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INTRODUCTION

Wardogs is a fun filled game of armored combat between infantry, tanks, aircraft, naval ships, forts, and mecha all in the service of colonies struggling to establish dominance, control resources, and defending themselves from each other. The included game setting is in the far future but players can utilize the design system to create combat units for multiple genres spanning time from 1800 AD to beyond 3200 AD. Not only is the construction system design flexible, but Wardogs uses a battlefield generation system capable of providing nearly 900 different environments in which to wage war on one another.

WHAT YOU NEED TO BEGIN

Rules-

Of course to play the game, you need to have at least one copy of the rules to share with your friends.

Unit Counters/ Miniatures-

The game can be played using either card stock counters, tent fold up counters, or miniatures (using 6mm as a base scale, most available mini's can be used). You'll need enough to represent each of the combat units you plan to use during your game of course.

Dice-

Wardogs requires several dice similar to those used in many popular role-playing games. One each of a 4-sided, 6-sided, 8-sided, 10-sided, and 12-sided are needed. Multiples of these dice types are unnecessary to play but will be helpful in getting roll results faster.

Pencil(s)-

One or two pencils with erasers are needed to record battle damage and track ammunition use on the Wardog unit record sheets.

Copies-

Wardog unit statistics are recorded on copies of the Unit Record Sheet included in the back of this book. You'll need a copy of this sheet for each unit you plan on playing with on which to keep track of the unit status as the battle progresses.

Game Board/ Table top Terrain-

Wardogs is set up to be played on a map board showing various ground terrain and buildings with a hex-grid overlay such as that included with this game. Each hex on the board represents 200 meters in game scale. It is recommended that when using a hex map, the play area be at least 4' x 4' to provide enough room for the battle. Wardogs is also readily adaptable for play with miniatures using hexless table top terrain converting the hex scale values as desired. It is recommended that the play area for table top terrain be at least 6' x 6' to readily accommodate any scale differences.

Ruler or Tape Measure-

When playing on table top terrain, a ruler or tape measure will be needed to measure weapons range and movement of units during the game.

Bit of String-

It sounds a bit odd, but a piece of ordinary string or yarn about 30-inches long or so is very useful when checking Line of Sight (LOS) or Fire Arc lines across the map/ table top. While not absolutely required, it is quite helpful.

Opponent(s)-

You'll need at least one living person to play against of course. Androids, Imaginary Friends, and Little Wooden Puppets don't make very suitable opponents unfortunately.

Play Time-

You and your opponent(s) will need at least 2-3 hours of time in which to conduct a battle using 4-6 units per side. If more units are to be used, then a bit more time may be needed.

BASIC TRAINING

Well recruits, welcome to your first day in the life of a Wardog! First off, let us review the various unit types you may be assigned to during your tour with us. These are also the unit types you will be trying to eliminate when on the battlefield before they can eliminate you!

UNIT TYPES

Wardogs uses several different unit types with which you may conduct combat over the game board with your friends. These unit types are the base as listed below from which more detailed and time period specific vehicles and structures may be built.

Armored Vehicles (AV)-
This unit type is the basis for ground effect vehicles such as tanks, vans, jeeps, and armored cars. All armored vehicles are assumed to be either tracked or wheeled when constructed unless advanced equipment is used for other movement modes. With the appropriate equipment and technology level, grav tanks, hovercraft, or even amphibious vehicles may be created.

Close Air Support (CAS- Aircraft)-
This unit type is the basis for atmospheric aircraft such as dirigibles, planes, and helicopters. All aircraft are assumed to be propeller type unless noted on the unit record sheet at time of design. Some advanced equipment may allow for VTOL units which may take off and land without virtue of a runway. Aircraft are the fastest units on the board, but also the most prone to catastrophic damage should they be shot down.

Infantry-
The lowly foot soldier is designed in 8-man,squad-sized units and has limited capacity for equipment, speed, and is almost never armored. Hard to spot but easy to eliminate, infantry is cheap and in the right circumstances, capable of disabling or destroying even the largest units on the board.

Mecha-
Ranging from Powered Infantry to towering walking behemoths packing enough fire power and armor to ruin almost anyone's day, this unit type is the most versatile of those used in Wardogs. Mecha have few equipment limitations and are capable of covering a wider range of terrain types than armored vehicles and far more sturdy than aircraft. Mecha may be designed to represent anthromorpic anime style mechs to hard science fiction type autonomous robots, all at the whim of the designer.

Surface Naval Units (Boats)-
This unit type is the basis for naval ships such as landing craft, PT Boats, Riverine Patrol boats, Coast Guard Cutters and such vessels. With the appropriate equipment, cargo ships, carriers, amphibious landing craft, submarines, and hydro-foils may be designed.

Structures/ Buildings-
This unit type represents any building, fortification, trench, or factory necessary for the battlefield. Unable to move in most instances, they can be some of the most heavily armed and armored units encountered in Wardogs though most equipment is unavailable to this unit type.

UNIT SIZE

Each unit ranges is size from one (1) to ten (10) for purposes of design and reference. To establish a more real world scale, simply multiply the unit size by two (2) for its longest dimension in meters. Multiply this by 0.4 for its narrowest dimension. (*Thus: a size 4 mecha would be 8 meters tall and 3.2 meters wide.*) Weight is measured in metric tons equal to unit size times equipment modules times hardpoints.

Structures and buildings function in a slightly different fashion than most Wardogs units. Where a single mecha or AV will occupy a single hex at a time, a building may occupy several hexes if it is an industrial complex or research facility, an airport terminal, and such. When a building occupies multiple hexes, each hex worth of structure acts as a separate target and all of the hexes forming the building must be eliminated to totally destroy the building itself. It is also possible for multiple buildings, such as farm houses or tract houses, to occupy a single hex. Each building would still be considered a separate target in this instance.

ARMOR RATING

Each unit has an armor rating (AR) assigned to it ranging from one (1) to ten (10). The higher the rating, the more protection that the armor the unit has provides making it more difficult for other units to damage it. Every unit has a default armor value of one (1) with the exception of infantry. Infantry have a default armor value of zero (0) unless they are equipped with armor. No unit may have an armor rating, modified or unmodified, greater than ten (10).

During combat, the armor value is the target number that enemy weapons fire must equal or surpass to inflict damage. As damage is inflicted against the unit, the armor value will decrease making the unit more and more vulnerable to follow-up attacks. Shields can absorb some of this damage, reducing the rate at which the unit armor is damaged. When the armor rating reaches zero (0) or is exceeded, any damage that has been inflicted occurs to the operational systems of the unit, possibly destroying it.

THERMAL SIGNATURE

Each unit radiates a thermal signature, or heat signature, which is used by enemy units to detect the unit and achieve a target lock for their weapons (except melee types). Thermal signature is increased and decreased by weapon types, unit size, unit technology level, and various equipment types. The higher this signature is, the easier it is to achieve a target lock. Once the lock is achieved, the target unit may be taken under fire by the attacking unit with any weapons of sufficient range to reach the target.

No unit may have a lower base thermal signature than one (1). Modifiers due to such things as smoke, terrain, flares, and the like may adjust the unit thermal signature lower than one (1) making lock-on impossible for units not equipped with such things as enhanced sensors. The unit thermal signature has no effect on melee combat as described in the Advanced Training- Combat Section, page 21.

PLAYING THE GAME

Now that you have the basic concept of what a Wardog needs to know recruit, it is time to show you what a Wardog does when on the battlefield! Pay attention now, because this information can save your hide when it hits the fan out there.

TURN SEQUENCE BASIC TRAINING

The turn sequence shown below is the step by step order than players follow when completing each turn of the basic game. The Advanced Training section later on will provide two additional steps to the sequence once you are familiar with these rules. Each game turn represents approximately one minute of time on the battlefield for scaling reference.

1. d10 rolled by all players.

2. Low roll moves one non-infantry unit first proceeding to highest roll in alternating sequence. Mecha needing to stand due to previously failed Stability Rolls make their attempt before other movement occurs. (players may change this as they want.)

3. All infantry moves.

4. Mine field attacks are resolved as applicable.

5. Stability rolls are made for flight mode landings, Mine Field attacks, etc. as needed.

6. All units still standing/ functional may declare intended targets and weapons fire

7. All units roll for lock-on.

8. Damage is resolved. Attacks are simultaneous so initiative is moot.

9. Unit sheets are updated.

10. Rinse and continue blasting away!

Step 1- Initiative

Each player rolls a single ten-sided dice at the start of the turn. The results of this roll will determine who moves first during the turn. In the case of a tie, the die should be re-rolled until the tie is broken. If multiple players on each side are involved, then it is recommended that the die roll be for each side rather than for each player. However, this is not a carved in stone rule.

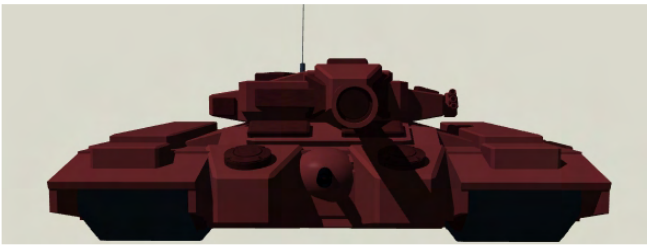
Step 2- Unit Movement Begins

Once the initiative dice rolls have been made, the player or side with the lowest result chooses one non-infantry unit to move first. Movement alternates between sides, each side moving one unit at a time until all of the non-infantry units on the battlefield have been moved.

Also, at this time any unit that failed a stability roll in the previous turn and fell down or went out of control makes their attempt to recover. (This process is explained more fully under “Stability” later on in these rules.) Units with defensive measures such as Decoy Flares, Smoke Dispensers, Cratering Charges and the like, may deploy them upon the completion of all non-infantry movement.

Step 3- Infantry Movement

After all of the non-infantry units on the battlefield have moved, it is then the infantry's turn. As with step 2, the player or side with the lowest initiative roll result chooses one infantry unit to move first. Movement alternates between sides, each moving one unit at a time until all infantry units on the battlefield have been moved.



Step 4- Mine Field Attack Resolution
Once all movement has been completed by both sides, units that have moved into an emplaced minefield are subject to attack and damage. (This process is explained more fully under “Mines” later on in the Combat section of these rules.)
The order of that these attacks occur in is unimportant and may be dealt with either alternating between sides or one side at a time.

Step 5- Stability Checks
After any mine field attacks have been made and resolved, stability checks are made by all units that performed a landing during the movement phase of the turn or were successfully attacked by a mine field this turn. Units that fail these checks will suffer the results immediately during this phase of the turn. (This process is explained more fully under “Stability” later on in these rules.)

Step 6- Declaration of Fire
During this phase of the turn, any unit still standing and functional may declare their targets for attempted weapons lock and with what weapons they plan on engaging the target with. In order for the target to be valid, the attacking unit must have a clear line of sight (LOS) to the target or be equipped with indirect fire capable weapons.

Step 7- Roll for Target Lock-on
Once valid targets have been determined and weapon fire designated, each attacking unit rolls a single d10 against the target in an attempt to achieve a target lock. The d10 roll may be modified by terrain, equipment, battlefield conditions, and other modifiers present during the turn. The final result must be less than or equal to the thermal signature of the target unit in order for the target lock to be successful. (This is more fully explained in the “Combat” section later on in these rules.)

Step 8- Damage Resolution
Attacking units that have successfully achieved a target lock, may fire all of the weapons they assigned to the target. If the target is within the weapon's designated range, then damage rolls are made against the target based on the weapon damage rating and rate of fire. (This is more fully explained in the “Combat” section later on in these rules.)

Targets hit by designated weapons fire make a stability roll at the end of this phase as modified by the stability table and suffer the effects of failure immediately before going to the next phase of the turn. (This is more fully explained under “Stability” later on in these rules.)

Step 9- Update Unit Record Sheets
Once all weapons fire and damage has been resolved, each unit records any damage taken during the turn, knocked out equipment or weapons, any failed stability roll consequences, and all ammunition expended during combat on the record sheet for that unit. Once all unit record sheets have been updated, players are ready to proceed to the next step.

Step 10- Next Turn, Start again!
Congratulations, you've made it through the turn. Now you and your opponent(s) get to go back to step one and try to make it through the next turn. Good Luck!!!

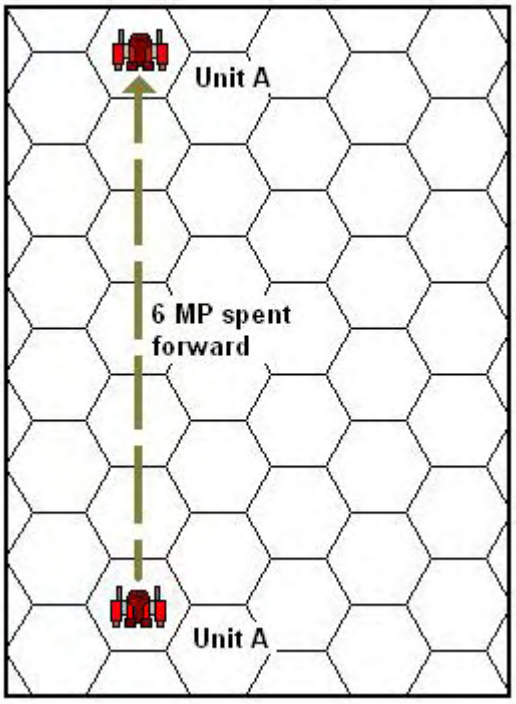
MOVEMENT

With the exception of structures/ buildings, all units have an assigned number of movement points that they may spend to negotiate terrain and maneuver across the battlefield. The number of movement points is influenced by the size of the unit, the technology level, how much armor the unit has, and the unit type itself. Various equipment also has an effect on how a unit may move and how fast. A unit may choose to move forward or backwards utilizing the same terrain point cost for each. However, a unit moving backwards through difficult terrain will suffer a stability penalty to any such rolls made. TABLE 1 shows the MP Cost per terrain type.

Forward and Turning-

All units except infantry move one (1) hex per Movement Point spent as modified by terrain cost (refer to table below). Each unit, except infantry, also pays one (1) Movement Point for each hex face (turn) change made. Infantry is limited to one (1) hex of movement, ignoring terrain cost, each turn and may change any number of faces it desires once per turn.

(ie. A mecha with 6 Movement Points may travel six hexes along a road or across a clear meadow in a straight line. If the pilot decides to turn after 3 hexes forward into a rubble strewn area then 3 MP would be spent walking forward, 1 MP for the single hex face turn, and 2 MP to walk into the rubble (rough terrain) hex.)



A unit may only change one elevation level at a time normally. For each additional level of change attempted greater than one, the terrain cost of the hex the unit is attempting to enter is multiplied by the number of elevation levels.

(ie. A mecha is trying to go from a level 1 clear hex to a level 4 rough hex. The terrain cost of the rough hex will be 2 (terrain cost) x 3 (elevation 4-1)= 6 MP.)

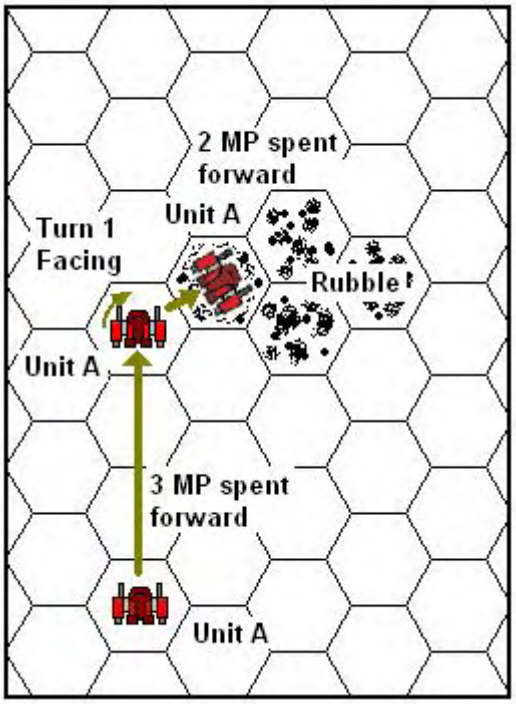


TABLE 1

TERRAIN TYPE	MP COST
Clear / Road	1
Rough	2*
River	2*
Light Forest	3*
Swamp; Clear / Rough	3*
Swamp; Forested	4*
Heavy Forest	4*
Deep Lake / Ocean	5

* Mecha landing from flight mode must make a stability check.

Infantry Transport-
Infantry squads may ride in armored vehicles equipped with Infantry Compartments. Load up may occur when both end their movement in the same hex as the other at the end of the movement phase for that turn, the squad marker is removed from the board while loaded up. While loaded onto the armored vehicles, the infantry is moved with the vehicle and expends no movement points.

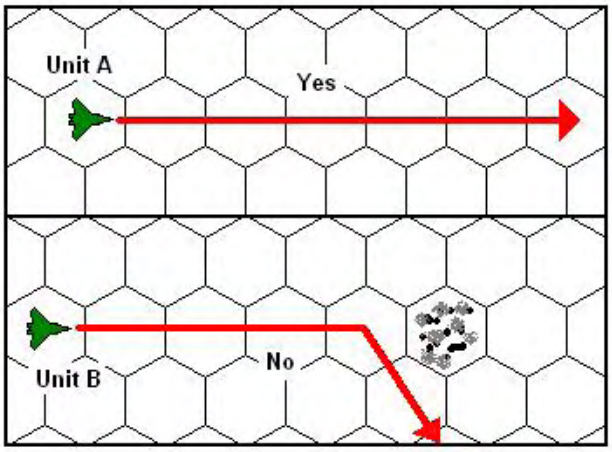
Unloading from the vehicles also takes place at the end of the movement phase of the turn and the squad marker is placed on the board at the rear of the vehicle marker. The infantry squad then moves as normal on the following turn.

Crashing:
Any unit that has its movement points reduced to zero while in flight or lands without the appropriate landing gear for the terrain will crash. To determine how much damage a unit suffers during a crash roll 1d10 and multiply by the unit size. This is the number of dice to roll for damage. For every 10 dice, increase the damage die type by one from a base of d4 and roll against the unit AR for damage as if it were weapon fire (see the Combat).

(ie. A size 4 helicopter (Close Air Support, VTOL-Propeller) is hit by ground fire that destroys its engine. Without power, the helicopter will crash at the end of the combat phase. A d10 is rolled resulting in a 6. This is multiplied by the helicopter size (6x4) equaling 24. Since there are 24 dice, the damage die would be increased from a d4 two times to a d8. The helicopter pilot would roll 24 d8 against the helicopter AR of 3. For each result of 3 or more, the copter takes a point of damage. Once either the full allotment of damage dice are rolled or the damage results in the helicopter being fully destroyed, no further rolls need be made.)

Full Flight-
Units in full flight have a different amount of movement points based on the flight equipment they have and treat terrain costs as clear/road except for the terrain of the hex they land in. At the start of the movement phase Full Flight is to begin, the pilot must declare the unit to be 'taking off' (see below for Take-off and Landing). The unit must travel a minimum number of hexes equal to 1/3 of its aerial MP value each turn to avoid stalling and crashing (see below for crashing). Full Flight mode may continue turn to turn until the player has declared a landing. Any unit that lands in terrain that is neither clear/ road or deep lake/ ocean must make a stability check to determine if they have maintained control and avoided either falling or crashing (see below for Crashing). Infantry and Close Air Support units are exempt from the need for a stability check.

Jet Assisted & Partial Flight-
Jet Assisted & Partial Flight are similar to Full Flight and must be declared the same way. However, unlike Full Flight, Assisted & Partial Flight lasts only for that turn and the unit must land at the end of the movement phase.



Take-Off and Landing:
For any unit without vertical take-off and landing (VTOL) capability to land in or take-off from the battlefield they must be equipped with appropriate landing gear and have a straight line runway. The length of the required runway is equal to1.5 times the aircraft size rating in hexes. These hexes must be in a straight line from the forward facing of the unit. *(ie. A Jet size 4 would require 4 x 1.5= 6 hexes to take off or land)*

Stability:
Stability checks are required when the unit is hit by enemy fire, melee attacks, landing from flight mode in non-clear terrain, trying to stand from a fall, stepping on mines, and when turning while moving on ice.
A result of one (1) on the stability roll indicates stability failure (the mecha falls, vehicle goes 'out of control', the aircraft crashes). A new check may be rolled by the unit (if the aircraft should survive the initial crash) at the cost of 2 MP.
Once upright or back in control, only one half of any remaining MP may be used. Flight mode may not be engaged, thus close air support units may not crash twice. Out of control vehicles may not move or conduct combat until they recover.

When a Stability check is required, a d10 is rolled. This roll is subject to equipment modifiers and the modifiers listed in Table 2.

(ie. Lets assume that a size 5 mecha is landing from Partial Flight in light forest terrain. This would require the pilot to roll a stability check on a d10. Assuming our pilot has been around a while and is rated as a regular. He gains no Piloting skill modifier for the roll. The mecha itself is a biped and has no stability modifier. So the roll is made and a 4 is the result. We look at the Stability Modifiers and find that landing in forested terrain is a -2 modifier, making the roll result a 2. The pilot is successful in landing upright…barely. Had our Pilot been rated as green, his piloting skill would be -1, further reducing the roll to only a 1 and resulting in the mecha falling on down amidst the trees.)

Falling:
If a unit falls from any height of more than 5 meters, it will suffer a damage roll. Damage dice from a fall are assigned at a rate of a d4 for every 5 meters of vertical height fallen. For every 10 damage dice, increase the die size by one class. *(ie. The mecha in the previous example fails the stability check while landing and falls 10 meters (equal to its height). 2d4 are rolled against its Armor Rating. The same mecha falls again later a distance of 55 meters for 11 die of damage. Since there are more than 10 dice, 11d6 are rolled against it's AR.)*

Damage from a fall is determined and assigned during the Physical Combat phase of the turn.

TABLE 2

ACTION	STABILITY MODIFIER
Per hit by enemy weapons fire.	-1
Jumping off an object more than 5 meters tall.	
When moving backwards through non-clear / road terrain.	
Per melee hit by enemy.	-2
Landing in forested terrain from flight mode.	
Kicking enemy Unit.	-3
Pushed by enemy mecha or rammed by enemy non-mecha unit.	-4
Being flipped by enemy mecha.	-5
Being rammed by enemy mecha.	-7
Unit hit by land mine attack.	-8

COMBAT

Inevitably, you will find yourself in the middle of a fight for your life on some forsaken battlefield on some equally forsaken planet. This section of your training will teach you the skills necessary to at least make the enemy keep their head down. Who knows, you green recruits might actually take one or two of them out.

Lock On:
The first thing to determine is if you can find your target and lock it up for weapons fire. There is no range for target lock on. If the attacker has Line-of-sight (LOS) to the target unit, the attacker may roll a d10 against the target's thermal signature with any modifiers that may apply for both the attacker and the defender in an attempt to gain a target lock. These modifiers and conditions are shown in Table 3.
Any result that is equal to or is less than the target's thermal signature has achieved a target lock for that turn. All weapons with arc and range to the target possessed by the attacking

Infantry vs Infantry:
When Infantry squads are attempting to lock-on to enemy infantry squads, they receive and automatic -2 bonus to their lock-on rolls. This is due to the more intimate nature of man-to-man combat and the intuition gained through experience that sensors just cannot replace.

Blocking Terrain:
Some terrain will prevent units from establishing a Line-of-Site to their intended target(s). Such terrain are small hills, rock formations, buildings, and forest. Hills, rock formations, and buildings are measured in five (5) meter levels. So if the map reads Hills Lvl 2, you know that it means they are 10m tall for easy reference. Features such as mountains and large hills are so big that the battlefield the map is representing may be on their slopes with changes of elevation so gradual that it goes unnoticed for practical purposes.

TABLE 3

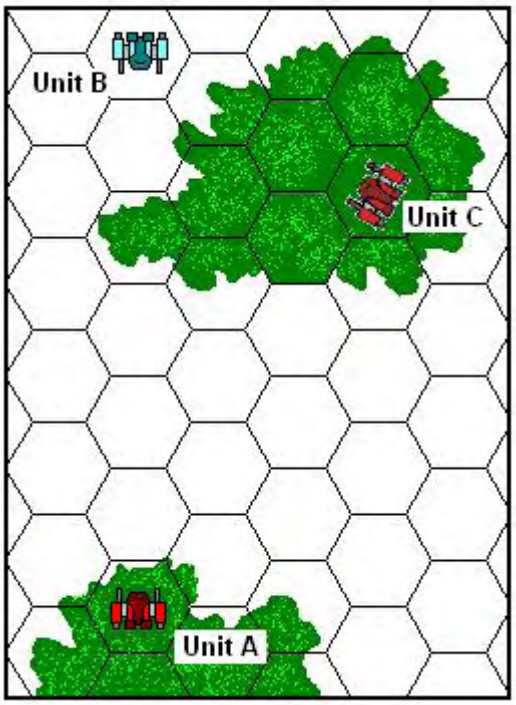
UNIT STATUS	LOCK ON MODIFIER (To Attacker Roll)
Target has used Smoke Dispenser and is positioned in resulting cloud. Chaff has been deployed in the same hex as target.	+3
Target is submerged in Deep Lake / Ocean	+5
Decoy Flare has been deployed:	(See Decoy Flare, Page 33 for details)
Attacker or target are in the flare hex.	+5 (+3 if flare is deployed under water)
Attacker or target are in the hex adjacent to the flare.	+3 (+1 if flare is deployed under water)
Attacker or target are two hexes away from flare.	+1 (+0 if flare is deployed under water)
Target is standing in forest terrain.	+2 (per forest hex between target and attacker)
Target has moved 13+ hexes in the turn.	+3
Target has moved 9-12 hexes in the turn.	+2
Target has moved 6-8 hexes in the turn.	+1
Target has moved 3-5 hexes in the turn.	+0
Target has moved 0-2 hexes in the turn.	-1
Target has partial cover (something solid to hide behind)	+1
Attacker is using Indirect Fire, Ignore full cover / LOS	+2

Hills/ Rock Formations- Hills/ Rock Formations will hide any unit that is shorter than they are. Thus if a size 4 mecha, which when scaled per page 6 we find to be 8 meters tall, is behind a 10 meter tall hill, it is effectively hidden from sight. If the hill was only 5 meters tall, then the mecha would be considered to have partial cover and benefit accordingly.

Buildings- Buildings will also block LOS if they are taller than the unit behind them. If the building is shorter than the unit behind it, then it is considered partial cover. A unit behind a building that is taller than it is does not have the choice of partial cover or not. It is considered to be in total cover, even if at the corner of the building. Units inside of buildings may declare partial cover or total cover if the building is taller than the unit. This declaration is made at the end of the movement phase for that turn. A new declaration must be made at the end of the movement phase of each subsequent turn. If a unit declares partial cover, it may fire at other units. If it declares total cover, then it may not establish LOS to any unit outside of the building it is in.

Occupied Hexes:
Units may establish LOS and fire at targets beyond/ through hexes that are occupied by other units, be they friend or enemy at no penalty.

Forest- Forest provides some cover and concealment, having an individual terrain modifier to account for this. When more than one (1) hex of forest terrain is between the attacker and target (such as between Unit B and Unit C below), then LOS is considered to be blocked. Should the attacker and/or the target be in a forested terrain hex (Such as Unit A and Unit B below), this hex is not counted as intervening terrain though the terrain modifier for the hex is still counted.



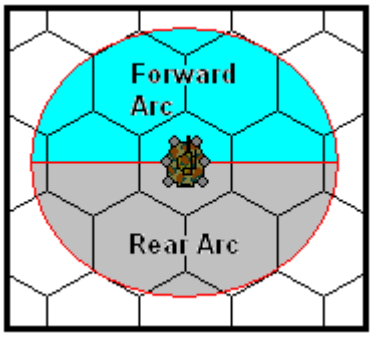
Arcs of Fire:
The next thing to do is to make sure the target is in the arc of fire for any and all weapons you wish to use against it. An arc of fire is a portion of a circle between two lines where the weapon can physically point. *(Another way to look at Fire Arcs is similar to a baseball diamond with the weapon as the batter. Anywhere between the first and third baselines is fair territory for the shot and anywhere outside of those lines is out of play.)*
Weapons are mounted in one of three ways as shown in the diagrams below. The weapon mounting will be listed on the unit record sheet next to each weapon recorded. In the case of custom built units, the designer will have to record the mounting position of each weapon at time of unit design.

Infantry is considered to have 360-degree arc of fire unless blocked by some obstacle and does not require a recorded weapon mount location.

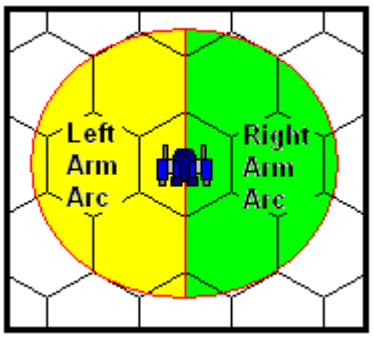
All torso / forward hull mounted weapons are able to fire in a 180-degree arc forward or backward; Refer to Display 1

All arm mounted/ hand carried weapons on the mecha are able to fire either 180-degrees left or right depending on which arm they are mounted on; Refer to Display 2.

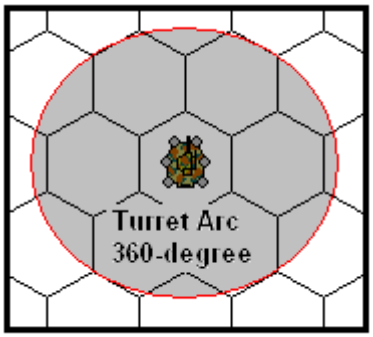
All turreted weapons have 360-degree arc of fire; Refer to Display 3.



Display 1



Display 2



Display 3

TABLE 4

RANGE RATING	RANGE BANDS (Short/ Medium/ Long)
1	1 / 2 / 3
2	2 / 4 / 6
3	3 / 6 / 9
4	4 / 8 / 12
5	5 / 10 / 15
6	6 / 12 / 18

Range:
The next thing to do is to make sure that the target is in range of the weapons being fired at it and if the target is at long, medium, or short range of those weapons. Each weapon has a range rating of one (1) through six (6) that corresponds to a number set as shown on the table below. The number set shown for each Range rating shows the base short/ medium/ long range of the weapon in hexes. These numbers may be modified by weapon enhancements and battlefield modifiers.

Hit Resolution:
Weapons that successfully lock on to their targets roll one damage dice per their ROF. The type of die rolled is based on the DMG rating of the weapon modified by any applicable weapon enhancements and compare the total to the target Armor Rating. Each weapon has a base DMG rating of 1-4 and may be modified by weapon enhancements up to a maximum of 5. Each DMG rating corresponds to a die type which is rolled against the target AR value. The DMG ratings are shown in Table 5.

Range also has an effect on hit resolution and applies a penetration modifier to the DMG die roll as shown on Table 6.

(ie. A weapon with a ROF 3 and DMG rating of 2 locks on and fires at a mecha with AR 6. Since the DMG rating is 2, this means that 3 d6's are rolled against the target. The dice rolls are 5, 4, and 6 respectively. If the target is at Short Range, then these rolls are modified by +1, becoming 6, 5, and 7. The 6 and 7 will do damage to the target. If the target is at Medium Range, then no modifier is added since it's +0 and only the 6 does damage. If the target is at Long Range, then these rolls are modified by -1, becoming 4, 3, and 5 respectively and none of the shots manage to do damage.)

TABLE 5

WEAPON DMG RATING	DIE TYPE
1	d4 (Minimum die size)
2	d6
3	d8
4	d10
5	d12 (Maximum die size)

TABLE 6

RANGE	DMG DIE ROLL MODIFIER
Short	+1
Medium	+0
Long	-1

Roll Results:
To determine the type amount and type of damage for each die rolled, refer to Table 7. Damage rolls made against the same target of multiple attackers are rolled against the target's current AR for that turn. So if a mecha with AR 5 was attacked by 3 Armored Vehicles and a Heavy Weapons Infantry Squad, then all of their attack rolls would be made against the mecha's AR 5. Damage would be applied to the mecha after all of the attacks had been resolved as normal.

TABLE 7

DIE ROLL	HIT OR MISS	ARMOR RATING DAMAGE	PENETRATION DAMAGE ROLL	STABILITY CHECK ROLL
Less than Target AR	Miss	None	No	No
Equal to Target AR	Hit	-1	No	Yes
Greater than Target AR	Hit	-1	Yes	Yes

Damage Application:
There are two types of damage that can be inflicted against the target. The first type of damage is against the Armor Rating which reduces the armor of the target. Damage of this type is applied only to the armor and is permanent until repaired. If the unit is equipped with energy shields, then the damage is first applied against the shields, eroding their protection in the same manner as armor hits. Unlike armor however, shields are restored to their original rating at the start of each turn as long as there is energy to power them.
When the target Armor Rating is reduced to zero the target is considered combat ineffective and successive hits generate double the penetration table rolls against the unit.

The second type of damage is against the internal components of the unit being protected by the armor and shields. This is called Penetration Damage. Penetration hits are rolled on Table 8 or Table 9 per the appropriate target type and can quickly reduce target units to smoking wreckage. If a particular internal component is damaged twice without repair, it is the same as a destroyed result for that component, requiring later replacement. If an internal component that has already been destroyed is hit again, the damage is absorbed without causing any further harm rather than migrating to some other system.

Infantry squads are the only unit destroyed automatically if hit by penetration damage.

Buildings/ Structures are affected by damage slightly differently than other units due to their modular nature. Each hex that a building occupies is treated as if it were an individual unit in terms of design, damage, and when destroyed. Once a 'section' of the building is destroyed, the building sections immediately adjacent to it are weakened, suffering a -1 to their AR. If this results in the AR value becoming zero, these sections will not collapse but are open to penetration damage.
When a building section is destroyed, any additional incoming fire may be directed *through* the hex at the sections immediately adjacent and behind the destroyed section. These sections do not get the benefit of any Armor Rating they may have, instead being treated as unarmored for purposes of damage.

Damage to Terrain:
Weapons fire sometimes will travel through and into hexes containing terrain that can be affected by the attack itself. In such instances the terrain will be destroyed and/or converted to a differing terrain type as follows;

Energy Weapons-
Set fire to all forested terrain types if the result of a d10 roll is 2 or less. These fires burn for the remainder of the game rendering the hex impassable to any unit but mecha or aircraft.
The fire may spread to any adjacent forest hexes at the end phase of each turn after the initial fire was set. A d10 roll is made during the end phase of the next turn, a result of one (1) indicating the fire has spread. Effects of the fire add 5 to the thermal signature of any unit traveling through the flames for 3 turns. Smoke in the hex is treated exactly as the Smoke Dispenser Enhancement (see page 35) for effects.

Kinetic/ Ballistic Weapons-
Convert clear/ road and all forested terrain types to rough terrain.
Swamp terrain is converted to deep lake terrain.

TABLE 8

DIE ROLL	EFFECT
2	Cockpit destroyed- Crew killed. Mecha goes down smoking!
3	Equipment destroyed- One undamaged system is blown to dust bunnies. Replacement required.
4	Arm Destroyed / Blown off- Mecha has been dis-armed. Everything on the arm is slagged. *
5	Leg damaged- Movement reduced by (MP divided by number of legs- round to nearest) *
6	Equipment damaged- One surviving system is knocked collywobbles and off-line. Repair needed.
7	Weapon damaged- One surviving weapon is off-line and in need of a mechanic badly.
8	Arm damaged- A bit shot up but still operable at -2 to hit in melee combat. *
9	Leg Destroyed / Blown off- Movement reduced by (MP divided by number of legs)x2. *
10	Weapon destroyed- One surviving system is nothing but inoperable junk. Replacement required.
11	Power Plant damaged- Mecha may move or fire, but not both in the same turn. Shields are down.
12	Power Plant destroyed- Mecha goes down in flames. BBQ anyone?!?

* Roll d6: Result is odd = right limb affected. Result is even = left limb affected.

TABLE 9

DIE ROLL	EFFECT
1	Crew compartment destroyed- Crew killed. Just look at the mess!
2	Equipment destroyed- One undamaged system is blown to dust bunnies. Replacement required.
3	Turret Destroyed**- The unit has popped its top. Everything on it is molten scrap metal.
4	Wheel / Track / Fan / Anti-Grav Generator / Engine damaged- MP reduced by half (round up)
5	Equipment damaged- One surviving system is knocked off-line and out of service. Repair needed.
6	Weapon damaged- One surviving weapon is off-line and in need of a mechanic badly.
7	Turret Damaged**- A bit shot up and limited to the forward arc only. -2 to hit with all turret weapons.
8	Wheel / Track / Fan / Anti-Grav Generator / Engine destroyed. Unit is now a MP zero pillbox.
9	Weapon destroyed- One surviving system is nothing but sparking junk. Replacement required.
10	Power Plant destroyed- Unit goes up in flames. Someone grab the marshmallows!

** If unit has no turret, treat this roll as one less. (ie. a roll of 3 becomes a 2, 7 becomes a 6.)

MINES

Land and Ocean Mines have no friends once they've been placed on the board so be very careful when around them recruit. When used, the player running the mine laying unit records the hex number on that units status sheet. This results in a bit of honest play required. (An optional method is to place six marker chits face down, one per hex, along the route the unit just traveled that turn. One marker chit is marked "MINE". These chits remain face down until a mine sweeper array is successful on detection or a unit enters the hex and detonates the mines. Of course then it's plain to see which hexes to avoid.) ALL units entering that hex after the mine pattern has been placed are subject to attack.

Mine Attack resolution:
Roll 1d6 to figure out the mine attack strength. Roll 1d10 per point of attack strength applying each die roll against the target AR of the target unit in the hex. Hits and Damage are resolved as described above in Hit Resolution and Damage Application.

MINE SWEEPER ARRAY

Any unit equipped with an active Mine Sweeper Array rolls 1d10 when entering into any hex adjacent to a mined hex. If the die roll result is an odd number then the mine pattern has been detected. If the die roll result is even then the mine pattern remains undetected.

The mine sweeping unit may then attempt to detonate the mines by spending a turn inactive for each attempt. The unit rolls a d6, an odd result (1,3, or 5) means the minefield has been successfully and completely cleared. An even result means the unit may have missed a few mines and the minefield is considered active still. Once cleared, the mine marker is removed from the board.

DEFENSIVE MEASURES

Units equipped with smoke dispensers, decoy flares, cratering charges may choose to deploy these defensive measures at the end of the unit movement phase of the turn (but before the infantry movement phase) as per the equipment descriptions.

UNIT NAME	COYOTE	NATION	PACIFICA STATION	CPV	76

UNIT TYPE	MECHA
UNIT SIZE	4- Light
TECH LEVEL	4- MHD

STABILITY MODIFIER	+4
MOVEMENT POINTS	7
THERMAL SIGNATURE	5
ARMOR RATING	4

LEGS

RIGHT ☐ LEFT ☐

ARMS

RIGHT ☐ LEFT ☐

WEAPONS

WEAPON	Type	Loc	Range	ROF	Damage	AMMO	Enhancements
Particle Cannon	Energy	Front Torso	4	1	4	None	Extra DMG
30mm Autocannon	Kinetic	Lt Arm	2	3	2	20	Extra Ammo

EQUIPMENT

1) Superior Gyroscope	
2) Smoke Dispenser 00000	

UNIT NAME	ROADRUNNER	NATION	PACIFICA STATION	CPV	69

UNIT TYPE	MECHA
UNIT SIZE	2- V. Light
TECH LEVEL	4- MHD

STABILITY MODIFIER	+4
MOVEMENT POINTS	10
THERMAL SIGNATURE	2
ARMOR RATING	3

LEGS

RIGHT ☐ LEFT ☐

ARMS

RIGHT ☐ LEFT ☐

WEAPONS

WEAPON	Type	Loc	Range	ROF	Damage	AMMO	Enhancements
Crossbow Msl Sys	Ballistic	Front Torso	4	1	2	6 Tubes	External Launch Tubes; Multiple Launch Tubes (+5)
Heavy MG	Kinetic	Rt Arm	2	3	1	30	Extra Ammo (x2)

EQUIPMENT

1) Superior Gyroscope	Note: Right Arm has no Hand

UNIT NAME	SAND DEVIL APC	NATION	PACIFICA STATION	CPV	87

UNIT TYPE	AV-H
UNIT SIZE	3- Light
TECH LEVEL	5- Fission

STABILITY MODIFIER	+0
MOVEMENT POINTS	13
THERMAL SIGNATURE	4
ARMOR RATING	5

LEGS	
RIGHT	LEFT

ARMS	
RIGHT	LEFT

WEAPONS

WEAPON	Type	Loc	Range	ROF	Damage	AMMO	Enhancements
75mm Mag. Cannon	Kinetic	Front Hull	3	1	2	10	Extended RANGE (3 / 6/ 11)

EQUIPMENT

1) Hovercraft Modification	
2) Infantry Compartment (1 Squad)	
3) Smoke Dispenser 00000	

Basic Infantry Squad (Riflemen): PV: 8
WEAPON- Infantry Small Arms (L3) Range: 1 (1/2/3) ROF: 1DMG: 1 (d4-1)
Thermal Sig.: 1 MP: 3 AR: 0 Ammunition: OOOOO OOOOO
Cratering Charge* (O); Reduced DMG

Basic Infantry Squad (Riflemen): PV: 8
WEAPON- Infantry Small Arms (L3) Range: 1 (1/2/3) ROF: 1DMG: 1 (d4-1)
Thermal Sig.: 1 MP: 3 AR: 0 Ammunition: OOOOO OOOOO
Cratering Charge* (O); Reduced DMG
** This equipment has been changed from the regular squad for demo rules purposes.*

Heavy Weapons Squad (Kinetic): PV: 10
WEAPON- Infantry Heavy Weapons (L2) Range: 2 (2/4/6) ROF: 2DMG: 2 (d6)
Thermal Sig.: 1 MP: 3 AR: 0 Ammunition: OOOOO
Reduced Ammunition; Cratering Charge (OO)

Cratering Charge- This is a shaped explosive charge that create a foxhole to provide partial cover for one unit. Each charge is packed in an independent dispenser aimed to fire into the hex immediately fronting the hex currently occupied by the unit. Once fired, the charge is expended and is marked off of the unit control sheet.
Effect: Create a 1 hex crater ahead of unit deep enough to provide partial cover defensive bonus.