

Organoid-type Substructure

Being consummate geneticists, it was not long before the scientists at [Solan Starworks](#) began designing organic substructures for ships and vehicle designs. Instead of conventional sub-plating and trusses, all empty spaces are filled with the natural organic systems of a living ship. The new system, dubbed Organoid, which can refer to either being similar to organs, or to living tissues, would set the standard for all subsequent Solan designs. The concept of a fully living spacecraft fit the [Iromakuanhe](#) philosophies of environmental symbiosis. As well as being reassuring to their crews, designs using this methodology proved to be of generally excellent performance. Organoid engineering combines the natural error tolerance and adaptability of organic systems with the durability and precision of well engineered machinery. Depending on the size of the craft and the complexity of the systems it has to deal with, ships using this system will have varying levels of intelligence, similar to that of a conventional AI.

General Information

Name: Organoid-type Substructure Type: Substructure/Engineering Methodology Government: [Iromakuanhe Astral Commonwealth](#) Designer: [Solan Starworks](#) Manufacturer: [Solan Starworks](#)

Technical Specifications

General Overview

To simply construction and maintenance, and ensure that there are backups for the most critical facilities aboard a starship, organoid systems have many capacities, including life support and ship intelligence systems. This is due to the manner in which these units are designed, as the vessel is a fully living entity, rather than a series of interconnected components. The very same processes that allow it to live, inversely allow the crew the subsist as well, creating a sort of symbiotic relationship between the two.

Life Support

Life support systems are enabled via a combination of photo/thermosynthetic, which allows it to feed itself and process used or contaminated atmosphere into a breathable gas. Radiation and/or heat is drawn from light from the nearest star, or from the reactors inside the unit, and combined with water and accumulated biomass to produce large amounts of energy for the ship to run. It sports a very robust immune system as well, that filters out and destroys most harmful organisms, removes hazardous contaminants from the air and kills vermin.

NI (Natural Intelligence)

An NI, or Natural Intelligence is a data construct of animal-like sapience levels, and an advanced organic computer system with capabilities comparable to a sophisticated military supercomputer. Most functions are automated, while the system is able to manually initiate any function that has been inscribed into its genetic memory. Personnel can interact with the unit in the same manner one would a pet, and can also be accessed like the data networks on older, silicon-based computers. Like a well-trained animal, the NI is absolutely loyal and very good at what it does, but relatively crude in terms intelligence. However, as an organic construct, it possesses the same fault tolerance and adaptability a more intellectually advanced species has, and has the ability to learn and grow with time.

Internal Defenses

The organoid has a potent autoimmune system and excellent natural defenses from intruders. Of these are small symbiotic drones similar to antibodies in function, that continuously canvas the area for any unregistered living entities and proceed to mark them. Once detected, protocols are set to capture and carry the the object to an isolation chamber where it is screened and analyzed. Any objects or entities that cannot be moved by the antibodies are reported to the main organoid body, who in turn will alert all relevant personnel of the detection. Vermin, parasites, antigens and hostile synthetic constructs are attacked immediately.

Auto Regeneration

The organoid systems are capable of regenerating damage as needed, though any loss in overall ship materials has to be remedied through extensive repairs and proper amounts of biomass. Repairs can take several weeks, but thankfully, the systems regenerate much faster than those of natural species. Superficial damage (cuts, penetration from solid ammunition) takes the least amount of time to recover from.

Damage Resistance

Despite being composed of living tissues, the Organoid is unnaturally resilient. It is fully capable of resisting the assault of most small arms, including solid ammunition and energy weapons, incendiary weapons and even light explosives. Regardless, once the armor on the craft, usually [Aerudirn](#), is penetrated or saturated away, the craft is much more vulnerable.

Armor Type: None (x.4 on Mecha, .x2 on Starships)

OOC Notes

Approved [here](#).

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