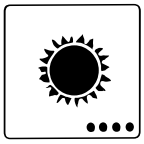


Terrain

The details of locations on a world are revealed by its Terrain. Terrain provides specifics about locations: its wealth, its population, its productivity, even its dangers.

World mapping divides the surface of a world into a series of hexagons (hexes) which define location and help in computing movement. Worlds are mapped with coarse scale World Hexes grouped into triangles to form a hexagon based world map. Each of the World Hexes is further divided into Terrain hexes, which may be divided into Local hexes, which may be divided into Single hexes. Each of the hexes is further detailed by a Terrain Type.

Terrain Within Terrain Within Terrain. Terrain is mapped with a hierarchy of hexes. The result is larger hexes which may appear impassible, but when analyzes more specifically reveal potential travel routes.

For example, a World Hex identified as Mountain (and probably impassible) may prove to be composed of many Terrain hexes, some of which are passable. It is only when terrain is explored that characters can discover its true nature.

MOARN Map Only As Really Necessary. Detail should be produced only as needed. Part of the adventure is encountering unexpected terrain.

THE TERRAIN CHARTS

Terrain is described and explained in a series of charts:

Terrain Overview. Fifty-four terrain types are shown in overview on this chart. Each type is named and numbered for ease of reference.

The Heights. The Heights chart shows the various levels or altitudes in the atmosphere on mainworlds. It shows the atmosphere type at various altitudes, and provides direction on the effects of atmosphere (or lack of atmosphere) on characters. It shows the types of atmosphere in which Flyers may operate.

The Depths. The Depths chart shows the depths of oceans on mainworlds. It shows the effects of pressure on vehicles which venture into the depths.

Vehicle Speeds. The Vehicle Speeds chart shows Speed values for various types of vehicles and their corresponding speeds in kph.

The chart also shows the typical or expected maximum speed of various vehicles in specific types of terrain.

For example, the chart shows a Car cannot operate in Clear terrain (because a Car is built to operate on Road), but an OffRoad can (at Speed=4 = Vslow = 30 kph) with 0 Mods.

Terrain Charts 1 - 9. The Charts show and describe the specific types of terrain.

UNDERSTANDING TERRAIN

Terrain is the character or nature of world surfaces. It may reflect the topography of land, the types of vegetations or natural features of land, the improvements or infrastructure, or a combination of these elements.

Terrain may be as simple as Clear: flat, unimproved land with no specific restrictions on travel or access. Terrain may be as complex as Domed City in Twilight Zone.

Mapped In Hexes. The Traveller Mapping System defines a hierarchy of mapping hexes: the 1000 km World Hex; the 100 km Terrain Hex; the 10 km Local Hex; and the 1 km Single Hex. Larger hexes have more general terrain; smaller hexes have more specific Terrain.

Identified by Terrain Types. Terrain is identified by Type or Name. Each Terrain Type describes specific features which restrict or enhance travel, and which identify interesting features.

WHAT TERRAIN DOES

Terrain has three important effects:

It Provides Character. Terrain provides character and interest to world surfaces. Terrain defines the details of locations and provides insights into potential benefits or consequences of exploring those locations.

Its Shows (Potential) Value and Resources. Terrain establishes the potential for finding value and important resources in specific locations. Certainly Wooded terrain can provide lumber; Baked Lands can probably provide pools of liquid base metal; Frozen Lands may provide solidified gases.

But Terrain also directs or narrows searches. Characters will probably not search Swamps for starship repair parts; they probably won't hunt tigers in Cities (but!). Terrain tells reasonable people what to expect and not to expect in specific locations.

Movement and Impediments. Terrain constrains movement by individuals and by vehicles. It clearly establishes the expected speeds for specific vehicles and it directs of channels movement to specific routes.

VEHICLE OPERATIONS

Vehicles are classified by the territory they cover.

Local. The vehicle is designed for travel on a daily basis in and around a specific location and within a Terrain Hex (an area 100 km in diameter). A car used for city driving or a delivery truck are Local. Such vehicles occasionally venture into adjacent Terrain Hexes.

Regional. The vehicle is designed for travel in several World Hexes (each about 1000 km in diameter). Many Cargo Trucks or Truck Trains are Regional. Such vehicles occasionally venture into adjacent World Hexes.

Continental. The vehicle is designed for travel within a World Triangle (a cluster of 3 to 28 World Hexes).

World. The vehicle is designed to travel anywhere on the World.

A territory classification assumes the vehicle will venture occasionally into neighboring territories. For example, a Regional vehicle will sometimes visit adjacent regions.

Vehicle Speeds. The Vehicle Speeds Chart details the expected travel speeds for vehicles based on Terrain.

THE TERRAIN TYPES

The 36 basic Terrain types address most situations to be encountered on world surfaces. The 18 additional Terrain types cover some special situations.

11. Clear. Simple and relatively flat. Vegetation is slight and unobtrusive. Other names for Clear terrain: Plains, Prairie, or Steppe.

12. Clear- Wooded. Clear, but more than half covered with mega-flora*.

13. Wetland. Relatively flat, and at least half covered with Shallow water (0.5 meters deep). Wetland is a Marsh.

14. Wetland Wooded. Wetland more than half covered with mega-flora*.

15. Rough. Uneven, obstructed, and rocky. Some names for Rough terrain include: Badlands,

16. Rough Wooded. Rough more than half covered with mega-flora*.

21. Mountain. Dominated by steep slopes and rocky peaks or ridges.

22. Desert. Clear characterized by little vegetation, lack of water, and extreme temperature.

23. Chasm. Deep gorge well below typical land or surface levels.

24. Cropland. Clear characterized by extensive and intensive agricultural uses. Cropland is Clear terrain with an overlay of Roads.

25. Rural. Clear which has been settled. Rural is an inferior or less productive form of Cropland. Rural is Clear terrain with an overlay of Roads.

26. Ruins. Includes sophont-constructed, now abandoned, buildings or installations.

31. Ocean. Saltwater ocean fed by continental drainage.

32. Islands. Includes a small group of islands in the Ocean.

33. Shore. The boundary between Continent and Ocean.

34. River. A channel of flowing water large enough to pose a barrier to travel.

35. Lake. An isolated body of fresh water that occupies more than half a hex. Ground transportation bypasses lakes rather than crossing them.

36. Ice Cap. A covering of frozen water near the North or South Pole.

41. Baked Lands. Lands under intense stellar heating.

42. Twilight Zone. Hospitable territory between the hot and cold hemispheres of Twilight Zone planets.

43. Frozen Lands. In constant shadow and extremely cold.

44. Ice Field. The location is covered with frozen Ocean.

45. Precipice. An extreme change of land elevation which is an absolute barrier to ground vehicle travel.

46. Exotic. Abnormal, unusual, unexpected, or inexplicable elements (geysers, volcanic events), meteorologicals (fogs, hazes, constant storms), aesthetics (beautiful landscapes, stunning atmospheric displays), or other.

51. City. A high population community with associated governmental, cultural, educational, commercial, and manufacturing facilities. For Transportation, treat City as Highway.

52. Domed. A City with associated environmental protections against Vacuum, Tainted Atmosphere, or Weather. For Transportation, treat Domed as Road.

53. Arcology. A complex of high population density hyperstructures. An Arcology is a self-sufficient isolated community with only limited exterior contacts.

54. Suburban. A moderate population community near and associated with a City.

55. Town. A low population community providing governmental, cultural, commercial, and educational support for the area.

56. Starport (or Spaceport). A landing ground for starships and interaction with off world enterprises.

61. Highway. A high quality transportation network component supporting wheeled vehicles.

62. Road. A local transport network supporting wheeled road vehicles.

63. Trail. A rudimentary, unpaved path for persons and Vlite vehicles.

64. Air Corridor. A path and assigned altitude for Flyers and under computerized air traffic control.

65. Grid. A surface Highway under centralized computer traffic control for safety and efficiency. Any surface vehicle with Grid Controls can use log into the Grid and use the roadways.

66. High Speed. A high-speed, high-volume passenger and cargo network using its own dedicated vehicles on rails or proprietary roadbeds.

ADDITIONAL TERRAIN TYPES

The additional Terrain types address special or less frequent situations.

71. Ocean Depths. A section of Ocean significantly deeper than normal.

72. Abyss. A section of Ocean (on an Ocean World) significantly deeper than normal.

73. Caverns. Surface terrain is underlain by extensive caves, tunnels, or other natural underground locations.

74. Crater. Dominated by a large impact crater.

75. Wasteland. Contaminated by natural or sophont processes, which may be chemical, biological, radiation, or other processes.

76. Penal Colony. Contains a prison or prison camp.

81. Volcanic. Experiences significant geothermal or volcanic activity.

82. Noble Estate. Contains the private territory of a noble.

83. Reserve. Set aside as a protected area.

84. Mines. Extensively mined for natural resources.

85. Resources. The location is the source of extensive and rich natural resources.

86. Resources Oil. The location is the source of extensive and rich natural petrochemical resources.

91. Vlite Airport. A rudimentary landing ground for Flyers suitable for Vlite Winged craft.

92. Lite Airport. A landing ground for Flyers suitable for Lite and Vlite Winged craft.

93. Airport. A landing ground for Flyers suitable for Medium and smaller Winged Flyers. Runways (usually more than one) are about 3,000 meters long.

94. Heavy Airport. A landing ground for Flyers suitable for Heavy and smaller Winged Flyers.

95. Vheavy Airport. A landing ground suitable for all winged Flyers.

96. AirPad. A landing ground for vertical landing and takeoff Flyers.

96. Open Field. Clear terrain equivalent to 91, Vlite Airport.

97. Road. Road terrain equivalent to 92, Lite Airport.

98. Highway. Highway terrain equivalent to 93, Medium Airport.

***Mega-Flora.** Plant life or vegetation larger in size than persons is Mega-Flora (a typical mega-flora is a tree). Mega-flora is a barrier to most vehicles.

HEIGHTS AND DEPTHS

Altitude in the atmosphere and depth in water are types of Terrain. They are expressed in Levels.

Altitudes

Atmosphere Type determines the effects of atmosphere on travel (especially on Flyers).

The **Levels of the Atmosphere Chart** shows the various levels for various world atmosphere types.

The Surface level is the world surface. Levels above the surface correspond to the standard ranges.

Upper (Range=7) is further divided into several sublevels. Objects at a sublevel are treated for most purposes as at the level; the sublevels merely allow differentiation for various flyers and for the dissipation of the atmosphere.

NOP. The conventional term for flying close to the surface of a world (primarily to avoid detection) is called Nap of the Planet. By ancient convention, on Terra (and only on Terra) this level is called NOE.

Depths

Water on a world has depth measured in levels. Submersibles, some forms of Armor, and some spacecraft can submerge below the surface of oceans, and may be able to venture deep into the depths.

Chart 14 Depths details the levels of Depth.

The **Depths of the Oceans Table** shows the various depths and when they typically are present.

Pressure. Objects at any appreciable depth are subject to Pressure as shown. Pressure shown in units roughly equal to Bars (or Atmospheres).

Pressure inflicts damage to objects in D. Pressure-1 includes 1D hits per Minute. A submarine at resting on the Continental Shelf is subject to Pressure-15 every minute.

INSIGHTS INTO TERRAIN

Various terrain types are related.

Desert and **Baked Lands** are related.

Desert is dry territory, usually hot. **Baked Lands** are territory under constant stellar (solar) heating, usually on Twilight Zone worlds. **Desert** only occurs on worlds with atmospheres. **Baked Lands** may be vacuum, or may be on a world with atmosphere.

Ice Cap, **Ice Field**, and **Frozen Lands** are related.

Ice Cap is a mass of ice (or other frozen liquids and gases) accumulated toward the poles of a world; it may overlie Land or Ocean. **Ice Field** is a region of frozen Ocean; it overlies only Ocean; liquid Ocean may be present under the Ice Field. **Frozen Lands** is a region of very cold Land; it overlies only Land. The Ocean or Land underneath may have other terrain features present.

Chasm and **Precipice** are related.

Precipice is a sheer cliff or rock wall which cannot be crossed by world surface travel. **Chasm** is a canyon or deep crevasse (best thought of as paired Precipices). **Chasm** produces the only hospitable or habitable locations on Atmosphere= F Thin Low worlds.

City, Domed, Arcology, Suburb, Town, Cropland, and **Rural** are related.

City is a dense highly populated location with its associated infrastructure to support the demands of the population: markets; roads and bridges; entertainment; services. **Domed** is a **City** in an inhospitable location requiring protection from Atmosphere (or other Threats). **Arcology** is a hyper dense population center which avoids unnecessary interactions with other locations; it strives to be self-supplying for its energy, food, and other product needs. **Suburb** is medium-density population center near a **City;** it appears only near or adjacent to a **City. Town** is a low-density population center isolated from other population centers. **Cropland** is agricultural land with significant population involved in its support and usually dispersed with the territory. **Rural** is similar to **Cropland** but not as productive. All populated terrain types include Roads, and some include Highways.

Terrain Overview

The various terrain types are shown here for reference.

Terrain


Clear 11


Marsh 12


Rough 13

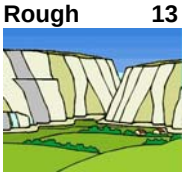

Clear Wood 14


Swamp 15

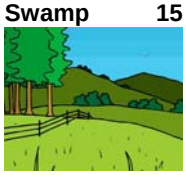

Rough Wood16

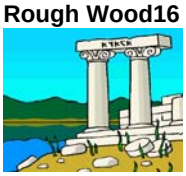

Mountain 21


Desert 22


Chasm 23


Cropland 24

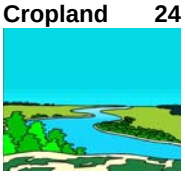

Rural 25


Ruins 26


Ocean 31


Islands 32


Shore 33

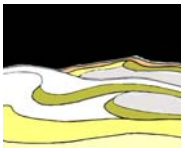

River 34


Lake 35


Ice Cap 36

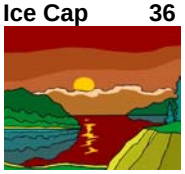

Baked Lands41


Twilight Zone42


Frozen Land 43


Ice Field 44


Precipice 45


Exotic 46


City 51


Dome 52


Arcology 53


Suburb 54


Town 55


Starport 56

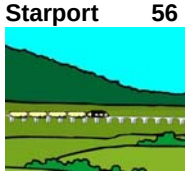

Highway 61


Road 62

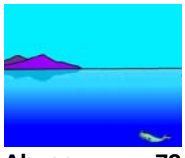

Trail 63


Air Corridor 64

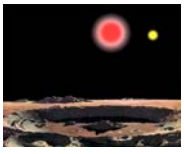

Grid 65


High Speed 66


Ocean Depth711


Abyss 72


Caverns 73


Crater 74

Wasteland 75

Penal 76

Lake 81

River 82

Shore 83

Mines 84

Resources 85

Oil 86

Airpad 91

Vlite Airstrip 92

Lite Airstrip 93

Airport Med 94

Airport Hvy 95

Airport Vhvy96

The Heights

Altitudes

Levels of the Atmospheres — Ellipsoid

Altitude	R=	Level	0 Vacc	2 Vthin	4 Thin	6 Standard	8 Dense	A Exotic	B Corrosive	C Insidious	D Dense High	E1 Polar	E2 Arctic	E3 Tropical	E4 Equatorial	F Thin Low	Comments
250,000 km	11	Satellite	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Luna= 384,000 km
50,000 km	10	Geo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	For Terra= 36,000 km
5,000 km	9	Far Orbit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MEO = Medium Earth Orbit
500 km	8	Orbit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	LEO = Low Earth Orbit
50 km	7	Upper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30 km	6.8	Mid8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20 km	6.6	Mid6	0	0	0	0	1	1	1	1	1	0	0	0	0	0	
12 km	6.4	Mid4	0	0	0	1	2	2	2	2	2	1	0	0	0	0	
8 km	6.2	Mid2	0	0	1	2	4	4	4	4	4	2	1	0	0	0	
5 km	6	Mid	0	1	2	4	4	4	4	4	4	4	2	1	0	1	
1000 m	5	Airspace5	0	1	2	4	6	6	6	6	6	4	4	2	0	2	
500 m	4	Airspace4	0	2	4	6	8	A	A	A	A	6	4	2	1	2	
150 m	3	Airspace3	0	2	4	6	8	A	A	A	A	6	4	2	1	2	
50 m	2	NOP	0	2	4	6	8	A	A	A	A	6	4	2	1	2	
5 m	1	Near Surface	0	2	4	6	8	A	A	A	A	6	4	2	1	2	Typical Grav Altitude
1.5 m	T		0	2	4	6	8	A	A	A	A	6	4	2	1	2	
0.5 m	R		0	2	4	6	8	A	A	A	A	6	4	2	1	2	Typical Lifter Altitude
Surface	**0**	**Surface**	**0**	**2**	**4**	**6**	**8**	**A**	**A**	**A**	**A**	**6**	**4**	**2**	**1**	**2**	
500 m	-4	Chasm Rim	0	2	4	6	8	A	A	A	A	6	4	2	1	2	
1000 m	-5	Chasm Wall	1	4	6	8	A	A	A	A	A	8	6	4	2	4	
5 km	-6	Chasm Floor	2	4	6	8	A	A	A	A	A	8	6	4	2	4	

On This Table: 2= Very Thin (includes Atm-3). 4= Thin (includes Atm-5). 6= Standard (=Earth. =Terra) (includes Atm-7). 8= Dense (includes Atm-9). A= Very Dense (includes A=Exotic, B=Corrosive, and C=Insidious).

THE ATMOSPHERE TYPES

	Type	Descriptor	Tainted?	Human Effects	
0	0	Vacuum		Suff-3	
	1	Trace		Suff-3	
2	2	Very Thin	Tainted	Suff-2. Poison-1.	
	3	Very Thin		Suff-2	
4	4	Thin	Tainted	Suff-1. Poison-1.	
	5	Thin		Suff-1	
6	6	Standard			
	7	Standard	Tainted	Poison-1	
8	8	Dense			
	9	Dense	Tainted	Poison-1	
A	A	Exotic		Poison-1.	
	B	Corrosive		Corrode-1. Poison-1	
	C	Insidious		Corrode-2. Poison-1	
*	D	Dense-High			
*	E	Ellipsoid		Polar	E1
				Arctic	E2
				Tropic	E3
				Equatorial	E4
*	F	Thin-Low			

* Governing pressure determined from the chart.

FLYERS AND ATMOSPHERES

Type	Prohibited	Mishap In	Operates In
Wing	0	2	2-4-6-8-A
Rotor	0-2	4	4-6-8-A
Flapper	0-2-4	6	6-8-A
LTA	0-2	4	4-6-8-A

Mishap: Flyer operating in Mishap Atmosphere Check Quality twice during the flight.

Human Atmosphere Effects

Effects are imposed per minute.

Non-Human Atmosphere Effects

Sophont breathes native Air-N.

Lower Atmosphere levels produce Suff= (Native Air minus Local Air) / 2 (round fractions up). Taint (other than in Native Atmosphere) inflicts Poison-1.

For example, a sophont who normally breathes Air-9 and is on a world with Air-6 can expect (9-6 = 3 / 2 = 1.5 =) Suff-1 breathing the local atmosphere. He probably needs a Breather-5 (to increase Air-6 to Air-8).

The Depths of the Oceans

Altitude	R=	Level	Pond	Stream	Lake	River	Large Lake	Harbor	Bay	Sea	Ocean	World Ocean		Pressure	Comments
50 m	2	Tsunami	-	-	-	-	-	-	-	-	□	□			
5 m	1	Vbig Waves	-	-	-	-	-	-	-	-	□	□			
1.5 m		Big Waves	-	-	-	-	□	-	-	□	□	□			
.5 m		Waves	□	□	□	□	□	□	□	□	□	□			
Surface	0	Surface	□	□	□	□	□	□	□	□	□	□			Lake, Sea, Ocean Surface
.5 m	R	Wading	□	□	□	□	□	□	□	□	□	□			
1.5 m	T	Fording	□	□	□	□	□	□	□	□	□	□			
5 m	1	Pond	□	□	□	□	□	□	□	□	□	□		1	Pond
50 m	2	Thermocline	-	□	□	□	□	□	□	□	□	□		5	Pond Bottom
150 m	3	Shelf	-	-	□	□	□	□	□	□	□	□		15	Continental Shelf
500 m	4	Lake Bottom	-	-	□	□	□	□	□	□	□	□		50	Lake Bottom
1,000 m	5	Deep Lake	-	-		-	□	□	-	-	□	□		100	Deep Lake
5,000 m	6	Sea Bottom	-	-	-	-	-	-	-	-	□	□		500	Ocean Bottom
50 km	7	Deep Ocean	-	-	-	-	-	-	-	-	-	□		5,000	Maximum depth non-Ocean World
500 km	8	Abyss	-	-	-	-	-	-	-	-	-	□		50,000	Ocean World Abyss
5,000 km	9		-	-	-	-	-	-	-	-	-	□		500,000	Probably never encountered.

□= Accessible with proper equipment. – (shaded) not possible.
Pressure in Bar (= one Atmosphere). Pressure-1 inflicts 1D hits per minute.

DAMAGE

Any object under water is subject to Pressure as shown. Pressure-1 inflicts 1D hits per minute on Armor. If Armor is penetrated, Sealed is also penetrated.

Inverse Damage. A native from a specified depth requires protected enclosures equal to the difference in Pressure when venturing out of its native level.

Speeds

Typical vehicle speeds are shown.

Speed

BASE VEHICLE SPEEDS

		Speed	kph	Air	Water	Land	Land	Gravitics
1	6	Creep	5			Person	Mole	
2	- 5	Crawl	10			Legged		
3	- 4	Xslow	20			OffRoad		Lifters
4	- 3	Vslow	30		Boat	ATV	Tracked	
5	- 2	Slow	50	LTA	Ship	MTV	Wheeled	G-Drive; M-Drive
6	- 1	Standard	100	Flapper	Sub	STV	Air Cushion	
7	0	Cruise	300	Rotor			Road	M-Drive
8	+1	Fast	500	Wing				
9	+2	Vfast	700					
10	+3	Sonic	1000					Speed of Sound In Air
11	+4	Ssonic	2000					
12	+5	Hsonic	3000					
13	+6	Xhsonic	5000					

Speed is the typical speed for the vehicle. An operator may push the vehicle to Speed +1 subject to mishap.

Vehicles may not exceed Speed-10 in atmosphere unless designed for greater than Speed-10.

SPEED AND TERRAIN

Terrain No	Terrain	Speed=	1 Person	7 Car	7 Truck	4 OffRoad	6 ACV*	5 Wheeled	4 Tracked	3 Lift	5 G-Drive M-Drive	1 Mole	2 Legged
11		Clear		no	no	0	0	0	0			0	0
12		Clear Wooded		no	no	-1	no	-1	-1			0	0
13		Wetland		no	no	no	-1	-2	-1			0	0
14		Wetland Wooded		no	no	no	no	no	-2			0	0
15		Rough		no	no	-1	no	-3	-1			0	0
16		Rough Wooded		no	no	no	no	no	-2			0	0
21		Baked Lands		no	no	-1	0	0	0			0	0
22		Twilight Zone		no	no	0	0	0	0			0	0
23		Frozen Lands		no	no	-1	0	0	0			0	0
24	56	Icefield, Ice Cap		no	no	-1	0	0	0			0	0
25		Precipice		no	no	no	no	no	no			-1	0
26		Exotic		no	no	0	0	0	0			0	0
31		Mountain		no	no	no	no	no	-2			-1	0
32		Desert		no	no	0		0	0			0	0
33		Chasm		no	no	no	no	no	no			-1	0
34	35	Cropland, Rural		Road	Road	Road	0	1	1			0	0
41		City		Hwy	Hwy	Hwy	No	1	1			0	0
42	43	Domed, Arcology		Road	Road	Road	No	1	1			0	0
44		Suburban		Hwy	Hwy	Hwy	No	1	1			0	0
45		Town		Road	Road	Road	No	1	1			0	0
46		Starport		Road	Road	Road	Road	1	1			0	0
51		Ocean	No	no	no	no	0	no	No			0	no
52		Islands	No	no	no	0	0	No	-1			0	no
53		Shore	No	no	no	no	0	No	-1			0	no
54		River		no	no	no	0	-2	-1			0	no
55		Lake		no	no	no	0	-3	-3			0	no
61		Highway		Hwy	Hwy	Hwy	Hwy	Hwy	Hwy			0	No
62		Road		Road	Road	Road	Road	Road	Road			0	No
63		Trail		Vlite	Vlite	Vlite	Vlite	Vlite	Vlite			0	No
64		Air Corridor		no	no	no	no	no	no			no	No
65		Grid	No	0	0	0	0	0	0			0	0
66		High Speed		no	no	no	no	no	no			no	No

Terrain-1

Terrain Group 1 is the basic set of terrain types encountered on hospitable world surfaces.

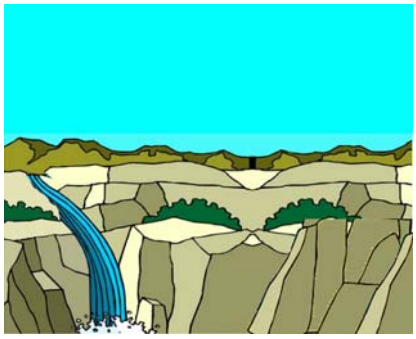
Terrain-1

Clear 11

The way ahead is Clear: flat or rolling land with a minimum of obstructions. There may be minor barriers from surface rocks, gullies, or water channels. There may be occasional vegetation.

Wetland 13

The way ahead is Wetland: marshlands more than half covered with shallow water (generally knee to waist deep). There is no clear or continuous land path through the area. There may be minor barriers (islands, hills, or rocks). There may be occasional vegetation.



Rough 15

The way ahead is Rough: uneven, obstructed, and rocky land. Progress is indirect and time-consuming. There are major obstructions frequently encountered. There may be occasional vegetation.

Clear, Wooded 12

The way ahead is Clear but overlaid with megaflora (forests; large plant growth) for the majority of the area. Trees or other large vegetation are irregularly spaced no more than 3 meters apart, and often much closer, There are substantial barriers to surface vehicles.

Wetland, Wooded 14

The way ahead is Wetland: swamp overlaid with megaflora (forests; large plant growth) for the majority of the area. Trees or other large vegetation is irregularly spaced no more than 3 meters apart, and often closer. There are substantial barriers to surface vehicles.

Rough, Wooded 16

The way ahead is Rough overlaid with megaflora (forests; large plant growth) for the majority of the area. Trees or other large vegetation is irregularly spaced no more than 3 meters apart, and often closer. There are substantial barriers to surface vehicles.

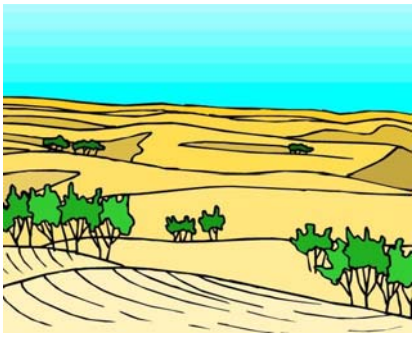
Terrain-2

Terrain Group 2 is a set of additional or less common terrain types encountered on hospitable world surfaces.

Terrain-2

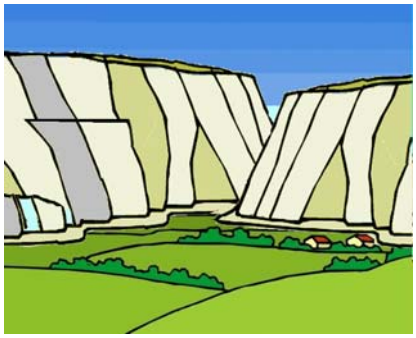
Mountain 21

The way ahead is Mountainous: steep rocky peaks or ridges presenting substantial barriers to travel. Surface progress is slow and severely restricted. There may be occasional vegetation.



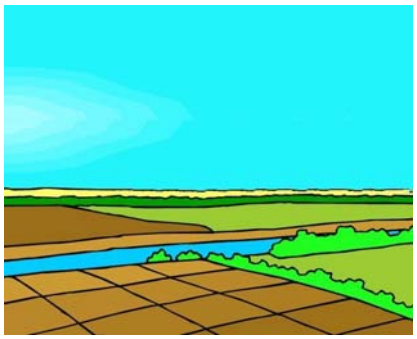
Desert 22

The way ahead is Desert: flat or rolling, often uneven or sandy. The terrain is dry with wide swings in temperature.



Chasm 23

The way ahead is a Chasm: deep valley, canyon, or gorge substantially below the typical land levels. Progress along the Chasm is easy; climbing the Chasm walls is formidable.



Cropland 24

The way ahead is Cropland: extensive, cultivated agricultural land dedicated to the production of crops.

Transport Net: Treat as Road.

Rural 25

The way ahead is Rural: partially or sparsely settled terrain nevertheless with basic civilized amenities and infrastructure.

Transport Net: Treat as Road.

Ruins 26

The way ahead is Ruins: sophont-constructed buildings or installations which have been abandoned and have fallen into disrepair.

Ruins may be found anywhere on any world: they range from simple abandoned buildings to ruined cities from long-lost civilizations.

Terrain-3

Terrain Group 3 is the basic set of water-related terrain types encountered on hospitable world surfaces.

Terrain-3

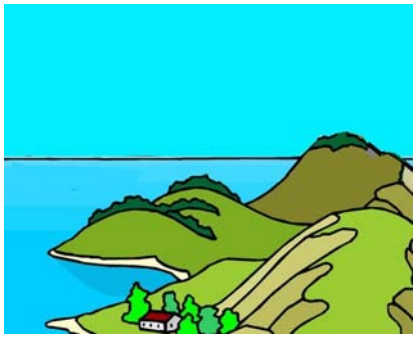
River 34

The way ahead is a River: flowing water large enough to pose a barrier to surface vehicles.

River may occur in any territory. Its flow connects to Lake of Ocean.

Lake 35

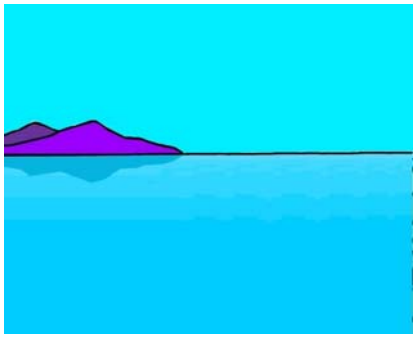
The way ahead is a Lake: a body of water covering most of a Terrain hex.



Shore 33

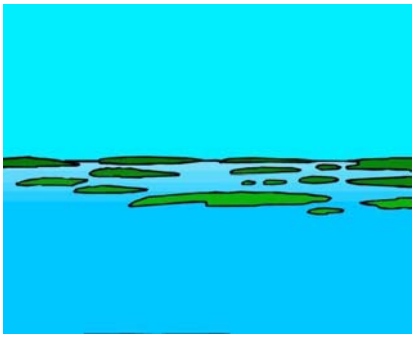
The way ahead is Shore: the boundary between land and ocean. Shore may include other terrain types as well.

The Water portion of the hex is Continental Shelf.



Ocean 31

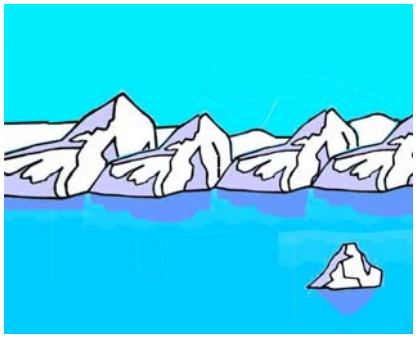
The way ahead is Ocean: a large body of saltwater fed by drainage from continents.



Islands 32

The way ahead is Islands: small bits of land in an Ocean.

Islands do not have Continental Shelves.



Icecap 36

The way ahead is Icecap: frozen water (or other) in the coldest regions of the world.

Terrain-4

Terrain Group 4 is the basic set of terrain types encountered on inhospitable world surfaces.

Terrain-4

Baked Lands 41

The way ahead is Baked Lands: territory under constant or intense stellar heating. The territory is reasonably flat and easily travelled. There are only occasional and minor barriers.

Twilight Zone 42

The way ahead is Twilight Zone: lands midway between the Baked Lands and the Frozen Lands of worlds locked to their star.

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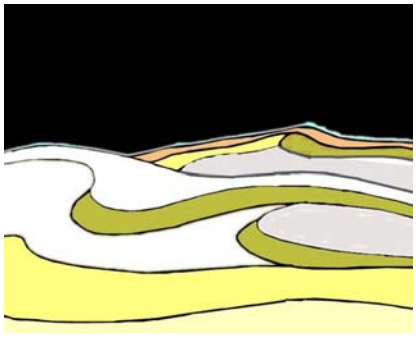
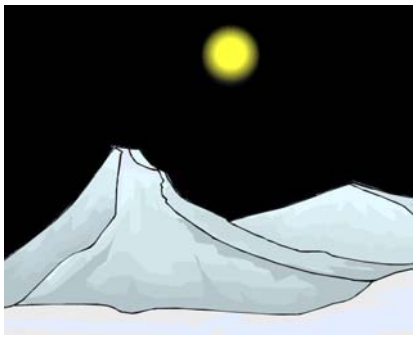


Frozen Lands 43

The way ahead is Frozen Lands: lands in constant shadow on planets locked to their star.

Or
Lands on worlds far enough from their primary star that they are forever frozen.

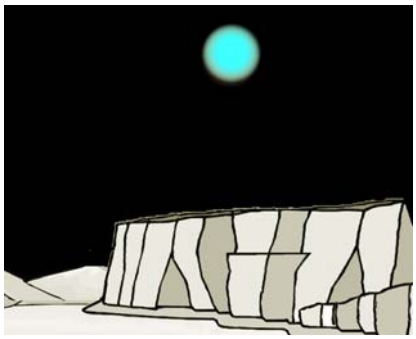


Ice Fields 44

The way ahead is Icefield terrain: vast expanses of frozen water, gases, or other liquids.

Exotic 46

The way ahead is Exotic terrain: abnormal, unusual, or inexplicable territory which provides unexpected features.



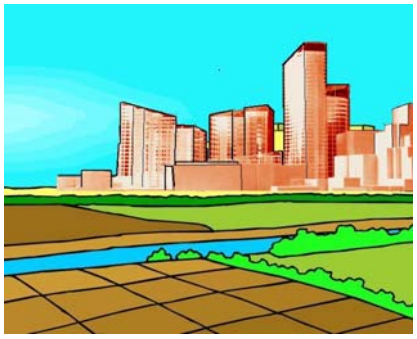
Precipice 45

The way ahead is a Precipice: an extreme change in land elevation which is an absolute barrier to surface vehicles.

Terrain-5

Terrain Group 5 is the basic set of terrain types associated with population centers.

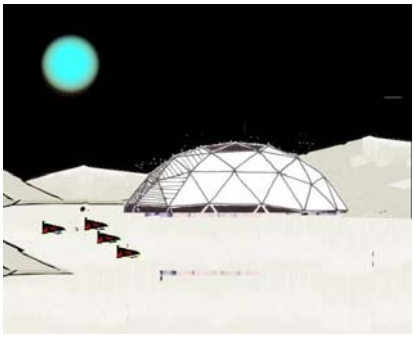
Terrain-5



City 51

The way ahead is City: a major population center with governmental, cultural, educational, and commercial facilities.

Transport Net: Treat as Highway.



Domed City 52

The way ahead is Domed City: a major population center with governmental, cultural, educational, and commercial facilities. It includes protections against environmental conditions.

Transport Net: Treat as Road.

Arcology 53

The way ahead is Arcology: a complex of large high population density hyperstructures. Arcologies are self-sufficient isolated communities with only limited exterior contacts.

Transport Net: Treat as Road.

Suburb 54

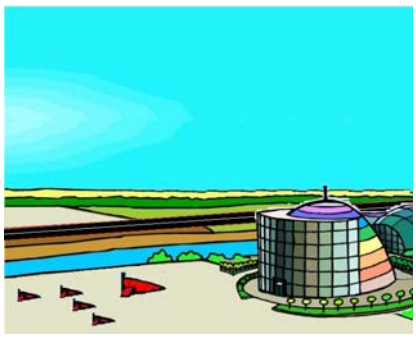
The way ahead is Suburb: moderate population regions on the edges of City terrain.

Transport Net: Treat as Highway.

Town 55

The way ahead is Town: low population regions providing government, cultural, commercial, and educational support for the region.

Transport Net: Treat as Road.



Starport 56

Starport is an established landing ground for starships and spacecraft.

Transport Net: Treat as Road.

Terrain-6

Terrain Group 6 is the set of terrain types associated with the transportation net.

Terrain-6

Highway 61

The way ahead is Highway: high quality Transport network intended for wheeled road vehicles.

Transport Net: Highway.

Road 62

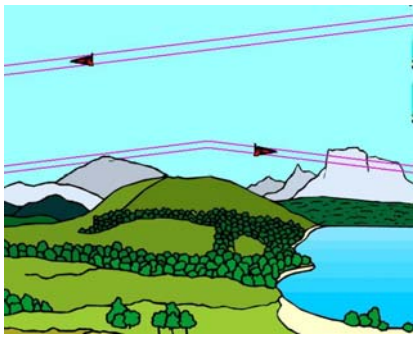
The way ahead is Road: moderate quality Transport network intended for wheeled road vehicles.

Transport Net: Road.

Trail 63

The way ahead is Trail: low quality Transport network intended for vlite vehicles.

Transport Net: Trail.



Air Corridor 64

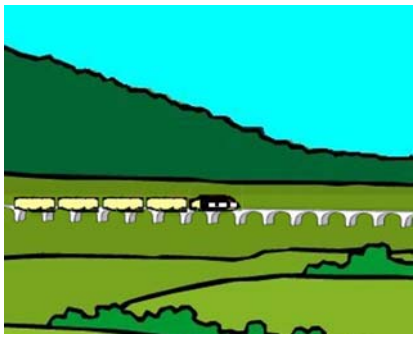
Air Corridor is a path and altitude for Flyers. It is under computer air traffic control.

Transport Net: Air Corridor.

Grid 65

The Grid is controlled Highway providing automated vehicle direction for safety and efficiency.

Transport Net: Treat as Highway.



HighSpeed 66

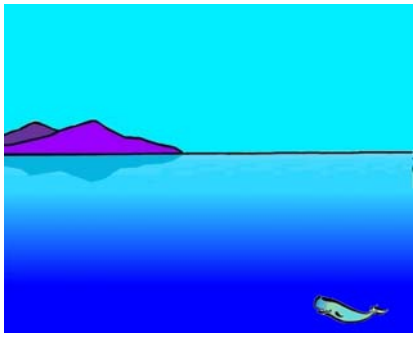
High Speed dedicated high speed, high volume passenger and cargo movers.

Transport Net: High Speed.
Transport Net: Treat as Trail.

Terrain-7

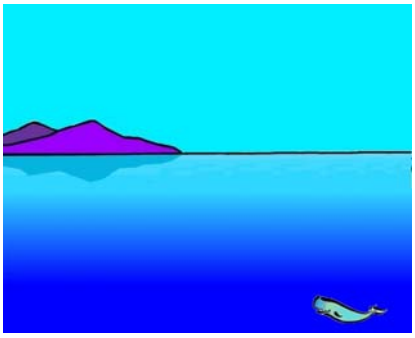
Terrain Group 7 is the supplementary set of terrain types associated with strange or esoteric locations.

Terrain-7



Ocean Depth 71

The way ahead is portion of the Ocean which is significantly deeper than normal.



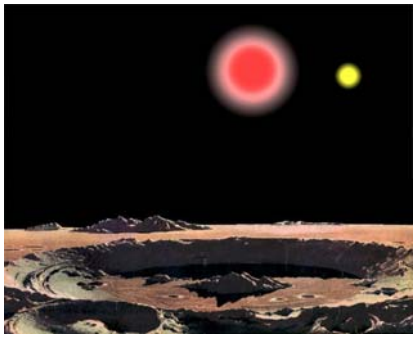
Abyss 72

The way ahead is portion of the Ocean (specifically on an Ocean World) which is significantly deeper than normal (and deeper than Ocean Depth).

Caverns 73

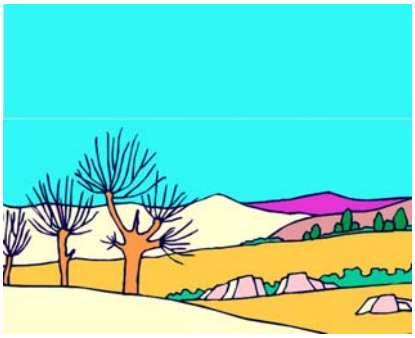
The way ahead is underlain by extensive caves, tunnels, or other natural underground locations.

Caverns are overlaid (underlain?) on other terrain.



Crater 74

The way ahead is Crater: a significant impact crater which creates substantial barriers to movement.



Wasteland 75

The way ahead is Wasteland: lands contaminated by natural or sophont processes. Contamination may be chemical, biological, radiation, or other processes.

Wasteland is overlaid on other terrain.

Penal Colony 76

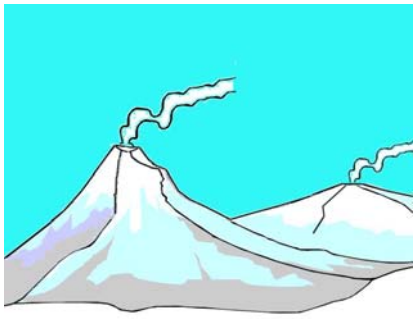
The way ahead is Penal Colony: a community of convicted criminals (or political prisoners) transported here from another world.

Penal Colony is overlaid on other terrain.

Terrain-8

Terrain Group 8 is a supplementary set of terrain types associated with resources.

Terrain-8



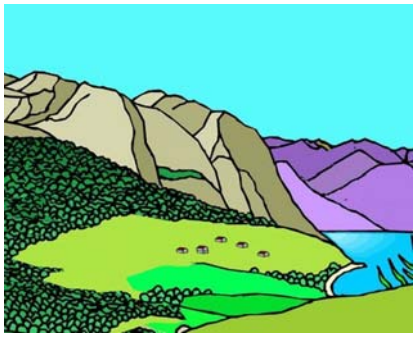
Volcanic 81

The way ahead is Volcanic: molten interior rock emerging to the surface. The territory is similar to Mountain. Surface progress is slow and severely restricted. There may be occasional vegetation.

Noble Estate 82

The way ahead is Noble Estate: the private lands of a wealthy or powerful government, business, or military leader.

The estate is overlaid on other terrain, which influences surface progress. In addition, local security forces may obstruct or impede movement.



Reserve 83

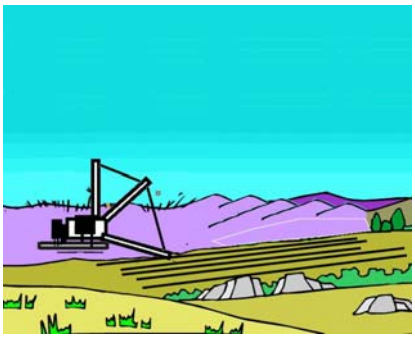
The way ahead is Reserve: lands set aside from exploitation or settlement. The territory is subject to entry and interaction restrictions in order to protect it from exploitation or interference.

The Reserve is overlaid on other terrain, which influences surface progress.

Mines 84

The way ahead is a Resource being exploited to produce ores or raw materials.

The Mine is overlaid on other terrain.



Resources 85

The way ahead is a significant Resource which is part of the natural wealth of the world.

The Resource is overlaid on other terrain.

Resources Oil 86

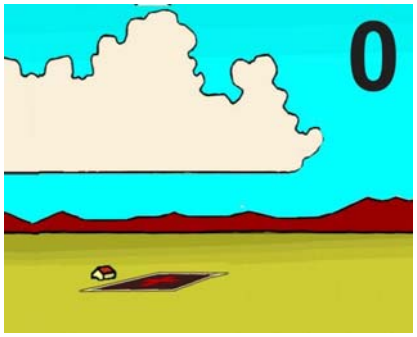
The way ahead is a significant Resource (consisting of natural petrochemicals or their analogs) which is part of the natural wealth of the world.

The Resource is overlaid on other terrain.

Terrain-9

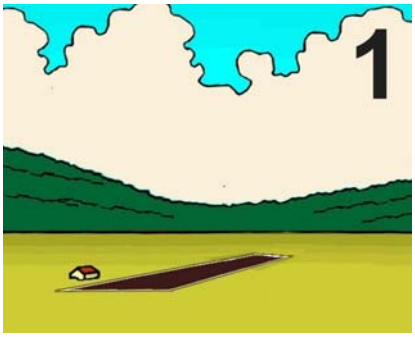
Terrain Group 9 is the set of terrain types associated with Flyer landing grounds.

Terrain-9



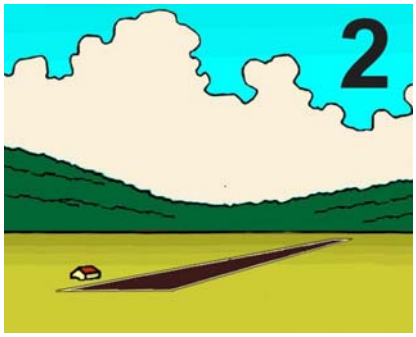
Airpad **96**

A landing ground for vertical landing and takeoff Flyers.



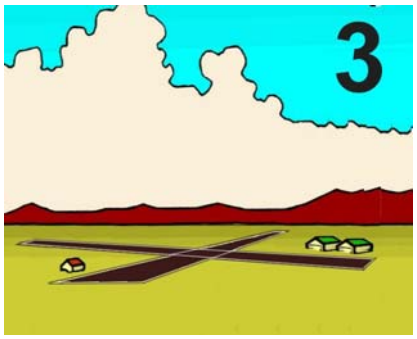
Airstrip Vlite **91**

A rudimentary landing ground for Flyers suitable for Vlite Winged craft.



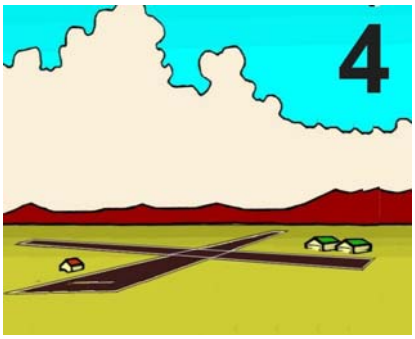
Airstrip Lite **92**

A landing ground for Flyers suitable for Lite and Vlite Winged craft.



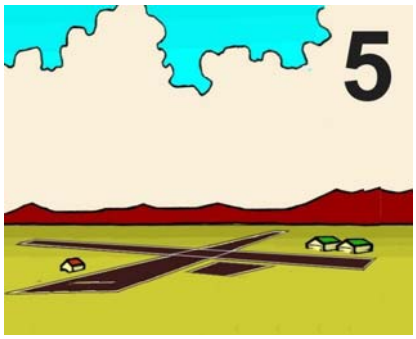
Airport **93**

A landing ground for Flyers suitable for Medium and smaller Winged Flyers. The runways (usually more than one) are about 3,000 meters long.



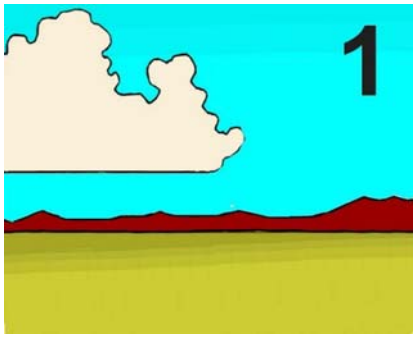
Airport Heavy **94**

A landing ground for Flyers suitable for Heavy and smaller Winged Flyers.



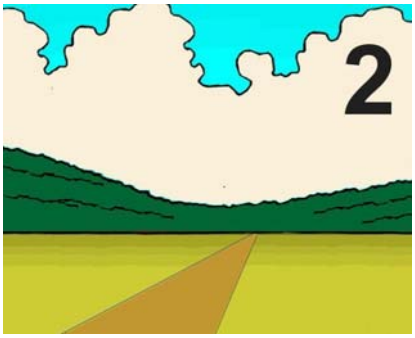
Airport Vheavy **95**

A landing ground suitable for all winged Flyers.



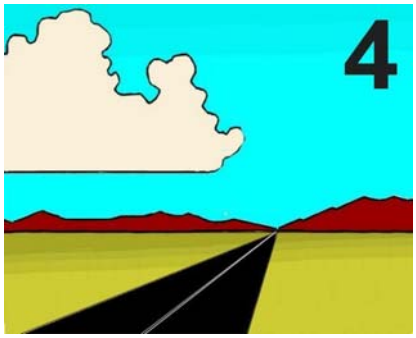
Open Field **97**

A portion of other terrain suitable for landing by Vlite Winged craft.



Road **98**

A portion of road suitable for landing by Lite and Vlite Winged craft.



Highway **99**

A portion of highway suitable for landing by Medium and smaller Winged craft.