

TERRAIN TYPE

TERRAIN TYPE	INFANTRY	WHEEL	TRACK	WALKER	GEV	OBSCURMENT	MOVEMENT	HULL DOWN	NOTES
BASIC TERRAIN TYPES									
Clear	1	1	1	1	1			N/A	
Scrub	2	2	1	1	3			+4	
Sand	1	2	1	1	1			+3	Greater Skidding Chance
Mud	2	4	2	3	1			N/A	Greater Skidding Chance
Swamp	4	6	4	6	1			+1	
Road	1/2	1/2	1/2	1/2	1/2			N/A	
Urban	1	1	1	2	2	1		+2	
D Urban	1	2	2	3	3	2		+1	
Rough/Broken Rocky/Rubble	2	3	2	2	3			+3	
	3	5	4	3	4			+2	
TERRAIN MODIFIERS									
Tall Grasses	+1	+1	+0	+0	+1	1		(+1)	2 obscurement for infantry and size <2 vehicles including rock spires or other similar obstacles
Sparse	+1	+2	+1	+1	+3	1/2 hexes		+4	
Open	+2	+4	+3	+2	+6	1		+2	
Dense	+2	+7	+5	+4	X	2		+1	
Closed	+3	X	X	X	X	3		+0	
Jungle	+1	+2	+1	+1	+2	+1		-1	2 obscurement for infantry and size <2 vehicles
Ice	+2	+2	+1	+1	+0			N/A	Greater Skidding Chance
Snow	+1	+1	+0	+1	+0			N/A	Greater Skidding Chance
Deep Snow	+3	+3	+1	+2	+1			+2	1 obscurement for infantry and size <2 vehicles
Elevation Up	+2	+2	+1	+2	+4			+1	
Elevation Down	+0	+0	+0	+1	+0			+1	
HYDROGRAPHIC TERRAIN									
Calm Water	N/A	N/A	N/A	N/A	1				
Choppy Water	N/A	N/A	N/A	N/A	4				
Turbulent Water	N/A	N/A	N/A	N/A	X				
Rapids	N/A	N/A	N/A	N/A	3				
WEATHER/ENVIRONMENT MODIFIERS									
Rain/Snowing						1/5 hexes			Concealment Only
H Rain/Blizzard						1/3 hexes	3/4		Concealment Only
Hvy Wind						-1 to hit	3/4		-2 penalty to hit for missiles
Night						1 (total)	1/2		Penalties only for vehicles/personnel without sensors
Light Fog/Dustorm						1/2 hexes	3/4		Concealment Only; Full Penalty for Energy Weapons
Hvy Fog						1/hex	1/2		Concealment Only; Full Penalty for Energy Weapons
Smoke/Sandstorm						2/hex	1/3		Concealment Only; Full Penalty for Energy Weapons

VEHICLE SIZE FOREST ADJUSTMENT TABLE

>2	Use Infantry Entry
3-4	-2 Levels
5-7	-1 Level
8-13	Standard Entry
14-19	+1 Level
20-25	+2 Levels
26+	+3 Levels

SKIDDING

On slick surfaces, ground-contact vehicles have a chance to slip while maneuvering. Any time a vehicle makes a turn on a slick surface (as indicated on the terrain table), it must make a piloting roll or slip. The base threshold is 3, modified as follows:

Tracked Vehicle	-1	Sand	+0
Wheeled Vehicle	+0	Wet Pavement	+0
Walker Vehicle	+1	Mud	+1
Off Road Ability	-1	Snow	+1
Speed Modifier	Per Weapons Fire Mods	Ice	+2

Units that fail their piloting roll/slip 1 hex per MoE. This skidding continues in their original direction of movement (facing does change) and uses up MP's as normal (if necessary, the skid continues on into a subsequent turn). If the vehicle hits an obstacle (or terrain type such as woods that could count as an obstacle) count as a ram attack.

Fumbles skid as above as well as something nasty happening, roll a d6. On a 1-3, the vehicle fishtails and turns one more hex than intended. -1 to weapons fire this turn. On a 4-5, the vehicle has a Spinout, no weapons fire until control regained; random facing determined at end of spinout. On a 6, the vehicle Rolls, turning sideways and going side-over-side; no weapons fire and treat as a ram/falling.

TERRAIN

N/A listed in Hull Down indicates a Hull Down position is not possible in this terrain.

NUMBER OF ACTIONS

MIN CREW SIZE	TOTAL ACTIONS
1	2
2	3
4	4
8	5
16	6
32	7
64	8
128	9
256	10

FIRING MODIFIERS

CIRCUMSTANCE	MODIFIER
RANGE TO TARGET	
Point Blank	+1
Short	0
Medium	-1
Long	-2
Extreme	-3

ATTACKER MOVEMENT

Stationary	+2
Half Combat Speed	+1
Combat Speed	+0
Half Top Speed	-2
Top Speed	-3

ATTACKER AIMING

Aim for movement systems	-1d
Aim for sensor arrays	-2d
Aim for particular weapon	-2d
Aim for crew	-1d
Aim for AUX systems	-1d
Aim for something small	-3d
Aim for something really small	-4d

TARGET MOVEMENT

0	-3
1-2	-2
3-4	-1
5-6	+0
7-9	+1
10-19	+2
20-50	+3
51-99	+4
100-500	+5
501-99	+6
Evasion	Special

TARGET DEFENSIVE ARC

Front	-0
Rear Flank	-1
Rear	-2

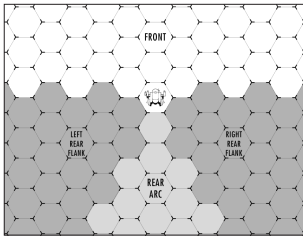
OBSCUREMENT

See Table

MISCELLANEOUS MODIFIERS

Turret Locked	-2
Different Environment	-2

DEFENSE ARCS



SPECIAL ATTACKS

BURST FIRE

Against armored targets, add a weapon's ROF to its Damage Multiplier. Against unarmored targets, add the ROF to its Margin of Success. Burst fire costs 5 rounds per point of ROF used.

WALKING FIRE

Weapons capable of burst fire may attack multiple targets equal to the weapon's ROF + 1. If targets not adjacent, each empty hex counts as a target. Decrease the ROF for figuring damage by 1 for every target attacked, but do not decrease ammunition spent. Each target can only be attacked once per round.

SATURATION FIRE

Choose a hex up to medium range distant and roll a normal attack; add the ROF. Any unit entering the target hex must beat this number defensively or suffer an attack, taking damage equal to their Margin of Failure x the Damage Multiplier of the weapon. Saturation costs 10 rounds of ammo (8 missiles) per ROF point used.

AREA OF EFFECT (AOE) ATTACK

Single attack roll made (vs Def 1 if targeting the hex); every unit (friend or foe) in the area affecting rolling Defense verses the attack. Even if Defense roll results in a MoS of 0, the unit still takes concussion damage equal to DM in atmosphere, or DM/2 in space.

INDIRECT FIRE

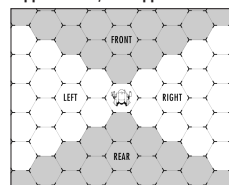
Allied unit must serve as forward observer, with LOS to the unit (requires one action). Attack receives forward observer's Obscurement modifier; attack can be made over obstacles. If no observer, attack deviates 1 die distance from desired impact hex.

ANTI-MISSILE FIRE

Any ranged weapon may be used at -6 (may use ROF to reduce penalty); does not use actions to perform. A hit against a single missile destroys it. Against an ROF missile attack, burst fire must be used to defend; each MoS reduces the missile's ROF by one. If ROF reduced below 0, missile flight destroyed. AM fire uses 5 shots minus MoS, min 1. If ROF used for AM fire, multiply ammo usage by 5 (by 2 for missiles).

RAMMING

Opposed Roll; DM Applied to Other Vehicle = Size + Impact Modifier



IMPACT SPEED:

Head On = Sum of Spd/Velocity

Side = Attacker's Speed/Velocity

Rear = Difference of Spd/Velocity

IMPACT SPEED	GROUND DM MODIFIER	AIR/SPACE DM MOD
1-2	-2	+0
3-4	-1	+1
5-6	+0	+2
7-9	+1	+3
10-19	+2	+4
20-99	+3	+5
100+	+4	+6

ECM/EECM

ECM - JAM COMMUNICATIONS

IW + Rating becomes the Threshold to beat for any communication attempted within or originating from the ECM's range. Emitter must roll an IW + Comm. Rating. If transferring CPs, failure results in the loss of the CPs.

ECM - DEGRADE SENSORS

IW + Rating becomes the Threshold to beat for any active sensor test attempted within or originating from the ECM's range. Detecting unit must roll IW + Sensor rating; failure results in loss of LOS.

ECM - SPOOF ATTACK

When attacked by Missile or Guided systems, IW + Rating equals a second Defense roll; if either Defense roll is successful, the attack fails.

EECM - COUNTERACT ECM

Opposed IW + Rating vs one active ECM in range. If successful, subtract MoS from the ECM threshold.

EECM - DEGRADE ECM RANGE

Opposed IW + Rating vs one active ECM in range. If successful, subtract MoS in km from ECM range.

DAMAGE EFFECTS

DAMAGE	EFFECT
Damage < 1	No Effect; Nothing
1 < Damage < 2	-1 Armor; Light Damage System Table
2 < Damage < 3	-2 Armor; Heavy Damage System Table
3 < Damage	Overkill; Target Destroyed

SYSTEM DAMAGE TABLES DAMAGE

ROLL	LIGHT DAMAGE	HEAVY DAMAGE
1	Fire Control Roll on Sub-table A	Fire Control Roll on Sub-table A, +1
2	Structure Roll on Sub-table B	Structure Roll on Sub-table B, +1
3	Crew; Crew Stunned (Lose 1 Action)	Crew 10% Casualties, Min. 1
4	Movement -1 MP	Movement 1/2 MP, -2 Maneuver
5	Aux. Systems -1 to 1d6 Aux. Systems	Aux. Systems 1d6 Aux. Systems lost
6	Roll Twice on this table	Roll Twice on this table

SUBTABLE A: FIRE CONTROL DAMAGE

ROLL	EFFECT
1	-1 Accuracy to a single weapon
2	-2 Accuracy to a single weapon
3	-1 Accuracy to all weapons
4	Single Weapon Destroyed
5	Fire Control Destroyed (-5 to all attacks)
6	Roll Twice on this table
7	Ammunition/Fuel Hit (Roll 1d6) 1-3 Ammo Storage and Fuel Tank Ruptured (Vehicle Cannot Move or fire weapons) 4-6 Chain Reaction! Ammo and fuel explode! (Vehicle destroyed, all crew killed)

SUBTABLE B: STRUCTURAL DAMAGE

ROLL	ROLL EFFECT
1	-1 MP*
2	1/2 Remaining MPs (Round Down)*
3	-1 to Maneuver
4	-2 to Maneuver
5	Power transfer Failure; No movement**
6	Catastrophic Crew Compartment Failure (75% Casualties, Minimum 1)
7	Complete Structural Failure (Vehicle Destroyed, Crew Escapes)

* = Engaged Movement Type

** = Lose one Movement Type

OVERKILL EJECTING

EJECTION SYSTEM?	ROLL NEEDED ON ONE DIE
NO	6
YES	2

WALKER KNOCKDOWN

DAMAGE REQUIRED	PILOTING THRESHOLD
2 x SIZE	1 + MOS of ATTACK

Failure = Walker Falls over. Fumble = Fall, plus Light Damage.

Walker must spend 1MP to stand up before it may move.

DETECTION MODIFIERS

CIRCUMSTANCE	MODIFIER	NOTES
BASE SENSOR RATINGS		
Visual (Day)	4	
Visual (Night)	2	
Passive	Special	IW Skill Level + Sensor Rating + Range Bonus
Active	Special	IW Skill Roll + Sensor Rating

ATTACKER MODIFIERS

Active: Extra Range Band -1/range band

DEFENDER MODIFIERS

Active Sensors Used	-1	
Sensor Range Increased	-2/range band	Includes the -1 for Active Sensors Used
Stealth Rating	R	Perk; Default = 0
Large Sensor Profile	R	Flaw; Default = 0
Movement Penalty	-1/hex moved	
Space Movement Penalty	-1/thrust point spent	
Combat Penalty	-1/weapon fired	Weapon fired multiple times counts as multiple weapons fired
Additional RoF Penalty	-1/point of RoF	

TERRAIN/ENVIRONMENT MODIFIERS

Obscurement Penalty	Per Terrain Table	
Concealment Penalty	Per Terrain Table	Applied to Passive/Visual Detection Only