

Anatomie of a bioship

Table of Contents

Anatomie of a bioship.....	1
Hull(chassis).....	1
Energy production.....	1
Shields.....	2
Weapons.....	2
Propulsion.....	2
The plegma array.....	2

Hull(chassis)

Once a seedling evolves to a ship, the seedling becomes the vanis radix, or “root of the ship”, which in turn regulates the cambium matrix. The main function of the cambium matrix is the growing of the ship as it further evolves, but also the production of the xylem matrix, which gives the ship the necessary structural stiffness. The vanis radix also controls the working of the bud array which supply's the embryonic starting points of the parts that grow out from the main structure of the ship, such as weapon buds or engine buds which will grow out to be telum emmitors / telum arrays, concidor launchers/ concidor arrays and propulsors/ propulsor arrays.

All add-ons for the ship will follow this process, be it on a smaller scale.

The vascular radix regulates the vascular matrix which is composed of the veins that are distributed across the ship. The veins are one of the forms the xylem matrix takes. These veins perform several functions among which cooling of the ship, opening and closing functionality of docking clamps, cargo sections, etc. and releasing of the saucers of the engine section, cockpit section and the transport bulbs in case of emergency.

The vascular radices also ensure that the vascular matrix keeps pace with the cambium matrix as the ship grows

Energy production

The synthesis radix regulates the cortex matrix which is a layer on top of the xylem matrix. The synthesis radix together with the cortex matrix generate energy by means of a photosynthesis process. This energy is passed on to the other parts of the ship by means of the phloem matrix or to the fyto radix for storage in a tuber array. A secondary input for the synthesis radix is a recent discovery which has led to the development of the plegma array, see further in the text.

The synthesis radices also ensure that the cortex matrix keeps pace with the cambium matrix and the bud array as the ship grows.

The fyto matrix regulates the storage en release of energy by the tuber array. This tuber array serves as a storage place for energy produced by the synthesis radix.

The fyto radices also ensure that the tuber arrays keep pace with the cambium matrix and the bud array as the ship grows.

Shields

The aegis matrix regulates the epidermal matrix which is a layer on top of cortex matrix. The epidermal matrix together with the aegis radix provides the ship with an energy barrier that shields the ship from influences of space travel. The cuticle matrix is a protective layer of the epidermal matrix. Obviously there are all translucent so they don't interfere with the cortex matrix. The aegis radices also ensure that the epidermal matrix and the cuticle matrix keep pace with the cambium matrix as the ship grows.

Weapons

The telum array transforms energy from the tuber array into a coherent energy beam which can be projected by the telum emitter.

The number of telum arrays is determined by the vanis radix depending on the type and size of the ship.

A recent development, the desiccator launches pellets that absorb energy like a sponge until they overload, in sufficient number they can drain all energy of a ship.

When given a nutrient boost the desiccator array produces a number of pellets which can be ejected by the desiccator launcher.

The number of desiccator arrays is determined by the vanis radix depending on the type and size of the ship.

Propulsion

The retis design is based on an ancestral design that used the planetary grid for sub-orbital and orbital flight, a further development made it possible to use the cosmic grid for interstellar travel. While the retis radix controls the interstellar travel, a retis array accumulates the energy to travel from one connected node to another.

Each ship has one retis radix, the number of retis arrays is determined by the vanis radix depending on the type and size of the ship.

The propulsor drive is a further development of an ancestral design for a planetary insertion engine.

A propulsor drive combines thrust and steering so the minimal amount of propulsor drives is two.

The propulsor matrices coordinate between the propulsor drives of a ship, while the propulsors provide the propulsion of the ship.

The propulsors eject particles, to propel the ship, whereas the velum collectors harvest particles for the velum array. And so the velum array provides the energy for the retis arrays.

The plegma array

Some time ago an expedition discovered abandoned buildings from an ancient civilization. Among the buildings, some found texts that mentioned a way to draw energy from the skies. Others uncovered texts that mentioned energy from outer space. On one building was a depiction of presumably a planet with two skies and a device between them and a line that connected the "second sky" with the device.

The strange thing about all of this was how the texts seems to resemble a very archaic version of their own ancestral writings.

Inside the building they found the remnants of a device, apparently no longer connected to anything but on the devise they found something written like “quicken nexus”. Once someone pressed the button beneath it, a screen came to life, displaying the text “charging”, while this was happening a second screen came to life, displaying the same depiction as on the wall outside with a fluctuating number beside the line, once this number stabilized the first screen changed and now displayed “Nexus” and on the next lines “quickenning storage” and “quickenning connections”.

Further investigation revealed the “nexus-device” to be a controlling device like a matrix aboard a ship. But the greatest revelation was that this civilization has mastered the art of gaining energy from what we use for interstellar travel.

Combining what the expedition had discovered with the knowledge used to develop the retis drive led to the development of the plegma array.

BSRC