve sided (D4, D6, D8, D10 and D12). It is useful to have three or four of each type.

I use opaque dice for one side and clear ones for the other which allows the die to be rolled at the same time. However, this is not necessary.

I also use dice of different colours as well as the number of faces as this makes recognition easy.

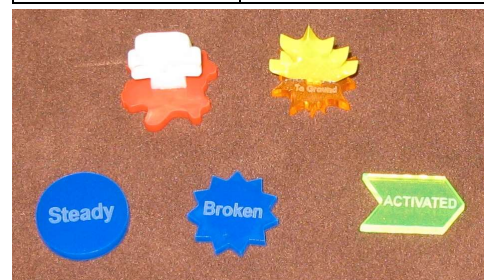


Counters

While not absolutely necessary, it is useful to have a range of counters to represent different states, situations and events.³

The types of counters includes:

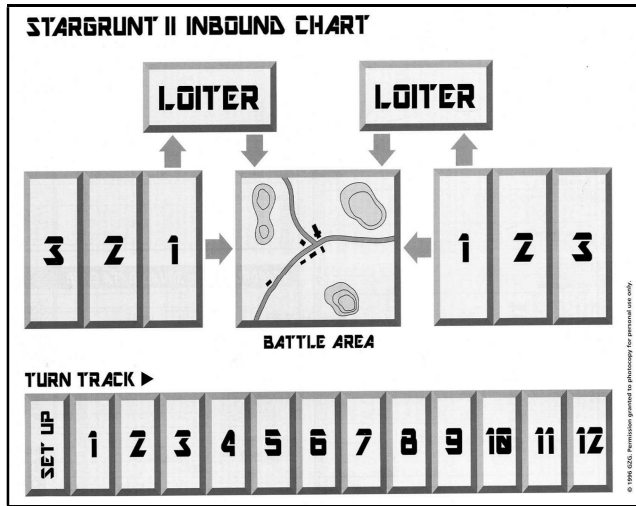
Type	Description
Suppression	Show units that are suppressed by fire.
Activation	Show that a unit has been activated.
Casualty	Marks untreated casualties.
Wounded	Identify figures that are wounded
Killed	Identify figures that are dead.
Disabled/ Damaged	Identify disabled vehicles and power armoured troops.
Confidence	Show current confidence level of a unit. This includes confident, steady, shaken, broken and routed.
Panic	Identifies a unit that is panicking.
Hidden	Marks the location of a hidden unit.
Dummy Unit	Marks a dummy unit. Note this should look like a hidden unit marker from one side.
Fire Support	May be spent on calling for support missions.
Target	Marks a target of a fire support mission.
Dummy Target	Marks a dummy fire support target.
Seize the Initiative	Used to activate units out of sequence.
Smoke	Show the location of smoke screens.
Fire	Show the location of any fires.
Mines	Show the location of mines, including dummy markers.
Electronic Warfare	Chits used to track use of EW.



³ I use 3D counters made by Litko Games (<http://www.litko.net/>).

The Inbound Chart

A copy of the following chart can be found in the Stargrunt II rules. It is used to keep track of fire support requests and the arrival of reinforcements and air support.



Counters are placed on the numbered boxes to indicate when fire support or reinforcements will arrive. Instead of activating a unit, a counter may be moved along the inbound track. When the counter is moved to the battle area, the unit is placed on the battlefield and may be activated on the next turn.

FORCES

Unit Types

Squads

Most units are infantry squads of between 5 and 10 infantry figures. In general, troops in a unit are equipped with similar weapons and armour. One or two soldiers may be equipped with a support weapon.

One figure in each squad must be designated as the squad leader.

Single Figures

In some settings, or circumstances, a unit might comprise a single figure. Single figures are treated as any other unit for the purpose of activation and other rules. Single figures do not ‘join’ other units, however there are cases where they may influence nearby units. Single figures are treated as small targets when being fired on (see page 12).

Specialists

Some units may include specialists such as medics or forward observers. These are described under the relevant rules (see page 23 for medics and page 35 for forward observers).

Power Armoured Troops

Power armoured troops are usually the elite of a faction’s infantry⁴. They are often equipped with specialised weapons and other enhancements, including on-board medical treatment (see the rules for medical treatment on page 23). They are organised in units as for other infantry and obey all other rules.

Cavalry

Cavalry includes traditional horse mounted cavalry and alien or mechanical equivalents where a single rider is mounted on (or in) some

form of small vehicle. Cavalry are usually grouped into squads in a similar way to infantry and obey all other rules as if they were a normal unit.

Cavalry may dismount and act as infantry. It takes one reorganise action to mount or dismount. Generally, a cavalry unit will leave a detachment with their horses (see detachments on page 23) however vehicles may be left unattended.

Cavalry are generally treated as foot movers, but small vehicles could use wheels, tracks or anti-gravity effect drives. See the rules for vehicle movement (page 30) for details on the effects of different methods of movement. Horse cavalry have a base move characteristic of D10 and vehicular cavalry move D12.

Cavalry may not prop (see page 12). However, cavalry that have dismounted may prop as long as their mounts have been detached.

Cavalry move D10x2.
Vehicles move D12x2.

Leaders

Each unit must have a designated leader figure. This figure should be clearly identified. The leader figure should generally be used to mark the centre of mass for the unit. This means that to measure the distance between two units, you measure from the centre of the unit leader’s base.

Cohesion

All figures in a unit must be within 6 inches of the leader. That is, the unit may occupy an area no larger than a circle of 12 inches diameter centred on the leader. If this is not the case, the unit is considered disorganised. The unit may only use “move” or “recover from suppression” actions until the offending figures are brought back into cohesion.

⁴ This may depend on the setting. It is certainly possible to have a force entirely comprised of power armoured troops.

Commanders

Commanders represent the leaders above unit level. This includes platoon and company commanders. While they may be “leaders” of their headquarters unit, they are also in overall command of all or part of the force.

The most important function for commanders is to synchronise their subordinate units and to try to maintain force morale.

Quality and Leadership

Each unit in a player’s force has two characteristics: quality (Q) and leadership value (LV).

Unit Quality

Unit quality is a key factor in most of the game rules. It represents the basic training level of the unit, its experience and general competence.

Unit quality is rated as one of three levels: green, experienced and veteran. The exact meaning of these terms will depend on the setting chosen.

Unit Quality	Quality Die	D6
Green	D6	1
Experienced	D8	2-5
Veteran	D10	6

Quality is expressed as a die type according to the above table. When building a force, the quality level for each unit can be assigned randomly using a D6, as suggested above.

Leadership

Leadership represents the effectiveness of the unit’s leader.. It is given a value between 1 and 3 and can be randomly assigned to each unit by rolling a D6 using the table below.

Leadership	LV	D6
Poor	3	1
Average	2	2-5
Inspirational	1	6

Elite and Untrained Units

The basic rules describe three classes of troop quality: green, experienced and veteran. In some settings it may be desirable to represent militia, civilians or other “untrained” troops. Similarly, some forces may include special forces or other “elite” troops.

As with the other classes, these troops are given a quality die.

Unit Quality	Quality Die
Untrained	D4
Green	D6
Experienced	D8
Veteran	D10
Elite	D12

However, there are some additional rules that apply to these special categories.

When being fired on by untrained troops, shift the target die up by one, so a D8 will become a D10. Similarly, when being fired on by elite troops, shift the target die down by one, so a D8 will become a D6. (See firing rules on page 12).

Confidence

Morale is represented by a unit’s confidence level. As confidence drops during the battle, a unit will become more restricted in the types of activities it can perform and more likely to break and run if assaulted. Confidence will drop when a unit suffers setbacks, but may be rallied by an effective leader.

Units generally start out confident, but this can be adjusted as part of the scenario design.

There are five confidence levels:

Confidence	Effects
Confident	No restrictions
Steady	No restrictions
Shaken	May not move toward the enemy or leave cover without passing a leadership test. See page 26.
Broken	Must move away from the enemy towards cover as soon as possible. May not leave cover except to withdraw from the enemy. May fire as long as they are in cover. If assaulted, automatically rout.
Routed	Ignore all suppression markers. Must use each action to withdraw.

Note that all the above are cumulative. ie. A broken unit suffers all the restrictions of being shaken as well.

Optionally, the initial confidence level for each unit may be randomly assigned. For each unit, roll a D6, if the result is anything other than a 1, the unit begins as “confident” if it is a 1, drop the unit’s confidence level to “steady” and roll the die again. If the result is again a 1, drop the confidence level to “shaken”.⁵

Morale is represented by a unit’s confidence level.

The rules for rallying (page 22) describe how commanders can improve a unit’s confidence, and the rules for assaulting (page 15) describe one of the ways confidence can be lost.

However, units can also lose confidence due to a variety of events in the game, such as coming under fire or taking heavy casualties. These triggers cause a confidence test (see page 25).

Mission Commitment

In addition to confidence, mission commitment also affects troops reactions to adverse events. Commitment represents the importance the troops place on the mission and their willingness to take risks and accept casualties to achieve it.

Commitment is given one of three levels: high, medium and low. It affects when units are forced to take a confidence test and how likely they are to pass it. Refer to the rules on page 25 for the effect of mission motivation.

Fatigue

Units may begin the game with a level of fatigue. This affects the starting confidence level of the unit. There are three levels: fresh, tired and exhausted.

Fresh troops have only recently arrived on the battlefield. They are confident.

Tired troops have been in action for a few days. They begin the game steady.

⁵ Players may like to experiment with using different die types or different results depending on the scenario or setting.

Exhausted troops have been in active combat for many days or weeks. They begin shaken.

Weapons

Weapons are categorised into two primary types: close combat weapons and ranged weapons.

Close combat weapons are used in hand to hand combat and include knives, bayonets swords and clubs. Many ranged weapons such as pistols can be used in close combat and weapons such as rifles may be treated as clubs.

Most close combat weapons have a strike value of 1 and humans have an impact value D6.

Refer to page 15 for a full explanation of the close combat rules.

Ranged weapons include small arms, support weapons and heavy weapons. Most soldiers will carry small arms such as rifles, but some specialists will carry a support weapon such as a plasma gun. Heavy weapons are usually either mounted on vehicles or served by a crew.

Effective weapon range for all rifle type small arms and support weapons is 48 inches. There is no maximum range, but fire at over 48 inches is considered “long” range and is less effective. Similarly, short range is 12 inches and more effective. Some weapons, such as pistols, have a restricted range.

The average small arm has a firepower of 2 and an impact of D6. Weapons with a higher rate of fire might have a firepower value of 3 or even 4, while older or slower weapons could have a value of 1 or 0.5.

Refer to the rules on direct fire for a full explanation of the ranged combat rules (page 12).

Grenades include hand thrown and rifle launched grenades, whether underslung or fitted to barrels⁶. Grenades are treated as a form of support weapon. Units equipped with hand grenades can choose for up to two models to throw hand grenades in a shoot action instead of

⁶ The original Stargrunt II rules abstracted grenades by treating them as included in normal small arms fire and close combat. They are added into these rules to offer tactical options and may be ignored if desired.

their normal weapon. A typical grenade has a firepower of D8 and an impact of D8.

Personal Armour

Most troops will have some form of armour that provides defence against enemy weapons. Each armour type is allocated a die type, which is compared to a weapon's impact value to resolve hits.

Type of Armour Worn	Armour Die
Basic Battledress	D4
Partial Light Armour	D6
Full-Suit Light Armour	D8
Light Power Armour	D10
Heavy Power Armour	D12

In some settings, units may be equipped with no armour at all. In which case they use a D4 as their armour die but treat any result as a wound. The die roll is only used to determine if an instant kill results. See page 14 and 18 for details on determining casualties.

Other Equipment

Other equipment, such as sensors or communications equipment, may be given a quality rating.

Type of Equipment	Quality Die
Very inferior or no capability	D4
Inferior	D6
Average	D8
Superior	D10
Very superior	D12

CORE MECHANIC

Quality Levels

Most elements of the game, such as troop types, weapons and armour, are given a quality level. This is represented as a die type ranging from a D4 through D6, D8, D10 to a D12. The higher the die type, the better the quality. A D8 is considered average.

The quality die is used to determine most of the game effects.

Die Rolls

Die rolls are used to resolve most game effects such as moving and shooting. There are three forms of die roll: simple, opposed and unopposed.

Simple Roll

The simple die roll is where the number rolled on a die is used to resolve an event. For example, when moving, a unit rolls their movement die and receives movement points according to the number rolled.

Opposed Roll

In an opposed roll, the players simply roll their relevant quality dice with the highest roll winning. For example, if one player is rolling to determine if a weapon hit has caused a casualty, the attacker rolls the corresponding weapon impact die, while the defender rolls their armour die. If the impact die beats the armour die, then a casualty has occurred. In most cases a draw will favour the “defender”. In some cases scoring more than double the opponent will have an additional effect.

Unopposed Roll

In an unopposed roll, the player is simply trying to score higher than some target value. In most cases scoring less than half the required value will result in additional negative effects, while scoring more than double the required value may confer an additional benefit.

Die Shifts

Rather than adding and subtracting modifiers to the die rolls, the dice themselves are “shifted” up or down. For example, a D4 might be shifted up (positive shift) to a D6 to represent some advantage, or a D10 might be shifted down (negative shift) to a D8 to reflect some disadvantage.

There are two forms of die shift referred to as “open” and “closed”. By default, die shifts are closed unless otherwise specified.

Open Shift

An open die shift means that if a die needs to shift above a D12 or below a D4, the excess shifts are applied to the opponent’s die. That is, shifts above a D12 become negative shifts to the opponent’s die, while shifts below a D4 become positive shifts to the opponent’s die.

For example, if one player was rolling a D10 with two positive shifts and the other player was rolling a D6, the D10 would shift up once to a D12, and the second shift applied to the opponent’s die reducing it to a D4.

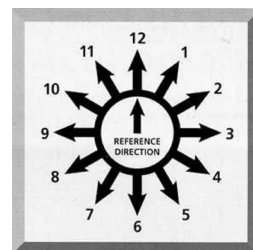
Closed Shift

A closed die shift means that once a die is shifted up to a D12 or down to a D4 no further shifts are applied.

For example, if one player was rolling a D10 with two positive shifts and the other player was rolling a D6, the D10 would shift up once to a D12 but the second shift would be ignored and the opponent would retain their D6.

Random Directions

Occasionally the rules require determining a random direction.



One method is the “clockface method”. Nominate one direction as 12 O’clock and roll a D12. The result is the direction as on a clockface.

RULES OVERVIEW

Turn Sequence

At the start of each turn, players roll a D8 with the highest scorer deciding whether to go first or second.

Players then alternate activating one unit at a time until both players have activated all of their units. If one player has more units than the other, they activate their remaining units at the end of the turn.

When a unit is activated, it is marked with an activation marker then performs two actions.

The turn ends when all units have been activated. At this point, all unit activation markers should be removed, but other markers, such as suppression, are left in place.

Passing

Players may “pass” on their activation only if they have fewer unactivated units than their opponent. A player may continue to pass on their activation until they no longer have fewer unactivated units.

Seize the Initiative

Optionally, at the start of the game, each player receives two “seize the initiative” tokens. These may be used at any time during the game to interrupt the normal alternating activation sequence to activate a unit of the player’s choice that has not already been activated.

If one player uses a “seize the initiative” token to activate one of their units, the other player may also use a token to take the initiative back.

If players agree, more tokens may be issued or players may receive a different number of tokens to reflect difference in force balance. For example, each player might receive an initiative token for every veteran or elite unit in their army.

Players may also decide that an additional initiative token can be awarded during the game for achieving an objective.

Random Activation

Some players may prefer less predicability than the simple alternating activation. This is particularly applicable when playing solo. Two alternative mechanisms are suggested.

The first is to use a chit draw mechanism. For each unit in an army add a chit into a container, using a different colour for each side. Draw the chits randomly to determine which side will activate a unit next.

As a variation on this approach, players may add an extra chit for each veteran or elite unit and withhold a chit for each militia unit to reflect the difference in flexibility of the different forces. The extra chits do not mean the elite units can activate more often, just that they may offer the player greater flexibility in when to act. At the end of the turn, if a player has one or more unactivated units (because their force was penalised by including militia, they are allowed to activate one of those unactivated units and the turn then ends.

A third option is a card draw mechanism where each unit is allocated a specific card. The deck is shuffled at the start of each turn and cards drawn one at a time to activate the specific units. This approach also offers the potential to include random event cards and a random “turn end” card.

Unit Activation

An activated unit performs two actions.

Action	Note	Page
Assault	Engage in hand to hand combat	15
Communicate	Send a message between units	21
Detach	Detach part of a unit	23
Detect	Detect hidden enemy	24
Medical Treatment	Treat wounded models	23
Move	Move a unit	11
Order	Order subordinate units to activate	22
Prop	Make use of terrain	12
Rally	Attempt to improve confidence	22
Regroup	Combine two units	24
Recover	Recover from suppression	20
Reorganise	Perform miscellaneous actions	21
Shoot	Shoot at an enemy	12

UNIT ACTIONS

When activated, a unit may perform two actions. If a unit is suppressed, it may not move, shoot or assault until it successfully removes all suppression markers.

Move Action

First, nominate the point the unit is moving toward. Roll the unit movement die and multiply the result by 2 to determine the number of movement points available. Each movement point equates to one inch of movement in clear terrain, but more difficult terrain will require more points. See Terrain Effects below.

Unit Type	Movement Die
Encumbered Infantry	D4
Infantry	D6
Fast Infantry	D8
Cavalry	D10
Vehicles	D12

The unit must move as far as it is able or to the nominated point, whichever is closer.

Distance is measured from the unit leader and other figures moved so as to remain within unit cohesion.

A unit cannot end its move closer than 2 inches from an enemy unit unless it is assaulting.

Friendly units may freely interpenetrate one another, unless one unit is in travel mode. In this case, the moving unit must stop 2 inches from the other unit.

Terrain Effects on Movement

Clear terrain costs one movement point per inch. Poor terrain costs 2 movement points per inch and difficult terrain costs 3 points per inch. Impassable terrain may not be entered.

Category	Normal Infantry	Power Armoured Infantry	Cost
Clear	Open, light scrub, slopes, roads	Open, light scrub, rough, cultivated, slopes, roads	1
Poor	Rough, cultivated, swamp, all woods, open water (if amphibious)	Swamp, all woods, open water (if amphibious)	2
Difficult	Rivers/ streams (crossing)	Rivers/ streams (crossing), open water (wading on bottom)	3
Impassable	Open water (non-amphibious)	Open water (non-amphibious)	-

Crossing Obstacles

Crossing an obstacle, such as a fence, requires spending movement points. For example, a low fence that can be quickly climbed over may cost 1 inch of movement, while a higher wall that requires assistance to climb may cost 3 inches of movement. All obstacles should be defined in the scenario.

Encumbrance

Troops carrying heavy equipment or casualties move at one die type lower than normal. For example infantry carrying man-packed weapons reduce their movement die from a D6 to a D4.

Moving Casualties

Squads can move while carrying their wounded as long as there is at least one able bodied trooper per casualty being carried. When moving with casualties, a unit counts as “encumbered” as described above.

A unit may fire as normal (using only the able bodied troopers) as they are assumed to briefly lower the wounded to do so.

A player may choose to abandon the wounded, in the hope of being able to return at a later point to recover them. However, this carries morale risks as described on page 25.

Travel Movement

In travel movement, units are not moving tactically, but marching in column in a safe environment. Units use the maximum number of movement points without needing to roll a die. For most infantry, that will be 12 inches.

The unit must form a column one or two figures wide and all figures must be in base contact.

While in travel mode, the only actions available to the unit are to move or reorganise. It takes one reorganise action to form up in column and another to return to a normal tactical formation.

While in this formation, the unit is more susceptible to enemy fire and other effects. If fired on, the unit is automatically suppressed and must take a confidence test (see page 25).

Prop Action

An infantry unit may spend one action to “prop”. That is they take time to position themselves securely taking advantage of whatever local cover is available. A unit may prop even if it is notionally in the open.

A unit that has propped receives a positive target die shift when being fired upon and receives a positive armour die shift when determining casualties from shooting. This is in addition to any shifts due to cover and concealment,

While propped, a unit may not move, but it can fire and perform most other actions as normal. A propped unit may not initiate close assault.

Once a unit has propped, it stays that way until another action is used to “unprop”.

Cavalry and vehicles may not prop.

Shoot Action

Shooting is a two step process. The firer first compares their quality and firepower against the target range and posture to determine the effectiveness of the fire. The second then determines how many actual wounds are caused by the fire.

A unit cannot shoot while it is suppressed.

No single weapon may be fired more than once per activation, however a unit can choose to split its fire and engage multiple targets (see Split Fire on page 15).

Roll to Hit

The target rolls a target die and the firer rolls their quality die plus one or more firepower dice. Success depends on the number of firer dice that score higher than the target die.

Target Die

The target rolls a target die based on range and posture.

The initial target die is a D8 shifted according to the following table. If the target die is shifted above a D12, no shooting is possible.

Situation	Die Shift
Target at long range	+1
Target partially concealed	+1
Target completely concealed	+2
Target propped	+1
Small target	+1
Target at short range	-1
Firer untrained	+1
Firer elite	-1
Target is in travel mode	-1
Firer is using suppressive fire (see page 15)	-1

Small targets include single figures and small pieces of equipment such as drones. A concealed target is one that is partially obscured by terrain. For example, the unit may be behind a wall or amongst vegetation.

Range is measured between unit leaders.

Effective range for all small arms is 48 inches. Firing within 12 inches is considered close range, while firing at targets beyond 48 inches is long range. There is no maximum range for small arms, but fire at long range is less effective.

Weapon Ranges	
Short Range	12"
Effective Range	48"
Long Range	>48"

Pistols may only be used at close range and some other weapons may have range restrictions.

Firepower Dice

Small Arms

The small arms firepower die is calculated by multiplying the number of men firing by the firepower of the weapon being carried. If required, this is rounded up to the nearest die type.

For example, 3 men with FP3 weapons would have a total FP of 9 and therefore roll a D10.

Small arms firepower cannot exceed D12 no matter how many figures are firing, however large units can choose to split their fire.

Unit FP = number of figures x individual FP rounded UP to nearest die type. Max: D12.

Support Weapons

Most squads will also be equipped with one or more support weapons such as light machine guns and grenade launchers. The firepower of a support weapon is expressed as a die type. The support die for each support weapon is rolled along with the unit's small arms die to determine the results of the fire.

A player may choose to fire a support weapon on its own as a separate action rather than as part of unit's general fire. In this case, the firing procedure is the same except that the small arms die is not rolled.

Squads may be equipped with multiple support weapons. All of them may be used to support small arms fire. It is unusual, but not outside the rules for a squad to be equipped with ONLY support weapons. In which case, any number of

them can be combined as for small arms fire with all firepower dice contributing to the initial effect. However, when determining impact, use the LOWEST impact value of all the weapons that fired.

Grenades

As an optional rule, units may be equipped with hand grenades or rifle fired grenades (underslung or barrel mounted). These act as support weapons. Hand grenades have a range of 6" and rifle grenades have an effective range of 24" and a maximum of 48"⁷. Up to two members of a unit may choose to throw hand grenades instead of using their normal weapon and these count as support weapons. Grenades used in this way use the impact value of the unit's small arms just like any other support weapon.

Specialist grenades, such as anti-tank grenades may be used as an individual action as for other support weapons. In which case, they use their own impact value.

Generic Weapon Data⁸

Type of Weapon	Suggested Firepower	Suggested Impact
Muskets or slow archaic weapons.	0.5	D4
Single shot or slow semi-automatic weapons.	1	D8
Automatic weapons and assault rifles.	2	D8
Shotguns and high rate of fire weapons.	3	D8
Light machinegun	D8	D10
Heavy machinegun	D10	D10
Automatic grenade launcher	D12	D8
Hand grenade	D8	D6

⁷ Unless the setting or a specific weapon changes this.

⁸ For a more extensive weapon list, refer to the original Stargrunt II rules or the separate dustup genre booklets.

Resolving Direct Fire

The target rolls their target die and the firer rolls the unit's quality die along with one or more firepower dice determined above.

If the firer fails to beat the target's die roll with any of his dice rolls then the fire attempt was unsuccessful. If just one of the firer's scores exceeds the target's roll, then the shot is deemed to be a minor success and the target takes a suppression marker (see page 20).

If two or more of the firer's scores exceed the target's score, then a major success occurs. The target takes a suppression marker and casualties are calculated according to the next step.

Roll quality and firepower against target die.

No successes: No effect.

One success: Target is suppressed.

Two or more successes: Target is suppressed and may incur casualties.

Determine Casualties

If the previous step results in a major success, then the fire has been accurate and concentrated enough to potentially cause some casualties to the target unit.

Total up all of the firer's dice, even those that did not succeed. Divide the resulting sum by the target die type (rounding down) to determine the number of hits.

For example: the target die is a D8 and that player rolled a 4. The firer rolled a 6, 5 and 2 scoring a major success because two dice scored higher than the target die. The total of the firer's dice is 13. This is divided by the target die type (8) resulting in 1 hit.

Optional Additional Hits

In many cases, the number of hits will be a fraction or have a remainder. This represents the probability of an additional hit. Roll the target die type again and if it scores less than or equal to the remainder, add an extra hit to the total.

In the above example, the firer had a total of 13 compared to the target die type of 8. This would result in 1 hit with a 5/8 chance of a second hit.

Resolve Impact

Each hit calculated above is randomly distributed amongst the target squad. Most simply, this is done by assigning a number to each target figure and rolling a die that size or larger for each hit. It is possible for one figure to be hit twice, in which case they make two armour rolls as described below.

For example, if the unit contains 5 figures, number each from left to right and roll a d6 (rerolling any sixes) and assign the hit to the corresponding figure.

Once each hit has been allocated, the appropriate impact and armor dice are rolled and compared to determine if the hit results in an actual wound or fatality.

For example, if the target has an armour die of D6 and the weapon has an impact of D8, one of each die is rolled and the result compared.

If the impact die is less than or equal to the armour die, the shot did not penetrate the armour.

If the impact die is greater than the armour die, then the target is wounded and marked with an untreated wound counter.

If the impact die is greater than twice the armour die, then the target is killed and marked with a kill counter.

Impact die \leq armour die: no effect.

Impact die $>$ armour die: target is wounded.

Impact die $>$ target die $\times 2$: target killed.

If a figure takes two (or more) wounds as a result of this process, it is considered killed.

If support weapons were used in the support role, only their firepower contributes to the small arms effect. The impact for the small arms is used to determine armour penetration.

If the support weapon was fired as an individual weapon its own impact value is used.

Extended Example

A unit of 10 experienced troops armed with 9 laser rifles and 1 plasma rifle fire at an infantry target 30 inches away, behind cover. The target die is a D8, but that is shifted up to a D10 to account for the concealment. The firing unit rolls

a D8 as their quality die, a D10 for the laser rifles, and a D6 for the plasma rifle. Assuming the result on the target die is 5 and the firer rolls a 6, 8 and 3. Because two dice exceed the target roll, the result is a major success. All the firer dice are added for a total of 17. This is divided by the target die type (D10) for a result of 1 hit and a 7 in 10 chance of a second hit. For each hit, the firer rolls their weapon impact die (D6) against the target armour die (D6). If the impact die beats the armour die, the target figure is marked with an untreated wound counter.

Split Fire

Each time a unit is activated each weapon may only fire once. However, the unit may use two actions to fire with some figures firing at one target in one action and other figures firing at another target in the second action.

In some cases, it can be mathematically advantageous to use two actions to split fire in this way and fire at the SAME target in an attempt to cause two suppression results.

Suppressive Fire

Suppressive fire is a special type of ranged fire where the aim is not to hit or wound the target but just keep their heads down through suppression. It is particularly useful at long range to counteract the benefits of concealment.

A unit using suppressive fire gains a negative die shift on the target die type. However, regardless of the number of successes, no hits can be scored. A major or minor success will only result in a suppression marker.

Line of Sight

A clear line of sight is required between the leader of the firing unit and the leader of the target unit for all direct fire. Line of sight is blocked by hills, buildings, and woods. Smoke blocks line of sight unless the observer is equipped with special sensors.

Concealment

Concealment refers to some type of obstacle that obscures the line of sight to the target. It can be a wall, vegetation, smoke or anything else that

obscures the target. It need not be substantial enough to provide any actual protection, “cover” (described below) serves that function.

Troops may be exposed, partially concealed or completely concealed. Those exposed are in the open and can be spotted or fired upon as normal. Those that are partially concealed gain a +1 target die shift when being fired on to represent the difficulty of targeting them. Troops that are completely concealed may still be fired upon, unless they are also “hidden” (see page 24), in which case the target die is shifted up twice.

If, after applying all die shifts, the target die is above a D12, they may no longer be engaged.

Troops that are fully concealed may not engage the enemy.

It takes one reorganise action (see page 21) to switch between full and partial concealment.

Concealment

Partial concealment shifts the target die up by one.

Complete concealment shifts the target die up by two.

Completely concealed targets may not fire.

Use a reorganise action to switch between partial and full concealment.

Cover

Cover, representing some form of actual protection, may be declared as “soft” or “hard”. Soft cover confers a +1 die shift to the armour die of the target, while hard cover confers a +2 die shift.

Cover

Soft cover: +1 armour die shift.

Hard cover: +2 armour die shift.

Assault Action

The procedure for close assault can be divided into four phases: courage test; move to contact; resolve combat; and outcome. Ideally, close assault should not be attempted unless conditions are favourable, in which case it will usually be successful in the first phase and the defender will be forced to withdraw. Assaulting without prior preparation is deliberately random with considerable risk to the attacker.

If hand to hand combat occurs, it is often more bloody than ranged weapons fire.

Unit Activation

Regardless of the outcome of the assault, both the assaulting unit and the target are considered to have been activated as a result of an assault action.⁹

Courage Test

The first phase of the assault is the courage test. Both players make an opposed roll using the respective unit's quality dice with the following open die shifts. Note that for the purpose of calculating "outnumbering", power armoured troops count as two normal troopers.

If the attacker failed to beat the defender's score, then the attack does not take place and the attacker loses their first action, but may still do something else with the second action, such as shoot.

If the attacker's score is more than double the defender's then the defender must withdraw (see below). The attacker then has the option to automatically occupy the defender's position (using up the remainder of their activation) or attempt to contact the defender, (who are further away) and risk rolling high enough to do so.

If the attacker's score is higher than the defender's, but not more than double then the attacker may attempt to move to contact.

If the attacker fails to score at least half of the defender's score, the attack fails and the attacker loses both of their actions this turn. Additionally, if the defender is not suppressed, then the attacker has suffered a serious last minute bout of nerves and must immediately drop one confidence level.

Situation	Die Shift
Outnumbered 2:1	-1
Outnumbered 3:1 or more	-2
Per suppression marker*	-1
Confident	+1
Shaken or broken**	-1
Per wounded figure***	-1
Per killed figure***	-2
Leader wounded or killed***	-1
Facing a terror weapon****	-2
Defender in soft cover	+1
Defender in hard cover	+2

Notes

* Attackers may not assault if suppressed.

** Attackers may not assault if shaken, broken or routed (see page 25). A defending unit that is already broken will automatically drop to routed and withdraw if close assaulted as long as the attacker's die roll is higher than theirs.

*** Wounded and killed figures only apply at the end of combat when determining the winner. The leader killed modifier is in addition to modifiers for wounded figures.

**** See page 26.

Attacker and defender make opposed quality die roll.

Attacker > defender * 2: defender withdraws and drops a CL.

Attacker > defender: attack occurs.

Attacker <= defender: attacker halts and loses action.

Attacker <= defender / 2: attacker ends activation.

Drop CL if defender not suppressed.

Withdrawal

The defender may voluntarily withdraw instead of taking the courage test, or may be forced to do so as a result of the test.

If the defender is already routing, they **MUST** withdraw.

A squad that either voluntarily withdraws or is forced to do so removes all suppression markers.

To withdraw, a squad moves one normal move away from the attacker, towards cover if at all possible, and drops one confidence level (see Morale on page 25). The drop in confidence occurs even if the withdrawal was voluntary.

⁹ This is an important point. It is a viable tactic to declare an assault even with a high probability of failure in order to deny the enemy unit freedom of action. For that turn, that unit was focused on repelling or discouraging the assault.

Occupy Defender's Position

If the defender withdraws, the attacker has the option to automatically occupy the defender's vacated position and end their turn.

Move to Contact

If the attacker decides to attempt to contact the defender they must make a single move toward the enemy location. If the score from the unit's move action is sufficient to reach the defender, the assault is resolved as below. However, if the distance is not enough, the assaulting unit has been too slow to get moving and may be caught by defensive fire from the target. If the attacker survives this fire, they may use their second action to attempt to complete the assault. (see Combat Resolution on page 17).

Should they still fail to move far enough to reach the defenders, the player must move as far as they can and remain in that position. They have been seriously caught out of position.

A unit that fails to make contact with the enemy must remain 2 inches away (see movement rules on page 11).

Note that movement must take account of the normal terrain and obstacle rules. If defenders are behind some form of obstacle such as a fence, then the attacker must roll enough movement to cover the movement cost of crossing the obstacle.

Attacker makes one move.

If they fail to reach the target, the target may attempt "final defensive fire".

If this results in casualties, the attacker must withdraw, suppressed, and end its turn.

Otherwise, they may attempt a second move action to try to reach the target.

If they do not reach the target, they must remain where they ended their move.

Final Defensive Fire

If the attacker fails to contact the defender after their first move, the defender has the opportunity to fire on them, even if the defender has already been activated.

If the defender is suppressed, they must pass a suppression test by rolling their quality die and exceeding the unit's leadership plus the number

of suppression markers. Note, the suppression markers are NOT removed.

For example, if an experienced unit, with leadership 2, had 2 suppression markers they would roll a D8 and need to score higher than a 4 to pass.

Defenders who withdrew are not permitted to attempt defensive fire.

This fire is resolved normally, except that any suppression results are ignored. If the fire fails to score any actual casualties, it has no effect and the attackers proceed with the assault.

If any casualties are inflicted, the attacker must test to see how they react. They must roll their quality die and attempt to exceed their leadership plus the number of casualties inflicted. If they fail to do so, they return to their initial position with their casualties, take a suppression marker and end their activation.

If they pass this test, the attacker may use their second action to attempt to contact the enemy.

Support weapons may be used in their support role for defensive fire, but heavy weapons may not. The crew of a heavy weapon would normally be armed with some form of secondary weapon or side arm that can be used instead.

Combat Resolution

If, after all the preliminary activity, the attacker does make contact with the enemy, the two units engage in hand to hand combat.

Close combat is fought in two rounds. In each round, one player becomes the 'striker' and the other the 'target'. The attacker is the striker in the first round and the defender is the striker in the second round. However, the combat is considered to have actually occurred simultaneously and any casualties incurred in the first round are able to participate in the second round.

The striker and the target players make an opposed die roll. The target rolls one die: their quality die. This is shifted down once if the target is outnumbered 2:1 or twice if outnumbered 3:1 or more. It is also shifted down once for each suppression marker.

The striker rolls their quality die and one or more strike dice. The strike die is determined by multiplying the strike value of the unit's close combat weapons by the number of troopers armed with that weapon. The result is the nearest die type (rounded up).

Combat is simultaneous. Each player takes a turn as striker. Striker rolls quality die and strike dice against the target's quality die.

No successes: No effect.

One success: Minor success.

Two or more successes: Major success.

Routing units do not strike back.

Strike Value

The strike value (SV) is a measure of the hand to hand combat ability of the troops or specific weapons. Most humans armed with bayonets, knives, rifle butts etc have a strike value of 1. Some multi-limbed aliens may have a higher value.

If the unit's strike value is less than a 4 then a D4 is used. If the unit's strike value is greater than 12, the target's quality die is shifted down by one, over and above any die shifts due to outnumbering.

Result

If the striker fails to beat the target's roll with any of his dice scores, then his attack has had no effect. If just one of the striker's scores exceeds the target's roll, then the strike has been a minor success and the striker may have succeeded in causing a few casualties. If two or more of the striker's scores exceed the target's score, then a major success occurs and the striker will possibly have caused many casualties.

If no strike dice beat target die: no effect.

Otherwise, add all dice and divide by target die type to determine hits.

On a major success, multiply hits * 2.

If a success was achieved, add up all the scores on all of the striker's dice. If a major success was achieved, this score is doubled. The number of potential hits scored against the target is this total divided by the target's die type. If the total strike score is not an exact multiple of the target die type, then the points left over represent a chance to inflict another hit. In this case, roll the

target die type once and if this roll is less than or equal to the remainder, then an additional hit is scored.

For example, if the striker's total is 17 and the target die type was a D6, then the striker will have scored 2 hits (17 divided by 6) with a roll of 1 to 5 on a D6 resulting in a third hit.

Casualties

Hits are then randomly allocated to figures in the target unit. This is done by assigning a number to each target figure and rolling a die that size or larger for each hit. It is possible for one figure to be hit twice, in which case they make two armour rolls as described below.

For example, if the unit contains 5 figures, number each from left to right and roll a D6 (rerolling any sixes) and assign the hit to the corresponding figure.

Once each hit has been allocated, the striker and the target make an opposed die roll comparing the striker impact value against the target's armour value. If the striker's roll is less than or equal to the target's roll, the hit has been deflected by the armour and has no effect. If it is greater than the target's roll, then a hit is inflicted and the figure is marked with a hit (untreated wound) counter. If it is greater than twice the target's roll, then a kill is scored and the figure is marked with a kill counter.

For each hit: roll impact vs armour die.

If impact > armour, target is wounded.

If impact > armour * 2, target is killed.

For example: if the armour die rolled a 4. A roll of 5 or more on the impact die will cause a wound, a roll of 9 or more will cause a kill, while a roll of 4 or less will have no effect.

Counterstrike

Once the attacker has worked out their strike and any casualties have been determined, the defender takes on the role of striker and the whole process is repeated. Any casualties taken by the defender in the attacker's round of combat are included in the defender's strike as the two actions are considered simultaneous.

Outcome

At the end of the second round of combat, once both players have resolved their strikes, another courage test is made in the same way as initiating combat but this time includes the modifiers for taking casualties.

If one die beats the other die then the loser must withdraw one combat move and drop one confidence level. If one die is more than double the other, then the loser must withdraw one combat move and drop TWO confidence levels. If both die results are equal, then the defender is assumed to have won and the attacker must withdraw, however they don't drop in confidence.

A unit that withdraws is considered to have abandoned their wounded.

Make opposed quality die roll. Loser withdraws and drops a confidence level.

If winner doubles the loser, the loser drops 2 confidence levels.

If the roll is a draw, the attacker withdraws but does not drop in confidence.

Total Victory

If one side in the combat is completely destroyed then no final courage test is needed. The victors retain the position with no effect on their confidence level.

Extended Example

*An experienced squad of 8 troopers armed with bayonets (strike value 1) assault a squad of 6 veterans (also with a strike value of 1). The defenders are the target for the first round of combat and so roll a D10 as their quality die. They roll a 6. The attackers roll their quality die (a D8 scoring a 7) and their strike die ($8 \times 1 = D8$ scoring an 8). Both striker dice scored higher than the target dice resulting in a major success and casualties may have occurred. The scores are added ($7+8 = 15$) and doubled for being a major hit ($15 * 2 = 30$) then divided by the target die type (D10) resulting in three hits ($30 / 10 = 3$).*

As the target unit contains six models, number each from one to six and roll a D6 for each hit, allocating it to the corresponding model.

For each hit an opposed die roll is made with the striker rolling their impact die (D6 in this case) and the target rolling their armour die (D6 as well). This results in 4 vs 2 (wound), 1 vs 4 (miss) and 6 vs 2 (kill) and so the striker has beaten the target twice, one of which was more than double resulting in one kill and one wound.

The defender now has a chance to strike back. Even though two figures were wounded, they still count in this round of combat as it is simultaneous. The attacker now becomes the target and rolls a target die (D8 scoring a 3). The defender becomes the striker and rolls a quality die (D10 scoring a 4) and a strike die for 6 bayonets ($6 \times 1 = D6$ scoring a 6). Once again, both of the striker's dice beat the target die (major success), so they are added together, doubled and divided by the target die type to determine hits ($4+6 = 10$, $\times 2 = 20$ resulting in 2 hits with a $4/8$ chance of a third hit).

The opposed armour rolls are then made (D6 versus D6), which results in one wound.

Both sides then make another opposed quality die roll to determine the winner. The attacker rolls D8, shifted down twice for two wounds. While the defender rolls a D10 shifted down once for a wound and twice more for a kill. The net result is the attacker rolls a D4 and the defender rolls a D4. The result is a 3 versus a 4, so the attacker loses, withdraws and drops one confidence level.

Multiple Units in Close Combat

Usually combat is fought between two opposing units. However, there are a few occasions where one unit will be engaged by multiple enemy units. In such cases, the player controlling the outnumbered unit should split it into two or more detachments and treat each detachment as a separate unit for the duration of the combat. Each step of the combat is still done in sequence.

This most frequently occurs when one large unit assaults two smaller units that are close enough together to be reached in the same move. When this occurs, the attacker must be able to maintain unit coherency.

For example, a large unit of 12 figures (A) may be facing two smaller units each of only 5 figures

(B and C). The attacker may decide that it can take on both units and declares the intention to assault. Unit A splits into two detachments (A1 and A2) each of 6 figures with A1 lining up against B and A2 lining up against C. Each pair then performs a courage test. Units B and C may both be forced to withdraw, in which case unit A may either occupy the position or attempt to continue the assault on one or both of the withdrawing enemy. If either B or C remain in place, then unit A will continue the assault against it. However, if either of unit A's detachments fail the courage test, then the whole unit must obey the result and stay put or even drop a confidence level if required. It is therefore possible that unit A may force one enemy unit to withdraw, but itself not be able to complete the assault.

If combat does occur, it is fought between detachments as if they are a unit. If one opponent withdrew while the other remained, the attacker simply regroups back into a single unit and fights the combat accordingly.

At the end of the combat, each pair of units performs another courage test as usual with the parent unit again obeying the worst result amongst its detachments.

A unit forced to withdraw due to multiple failed rolls will only make one withdrawal move, but will suffer each required loss of confidence. For example, if a unit fails two courage tests, it will withdraw one move, but take two losses of confidence.

Divide outnumbered unit into detachments.
Each detachment performs a courage test with respective opponent unit.
The whole unit obeys the worst result.
Resolve any resulting combat.
Perform final courage test with each detachment and apply the worst result to the parent unit.

Note: the unit should be split so that it matches the number of figures in the opposing units as nearly as possible.

For example, if a unit of 10 figures assaults a unit of 4 and a unit of 6, it should split into a detachment of 4 and a detachment of 6 to match them.

Special Close Combat Weapons

In some settings, certain close combat weapons have a strike die instead of a strike value. A unit equipped with one or more such weapons simply adds their strike dice to the striking die pool. For example, a unit of 6 infantry equipped with 5 bayonets (strike 1) and one laser sword (strike D8) would roll a D6 for the combined bayonets and a D8 for the laser sword.

When used in this way, the special weapon contributes to the striking value of the unit, but does not affect the armour penetration for any resulting hits. That is, all hits are resolved using the unit's normal close combat impact value.

Some close combat weapons have an impact value greater than the normal squad impact value and there are occasions where it is desirable to use that impact value. In this case, the unit should split into detachments as described above (see "multiple units in close combat on page 19).

The Two Inch Rule

As noted in the movement rules, it is not possible for a unit to move closer than 2 inches to another unit unless they are assaulting. This means it is possible for a unit to be activated when it is 2 inches away from an enemy unit. In these circumstances, assuming the unit would otherwise be permitted to assault, no courage test is required and the assaulting unit automatically moves to contact. The defending unit is not given the option to withdraw or engage in defensive fire.

Recover Suppression Action

Units fired on by an enemy shoot action are often suppressed. While suppressed the unit is restricted in the actions it can take until the unit leader is able to use an action to remove the suppression.

Often, the enemy will try to take advantage of this and use the opportunity to move while the unit is "pinned down".

When a unit is suppressed, a suppression marker is placed by the unit as an indicator. A unit may have up to 3 suppression markers, each of which has to be removed separately.

Suppressed units may only:

- Defend if attacked
- Reorganise if in cover
- Prop

The leader may attempt to communicate, or remove suppression.

Suppression of Infantry Units

A suppressed unit is limited in the actions it may undertake until all of the suppression markers have been removed.

Units that are suppressed may defend themselves if assaulted, but can otherwise not move or shoot. They can perform a reorganise action (page 21) as long as they are in cover. They can prop (page 12), but cannot unprop until they are no longer suppressed.

The unit's leader may still carry out communicate actions (see page 21) while the unit is suppressed and may use an action to try and remove the suppression marker.

Removal of Suppression

The unit leader may use one or more actions to attempt to remove the suppression. Each suppression marker must be removed as a separate action.

To remove the suppression, the unit rolls its quality die. If the score is higher than the unit leadership, one suppression marker can be removed, otherwise it remains.

Roll unit quality die. If this exceeds unit leadership, remove one suppression marker.

MultipleSuppressions

A unit can accumulate up to three concurrent suppression markers. Any subsequent suppression results have no effect.

Suppression of Units in Buildings

Units that are occupying a building can be either partially or completely concealed. Those that are

partially concealed may be fired on and suppressed as for a unit in the open. Units that are completely concealed may be fired upon as long as they have been detected.

Reorganise Action

Reorganise actions are a general purpose action. They do not count as moving, although individual figures can be moved around within the existing unit footprint. A leader figure may not be moved more than 2 inches during a reorganise action. Other figures may be moved up to 6 inches as long as they start and end within coherence of the unit leader.

Reorganise actions are used for any action not already covered by the rules and often relate to something defined in the scenario such as picking up an item or performing an activity at a specific location.

A reorganise action may be taken while a unit is suppressed, but only if the unit is currently in some sort of cover. Units in the open cannot reorganise while suppressed.

Reorganise actions are also used to change from being completely concealed to partially concealed and vice versa (see page 15), to mount and dismount from vehicles and cavalry (see pages 5 and 31), and to reform to or from travel movement (see page 11).

Communicate Action

During the game, there may be a need for two units to communicate. This will most often be a commander attempting to contact a subordinate unit, but could also be a unit spotting for artillery or air attack.

To communicate, the sending unit rolls their quality die. The score they need to beat is the worst (highest) leadership value of either the sender or receiver.

For example, an experienced unit with leadership 1 attempting to communicate with a unit of leadership 3 would roll a D8 and need to score more than 3 to succeed.

Most frequently, units will be communicating either with their immediate commander or subordinate. However, in some cases one or

more levels of command are bypassed, such as a company commander attempting to contact a squad directly, bypassing the intermediate platoon commander. For each level of command being bypassed, shift the die type down.

If the sender and receiver are within 6 inches and have a clear line of sight, no roll is required. The communication attempt is automatically successful.

Roll quality die of sender.

To succeed, score higher than the worst LV of sender or receiver.

Shift die type down for each command level bypassed.

Not required if within 6" and LOS

Jamming

In some settings, enemy forces may have a jamming capability. This has the effect of shifting the communication die down one or two levels depending on the effectiveness of the jammer.

This can be determined using an opposed die roll comparing the quality die of the communications equipment with the quality die of the jamming system. If the jammer achieves a minor success, shift the communication die down by one. If the jammer achieves a major success, shift the die down twice. (Refer to page 8 for information about equipment quality attributes).

Order Action

Commanders in Dustup are not super-human warriors. Their main job is to command troops and issue orders. They do this through the "order" action. In effect, they use one of their actions to (re)activate a subordinate unit and cause it to take two actions.

This does not really represent the activated unit doing more, but reflects the benefit the unit gains by having the focus of the higher level commander direct their actions. It portrays the synergy and improved effectiveness because the commander is providing higher level coordination. In many cases, the commander will use both actions to activate units to further maximise the coordinating effect by having two units act at once.

The order action has two steps: first the commander attempts to communicate with the subordinate unit (see Communicate Action on page 21), then the subordinate unit is activated and takes its two actions. A unit that has already been activated can be reactivated by this means, and a unit activated by a commander's order does not lose its own opportunity to activate in the normal way. To represent this, units are only marked as "activated" when they do so as their normal turn. When activated by a commander, no activation marker is placed against the unit.

If the communication attempt fails, that action ends. However, the commander may use their second action to attempt the order again.

If a commander is physically within 6" of the subordinate unit leader and has direct line of sight to them, no communication role is required. The commander can issue the order directly.

A unit activated by a commander may itself be a command unit and can therefore use its actions to activate additional subordinates. For example, a company commander could use his two actions to activate subordinate platoon commanders, each of whom could use their actions to activate subordinate squads resulting in 4 squads taking actions in a coordinated way.

Commander attempts communication.

If successful, unit is (re)activated and receives two actions.

Combined Assault

A special rule that only applies when a commander activates multiple subordinates is the combined assault. This is where a commander orders two units to assault the same target enemy unit. If both units are successfully activated the combat is conducted as for "multiple units in close combat" (see page 19).

Rally Action

Another role for commanders is to rally troops whose morale is failing. This is done through a rally test.

First, the commander must attempt to communicate with the intended unit (see Communicate action on page 21). If successful, the unit then rolls their normal quality die and

attempts to score higher than the sum of the unit's leadership and the commander's leadership. Rallying cannot raise the unit's confidence above their initial confidence level.

Commander attempts communication.
If successful, unit rolls quality die. Target score = unit LV plus commander LV.
If result > target number, increase confidence by one level.

If the result on the die roll is higher than the target number, the unit improves its confidence by one level.

Optionally¹⁰, if the die roll exceeds double the target number, then the unit's confidence rises by two levels. However, the risk is that if the roll is less than half the target number, the unit's confidence drops one level.

If result > 2 x target number, increase confidence by two levels.
If result <= half target number, drop confidence by one.

Detach Element Action

In general, units must remain together as a coherent group. However, there may be occasions when one small part of the unit needs to be detached to operate independently. For example, a scout team might be detached to investigate ahead of the main unit, or a gun group might be deployed to provide cover fire while the rest of the squad moves.

It takes one action to form a detachment and another action to regroup. Regardless of the relative size of the parent and detachment, the parent is always the element that contains the unit leader.

Whenever the parent unit is activated, its leader may use an action to attempt to activate the detachment. This requires a communication test if the detachment is more than 6" away or is no longer within line of sight. If the communication test is successful, the detachment may make two actions as if it was a normal unit.

Medical Treatment Action

Troops may suffer wounds due to shooting (see page 14) or hand to hand combat (see page 18) and require treatment. Untreated wounded have adverse effects when a unit needs to test its confidence (see page 25), so should be dealt with as soon as possible. Figures that have been killed in combat do not require medical treatment.

Wounded may be treated by the unit themselves or a dedicated specialist medic. This represents giving pain relief and dressing wounds etc.

It takes one action to treat all of the wounded in a unit. For each casualty, roll a D6 and consult the following table.

Die Result	Effect
1-2	The figure has been killed. Replace the untreated marker with a kill marker.
3-5	The figure is stabilised. Replace the untreated marker with a wound marker.
6+	The trooper is treated with drugs, patched up and can resume normal duty. Remove the hit marker.

If the unit contains a trained medic, use a D8. If the unit is being treated by a dedicated medical team, use a D10. A medic from another unit can treat a unit, but must have first moved to within 2 inches of the treated unit's leader.

Once treated, wounded may be left in the care of a detachment of one or more healthy members of the unit.

Non-medical troops roll D6.
Unit medic roll D8
Medical specialist roll D10.

¹⁰ This optional rule should be agreed upon before the game starts.

Power Armour Troops as Casualties

Power armour contains automated systems that kick in as soon as the trooper is hit. Such hits are not treated as for normal soldiers. Instead, as soon as a power armoured trooper is hit, roll a D6 and consult the following table.

D6 Result	Effect
1	The figure has been killed. Replace the hit marker with a kill marker.
2-4	The figure is stabilised. Replace the hit marker with a wound marker.
5	The trooper is unhurt, but the suit is wrecked. Replace the hit marker with a disabled marker.
6+	The trooper is treated with drugs and patched up and can resume normal duty. Remove the hit marker.

Optionally, the occupant of a disabled suit of power armour can get out and be replaced with a suitable unarmoured figure that can either carry on with the unit or withdraw. It requires a reorganise action to extract the occupant from the suit.

Regroup Action

Regrouping allows two depleted units to combine. This uses up the activation of both units, so neither may already be activated unless the regroup is a result of a commander issuing orders to reactivate one or both units.

The two unit leaders must be within 6 inches of each other, but the activating unit may make one move at the start of the activation to achieve this. The resulting combined unit is then treated as a single unit with the leadership of the best of the two original units, the unit quality of the larger unit (or the lowest value if they are the same size) and the worse confidence of the two units.

Activate both units.

LV: best, Q: larger unit, Confidence: worst

Detect Action

Hidden Units

Units may begin the game hidden, and in some circumstances become hidden during the game. To be hidden, the unit must be deployed in a suitable type of terrain that could conceal them. Note that large targets may only be hidden if there is appropriate concealment and it is realistic to do so.

Hidden units are marked with a counter. For each hidden unit deployed, two dummy counters may also be deployed to further confuse the opponent.

Hidden units become detected as soon as they move, fire or do something that could reasonably be argued gives their position away.

A unit leader may attempt to detect a hidden enemy unit. To do so, they must have line of sight to the marker. Detection requires an opposed roll, where the target rolls a range die and the observer rolls their quality die and a sensor die.

The range die is a D8 if the range is less than 12", a D10 if less than 24" and a D12 if less than 48". If the target is larger than size 1, shift the die down by one. It is not possible to detect a hidden unit beyond 48 inches, regardless of its size, as long as its hiding place could reasonably hide such a target.

Range	Die
<12"	D8
12-24"	D10
>24"	D12

The sensor die is based on the type of sensor.

Sensor Type	Die
Unaided Vision	D4
Aided Vision (binoculars) or basic electronic sensors	D6
Enhanced Electronic Sensors	D8
Superior Electronic Sensors	D10

If both of the observer's dice score less than the target die, the target remains hidden. If one of the observer's dice scores higher than the target, the owning player must remove the marker if it is a dummy counter. If both observer's dice

score higher than the target, the owning player must remove it and replace it with the actual unit, or simply remove it if it is a dummy counter.

Opposed roll result:
Fail: no detection.
Minor success: remove counter if dummy.
Major success: reveal unit.

Night Vision

At night, with unaided vision, the detection ranges are divided by 3. So the range die is a D8 if the range is less than 4", a D10 if less than 8", and a D12 if less than 16". Typically enhanced and superior sensors have augmented vision and behave as if it was daylight.

MORALE

Confidence Test

A unit takes a confidence test by rolling their quality die and attempting to score higher than the target value in the following table plus the unit's leadership.

A unit that scores higher than the required score passes the test. A unit that fails to score more than the required result fails the test and drops one confidence level. A unit that scores less than half the required score (rounded down) reacts badly and drops two confidence levels.

Units need to take a confidence test whenever one of the events in the following table occurs.

Circumstances requiring a confidence test	Commitment		
	Low	Medium	High
First time unit comes under fire	1	NTR*	NTR*
First time unit is suppressed by fire	2	1	NTR*
Unit takes casualties from fire	2	1	0
Unit leader becomes a casualty	3	2	1
Unit is forced to abandon wounded**	3	2	1
Vehicle takes one or more damage	3	2	1

* No test required.

** Wounded figures (either treated or untreated casualties) are considered abandoned if the unit withdraws away from visible enemy units without taking their wounded with them. Killed figures do not count in this case.

In addition to the above events that trigger a confidence test, the following modifiers are applied to the required target score.

Confidence Test Modifiers	Commitment		
	Low	Medium	High
Unit is under artillery or aerospace attack	+2	+1	+0
For each untreated casualty	+2	+1	+0
Unit takes more casualties in one attack than it has surviving members afterwards	+4	+2	+1
Unit is in travel mode (see page 11)	+4	+3	+2
Each existing vehicle damage marker (see page 32)	+2	+1	+0

For example, a unit with a leadership of 2 and medium commitment needs to score more than 3 when they take a test due to suffering casualties from fire.

Panic

There are some circumstances that may cause some troops to panic and either freeze or flee at the sight of the enemy. A panic test is similar to a confidence test. To pass, the unit must roll their quality die and attempt to score higher than their leadership. Failure causes the unit to panic.

Untrained units must test for panic the first time they come into line of sight of any enemy unit in the game.

Green units test for panic the first time they are fired on by any enemy unit in the game, or the first time they see any unit of enemy armour (AFVs), large alien creature, power armoured troops or enemy that provokes terror.

Experienced units only need to test for panic the first time they see an enemy that provokes a terror reaction.

Veteran and Elite troops never need to test for panic.

Untrained units test as soon as they first see the enemy.

Green units test the first time they are fired on or the first time they see an AFV, power armoured troops or a terror unit.

Experienced units test the first time they see a terror unit.

Veteran and elite units do not panic.

A panicking unit can do nothing until it recovers. Each time the unit is activated, the unit uses BOTH of its actions to attempt to pass another panic test. If it does so, the panic marker is removed and it can act normally in subsequent turns. If it does not pass, it remains panicked. If it fails to score at least half of the required die result, not only does it remain panicked, but it also drops a confidence level.

Panicked units may not be rallied while panicking, but if in direct contact with a superior commander, they may use that commander's leadership value instead of their own to attempt to pass the test.

Panicked units must also test their confidence if required by other circumstances (see page 25) and if forced to rout will do so with no further possibility of being rallied.

Once a unit has passed a panic test, they are not required to take another one regardless of subsequent game events.

Panic test: roll quality die against leadership. Failure means the unit panicked.

Panicked units do nothing until they recover.

When activated, attempt to recover by passing another panic test, which uses both actions. If less than half the required score, drop a confidence level. If forced to rout, may no longer recover.

Terror

Some weapons or units provoke terror. This includes weapons such as flame throwers and particularly nasty aliens. Terror has two effects: it may cause a unit to panic as described above; and it affects a unit's willingness to engage in close combat. Refer to the rules for close combat on page 15.

Leadership Test

Certain circumstances require a unit to take a leadership test. This is a measure of the leader's ability to encourage their followers to take a difficult action.

The unit rolls their quality die. To pass, they must score higher than the unit's leadership value.

Death of a Leader

Occasionally, unit leaders will become casualties. When this occurs, the unit must immediately take a confidence test. Regardless of the result, the next time the unit activates, it must spend both actions reorganising. At the end of that activation, a new unit leader is appointed, and one of the other figures can be replaced by the wounded leader figure. The new leader may not be as competent as the old leader and their leadership value is assigned randomly by rolling a D6. If the result is a 1 or 2, the new leader is worse (has a higher LV). If the result is a 6, the new leader is better (has a lower LV). Otherwise they have the same LV.

If a commander becomes a casualty, all subordinate units must immediately take a confidence test with a +1 modifier to the target number. If there is a second in command within the appropriate headquarters, they will take command of their headquarters as if it was a normal unit.

If there is no potential second in command available, the player has the option to promote one subordinate to commander. This could be a platoon commander being promoted to company command, or a squad leader promoted to platoon command. When the unit containing the new commander is activated, it takes one reorganise action for the respective figure to assume their new command and a second reorganise action for the unit to appoint a new leader as described above. This may result in a cascade of new leader appointments.

ARMoured DUSTUP

Heavy Weapons

Heavy weapons are typically larger than squad support weapons and are usually mounted on vehicles or tripods.

Heavy weapons are given a size class with 1 being small crew served weapons and 5 being a large anti-armour weapon mounted on a heavy tank. Weapons of size 1 may be mounted on tripods and carried by infantry, but larger sizes must be mounted on vehicles or towed carriages.

Moving Heavy Weapons

Heavy weapons cause encumbrance: move D4.
If crew is reduced to half, may no longer move, but may fire.
Weapons must be dismantled to move and set up before use.

Man-packed heavy weapons must be dismantled for transport and set up prior to use. Each of which requires one reorganise action on the part of the crew. They also cause the troops to be “encumbered” meaning they will roll a movement die one shift lower than normal. If the crew is reduced to half or less than half the normal size, the weapon can no longer be moved. A size 1 weapon can continue to fire until the last crewman is killed, but larger weapons require at least half the standard crew. The weapon can be abandoned by the crew at any time, by simply moving away from it.

Heavy weapons of size 2 and above may not be man packed. They require either self-propelled or towed carriages. Towed heavy weapons require a reorganise action to limber and unlimber and need at least half the crew to do so.

Hits on Heavy Weapons

When a crew served heavy weapon is hit by fire or artillery, the weapon itself is counted as a potential target and included when hits are allocated. Unless otherwise noted, the weapon counts as if it had D8 armour. A wound result disables the weapon, while a kill result permanently damages it.

Firing Heavy Weapons

Each heavy weapon must be fired as an individual action. Multiple heavy weapons may not combine their fire, nor may they combine with small arms or other weapons.

Like support weapons, heavy weapons also use one or more firepower dice, which is rolled along with the firing unit’s quality die against a target die to determine the effect. A minor success results in suppressing the target and a major success results in hits on the target as with regular fire (see the firing rules on page 12). Armour penetration is determined by an opposed impact versus armour roll.

The firepower and impact values assigned to heavy weapons depend on the setting, but a typical heavy machine gun would have a firepower of 2D6 and an impact of D8. A typical tank gun would have a firepower of D10 and an impact of D12x2.

Heavy weapons are generally either anti-armour weapons or anti-personnel weapons, but rarely both. As such, they often have two impact values: one for dispersed infantry (including power armoured infantry) and one for armoured targets. Occasionally, some heavy weapons may also have two firepower values.

Heavy Weapon Range

Effective range for a heavy weapon depends on the weapon size and the target size. Heavy weapons of size 1 have an effective range of 48” and an unlimited long range. Heavy weapons of a size greater than 1 have an effective range of their size multiplied by 48”. For example, a heavy weapon of size 3 has an effective range of 144”.

Heavy weapons do not have a short range.

Heavy Weapons and Large Targets

When a heavy weapon is fired at a target whose size is greater than the firing weapon the target die is shifted down by one. For example, a class 2 heavy weapon (with an effective range of 96”) firing at a size 2 target closer than 96 inches has

a target die of a D8, but if firing at a size 3 target will use a D6 as target die.

Weapon Size	Effective Range
1	48
2	96
3	144
4	192
5	240

Heavy Weapon Fire Control

Heavy weapons have a fire control quality which can affect their accuracy. Typically weapons mounted on vehicles have an average fire control, but some manpacked or pintle mounted weapons may have an inferior fire control. Weapons with inferior fire control give their target a positive (closed) target die shift. Weapons with superior fire control apply a negative (closed) die shift to the target die (min D4).

Fire Control	Effect
Inferior	Target gets a positive closed target die shift.
Average	No effect.
Superior	Target gets a negative closed target die shift.

Unguided Rockets

Unguided rockets (referred to as Infantry Anti-Vehicle Rockets or IAVR) represent shoulder fired anti-armour weapons such as bazookas and rocket propelled grenades. They function similarly to support weapons. If they have a high explosive warhead, they can be used to support small arms fire, including defensive fire in close combat. However, they are generally fired as a separate action in order to use their higher penetration value.

IAVRs may be disposable or reloadable.

IAVRs use the same range bands and support weapons. That is, they have an effective range of 48". However, some lower technology or light IAVRs may have restricted ranges.

Like support weapons, the target die is not shifted up if the target is of a size greater than 1.

Guided Weapons

Guided missiles are usually man-packed weapons. In most cases they are considered heavy weapons and therefore require one action to set up ready for firing. They may also be mounted on vehicles, in which case they do not need to be set up before firing.

Electronic Counter-Measures

All units and vehicles have an ECM rating, expressed as a die type. This represents their capability to jam or disrupt guided weapons.

ECM Type	ECM Die
Very inferior	D4
Inferior	D6
Average	D8
Superior	D10
Very superior	D12

Guidance Systems

All guided weapons have a guidance rating expressed as a die type.

Guidance Type	Guidance Die
None	D4
Inferior	D6
Average	D8
Superior	D10
Very superior	D12

Firing Procedure

Guided weapons are always fired as a separate action and are never used to support small arms fire. There is no range limit on guided weapons.

Guided weapons use the firer's quality die and the weapon's guidance die. The target uses an ECM die instead of a target die. The ECM die is shifted up by one if the target is behind cover.¹¹

The effect of fire is the same as other direct weapon fire. If none of the firer's dice beat the ECM die, the shot missed. If one die beats the ECM die, the target is suppressed. If both dice beat the ECM die, the target has been hit. Make

¹¹ Optionally, if using archaic wire guided systems, the guidance die is shifted down by one if there is any physical obscuration between the firer and target.

a single impact versus armour roll to determine if the target was damaged.

Remote Missile Launchers

Guided missiles may be set up to fire remotely. Once the missile system is emplaced it requires an additional action to set up and activate the remote system. The operator may then move up to 12" from the launcher (using additional actions as required).

To fire the missile, the controlling unit must be activated as normal and expend an action. The target must be visible to either the firing unit or the remote launcher. The resolution procedure is as for other guided weapons.

Decoys

Decoys are devices fitted to vehicles to confuse guided weapons. The decoy system is employed before the dice are rolled to determine if the missile hits its target. The target rolls a D8 (or other die type to reflect differences in system quality or technology levels) against the missile's guidance die. If the decoy system succeeds, the missile is defeated.

If multiple missiles are fired, the decoy can attempt to defeat each one, but once it intercepts one missile it is consumed and other missiles will attack the target as normal.

At the basic level of technology assumed by Dustup (and Stargrunt II) a decoy system may only be used once per turn. However, for more advanced levels of technology this rule can be amended and decoys can be permitted to target multiple incoming missiles.

Area Protection

It is possible to deploy ant-missile defence systems that function as decoys. These protect an area of 6" so any friendly vehicle within 6" that is targeted by a guided weapon can use the area protection system to intercept the missile. Such systems are usually small one-shot systems that take one action to deploy.

If the setting warrants it, more complex systems, with multiple shots and/ or mounted on vehicles, may be deployed but it is left to the readers to agree on appropriate rules.

Vehicles

Dustup is intended to be primarily an infantry based game. However, there is often a need to model transport vehicles and personnel carriers. Infantry will occasionally be supported by tanks or various specialist vehicles.

General Rules

Each vehicle is treated as a unit in its own right, even if grouped into formations. Vehicle crews are not normally represented, but may be treated as a unit if suitable figures are available.

Vehicles (or more correctly their crew) are assigned a unit quality and leadership, and get 2 actions as for any other unit. Most actions, such as move and shoot, are available to vehicles.

Vehicle Size

Each vehicle must be given a size value from 1 to 5. Sizes are relative and depend on the setting. The size is used to determine how hard the target is to see and shoot. It also limits the size of weapons and armour that can be fitted. A vehicle can not carry a weapon larger than its own size, that is a size 2 vehicle can not carry a weapon larger than size 2, and it can not have armour greater than its own size.

A typical armoured personnel carrier is a size 2 vehicle while a typical battle tank is either a size 2 or 3.

Size 1 vehicles include motorcycles, small combat cars and small mechs.
 Size 2 vehicles include standard trucks, small APCs and small tanks.
 Size 3 vehicles include larger APCs and tanks.
 Size 4 vehicles include particularly large tanks.
 Size 5 vehicles include super heavy tanks.

Armour

Unarmoured vehicles, such as a civilian truck, have a D8 armour die. Armoured vehicles, such as tanks, are given an armour class. Their armour is a D12 times the armour class. For example a class 3 tank has an armour die of D12x3.

Vehicles have armour values for front, side, rear, top and belly (for use against mines). It may have different armour for each aspect.

Types of Vehicles

Conventional Vehicles

Vehicles include tanks, personnel carriers and transport vehicles. Vehicles may be tracked, wheeled, hover or use any other form of movement suitable to the setting.

Open Top Vehicles

Some vehicles are not completely enclosed but have an open top. These are often transport vehicles or some form of self propelled artillery platform. They are somewhat more vulnerable than a fully enclosed vehicle (see page 34).

Some vehicles have hatches that can be opened to allow the occupants to fire. When closed down, treat these vehicles as conventional enclosed vehicles, but when opened up, treat them as open top vehicles.

Mechs

Walkers or mechs are a particular type of vehicle, usually some form of anthropomorphic robot. They obey all of the normal rules for vehicles, but are often equipped with arms and close combat weapons and may initiate close combat.

Large Creatures

Monsters and large creatures are treated in a similar way to vehicles and mechs. They usually form units of single creatures and many are capable of engaging in and initiating close combat.

Vehicle Movement

Unless otherwise noted, most vehicles have a D12 mobility die, meaning they will generally move D12x2". This does not necessarily represent their maximum speed, but their tactical speed when attempting to negotiate complex terrain, avoid obstacles and traps and generally operate in the combat zone. Mechs and monsters typically have a D6 movement die and count as walkers.

Movement is reduced in the same way as for infantry with clear terrain using up one movement point per inch, poor terrain using 2 and difficult terrain using 3. What terrain constitutes each class varies depending on the vehicle's method of movement.

Low Mobility Wheeled Vehicle	
Clear	Roads
Poor	Open, slopes
Difficult	Light scrub, cultivated, river/ stream (crossing at ford), open water (amphibious)
Impassable	Rough, swamp, all woods, river/ stream (not at ford), open water (non-amphibious)
High Mobility Wheeled Vehicle	
Clear	Roads, open
Poor	Light scrub, cultivated, slopes, open water (amphibious)
Difficult	Rough, swamp, river/ stream (ford)
Impassable	All woods, river/ stream (not at ford), open water (non-amphibious)
Tracked Vehicle	
Clear	Roads, open, light scrub
Poor	Rough, cultivated, slopes, open water (amphibious)
Difficult	Light woods, river/ stream (fording)
Impassable	Swamp, dense woods, river/ stream (non-ford), open water (non-amphibious)
Hover/ GEV Vehicle	
Clear	Roads, open, open water, swamp
Poor	Light scrub, slopes, cultivated
Difficult	Rough, rivers/ stream
Impassable	All woods
Grav Vehicle	
Clear	Roads, open, open water, rivers/ stream, light scrub, cultivated, swamp
Poor	Rough, slopes
Difficult	
Impassable	All woods (must fly over)
Walker Vehicle	
Clear	Roads, open, light scrub, slopes
Poor	Rough, cultivated
Difficult	Light woods, swamp, river/ stream (ford), open water (wading on bottom)
Impassable	Dense woods

Obstacles

Obstacles are more complex as they may be passable for some vehicles and not for others. Each vehicle description should identify what types of obstacles it can cross or breach.

Some obstacles may be defined as impassable to some or all mover types. For example, dragons teeth obstacles may be impassable to wheeled and tracked vehicles, but count as difficult terrain for grav vehicles, wire may be impassible to wheeled vehicles but only a minor obstacle for tracked vehicles.

Each obstacle should be categorised at the start of the game.

Transport of Infantry

Transport vehicles have a carrying capacity that determines how many troops may be transported. Ideally this should be large enough to transport whole squads.

Mounting and dismounting from a vehicle requires one action when the passenger unit is activated. To mount a vehicle, all models in a unit must be within 2" of the vehicle. When dismounting, the unit must be deployed so that all models are within 2" of the vehicle. Once dismounted, the unit may use its second action to move further away.

Towing and Pushing Vehicles

Some vehicles may tow or push other vehicles as long as they are no more than one size class larger than the pushing or towing vehicle. For example, a class 2 vehicle can tow a class 3 vehicle or smaller, but not a class 4 or 5 vehicle. It takes one reorganise action to attach tow cables or line up on the vehicle. Vehicles travel at half speed when towing or pushing. That is, if they normally roll a D12 as their movement die, they roll a D6.

Grav and hover vehicles may not tow or push other vehicles. Damaged vehicles may not tow or push another vehicle.

Firing at Vehicles and Large Creatures

Firing at vehicles is essentially the same as firing at infantry units (see page 12). The target rolls a target die, determined by range and posture and the firer rolls their quality die along with one or more firepower dice.

Some weapons have a different firepower and/ or impact value when firing at vehicles or point targets compared to when they fire at dispersed infantry units. This reflects the primary role of the weapon as either anti-armour or anti-personnel.

One successful die results in the target vehicle being suppressed, while two successes have the potential to produce hits that damage or destroy the vehicle.

For small arms and support weapon fire, weapon ranges against vehicles remain the same as for infantry. That is: effective range is 48 inches, short range is 12 inches and long range is over 48 inches. Heavy weapons have an effective range that depends on the size of the target vehicle (see page 27).

Note that small arms are unable to cause more than one suppression on a vehicle with armour greater than 1. If such a vehicle is already suppressed, no further suppression can be caused by small arms. Support weapons and heavy weapons can cause additional suppression up to the usual 3 markers.

For each potential hit scored against a vehicle, an opposed roll is made comparing the weapon's impact die against the target armour die. If the impact die beats the armour die, the vehicle is damaged and receives a damaged marker. If the impact die scores more than double the armour die, the vehicle is destroyed. Note, the armour die used should reflect the angle of the shot, so that frontal armour is used when the fire is from the front, side armour is used for side shots etc.

If impact die beats armour die, vehicle is damaged.
If impact die is more than double armour die, vehicle is destroyed.

Indicating Damaged Vehicles

Cumulative vehicle damage can be indicated by the use of counters or suitable markers. A destroyed vehicle can be indicated by smoke or flames or by simply turning the vehicle on its side. Note that damaged vehicles still provide cover and concealment, so should be left on the table.

Casualties to Vehicle Passengers

When a vehicle is damaged, each passenger must test to see if they are also hit. For each passenger, roll the relevant armour die for that figure. If it exceeds the weapon class of the firing weapon, the passenger is unharmed. Otherwise, they are hit and need to be medically treated as for other wounded troops (see page 23). If the vehicle was destroyed, then each passenger must score more than double the weapon class or is considered hit.

Open Top and Soft Skinned Vehicles

When firing on these vehicles, the firer has the option of engaging the passengers instead of the vehicle. In this case, no damage can be inflicted on the vehicle itself, and the passengers gain the benefit of concealment and cover: hard cover if the vehicle is armoured and soft cover if not. If the occupants are suppressed, the vehicle is also suppressed and will close down if that is applicable.

Vehicle Damage

While some shots will destroy a vehicle outright, more often vehicles will accumulate minor damage. Each point of damage reduces the vehicle's mobility, firepower and close combat ability.

Vehicles record damage using damage markers. For each damage marker, the vehicle's mobility is reduced by shifting the terrain type to the next most difficult terrain. For example, clear becomes poor, poor becomes difficult and difficult becomes impassable. Once a vehicle has

accumulated sufficient damage markers, all terrain will become impassable.

Additionally, for each damage marker, any targets the vehicle tries to engage or spot gain a positive die shift to their target die. Thus, after enough damage, the vehicle will no longer be able to shoot at all.

Finally, for mechs and monsters, for each damage marker, the vehicle's quality die is shifted down (minimum D4) whenever it is defending itself in close combat, making it progressively easier to hit. Its ability to strike is unaffected.

For each damage marker:
Treat terrain as one level more difficult;
Targets gain positive die shift from shooting;
Shift the quality die down when defending in close combat.

Fire by Vehicles

Vehicle fire is conducted according to the normal firing rules found on page 12 and the rules for heavy weapons found on page 27.

Weapon Stabilisation

Weapons are fitted with different stabilisation systems. This affects how the weapon works if the vehicle moves.

Stabilisation	Effect
Poor stabilisation	If the vehicle moved for one action, the weapon cannot be fired.
Average stabilisation	If the vehicle moved for one action, shift the target die up by one.
Superior stabilisation	The weapon is not penalised if the vehicle uses one action to move and one to fire. However, the vehicle can also move AND shoot in the same action, in which case the target die is shifted up by one.

Multiple Weapons

Many vehicles are equipped with multiple weapons. In general, only one weapon may be fired per action.

However, some vehicles can slave their weapons to a single fire control system, and are equipped

with an autoloader (or dedicated crew member) that allows them to fire concurrently. When this is the case, any such weapons may fire at the same target as a single action, even if they are heavy weapons. If this is done, the shots are resolved individually.

Mechs and Monsters

Mechs and monsters are often armed with multiple heavy weapons. They may fire two weapons at the same target as a single action.

Fire by Passengers

Passengers in a vehicle can be activated independently of the vehicle and may engage in fire combat if that is appropriate for the vehicle type. If the vehicle is suppressed then the passengers are also suppressed and may not shoot unless they are in a fully enclosed vehicle that has firing ports.

Suppression and Vehicles

Vehicles accumulate suppression markers the same way other units do. However, unlike infantry, vehicles may continue to move and shoot while suppressed, but may not initiate a close assault or tank shock.

A vehicle is suppressed if it has at least one suppression marker.

When moving, a suppressed vehicle treats all terrain types as one level more difficult than normal. This may prevent a vehicle from moving. When firing, a suppressed vehicle, and its passengers, shifts the target die up by one.

When suppressed, passengers may not disembark and no weapons may be used that require exiting the vehicle. Weapons that can be fired from within the vehicle may be used as normal.

When suppressed:

- Terrain is one class more difficult.
- The target die is shifted up by one.
- Passengers may not disembark.
- External weapons may not be fired.

Suppression markers on vehicles are removed as normal by the vehicle commander.

Suppression of Mechs and Monsters

Mechs and monsters accumulate suppression markers as for vehicles. Like vehicles, suppression does not prevent them from moving or shooting, but it does prevent them from initiating an assault.

Close Assault

Vehicles may be close assaulted in much the same way as units. However, only monsters and mechs may fight back. The crew can choose to dismount to fight back as long as the vehicle is not suppressed. Vehicles themselves do not close assault, but can generate “tank shock” (see page 34).

Mechs and Monsters

Mechs and monsters may initiate an assault or be the target of an assault as if they are an infantry unit. Like other vehicles, the size value is used to calculate outnumbering. A mech or monster that fails the courage test will withdraw using the same rules as infantry. Mechs and monsters may not initiate an assault if they are suppressed.

Mechs fight a round of close combat using the same rules as infantry units; giving and receiving hits based on the weapons being used. They will withdraw as usual if they fail the courage test at the completion of the assault.

Infantry Assaulting Vehicles

An infantry assault on a vehicle represents an attempt to place satchel charges or slip grenades into hatches or ports. To initiate the assault, the infantry unit and the vehicle make the normal courage test as described on page 16, however, the vehicle can't be forced to withdraw and will only do so voluntarily.

When making the courage test, use the vehicle's size category for the purpose of calculating outnumbering. For example, a vehicle of size 2 counts as 2 units and therefore outnumbers a single infantry unit two to one.

Opposed courage test (vehicle will only withdraw voluntarily).

If infantry successful, make one impact vs armour roll.

Infantry withdraw to nearest cover.

If the infantry make contact with the vehicle, they do not complete a normal round of close combat, but instead make a single opposed armour roll using the impact value of their grenades or explosives against the vehicle's armour. Regardless of the result of this armour roll, the infantry unit will withdraw one move towards the nearest cover.

Tank Shock

Vehicles can initiate an assault against an infantry unit. This is not an attempt to enter hand to hand combat, but an attempt to shock and overrun the infantry. The normal courage roll is made with minor changes to the outcome.

For the purpose of determining outnumbering, treat a vehicle as a number of units equal to its size class. For example, a vehicle of size 2 counts as 2 units and therefore outnumbers a single infantry unit.

If the target infantry unit rolls higher than the attacking vehicle, the vehicles moves to or through their position, but the infantry stand their ground and simply move out of the way of the vehicle, letting it pass. If they score more than double the attacking vehicle, they may make a single attack on the vehicle, with grenades and satchel charges, as if they had in fact initiated the assault. Otherwise, they withdraw.

Opposed courage test.

If infantry > vehicle: vehicle moves but infantry move aside.

If Infantry > 2 x vehicle, infantry may make an attack.

Otherwise, infantry withdraw.

Vehicles may not initiate tank shock if they are suppressed.

Open Top Vehicles

If an open top vehicle is assaulted, the attacker must declare if they are attacking the vehicle or the passengers.

If they are attacking the vehicle itself, the occupying unit is included for the purpose of determining outnumbering. For example, a class 2 vehicle carrying a unit of infantry counts as three units for the purpose of determining if the attackers are outnumbered. Additionally, if the attackers fail to reach the vehicle in their first move of the assault, the passengers may perform final defensive fire (see page 17).

If they are attacking the passengers, then they count as being behind cover. Should the passengers be forced to withdraw, they close down the vehicle instead and the attackers may switch their assault to the vehicle itself.

Final Defensive Fire

Vehicles are able to perform final defensive fire as described in the standard assault rules if they have support weapons, such as machine guns, or the passengers are able to fire from inside the vehicle – either because they have appropriate fire ports or the vehicle is open topped.

Super-Heavy Vehicles

Some large vehicles have multiple large turrets and many weapons. Such large vehicles do not normally have a place in an infantry skirmish game, as at this scale they are an army in their own right.

It is possible to use such a vehicle as a special objective or strong point in special scenarios. When using such a vehicle, treat each turret as a separate “unit” for activation, suppression and damage purposes. When targeting such a vehicle, the attacker must nominate whether a turret is being targeted or the main hull. If the hull is destroyed, all of the turrets may continue to fire and they must be destroyed individually.

Artillery and Air Support

There are two forms of artillery fire used in the game: on-table (usually light mortars) and off-table (heavier weapons in a support fire role).

Ammunition Type

There are three basic types of artillery ammunition: general purpose, anti-armour and

anti-personnel. The type is used to determine the impact effect of the shot.

Ammunition Types		
Warhead Type	Impact vs Infantry	Impact vs Armoured Target
General purpose explosive	D8	D8
Anti-personnel submunitions	D12	D8
Anti-armour submunitions	D6	D12x2

Ammunition Size

The size of the round determines the blast effect, or which figures are inside the potentially lethal impact area.

Artillery Types	
Delivery System	Burst Radius
Small (light mortars)	3"
Medium (medium mortars, light artillery)	4"
Large (heavy mortars, field artillery)	6"
Very large (superheavy artillery, area saturation weapons)	10"

On-Table Artillery Fire

Most indirect fire will be performed by off-table weapons, coordinated by observers on the table. However, infantry light mortars may be present on the table or the scenario might include an artillery battery being directly assaulted.

Restrictions

High angle systems, such as rockets and mortars, have a minimum range, below which, they may not fire. This is 24" for light mortars and 48" for all other weapon types¹².

Direct Fire

Guns that are firing over "open sites" at a visible target follow the normal direct fire procedure and do so when they are activated. Assume the

weapon is a heavy weapon of the appropriate size.

Indirect Fire

Guns that are firing indirectly use the indirect fire procedure described below.

Off-Table Fire

All of table fire is assumed to be indirect fire and requires an on-table observer.

Indirect Fire

Indirect fire has two parts to the process. The observer must observe and call for fire from the supporting gun battery, and at a later point in time, the rounds arrive and impact the target zone.

Request Fire Support Action

Any unit may request a fire support mission. Some units, such as the platoon HQ, may include a dedicated Forward Observer (FO) or a Liaison Officer (LO). In either case, the unit uses an action to request fire support.

The requesting unit rolls a D8 and needs to exceed their leadership plus the threat level to succeed¹³.

Requestor	Difficulty Level
Artillery request by FO	+0
Artillery request by other	+2
Air request by LO	+2
Air request by other	+4
Orbital request by LO	+3
Orbital request by other	+6

The die type is shifted down if a platoon commander is requesting support from another platoon in the same company or shifted down twice if from another platoon in a different company.

¹² Obviously this is way out of scale with the miniatures, but is offered as an option for game purposes. Players can of course decide that no piece of on-table artillery can fire indirectly if they so desire.

¹³ These are suggested values. Players should modify them to reflect their scenario or setting.

Fire Support Chits

Optionally, players may begin the game with some number of “fire support chits”. These may be spent to shift the request die up by one. For standard games it is suggested players begin with two support chits.

Successful Request

If the die result exceeds the target value, the request has been successful and the player places a target marker on the table where they want the rounds to land. When the rounds will land depends on the scenario and the type of firing unit. The following table suggests some appropriate delays.

Firer	Impact time
On-table artillery	When the firing unit next activates
Company/ platoon support	On the next turn
Battalion Support	After two turns
Regimental or higher support	After three turns
Orbital support	After three turns
Air support	After three turns

The impact itself is resolved instead of activating a unit. That is, in the appropriate turn, the player may choose to resolve a fire support impact instead of activating a unit.

Dummy Targets

Optionally, to confuse the enemy player, instead of placing one target marker for each fire support request, the player may place three. One of these is the real one, and the other two are dummies. The real target is only revealed at the time of impact.

Resolving Impacts

Fire Support Accuracy

Depending on the type of fire, the impact may not actually hit the intended target point. This depends on both the observer and the type of round.

An unopposed die roll is made using the quality level of the target designation or range finding equipment (basic = D6, advanced = D8, superior

= D10). If the observer is not a dedicated forward observer, then a D4 is used.

Range Finding Equipment	Die Type
Basic	D6
Advanced	D8
Superior	D10

If the round is a laser guided round (or similar), and the observer can still see the target, shift the die up once, and if the round is some form of self-guided round, shift the die up twice. The player must roll higher than the observing unit’s leadership for the rounds to be on target.

If the round is not on target, the actual score rolled is multiplied by a D8 to determine how far the round scatters from its intended target point. If the round was laser guided or self-guided, the D8 is not multiplied. The direction of the deviation can be determined by the “clockface” method (see page 9)

Once the new impact point is determined, move the marker there and determine which, if any enemy figures are within the blast radius. If the firer was unlucky, their own units may be under the blast zone.

Resolving Impacts

For each figure within the blast zone, roll the appropriate impact and armour dice. If the impact die exceeds the armour die, the target is wounded. If it exceeds double the armour die, the target is killed.

Vehicles use their “top” armour value if the impact point is over the vehicle, but their relevant side armour if only within the blast radius. Some weapons can fire air bursting cluster munitions in which case vehicles use their top armour when within the blast radius.

Figures separated from the impact point by some form of cover gain a die shift to their armour die.

If any member of a unit is caught in the blast area, regardless of whether they are wounded or not, the unit is suppressed and must make a confidence test (refer to page 25).

Multiple Incoming Rounds

In many instances, a firing unit is made up of more than one gun. In which case, multiple

rounds will strike the target area. The impact point calculated above represents the location of the first such round. The impact point for each subsequent round is determined using the same method relative to the actual point of impact. For example, if the impact is a three round burst, the location of the initial round is calculated using the above procedure. Then a distance and direction die is rolled for the second round and the corresponding impact point determined by deviating from the first impact point. The location of the third round is calculated in the same way relative to the first impact point.

Figures caught in the blast of multiple rounds test their armour against each impact.

AEROSPACE OPERATIONS

At the scale of a typical Dustup game, aircraft do not play a significant role beyond the abstracted method of fire support (see page 35). Similarly, the on-table air defence systems will be limited as it is assumed that area air defence is provided by heavier systems deployed behind the front line. However, there may be occasions where aircraft or orbital landers do need to be explicitly represented as transport or close support systems.

Inbound Air Support

The Air Defence Environment

The scenario should define the ADE for each side based on the following table. As a default, use an inferior or average level for most games.

ADE	Description	Die Type
Minimal	No more than a few ground fired light AA cannons or low tech forces.	D4
Inferior	A few dedicated weapons such as shoulder fired AA missiles and vehicle mounted Flak guns.	D6
Average	Medium-tech forces with reasonable AA equipment and some air cover.	D8
Superior	Heavily defended area with advanced AA weapons and EW capability.	D10
Extreme	Massive AA defences, laser systems, ultra-tech missiles, fighter superiority etc.	D12

Aircraft ECM

Each aircraft is fitted with an Electronic Counter Measure system. This uses the usual inferior, average, superior rating system for other system capabilities (see page 8).

Arriving in the Battle Zone

Before airborne units can arrive on the table they must negotiate the ADE. When the aircraft attempts to move from location one on the inbound chart (see page 4) to either the loiter location or the actual battlefield, they make an

opposed die roll comparing their ECM system with the enemy ADE. If the ADE rolls higher than the aircraft, it has been acquired and may be engaged. The pilot may voluntarily abort the mission and return to base. Otherwise they can continue at the risk of being shot down.

To continue, another opposed roll is made with ADE versus the aircraft's armour. If the aircraft is hit it is shot down.

If the initial ADE roll scores more than double the aircraft's ECM, the ADE roll is doubled when then attempting to shoot down the aircraft.

If the ADE roll fails to beat the aircraft ECM, or the aircraft survives the engagement, the aircraft arrives on the table or the loiter zone as desired.

Aircraft on the Table

Air vehicles operating on the table are assumed to be operating at very low altitude. They are therefore either 'airborne' or 'grounded'.

Airborne vehicles get two actions per activation as for other vehicles. During each action the aircraft must be moving, hovering or grounded. Only VTOL aircraft can hover or land.

Aircraft move so fast that during each action they may move anywhere on the table as long as they do not change direction by more than a 90 degree turn during each move action. They may also move off the table at any time and either move to the loiter or location one boxes on the inbound chart.

Aircraft may use action to fire weapons, make spotting attempts or drop ordnance, cargo and passengers.

Non-VTOL Aircraft

Non-VTOL aircraft must use at least one action to move and must move at least 24".

Non-VTOL aircraft must always face the direction they are moving.

VTOL Aircraft

VTOL aircraft also usually face the direction they are moving. However, if they restrict their speed to 12" or less they may move in any desired direction. If a VTOL aircraft does not

move at all during an activation, it enters hovering mode and is marked with an appropriate counter.

If hovering, the aircraft may rotate to face any direction as part of any other action. For example, it may rotate as part of a firing action.

It takes one action to land from either hovering or moving mode. Once landed it may load or unload cargo or troops. Taking off takes one action but the aircraft can either hover or move as part of the take off action. VTOL aircraft may not move while grounded unless they are fitted with wheels and are moving on a clear paved surface. When moving on the ground they move up to 6" per action.

Grav Vehicles

Grav vehicles differ from other aircraft in that they are very low skimming vehicles with a flight capability. Grav vehicles may move as normal ground vehicles when grounded but can take off and land like VTOL aircraft.

Spotting from Aircraft

Aircraft may attempt to spot hidden enemy units in the same way as ground units. One spotting attempt may be made per action. All areas of the table are considered within line of sight, unless agreed upon by both players but units may be concealed by terrain or smoke.

Firing from Aircraft

Aircraft carry four types of weapons: turreted, fixed, deadfall and guided.

Turreted Weapons

This includes weapons such as chin mounted guns, dorsal turrets and door guns. The description of the model must specify the arc for any turreted weapon mounts. In most cases, the weapon is unable to fire at any ground targets within 6" of directly under the model as the weapons can't depress far enough to aim at that angle. Weapons mounted under the aircraft can't fire while it is grounded.

Fixed Weapons

These are rigidly mounted on the aircraft and usually fire straight ahead. Such weapons may only engage targets in a 6" fire corridor in front of the weapon. Non-VTOL aircraft can't engage ground targets within 24" of the centre of the model. VTOL aircraft can pitch so they can engage ground targets 12" or more away. Fixed weapons may not be fired while grounded.

Unguided rockets are considered fixed weapons.

Deadfall Weapons

These are simple 'dumb bombs' that rely on gravity. When they are dropped, roll a D6 and place the impact marker that many inches in front of the centre of the model. If more than one bomb is dropped in the same action, they may either be dropped on the same target or in a 'stick'. If on the same target, then roll a D6 for each bomb and place it that many inches from the centre of the model. If dropped in a stick, roll a D6 for each bomb and place it that many inches in front of the preceding bomb.

Bombs dropped from a hovering vehicle impact directly below the vehicle.

Bombs may not be dropped while grounded.

Guided Weapons

These may be fired at any target within the forward 180 degrees of the model. They use the same firing procedure as ground based guided weapons (see page 28). However, if the target is outside the central 90 degree arc of fire, the guidance die is shifted down by one.

On-Table Anti-Aircraft Fire

Firing on an aircraft is a two-step process. First the target must be acquired and then it is engaged. Only designated anti-air weapons may fire on an aircraft and they must be defined to have a guidance system as for guided missiles (see page 28).

To acquire the target the firer rolls their guidance system, quality die against the aircraft's ECM quality die.

If the guidance die beats the ECM die, the aircraft has been acquired and may be engaged. The pilot may then choose to abort their mission and simply leave the table to return to base, attempt to evade or attempt to complete their mission.

If the pilot chooses to evade, they must move at least 24" as a normal move, turning no more than 90 degrees. If the firer no longer has line of sight to the aircraft they can't shoot. If line of sight still exists, a second guidance versus ECM roll is made as above. If the lock is retained, then a shot may be fired.

If they still have a lock, the firer may then engage the aircraft. The firer rolls their guidance quality die and weapon firepower die. The target rolls their ECM die. If the aircraft is hovering, shift the ECM die down by one.

If a minor success is scored, the pilot must make a confidence test at a threat level of +2. If this test is failed the aircraft immediately aborts and returns to base.

If a major success is scored, the aircraft may be damaged as for any other vehicle. For each hit, roll impact versus armour to determine the result. A destroyed result means the aircraft, including any occupants, is destroyed in the air and falls to ground causing an explosion of radius 6" and an impact of D8. Any units caught in the blast must immediately test for casualties.

If the aircraft is not destroyed but receives one or more damage results it must attempt an emergency controlled landing.

If the aircraft is hovering, it will land where it is. If it is moving, the aircraft will impact the ground D12x2 inches immediately forward of its current position. If this point is a hard object such as a building or another vehicle, the aircraft (and probably whatever it hit) is destroyed.

If the aircraft managed to land somewhere relatively safe, roll the pilots quality die, shifted down for every damage point above one. If the result is a 1, the aircraft is destroyed on impact and explodes as above. If the result is a 2 or 3, every occupant must roll a D6 and they are killed on a result of 1 or wounded on a 2 or 3. If the result of the crash test is 4 or higher, the pilot has managed a controlled landing. It is wrecked

beyond repair but all occupants survive. Each unit on board is placed within 2 inches of the aircraft (or as near as possible) and given 3 suppression markers, but is otherwise unharmed.

Aircraft Firing at Other Aircraft

Dustup is not intended to model aerial dogfights. However, the procedure described above may optionally be used to allow aircraft to fire at other aircraft.

Passenger Transport

Loading and Unloading Passengers and Cargo

Grounded aircraft can load and unload passengers like any other vehicle. Each passenger unit takes one action to disembark and must deploy within 2" of the vehicle. A subsequent action is required to move further away.

It takes one action for a unit to embark onto a lander. The unit must begin within 2".

The time taken to load or unload cargo depends on the cargo. As a guide, one infantry model can load or unload one man-portable box per action, while a whole squad is required to load or unload larger items.

Landing Zones

Landing a VTOL or grav-vehicle requires a suitable landing zone (LZ). This must usually be completely clear of any type of obstruction including troops. If the LZ is lightly obstructed in anyway the owning player must roll the vehicle's quality die and score 3 or more. If a 1 or 2 is scored the aircraft landed heavily. This does not cause injury to passengers or crew, but prevents the aircraft from taking off again during the game. Heavily obstructed areas may not be used as an LZ.

The size of the LZ depends on the size of the vehicle. Small craft require a 6" diameter LZ. Larger transports require a 12" diameter LZ.

while very large orbital dropships may require 18”.

Dropping Troops from Hovering Aircraft

Troops may fast-rope, or use grav-packs, from hovering VTOL aircraft. If using grav-packs, the whole squad is dropped as one of the passenger’s actions. Using ropes requires the whole activation (ie two actions).

Roll the unit’s quality die for each model being dropped. On a result of 1, the model is wounded as if from small arms fire and must be treated at a later time.

Shift the quality die down by one if the troops are being dropped into difficult terrain such as woods, jungle, hillsides or building roofs.

Troops may not abseil from a grav-vehicle as the grav-field makes this impossible. They may, however, use grav-packs.

Troops are all placed no more than 1” outside the footprint of the vehicle.

Interface Landings From Orbit

Troops and vehicles may be landed from orbit using VTOL dropships. They function as for any other VTOL aircraft and may land in any suitable location on the table.

High Altitude or Orbital Insertion

Drop-troops and small vehicles of size 1 may be inserted from high altitude or orbit directly onto the battlefield by parachute, jump packs, grav-packs or ballistic entry capsules. Generally, only regular or better quality troops may parachute and only veterans or elite may drop from orbit.

To determine the landing point, nominate a desired landing zone and roll the unit’s quality die against a target value of 4. If parachuting, shift this die down by one. If the roll is successful, the actual landing zone is D6” from the target point in a random direction (see page

9). If the roll was a failure, the landing zone is D6x2” from the target point.

If the LZ is off the table, the unit is lost.

Each individual model then also rolls a D10. For an orbital drop the result is doubled. This determines the distance from the drop zone that model actually lands in a random direction. Such units are therefore likely to be widely dispersed and out of unit integrity requiring multiple activations to reorganise.

Finally for each model in the unit, roll the unit’s quality die. A score of 1 means the model is wounded and must receive medical treatment. If the unit is a vehicle it is destroyed. If the LZ is in difficult terrain such as woods or rubble, shift the quality die down by one for infantry but any vehicles are automatically destroyed. Models landing in open water are destroyed unless they are power armoured troops.

ADDITIONAL RULES

These additional and optional rules are more or less exactly as found in Stargrunt II and are included here for completeness with the permission of Jon Tuffley.

Fire

Flame throwers may be used to deliberately or accidentally set an area alight. Roll a D6: if the area is particularly flammable, it will catch fire on a 3-6; otherwise it will only catch fire on a 6.

If an area catches fire, place a fire marker in the centre of the area. The fire is considered to be burning in a 3" radius centred on the ignition point.

Any infantry model or soft skin vehicle that moves within 3" of the fire marker must roll their armour die against an impact of D4. If the fire roll beats the armour die, the model is wounded, killed, damaged or destroyed as for normal armour rolls.

At the end of each turn, roll a D6 for each fire. On a roll of 1 the fire goes out, but on a roll of 6 the fire spreads in a random direction (see page 9 for randomising direction) and D6" distance.

An infantry unit may attempt to fight the fire using both its actions. Roll a die based on the number of models in the unit (rounded up) and a score of 4 or better removes the fire marker.

Artillery and aircraft may also be used to fire incendiary ammunition. Use the regular fire support targeting rules to determine the impact point and place fire markers at each

Smoke

Smoke can be generated from fires or by artificial means such as artillery. Each "cloud" should be represented by a 2" cotton wool ball or a suitable token.

Smoke blocks line of sight and prevents detection and observed fire.

Natural Smoke

Each fire produces smoke that extend downwind from the source. When the fire starts, roll a D6 and place that many clouds in a line starting at the source. At the end of each turn, as part of rolling to see if the fire stays lit, roll a D6 again and consult the following table.

D6	Effect
1	Remove all smoke
2	Remove one cloud
3-4	Leave as is
5-6	Add one cloud

Artificial Smoke

Infantry units and vehicles fitted with smoke dischargers can create a 6" smoke cloud in front of their position as one action. For infantry this can be any distance up to 6" in any direction, while for vehicles it must be 6" to their front.

The next time the unit is activated, remove the smoke cloud.

Artillery delivered smoke forms a line the equivalent of the weapon's burst radius aligned as desired by the firer. See the rules for artillery to determine the impact point (page 34). An artillery smoke cloud can be refreshed by firing a new mission at the same target. At the end of each turn, roll a D6: on a 1 remove all of the smoke; on a 2-3 remove half the smoke rounded up; on a 4-6 remove one cloud.

Some prepared positions can be equipped with larger smoke generators. These produce a 6" trail of smoke that is retained for as long as the generator is turned on. Once it is turned off, Roll a D6 at the end of each turn: on a 1 remove all of the smoke; on a 2-3 remove half the smoke rounded up; on a 4-6 remove one cloud.

Some vehicles may be equipped with exhaust smoke generators. If the vehicle is stationary, place a smoke cloud around the whole vehicle. If the vehicle is moving, place a 6" smoke cloud directly behind the vehicle. This cloud is removed as soon as the vehicle is activated again.

Casualty Evacuation

At the scale of Dustup, casualty evacuation (CASEVAC) is all about getting the wounded off the battlefield to sustain the morale of the combat troops. All troops want to know that they will be looked after if they are wounded and that their friends will get the care they need.

As noted in the medical treatment rules (page 23) treated wounded can be left with a detachment from a squad. This detachment can also attempt to evacuate the wounded by carrying them off the battlefield. However, this is a very slow process and does not improve the confidence of the remaining troops.

A more effective method of CASEVAC is to use a vehicle or VTOL aircraft to quickly secure the wounded and rush them to a medical facility. The availability of such vehicles is dependent on the scenario.

If available, CASEVAC vehicles are usually represented by a counter placed in the 'loiter' zone of the inbound chart (see page 4). When they are successfully called, using a communication action, they may be moved to the battle zone and placed on the table.

When a unit is activated it may spend one reorganisation action to transfer their wounded to the vehicle provided they are within 2". The CASEVAC vehicle may make as many pickups as desired until it is full. It can carry half as many wounded (rounded up) as its normal carrying capacity.

When the CASEVAC vehicle leaves the table, the counter is placed in zone one of the inbound track. It may not return until it has made the trip all the way to zone three and back to zone one or the loiter zone.

When the vehicle leaves the table, roll a D6 for each unit that successfully offloaded their wounded. If they score a 3+ the raise their confidence by one level. If they score a 6, they raise it by two levels. Additionally, all friendly units within 12" also roll a D6 and raise their

confidence level by one on a score of 5+. ¹⁴

Unlike rallying, this can raise a unit's confidence above their starting level.

The successful evacuation can also affect the player's victory conditions and influence campaigns.

Mines and Explosives

Minefields

Conventional minefields are represented by an inverted counter. Each counter marks a minefield 6" in diameter, so any unit moving within 3" must test to see if it has activated a mine. Minefields may be anti-personnel (AP), anti-tank (AT) or dummy.

When an infantry unit enters a minefield roll the unit's quality die for each model for every 3" (or part thereof) the model moves through the minefield. If the minefield is an AP minefield, the model is hit on a 1, 2 or 3. If it is a mixed minefield, the model is hit on a 1 or a 2. Infantry will not set off AT mines. Any figures hit must roll their armour die against an impact of D10. If the impact beats the armour die the model is wounded. If the impact die doubles the armor die the model is killed outright.

Vehicles entering an AT or mixed minefield automatically trigger a mine for every 3" (or part thereof) they move through the minefield. They roll their belly armour die against an impact of D12. If the mine beats the armour the vehicle is damaged and immobilised. If the mine doubles the armour score, the vehicle is destroyed.

If the vehicle is damaged, there is a chance the occupants are injured. Each occupant rolls their armour die and must score 3+ or suffer an untreated wound. If the vehicle was destroyed, all occupants are killed.

Prop

It is not possible to prop in a minefield.

¹⁴ These effects are not cumulative. That is, a unit may either roll a D6 because they evacuated their own wounded or because they saw another unit do so, but not both.

Mine Clearing

Infantry

Deliberate mine clearing by infantry is too time consuming to be conducted in Dustup. However, infantry willing to sacrifice themselves can potentially clear a narrow lane by detonating mines.

When a unit is activated, one model may be moved (as if it was a detachment) into and through the minefield at half speed (ie one inch of movement requires 2 movement points) until they either reach the end or are wounded. Mark the line the model took with a piece of string or something similar. This represents the cleared lane. Subsequent models may follow the exact same route one model at a time. Any model moving along the already cleared part of the lane must roll a D12 and will detonate a mine on a roll of 1. Movement through a mine lane is at half speed.

Alternatively, models can simply rush the minefield and hope that some of the troops make it all the way through. This does not clear the minefield nor create a lane.

Vehicles

Vehicles fitted with a mine plough or roller or similar clearing device can attempt to clear the minefield. The vehicle must move over the mine counter. It then rolls the driver's quality die. On a score of 1, the vehicle is hit as described above. Any other result removed the counter. This clears both AP and AT mines.

Line Charge

A line charge is a special explosive device that is fired across a minefield and detonated to create an 'instant' lane. To fire a line charge, a vehicle must be positioned near the edge of the minefield and expend a whole turn (2 actions) to fire and detonate the charge. The mine counter is then removed. This clears both AP and AT mines.

Multiple Mine Counters

Larger minefields can be created by placing additional counters. If a unit is within 3" of more than one counter it must test for each separately.

Denser minefields, or minefields containing both AP and AT mines, can be created by placing multiple counters.

Command Detonated Mines

Command detonated mines are 'directional' anti-personnel mines similar to modern day 'claymores'. They may be emplaced before the game or during the game and require one reorganise action to set up. They are marked by a suitable counter (which could also be a dummy counter).

CDMs have a 180 degree field of fire, which should be denoted by the counter being used. Only units within the field of fire will be hit by the mine. CDMs have a range of 6".

They may be triggered at any time during the game as long as the controlling unit can see the mine and the unit it will attack. Activating the mine does not use up the activation of the controlling unit. Any number of pre-set CDMs may be activated at the same time.

The CDM may be activated at any point in the movement of another unit. That is, even if the moving unit moved past the mine, it may be activated at the point in which it was in the field of fire.

When it fires, each model in the unit that is within the field of fire must test their armour die against an impact of D10 and suffer a wound accordingly. If multiple mines are fired, models must test their armour against each one.

The mine counter is removed as soon as it is used.

CDMs have no effect against armoured vehicles. They can damage soft skinned vehicles as for infantry. Occupants of the vehicle must also score 3+ on their armour die or also suffer a wound.

Booby Traps

These are one-shot devices similar to mines that have some sort of trip-wire or sensor that cause them to detonate.

When an infantry unit moves within 3" of a booby trap they roll their quality die against a D8. If they succeed, they detect the trigger and disable the device. Otherwise it detonates and attacks the closest figure. That model rolls its armour die against a D8 to determine if they are wounded. Other models within 3" of the device must also test their armour die but against an impact of D6.

Improvised Explosive Devices

These function exactly as for booby traps except they are intended for vehicles. If a vehicle moves within 3" of an IED it will detonate with a D12 impact as if it was an AT mine. Unlike a minefield, an IED is removed as soon as it detonates.

In some settings, IED may be more powerful than a typical AT mine. Simply apply a more powerful impact die up to a D12x5 if desired.

Infantry moving within 3" may detect the IED. Roll the unit quality die against a D8. If they succeed they have detected the trigger mechanism or the disturbance. It is not disarmed, but is marked and vehicles know to avoid it. However, if the infantry roll less than half the result on the mine die, they have inadvertently triggered the device and all infantry within 6" are caught in the blast. All models must test their armour die against an impact die of D12.

Buildings and Fortifications

All buildings and fortifications are considered point targets and are given a size class as for vehicles. They are thus engaged as if they are a vehicle. Very large structures are considered to be made up of modules.

A player may choose to target a specific part of a building, such as a door or window, in which case

treat the target as one or two sizes smaller than the building itself. If the shot misses, roll a D6. If the result is less than the size class of the building, the shot missed the intended target, but still struck the building somewhere. Otherwise it missed the building completely.

Suppression of a building suppresses its occupants.

Buildings should be given an armour class as for vehicles.

If a building is damaged or destroyed, it results in potential casualties for the occupants. What 'destroyed' means depends on the buildings, models available etc. Usually it should result in rubble which may still serve as cover, but alternatively it may simply mean a breach has been created. Players should agree before the game how each individual building will be handled.

Fortifications may mount weaponry just as a vehicle.

Suggested building values are in the following table.

Building	Armour Rating
Primitive wood building	Class 0 (D6)
Brick	Class 2 (D12x2)
Steel or concrete	Class 3 (D12x3)
Fortified bunker	Class 5 (D12x5)
Door or window	Class 0 (D6)
Armoured viewport	Class 1 (D12)
Armoured door	Class 2 (D12x2)
Heavy armoured door	Class 3 (D12x3)

Electronic Warfare

Some units are equipped with a dedicated EW capability. This can be a regular combat unit with an inherent capability, a command group or a specialist EW team.

EW systems are rated inferior, average and superior quality as for other systems (see page 8).

When a unit with an EW capability is activated, mark whether the EW system is active or not. When it is activated, the EW unit gets three EW counters. These represent the number of EW

attempts the unit can make before its next activation. Once they are used, the unit's EW capability is inactive and must be reactivated next time the unit is activated.

EW units can attempt to do the following:

1. jam an enemy communication attempt;
2. try to identify an inverted (hidden) enemy counter;
3. disrupt enemy sensors and guidance systems;
4. try to foil opposing EW operations.

An EW unit can improve its chances of success by expending addition chits each of which improve the die type by one.

Jamming Communications

An EW unit may attempt to jam enemy communications. When the communicating player rolls their communication die, the EW player also rolls their EW die. If the EW die exceeds the communications die (regardless of whether the communication roll was successful) the communication attempt fails.

Remote Spotting

An active EW unit may expend one or more chits at any time to attempt to identify any hidden enemy units, whether or not the hidden counter is in line of sight of the EW unit or not. This represents the EW unit linking with battlefield surveillance and command and control systems.

The EW player rolls a quality die corresponding to the EW system (shifted up for additional counters) and the target player rolls a die depending on the target situation. A hidden unit in the open uses a D4, if it is concealed it uses a D6. This is shifted up one if it is not in direct line of sight of the EW unit. If the detection event is successful, the counter is revealed regardless of what type of hidden counter it is (unit, mine, sniper etc).

Disruption of Enemy Sensors and Guidance

Whenever the enemy performs an action using sensors of guidance systems, the EW unit may

attempt to disrupt the action. The active player rolls their dice as usual to attempt their action. At the same time, the EW player rolls their EW die. If the EW die beats any of the other player's quality die then the action has been disrupted and fails.

Oppose Enemy EW Attempts

When an EW unit attempts an EW task, opposing EW units may attempt to disrupt them. The disrupting player simply rolls their own EW die at the same time as the active player. If the disruption die beats the EW die, the EW attempt has failed.

Drones

Large Drones

Weapon strikes from large drones can be modelled using the fire support rules (see page 34).

Small Portable Drones

Drones are man-portable remotely controlled reconnaissance systems. Units equipped with them carry several (enough for the whole battle) and the drones are expendable.

It requires one action to prepare and launch a drone. While operating a drone, the unit may take no other actions. If they do, the drone crashes and is lost. When activated, a drone may either move or spot. Drones may move up to 24" in any direction per action.

Drones may be equipped with inferior (D6), average (D8) or superior sensors (D10). For determining line of sight, the drone is considered airborne.

Enemy units may shoot down a drone if it is within 12". It is considered a small target, so is granted a positive die shift to its target die.