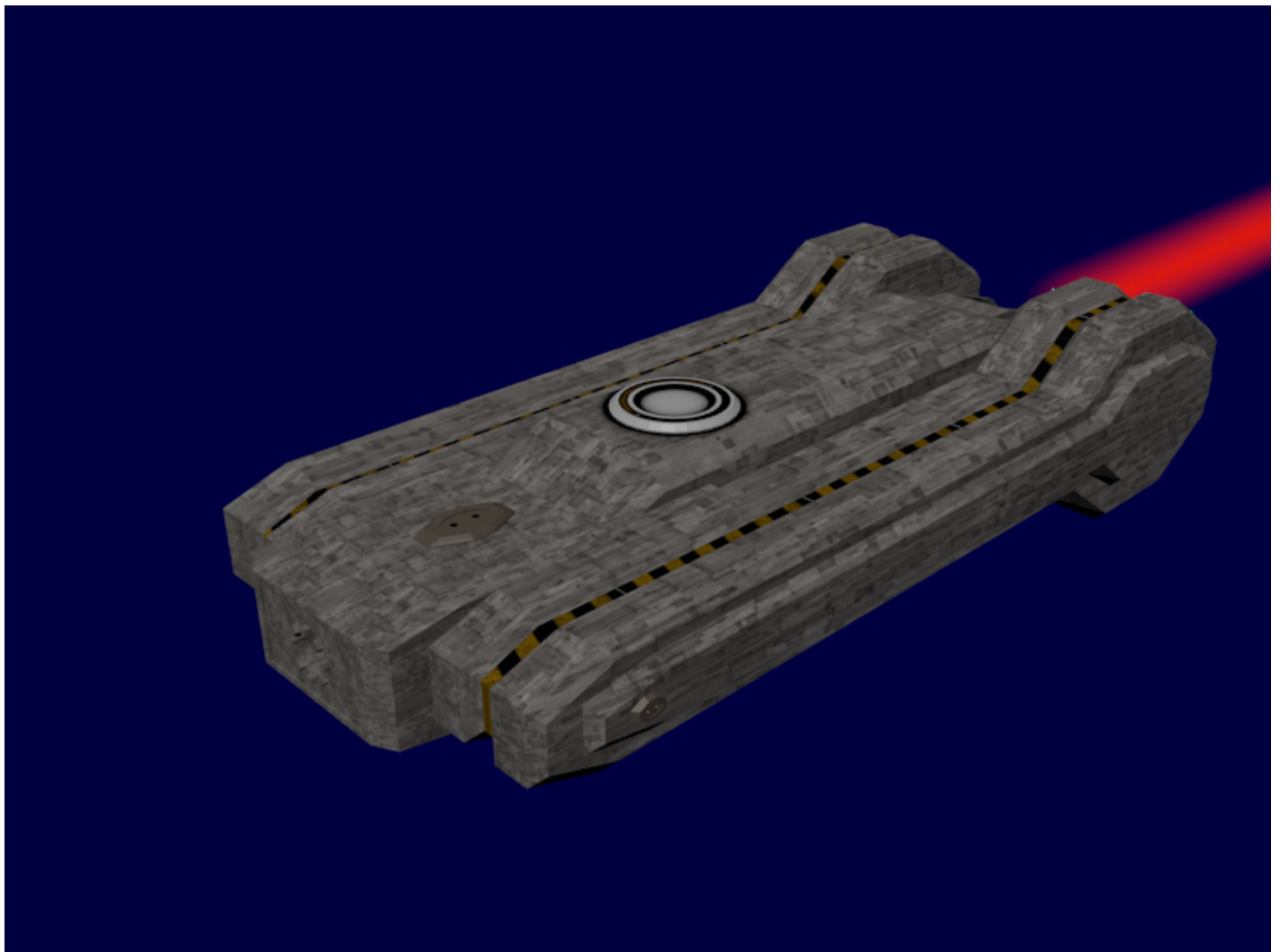


Gilane Mining Drone

A general purpose mining drone used by the Nayacesen family, then updated to more current day technology. The newer drone features improved armor plating and sensors, a better mining beam, and a drone array that isn't restricted to the ship the drone was originally designed for. Its range was also improved upon along with better maneuvering thrusters and an improved ion engine while still remaining the original look.

Appearance



The drone largely resembles a rectangular box with engines in the back and thruster packs on the sides. It has a primary mining beam located on the front, a hatch on the top for dumping its mined ore and two small cargoholds for storing the ore. The ship is equipped with two laser cannons, which can be removed from the drone to reduce its mass or to add additional salvage arms.

History

The Gilane mining drone was designed originally by Kozan himself in [YE 01](#) and built in the Kozan's fabrication bays in [YE 04](#), its intended usage was for mining small asteroids that would fit to small for the ship's actual mining beam to target. The drones typically go after asteroids in the surrounding area but also are used to collect loose rock and ore that is free-floating in space. However, the drone can also be used for mining purposes planetside or within an asteroid itself.

Toward in the middle of [YE 20](#), Marloke Nayacesen made a few updates to the drone to give more of a chance in hostile territory, but these upgrades were limited due to the money at the time and available materials, this included upgrading the ship to have a single plasma cannon and adding on two additional thrusters.

In [YE 33](#) [YSS Eucharis](#) Chief Engineer [Takeyu Nayacesen](#) updated the drone to current day technology, since the drone was well over twenty years old.

Statistical Information

General

Class: Drone Nomenclature: To-01-1C Type: Mining Drone Designers: Takeyu Nayacesen Manufacturer: Takeyu Nayacesen Fielded by: Nayacesen Family **Organizations using:** None Production: Fifteen

Dimensions

Length: 6 ft Width: 4 ft Height: 3 ft Mass: 90 lbs

Range, Speed and Durability

Sublight Engines: 130 m/s ¹⁾ 45 m/s ²⁾ Range: Limited, has to remain within 2200 feet of the ship Lifespan: Limited, requires constant maintenance.

Damage Capacity

See [Damage Rating \(Version 3\)](#) for an explanation of the damage system.

- Hull: 6 SP (Armor)

Systems

Armor

Although it's not meant for combat, the drone is equipped with a thin layer of [Durandium](#) to at least give it a bit of survivability.

Mining Beam

The forward area of the drone features the main mining beam, much smaller than the one used on the Kozan, it serves practically the same purpose and designed much the same way. The beam is split into two pieces, the first being a high powered beam that melt the surface of an asteroid while another beam pulls the loosened ore into the drone. The beam can be set to different wave length depending on what is mined and the composition of the asteroid. Improvements to beam allow it to mine more of the material and waste less.

Laser Cannon

The Plasma Cannon was replaced with a laser cannon, which has a better rate of fire and improved damage over the original plasma cannon. Two of these now exist on the Giliane, one on the underside of the drone and another on top. Its for a rate of fire of two hundred and fifty shots per minute, and can keep this up for five minutes straight before the cannons must downsize to only a one hundred and eighty shot per minute to conserve power. (Tier 9, Heavy Anti-Mecha)

Sensor Array

An onboard array of sensor systems and computers allows the drone to scan the make up of an asteroid and search for fissures that it can take advantage of, this is accomplished by using mineral scanners for the make up and mass sensors for the actual yield of the asteroid.. The sensor array has been improved upon, boosting longer range and better scan resolution over the original.

Mineral scanners

Used to determine what the asteroid is made out of, by scanning its surface and cross-referencing the data with saved mineral files.

Mass scanners

The mass scanners only purpose is to determine how much of a selected mineral is inside of an asteroid;

this helps determine how much yield the asteroid may bring in.

Drone Control Array Mark 2

Replacing the original Drone Control Array which had restricted the drone to the YSS Kozan only, the new and improved array allows the drone to operate independently from the ship and no longer requires orders from the ship's main computer to perform tasks due to the improved control center.

This also increases the drones effective range from 1200 meters to 2200 meters.

Salvage Arm

Recessed into the lower part of the drone is a salvage arm that can be used for grabbing either debris or rocks and bringing them back to the ship, this arm is typically used for recovering drones that have either wandered too far from the ship or damaged sentries. The arm is only rated for handling drones, it would take more than one to handle anything bigger than itself.

Fusion Generator

The drone's onboard fusion generator is used to power every system including the mining beam. There's enough onboard fuel for the generator for two hours of constant use before the drone must return to refuel.

Battery Cells

Located along the back port and starboard sides are batteries that serve as backup power for the drone's main systems, the batteries have enough power to last six consecutive hours before the drone must return for a recharge. These power cells can be replaced in the field, such as if miners are working inside of an asteroid and thus don't have ready access to the ship. The ports for these cells are located on the bottom of the drone, there is also a port for connecting a recharge cable.

The batteries are not designed to power the drone's mining laser.

Thrusters and Engines

The Gilane uses ion thrusters for movement, and a series of thruster nozzles located on keypoints along the drone's hull allow it to execute sharp turns or change its actual angle so that it can effectively mine around an asteroid.

1)

when empty, top speed

2)

when full

From:

<https://wiki.stararmy.com/> - **STAR ARMY**

Permanent link:

https://wiki.stararmy.com/doku.php?id=corp:takeyu:gilane_mining_drones

Last update: **2023/12/21 00:58**

