

Elysian Planetary Defense Satellite

1. About the Planetary defense Satellite

The PDS was developed as an answer to super weapons, and contains many systems to combat these.

Although a very large satellite it has a very small crew, and only a relatively small accommodations area, most of its mass given over to the powerful systems and technology required to make it work. It makes up for the lack of technological finesse that Elysia has missed out upon by being under Yamatai's thumb through having comparatively large devices.

2. History and Background

Upon its independence Elysia found its greatest threat in that most of the nations which might not be friendly to it possessed super weapons whereas in general it did not. The largest problem was not in ship to ship battle, for while Elysia had a major disadvantage in this area it would only lead to thousands of deaths in battle. No, the largest problem was that the Elysian's planets were open to being attacked with a super weapon, such large targets, impossible to move out of the way and with such dire results resulting with their destruction. The fact that a single ship could kill millions or billions with the single firing of a weapon was clearly something that needed to be remedied.

As such the PDS was designed, with multiple systems designed to counteract the effects of super weapons, including Interdiction fields and shields, as well as advanced wormhole devices. Their production was begun almost at once, but to give coverage of Elysia Novus and Veritas would take time.

Since [YE 34](#), all remaining ships of the class have been mothballed at the [Elysian Naval Arsenal](#).

3. Dimensions and Crew Compliment

Organizations Using This Vessel: Elysian Celestial Navy Type: Planetary defense Satellite Class: En-P-01
Designer: Manufacturer: Elysia Nova Ship Yards.

Crew: A minimum of one operator. The standard crew is 5, with two shifts of two (plebians) and a commander (archangel). Maximum Capacity: 5. Appearance: The PDS is a very smooth and flowing disk like object, which is of black color. Most of the time the PDS can not be seen due to its stealth systems.

- Length: 500m
- Width: 500m
- Height: 50m
- Decks: 1

4. Performance Statistics

- Speed (STL): 0.045c.
- Speed (CDD): .20 to 1,000c using Combined Distortion Drive.

Note: The CDD can still function (although at reduced efficiency) even in the presence of anti-FTL fields.

- Speed (Aerial): Mach 1 in atmosphere (When using shields to maximize aerodynamics). The PDS has the ability to use its anti-gravity systems to have a soft landing and VTOL.
 - Speed (Water): Up to 5 knots underwater. The PDS is able to 'float' on the surface by increasing its buoyancy using its anti-gravity systems.
- Range: The PDS is designed to surround a planet and to protect it, and as such is not intended to go anywhere. The only reason it has an FTL device is that it might travel to another planet, but this is not expected to be used heavily.
- Range (Support): The PDS' recycling systems means that food, water and oxygen will not run out, with a full crew, for 12 months.
- Lifespan: Ten years. The easy availability of repair crews from the planet will greatly increase this.
- Refit Cycle: Gradual modifications and improvements will be made as the design is improved and perfected and Elysian technology progresses. A complete update will occur every six months.

5. Inside the PDS

Bridge: The Bridge of the PDS is a rather small affair, a five meter by five meter circular room with the captains chair at the center and with the two other stations built in to the walls on either side with two chairs. These two stations are Communications/Sensors and Tactical.

Corridors: There is only one corridor in the PDS, and it's a completely non descript affair with a thin carpet to provide friction.

Commanders Quarters: The commanders quarters are a five meter by six meter rectangular room which is well furbished with a large four poster bed, a fake marble floor and wood paneling, and a writing desk. There is a computer interface built in to the desk. There is also a wardrobe and a chest of drawers.

Crew Quarters: There is a single two person crew quarter on the PDS made for crew. It consists of a three meter by two meter room with a single bunk bed, two chests of drawers and two wardrobes to be shared between the four occupants. Four occupants can share a room because their shifts mean that they will never be in the room at the same time, and to save room.

Toilets: There is a single toilet in a one and a half by one and a half meter cubicle next to the Crew Quarters, with a toilet, a mirror and a basin.

Showers: There is a single shower in the PDS which is a one meter by one meter room next to the toilet. It's simply a shower and a shampoo/conditioner dispenser.

Wardroom: The designers of the PDS were not going to waste space on both a mess hall and a wardroom,

and so the Commander is meant to eat with the rest of the crew. In practice an archangel may well decide to either order the plebeians to eat in their rooms or eat his meal in his. The Wardroom is four meters wide by five meters long and has a large table in it which fills up much of the space. Plates and cutlery are taken from a cupboard at the back, and the rations are taken from a pantry. The pantry has enough food for twelve months if rationed carefully.

6. Ship Systems

Hull/Armor: The relatively new Elysian “scale” armour, which nests thousands of super-durable plates in a self-regenerative base. This is highly damage resistant and disperses energy very quickly due to its high surface area.

- Armor Type: Medium
- Structural Points: 24

Shield Systems: The PDS is a near-stationary satellite which is very likely to draw fire in order to negate the numerous bothersome effects it generates as well as its tactically significant place in Elysian defense. As such, it needs very powerful shields, which it has in the form of a Continuum Distortion Shield. The CDS sustains what is in effect a pocket universe around the PDS by nesting electrogravitic and electrostatic fields. The ship is protected from both solid and beam weaponry because they pass through the curved space and around the ship. These shields are automatically modulated and phased with most frequencies, planes and dimensions covered. By modulating the shields to be more effective against the bands which the enemy weapons operate, rendering them largely unsuccessful. The CDS can protect against up to 3.75 YottaWatts worth of damage.

- Shield Points: 30 (Stopping power 3)

Stealth: For one reason or another it was seen as more convenient if the PDS' position was hidden, not only to help protect, and to simply leave their existence as a mystery. Elysia did not want people to know about their premier line of defense. Using its CDD to generate a field of curved space, the PDS is rendered somewhat invisible to scalar radar, aetheric-energy sensors, and other forms of detection. It can use scalar fields to simulate photons and other sensory forms to simulate empty space. The stealth systems are far from perfect but ensure that the PDS remains hidden against all but the most concentrated searches.

Interdiction Field: One of the most important features on the PDS is the Interdiction Field, meant to defend both itself and the planet from a wide variety of super weapons or other offensive effects. The interdiction field, which extends in a disk two hundred kilometers wide by fifteen deep, and the interdiction field generator take up a very large part of the Satellite, attempts to prevent hyperspace, subspace, normal space or any of the plethora of other dimensions from being warped or manipulated in any fashion. This prevents Transposition beams from working, given that they warp space, and also attempts to protect against any other weapon that uses dimensions to function, such as those that travel through hyper-space, draw energy from hyperspace directly to an area, rely on a sub-space effect such as sub-space tunneling, casing or shielding. It also prevents wormholes opening within the area of effect (including the PDS' wormhole system). This thus provides excellent protection many different super-weapons that might threaten the PDS or planet. The Interdiction field is so integral to the design and

purpose of the PDS that it remains on almost constantly, only opening a hole in it when an approved ship needs to pass through (although normally they'd be expected to use an STL drive).

Damper Field Generator: To defend the satellite and the surrounding area against scalar electro gravitational weaponry, which otherwise would have a devastating effect, the PDS is equipped with powerful anti-gravity device. This creates an anti-gravity effect which more than negates the force of gravity, turns Scalar EM waves back on itself, and completely defends anything within the area of effect. The field is designed to cope with even the most powerful scalar weapons. The Field is on by default, and has the added advantage of significantly reducing the effect of projectile weapons, sapping their energy with the repulsion effect. The field's area of effect is a kilometer in all directions.

Wormhole Defense System: The WDS was designed to negate the effect of other super weapons not treated by the Interdiction Shielding. It operates by using faster-than-light sensors and predictive programming to work out if it's likely that a ship is going to fire its main weapon, or to notice that a weapon has fired before said weapon impacts. Its predictive programming simply works out when a ship is most likely to fire a weapon, and monitors such factors as when was the last time the weapon was fired. The WDS then opens up a large wormhole in front of the ship that is about to or has just fired; the wormhole is usually the predicted size of the effect. The other end of the wormhole is usually somewhere where it will do no damage, but if the PDS sees the opportunity it will effectively reroute the effect to target an enemy. It should be noted that these predictive systems are fairly accurate but are not perfect, often mistiming wormholes or missing others. Because of this interception, using data relayed from the FTL sensors plays arguably a greater role. The WDS is capable of opening up to five major wormholes up to 2.5 AU away. The secondary effect of the WDS is to use smaller wormholes against such things as torpedoes or smaller weaponry effects, although with these it is more a case of interception based on sensory readings. The WDS can open up to fifteen of these smaller wormholes with a range of 500,000 miles. This system can not be used while the interdicator system is in use.

Airlock System: There is a single airlock on the PDS, at the end of the one corridor on the satellite, although several hundred meters further down. The airlock is a simple dual door system with an extendible

Escape Pods: There are is one escape pod in the PDS, and it is next to the Airlock. It's a simple escape pod with its own CDD capable of 5,000c and large enough to contain four Elysians.

Environmental Systems: The Environmental Systems on the PDS are very functional. They keep the interior at a pleasant temperature and so forth, but aren't anything particularly complicated beyond this.

Air Recycling System: The Air Recycling system is relatively efficient, making use of enhanced enzymes along with other systems which break down carbon dioxide in to carbon and oxygen with very little loss.

Sensor and Computer Systems: The PDS has a fairly advanced computer system, and a really quite effective sensor system needed for its WDS and to predict and intercept attacks.

Central Computer: The central computer of the PDS is a semi-organic sub-sentient computer that, while not an actual AI, is capable of using quantum computing for extreme speed. It is designed primarily for the ability to predict where and when an attack is likely to come from, and to be able to track hundreds or thousands of targets and to then monitor attacks of theirs which might even be exceeding to speed of

light and respond to them with the WDS.

Conformal PSC: The Psionic Signal Controller provides psionic and telepathic protection capable of nullifying all such activity. The device selectively allows some channels to allow secure telepathic operation even during psionic attack. They also function as protection against 'magical' effects.

Unidirectional sensors the PDS uses variable wide-band imaging clusters,

- Long-range gravimetric sensors: These powerful sensors sense the presence of ships and other objects through the warping effect their mass has on space-time. While this sensor is not particularly good at getting exact information about the ship, it is extremely good at working out where something is, and the speed it's moving at. It also beyond many types of cloaking device to foil this indirect form of scanning.
- Magnetic Resonance Scanners: This sensor is used to identify what the target's hull, and the other elements that compose the ship, are composed of. Upon collecting this data it is compared with the ship's database and which identifies whether this variety of ship has been seen before, and possibly distinguishing the creator (a common trend in creations for example), or a weakness in design.
- Long-Range Infrared Spectrometer: This sensor detects the radiation given off by hot bodies. In space almost everything is cold, space itself is only around 3 Kelvin, and the only things which are significantly above this are stars, planets, and other celestial bodies. As such, if something is giving off Infrared radiation and it's not a celestial body, then it must be something artificial. This sensor won't work on the more advanced ships out there, but can be surprisingly useful at detecting less advanced, or damaged, ships.
- Distortion sensors: This highly sensitive sensor is capable of sensing the distortions of space which are created through CDD and CFS drives, as well as other technology that utilizes similar technology. In order to combat the danger that vessels cloaked using the CFS system could present, and so ships using a CDD could be tracked, this device was developed. It not only can locate the source of such distortions, but also discern certain information about it – such as power and possibly design.
- Interferometer: This device combines the information from many different bands to create a far more accurate depiction. The Interferometer on the PDS's of such a complexity that it can pick up tiny in discrepancies from the data corrected, and through doing so discover the locations of even rather subtle spatial distortions and cloaking devices.
- Spectrometers: The Spectrometers measure the properties of light in particular sections of the electro-magnetic band.
- Electromagnetic trans-space flux sensors: These advanced sensors detect tiny variances in the Electro-magnetic bands across all of the spatial planes. It functions as an incredibly advanced visual sensor, but only more so.
- Quark and gluon density scanners: These scanners are capable of measuring the density of Quarks and Gluons in space through a complex sensor system. These sensors are highly useful at tracking bodies, and find out what composes them by working out the mean density of a material and comparing it. By comparing such a collection of densities to the ships memory, it is possible to discern what the ship is, and where tactical weak points may lie.

These sensors face the front of the ship and have a range up to twenty-five light-years.

Omnidirectional sensors of the PDS include:

- Subspace mass sensors: This sensor simply detects mass in subspace, and its passage through this domain. This sensor also functions on the related hyper-space. It is vital for detecting vessels which are traveling through these domains. It is notably hard to hide mass from these variety of sensors when traveling through Hyperspace or Subspace.

These sensors have a range of ten light-years.

Weapons:

Shield-Piercing Anti-Matter Torpedo Launchers (5):

These five different launchers are each situated at a roughly equal distance away from each other, launching them using a electromagnetic system to launch them to close the speed of light. Upon exciting the Interdiction Shield they activate their own CDD devices launching themselves to 25,000c use an inbuilt navigation system to target, and find its way successfully to its target. Upon reaching its target it uses its CDD to help modulate itself with the opponents shields and hopefully penetrates it. If it fails then it explodes with its antimatter payload.

- Warhead: Shield-Piercing Anti-Matter Torpedo
- Purpose: To penetrate shields before exploding. Anti-Star Ship.
- Damage: Tier 12, Heavy Anti-Starship
- Range: 13,412,332,584 miles
- Rate of Fire: Individually from each launcher.
- Payload: 20 Missiles each.

Beam Eyes (60):

The ship's hull has 20 eyes on each side of the hull and 10 on the front and rear. These powerful beam projectors are used from anything to destroying missiles to cutting holes in starships.

- Primary Purpose: Anti-starship
- Secondary Purpose: Anti-mecha/Anti-fighter
- Damage: Tier 10, Light Anti-Starship
- Range: 2,000,000 miles
- Rate of Fire: 5 times a second
- Payload: Effectively unlimited, so long as the shuttle provides power.

OOO Notes

[Zakalwe created](#) this article on 2006/07/13 18:37; [Wes approved](#) it on 2006/07/14 06:41.

From:

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Last update: **2023/12/21 04:22**

