10. MOVEMENT

Briefing

Movement allows troops and vehicles to advance and retreat, maneuver into range, occupy objectives and seek positions where they can dominate the battlefield. The movement rate of a piece is dependent upon its mobility type, and its movement each turn is affected by the type of terrain it is moving through and any turns that it makes.

Infantry movement

1. The basic infantry movement rate is 6 inches per turn.

2. Infantry equipped with gravpacks and powered armor are not encumbered by the weight of their armor and equipment and can move more quickly.

3. Infantry equipped with jetpacks can soar above the ground, passing over rough terrain and obstacles.

Movement type	Movement rate
On foot	6 inches
Gravpack	12 inches
Jetpack	24 inches
Powered armor	12 inches

4. Movement in reverse is halved for infantry.

5. Sideways movement is also halved, except for aliens who are jointed to move sideways freely. Troops with this ability can move sideways on foot at their normal movement rates.

Crew-served weapon movement

1. A crew-served infantry weapon that lacks its own motive system may be moved by its crew if it has a wheeled chassis.

2. A wheeled weapon may be moved at the normal infantry rate of 6 inches per turn if it has its full crew.

3. A wheeled weapon may only be moved at half speed (3 inches per turn) if it does not have its full crew.

Ground vehicle movement

1. Two systems for establishing the movement rates of ground vehicles are given below.

a. The **Basic** ground vehicle rates assume that each vehicle is provided with the powerplant necessary to move it at the highest possible speed despite its size and weight.

Vehicle type	Movement rate
Grav	36 inches
Hover	30 inches
Thruster	48 inches
Tracked	30 inches
Walker	24 inches
Wheeled	36 inches

b. The **Advanced** ground vehicle movement rates assume that each vehicle is provided with the powerplant that will move it at the highest possible speed for its size and tonnage, but that significant performance variables will still exist. Therefore a range of speeds is provided for each vehicle type, and the players may assign speeds to their vehicles as they choose. The **Advanced** movement rates provide more variety to the game.

	Movement in inches		
Vehicle type	Fast	Average	Slow
Grav	36	30	24
Hover	30	24	18
Thruster	48	42	36
Tracked	30	24	18
Walker	24	18	12
Wheeled	36	30	24

c. Players are encouraged to use the **Advanced** movement rates to give more character to the vehicles that they create. These rates allow a player to create a meaningful difference between the speed of a large,

lumbering walker tank and a small, speedy reconnaissance battledrone.

d. Both movement systems set the vehicle movement rates in increments of 6 inches. This is necessary to conform to the rules for the rotation and fire of vehicles, making the mental calculations quick and easy.

2. Movement in reverse

a. Movement in reverse is halved for ground vehicles.

b. If a vehicle has front and rear driver positions it can move in reverse at its normal movement rate.

3. Sideways movement

a. Sideways movement is halved for grav, hover, thruster and walker vehicles.

b. Multi-legged walker vehicles that are jointed to move sideways freely can move at their normal rates.

c. Tracked and wheeled vehicles cannot move sideways.

A *Mandrill* L-90 of the Landoth Protectorate advances with troops of the 79th Paran Rangers.

Figures by Grenadier Miniatures. Model from author's collection.

Turning effects on movement

1. The **Movement and Fire** tables provide the turning costs for all types of pieces. The amount of rotation performed by a piece is linked to a reduction in the current movement rate.

Example: A turn of 45 degrees costs a grav tank one-sixth of its movement rate. If the tank has a movement rate of 36 inches, a 45 degree turn will cost six inches.

2. A piece can make as many rotations and turns as desired during a turn as long as there is sufficient movement allowance.

Example: Maneuvering within an industrial area the grav tank might move forward 5 inches, turn 45 degrees (for a 6 inch cost), move forward 9 inches to fire its cannon, turn 90 degrees (for a 12 inch cost), and move the remaining 4 inches into cover, for a total of 36 inches.

3. A piece cannot make a turn if it lacks the required movement allowance. A piece that has already moved a portion of its movement allowance may have insufficient movement left to make a turn.

Example: If the grav tank has already moved 31 inches this turn it does not have enough movement left to make a 45 degree turn, which would require 6 inches.

4. Turning costs are based on the original movement rate of a piece. To keep the movement rules from requiring too many calculations and becoming too complicated, turning costs are not affected by a piece's current speed or the terrain type.

Example 1: If a fast grav scout car is moving slowly, the turning cost is based on its movement rate of 36 inches, not on its current movement distance of 12 inches.

Example 2: If a tracked tank is moving through soft ground, the turning cost is not doubled because the movement cost is doubled in soft ground, nor is it halved because the speed of the vehicle is effectively halved in soft ground.

5. Since damage reduces the movement rate of a piece, turning costs are affected by damage. Refer to the section below on movement by damaged vehicles for more information.

Terrain effects on movement

1. **Firm ground** – normal movement for all infantry and vehicles.

2. **Soft ground** – movement is halved for infantry on foot and tracked, walker and wheeled vehicles. Normal movement for grav, hover and thruster vehicles, and for infantry equipped with gravpacks or jetpacks.

3. **Slope** – movement is halved when going uphill. Normal movement for grav and thruster vehicles, and for infantry equipped with gravpacks or jetpacks.

4. **River or stream** – can only be crossed at a bridge or ford. Movement is halved for amphibious pieces. Normal movement for grav, hover and thruster vehicles, and for infantry equipped with gravpacks or jetpacks.

5. **Ford** – movement is halved for infantry on foot, and for tracked, walker and wheeled vehicles. Normal movement for grav, hover and thruster vehicles, and for infantry equipped with gravpacks or jetpacks.

6. **Lake or pond** – As for river or stream.

7. **Road** – movement is doubled for infantry on foot, and for tracked, walker and wheeled vehicles. Normal movement for grav, hover and thruster vehicles, and for infantry equipped with gravpacks or jetpacks.

When wet or muddy, treat unpaved roads as soft ground.

8. **Bridge** – as for road.

9. **Vegetation** – movement through most vegetation is halved for both infantry and vehicles. The players may define some vegetation as dense and impassable. Medium and heavy vehicles may knock down individual trees at a movement cost of 1 inch per tree on firm ground. This rate is affected by other terrain types, and may be increased or decreased by the players depending on the size of the trees.

10. **Obstacles** – low obstacles such as fieldstone walls, embankments and large boulders halve movement for all except grav and thruster vehicles and infantry equipped with gravpacks or jetpacks (which can pass over them).

a. Only thruster vehicles and infantry, except infantry equipped with jetpacks can pass over high walls.

b. Antitank obstacles are impassable to tracked and wheeled vehicles.

11. **Buildings** – in the interior of buildings movement is doubled for infantry on foot and tracked, walker and wheeled vehicles. Normal movement for grav, hover and thruster vehicles, and for infantry equipped with gravpacks or jetpacks. Movement rates should be reduced if the building is filled with rubble or debris. A vehicle must be able to enter a building to use these rates. Players must determine if the individual floors of a building will support vehicles.

12. **Stairs** – movement is halved for infantry on foot and tracked, walker and wheeled vehicles. Normal movement for grav, hover and thruster vehicles, and for infantry equipped with gravpacks or jetpacks. If the stairs are not wide enough for a vehicle it may not enter them. Players must determine if the stairways of a building will support vehicles.

13. **Ladders** – only infantry may use ladders. Movement is tripled for infantry on foot. Movement is normal for infantry with gravpacks. Infantry with jetpacks do not need ladders.

14. The terrain effects are summarized in the Movement: Terrain Effects table.

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Movement and fire

1. When a piece is firing its weapons or being fired on, its relative speed is based on the original movement rate of the piece. Based on that rate, the movement is characterized as slow, moderate or fast.

2. For the purposes of hit/miss determination, the movement rate of a piece is divided into thirds. The amount of movement a piece performs in a turn affects both its fire and enemy fire on it.

3. The **Movement and Fire** tables give the effects of movement and rotation on fire. When the table gives a specific "effect on fire" that effect is used in the Hit/Miss determination process.

Example: A missile launcher rotates 90 degrees to fire on an enemy battledrone. The effect on weapon fire caused by the rotation is the same as for slow movement. The player will add the -1 factor for slow movement when making his hit/miss determination.

4. Rotation in place by a target has no effect on the fire of another piece on that target. A piece firing on an enemy that is rotating in place will treat that piece as if it were stationary.

5. Although the tables for rotation and fire provide specific numbers, these are just provided as boundaries. For example, in turning a tracked vehicle it is not important to know the vehicle is turning exactly 63 degrees, just that the turn is over 45 degrees and less than 90 degrees.

6. Movement by damaged vehicles

a. Since damage reduces the movement rate of a piece, turning costs are affected by damage. When a vehicle is damaged, the effect on movement and hit/miss determination will be based on the reduced movement rate. The highest remaining movement allowance does not become the new "fast" speed.

Example: A personnel carrier with a movement rate of 24 inches receives damage that reduces its maximum speed to 16 inches. If the vehicle moves the full 16 inches it would only be considered to be moving at moderate speed, not fast.

1. A vehicle that has its movement reduced one level by damage can no longer move fast. It may only move at a moderate rate or slower.

2. A vehicle that has its movement reduced two levels by damage can no longer move fast or moderate. It may only move at a slow rate.

b. Turning costs apply to the current movement rate and conditions, not the original movement rate of a vehicle. Thus the movement cost for as turn is less for a vehicle that is moving slowly because of damage.

Example: An undamaged armored car with a movement rate of 36 inches will have a movement cost of one-third (12 inches) for a turn of 90 degrees. If the same vehicle is damaged and its movement rate is reduced to 12 inches, the vehicle will have a movement cost of 4 inches for a turn of 90 degrees.

c. The following table will assist in calculating turning costs for damaged vehicles.

Reduced movement rate	One-sixth	One-third	Two-thirds	Five-sixths
4	1	1	3	3
6	1	2	4	5
8	1	3	5	7
10	2	3	7	8
12	2	4	8	10
14	2	5	9	12
16	3	5	11	13
18	3	6	12	15
20	3	7	13	17
22	4	7	15	18
24	4	8	16	20

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Altitude limits of infantry and ground vehicles

Type	Altitude limit
Infantry on foot	Surface
Infantry with gravpack	2 inches
Infantry with jetpack	12 inches
Grav vehicle	4 inches
Hover vehicle	1 inch
Thruster vehicle	None
Tracked vehicle	Surface
Walker vehicle	Surface
Wheeled vehicle	Surface

Overrun attacks

1. Armored vehicles may overrun other armored vehicles, infantry and crewed weapons. The category "armored vehicles" includes tanks, assault guns, tank destroyers, armored cars, armored personnel carriers, battledrones and other types of crewed armored fighting vehicles.

2. Armored vehicles may run down infantry, crewed weapons and other armored vehicles that are at least three classes smaller in size. Example: a heavy tank that is classed at size 6 may overrun any pieces that are classed at size 3 or smaller.

3. The cost of overrunning a piece is three times the normal movement cost of the type of terrain the piece is on.

4. To overrun an enemy piece, an armored vehicle must be able to must be able to run into and over it with its current movement allowance. An armored vehicle on a road may utilize the road movement rate when overrunning a piece.

5. Infantry and crewed weapons in foxholes can be eliminated if the overrunning vehicle is either fully-tracked or a walker, and it spends at least two-thirds of its movement allowance over the enemy position during that turn to destroy the position.

6. Pieces that have been overrun are considered destroyed and are removed from the board.

Pop-up maneuvers

1. In a pop-up maneuver a piece rises up to the altitude desired, taking advantage of any cover available, fires its weapons and drops back down into cover in the same move. A similar maneuver is to move horizontally out of cover while hovering to fire on a target and then move back into cover in the same move.

2. Grav vehicles, helicopters, hoverjets and hoverprops may execute pop-up maneuvers. Infantry equipped with grav or jet equipment may also perform pop-up maneuvers.

A helicopter pops up from behind trees to use its rotary autocannon.

Model from the collection of B. Glagola, Ph.D.

3. Any interceptive fire against a piece performing a pop-up maneuver is handled in the same manner as for any other movement by a piece. Determine the amount of movement expended and the amount of cover available at the time of the interceptive fire.

Transport

1. Loading or unloading a transport vehicle takes one-third of the movement allowance of both the transport vehicle and the pieces that embark or disembark.

2. **Loading** is defined as placing the pieces into the vehicle. If a player's figures cannot actually be placed into a vehicle model, the player should keep notes on which pieces have

embarked.

3. **Unloading** is defined as setting the pieces that disembark from a vehicle just outside of the vehicle, around the doors or hatches they used to disembark.

4. The following examples show possible actions during a turn:

a. A number of troopers are grouped around the doors of an armored personnel carrier. When they have the initiative, individual troopers load into the stationary vehicle. When the vehicle has the initiative, it may move two-thirds of its movement allowance. (Since the troopers were able to embark directly into the vehicle, they only used one-third of its movement allowance.)

b. A number of troopers are scattered around a parked heavy lifter. Each trooper is within one-third of his movement allowance of the vehicle. When they have the initiative, individual troopers load onto the stationary vehicle. When the vehicle has the initiative, it may move one-third of its movement allowance. (Since the troopers had to move before they could load into the vehicle, they used two-thirds of its movement allowance: one-third to move and one-third to load.)

c. A number of troopers are scattered around a parked heavy assault lander. Each trooper is within two-thirds of his movement allowance of the vehicle. When they have the initiative, individual troopers load into the stationary vehicle. When the lander has the initiative, it may not move. (Since the troopers had to move more than one-third of their movement allowance before they could load into the vehicle, they used all of its movement allowance: two-thirds to move and one-third to load.)

d. An armored personnel carrier moves one-third of its movement during its initiative. The troops on board may unload when they have the initiative and each may move one-third of their movement allowances.

e. An amphibious personnel carrier moves two-thirds of its movement during its initiative. The troops on board may only unload when they have the initiative.

5. Troops may load or unload from a hovering aircraft if they have jetpacks and all other movement restrictions, such as those given in the examples above, are met.

Stormers of the Toron Dominion unload from their *Lynx* T-27B armored personnel carrier.
Figures by Citadel. Model from author's collection.

6. Transport by damaged vehicles

a. When a vehicle is loading or unloading troops, its relative speed is based on the original movement rate of the vehicle. When a vehicle is damaged, the effect on loading and unloading will be based on the reduced movement rate. The highest remaining movement allowance does not become the new "fast" speed.

Example: A personnel carrier with a movement rate of 24 inches receives damage that reduces its maximum speed to 16 inches. If the vehicle moves the full 16 inches it would only be considered to be moving at moderate speed, not fast.

1. A vehicle that has its movement reduced one level by damage can only load or unload troops if it moves at slow speed when it has the initiative.

2. A vehicle that has its movement reduced two levels by damage cannot load or unload troops if it moves when it has the initiative.

Leaving the board

1. Pieces which leave the board during a battle may not return. They are counted as losses against the owning player, but are not considered to be destroyed.

2. The purpose of this rule is to prevent players from bringing pieces onto the board, having them fire, and then moving them off the board to avoid enemy fire.

3. If the players are conducting a campaign, undestroyed troops and vehicles may return in the next battle. Refer to the **Campaign Rules** for more information.

Off-board movement and delayed entry (Optional Rule)

1. This rule allows a player to have his troops enter the board outside of their specified entry area by delaying their entry to compensate for the additional distance they will have to travel.

2. Procedure:

a. The player should measure the distance his troops will have to travel to reach the point where he wants them to enter the board. The player should be careful to factor in the effect of the terrain types the troops will cross.

b. The player should then determine the number of turns it will take for the troops to move that distance, and delay their entrance by that number of turns.

3. The troops do not have to come in on the first turn possible. In some cases it could be advantageous to delay their entry. For example, troops who spent part of the turn moving off board could remain just off board and enter with their full movement allowance on the next turn

Example: In a scenario the players have designed, a player's entry point for his troops is the left half of his table edge. He decides to bring his squad of Stormers on 36 inches further to the right. Their jetpack move is 24 inches. They can enter on the second turn with 12 inches of movement remaining, or they can enter on the third turn or later with their full movement allowance.

4. A player may not have his troops enter the board through any portion of his opponent's entry area.

5. As soon as a player decides to utilize delayed entry, he must inform his opponent that he has troops moving off table and indicate the general direction they are moving (right or left, north or south, etc.). The player should also indicate the turn the troops could enter the board. He does not have to specify the types of troops that are involved in the off-board movement.

6. Players using off-board movement must be careful to keep their troops within command distances.

Assault Landings

1. Assault landings are not necessarily more complex than normal moves, but it may be useful to outline how they play out.

2. An assault lander can enter the battle by flying horizontally from off of the table, or can enter by descending vertically from above.

3. When an assault lander enters the battle by flying horizontally from off of the table, the movement, fire and any enemy reaction to it is handled in the same manner as any other vehicle moving onto the board.

4. When an assault lander enters the battle by descending vertically from above, its movement begins directly above the table.

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a. The movement should begin at the vehicle's full movement distance from the targeted landing point.

Example: A fast assault lander with thruster engines has a maximum movement rate of 48 inches. It should begin its move from a point 48 inches above its landing point.

b. During the descent, the movement, fire and any enemy reaction to it is handled in the same manner as any other vehicle moving onto the board.

5. If an assault lander has the ability to hover or remain in flight it does not have to set down on the ground.

6. Drop pods and air-dropped automated gun turrets utilize these assault landing guidelines to deploy.