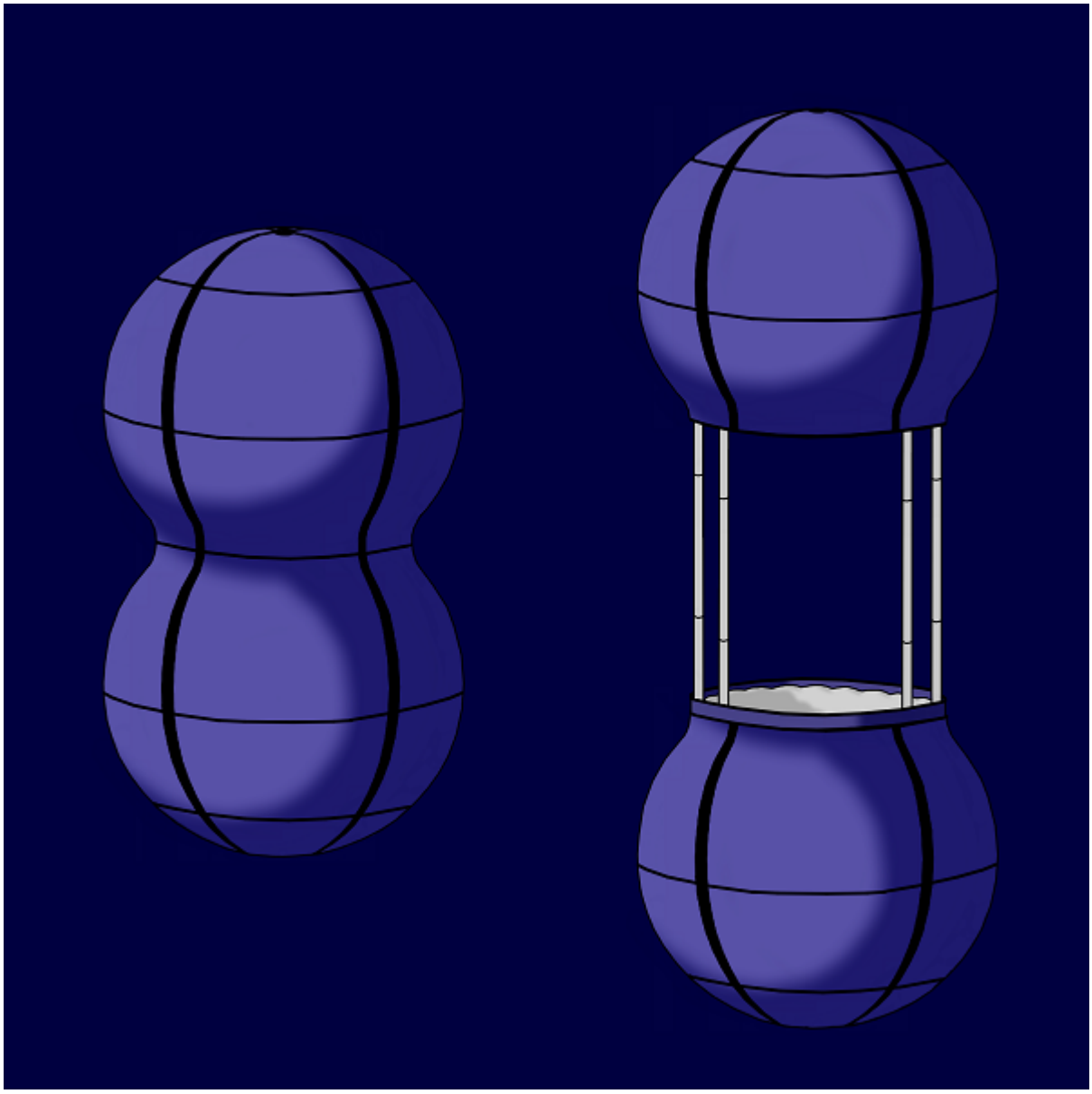
Type 33 Pilot Pod



The Type 33 Pilot Pod is a redesigned and compact variant of the Type 32 Pilot Pod and Type 32 Pilot Pod "Rakkasei" Block integrated together for YE 33. It is a full telepathic piloting solution that keeps the pilot in a fetal position and is generally as compact as possible. Like its Starfighter-based predecessor, it is designed to both improve the pilot's survivability and allow a standardized cockpit design, though the Type 33 Pilot Pod is intended more for large Power Armor or small Mecha. It is designed to allow full telepathic piloting and like its predecessor, the computer system is stored in this cockpit to prevent it from falling as easily into the hands of the enemy.

About the Type 33 Pilot Pod

After the Type 32 Pilot Pod was developed, plans for using it in Starfighters and in Mecha were drawn up, but the odds of a Mecha larger than a standard deck height being as useful were quite low. Due to this, the Type 32 Pilot Pod was assigned a Starfighter and Simulator role, and another more compact Pilot Pod was created with the data gleaned from testing of the larger model.

When it was decided to make the new Pod, the following goals were set:

- Further minimize volume and profile by containing the pilot in a fetal position
- Massage the pilot's back and body with a hemosynthetic insert to prevent cramping or bodily discomfort after leaving the pod
- Remove redundant and unneeded components
- Optimize and compact necessary self-contained systems
- Retain computer core into ejectable cockpit
- Run the same software as its predecessor (THOUGHT Software Package, as well as an AIES Virtual machine within a CIES or EIES)
- Make the unit able to hold a Star Army Butt Pack

Due to a need for superior video and audio processing, the Immersion System was later added as a software upgrade in YE 33.

The result was a peanut-shaped structure that was three feet in height and very reminiscent of the Type 32 Pilot Pod "Rakkasei" Block. It had geometric grooves for use with the joints which would be connected to it, and is intended to form the double torso joint of the mecha built around it. It splits onto a top and bottom half which split to open by way of compact hydraulic lifts, allowing access.

A Spacesuit is an option, but not required, and the unit has the same smooth, dark grey interior as the Ke-M2-3A "Mindy" Power Armor so that the pilot can still be clothed. It is recommended that the weapon and any sharp-edged items be placed in the Star Army Butt Pack, Type 29 before entering the pod and assuming a fetal position. The pod is designed not to close if anything might be pinched in the process. Afterward, the insert will massage the pilot's body to keep them from getting stiff or experiencing discomfort. This is not a problem for the flexible NH series.

Its simplicity combined with its shape and its thickness give it slightly less armor protection than a standard Power Armor. Wearing a Spacesuit is optional, as long as the Spacesuit is compact enough to fit. The Type 33 Pilot Pod actually uses a number of existing systems found in the Ke-M2-2D "Mindy II" Power Armor and the Star Army Escape Pod, Type 30.

The pod is made primarily of Yamataium with Yarvex sheets along the inside. If adopted by the Yamatai Star Empire, Xiulurium coating would also be used on the outside. However, such a coating can't be independently produced by Project THOUGHT.

Statistical Information

Government: Possibly Yamatai Star Empire in future Organization: Project THOUGHT, possibly Star Army of Yamatai and Ketsurui Fleet Yards in future Type: Small Ejectable Cockpit Class: PT-X3300, possibly Ke-X3300 Designer: Kage Yaichiro Manufacturer: Project THOUGHT possibly Star Army of Yamatai and Ketsurui Fleet Yards in future Production: Mass Production after unknown number of initial prototypes

Crew: 1 NH-22C Yamataian or better model, no taller than 6’ 10”, in fetal position **Appearance:** Peanut-shaped pod with various seams

Width: 26 inches (66 cm) Height: 38 inches (96.5 cm) **Mass:** 30kg (66lbs) net weight, 90kg (200lbs) maximum recommended load.

Speeds

Sublight: .375c in a vacuum **FTL:** 10c **Atmospheric:** Mach 1.8 at Earth sea level **Underwater:** 70mph (112kph)

Range: Indefinite due to Aether Generator and primarily Yamataium construction. Life Support can support a pilot's needs for 15 days, **and** support a pilot in stasis for 10 years. Lifespan: Undefined, recommended systems check once every 5 years, OS and Hardware upgrades as-needed.

Note: The Type 33 Pilot Pod lacks any dedicated weapons or weapon mounting ports.

Damage Capacity

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

- Hull: 5 SP (Mecha Scale)
- Shields: 5 (Threshold 1)

Compatibility

The Pilot Pod is compatible with an array of species, though to bring out the most advanced features and elements, an NH-model with a SPINE interface is required. An NH-27 can, however, pilot the machine with the transceivers without any loss in combat capability. It should be noted that it is possible to deactivate the other control systems in software to force the use of the SPINE interface and the Type 33 Star Army Communications Network Encryption System.

Race	Transceivers (if Enabled)	SPINE
Nepleslian	Incompatible (Analog)	Incompatible (Analog)
Human	Incompatible (Analog)	Incompatible (Analog)
NH-17 Nekovalkyrja	Disabled in Software	Incompatible
NH-22C Yamataian	Compatible	Incompatible

Race	Transceivers (if Enabled)	SPINE
NH-27 Nekovalkyrja	Compatible	Incompatible
NH-29	Compatible	Compatible
Minkan	Compatible	Incompatible
Minkan (Upgraded)	Compatible	Compatible
Nekovalkyrja, Type 33	Compatible	Compatible

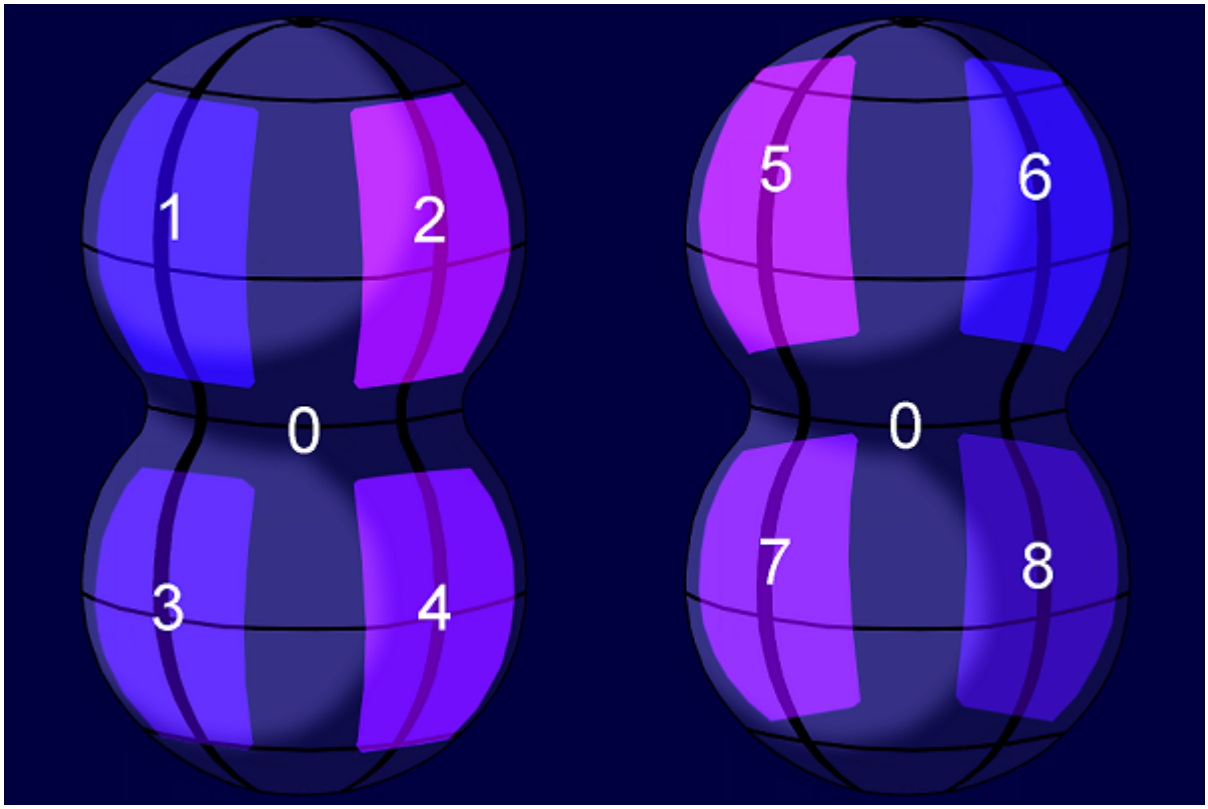
Control Methods

The Conventional Interface has been fully removed from the Type 33 Pilot Pod, leaving only the THOUGHT Interface; where SPINE or Mental Transceivers built into the walls of the pod allow a direct connection with the Compact Integrated Electronics System (CIES), the THOUGHT Software Package, and the Immersion System. This allows the pilot to see, feel, and move as if the pod or compatible connected hardware were part of their body, with numerous additional micromanaging options and benefits.

The THOUGHT Interface is intended to deliver an experience similar to that of a Star Army Power Armor, but notably enhanced and with many limitations removed. The pilot uses a bidirectional mental link with the CIES, Immersion System, and THOUGHT Software Package (filtered by the PSC) to allow them sensory and motor control of the machine, as if it were actually their body. Other options are possible as well, though it takes a notable degree of practice to unlock the true potential of this mode. The capabilities the THOUGHT Interface allows are designed to be only limited by the design of the unit controlled, and the pilot's skills. It is controlled by thought alone – with no tactile input whatsoever.

Compartments

In addition to seating the pilot, the pod seats various systems as well. The bulged ends of the pod allow for eight compact compartments to be installed, in which to install various things. The vast majority of these compartments hold the same things as the Type 32 Pilot Pod had, though compacted or in a lesser capacity. It is far less complex than the previous incarnation, streamlined and compacted due to the dimensions of the craft. No room is wasted in this configuration.



Compartments	Contents (Systems or Items
0	Cockpit
1	Utility Compartment
2	CIES Sensor Systems and Transceivers + PSC
3	Compact Integrated Electronics System (CIES) and components, Quantum Data Drive
4	Aether Generator and Capacitor System
5	Water
6	Rebreather/Oxygen Stores
7	Stasis Systems
8	Waste System + CFS

Systems Descriptions

Aether Generator and Capacitor System

A more compact Aether generator and capacitor system is utilized for this system, reducing the power available, but this is not an issue as the pod uses less energy than its predecessor. It is possible to reallocate power to other systems as needed. The generator is as small as possible, a standard “suitcase” model, and comes with two plugs for connecting other devices to. It is stored in Compartment Four.

Self-Destruct

Though its Aether Generator is tiny, it can still pack a punch. Overloading it can cause a decent amount of damage. The process takes only a few seconds and results in an aether energy explosion powerful enough to totally destroy the pod. The Pod has the ability to destroy most things within a twelve meter radius in this way, such as various Mishhu Battlepods. It can even take out the shielding of a Ripper Power Armor, or completely destroy an unshielded unit.

Damage: Tier 11, Medium Anti-Starship Range: 12 meters, radial

Armor, Frame, and Stealth Systems

The hull of the Pilot Pod is constructed of two layers of Yamataium, to provide the best possible mix of protection and the recovery from wear and tear. The bottom half has a lip that rests within the top one, designed to aid in keeping it airtight as well as to make it harder to open with prying tentacles. The inside has a Yarvex mesh to help protect the pilot from shrapnel. In between the layers of Yamataium is actually a fluid which expands into an airtight foam seal rapidly in the presence of vacuum, to prevent decompression should the hull be penetrated. The total thickness of the hull is 1 inch/2.5 centimeters. A Spacesuit is optional if it will allow the pilot to fit, though not required. This is all built atop a Yama-Dura modified ellipsoid frame designed for sustaining stresses and rapid acceleration from almost any direction – a necessity in the applications for which this system will be used.

Active Camouflage

Much like the on the Mindy and in Volumetric Windows, Active Camouflage technology is used – though the use of the technology on the far less complex surface makes it more efficient both in use of power and in the complexity of processing of the images shown. At times it is prudent to completely hide the pod, but making it look like a charred and undetonated torpedo is also an acceptable tactic. The system, like that of the Mindy 2A, can display false images up to 2 meters away, and can also emulate the red-collision avoidance strips present on the Mindy if needed.

Scalable Graviton Beam Projector

As on the predecessor, the upper rear of the pod is equipped with a small Ke-R3200/PT-M1-R3200 Scalable Graviton Beam Projector, though its output is relatively light. It is not able to tow much, though it can tow a Type 32 Pilot pod at the upper bounds of its tolerances. This comes into play when the Pod is deployed; and gives it the option of getting to a nearby SAoY ship, going through a brief hole in the CFS made by the ship to allow admittance, securing itself to the ship's hull quickly, and staying there until retrieval is possible. It is also meant to allow the pod to adhere to chunks of debris or to asteroids. By using the Active Camouflage and minimizing power output by shutting down nonessential systems, it can make the Pilot Pod yet harder to detect if concealment is desired. This particular Pilot Pod is even smaller and harder to find than the original.

Telescopic Rods

The telescopic rods extend from the top, made of Yama-Dura, and lift the top part of the pod as well as the top of whatever is attached. In the event of failure, a quick release can be used to detach each rod from the top of the pod.

Cockpit

The cockpit is simply a synthetic grey insert in which he pilot rests in the fetal position, indicated as Compartment Zero. Their uniform can remain on during the whole process, and the material shields them from various types of energies and radiation. As the pilot controls the pod or what it is attached to, they are unable to feel their normal body, and the pod takes care of various tasks like waste removal, oxygenation, and massage to keep the body from suffering ill effects during extended period in this position.

Mental Transceivers

These are the same mental transceivers as found in the Comfort Bed; and have been configured to work for all aspects of the THOUGHT Software Package, the Immersion System, and the CIES. The transceivers built into the pod's inner hull are designed to function even if the pilot is wearing a Spacesuit and helmet. It should be noted that in addition to the transceivers in the interior hull scanning the mind of the occupant, there is also a SPINE interface present. These transceivers can be disabled in software to restrict the machine to utilizing SPINE input to take full advantage of Type 33 Star Army Communications Network Encryption System security.

Manual Eject/Open

A manual ejection of the Pilot Pod from the connected system can be triggered via a normal ejection command to the computer or by pushing hard on a compact button in the left side of Pilot Pod as a manual release. A similar button on the right side opens the Pilot Pod itself and allows the pilot to leave the ejected Pilot Pod even if the computer is damaged. The buttons must be pressed fairly deep, recessing deeper into the Pilot Pod wall than an elbow or hand could press by accident.

Continuum Distortion Drive/Combined Field System

The Pilot Pod uses a Power Armor-based Continuum Distortion Drive/Combined Field System. In effect, the CFS sustains a small "pocket universe" around the pod by nesting electromagnetic and electrostatic fields. The combined field can serve a number of purposes, in this instance propulsion and shielding. It is usually left idling when inside a Mecha, ready for the pod to eject and deploy at a moment's notice. Unfortunately, its PA-scale dimensions only allow for travel at up to 10c, and a small level of shielding which protects from scalar attacks. The CFS is stored in Compartment Eight.

Note that an active CFS can cause lethal harm to an unshielded organic within 0.5 meters of the pod if not “idle”. The pod itself is designed with shielding systems protecting its occupant from these risks, though it is used to sterilize waste material. **Do not use around your starship, unshielded life forms, or ammunition.**

Compact Integrated Electronics System

The pod is equipped with a Compact Integrated Electronics System (CIES) rather than the standard BIES or AIES. The reasoning for this is that this pod contains the main computer core intended to control large Power Armor or even small Mecha-grade units. The bulk of the CIES systems and components are in Compartment Three of the pod, though the sensors and transceivers are located in Compartment Two. A scanner compatible with the electronic brains of Yamataians, Minkans, and Nekos is also located in the interior hull; which allows the CIES to be interfaced with even without SPINE, though SPINE is present and available. It should be noted that it is possible to load the system with Escort Integrated Electronics System (EIES) should the pod control a craft of a particularly large size, but things of this scale are usually left to its predecessor, the Type 32 Pilot Pod.

Type 33 Star Army Communications Network Encryption System

An upgrade in late YE 33 has added compliance with the Type 33 Star Army Communications Network Encryption System, to further protect against capture and misuse of this technology by the enemy. This is used in conjunction with the SPINE interface.

Immersion System

Added in YE 33 as a software upgrade, the Immersion System helps manage advanced three-dimensional audio and video capabilities while also providing a standardized format for all systems using Pilot Pods. It is capable of advanced panoramic vision and sound, triangulation of both, zoom, and overlays. In this configuration, it interacts seamlessly with the THOUGHT Software Package to paint as complete a picture of the situation for the pilot as possible.

THOUGHT Software Package

Added to the CIES is the THOUGHT Software Package, permitting both full telepathic control of the craft and the creation of ESS backups, whether through the mental transceivers in the interior hull or SPINE. Add to that the ability to send mission and ship-specific data along with the ESS transmission, and a full black box can be copied to a secure SAoY server. An AIES Virtual machine is also included for running Power Armor software and combat programs within the CIES. Other options can be added from the suite, especially in models for Aces and Nobility, but these are the standard loadout for this pod.

Erasure

If the Pod is captured by an enemy, the CIES will automatically (or even manually if desired) delete all Project THOUGHT software as well as the virtual AIES and all mission and ESS data. The system's RAM will be dumped and the data lost. This is to prevent the advanced software, all mission data, and Soul Savior data from falling into enemy hands. The storage system containing the software, mission data, etc will be electrically overloaded and burned out immediately after erasure to prevent analysis. Pilot Pod functions and very basic controls for the Pod (and only the Pod) can be preserved with solely the standard CIES configuration. A pod that's been erased will not function in a Starfighter or Mecha. It is not uncommon for a Pod's pilot to configure the system to undergo Erasure by default after the pilot enters stasis and the Pod has successfully sent their Soul Savior data to the ESS Database – just in case an enemy should happen to be the one to find them.

Life Support

The life support system is very simple. A supply of condensed oxygen with a rebreather system combined with a water store from which one can drink both last for fifteen days. A waste compartment is also present, connected to a catheter and a waste pouch. The tubes for these can snake up from the pant legs by the boot or through the waist of the pants to take care of these needs for the pilot, but cannot be used if the pilot is wearing a Spacesuit. The Butt Pack contains three weeks' worth of Star Army Emergency Ration Pills by default. These systems are each separated by different compartments in the pod, specifically Compartments One, Five, Six, and Eight. The waste connection stores are in the same area as the CFS for the purpose of sterilizing waste material to prevent illness.

Should a pilot's body feels bodily need, this sensation is by default felt even when the pilot is controlling the pod or attached hardware. Should the pilot wish to ignore these sensations, they are permitted to do so or even deactivate reception of the sensation, but at their own risk.

Sensor/Transciever Cluster and Conformal PSC Device

The standard sensor package of the CIES, combined with the Ke-M2-E2902 PSC (Psionic Signal Controller), also imported from the Mindy 2A, allows the unit to operate with a full suite of information access and control. Transmissions are filtered through the PSC by default, as it is safe enough to stay on at all times. The field generated by the PSC protects the entire Pilot Pod, and extends only two inches out past the surface of the hull (thus, it will not create an obvious psionic "dead zone"). This is stored in Compartment Two.

Stasis Systems

Located in Compartment Seven, the Stasis Systems allow a pilot to enter stasis after fifteen days have passed. The Stasis system will function for ten years before failing, by which point an ST backup of the Missing In Action occupant is presumed to have since been applied and that soldier revived. The unit can be set to disengage the stasis once a ship is detected in the area, when planet fall is made, or to leave

the occupant under.

Utility Compartment

Compartment One is designed to hold a standard Star Army Butt Pack, Type 29 and all it contains. It is recommended to keep the compartment well stocked, as it consists of the only food rations and ammunition included in the Pod. There is also room for a Star Army First Aid Kit, Type 32 in addition to this, though technicians have been known to carry items such as small toolkits. It is also where most soldiers drop their rank pins and other miscellaneous items upon entry into the pod.

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