

Introduction

The Starport is an extremely important part of the game and the background for many adventures. Every character passes through one at some time or other, whether he is a Starship Captain or is travelling Low. Despite the article on Champa Interstellar Starport in *The Journal* (No 7) I feel that this is an area in the game where the general outline has been fixed but some important details have been missed.

In nearly all cases the overall design of a Starport is going to be governed by one thing - money. Unless the Starport is on a world considered vital to the Imperium and thus the facilities are heavily subsidised, it will have to pay its own way. It should be rare indeed to find an A class Starport on a Poor world.

Landing Grounds

Or, how to save 4500 Credits each time you land... Most of the different types of landing areas depend on the Starship landing vertically in order for them to work, eg the 'Blast Pit' or 'Landing Pad'. While this is reasonable in low gravity or airless worlds, it is a waste of fuel on a planet with any sort of atmosphere. In order for a ship to make a planetary landing on a world with an atmosphere the ship has to be streamlined. As this is the case, why waste fuel landing vertically, when you can land like a TL7/8 Space Shuttle and glide in for free? All you need is a large runway.

The amount of fuel required to land vertically is going to be at least equal to that required to take off, and probably quite a bit more as the ships final speed is rather important... (And despite the fact that the ship is now a few tons lighter from the fuel used.) Taking the ratio between take off and landing vertically to be equal, for ease of calculation and allowing for at least half-way-decent computers, the following can be deduced:

1. Using the example of a Scout-Courier with a total fuel tankage of 40 tons, after a Jump-2 the amount of fuel remaining is 20 tons. The amount of fuel used during the week of the actual jump, can be taken as part of that used to perform the jump.

2. The amount of fuel required to manoeuvre to-back from 100 planetary diameters is small compared to that required to lift the ship. In order to ease the burden of calculation it can be taken as one tenth of the fuel remaining, that is 2 tons. This leaves 18 tons to take off/land vertically, or 9 tons for each.

3. Therefore by gliding in like a TL7/8 Space Shuttle using no fuel, you can save 9 tons of fuel (at 500 Credits a ton...). All the above assumes that all goes well of course, and depends a lot on the pilots skill. Not all Spaceports however will have the space for a 5km landing runway; for example Champa Interstellar Starport is built on an offshore island. These Spaceports will be less expensive to build initially, but cargo prices will be slightly higher. It is therefore reasonable to assume that a Landing Ground consisting of a runway 5km long (and perhaps 1km wide) is a preferred part of any commercial Spaceport. Naval facilities with no worries about fuel consumption would probably not require Landing



Starport Design in Traveller by Thomas M Price

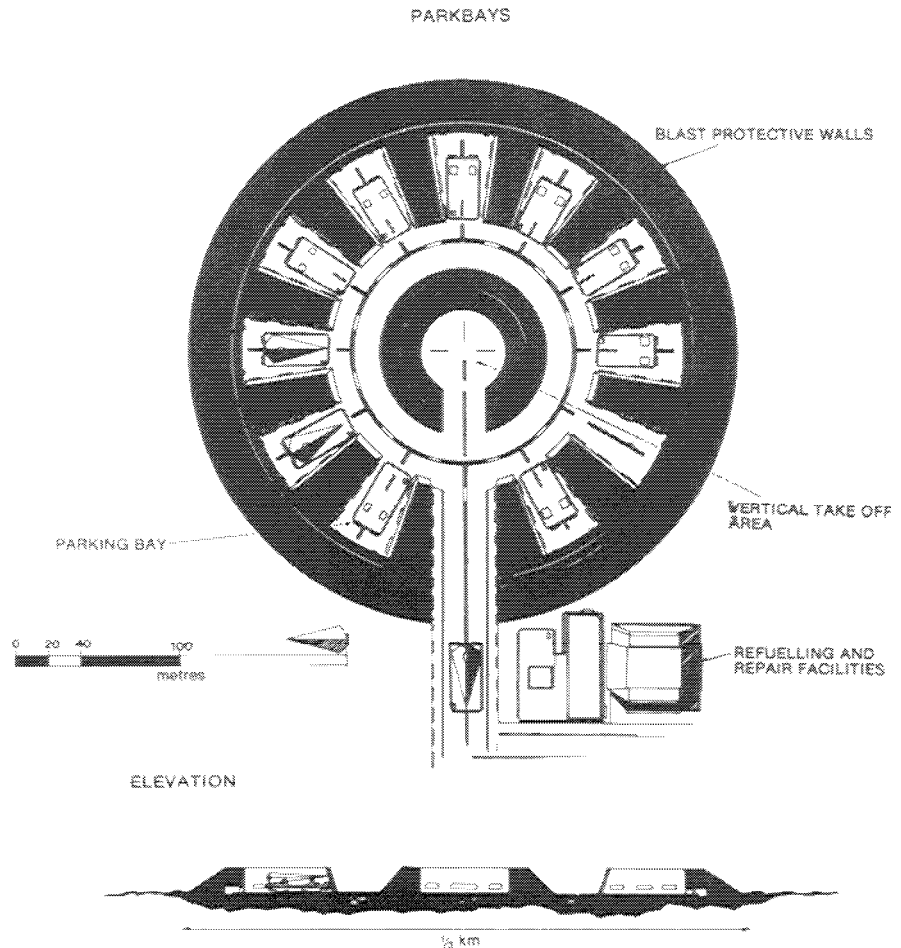
Grounds. (The Space Shuttle requires only 9000 feet to stop, and can do it in much less.)

Parkbays

Having landed, the ship wouldn't be left out in the middle of the field, a long way from any facilities and a menace to other ships. The ship must move (or in an emergency, be moved) to somewhere near the Starport facilities. This leads to a problem as a Starship makes quite a powerful bomb, and who wants to leave a lot of potentially dangerous ships out in the open, near the Starport buildings. There is also the owners concern with security (and with most of the players I know, I don't blame them!). Army depots have buildings housing the ammunition separated by Traversing (cal-

led elsewhere Bunds or Blast Protection Berms). The Traversing is basically a blast wall designed to direct the force of the blast upwards. Similarly, individual ships could be housed in bays separated by blast walls. Each bay would have its own small accommodation building attached, with its own kitchen and security office. These would come as part of the landing fee, for the ships guards to use during the stay in port.

A number of bays would be grouped together for the best use of space and materials, and would have a central Vertical Take Off pit. Just outside the protection wall would be a Starport refuelling/minor repair building and transportation for crew and cargos [see plans]. A group of bays and take off pit, together with its attendant facilities is called a *Parkbay*.



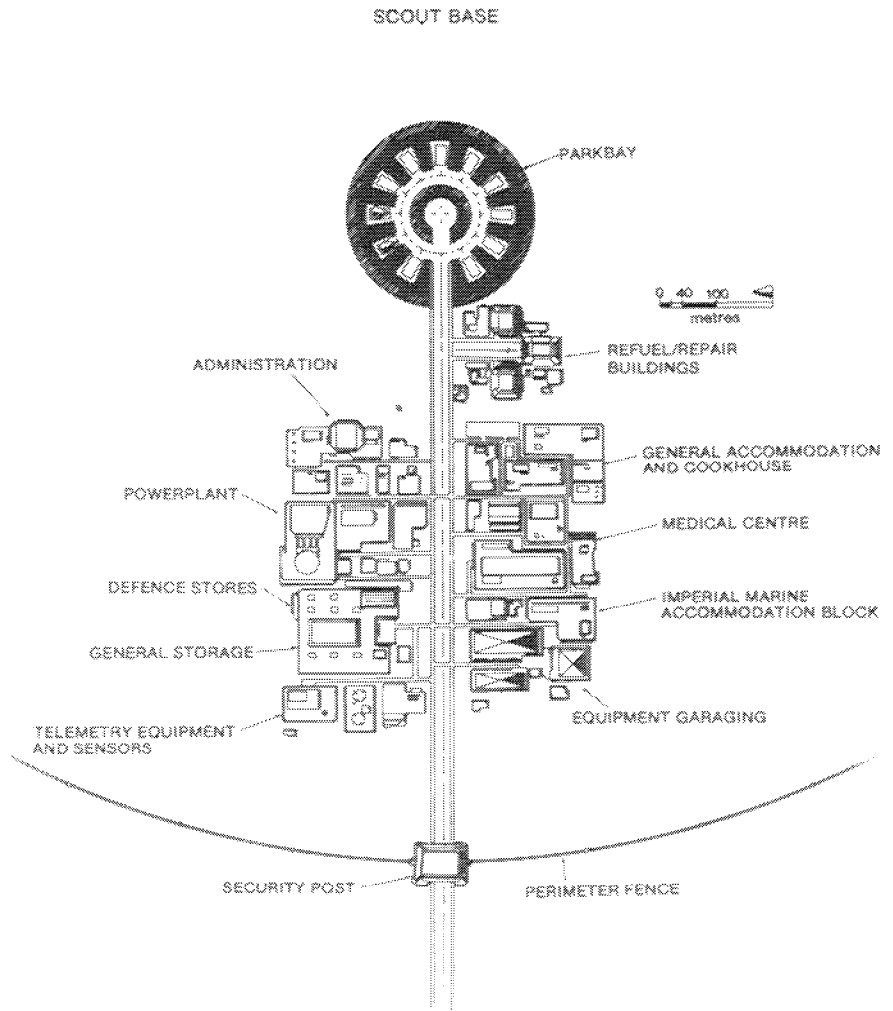
The Parkbays themselves would be grouped around central points in large Starports (C or greater). The blast protection Traversing will not offer complete protection from the meltdown of a starship engine, but it will prevent the ships in neighbouring bays melting down as well.

Naval Facilities

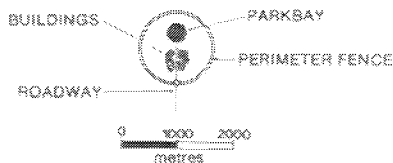
Scout Bases. The Scout Base would not be a large affair in most cases, as it usually only caters for scout/courier ships. There is no requirements for a Landing Ground as there are no fuel restrictions, so one Parkbay would normally be sufficient. The associated buildings would be few, an Admin block and equipment store, and an accommodation block housing the Marine Unit. The fuel store would be underground. The normal Parkbay Repair facilities would be enlarged allowing complete overhauls to be carried out. The orbital facilities of the Scout Base would be larger containing all the supportive equipment for the X-boat network in that system.

Due to the large number of Scout Bases throughout the Imperium the design would be standardised [see plans].

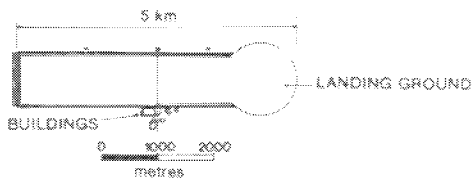
Any Customs or Immigration regulations would be carried out at the ship, at the time of landing. Regulations would be kept to Imperial Standards with any local Planetary regulations enforced on leaving the Spaceport boundary. Cargo transactions would take place at the Parkbay. The sale would be agreed either over the commlinks or by agent, a truck and Material Handling Equipment (MHE) would arrive and unload the cargo and take it away there and then.



SCOUT BASE

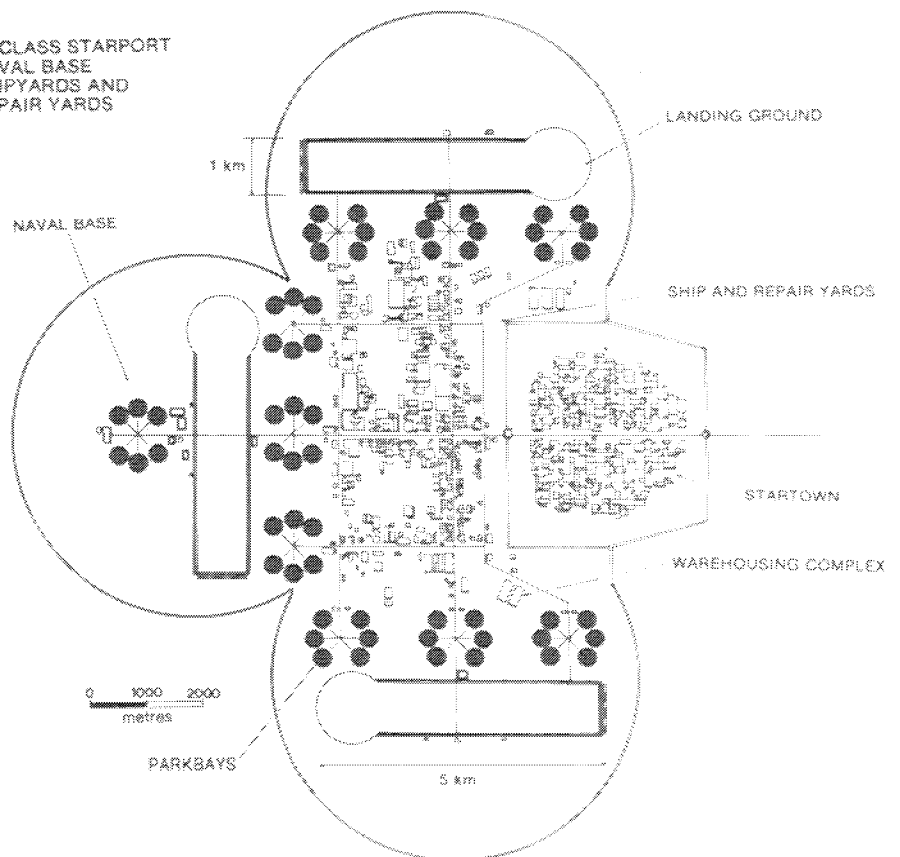


'E' CLASS STARPORT



Naval Bases. Naval Bases are much larger affairs both in orbit and on the ground and would vary greatly from place to place. There would usually be no requirement for a Landing Ground but some of the larger bases may well have one. There would be several Parkbays and more buildings. A good number of the facilities would be underground in 'Hardened' silos. The headquarters of the Marine Garrison would be in the Naval Base. There may well be a Naval Shipyard for the repair and construction of Military Vessels. The orbital facilities of a Naval Base would include all the functions of a Scout Base so there would not be a separate station except in the most unusual of situations.

'A' CLASS STARPORT
NAVAL BASE
SHIPYARDS AND
REPAIR YARDS



Startown

The Starport's income comes from a number of sources. The sale of fuel, equipment, repair fees, warehousing fees and a percentage from cargo sales being the principal money makers. However, these alone are clearly not enough to support the expense of running a large Starport.

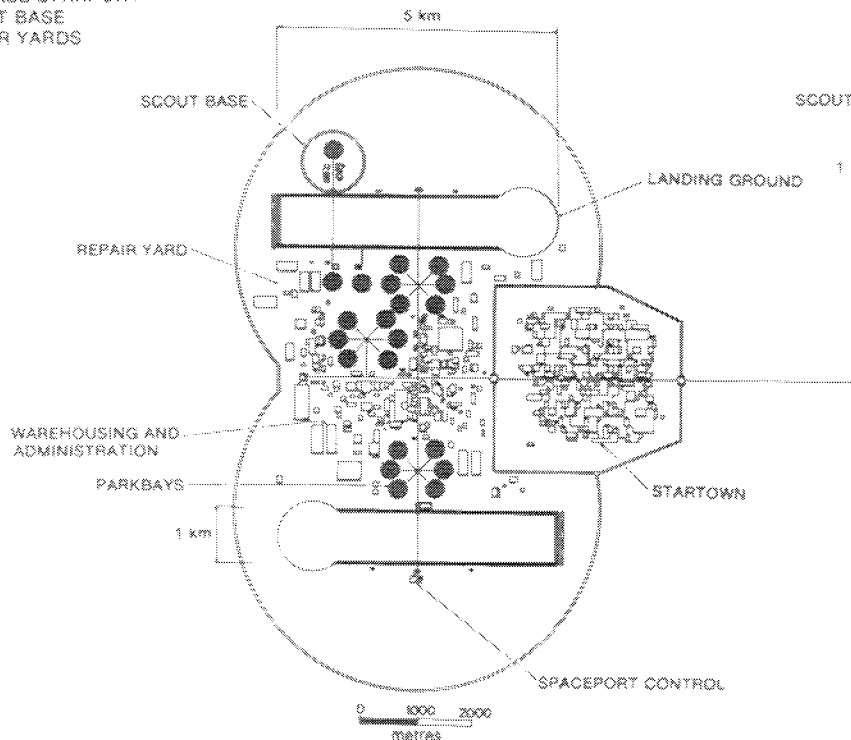
It does not seem reasonable to me that most of the plans I have seen of Starports, show the Startown *outside* the Extrality Fence. In order to support the

running of the Starport, recreational facilities and accommodation is required in abundance *inside* the Extrality Fence. As the Starport is Imperial Territory, it is not subject to the same rules as the host planet, so it can run all the operations that are illegal (and immoral) on the planet generally. (And all tax-free...) Thus by having the Startown *inside* the Extrality Fence you can provide for the needs of crews on R&R, and make a handy profit for the Starport. Whether the Starport Authorities run the

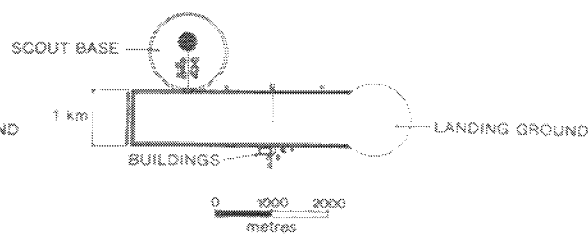
operations directly or lease them to enterprising locals will vary from Sector to Sector.

While there is much crime in a Startown it is not as bad as its reputation. Like any City it has its 'bad' areas, the better areas will be regularly patrolled by the Imperial Marines and the Starport Police. There will also be Licenced Police to protect specific building complexes, for example, The Travellers Aid Society. It is probably most useful to think of Startown as 'Las Vegas', where you can get

'B' CLASS STARPORT
SCOUT BASE
REPAIR YARDS



'E' CLASS STARPORT
SCOUT BASE



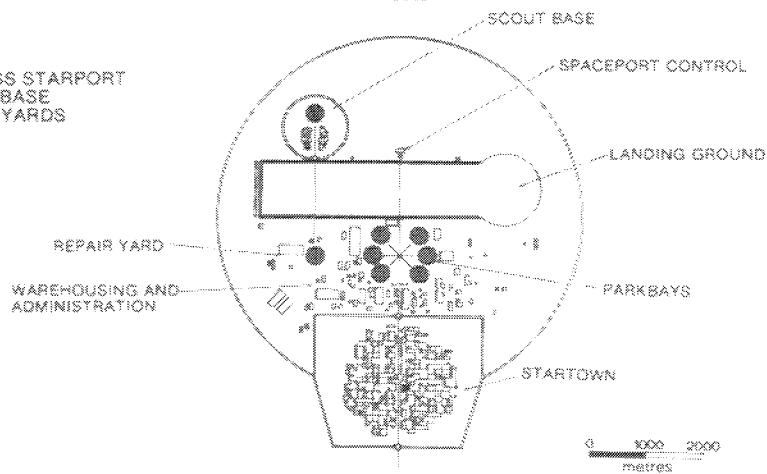
anything for money but you won't be surprised if you get ripped off.

There will, of course, be an interior fence between the Startown and the rest of the Starport and strict controls on access. The Starport Authorities don't mind reaping the profits of Startown but won't allow it to interfere with the running of the Spaceport. In a number of Starports the income from the Startown far exceeds that gained in normal trade.

Conclusions

The size of a Class A Starport is going to be a lot bigger than most people realise. The size of the Landing Ground and the Startown have to be taken into account. So, don't think big, think *huge*...

'C' CLASS STARPORT
SCOUT BASE
REPAIR YARDS



'D' CLASS STARPORT
SCOUT BASE

