BIOGEL TECHNOLOGY

Version 6-7-23 © 2023 SHETIRA ANWAE

TABLE OF CONTENTS OVERVIEW Dressing Pod The Biogel Technology document will present various major core biogel powered **Fighter Pod** technologies present within the Destiny Omega/Gelitech story world. Biogel itself will <u>Oracle</u> be presented in a separate Biogel document. **Power Plant** Biogel Goods And Services will also have its own document. Quantum Clock [NEW] **Reactor Core** Soul Injector

<u>Stream Weapons</u>

DRESSING POD

Biogel Technology

The biogel dressing pod is a device intended to create the illusion that biogel is completely removable, and thus not a permanent symbiotic life form. The deception was considered critical to the public acceptance of the defunct Vixanti Interstellar Lifestyle, but Vixanti Corporation was taken under full military control prior to the product line's release to the general public. When commercial deployment of biogel was spun off to the new Vixanti's Gelitech subsidiary, the biogel dressing pod, and all concept of biogel as a removable item of 'clothing' were removed from the lineup. Biogel dressing pods are still in use in certain Vixanti facilities, and in certain biogel oriented military applications, in order to allow personnel to go about certain business without the outward appearance of being biogel hosts.

A biogel dressing pod works by temporarily altering the balances within a biogel host's coating, allowing the machine to remove the exterior mass, while leaving the interior intrusion of the substance in place. In the case of soul infused biogel, or biogel with special genetic programming, the special qualities remain entirely within the host, while the mass taken into the machine is entirely basic, unaltered biogel. When re-dressing a host, the machine adds back the mass that was removed, maintaining the substance's inner balances as it does so.

Some biogel pods possess extra features. These extra features are also deployed in Gelitech Uniform Pods, without the biogel 'removal' qualities of the actual dressing pods. These features include: adding colored biogel 'patches', such as those on Vixanti Corporation 'uniforms'; equipping belts, wrist watches/comms, and other accessory items; automatic biogel cleaning; and hair dressing/gelatination. The latter quality involves the replacement of hear hair with stretchy strands of biogel, and can be reversed by re-conversion of the biogel into keratin.

A critical flaw with the illusory biogel undressing conducted by the biogel dressing pod is the tendency of the internal biogel intrusion to grow and re-coat its host. Typically, this will occur after between 3 to 5 days have passed, though in some cases an individual can go up to 10 days without re-coating occurring. Biogel re-coat of this sort is particularly hazardous. There is a safe period of 3 hours before a risk of spontaneous glistening occurs. Beyond that, the chance of glistening in any given 6 hour period is the usual, with the caveat that the last cleaning has occurred when the biogel suit was 'removed'. Depending on how long ago that was, spontaneous glistening in short order might be virtually guaranteed.

FIGHTER POD

Biogel Technology, Vehicle, Aerospace

The biogel fighter pod is a principally biogel based, single person searospace craft capable of maneuvering freely in virtually any non-corrosive environment with pressures ranging from o to 360 standard atmospheres. A sphere with truncated sides, the fighter pod is largely empty save for a firm reclining seat, a set of transdimensional field coils, and various tubes for the movement of liquid activated biogel. Various accessories can be attached on the sides of the fighter pod, including weapons, sensors, cargo modules, etc. The accessory points can also be used to attach the pod to a larger system, such as a personnel shuttle body, in order to control and maneuver it.

Biogel fighter pods are typically stored in special cubicles, either at the sides of a hangar, or below the hangar deck. These cubicles have direct connections to the facility or vessel's activated biogel network. Once a pilot enters the pod, and activates it, activated biogel flows into and fills the pod completely. The trans-dimensional field coils prevent the gel from subsuming the pilot, while also allowing the pilot to exert control of the pod via simple act of will. Once the pod is filled, and the cubicle moved to launch position, the pod can fly free.

Biogel pods have an endurance of approximately 6 hours of normal, non-combat flight. The activated biogel slowly loses energy over this time, and once its endurance has been exceeded, it solidifies into shiny black, inactivated biogel. This results in the glistening of the pilot as well, and the resulting gummy is often quite difficult to extract from the mass in which she has been encased.

Combat can drastically reduce the endurance of a biogel fighter pod. While conventional, nonenergy based weapons won't do much to reduce flight endurance, energy based weapons without their own power source, or biogel energy weapons, will drain power from the pod quite rapidly. While the available energy that can be discharged at any given moment greatly exceeds that from a conventional power system, the number of potential discharges is greatly reduced.

The Feyli Imperial Navy considers the current biogel fighter pods good for 2 hours normal flight along with 15 minutes of combat. This makes them unsuitable for interceptor or distant attack roles. As defensive fighters, however, they are regarded as being superior to all conventional craft. In order to increase operational endurance, all Navy biogel fighter carrying craft have external charge points, where pods can dock and connect to the ship's activated biogel network for a few moments to recharge.

The only civilian spacefaring deployment of biogel fighter pods is aboard the Destiny Omega, operated by Vixanti Corporation under the personal command of Lady Shetari Anwae. The ship has 16 fighters in ready cubicles below the main hangar deck, 2 in the role of shuttle control pods, and 6 spares kept below decks.

Gelitech also has a selection of biogel fighter pods at each of its facilities which contain an active biogel reactor core. These are mainly used for demonstration flights, though they can be fitted with biogel beam projector hemispheres for defensive purposes if needed.

ORACLE

Biogel Technology, Information System, Transformation Peril

As an experiment in opening up direct access to certain aspects of the Unity's mind and powers to certain select individuals, Lady Anwae directed Dr. Alluwa to create a device that could transform anyone into a 'biogel oracle'. While held inside the device's grasp, the oracle would have have considerable access to the vast swath of information within the Unity. This would, at Omega's discretion, even extend to the Unity's network of senses embodied in each and every biogel wearing individual.

Each of the half dozen existing oracle units is an identical, pod shaped device with a reclining seat inside. This seat is made of glistening, luminous pink, transparent biogel. Upon contact with a nude, or biogel wearing, individual, the biogel will instantly stick to, spread over, and fully encase her. It expands to form a rounded surface flush with the outer surface of the pod, sealing the new oracle inside and ensuring that no one can interfere with her activities.

Once fully ensconced within the pod, threads of brightly glowing activated biogel spread through the transparent encasement, and then over the surface of the oracle until she's entirely covered with it. At this point, she has access to the Unity's collective consciousness. At first, this access is very limited, largely in order to preserve the oracle's sense of self. She might be able to sense the world as if she were in a random biogel wearer's body. She might be able to remember certain things highly pertinent to the Unity as a whole. But to access more, she must remain in the pod.

A prospective oracle must decide how long she will remain in the pod before she enters. Options range from one day to one month. One day is only enough to poke around the world as another biogel wearer for a bit, and to obtain an understanding of the Unity and its potentially accessible properties. It takes several days before the oracle can begin to remember some of the memories which have been added to the Unity from its countless constituent minds. After a week and a half, remembering becomes relatively easy, though retaining her sense of self starts to become difficult. After two and a half weeks, if allowed, the oracle can choose who's body to perceive the world from, thought at this point, only the most disciplined of minds can retain their sense of self. As the end of the month nears, the oracle's retention of her sense of self becomes virtually impossible. An oracle who loses their sense of self is immediately dissolved into the activated biogel, and their soul becomes part of the gestalt within the connected biogel core.

Biogel oracles can hear the inquiries of those who might come to them for advice, and the nature of their prison compels them to reply as truthfully as the Unity, and Omega, allows. The reply comes in the form of fluid, ethereal words that come directly from the surface of the pod's biogel filling, or cloudy images which form upon its surface. Under no circumstances will the oracle reveal anything about Omega's nature, thoughts, or intentions. She will not discuss Vixanti, Gelitech, or anything that might compromise their security or business operations. Nor will she reveal anything which might be considered a matter of national security for the Fey'li Empire.

The experience of being a biogel oracle has been noted to carry along with it certain addictive properties. A biogel oracle who only enters a pod for a few days in unlikely to feel any particular inclination to do it again. However, once a biogel oracle becomes comfortable remembering the Unity's memories, the desire to do so again is quite compelling. Given the chance, such biogel oracles will enter the pod again and again if given the opportunity, insisting on longer and durations each time, until their longer dissolution into the Unity is all but guaranteed.

Biogel oracle addiction does not rise to the point where a former oracle will attempt to force their way back into the pod, and has no effect on her so long as she remains out of sight of an oracle pod. Should she again come into the presence of such a pod, she will insist on a longer duration than her last time as an oracle, regardless of the intervening time, or the immediate circumstances.

There is no means by which the general public can access either a biogel oracle pod, with or without an oracle inside. It is currently considered highly restricted technology by the Fey'li Imperial Navy, though internally, Vixanti has thus far been totally free to experiment with it as they see fit.

POWER PLANT

Biogel Technology, Power Generation, Transformation Peril

Perhaps one of the most important and generally useful developments in biogel technology is the so-called 'life essence energy collection and induction system', or more commonly the 'biogel power plant'. Though the exact mechanisms of its operation are quite complex, the core concept is quite simple. Living sapient life forms each have a connection between their mortal bodies, and the fundamental, higher-order-dimensional domain of their immortal soul. The biogel power plant life form converts the sapient into transdimensional shape which allows it to easily massage large amounts of energy out of that higher order space, through the life essence connects, and into the mortal realm. That energy can then be passed through biogel in specially constructed induction loops, allowing it to be converted into electricity.

Excepting a few experimental prototypes, all biogel power plants come in a fixed, and largely modular form. Each is a large, horizontal cylinder comprised of a set of certain elements, with supporting frames, and accessory and electrical equipment beneath. At the ends are the hemispherical end caps, which contain the transdimensional field generators and the biogel filled tubes with conduct the resulting fields into the power pods. Between the end caps are up to three power pods, which each contain twenty-four power elements. These power elements convert and contain the souls which are used to siphon higher dimensional energy.

Each power pod consists of two independently moving vertical carousels. These each hold six tubes, which are geared so as to always be held in an upright position, regardless of the position of the carousel. Each tube contains two power elements, positioned end-to-end, and accessed by a sliding cover which rotates back into its own outer shell.

In all current cases, entrance into a biogel power element is made as 'normal' and 'comfortable' as possible for the volunteers who 'staff' the systems. A special padded deck suitable for barefoot walking is installed at the entrance level, and steps lead up to padded benches right alongside the element openings. In many cases, portions of the end cap covers, power pod casing, and power element sliding lids are made transparent pink to allow a view of the outside while waiting for energizing. The biogel ports at the head and foot ends of each element are surrounded my a glowing, shifting, and pulsing pink mosaic appearance in order to seem less threatening.

Once both elements in a tube are occupied, the carousel rolls the tubes downward to the next position, where they are connected to the biogel tubes extending from the transdimensional field generators. A spray of glowing pink activated biogel aerosol fills the elements, and covers the occupants as they float up of the beds into the middle of their chambers. Soon, energy flows from one end of the element to the other, morphing their bodies into a shapeless sizzle of 'negative energy' between the biogel ports. A sextet of bright strands of activated biogel spin around this sizzle of un-light and sparks shoot about within this field, creating vibrations which add massive amounts of energy to the biogel coils along the internal spine of the power plant.

The biogel transformer coils created a constantly moving set of one-way linear waves which stimulate high currents in a set of superconducting electrical coils wrapped around them. Using this setup, each independently operating half-pod can produce up to 9,370 amps of standard shipboard 480V DC electricity, or about 4.5 megawatts of power. A fully occupied power pod can produce up to about 9 megawatts of power.

Up to three power pods, with a total of 72 power elements, can be strung together in a single power plant. These 'max-plants' can produce upward of 15.5 megawatts of total power, a value that might seem small relative to ground based power plants, but has the benefit of a 100% superconducting shipboard power network to eliminate undesired power losses. Most biogel powered starships are designed to accommodate two full power plants for redundancy. The Destiny Alpha and Destiny Beta both have a pair of three power pod type units, while the Destiny Omega has four two power pod type units.

While biogel power pods are highly effective methods of utilizing a previously inaccessible source of power, it does not come without risks to those who volunteer to have their souls used, and potentially abused, in such a fashion. While the experience is generally described as being 'strange', 'only a little uncomfortable at first', and 'woah... groovy, maaaan!', some find the energizing stage distinctly displeasing to the senses. There is also a very real risk that a soul might not come out in quite the same physical state as when she entered a power element.

Following are the current known outcomes for those who enter a modern biogel power plant (Mk₃ or greater).

- Success. Returned to normal at end of power cycle. (92.5%)

- Process error. Returns at end of power cycle, but in a body identical to another occupant of the subject's power pod. (1.8%)

- Process error. Returns at end of power cycle, along with a perfect physical clone of themselves, containing a soul that had been trapped in the induction loop. (1.5%)

- Process error. Returns at end of power cycle as a gummy. (1.4%)

- Process error. Subject sucked into the induction loop at end of power cycle, body re-formed with another soul that had been previously trapped in the induction loop. (0.9%)

- Process error. Returns at end of cycle, though as a different sapient species who's dna has been trapped in the system at some point since the last full system clean and reset. (0.7%)

- Process error. Returns at end of cycle as a creature of transdimensional nature. (0.05%)

- Full failure. No body re-formation. Subject soul sucked into the induction loop on end of power cycle, joins souls already present. (0.9%)

- Full failure. Subject's soul falls into its own 'negative energy' rift. Fate Unknown. (0.25%)

QUANTUM CLOCK

Biogel Technology, Exotic, Quantum Continuity Hazard

According to those in the know, the fabled quantum clock is probably the single most outrageously dangerous technology ever to be developed by the hands of civilized sapients. The particular sapient responsible for its creation was Dr. Wen Kidan, working as a research scientist for Vixanti Corporation through its principle subsidiary Gelitech. Depending on who one asks, he completed the device in the year 4615, 4616, 4617, 4618, or even in 4619. Its first activation came shortly thereafter, and is one of the reasons that even those is the know just don't seem to know quite when it was created.

The concept behind the device is deceptively simple, and the consequences of its use are as unpredictable as they can be catastrophic. The quantum clock doesn't keep time. Instead, it acts as an anchor around which time can be shifted forward and backward.

On the face of it, the quantum clock seems like a perfect time machine. It anchors those in its immediate vicinity along with itself, allowing them to travel through time with little apparent risk. Were the quantum clock the only transdimensional, and/or time-trancendent thing in the universe, that might be the case. However, it isn't.

All trans-time entities will twist and warp the temporal flow around themselves as the quantum clock shifts the timeline. Some particularly powerful entities, those that are fully timetranscendant, won't be affected any more than the anchored time travelers. Others may find themselves experiencing chaotic time jumps. In the latter case, their ability to understand what is happening, or even remember their 'old' selves is highly variable. Because of these effects, an in particular the sum total of warping due to inanimate trans-time object, the result of a time shift on the overall timeline will be highly unpredictable. The potential for creating a destructively resonant timeline in this way is auite high.

Theoretically, one can travel both backwards or forwards in the current timeline. Should one go backwards, it will have the effect of instantly altering history, resulting in the creation of a diverging and potentially quite unstable timeline as a consequence. No one really knows what might happen should one go forwards in time with a quantum clock. The need to 'suck' history into the required temporal configuration is likely to have even more perilous effects than going backwards.

Dr. Kidan's quantum clock uses а of exotic transdimensional combination materials such as various types of gobzite and even biogel itself, assembled into a massive armillary sphere. Attached to this are various control and detection systems. The latter allow the clock to determine the parameters of the timeline during an activation. The former allow an operator to specifically target various things or even people to ensure that they can't be 'lost' due to the timeline changes its use causes. If they wouldn't be part of the new divergent timeline, the time shift is cut off. This is the device's only safety mechanism.

There is no known manner in which a quantum clock can be made safe to use for any purpose. During its several activations, and despite the very short time shifts involved, it caused the resulting timelines to become more and more divergent and unstable. This eventually resulted in a timeline quite hazardous to the principle actors in the initial, stable, 'correct' timeline. Exactly how a stable timeline was restored is unknown. It may have been the result of pure chance, or the influence of one or more trans-time powers. What is known is that the current stable timeline isn't quite the same as the previous, though it might be thought of as being just as 'correct' as its equally 'correct' predecessor.

Beyond the above, very little else is understood about the quantum clock. It is believed to have been dismantled owing to its dangers. A far more useful, and far less dangerous, derivative of the quantum clock, the quantum micro-clock, is used as part of the resynthesis portal, which will be described in its own entry within the next edition of this document.

REACTOR CORE

Biogel Technology

Once Vixanti Corporation's most heavily guarded secret, the biogel core, often referred to as the biogel reactor, is a device intended to provide a state of transcendent being to anyone lucky enough to have their genetic material injected into it during the final phase of its creation. There are currently several hundred biogel cores in existence, most aboard biogel operated military and experimental starships, or buried deep within Vixanti Corporations laboratories and biogel production facilities. Only one can be viewed by the general public, within the halls of the former Vixanti Corporation Facility Three, beneath Mashiva Spaceport. Almost all of the cores have been imbued with the genetic essence of Lady Shetari Anwae, the current public mistress of all things biogel, and for all intents and purposes, act as a single unit.

Physically, a biogel core is a spherical mass of genetically imbued, ultra-reactive biogel which can be energized by a set of specially configured quantum state coils. Contained within a protective reactor housing, the core's biogel glows with a vivid, deep pink color. In this state, all of the minds within the core are fully conscious and act in concert to perform the instructions provided by the genetically linked being to the best of their ability. Special interface systems allow these souls to directly control electronic systems, while entirely biogel based systems are provided whenever possible and practical.

While a biogel core is typically used as a living computer of sorts, it has potent capabilities of its own. All cores sharing a single genetic essence act as one unit, instantaneously sharing information and control capacity regardless of the distance between cores. The core is also capable of exerting some degree of control over the perceptions of any individual wearing biogel that has been imbued with the same genetic essence as itself. In theory, this means that nearly everyone wearing biogel is subject to the such control by Lady Anwae's biogel core network. In practice, the biogel core network has virtually no control over anyone not within close range of its cores, as the small size of the network drastically limits its capability to control both ships, systems, and any large number people simultaneously.

The directly emitted light of a biogel core can create a clear telepathic bond between the minds of the core and any biogel wearing sapient life form that it touches. Typically, the core will attempt to convince that being to reaming within its glow, unless some more pressing matter requires otherwise. The light causes the being's own suit to energize, specks of glow spreading to form splotches that spread to completely cover her biogel suit. Once the entire suit is aglow, the wearer instantly melts into a gooey. As a result of this property, individuals all engaging in maintenance work within the housing of an energized biogel core must wear a full suit of protective clothing.

Minds are injected into a biogel core using one of several methods. The simplest is to drop a sapient organic life form into the core from above. While this may be effective, and fun to watch, it also adds the beings full body mass to the core, which can't be removed unless the core is deenergized to allow it to be siphoned off. More useful is to use ultra-reactive biogel to transform a subject into a gooey, reprocess that gooey to drastically reduce its total volume, and then drop that into the core. The most common, and most efficient overall, is the directly connected soul injector system used in most facilities and aboard all biogel controlled starships.

Individual minds held captive within a biogel core can, in theory, be extracted by the will of the genetically linked controller and are drawn out using one of the probes installed within the reactor head. The small volume containing the extracted mind needs to be reprocessed to render it safe and useful. The genetically linked controller can enter and exit the core at will, typically using the connected soul injector as a portal. In theory, all minds within the existing biogel reactor cores came from willing volunteers under no coercion or duress, or from those who may have accidentally come into physical contact with the core's biogel mass. Individuals who are interested in becoming part of a biogel core may do so at the former Vixanti Facility Three, now the Gelitech Marian Drift Prefecture Operations Center, at the Mashiva Spaceport during one of the twice weekly interactive tours.

SOUL INJECTOR

Biogel Technology, Transformation Peril

In order to facilitate the adding of souls into the gestalt of a biogel reactor core, two separate systems have been developed. One directly inserts the subject into the physical mass of the core. The other applies activated biogel to the subject, converting her to the same, and processing the result prior to injecting it into the core. Both of these systems are referred to as soul injectors.

The direct insertion soul injector is the preferred system for ground based biogel reactor systems. With this system, the subject to be injected is restrained in a dropping frame integrated into the reactor head, in the middle of the control and data acquisition probes. Encompassed in a null gravity field, the subject is lowered physically into the gelatinous core mass. Her body is subsumed into the mass as it descends, and she remains alive and conscious throughout the process. Only once her body is completely subsumed does her still conscious soul begin to join the gestalt, and add its power to the core.

The indirect insertion soul injector is preferred for use aboard mobile platforms such as starships. In this system, the subject is held in a frame, while the activated biogel from the ship's network is allowed to make direct contact with her body. This causes the subject to be converted directly into more activated biogel, which is then pulled back into the network. The subject's soul is then filtered out and massaged into a dissociated state before being injected into the reactor core to join the gestalt. This process ensures instant union with the gestalt, therefore minimizing any potential disruption caused by the presence of an un-synchronized mind within the core.

Soul injection is an effectively irreversible process. In the event that a soul finds its way out of the core, all of its thoughts and memories are the same as all other souls within the core. Therefore, an errant core soul cannot be distinguished from any of the others, at least from the standpoint of technology. The dominant soul of all biogel, Omega, is capable of telling one soul from another, and of restoring it to more or less its prior self as a resynthesized being. Even so, the resynthesized individuals can never actually be parted from Omega, and are as completely subject to that soul's will as they were within their core.

Most Gelitech facilities with biogel reactor cores accept volunteers to join with their respective gestalts. Special reactor core tours are offered on occasion and include usually live soul injector demonstrations. Audience participation is always encouraged.

STREAM WEAPONS

Biogel Technology, Weapon, Transformation Peril

Biogel Stream Weapons direct a stream of highly energized biogel toward a hostile target. This stream imparts massive amounts of energy into a target's shields, overheating the driving superconductors and exposing the target's hull in very short order. Energized biogel streams are also highly effective against standard hull materials and most armors, 'burning' a hole and spraying into the target as an aerosol of ultrareactive biogel.

Anyone touched by this highly transformative black mist is converted almost instantly into a puddle of living, conscious, and fully aware liquid biogel. The black mist quickly loses energy, becoming reactive biogel after about fifteen seconds. This congeals upon anyone caught by it, and transforming them into a gummy of their own physical sex. After a minute or so, the biogel begins to congeal upon surfaces. It ceases to pose a hazard after about five minutes, and becomes fully solid in ten.

Four overall classes of biogel stream weapon exist: Fighter, Defense, Cruiser, and Alpha.

Fighter stream weapons exist only as sidemounts for Vixanti Biogel Fighter Pods. They are capable of instantly overwhelming fighter class shields and knocking a fair dent in light combatant shields. While still potentially dangerous against a cruiser class combatant, especially in large numbers, against battleship class or larger vessels, these weapons are better used to protect more capable units in the attack.

Defense stream weapons are biogel hemisphere projectors intended for mounting as a defense against fighters, light combatants, destroyers, cruisers, and incoming warheads. Fighters have no defense against these weapons, and a few hits are enough to deal with the typical light combatant or destroyer. Cruisers require a considerable amount of time on target. Battleship or larger targets are only threatened if their shields fail. Cruiser class stream weapons are larger biogel hemisphere projectors intended for use as general purpose weapons against all targets. A single hit is sufficient to deal with ships below cruiser size, and cruisers can generally only take a few before succumbing. These weapons can threaten battleships when deployed in numbers, while larger supercapital types require considerable effort to take down.

Alpha class stream weapons are fixed mount cannons. While they can be used like a normal stream weapon capable of knocking out even a battleship's shields in four or five hits, their real power comes when a volunteer is 'expended as ammunition', being liquefied and added to the discharge stream. This volunteer's soul becomes the controlling force behind the biogel, able to guide the stream to strike a maneuvering target. If this stream is able to get inside the target, it won't solidify. Instead, it congeals as an animate blob of reactive biogel under the control of the volunteer, seeking out and transforming all accessible enemy crew into gummies. This mass becomes a normal biogel monster, still able to transform targets, but having to completely surround them first.

While biogel based weapons are generally seen as being a 'non-lethal' option for warfare, they have not yet been deployed outside of a small experimental task force consisting of biogel powered and controlled light combatants, and the Destiny Omega.