2024/05/28 22:21 1/10 Harbor-class Trade Station

Harbor-class Trade Station

A cheaper and more cost-effective civilian station to replace the Civilian Orbital Space Station.



About the Ship

Much smaller and cheaper than its larger counterpart, the Harbor-class Trade Station is the second design to come out of Abwehran Imperial Yards to be sold to civilian corporations and independents.

Key Features

The Harbor Trade Station is a cheaper civilian station than a Civilian Orbital Space Station and is open for purchase by other organizations.

Mission Specialization

To provide a safe port for civilian craft moving along trade lanes and ports of call.

Appearance

The Harbor-class Trade Station is a large, thick disc with protrusions on both dorsal and ventral sides to look like a bunch of city skyscrapers rising up from the ground. Then jutting out horizontally from the disc at 90-degree intervals are box-like protrusions for docking purposes.

History and Background

A station that had been on the design table since AF 259 (YE 28), the Harbor Trade Station was to replace the near obsolete Civilian Orbital Space Station. The Civilian Orbital Space Station was a massive civilian center that was much too massive to maintain properly in systems farther from Jaspis, which meant a smaller station would be needed for the eventual expansion into the galaxy.

While it had been in the design stage, it wasn't until AF 260 (YE 31) that designs could be completed for the Harbor Trade Station. Because of this, many of the Jaspis System's COSSs had been modified with hyperspace fold modules to move colonization efforts forward. Currently, the Harbor Trade Station is to replace COSSs in Meltra, Schongebiet, and Himmel Der Bergleute with plans to build two more in ASE-006 and Neue Jaspis, once negotiations and Anti-Junker operations are completed. But with the decision to sell these stations to the public, many more could be built.

Statistics and Performance

General

Class: Ay-P5-1a Type: Civilian Trade Hub Designers: Kaiserlich F&E Manufacturer: Abwehran Imperial Yards Production: On Demand Fielded by:

- CSAA
- Civilian Corporations and Independent Contractors for 20,000,000 AC (6,670,000 KS)

Passengers

Crew: 55,415

- 1 Station Commander
- 39 Traffic Control Center Personnel
 - 3 Chief Traffic Controllers
 - 36 Traffic Controllers
- 40,071 Engineering Personnel
 - 1659 Engineers
 - 150 Machinists ¹⁾

2024/05/28 22:21 3/10 Harbor-class Trade Station

- 3600 Mechanics
- 34662 Technicians
- 10,548 Medical Personnel
 - 1758 Doctors
 - ∘ 8790 Medical Technicians
- 4756 Cargo and Supply Personnel
 - 600 Dock Quartermasters
 - 156 Chief Foremans
 - 4000 Dockworkers

Marines/Security: 2900

Pilots: 2400

Civilian Government Employees: 300,000²⁾

Corporate Employees: 500,000

Maximum Capacity: There are accommodations for 900,000 people. About 1,800,000 people can fit aboard in an emergency, but the station would be extremely cramped.

Dimensions

Length: 5 kilometers (3.1 miles) Width: 5 kilometers (3.1 miles) Height: 1.9 kilometers (1.18 miles)

Decks: 468 (4 meters each)

Propulsion and Range

Continuum Distortion Drive: N/A Hyperspace Fold Drive: N/A Sublight Engines: N/A Range: In-System

Lifespan: 100 years Refit Cycle: Every Two Years

Damage Capacity

See Damage Rating (Version 3) for an explanation of the damage system.

• Hull: 120

• Shields: 160 (Threshold 2)

Inside the Ship

Compartment Layouts

Agricultural Section

A large section of station dedicated towards plants and livestock, each level of the Agricultural Section is actually twelve meters in height to provide ample space. While farms are the most common of facilities in the Agricultural Section, recreational parks can also be found here to provide a place to relax. About 10% of the Harbor's volume is comprised of the Agricultural Section.

Cargo Storage Areas

Large areas of storage space, there are cargo storage areas near Docking facilities, the Agricultural Sections, food preparation areas, and even the Fabrication Center. Storage areas near the Docking facilities tend to be the larges and hold stores for resupplying warships and strike craft with the necessary ammunition, food, water, and fuel. Each of these storage areas is dedicated to a certain type of necessity for safety from volatile substances and contaminants.

Agricultural Section storage areas are more straight forward and are used for storing the variety of produce that can be harvested year round. Storage areas for kitchens and restaurants on the Recreational Level are normal divided into refrigeration and dry-food storage, while Fabrication Centers hold all the materials needed for construction.

Central Computer Center (CentComp)

Unlike its military counterpart, a Harbor's CentComp contains only two CU-24 computer systems with a pair of Program AIM units acting as masters. This is mainly because Smart AIMs are seen as a military asset, thus it is unavailable to the public. The two Program AIMs are responsible for delegating duties of a variety of VIMs found in the various computer centers on board.

Commercial District

Located in the multiple skyscraper structures on the dorsal and ventral sides of the Harbor, the Commercial District contains Station Administration areas and Corporate Offices that can be rented out to both native and foreign corporations. Offices range from small, one-room facilities for the small business owner to entire sections of nearly fifty offices for the mega-corporation. Each facility can be modified for specific uses and have the ability to have variable gravity and atmosphere settings.

Computer Centers

The Harbor Trade Station has twelve Computer Centers with CU-24 computer systems. Each computer is run by a Virtual Intelligence Model of the Kesslinger Intelligent Operating System.

2024/05/28 22:21 5/10 Harbor-class Trade Station

Crew Cabins

With large amounts of volume in the Harbor, Crew Cabins are a lot like apartments on planets. Varying in size, Crew Cabins are classified by Marriage Status. Furnishings and basic entertainment equipment are provided.

Bachelor Cabins

A Bachelor Cabin is one of the smallest cabins on a Harbor. There is a main room with a small kitchenette and a small bedroom with bathroom.

Married Cabins

Cabins for Married individuals are much larger than their Bachelor counterparts. There is still a Main Living Area with appropriate furnishings and entertainment center, but the kitchenette is replaced with a separate room for both kitchen and dining area. There are two bedrooms: a Master Bedroom and a large bedroom for other dependents. Two bathrooms are provided as well.

VIP Cabins

Luxurious Cabins for visiting dignitaries and other high ranking officials, VIP cabins are structured much like Married Cabins. The main difference between the two is much larger volume for the VIP Cabin.

Damage Control Centers

In order to make damage control efforts more efficient, the Station has been divided into twelve piesections. Each circular pie section is then divided vertically into 25-deck sections with a couple of 8-deck sections on the top and bottom most points. A single Standard Damage Control Center then commands repair efforts in these sections and resulting in the formation of a damage control network. There are about 218 Standard Damage Control Centers in a single Harbor.

Docking Arms

While the four docking sections only have a pair of arms each for Large Transports and Bulk Freighters, the rectangular sections the arms are attached too are built to house medium-sized transports. With all the facilities necessary for maintenance and resupply, the Harbor Trade Station is full capable of handling traffic 24/7 (or 48/4 for the Abwehran). Each arms have the capacity to handle six Large Transports while the rectangular sections can hold twenty medium transports in its central Docking Station.

Drone Hives

Lining the Harbor Station's rim, there are around thirty-six Drone Hives that contain 20 ASD1 Construction/Repair Drones each. These Construction Drones are used for EVA repair work on docked transports and the station itself. They can also be used to construct various orbital support facilities around the celestial body the station orbits.

Engineering

For a station the Harbor's size, a single engineering section wouldn't be enough to power all of its systems. Thus, the Harbor has the equivalent of 25 Standard Large Warship Engineering Sections. Though many components of the Large Engineering Sections have been removed, such as the Hyperspace Fold Generator, the amount of Fusion-Fission Reactors is enough to power everything necessary.

Factory Section

A full 30% of a Harbor is dedicated to manufacturing facilities. These large sections are divided up into smaller compartments that are rented out to manufacturing corporations and even independents. Of course, about 40% of the Factory Section is reserved for the Harbor's use to produce replacement parts for the station and docked vessels.

Launch Bays

Located on the sides of the rectangular structures of the Docking Arms, these facilities are dedicated to Small Transports and Shuttle craft. There are ten launch bays per Docking Arm with the capacity to hold five small transports and twenty shuttles.

Laundry Facility

The Harbor contains a central Laundry Facility where all laundry is taken to be cleaned. Filled with Commercial Laundry facilities and Dry-Cleaning equipment, the Laundry Facility can clean nearly 40000 tons of clothes a day.

Maintenance Conduits

Small passageways that technicians have to crawl through, they are large enough for an adult Abwehran male to crawl on his hands and knees.

2024/05/28 22:21 7/10 Harbor-class Trade Station

Medical Center and Laboratories

Much like it's military counterpart, the Harbor Trade Station is responsible for hundreds of thousands of individuals with millions more moving through each year. Because of this, the Harbor is set up much like the Bulwark-class Military Outpost. With a central hospital and 218 clinics spread throughout the station, the Harbor also includes an additional four hospitals (one near each Docking Structure).

Outpost Commander's Suite

The Outpost Commander's Suite is different from the usual quarters on board a Harbor. While spartan in decor, it has the largest volume of all living quarters. A six room apartment, the Suite is divided into a Master Bedroom, Day Cabin (Office), Living Room, Kitchen/Dining Room, and two Bathrooms. The Master Bedroom is large enough for Outpost CO and his spouse(s) with multiple beds or just a single large bed and appropriate furnishings. A large Bathroom is attached to the Master Bedroom, but the Master Bedroom also has doors leading to the Day Cabin and the Living Room. The Day Cabin is the Outpost CO's office and leads to the outside corridors, though another door also leads to the living quarters of the Steward responsible for the Commander. The Living Room is a rather large room that is furnished with sofa-beds so that children can live there too. The Living Room also leads to the Kitchen/Dining Room, the second Bathroom, and the Outside Corridor.

Passageways

Standard spartan and utilitarian passageways are used for everyday foot traffic are quite common on the Harbor, but there are also a series rings located at various points of the disc. These rings are much like ring of a tree in pattern and are used to get personnel to locations on the massive station quickly and efficiently.

Recreation District

Filled with Shops, Hotels, Parks and a variety of other entertainment facilities, the Harbor dedicates a vast percentage of volume to its Recreation District. Each Harbor has a Recreation District that can be customized to the investor responsible for the station's operation.

Standard Recreation Districts under CSAA operation includes stores and restaurants for lease to individuals/companies, a single amusement park, nearly twenty nature parks, and a variety of sporting arenas.

Station Control Center

A spherical traffic control center with a single disc in the center, the Station Control Center always has twelve Traffic Controllers and a Chief Traffic Controller on station at any given time. The sphere is used to project a view of space surrounding the station.

Ship Systems

Armored Hull and Hull Integrated Systems

A Harbor's frame consists of titanium-filled trusses of Durandium Alloy covered by a standard civilian hull and the old Tri-Layer Armor.

Computers and Electronics

There are 14 CU-24 Computer Systems used to operate the Harbor Trade Station with two operating on Program AIMs and the remainder on Virtual Intelligence Models.

Communications

- Radio
- Station Laser Communication
- Sound-Powered Telephones
- Station Subspace

Detection

- Station Gravatronic Radar
- Infrared Spectrometer
- Imaging Scanner Package
- Station Subspace Mass

Emergency Systems

The Harbor uses a compartmentalized design to protect areas against catastrophic decompression and hull breaches. The station also has six Station Escape Podss per Damage Control Section (1308 Pods in all) to facilitate quick escapes in case of station destruction.

Life Support Systems

The Harbor primary source of clean air comes from the plants found in both Agricultural Sections and Recreation Level. A series of Artificial Photosynthetic Life Support Systems provides waste filtration, emergency rations, and a back-up air recycling system for the station.

9/10 2024/05/28 22:21 Harbor-class Trade Station

Propulsion

While the station is an immobile, orbital harbor, the Harbor contains nearly 100 Station-keeping Fusion Engines located at precise intervals to maintain a stable orbit around its host planet. This is mainly due to the fact that standard maneuvering jets are unable to provide the thrust necessary to keep such a massive vessel in orbit.

Shield Systems

The Harbor Trade Station uses a Sectional Defense Field and Hazard Shield just like it's military counterpart. Each Damage control Sector has a Defense Field Generator for a total of 218 generators on a single Harbor.

Weapons Systems

Anti-missile Laser Emitter: 120, 1 SDR

Vehicle Complement

Drones

720 ASD1 Construction/Repair Drones

Shuttle Craft

• 800 Schiffchen

Commerical

• Small Transports: 200 • Medium Transports: 80

• Large Transports: 48

For Station-run Manufacturing

If Operated by CSAA

Last update: data: faction:abwehran_star_empire:technology:spacecraft:harbor_trade_outpost https://wiki.stararmy.com/doku.php?id=faction:abwehran_star_empire:technology:spacecraft:harbor_trade_outpost&rev=1587841933 04:38

From:

https://wiki.stararmy.com/ - STAR ARMY

Permanent link: https://wiki.stararmy.com/doku.php?id=faction:abwehran_star_empire:technology:spacecraft:harbor_trade_outpost&rev=1587841933

Last update: 2023/12/21 04:38

