FORGE OF WAR

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Original Game Concept

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1 Introduction

These rules began their life as a personal reaction to the often unnecessary and increasing complexity of a number of commonly available science fiction rule sets, and Warhammer 40K in particular.

When first published on my games blog they stirred a response in a number of other gamers with similar feelings and from that the Forge of War development group was born. This second edition of the rules is the result of the hard work and dedication of this group. To these we must give our thanks for without them Forge of War would have languished and eventually vanished.

These rules try to break free from a number of the conventions that have bound the most popular professional titles and return us to what must be the core issues facing any commander on a future battlefield - command and control, and the effective use and motivation of his prime resource - his men, whilst dealing with the fog of war. As you will discover, two major yet simple mechanisms are used to this end.

Through playtesting and debate the development group have forged a set of rules I am proud to be associated with. Although longer than their predecessor they now address most aspects of SF skirmish wargaming, including the use and abuse of armoured fighting vehicles.

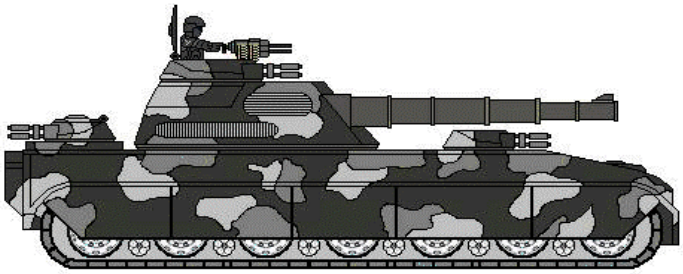
Like their predecessor they can stand alone and offer the gamer the opportunity to create his own Force Lists based upon the collections of himself and his regular opponents. However, we recognise that most players coming to these rules have invested considerable time, money and effort in building up collections for such games as Warhammer 40K, AT-43, Star Wars and others. Thus these rules are supplemented with generic troop and weapons' lists that guide those players to quickly convert their forces.

We recognise that this second edition shall, in its turn, succumb to evolution through play and we look forward to the feedback of you and other players so we can further perfect this system.

One last thing... these rules are free and shall ever remain so. However, they are copyrighted to prevent someone less scrupulous than most of you from selling them on. They are here to share with our fellow gamers, so do with them what you please. If you do pass them on though we would consider it a favour if you mentioned us to those you share them with.

Enjoy,

Craig.



2 The Mechanics

These rules are based around two key mechanics, the Activation Roll and the D-marker.

2.1 The Activation Roll

The Activation Roll is an attempt to break away from the taking turns mentality of the more popular rules sets available for this 'period'. In those rules one player can move, fire and attack with every single unit before his opponent can do anything, regardless of the skills, readiness or order of his units.

The Activation Roll makes the Player-General consider carefully which units to activate, and in which order, because to fail an Activation Roll passes the initiative to his opponent. It also makes him use his valuable leaders carefully as they often have higher command values than ordinary troops and are best used leading their men than zooming around like helicopter gunships.

The Activation mechanic represents the fog of war and the responsiveness of units to commands from their HQ which may have been made without an accurate understanding of the situation from the point of view of that unit.

Example

A human infantry platoon gets the command to leave cover and advance across open ground towards some dense woodland. From HQ's point of view they know the area is relatively safe based upon the reports of other units.

However, all the young lieutenant leading the platoon can see is several hundred metres of deadly open ground. He has no idea if the woods are empty or full of dug in enemy infantry. He has a couple of wounded men their comrades are not happy to leave on their own. His platoon are mostly conscripts who have been brought in to replace the heavy losses his veterans have suffered in the last few days. They are cold, hungry, tired and not keen to leave the cover they fought so hard for. To cap it all his comm's operator is dead and the platoon is short of ammo for its support weapons.

In the end he chooses not to move as ordered but sends a runner back to check the orders. In game terms the unit failed its Activation Roll

2.2 The D-Marker

The D-marker impacts considerably on the example above. When a unit or leader takes hits it has a choice. It can lose figures (or in the case of a leader - wounds) or take D-markers. The 'D' stands for Disorder, Disorientation, Demoralisation and Damage. A unit can only have a limited number of D-markers on them at any one time depending on their training, and each marker places negative modifiers on their Command, Shooting and Fighting values (as described later) as well as their ability to move quickly.

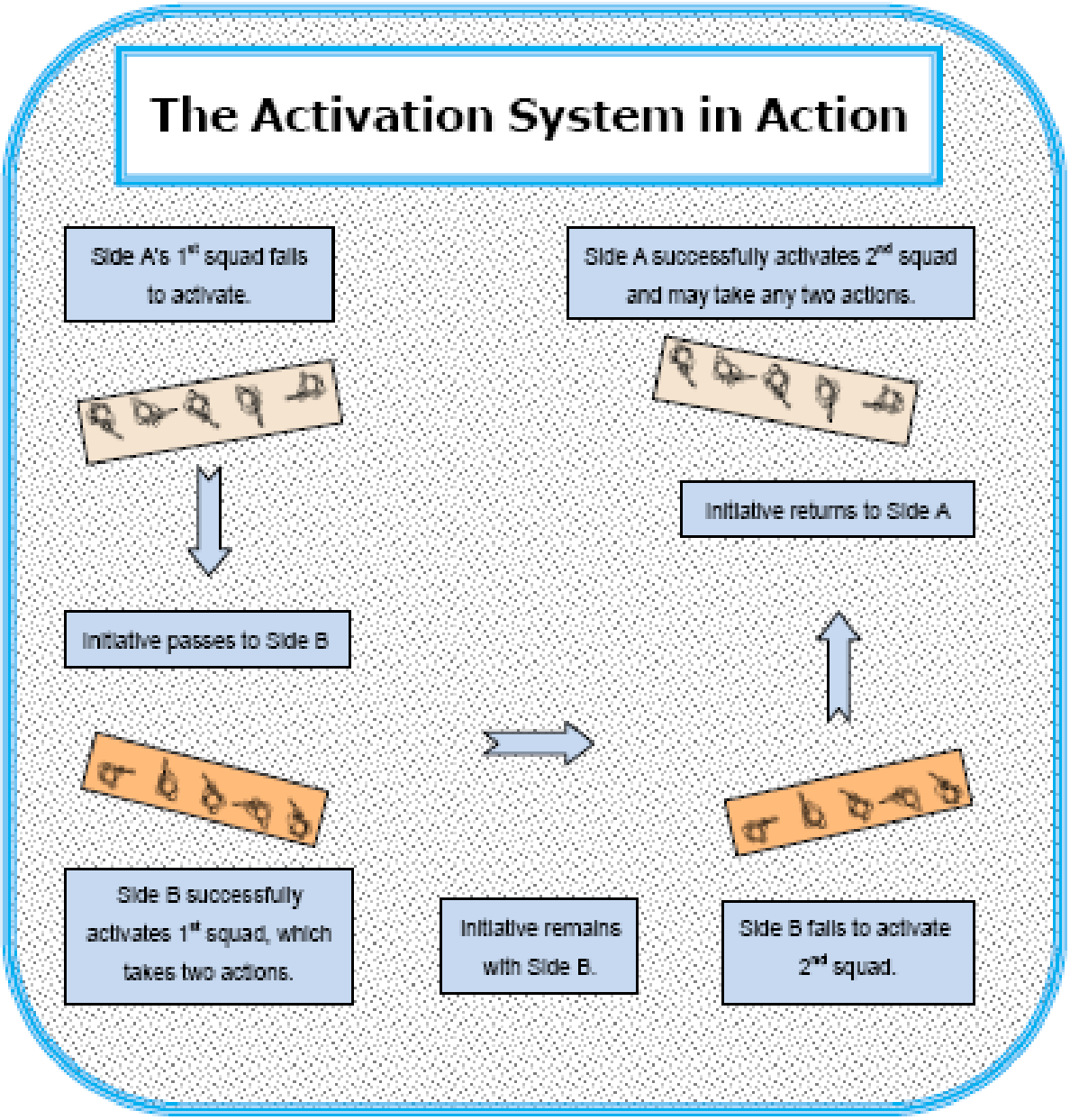
In the example above, the human infantry platoon has the maximum number of D-markers it can carry. It is demoralised, disorientated, disordered and damaged. The Lieutenant needs time to replenish his

ammo and get the men into shape before venturing out from their present position into god only knows what sort of reception from the enemy.

D-markers can also accumulate if a Player-General pushes his troops to move rapidly through difficult terrain, or if they lose a beloved leader.

Thus the accumulation of D-markers can slowly but surely cripple a unit's effectiveness. They can be removed, if the unit can find some quiet time to reorganise themselves.

The combination of these two simple mechanics forces the Player-General to think carefully how he will deploy, activate and move his troops and how best to use his precious few decent Leaders.



3 Unit Attributes

3.1 Troop Values

Units are defined by their:

CV	Command Value.	The ability to maintain order and follow commands in battle. It is also used resist the effects of fear and psychic powers, and when attempting to remove D-markers.
SV	Shooting Value.	The troops' skill with ranged weapons.
FV	Fighting Value	The troops' skill with close combat weapons. If the FV is followed by a number in brackets, it indicates the number of attacks the unit has. This value includes any factors for a standard infantry close combat weapons such as bayonets, combat knives, side-handled batons etc.
AV	Armour Value	How hard the troops are to hurt based upon their armour and innate toughness.

This can be abbreviated to CV-SV-FV-AV-W. The first three vary between 1 and 10, depending upon the unit's and leader's skills, training and background. The armour value, AV, depends upon the armour they are wearing and their toughness. The wounds, W, is the number of hits the figure takes before it is removed. If a unit is comprised of multiple wound figures, wounds should be applied so that a previously wounded figure is removed before a non-wounded figure receives a new wound.

Example

An ordinary human infantry Platoon may have a Unit factor of CV7-SV6-FV5-AV1-W1.

Professional human infantry are usually well-disciplined and have a defined command structure with plentiful NCO's so a CV of 7 out of 10 is applicable.

They are better than average shots having had plenty of practice, but are not marksmen, so an SV of 6 is reasonable.

Given that they are not well-armed for close combat their FV is only 5.

They are not often armed with more than a thick greatcoat, a helmet and flak jacket giving them a paltry AV of 1. This is why infantrymen like cover so much.

Finally, each man has only 1 wound. They're only human after all.

3.2 Troop Training

This has been broken down into five broad bands representing the major divisions in terms of field skill, weapons skill, fire discipline and élan or esprit d'corps. This factor will determine how many D-markers the unit can carry before it becomes utterly useless.

Elite	Highly trained and motivated troops who excel in their field of expertise.
Veteran	Professional troops who have been seasoned in combat.
Professional	Trained and disciplined troops that take commands well.
Militia	Part time defence forces or conscripts with limited training and fragile morale.
Horde	A mass of creatures that attack with little consideration for their own lives.

Example

Taking our human infantry platoon. When it landed on planet it was an Veteran unit, full of battle hardened troops.

Campaign losses has meant it has been brought up to strength with conscripts. These shivering greenhorns are little better than Militia, but the combination of veteran NCO's and the conscripts actually makes the platoon act as Professional.

Much longer on the battle line might reduce the platoon's training factor further though.

3.3 Troop Type

Infantry	Creatures who fight predominantly on foot. They may have transport vehicles, but these are primarily to get them to the battle. It includes troops that are equipped with jump packs or their equivalent.
Cavalry	This includes riders of beasts, bikes, jet-bikes and small one or two man buggies.
Armour	Vehicles whose primary task is to fight rather than transport others.
Monstrous Creatures	The universe is full of creatures who defy common description such as great daemons, alien monstrosities etc.

Infantry and cavalry units generally have 5-20 figures depending upon their race and type as defined in their force list. Hordes may have many more.

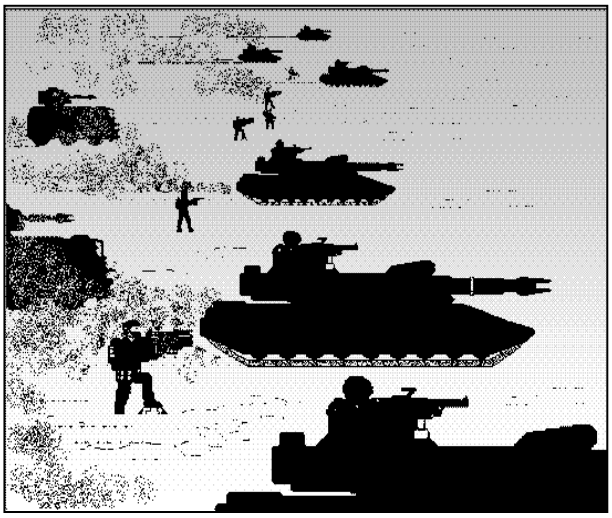
Cavalry may dismount and fight on foot. In this case every fourth figure is detailed off to mind the unit's mounts. What type of infantry they then count as is detailed in the force lists.

3.4 Armour

There is a wide range of armour available. Below is a representative, but not exhaustive, list:

Armour Type	AV	Examples
None	0	Poorly armed Militia, Rioters, Civilians
Flak/Chitin/Tough Hide	1	Basic Line Infantry, Alien Creatures
Mesh/Light Carapace	2	Special Forces, Commandos
Thick Chitin/Carapace	3	Elite Line Infantry
Power Armour	4	Assault Troops, Star Marines
Heavy Power Armour	5	Elite/Specialised Assault Troops
Dreadnought Armour	6	One man Mecha unit
Fast Vehicles	6	Bikes, Jet-Bikes, Jeeps, Light Mecha etc.
Armoured Vehicles	7	Armoured Personnel Carriers, Light Armoured Fighting Vehicles
Armoured Fighting Vehicles	8	Light Tanks, upgraded APC's
Heavy Armoured Vehicles	9	Main Battle Tanks

Super-heavy Armoured Vehicles and battle mecha shall be dealt with in supplementary rules.



3.5 Unit Cohesion

Generally all figures in a unit of infantry or cavalry should remain within 2" of each other. The nature of modern and futuristic warfare has made open order the standard fighting formation.

Horde figures must remain within 1" of each other.

If, through combat casualties this cohesion is lost, then on their next activation all figures in the unit must move to regain cohesion. If this is not achieved the unit immediately takes a D-marker. On the following move they must try again and so on, until cohesion is regained

4 Activation system

4.1 General

As stated in the introduction, these rules have no set length turns. Instead at the beginning of each game turn both Player-Generals roll one ten-sided die, rerolling ties. The highest may choose to start first or second that game turn.

On their turn a Player-General selects a unit or vehicle and attempts to activate it. Each leader or unit has a Command Value, a number they must roll equal to or less than one ten-sided die to become activated so that they can move, fire, fight etc. An unmodified 'natural' roll of a 10 on the die is a failure regardless of the modified Command Value.

To test for activation a player deducts the number of D-markers from the Command Value of the unit.

Activation Modifiers	
-	Subtract the number of D-markers on the unit
-1	Unit is at half or less of its starting strength (in figures)
-1	Terrifying enemy unit or figure within charge range (2 moves) of the unit
+1	If within line of sight and 12" of the Force Commander or members of his command squad/vehicle
+1	No enemy in line of sight
+1	Unit is in soft cover
+2	Unit is in hard cover
+3	Unit is in fortified structure or bunker

If a Player-General fails to activate a unit then the initiative passes to his opponent. If he succeeds, and after that unit has acted, he may then attempt to activate another unit, and so on until he fails. He can only activate any particular unit once in each game turn. With each failure, initiative passes to the opponent until each player has attempted to activate each of his units. At this point the turn ends.

If a player has attempted to activate all his units already then the player with units left to attempt, retains initiative until all attempts have been made.

This mechanic will lead to lulls in parts of the battle field, as the officers desperately try to reorganise their battered units and remove D-markers before throwing them into the fray again.

4.2 Actions

Once activated a unit can generally carry out any two of the actions listed below (if they have the capability, training or equipment):

- Make a full move.
- Shoot at a foe in line of sight and range.
- Engage an enemy in close combat with whom their troops are in contact.
- Unlimber and deploy an infantry heavy weapon.

Only the move action can be used more than once in an activation. Each of the others can be used only once.

The definition of an 'infantry heavy weapon' is one that requires two or men to effectively use it. Thus an anti-tank gun or a belt-fed machine gun is one. A single shot RPG or a machine gun with a box magazine is not. This will be detailed further in the section on Weapons and in the force lists.

4.3 Failing to Activate – Default Actions

As stated, units that fail to activate cannot carry out any of the above actions and initiative passes to the other player. However, in the event of a failed activation, if the unit has enemy units in sight it may still make a single move towards the nearest cover (if not taking the unit closer to the enemy) or to retreat directly away from the enemy. It may do this by using a single move action directly towards the nearest cover not occupied by the enemy or directly away from the visible enemy. The may also adopt a hiding position if the advanced *Stance* rules are being used.

4.4 Withdrawing

If a Unit that is at or below a third (33%) of its starting strength fails to activate, it will withdraw directly away from the enemy using both movement actions without modification and without stopping in cover. The unit will continue to withdraw in subsequent turns until a successful activation is made. Each subsequent failure to activate will result in the unit taking an additional D-marker, or a casualty (i.e. a deserter) if no more D-markers can be taken.

If the unit is involved in Close Combat it does not normally need to activate in order to fight (see Close Combat section), however if it is at or below 33% of its starting strength it must still attempt its activation roll. A Failure results in the unit withdrawing as described. The opposing unit will get its close combat attacks before the withdrawal but the withdrawing unit does not get to attack.

5 D-Markers

5.1 General

When a unit is hit the player can choose to lose a figure or take a D-marker for each hit. Each D-marker on a unit cumulatively reduces their CV, SV and FV by one. A couple of possible ways of tracking this is to place a glass bead by the unit for each D-marker or a six-sided dice or a numbered counter with the current number of D-markers on the upper face.

A unit can only carry a limited number of D-markers at any one time. Once they have that number then all further hits automatically remove figures.

This also applies if a unit with its maximum number of D-markers should lose a D-marker for other reasons, such as moving at full speed through difficult terrain. It is assumed the figure is lost due to exhaustion, desertion or an accident.

Elite	These can carry up to five D-markers at a time.
Veteran	These can carry up to four D-markers at a time.
Professional	These can carry up to three D-markers at a time.
Militia/Conscript	These can carry up to two D-markers at a time.
Horde	These can carry up to one D-marker at a time.

5.2 Removing D-Markers/Rallying

Instead of performing a normal activation on a unit the player can choose to attempt to remove D-markers. They are essentially spending the time motivating their men, passing around fresh ammo, getting them back into formation, tending to minor wounds, and taking a break to catch their breath.

To remove D-markers the unit must roll one ten sided die against their Command Value less the number of D-markers they are carrying. There are a few modifiers to CV before a roll is made:

+1	If within 12” and in line of sight of the Force Commander or members of his command squad
+1	If there are no surviving enemy in line of sight.
+1	If the unit has just slaughtered an enemy unit (i.e. killed every last one of them).
-1	If a Terrifying enemy unit or figure is within charge range (2 moves) of the unit.

Once the die is rolled the unit removes one D-marker for each point scored below the modified Command Value.

For instance: if the modified CV is 6 and the unit rolls 5, it removes one D-marker. If it had rolled 4, it would have removed two D-markers.

A roll of one always removes one D-marker, even if the modified CV is one or less.

5.3 Permanent D-Markers

A unit that has lost 50% or more of its starting number cannot remove all of its markers. It will always be left with at least one marker. This is increased to 2 markers if the unit has lost 75% or more of its starting number.

6 Movement

6.1 General

The distance a unit or may move in an activation varies according to troop type and the terrain being crossed.

Generally, unless listed otherwise in the relevant force list, the following movement allowances apply:

Troop Type	Base Movement
Infantry	0-6"
Cavalry, bikes, and other light/fast vehicles	0-12"
Armour	0-8"

During their move a unit cannot pass closer than within 2" of a known enemy unless they are moving to contact that enemy.

When moving a unit move each figure individually, remembering unit coherency requirements.

6.2 The Effects of Terrain on Movement

As this is a game of small units, not huge armies, difficult terrain has less effect than in some systems. The player can choose one of two options below when sending a unit through difficult terrain:

1. Let them pick their way through carefully. This halves the total distance they can cover, but they maintain order.
2. Push them through at full speed, but pick up a D-Marker or lose a figure.

Difficult terrain includes: Woods, Forests, Boggy Ground, Shallow Rivers (such as at Fords), Ash Plains, Steep Hillsides, Rock Strewn, Scree, Deep Snow. Generally use common sense and agree areas of difficult terrain at the beginning of a game.

Decent roads are uncommon on less developed planets, but where they exist they allow troops to move through difficult terrain at full speed as long as every figure in the unit moves along the road.

Obstacles such as Hedges, Low Walls, Barbed Wire or Fence Lines reduce movement by 2", or the player can force his troops over them at full speed and take a D-marker (they can’t lose a figure to an obstacle). This penalty is applied only once even if a unit takes two activations to cross the obstacle.

Some terrain is considered impassable except in certain circumstances:

- Lava flows - unless on a bridge
- Deep Water (Rivers, Pools, the Sea) - unless on a raft/boat/bridge.
- City walls or fortifications - unless through a gate or over the walls by ladder.

Built up areas bring their own problems. In most cases troops moving along streets may do so unhindered. Treat buildings (both untouched and ruined) as difficult terrain for infantry and impassable for cavalry -

unless they dismount and lead or wheel their mounts through it. Armour can move through buildings but automatically takes a D-marker for each move. This is from falling debris and damage caused forcing its way through walls etc.

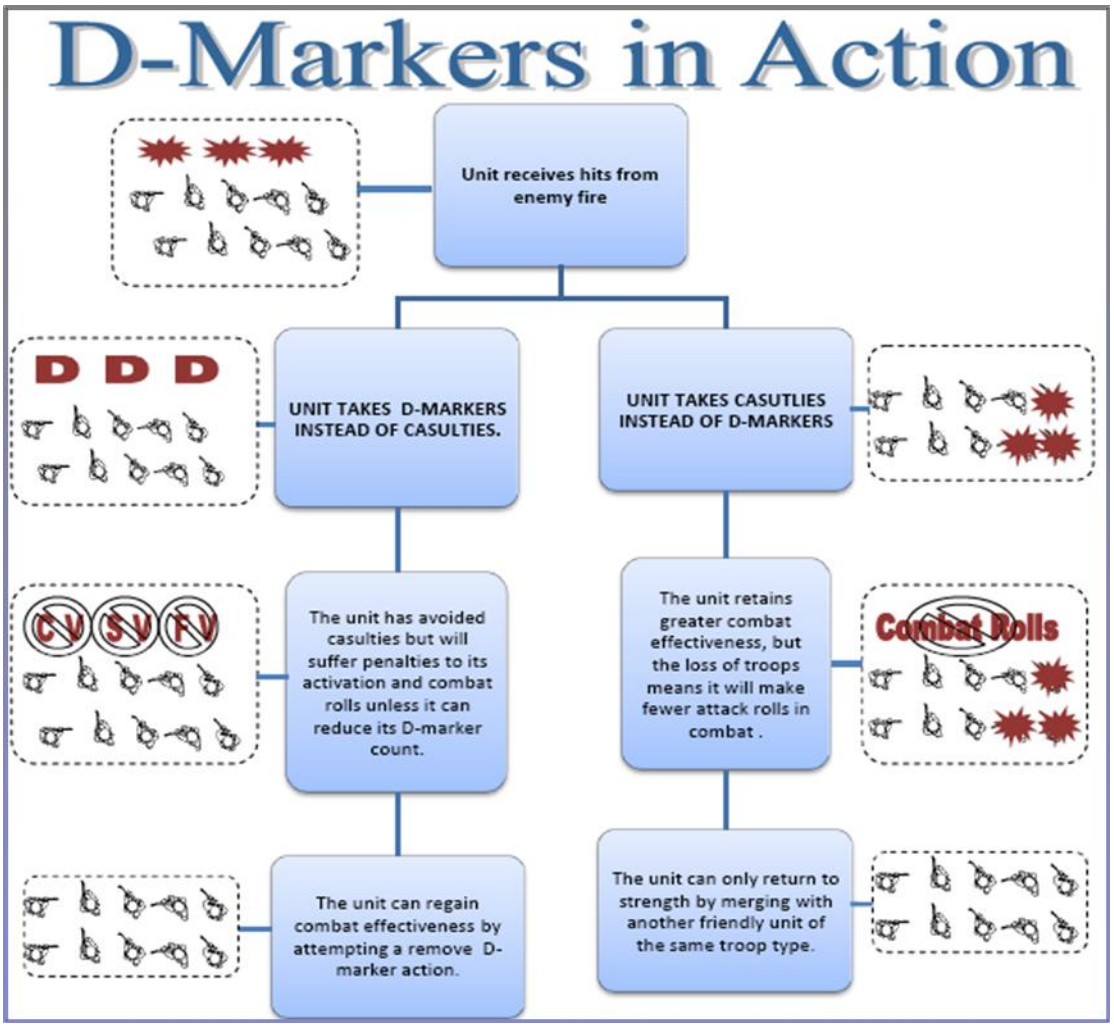
Infantry can climb up inside buildings. It takes 3” of movement to rise up one floor.

This elevation allows them to shoot over friendly troops at enemy that are at least 3” beyond them. The 3” rule is to prevent ‘friendly fire’ incidents. Of course the enemy must be in line of sight and range.

6.3 Jump Packs

Infantry equipped with jump packs or their equivalent may use these as a move action, allowing them to make a move of up to 12". This move ignores the effects of difficult terrain as long as the jump troops’ destination is not itself difficult terrain. If they choose to land in difficult terrain they take a hit and may either take a D-marker or lose a figure.

The jump action may only be used up to once per activation, but does not prevent the jump troops from making a normal move as their other action. A jump action may not be used to enter close combat.



7 Cover

7.1 Soft Cover

Soft cover blocks line of sight and provides limited protection. It includes general vegetation, hedges, fences, wading through water or snow. Units in soft cover will add 1 to their AV.

7.2 Hard Cover

Hard cover blocks line of sight and provides a certain amount of protection. It includes walls, buildings (both intact and ruined), trenches, trees (woods and forests), barricades, large boulders or anything else with a reasonable chance of stopping the shot. Hard cover that is designed to protect the occupier such as fortified wall and trenches will add 3 to AV, most other hard cover will add 2. Hardened Bunkers may add 4 or more by agreement between both players.

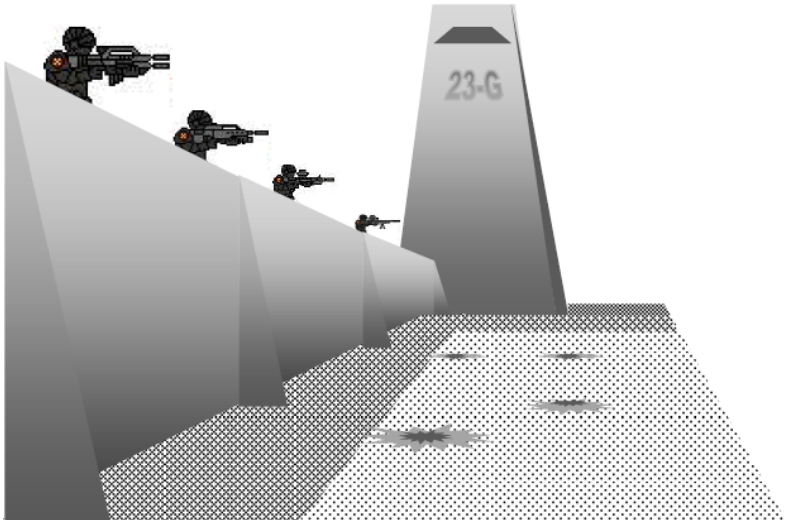
7.3 Blown Cover

If a unit in cover shoots out of it at another unit then their cover is 'blown'. Any opposing unit that can draw a line of sight to them on the turn they fire and subsequent turns may return fire, ignoring the sight blocking effect of that cover (but not any physical protection it gives). If a unit is able to enter cover without being seen by an enemy unit then its cannot be fired upon until its cover is blown.

7.4 Fighting Inside Cover

Inside an area of soft or hard cover all weapons effective ranges are reduced to 6". However, the unit shooting can target any opposing unit sharing the same piece of cover as long as they are within 6".

A unit occupying hard cover that is charged from beyond it, gains the advantage of that cover in the turn it is charged, but not thereafter.



8 Ranged Combat

8.1 General

Units or leaders that have figures armed with ranged weapons may shoot any another unit or vehicle in their activation.

The target must be within range and in line of sight. Vehicles and other units effectively block line of sight for direct fire weapons. The simple rule is if you can't see at least half a figures base or the figure itself, you can't target it.

Indirect fire weapons such as mortars and artillery may fire on units hidden from a direct line of sight as long as an unengaged friendly unit has line of sight and can thus spot for them.

8.2 Targeting

Usually all the figures in an infantry or similarly armed cavalry unit must fire at the same target. However, specialist heavy weapons such as Laser Cannons, Missile Launchers and Rail Guns for example, may be targeted separately. Thus the anti-personnel weapons will focus on killing personnel and the anti-tank on tanks.

This is a rule that requires common sense to apply. Generally a unit can only target one anti-personnel target and one anti-tank.

This same rule applies to vehicles that have both anti-tank and anti-personnel weapons and suitable targets to apply them to (but only if these weapons are crewed).

8.3 Shooting

To hit a target a figure must roll equal to or less than their Shooting Value with a ten-sided die. Their Shooting Value is modified as follows:

Ranged Combat Modifiers	
-1	Per D-marker on the shooting unit/leader.
-	AV of the target.
-1	If the target is in soft cover.
-2	If the target is in hard cover.
-3 or -4	If the target is in a manmade fortified structure such as a bunker.
-1	If target is at over half the weapon's maximum range.
-1	If shooting in the same turn as moving 6" or less (before or after the shooting).
-2	If shooting in the same turn as moving over 6" (before or after the shooting)
+1	If the target is within 3" but not in base-to-base contact.

+	Weapon Value (WV). This modifier can only be applied to cancel the target armour value (AV). If the WV exceeds the target's AV, the excess WV is not used.
-1	If shooting at a unit or vehicle that has moved fast (i.e. over 6") already this turn.

Roll one ten sided die for each figure armed with a ranged weapon. Certain weapons give a figure tw or more dice as rated by the 'weight of fire' (see section 16).

If the modified SV is zero or less the shooting unit may still be able to hit if they roll any 1's.

Re-roll each 1. To hit they must score equal to or less then 10 – the negative modifier to the SV.

So, for instance, if they are suffering from a -4 modifier they will need to roll six or less.

Example #1

Twenty Human infantrymen are shooting at a Heavy Power Armour unit in an abandoned building 18" away. The modified shooting value is -4 (6 infantrymen shooting value – 7 Heavy Power Armour value – 0 laser rifle weapon value – 2 hard cover – 1 over half range). The Human infantrymen would roll 4 dice rerolling any 1's they get and trying to roll 6 or less with them.

Example #2

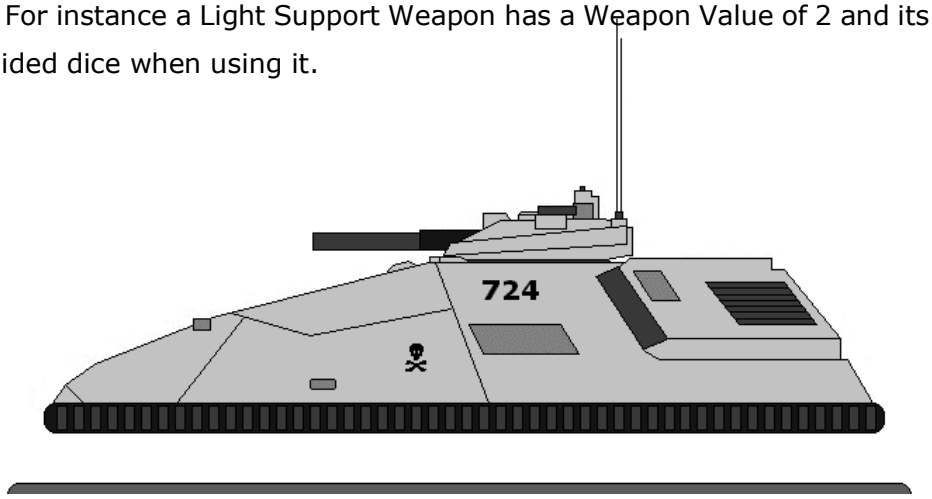
Five aliens with missile launchers move 4" and then shoot at 10 Star Marines 20" away in the open. The modified shooting value is 2 (4 alien shooting value – 4 Star Marine power armour value + 6 missile launcher weapon value but only 4 is applied to cancel the Star Marine's armour value -1 for moving 6" or less –1 over half range).

8.4 Applying Hits

Hits may be taken as figures/wounds or D-markers (see D-marker rules above). However if there are more successful hits than figures visible to the shooting unit or vehicle then the remainder are taken as D-markers up to the maximum that unit can carry.

A unit cannot fire on another unit that is in close combat.

A weapons range and value is shown in its description. Generally Heavy Weapons have higher values and weight of fire. For instance a Light Support Weapon has a Weapon Value of 2 and its weight of fire counts as three ten-sided dice when using it.



9 Close Combat

9.1 General

Close combat is automatically initiated as soon as a unit or vehicle moves into base to base contact with an enemy figure(s).

A unit may take two move actions on the turn they move into close combat. This is called charging.

During each unit's activation following the initial close combat round, the unit can elect to continue the close combat or attempt to disengage.

9.2 Who Strikes First

Normally, close combat is simultaneous but there are exceptions.

If the target of a move into close combat is in cover and the attacker begins their move outside that cover then the defenders attack first in the initial close combat round unless the attacking unit is also armed with fragmentation grenades in which case both sides roll simultaneously.

9.3 Resolving A Close Combat Round:

To hit a target a figure must roll equal to or less than their Fighting Value with a ten-sided die. This value is modified as follows:

Close Combat Modifiers	
-1	Per D-marker on the unit.
-	The AV of the target.
-2	If the target is defending an obstacle.
+	Close combat weapon value as detailed in the notes section of specific close combat weapon
+/-1	If unit's FV is 2 greater or less than its opponent's FV

Roll one die for each figure in combat.

If the modified SV is zero or less the attacking unit may still be able to hit if they roll any 1's.

Re-roll each 1. To hit they must score equal to or less then 10 – the negative modifier to the SV.

So, for instance, if they are suffering from a -4 modifier they will need to roll six or less.

Hits may be taken as figures removed or D-markers (see D-marker rules above). The player taking the damage determines where the figures are taken from, but they must be figures that were in base contact with the attackers. If there are more successful attacks than figures in base combat the remainder is taken in D-markers up to the maximum that unit can carry.

Example

Twenty Chaos Cultists are advancing up a street and charge a barricade manned by a unit of 10 Star Marines. The cultists do not have fragmentation grenades so the Star Marines attack first. The Marine's modified fighting value is 8 (8 Star Marine fighting value – 1 cultist armour value +1 charging into combat this turn). The Star Marine player rolls 7 hits. The CV value of the cultists is 7 so they can take up to 4 D-markers. The Chaos player takes removes 7 figures as killed. The 13 surviving cultists attack back. Their modified fighting value is -1 (5 Chaos Cultist fighting value – 4 Marine armour value -2 target defending an obstacle). The cultists would roll 5 dice with a possibility of hitting on a 1 (13 cultists ÷ [1 negative fighting modifier +2] = 4.33 rounded up to 5). They roll 5 dice and get a single 1. As they have a negative fighting value of -1 this means they must re-roll the 1 and roll 9 or less. They roll an 8. The Star Marine player takes it as a D-marker.

9.4 Continuing With Close Combat

If a unit elects to continue with close combat then it does not normally need to roll for activation and this is its only action during the turn. Unengaged figures may then be moved up to their normal move distance in an attempt to get into base to base contact with unengaged figures and if none are available then engaged figures. The enemy unit may then move its unengaged units up to their normal move distance to get units into close combat. Figures may not pass between other figures if the gap is narrower than the width of the figures base. Finally, conduct a round of close combat.

9.5 Disengaging From Close Combat

If a unit attempts to disengage from close combat then they must succeed with a Command Test (roll equal to or less than the unit's modified Command Value). If the unit successfully activates, the first action must be to move away from the enemy unit one full movement and towards their table edge if possible. There is no restriction on the second action except the disengaging unit may not move into contact with any other enemy units or vehicles this turn. Failure means that they take a D-marker (or wound if no more D-markers can be taken) and remain where they are.

9.6 Withdrawing

If the unit is involved in Close Combat is at or below 33% its starting strength it must attempt its activation roll. A Failure results in the unit withdrawing as described. The opposing unit will get its attacks before the flee but the fleeing unit does not get to attack.

10 Vehicle Rules

10.1 General

Vehicles function in essentially the same manner as infantry, with a few key differences.

Vehicles will generally have AV's of 6 or higher. Often, vehicles will have special abilities (i.e. troop transport), greater speeds than infantry, and multiple weapon systems. They activate just like troops, as they have CV ratings and only activate with a successful activation roll. Once activated, they have two actions to perform just like troops. They may also accumulate d-markers that will impede fighting ability and movement rate.

10.2 Weapon Systems

Vehicles may have multiple weapons systems.

Turret-mounted weapons systems (including pintle mounted machine guns) can fire over intervening friendly infantry. Side-sponsons or hull-mounted weapons cannot.

Weapon systems on skimmers can fire over any other unit or vehicle between it and the chosen target. It cannot do this with sight-blocking terrain such as forests, buildings or hills.

Some vehicles, such as Light Mecha, may have a FV due to close combat capacity.

10.3 Armour

Vehicle armour (AV) can be expressed in these terms: value (value2).

The first value is the overall armour value for the unit. The vehicle's sides and top have this AV level. This second value reflects the AV modifier for the front (more heavily armoured) and rear (less so). The front AV is just the AV+ the modifier. The rear AV is AV- the modifier.

10.4 Movement

Unless stated otherwise, a vehicle can move 12" per move action.

10.5 Special Features

The most common feature a vehicle may have is transport capacity. The xN value that follows determines how many troops may be transported by the vehicle.

Other special features include Grav or Hover (same as Jetpack for troops).

10.6 Sample Vehicle Stats

Armoured Personnel Carrier	CV: 7	SV: 6	FV: 0	AV:7(1)	W: 1	Heavy Flame Thrower, HMG x2, Transport x10

10.7 Inflicting damage on a vehicle

In order to damage a vehicle, the attacking unit must use a weapon that has at least an WV of 1. Any hits made by weapons with an WV of 0 are wasted. The type of damage that is done can be determined by how many intervals below the hit value is rolled. Damage falls into three categories, Light Damage (d-markers), moderate damage (weapon system out, immobilization), and destroyed.

Hit	Hits equal to the hit value do only minor damage.
Hit -1	Hits one point lower than the hit value do minor damage x2.
Hit -2	Hits that are two points lower than the hit value do moderate damage.
Hit -3	Hits that are three points lower than the hit value do moderate damage x2.
Hit -4 or less	Hits that are four or more points below the hit value destroy the target.

Light damage translates into a single d-marker each, up to the number that unit can have for its training level. Further light damage translates into moderate damage. D markers may be reduced by taking the appropriate action during an activation and are reduced in the same manner. While reducing d-markers, the crew is hastily jury-rigging minor repairs, putting out fires, venting smoke, clearing out debris, and generally making their vehicle combat worthy again.

If an attacker scores moderate damage, the player controlling the vehicle determines which systems become damaged: one of the weapon systems, the track/propulsion system (immobilization), or if they are available, wounds.

Wounds if available are used to cancel out damage results, when a vehicle is reduced to 0 wounds its treated as a normal vehicle.

If a troop transport is immobilized or destroyed the troops inside can immediately bale out on a successful command test. If they fail the test they take one hit per point by which they failed. They can try to extricate themselves again on their next activation. Troops who bale out on their activation can do nothing else that turn.

Example

An Human infantry heavy weapons team spies an enemy APC rolling in their direction from the cover of a nearby devastated apartment block (normal range, no cover). The team brings its missile launcher to bear and fires off a round. The veteran team (SV 7) watches their deadly ordinance (WV 6) make its way unerringly toward the armoured APC (AV 7) and hit it squarely(the team needed a seven to hit, a five to moderately damage, and a 3 to destroy). At first, it is unclear to them how fair a hit they scored, but once the smoke cleared the grizzled troops could easily see the remains of the APC's main weapon system-mangled and useless (the unit rolled a 4, scoring moderate damage x2, and the opposing player chose to lose its two weapon systems rather than be immobilized in the weapon team's line of fire).

Optional Rules

11 Covering Fire

As part of its activation, a unit may declare it is providing covering fire. This takes an action.

To show a unit is providing covering fire, the unit is given a marker with the relevant modifier number on it to reflect its movement. A unit that moved during its activation before setting up its covering fire option will provide covering fire with a -2 modifier.

11.1 Duration of Covering Fire

A unit is deemed to be on covering fire orders until it either fires or until its next activation, at which time it can carry out another action or remain on covering fire. This means covering fire orders can span turns. A unit may declare covering fire but not have any targets present themselves before the end of the turn. If a target then presents itself in the following turn and before the unit activates again it can fire.

11.2 Providing Covering Fire

When a unit activates and moves into line of sight of a unit on covering fire orders, the covering unit may fire upon it before the activating unit gets to complete its actions. The player with the covering unit can decide at what point to open fire. A unit with covering fire orders can only fire once during that turn. Covering fire is performed the same as normal direct fire.

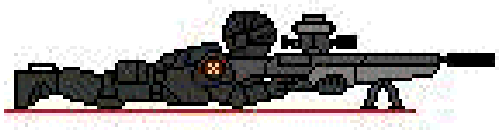
12 Stance Modifier for Infantry

Stance indicates how well the unit is using terrain and any small bits of cover available for protection from incoming fire. Only infantry models with an AV of 4 or lower may change stance, as it doesn't make much sense to have heavily armoured troops like Terminators trying to press themselves in the mud for extra cover.

NORMAL – No modifiers to movement or shooting.

CAUTIOUS - The troops in the unit crouch into their weapons while moving slowly and carefully. The unit gains +1 AV (armour value), -1 SV (shooting value), and can move a maximum of 3". This stance can be represented by laying one figure from the unit face-down. Any time troops that are *Cautious* are engaged in close combat, they are immediately considered to revert to a normal stance. Moving into or out of this stance costs one action each and can only be performed on activation.

HIDING - The troops in the unit are hiding behind cover or laying flat on the ground with their heads covered. The unit gains +2 AV (armour value) but cannot use any ranged weapons as the troops in the unit are too busy hugging the ground for dear life! Units that are hiding also get a +1 bonus when trying to reduce d-markers as troops feel a little safer while not making such large targets for the enemy. This stance can be represented by laying two figures from the unit face down. An enemy that close combat attacks a hiding unit receives a +2 bonus to its FV (fighting value) in the initial round of combat. There is no action penalty for moving into or out of this stance, and it is one of the only actions a unit that fails to activate can perform.



13 Reaction Test

Every time a unit moves in the open within 12" of an eligible enemy unit, immediately make a Reaction Test for that unit to see if it responds by firing. Units equipped for melee only may respond to a successful test by charging. Eligible units who may attempt a Reaction Test do not include units that are Hiding, units on Covering Fire (they don't have to test, they can shoot automatically), units that have already shot this turn with Covering Fire or a passed Reaction test, and units that fled the enemy this turn due to a failed Reaction Test.

To determine whether an eligible unit reacts, roll a d10 against its modified CV, the same as for activation. If the unit succeeds, it may only fire on the advancing enemy unit that triggered the test with a -2 SV penalty. If the unit fails its reaction test on a modified roll of "10 or 11" and its modified CV is less than 5, the unit must immediately flee and perform a normal move away from enemy units and toward its' starting side of the table. A unit may only take a Reaction Test once in a turn.

14 Indirect Fire

To engage in indirect fire with artillery, another friendly unit (not engaged in melee) must act as a spotter and have line-of-sight to the target. It is assumed that they have some form of communication.
In determining the effectiveness of the shot, use the SV of either the targeting unit (the one providing line-of-sight) or the firing unit, whichever is lower.
Indirect fire weapons can be either Accurate or Inaccurate, depending on their level of technology, guidance systems, and so on. Whether a system is Accurate or Inaccurate will be indicated in the Notes section of weapon stats entry.

Accurate	Include laser-guided bombs, "smart" artillery rounds, and cruise missiles.	Use 1d10 to determine the fall of shot.
Inaccurate	Rely on cruder technology and operator skill rather than sophisticated guidance systems and include mortars, blind-fire rockets, and most chemical artillery pieces.	If the target is at under half the weapon's range, use 1d10 to determine fall of shot. If target is over half the weapon's range, use 2d10 to determine fall of shot.

14.1 Determining Results of Indirect Fire

To determine the fall of the shot, first pick a target point within line of sight of a spotter. Roll 1d10 or 2d10 and add the values (see above).

From the total of the roll(s), subtract the SV of the shooting unit or spotting from this value. A result of "0" or a negative value means the shot fell exactly on the aim point. Any value returned that is greater that "0" is the number of inches deviation from the aim point. Roll a deviation die to determine its direction.

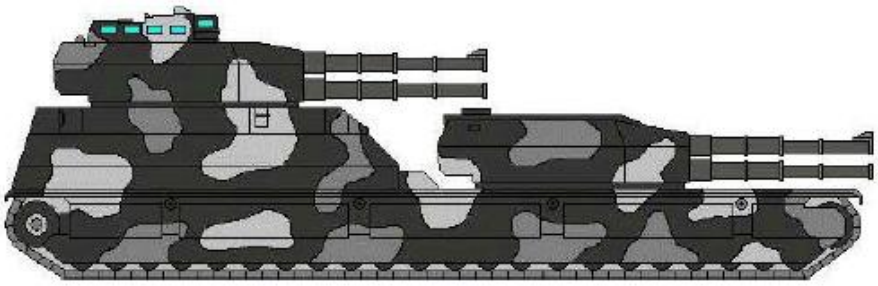
Most indirect fire weapons use a blast template placed with its centre on the fall of shot point to determine which models are caught in the blast and may be damaged. The size of each weapon's blast template is listed in the "Notes" section of the weapon entry.

Once you have found the fall point of the shot, place a blast template with its centre over the fall of shot point. For each model under the blast template, work out and resolve a standard ranged attack using the SV of the firing unit, WV of the weapon itself, and the defensive factors for the targets (such as AV and cover).

Example

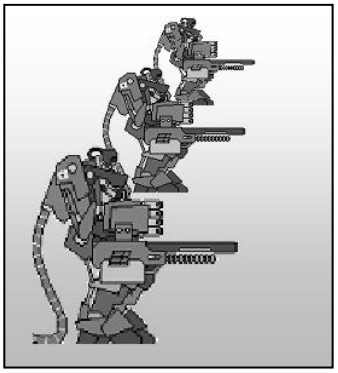
An Human mobile artillery piece (Inaccurate) is ordered to strike at an entrenched unit of twenty alien troops who are hunkered down in an abandoned hospital. A nearby unit of Human infantrymen can see the aliens but dare not assault them because the aliens are just too well-entrenched. After triangulating the hospital's position, the unit' grizzled weary sergeant calls in the coordinates of the aliens' position (spotting unit has direct line-of-sight, and is not engaged in melee). Upon receiving the coordinates, the artillery commander consults a map of the battlefield (he finds that target distance is over half his weapon's range) and barks an order to his eager men. The gun crew lays its weapon to target the given coordinates, and with a mighty shudder and heave the artillery piece launches its deadly ordinance (roll 2D10, subtract SV of battery, as it is lower than the SV of the spotters).

As the spotting unit of infantrymen watch intently from their own cover, a distant whistling grows into a deafening howl as the round speeds in. In that instant, one corner of the hospitals seems to ripple and shift as the artillery round punches through detonates inside (the artillery has a SV of 7, and the 2d10 roll equalled 9-the shot deviated by two inches). Even though the shot missed the main concentration of aliens, four unlucky ones holed up in the by the northwest entrance are vapourized in the blast (template placed over the deviation point, ranged attacks worked out using the artillery SV and weapon's WV). Other aliens who heard the incoming round scattered from their overwatch positions to make use of every available bit of cover (to avoid further casualties, the unit takes two D-markers). Watching the mayhem from nearby, the infantry sergeant senses it's time and starts rousing his men for a close assault on the hospital.



15 Generic Troop Types

15.1 Introduction



Rather than produce endless conversion lists for all the ranges of figures and SF wargames genres out there it was decided to provide a number of generic troop types. You can then use these as the basis for your own figure collections and modify them to suit your tastes.

Please feel free to extend these lists. We'd be interested to see what you come up with.

Generic Human Troop Types

These represent non-genetically modified human troops. The CV represents a combination of their training and their unit esprit d'corps. The SV, FV and AV represents their usual load-out of equipment.

For example the difference between Special Forces Assault and Recon troops is that the former is armed for breaching buildings, so has automatic weapons, grenades and enhanced carapace armour. The latter has more sniper rifles with good sighting mechanisms, but lighter armour.

Type	Training	CV	SV	FV	AV
Special Forces Assault Troops	Elite	10	7	8	3
Special Forces Field Troops	Elite	9	7	7	2
Special Forces Recon Troops	Elite	9	8	7	2
Paratroops, Commandos, Rangers, Close Protection Teams, Naval Boarding Parties	Veteran	8	7	7	2
Heavily Armoured Close Assault Teams	Veteran or Elite	8	7	8	4
Line Infantry Troops, Tank Crews, Artillerymen, Military Police, Civilian Police SWAT Teams, Naval Officers	Professional	7	7	6	1
Garrison and Conscript Troops, Rear Echelon Troops, Territorials and Reservists, Naval Ratings	Militia/Conscript	6	5	5	1
Citizen Militias, Civilian Police, Planetary Defence Forces	Militia/Conscript	5	4	4	0
Rioters, Zombies	Horde	3	2	4	0
Insurgents	Professional	8	6	6	0

Genetically-modified Human Troop Types

These represent a range of human troops who have volunteered or otherwise undergone genetic modification to enhance their strength, endurance and speed. They are generally superior to ordinary humans and are normally developed in response to alien threats or extreme environments.

Type	Training	CV	SV	FV	AV
Human Brutes – bred for size and strength	Veteran	7	5	8	1
Marines – men bred for power armour	Veteran	8	7	8	4
Assault Marines -	Elite	9	8	8	5
Marine Leaders	Elite	10	8	8	4

Generic Alien Troop Types

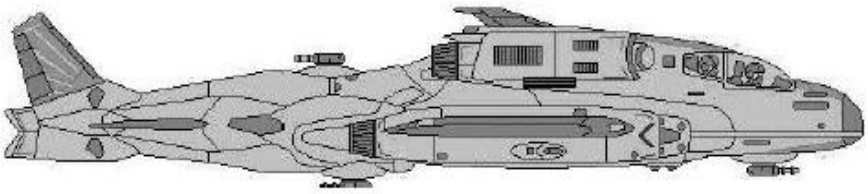
These represent a number of archetypes that are common to a number of rule sets and miniatures ranges. These include:

Brutes - large, muscular and savage aliens who excel at close quarters combat, but also carry some ranged weaponry.

Tech Aliens – those that depend on their advanced technology and speed rather than brute force.

Hivers – insectoid or arachnid troops that come on in droves with little thought for their own lives.

Type	Training	CV	SV	FV	AV
Brute Troopers	Professional	7	5	8	1
Brute Leaders	Veteran	8	5	8	2
Brute Generals	Elite	9	5	9	3
Brute Minions – small slave beings	Militia/Conscript	6	5	4	0
Tech Alien Troopers	Professional	8	7	5	2
Tech Alien Elites	Veteran	8	8	5	3
Tech Alien Battle suits	Elite	9	9	6	4
Hivers – small	Horde	5	4	5	1
Hivers – large	Horde	5	4	7	2
Hive Leaders	Horde	7	4	8	3
Hive Monsters	Horde	6	3	9	4



16 Generic Weapon Types

16.1 Introduction

These represent a variety of weapons commonly available to science fiction troops. The purpose of this section is to act as a guide to players as they design their own forces using figures from their collections. Read through the types and modify or add types as you need them. Note that many weapons marked as being Heavy are not so if mounted on a vehicle or various types of mecha or power armour.

Weapon	Range	Weapon Value	Weight of Fire	Notes
20mm Minigun	24"	4	4	Heavy weapon
40mm Cannon	48"	4	2	Heavy weapon
Advanced Assault Rifle	24"	2	See notes	Weight of Fire: 2 at targets up to 12", 1 if target is greater than 12" and shooter did not move this turn.
Assault Rifle	24"	1	See notes	Weight of Fire: 2 at targets up to 12", 1 if target is greater than 12" and shooter did not move this turn.
Automatic Pistol	12"	2	1	Pistol armed units increase FV by 1.
Flame Thrower	12"	1	See notes	All figures within 3" of target point are hit
Rocket-Propelled Grenade Launcher (HE)	24"	0	See notes	Weight of Fire: Versus infantry 2, versus horde 3, versus vehicle 1. HE = High Explosive.
Rocket-Propelled Grenade launcher (HEAP)	24"	4	1	HEAP = High Explosive, Armour Piercing
Heavy Machine Gun	36"	2	3	Heavy weapon
Howitzer	120"	7	See notes	Weight of Fire: Versus infantry 6, versus horde 8, versus vehicle 1. Versus vehicles, +2 to WV.
Laser Cannon	48"	6	1	Heavy weapon
Light Support Weapon	36"	1	3	This is a light machine gun.
Missile Launcher (HE)	48"	1	See notes	Heavy weapon. Weight of Fire: Versus infantry 2, versus horde 3, versus vehicle 1.
Missile Launcher (HEAP)	48"	6	1	Heavy weapon
Mortar, Heavy	48"	1	See notes	Heavy weapon. Indirect Fire. Weight of Fire: Versus infantry 3, versus horde 4, versus vehicle 1.

Mortar, Light	24"	1	See notes	Heavy weapon. Indirect fire. Weight of Fire: Versus infantry 3, versus horde 4, versus vehicle 1.
Plasma Rifle	24"	6	See notes	Roll 1d10 after gun is fired. Roll of 1 = 1 hit (wound or D-marker) on shooting unit. Weight of Fire: 2 at targets up to 12", 1 if target is greater than 12" and shooter did not move this turn.
Shotgun (Man-stopper)	12"	1	2	
Shotgun (Solid shot)	12"	0	2	
Sniper rifle	36"	2		Heavy weapon. Versus infantry, 1 automatic D-marker even if shooter missed or this exceeds the maximum # of D-markers the unit can take. If target hit, unit takes a 2nd wound or D-marker as usual.
Sub-machine Gun (SMG)	12”	1	2	Often used by close assault units.
Tank Cannon	72"	6	See notes	Weight of Fire: Versus infantry 4, versus horde 6, versus vehicle 1. Versus vehicles, +2 to WV.

Here is space for you to add your own weapons:

Weapon	**Range**	**Weapon Value**	**Weight of Fire**	**Notes**