Hull no. 2274-8DS7D "ISS Oracle"

A small, fast, highly sensitive research ship owned, designed, and built by Thorn Ironhart during her apprenticeship. Due to its known stealth capabilities, images will be limited.¹⁾



About the Ship

The pilot and Captain of this vessel built and designed as the completing project for her apprenticeship and as a design challenge. The object was to develop an entirely new class of ship that fit her chosen role as a mercenary researcher.

The choice was obvious for a person who would find a 10×10 prison cell luxurious. Bare minimum, fast, with powerful sensors and engines on minimum viable power and computer systems. Unfortunately, with bare minimum in all defensive systems, anyone who didn't like her presence could easily shoot her down. Thusly, Thorn decided to add in the best stealth systems she could find, and develop some of her own based on existing technology and parts found on derelicts and in scrapyards.

The result was little more than a manned probe.

Key Features

The ship is capable of gathering massive amounts of data in a short period of time, and is "biphasic" or of a two phase design.

When she arrives at a contracted research planet, the satellite settles in to a stable orbit (Usually geosynchronous) and jettisons both pods. The cargo pod follows the living pod closely as it defrosts the pilot and enters the atmosphere. When the contract is complete, both pods are loaded into a cargo ship to be jettisoned in orbit and collected by the satellite core. Raw data is processed on board and en route to home orbiting stations, where the ship docks as one piece for repairs and modifications as needed for the next mission.

While the ship is as hilariously tiny as her captain, it boasts some of the most powerful sensor nodes in the noncombat mercenary sector. It also boasts maneuvering and raw acceleration capabilities well

outside the capacity of many starfighters' performance threshold, if it holds together under the tortioning forces, and as long as the inertial dampers aren't damaged. Due to being powered by a fusion bottle reactor one might find on a midbulk transport, the ship has enormous power reserves, with fifty percent of base power capable of routing to sensors, or jumping at a mere 70% throttle.

Mission Specialization

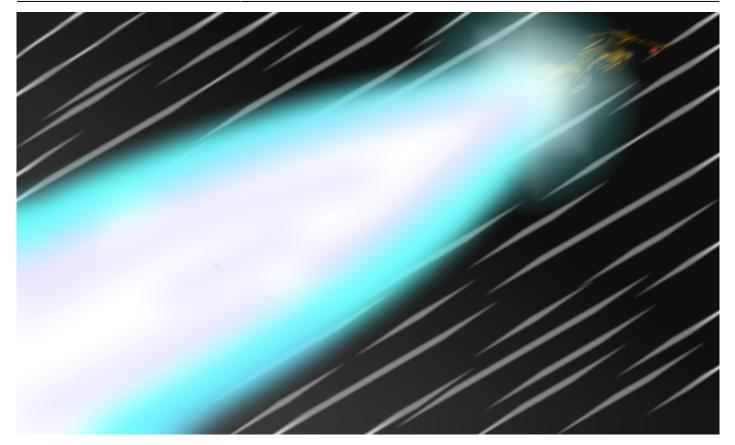
- Molecular scanning and technical scanning ability to produce high resolution images and detail down to blueprints
- Max acceleration allowing zero to .45c in 45 seconds and low profile prevents targets lock and allows rapid escape.

Appearance

Pretty is not how one would describe this particular awkward bird. The hull is barely held together with welds and organic material, the engine mount beams are warped and cracked, patch welded and more weld than original beam. The reactor is exposed to space, an angry glow and offgasses marking its position far better than any anti-collision lighting, which the ship doesn't have. The view from the rear is obscured by the single massive cruiser's main engine fed directly off of the reactor's waste power. The hyperspace fold drive is visible and exposed to open space, sitting dangerously close to the cockpit and mounted just aft of the primary sensor core and a fourteen petabyte hard drive. Two winglets mounted either side of the hull balance the vertical profile with a set of sensor nacelles from the front, and curve outward to encompass the forward hull and obscure the pod mounts.

There is a layer of bronze colored organic growth over the entire frame, which is actually a silicon based photosynthetic skin that assists with structural integrity and uses specialized chromatophores to scatter radar, infrared, and X-ray imaging to obscure its image or prevent a target lock. Other stealth systems on board are less visible, but its comm firewall masks the comm behind background radiation in local area, preventing interception by prying eyes.

One of few confirmed images of this particular ship. Others of the model line may exist



History and Background

During Thorn Ironhart's apprenticeship, she was tasked with building the ship to take her out on her own. Through countless hours of research and integration, refurbishing of derelict parts and learning to use a welder, she produced a single, micro sized ship.

She used scavenged and junk parts to heavily modify a survey satellite with a supermassive memory core (14 Petabytes raw data), high power jump drive out of a V1 transport, and two reentry pods. One pod was converted to a cargo area with soft landing thrusters and an inertial damping system made out of a damaged flying belt. The other pod is her living and working space. With a living space of 54 cubic feet, the ship is uncomfortably small for most, but it is not designed to live a person for long, as the system is designed to compile collected data while she's in cryogenic suspension. The survey satellite she used had a high power cloak on board which she rarely uses, but it can find itself handy in some scenarios.

The hull is open patchwork, with the cockpit strapped on top of the survey satellite core and the engines and reactor hanging off the back. Two small winglets provide mounting points for the laser imagers mounted six feet either side of the hull.

Unfortunately, due to its power reserves and sheer thrust, it has a problem of tearing itself apart, and often. Over the course of its service life, it has, and will continue to be refitted and rebuilt, often from the ground up.

In YE 39, the ship was rebuilt from the ground up by IIS technicians, rewiring the internals, optimizing the

computer, and replacing the reactor with a better fitted model, replacing the plasma rotor main engine core, and replacing 90% of the frame with stronger durandium alloys. The biological overskin was removed and reintroduced over an usonium hull shrouding alongside a tier six barrier to deflect debris at relativistic velocities.

This was after remaining in orbit of 188604 for almost three weeks, detected by an IIS ship after a little over one, though not investigated for another two.

Also in YE 39, Thorn Ironhart changed her citizenship status with Nepleslia, invalidating her hull number registration tag. Formerly Hull no. JR2-AA52D "Eye in the Sky," the ship was also renamed as it entered the Asura system, to ISS "Oracle."

It is believed that Elouise Nickelson, at the desk of Gaelan Sanders, did not properly review the statistical data included in the registration paperwork of JR2, as if she had, there would have been a good chance of impound due to security risks posed by an independent ship of no jurisdiction with the known scanning and stealth capabilities.

Mid YE 40, she registered for a Yamatai CIRC tag, and upgraded the power system for battery power support, with a new reactor.

Early YE 41, was upgraded with an Eye III sensor package and self repair.

YE 42, Oracle confirmed combat capable at Vail, making 3 confirmed ship kills. 1 cruiser, 2 frigates. 80 slaver arrests were made.

Statistics and Performance

Materials: biological components of iron/silicon cellular base grown over duralloy frame

Length: 8 meters

Rarity: Unique

Grades (30 point checksum)

- Weapons: 0 (Unarmed)
- Armour: 1 (No significant armor)
- Barrier: 1 (Standard anti-radiation shield.)
- **Speed:** 8 (305910 G max acceleration constant. Top speed .75c if classed as a missile ²⁾ +/-, zero relative velocity to 0.45c in 45 seconds. Top speed achieved in approximately 75 seconds ³⁾
- Maneuvers: 2 (Gas RCS maneuvering thrusters)
- Stealth: 8 (High grade mechanical/digital and biological stealth technology)
- Sensors: 10 (Designed as a scout corvette)

Notable Equipment:

Unarmed

- 220,000 element noncolinear phased array (variable wavelength transceiver)
- Geomagnetic sensor cluster
- six quantum mirror sensor cluster
- Penetrating Radar
- Laser spectrograph
- Biological and mechanical/digital stealth systems
- Full frame liquid hydrogen tubed cooling with three chamber pump to transfer heat to the reactor core
- Inertial damping system rated to 2000G, built into the hyperspace fold drive

General

- Class: Scout interceptor (Loose technicality)
- Type: Unarmed research vessel
- Designers: Thorn Ironhart
- Manufacturer: Thorn Ironhart
- Fielded by: Ironhart Recon and Research (Fictitious company, mercenary)

Passengers

Crew: 1

Maximum Capacity: 1

Dimensions

- Length: 8 meters (26 feet)
- Width: 4 meters (13 feet)
- Height: 4 meters (13 feet)
- Decks: 0

Propulsion and Range

Eye in the Sky has bare minimum viable systems, and is thus, rather high maintenence, requiring constant refits and repairs. It has an open body hull with exposed support beams to save weight, and the habitable compartment is absolute bare minimum viable. Well below "Humane" limits for manned space flight.

- Hyperspace Fold Drive: 75 LY/hr
- Sublight Engines: Single engine, plasma rotor, top speed .75c if classed as a missile ⁴⁾ +/-, zero relative velocity to 0.45c in 45 seconds. Top speed achieved in approximately 75 seconds ⁵⁾ 3.575 X 10^9 m/s ΔV
- Range: 40,000 light years single jump
- Lifespan: Unknown (Constant refits and mods)

• Refit Cycle: 6 months (Or four jumps, as the ship tends to tear itself apart every 4-5 jumps)

Damage Capacity

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

DR-3 ratings

- Hull: 6 based on size
- Armor: -4 (Open hull design, armor nonexistant.)
- Barrier: Tier 6 forward -2 (Standard space flight electromagnetic/inertial damping barrier, not rated for beam or kinetic weapons of any kind.) (Secondary barrier of Tier six front facing plate, deflector shield.)

Vehicle offers no ballistic or energy weapon protection, relying on sheer speed and small size to avoid fire, combined with stealth systems to prevent target lock.

Inside the Ship

Deck Layout

Cryo pod stuck to the top. No other livable space. Livable volume 5'X2.5'X2.5'

Compartment Layouts

Bridge

Single crew compartment.

The crew compartment is a single cryogenic stasis pod, modified to act as a short term living space for the occupant. Above the head is a cabinet to store an EVA suit or a change of clothes, a few ration bars, and some books for light reading while waiting for data to compile. There is an IV feed near the left side, pumping a sugar and nutrient blend, replenished via filtering water from the suit waste disposal system. Control is via a touchscreen interface on the forward glass panel of the cockpit and two joysticks deployable from the side walls of the pod.

Cargo Storage Areas

Cargo Pod

A simple reentry capable cargo pod with a follow mode on a beacon attached to the outside of the crew

pod. Simple RCS giudance and soft landing thrusters and an internal volume of 2 cubic meters.

Ship Systems

Armored Hull and Hull Integrated Systems

Tier 6 size, -4 damage rating

Open hull design with systems exposed to space. Minimum viable to the point of not even having a proper hull.

Computers and Electronics

Single "dumb" AI primary computer control system, with data collection and storage of up to 14 petabytes. Single communications array, standard.

Emergency Systems

One distress beacon, automated. No other emergency systems.

Life Support Systems

No life support systems save active recharge for Thorn's integrated rebreather and nutrient feed line via permanent set IV.

Propulsion

Single main plasma rotor engine and fuel system. 3.575 X 10^9 m/s ΔV

Top speed .75c if classed as a missile $^{6)}$ +/-, zero relative velocity to 0.45c in 45 seconds. Top speed achieved in approximately 75 seconds $^{7)}$

Single hyperspace fold drive with integrated inertial damper

Barrier Systems

The Oracle has a Standard geomagnetic shield rated for most radiation found in deep space and a single forward facing plate barrier system for repelling oncoming debris. No other shielding systems.

Weapons Systems

Unarmed

Power Systems

Single Tokomac fusion bottle, unshielded, thermo/radiovoltaic collector. Output rating nearly four terawatts per second. Fuel preheater and mass based thermal seperator. Fuel is elemental deuterium with tritium spike.

Stealth Systems

Below is marked the stealth systems used by the Oracle, alongside intended effects and theoretical applications.

• Distributed fuel preheater

Surface temperature of 105 degrees Kelvin, slightly below local space, rendering ship passively nondetectable on thermal imaging.

Chromatophore overskin

By using advanced biotechnology inspired skin, chromatophores render optical identification nearly impossible due to shifting patterns of shades of black and RADAR scattering properties.⁸⁾

• Faraday cage over power systems

Electron motion and EMF measurements near impossible due to EMF blocking properties of Faraday cages

Tactics

Uses nearby large bodies to hide mass, often by hiding near large asteroids or nearby ships

• Kaleidoscopic quantum projector

By projecting the quantum signature of gadolinium ore via from the noncollinear sensor array, it masks its own quantum mirror signature behind what appears to be a mass of ore.

Sensor systems

Below is marked the basic sensor clusters of the Oracle without regard to their location on the hull, which can be found in Appearance.

• 220,000 element noncolinear phased array (variable wavelength transceiver)

A combined magnetic resonance, electron motion, and radar array with active scan functionality. Also helpful in projecting a supposed quantum event or state.

• Geomagnetic sensor cluster

A series of hall effect and electric field sensors designed to detect and evaluate magnetic fields, usually planetary, but useful in detecting and evaluating another ship's barrier system.

• six Quantum Mirror sensor cluster

Used to determine quantum events such as hyperspace fold or continuum distortion jumps.

• Penetrating Radar

Can penetrate a ferrium hull up to two hundred meters and determine decks and equipment placement, originally designed for locating geology under foliage from orbit and mapping near surface cave systems.

• Laser spectrograph

Simple laser spectrograph used to determine surface composition of an object.

Scalar gravitational field sensor

Simple mass sensor, useful in determining where something is and how much mass is there.

OOC Notes

Ready for play, approved by Wes

Reapproved by Ametheliana on November 13, 2017

1)

The hull number used in the article title is an international registry number used to identify a ship with privilege in multiple territories.

- Nepleslia Hull no. JR2-AA52D
- Yamatai CIRC no. PX-C1-DS7D
- Asterian registry number **A-A3LP-2**
- Monarchy of Dovania hull number OX-0001-A1

Hull numbers are constantly updated.

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<sup>2)</sup>, <sup>4)</sup>, <sup>6)</sup>
Game Master's discretion
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3) 5) 7)
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55 seconds with appropriate gravitational assist
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8)
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The technology was developed as a science project after observing news reports of Psychopomp and Lorath biotechnology and genetic engineering, though no interaction was ever made with either faction during the development, and it appears to be a genetic chimera. Genetic base appears to be cephalopoid, though aspects of botanical cellular structure are present, including photosynthetic activity. It is likely that Sculpt was used in the initial iterations of the gene sequence. The technology was developed by a former owner of Thorn's, and she acquired the samples necessary to grow the chimera over her ship upon her release from a Lorath owner, likely of a scientific background. Though, considering the remains of a Slave Control Device found in the original body of Thorn, it is unlikely that the former owner and apprentice master was of a medical background.

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