Pasuuli's Guide to Starports

This guide helps a referee decide what any particular starport has on the ground, in the air, and in orbit.

Table of Contents

Traffic	2
Building Your Starport	4
Improving Traffic	5
Pre-Fab Starports	6
Starport Component Catalogue	7
Landing Facilities (all tech levels)	7
Parkbays	10
Smallcraft	11
Fuel and Maintenance	12
The Shipyard	13
Passengers and Cargo	14
Bases	17
Startown	19
Example Startown	21
Random Startown Generation	22

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Traffic

As a hasty (but useful) generalization, a world's interstellar traffic levels are directly proportional to the importance of that world, drawn from Traveller5 Book 3 page 27. The implication is that importance is more than just a world's capabilities, but also a measure of how that world fits into its interstellar scene. For example, a world with a good starport, high technology, surplus production, and a naval and scout base is bound to attract a lot of interstellar interest. In the typical case, then, there are other important-enough worlds close-enough to incur traffic. Edge cases are handled by shifting expected traffic based on the setting needs, explained later.

As a rule of thumb, about half of the ships visiting a starport will remain in orbit.

First, determine Importance. Importance is calculated by tallying up the features of a world's UWP:

IMPORTANCE FEATURES TABLE

- +1 Starport A or B
- -1 Starport D or worse
- +1 TL-16 or higher
- +1 TL-10 or higher
- -1 TL-8 or lower
- +1 Per Ag, Hi, In, Ri
- -1 Pop 6 or lower
- +1 Both Naval and Scout Bases
- +1 Way Station

The sum of these values is the Importance Extension, or Ix for short.

Now determine the number of ships visiting the starport by consulting the Expected Ship Traffic table. The top weekly numbers are order-of-magnitude: Importance +4 worlds have hundreds of ships per week, and Importance +5 have thousands of ships per week. As always, the numbers are subject to referee interpretations.

EXPECTED SHIP TRAFFIC TABLE

	Weekly	Daily
lx	Traffic	Traffic
+5	1,000-9,000	100-1,000
+4	100-900	15-100
+3	30-70	3-10
+2	20*	2-4
+1	10*	1-2
+0	2*	<1
-1	1*	<1
-2	0*	-
-3	0*	-

^{*} Plus Flux

For a "busy" setting, use the next higher row. For a "rural" setting, use the next lower row.

For the weekly traffic index, the number represents the number of ships per week passing through the starport — half landing and half remaining in orbit. This is what the starport is built to handle.

Passenger count is 12 average per ship, and cargo count is 80 tons average per ship. This means one passenger per hour equals 14 ships per week. As noted, these values are averages and guesstimates. The referee is free to weight the ship distribution in whatever way seems right for the situation.

Note: For the sake of simplicity(?), the passenger and cargo count was guesstimated by taking a simple average from one each of Types S, A, EC, K, Y, R, M, U, FP, L, C, L2, and F, representing ACS from 100 to 3,000 tons.

Starport Shuttles. Use the table below to determine quantity and type of shuttles the starport uses.

Trips are typically scheduled to coincide with the largest passenger count possible. If necessary, shuttles can make up to six round trips between orbital and ground facilities per 24-hour period. Each trip is considered one work shift; a different crew is needed for each trip in this period.

Heavy shuttle (TL-10; MCr 232). This 1200 ton shuttle carries up to 100 passengers (at two seats per ton) and 1000 tons of cargo. Its maneuver drive-T gives it 3G acceleration; its airframe hull gives it 4G in atmospheres. It requires five flight crew (on the ship) and ten freight handlers (at the starport).

Standard Shuttle (TL-12; MCr 32). This 95 ton shuttle is typically divided into a 70 ton cargo bay and a cabin that can seat up to 20

passengers (at two seats per ton). It has maneuver drive-B for 3G acceleration; its airframe hull allows 4G in atmospheres. It requires four flight crew.

VIP shuttle (TL-10; MCr 28). This 96 ton shuttle is tailored for luxury. It has a gravitic drive-3 for 3G orbital maneuver; its airframe hull allows 4G in atmospheres. Accommodations comprises 20 individual one-ton niches. It has a 20 ton cargo bay. It requires four flight crew and one dedicated steward.

Ships	Passengers	S	huttles		Cargo	tons
per Week	per Hour	Heavy	Standard	VIP	per Week	per Hour
9,000	700	53	70	8	720,000	4300
8,000	600	47	60	7	640,000	3800
6,000	450	35	45	6	480,000	2850
4,000	300	23	30	5	320,000	1900
3,000	250	17	25	4	240,000	1450
2,000	150	11	15	3	160,000	950
1,000	75	5	8	2	80,000	475
800	60	4	6	1	64,000	380
600	45	3	5	1	48,000	285
400	30	2	3	1	32,000	190
200	15	1	2	1	16,000	95
100	8	-	2	1	8,000	50
80	6	-	1	-	6,400	40
60	5	-	1	-	4,800	30
40	3	-	-	-	3,200	20
20	2	-	-	-	1,600	10
10	1	-	-	-	800	5
5	<1	-	-	-	400	2
4	-	-	-	-	320	1
3	-	-	-	-	240	1
2	-	-	-	-	160	-
1	-	-	-	-	80	-

Parkbays. Ships are moved via maglev rail to parkbays, which are circular platforms with 11 bays, each of which can hold a ship of up to 2400 tons. Maglev rail enters the parkbay and runs in a circle around the inside, with a branch into each bay. In the center is a single shielded vertical liftoff platform (also connected to the maglev system). *Passengers Per Hour, divided by two*, is also a good estimate for the number of parkbays required by the starport (surprisingly!)

System Defense. The tonnage a system should dedicate to defending a world is equal to the freight tonnage passing between this world and its largest trading partner per week (perhaps MCr1 of ship value per 100 tons of cargo). This is usually mortgaged equipment, rather than owned outright, and comes out of starport revenue and world subsidies.

Building Your Starport

Facilities. A starport's class determine its facilities.

Component	A	В	С	D	E	F	G	Н
Landing Area	у	У	у	у	у	у	У	У
Parking Area	У	У	У	у	O	У	O	0
Beacon	У	У	У	У	0	У	У	0
Fuel Depot	У	У	У	0	-	0	O	-
Warehousing	У	У	0	0	-	0	-	-
Ship Maintenance	У	У	у	-	-	0	-	-
Ship Construction	У	У	0	-	-	O	-	-
Facility Maintenance	У	У	у	0	-	0	0	-
Concourse	Y	у	0	0	-	0	0	-

Notes: y=the facility is required, o=the facility is optional. A dash means the facility is not typically present.

Starport Size. Your starport should match the world's interstellar needs as closely as possible. Please refer to the section on determining freight and passenger numbers to decide what to outfit your starport with.

Extrality. Most starports are granted extrality; that is, the world's jurisdiction ends where the starport grounds begin. Laws, regulations, and government are conducted in accordance with the customs of interstellar authority. In these cases, the law level is roughly equivalent to the starport's rating (A=5, B=4, C/F=3, D/G=2, E/H=1), and is also influenced by the world population.

Small or primitive starports, however, are often under local government jurisdiction.

Please note that starports that are under local jurisdiction will be under the influence of local authorities, and will also be taxed. However, under local jurisdiction your

starport will never have to harbor those that break the law on planet.

Berthing fees. Typically Cr100 per week. This price may be affected by the port size, social conditions on the world, the nature and quality of facilities, and the world's trade codes.

Drydock fees. Typically Cr100 per ton per day. This price may change based on ship tonnage, time spent in dock, local salaries, and equipment purchased.

Transaction fees. Typically Cr1 per ton of cargo moving through the starport. These fees can really add up to serious cash.

World subsidy. The local government may negotiate a subsidy for the starport authority. It may be based on improving traffic numbers over a period of time, or a monthly allowance, or any other type of agreement. Typically a member of the world's

government must be approached, and that person should be somehow inclined or convinced to lobby for support from the government. Competing bids must be overcome, and finally the case would be presented before the governing body, whatever that may be.

This is a process that could take years, and having SOC 10 or greater should help (the higher, the easier). Note that this process is an adventure, not a flow, and it's better if there's a referee involved.

Improving Traffic

Traffic is improved by improving the starport, investing in local production and infrastructure, and building or hosting bases.

Improving the starport is often a major undertaking. The best gain is when moving from a from a D to a C starport, or from a C to B.

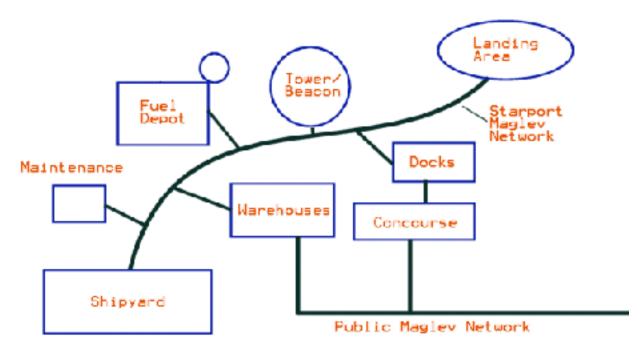
Investing in local production involves helping drive the world economy into one of the four main beneficial trade codes: Ag, Hi, In, or Ri. The ability to shift these is typically limited, though.

Hosting bases is another sure-fire way to boost interstellar traffic. Like getting a world subsidy, getting bases is often a long, drawn-out process of finding the right officials to persuade of the strategic value your world offers for a naval base, and the logistical and exploration advantages to a scout base. Negotiations are competitive and often cutthroat, and almost always require advocates (i.e. players) with a SOC of 10 or greater (the higher, the easier).

Initial contact is followed by social conversations, which then could move to negotiations with a contact, which then lead to political maneuverings in the interstellar scene. Negotiations or sanctions of rivals will then have to be dealt with. Finally, if the case is cleared of its competition, it may be heard in an interstellar court, presented before a sector duke, for example. Assuming the presentation is not a disaster, agreement typically follows, after a token mission of state is taken on in the duke's stead.

Note that each stage in the process takes a number of years, and it is quite possible that the player characters' grandchildren might be fully grown before the bases are in place. Note that this process is an adventure, not a flow, and it's better if there's a referee involved.

Abstract Starport Layout



Pre-Fab Starports

With these handy-dandy component packages, starport design has never been easier! Components have been paired together based on compatibility. Buy the package, purchase any remaining needed components, and you're ready to go!

Downport Freight Package: MCr250

- Two parkbays (upgrade to six parkbays for only MCr400)
- One 5km landing strip with 1km-diameter landing pad
- B-0 orbital telemeter
- B-2 surface laser transceiver
- SB-8 Freight Shuttle (upgrade to a SB-9 for only MCr300)
- F-11 100kt fuel tank
- · M-3 maintenance building
- W-9 warehouse (upgrade to a W-10 for only MCr 9)
- Parkbays, landing strip, and buildings all attached by maglev

Orbital Fuel Outpost: MCr250

- One dedicated landing strip on the world surface for shuttles
- Three SB-8 fuel shuttles (upgrade to SB-9s for MCr300 each)
- B-0 orbital telemeter
- T-7 4-person orbital control station
- 10 O-1 orbital parking-orbit transponders
- F-10 10kt orbital fuel tank
- R-8 surface fuel refinery

"Class D" Starport Package: MCr250

Except for defense, this package is nearly a complete starport.

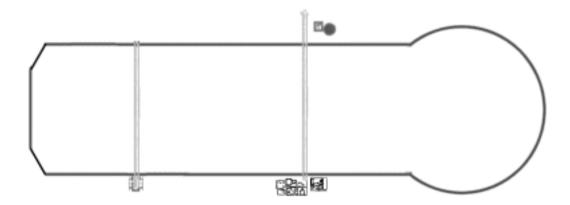
- · One 5km landing strip
- 20 1km-diameter landing pads
- B-0 orbital telemeter
- B-2 surface laser transceiver
- T-7 4-person surface control station
- Three SB-8 multipurpose shuttles (upgrade to SB-9s for MCr300 each)
- F-11 100kt fuel tank (or 10 F-10's)
- · M-3 maintenance building
- 10 W-9 warehouses (upgrade to W-10s for MCr 9 each)
- DD-8 100t drydock & S-2 minor repair station (1 ship capacity)
- C-8 concourse complex
- LS-9 up to 100-worker station support
- H-7 10 dton secure installation.
- Orbital option: one orbital F-11 and one orbital W-10 (MCr200)

"Class C" Upgrade Package: MCr360

Upgrade the "Class D" package to a minimal "Class C" with this package!

10 A-9 1000t hangars (MCr 100) M-9 maintenance complex (MCr 10) 10 W-10 warehouses (MCr 100) DD-9 1000t drydock (MCr 100) S-3 repair center/10 ships (MCr 50)

Starport Component Catalogue



Landing Facilities (all tech levels)

Land Ships Safely. Ships have to land! There are two ways to land a starship: some are airframe, which means they can use a runway, while the rest must stick to vertical thrust to slowly set themselves down onto pads. VTOL ships land from orbit in a number of hours equal to the size code of the world. Airframe ships may land from orbit in one hour, regardless of world size.

Most Imperial-standard landing strips have both built-in: a 5km long strip for airframe landings, ending in a 1km diameter circular landing pad. These strips are also used for airframe take-off. When building a decent facility (for instance, one with a parkbay), don't bother adding in the cost of landing strips.

Landing facilities may also have an attached beacon, perhaps placed midway along the strip or near other outbuldings. A beacon may include sensors and comm equipment, and may have its own power plant.

The control tower contains the main body of comm equipment and traffic control logic, as well as the administrative offices.

Module L: Landing Facilities (all tech levels)

<u>Component</u>	t			<u> Price</u>	(MCr)
L-0 1km ı	radius	landing	pad	0.03	
L-1 2km ı	radius	landing	pad	0.06	
L-2 4km ı	radius	landing	pad	0.12	
L-3 3km >	x 500m	landing	strip	0.03	
L-4 4km >	x 500m	landing	strip	0.04	
L-5 5km >	x 500m	landing	strip	0.05	
L-6 6km >	x 500m	landing	strip	0.06	
L-7 7km >	x 500m	landing	strip	0.07	
L-8 8km >	x 500m	landing	strip	0.08	

Module B: Beacons	Down	<u>Orbital</u>
B-0 telemeter	1	2
B-1 standalone transponder	5	10
B-2 radio transceiver (TL5)	0.05	0.1
B-3 laser transceiver (TL9)	0.5	1
B-4 maser transceiver (TLE)	5	10
B-5 multichannel maser xcvr (TLF)	50	100

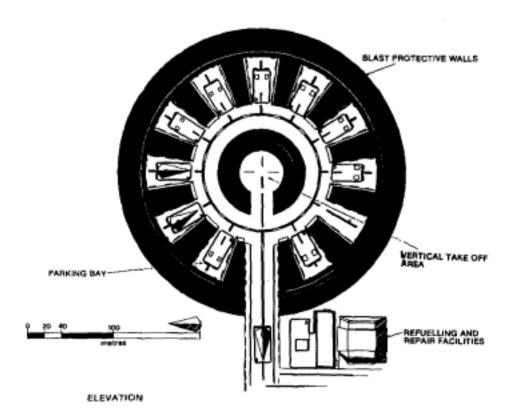
The B-5 is a large relay station with room for 1 operations or maintenance personnel. Larger installations are considered Control Towers:

Module T: Traffic Control Towers	Down	<u>Orbital</u>
T-6 small control outbuilding	1	10
T-7 4-person control station	5	50
T-8 8-person control tower (TL9)	25	250
T-9 16-person control tower(TLC)	100	1000

Tower sensors: for best results, place two PEMS and two AEMS in orbit.

PEMS: Passive sensors (TL B-F)		
TP-11: standard 100d sensor	10	20
TP-13: high-res 100d sensor	100	200
TP-14: inner system sensor	1000	2000
TP-15: inner + GG sensor	10,000	20,000
AEMS: Active sensors (TL B-D)		
TA-11: local orbit control	50	100
TA-12: general system sensor	500	1000
TA-13: deluxe system sensor	5000	10,000

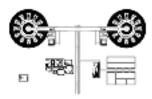
PARKBAYS

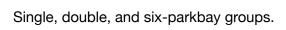


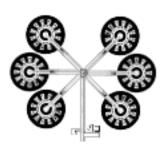


Close-up view of a single parkbay.









Parkbays

All parkbays are available at TL 10.

Parking Orbit Transponders. Think of these as being like the deep water mooring bouys at some shallow water ports. The ship is assigned a parking spot, which is marked by the transponder. It matches orbit with it and is then parked.

To hold ten thousand ships, you only need 40 orbits with 250 slots each or 50 with 200

slots each. Assume the radii are set every 100 km or so, that has the ships spread out in an annulus 5000 km "across". There's still plenty of space for traffic.

Hangars. For protection against a hostile environment, orbital maintenance, VIP ship storage, and other special cases, hangars are a per-ship solution, typically costing Cr2,000 per ton of ship capacity.

Module P: Parkbays (up to 1000 ton ships)

Component	Price (MCr)
P-0 custom parkbay	varies
P-1 single 11-ship parkbay	100
P-2 double 11-ship parkbay	200
P-3 triple 11-ship parkbay	300
P-4 quad 11-ship parkbay	400
P-6 6x11 parkbay	600
P-8 8x11 parkbay	800

Module O: Parking Orbit Transponders (TL 7)

Component	Price (MCr)
0-0 custom orbit transponder	varies
0-1 standard telemeter transponder	4
0-2 programmable transponder	8

Module A: Hangars

<u> Price (MCr)</u>
varies
0.02
0.2
2
20
200

Smallcraft

Utility Shuttles. The SB-7 is an airframe, single-passenger (or 1t cargo) orbital speeder.

Privately-owned shuttles can often be found for hire at class E starports. Their rates will be high.

Tug. The tug is equipped with engines and structure strong enough to pull a ship ten times its volume from space to orbit and back. A tug requires a crew of 2.

Search and Rescue Boat. The search and rescue boat is equipped with excellent sensors, fast engines, and a spare crew. The ship carries medical personnel, engineers, emergency supplies, and emergency low berths.

Defense Boats. From the tiny grav fighter (which pulls 11+ G's) to the massive SD Cruiser (which sports a spinal weapon), system defense boats are armored, fast, and carry expert gunners.

Module SB: Shuttles

Component		Price (MCr)
SB-7 10t shuttle	(TL9)	10
SB-8 100t shuttle	(TL8)	50
SB-9 1000t shuttle	(TL9)	350

Module T: Tugs

<u>Component</u>		<u> Price (MCr)</u>
TB-8 100t tugboat	(TL8)	20
TB-9 1000t tugboat	(TL9)	100
TB-10 10kt tugboat	(TLA)	400

Module RB: Search and Rescue Boats

Component		<u>Price</u>	<u>(MCr)</u>
RB-8 200t search/rescue boat	(TL8)	50	
RB-9 2000t search/rescue boat	(TL9)	300	
RB-10 20kt search/rescue boat	(TLA)	1500	

Module DB: Defense Boats (TL-12)

Component		<u>Price (MCr)</u>
DB-6	4t grav fighter	4
DB-7a	10t fighter	15
DB-7b	40t heavy fighter	50
DB-8	400t system defense boat	400
DB-9	4000t system defense b.	3000
DB-10	40,000t SD cruiser	20,000

Fuel and Maintenance

Fuel depots can be as simple as huge holding tanks, and may have mechanical hookups or pumps to refuel ships with.

Fuel tankers, which may be simply shuttles or modular cutters, are ships outfitted to carry fuel, and may or may not have refineries on-board to provide refined fuel for the starport holding tanks. Tankers run at the going price of spaceships; for example, the

price may be around MCr4 per ton of fuel the tanker can carry

(or per normal spaceship cost). Refineries are priced per normal spaceship cost and volume..

Fuel refineries are cousins to the shipboard fuel refineries, and are used to refine fuel on the spot for ships requiring it.

Module F: Fuel Depots	Down	<u>Orbital</u>		
F-0 custom tank	_			
F-7 10t fuel tank	0.001	0.5		
F-8 100t fuel tank	0.005	1		
F-9 1000t fuel tank	0.01	5		
F-10 10,000t fuel tank	0.1	10		
F-11 100,000t fuel tank	1	100		
F-12 1mt fuel tank	10	1000		
F-13 10mt fuel tank	100	10,000		
F-14 100mt fuel tank	1000	100,000		
Module R: Refinery Installations	Down	<u>Orbital</u>		
R-0 custom refineries	_			
R-7 10 tons/hour (TL9)	1	10		
R-8 100 tons/hour (TLA)	10	100		
R-9 1000 tons/hour (TLB)	100	1000		
R-10 10,000 tons/hour (TLC)	1000	10,000		
R-11 100,000 tons/hour(TLC)	10,000	100,000		
R-12 1mt/hr (TLD)	100,000	1,000,000		
Module M: Installation Maintenence Centers Orbital				
M-0 custom maintenance center	_	OIDILAL		
M-6 storage shed	0.01	2		
_	0.01	5		
M-7 portable outbuilding	1	10		
M-8 permanent outbuilding				
M-9 maintenance complex	10	100		

The Shipyard

A shipyard is necessary for the construction and maintenance of spaceships and starships. Shipyards can be quite large -- their size may depend on the amount of trade going through a system, or the size of the local population, or even the strategic importance of the system's location.

A shipyard consists of two components: a drydock area, which holds ship hulls, and the

shipyard itself, which embodies all machinery and support for the build process.

A shipyard will have one naval architect's office per 100 ships (or 1000 dtons).

Drydocks and shipyards are built at the tech level of the mainworld.

Module DD: Drydocks	Down	<u>Orbital</u>
DD-0 custom drydock	_	
DD-7 10t drydock	1	10
DD-8 100t drydock	10	50
DD-9 1000t drydock	100	200
DD-10 10kt drydock	n/a	2000
DD-11 100kt drydock	n/a	20,000
DD-12 1mt drydock	n/a	200,000

* Drydocks are required for shipyards.

Module S: Shipyard	Down	<u>Orbital</u>
S-0 custom shipyard	_	
S-1 machine shop	1	10
S-2 minor repair center/1 ship	10	100
S-3 repair center/10 ships	50	1000
S-4 repair center/100 ships	400	4000
S-5 overhaul center/10 ships	200	2000
S-6 overhaul center/100 ships	1000	6000
S-7 overhaul center/1000 ships	8000	50,000
S-8 boatyard/1 ship/year	400	4000
S-9 boatyard/10 ships/yr	2000	15,000
S-10 boatyard/100 ships/yr	16,000	100,000
S-11 boatyard/1000 ships/yr	160,000	1,000,000
S-12 shipyard/1 ship/yr	10,000	20,000
S-13 shipyard/10 ships/yr	50,000	100,000
S-14 shipyard/100 ships/yr	400,000	4,000,000
S-15 shipyard/1000 ships/yr	4m	40m
S-16 shipyard/10,000 ships/yr	50m	500m

Passengers and Cargo

Warehouses. Warehouses (with environmental controls, security systems, heavy shielding, &tc) are used to store goods for transport. One complex is used to store out-bound freight, while another complex is used to store in-bound freight. There is usually an additional set of warehouses dedicated to storing ship parts, construction equipment, and other starport machinery.

Concourse. The **concourse** is where all public areas are housed, including retail shops, services, non-starport-related offices, passenger ticketing, and gates.

Also included is the surface transport terminal, which often has its own customs and security office from the mainworld government. It also has scheduled (or not!) shuttle flights to and from orbit.

Habitat. A major subsection of the concourse is the living quarters for the starport personnel and visitors. Larger starports require ship crew to leave their ship while they are docked. In some cases, the living quarters represent a hostel or hotel; on others it may represent a whole uburban or suburban section of the port.

Personnel requirements can balloon rapidly. Think about the personnel requirements for a town or city. However, please note that downports can pull workers from Startown and therefore may require less maintained living space than orbital ports.

Generally, a habitat needs 10 tons per person.

Module W: Warehouses	Down	<u>Orbital</u>
W-0 custom warehouse	_	
W-7 10t storage	0.01	5
W-8 100t storage	0.1	10
W-9 1000t storage	1	50
W-10 10kt storage	10	200
W-11 100kt storage	100	500
W-12 1mt storage	1000	4000
Module C: Concourses	Down	<u>Orbital</u>
C-0 custom concourse	_	
C-7a portable outbuilding	0.1	1
C-7b permanent outbuilding	1	20
C-8 outbuilding complex	10	500
C-9 large starport complex	100	5000
C-10 industrial starport complex	300	50,000
C-11 commercial starport complex	1000	100,000
Module LS: Living Section	Down	<u>Orbital</u>
LS-0 custom living section		
LS-7 10 dtons (1 person)	0.01	0.2
LS-8 100 dtons (10 people)	0.1	2
LS-9 1000 dtons (100 people)	1	20
LS-10 10,000 dt (1000 people)	10	200
LS-11 100 kt (10,000 people)	100	2000
LS-12 1 mt (100,000 people)	1000	20,000

Hospital. Hospitals are ranked by volume; however, they are also divided into room-spaces when they are built.

This table may also be used to desginate research centers, laboratories, and other secure installations. Essentially, any building which needs redundant power systems and separate, secure environmental and network controls fits in this category.

Generally, these facilities need 2 dtons per person.

Other buildings cost MCr0.1 per dton for a downport location, and MCr0.2 per dton for a location on the highport. Examples of other buildings include:

- The Scout Lounge
- The Hiring Hall
- The Lone Star
- The Travellers' Aid Society
- Starship architect (Naval architect?)
- University departments
- Space academies
- Conference/exhibition centers
- Brokerages
- Various entertainment centers

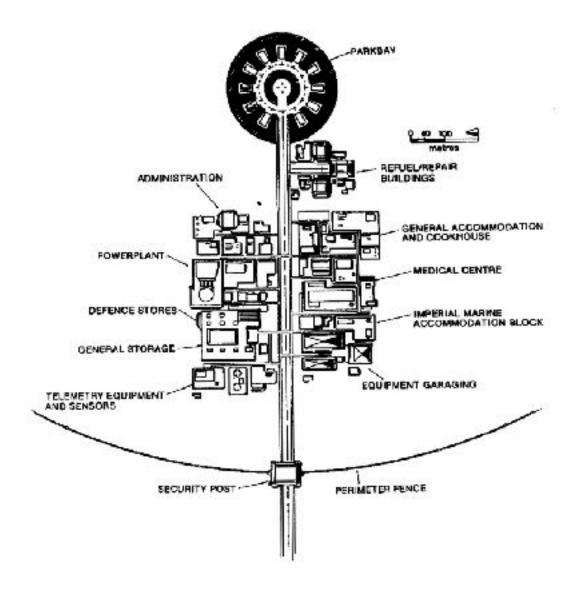
Maglev. The starport maglev rail network connects the internal starport components together: airstrips, parkbays, building complexes, and shipyards. Likewise, the external maglev rail network comprises the transport between the starport and the outside world, and usually only connects to the concourse and warehousing, which tends to allow better installation security.

Maglev is first available at TL 9 at twice the listed cost. At TL A and above the cost is as listed.

Module H: Hospitals, etc		Down	<u>Orbital</u>
H-7	10 dtons (5 people)	10	100
H-8	100 dtons (50 people)	100	500
H-9	1000 dtons (500 people)	1000	5000
H-10	10,000 dtons (5000 people)	10,000	20,000

Module X: Maglev Rail Networks

X-0	custom ne	etwork		_
X-1	starport	module	connection	2
X-2	external	module	connection	5



Detailed view of a Scout Base

Bases

Scout bases have refueling equipment, a parkbay, some service equipment and warehousing, and administration offices. They are open to public use for a price. Such a base may cost MCr200. A minimal scout base are equipped at 1 class lower than the commercial port, and usually (or perhaps initially) have

- 1 parkbay
- Passive sensors
- R-8 refinery
- DD-8 100t dry dock
- S-2 minor repair/1 ship
- C-2 outbuilding
- · Misc buildings, equipment, and supplies

Total: MCr 150

Scout way stations are larger than scout bases, with facilities used to service the X-boat system, including tenders. MCr100 per ship in the X-Boat network to be serviced. The average way station is orbital or off-orbit and will have:

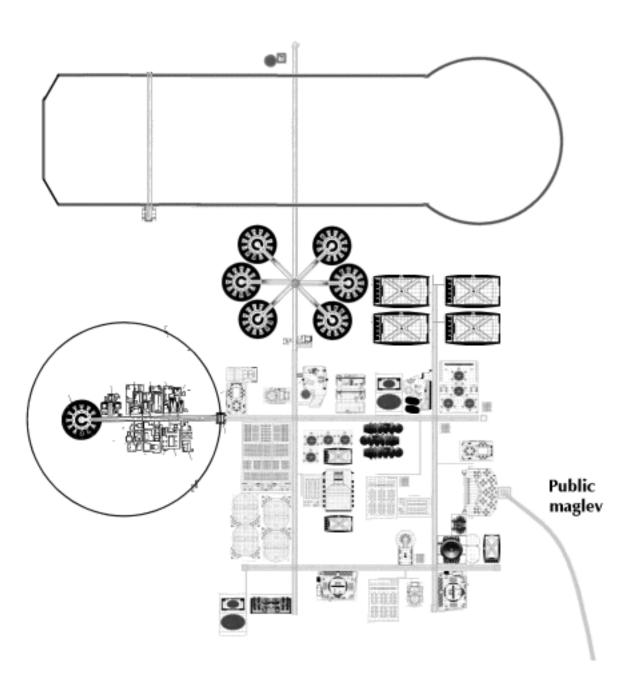
- F-10 10k fuel
- R-9 refinery
- R-8 backup refinery
- DD-9
- S-5 overhaul
- C-4 concourse

Total: MCr 921

Naval bases are huge affairs, often larger than the local starport itself. First-Strength bases are equipped at the same class as the commercial port; Second-Strength bases are equipped one class lower. In an emergency the naval base will open its facilities to the public for a price. A naval base has, at the minimum:

- 6 Parkbays + airstrips
- Passive sensor matrix
- Active sensor matrix
- Defense boats (varies)
- DD-10 dry dock
- S-6 shipyard

Total: BCr 21+



Startown

"Startown would cater to the crews and naive travellers, and maybe less naive travellers. And less naive natives.

Probably also easier to meet contacts and brokers for less savory cargo."

"Startown is not going to repair your ship, though they may try to sell you one..."

"Think Subic bay, Texas street, Bangkok."

Purpose. Startown is the destination for shore leave by civilian and military crew. As a warehousing district (presumably between the starport and the world), Startown lets player characters find their comfortable level of risk while still being close to the safety of a starport and, usually, their ship.

Getting Your Feet Wet. In other words, Startown is like a low-level hybrid town/dungeon. Characters may sortie out to it during the daytime and buy equipment with little risk. They may stray off the main arteries, trading a little more risk for the option of finding something interesting. And finally, they may rent a room at night, head into the streets, and dish out vigilante justice. Or be part of the problem.

It's Mardi Gras every day.

Learning About Traveller. As a "beginner's dungeon", it can also introduce new players to Traveller in general, and a setting in particular, and without a referee. A player can roll up a character and then take him into Startown -- probably during the day, on the main drag. There, he can rent a room, grab a bite, buy second-hand equipment, and get hired on a starship. Note that one can do a lot of this at the Starport itself -- but I would say that Startown is cheap. It's where you go if you don't have membership in TAS (or its 1900 equivalent). Once again, you can dial the safety level to what you're comfortable with, and learn as you go.

Central City. Separate from Startown, this is less of a dungeon, and more like the castle or keep. Everything is expensive, so the players who visit here are invited, entitled, or wealthy. Megacorps do their business here, as do nobles and government agencies. Here there are "thousands of businesses taking offworld resources and converting them into interesting products for export of import."

STARTOWN BETA

Startown Beta – the area adjacent to a second main starport — consists of a relatively safe main drag ("Main"), five less safe streets, and a number of unsavory "Red Zones". Much of startown's contents (mostly warehousing) are not shown in the map.

Though the safest locations are on the main drag, all but the Red Zones are reasonably safe to travel during the day.

Crawling Startown. Startown is explored in shifts, with one day broken down into four shifts. One shift per day should be spent resting, or else face task penalties and an increased likelihood of being mugged.

Equipment can be purchased new from Zak's Outfitter Emporium (location 5) off of 5th Street, or secondhand from "Big Joe" Kirashnakesh's Pawn (location V) off of 1st Street. A dodgy pawn shop in the Red Zone (location 3) might have good deals, but beware of muggers.

Food. Characters must eat three shifts out of four or else face task penalties and an increased likelihood of being mugged. A meal costs Cr4 on the Main Drag, and Cr2 elsewhere.

Lodging. Characters must rest one shift out of four or else face task penalties and an increased likelihood of being mugged. Hotels typically cost Cr10 on the Main Drag, Cr7 Off-Main, and Cr3 in the Red Zone. Every shift spent in a hotel in the Red Zone requires a mugging roll; moreover, no belongings can be left in a room in the Red Zone.

Casinos. Entering a casino is a potential way to win money. For every shift spent in a casino, make two average Gambling task roll.

Each success means the character has won 2D x 2D credits.

Bars. Bars are a place for socialization. Jobs, and even starship positions, can be found here. Characters may patronize and socialize at bars one shift per day for Cr25. At the end of each shift, the player may make an average roll for employment. <need more here> Additional shifts spent

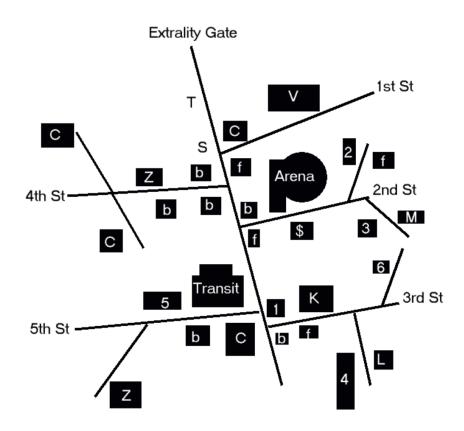
socializing increases task difficulties for the day, and increases the chance of being mugged.

Muggers. A player character entering a Red Zone during the day time, or an Off-Main street during the night, may get mugged. Roll (2D<10); +1D per extra member in the party. A "success" means the character or group of characters has been mugged by a decidedly superior force: all cash and possessions of value are taken. Characters entering the Red Zone at night are automatically mugged (1D<10) unless they take friends with them (+1D per extra member in the party).

Fatigue and Muggings. A fatigued character is subject to muggings even on the Main Drag. Add 1D to all character tasks for each type of fatigue (lack of sleep, lack of food, or too much time spent in a bar). Similarly, subtract 1D to the mugging roll for each type of fatigue.

If fatigued, the chance of being mugged on the Main Drag during the day is 3D<10, and 2D<10 during the night. The chance of being mugged on an Off-Main street during the day is 2D<10.

Example Startown



Key:

b: bar

f: food (cheap)

C: casino, owner "Abe" Abimjink (Amindii, B4A955).

K: soup kitchen

L: loan shark "Big Dave" Barulikaan (Scout, 5A6955, Age 30).

M: mission, run by Paulo Kiamak (Actor, 577589, Age 46).

S: street vendor Matt Shagax (Rogue, 764797, Age 22).

T: taxi services

V: used vehicles and equipment, owner Hyolloc (Llellewyloly, 47A6BB).

Z: hotel, owner "Bat" Essartix (Droyne, 273887).

\$: bail bonds, owner Del Dayreeh (Merchant, B96545, Age 26).

1: trade factor "Lars" Nafkkeen (Merchant, BB6A67, Age 30).

2: brothel

3: pawn shop, owner Virgil Ukirdig (Merchant, 963A88, Age 34).

4: "zoo"

5: outfitter's shop, owner Rex Oeksougz (Vargr, 747554).

6: "tattoo" parlor, owner Alan Ukash (Musician, 79859C, Age 34).

Arena: gladiator arena Transit: grav train station

Random Startown Generation

Recap. A Startown lets player characters find their comfortable level of risk while still being close to the safety of a starport and, usually, their ship. It's like a low-level hybrid town/dungeon. Characters may sortie out to various parts of it, weighing risks based on their comfort level. It can also introduce new players to Traveller's setting – even without a referee.

* * *

Though there are many types of Startowns, their offerings tend to be organized based on risk, with the least risky places grouped along a Main Drag, and increasingly risky destinations located further away.

Thus each of the following should be roughly classified according to personal risk (Main Drag, Off-Main, and Red Zone). Also note that risk in all areas increases at night.

Startown Generator. Starting from the Extrality Line, a few dice rolls generates the Main Drag and several branching streets, optionally filled with various things to see and experience, or open for customization as usual. Also, modular Startown segments can be "geomorphically" combined for quick variation, from "main street" to "den of thieves" to "mafia stronghold" and "church of the sub-genius", and so on.

Process: draw a line leading away from the Extrality Gate. This is the Main Drag. Next, roll 1D. Draw that many side streets off of the Main Drag. These are Off-Main streets. For each side of each Off-Main street, roll 1D. If that number is 1 or 2, then that's the number of buildings fronting that side of that street, starting with the corner off of the Main Drag. If that number is 3 or more, then there are 2 buildings fronting that side of the street, with the remainder of the buildings on a branch street -- a Red Zone street.

Now you have three classes of 'buildings':

- (1) those on corners of the Main Drag are Main Drag buildings. Roll 2D on the Main Drag table to determine the nature of each of these.
- (2) those on the Off-Main streets proper. Roll 2D on the Off-Main table for each.
- (3) those on the Red Zone streets. Roll 2D on the Red Zone table for each.

Main Drag

Place Liberally: "Taxi" service.

- 2-3. Off-port cargo factor "offices" (local or fly-by-night).
- 4. Recruiter.
- 5. Cheap Hotel (Cr10/night)
- 6. Casino.
- 7. (No more than once) Mass-transport station (magley, gray train, shinkansen...).
- 8. Bar.
- 9. Greasy Spoon.
- 10. Street Vendor outside a Bar.
- 11. Cheap Hotel (Cr9/night)
- 12. (No more than once) Two secondhand starship lots.

Off-Main

Always: Police and Jail.

Place Liberally: Hiring halls. Includes "contract" (slave) hiring.

Place Liberally: Secondhand/pawn equipment. Outfitters' shops will be built like bunkers.

- 2. "Check-cashing"/bail bond kiosks.
- 3. Live music or event outside a sleazy bar or casino.
- 4. Sleazier casinos.
- 5. Even cheaper Hotel (e.g. Cr7/night)
- 6. Sleazier food.
- 7. Sleazier bars.
- 8. (No more than once) Arena, gladiator-style.
- 9. (No more than once) Secondhand/pawn vehicles and heavy equipment. Outfitters' shops will be built like bunkers.
- 10. Food kitchen, faith-based or otherwise.
- 11. Sophont Club (one particular sophont type). Don't get involved with Llellewyloly hot tub
- 12. (No more than once) NEW equipment shop. Outfitters' shops will be built like bunkers.

Red Zone

Place Liberally: Warehousing (local-to-starport).

- 2. Virtual experiences: music, arenas, scenarios.
- 3. Loan sharks.
- 4. Grifter outside junk shop.
- 5. Brothel.
- 6. Dangerously cheap Hotel (e.g. Cr3/night)
- 7. Horrible establishment. Roll 1D: 1-2: Bar, 3-4: Casino, 5-6: Greasy Spoon.
- 8. Tattoo parlors, fly-by-night wafer jacks and implants.
- 9. Healers (street or shack-based).
- 10. Church missions (be they well-known, obscure, traditional, or nutjob).
- 11. Freak show/"zoo": building or land for the strange things that get found/confiscated.
- 12. Hazardous chemical production or storage things that the starport may want to keep at arms' length.

EXAMPLE - STARTOWN GENERATION

MAIN DRAG. 1D roll = 5. There are 5 streets giving off the Main Drag. 1st, 2nd, and 3rd

streets are arbitrarily placed on the right.

1st Street. North 1D roll = 2. Two buildings, one at the corner. South 1D roll = 1. One building at the corner.

2nd Street. North 1D roll = 4. Two buildings north (one at the corner), two buildings on Red

Alternately, fix the number of side streets based on the starport class:

Class A: 4 Off-Main streets Class B: 3 Off-Main streets Class C: 2 Off-Main streets Class D: 1 Off-Main street

Zone 21st street, at an angle north off 2nd Street. South 1D roll = 4. Two buildings south (one at the corner), and two buildings on Red Zone 22nd street at an angle south off 2nd Street.

3rd Street. North 1D roll = 3. Two buildings north (one at the corner), and one building on Red Zone 31st street north off of 3rd. South roll = 4. Two buildings south, one at the corner, and two buildings on Red Zone 32nd street south off 3rd.

4th Street. North 1D roll = 3. Building on the corner, building Off-Main, and one on Red Zone 41st street north off 4th. South roll = 3, same results (Red Zone would be 42nd street south off 4th).

5th Street. North roll = 2. Building on the corner, and one Off-Main. South roll = 3. Building on the corner, one Off-Main, and one on Red Zone 52nd street south off 5th.

Okay, I've got a zoned map. I can fill in whatever I want, but as I'm testing out my random tables, I'll roll for every spot.

RESULTS

I'll start with the Main Drag, which suggests there are 10 buildings, on corners where the Drag meets the Off-Main streets. From there, I'll do the Off-Main streets, and end with the Red Zones. The buildings and their locations are:

Main Drag:

Taxi service near extrality line.

Main @ 1st: Casino north, Greasy Spoon south Main @ 2nd: Bar north, Greasy Spoon south Main @ 3rd: Trade factor north, Bar south

Main @ 4th: Street vendor outside bar north, Bar south Main @ 5th: Mass transit station north, Casino south

Off-Main:

1st Street: Used vehicles lot north

2nd Street: Arena north, Bail bonds south

3rd Street: Food kitchen north, Very greasy spoon south

4th Street: Bad hotel north, Bad bar south

5th Street: NEW equipment shop north, Bad bar south

Red Zones:

21st Street: Brothel nw, Bad greasy spoon ne 22nd Street: Equipment shop + Grifter, Mission 31st Street: "Tattoo" parlor and implant shop nw

32nd Street: "Zoo" sw, Loan Shark se 41st Street: Crooked Casino nw 42nd Street: Crooked Casino sw 52nd Street: Truly ghastly hotel sw

Draw a map and you've got a handy in-game artifact.

GIVING DIRECTIONS

Now (theoretically) a passerby could give directions to players to these locations.

PC "I'm looking for the Roasted Kian... it's a bar in Startown..."

NPC "Yep, it's south 4th Street off the Main Drag. Can't miss it."

-or-

NPC "Uh, yeah, that's northeast 21st Street, and are you really sure you want to go there?"

PC "Well... can you recommend something better?"

NPC "Sure can. Head to south 1st Street, the food and... ambiance... is a bit healthier."