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Sakura Enhancement Module

Ke-S3-M29xx core Sakura Enhancement Module design

History and Development

With the strain on resources caused by the war, Star Army Officer Kage Yaichiro endeavored to try and find ways to optimize existing forces and technology with minimum expenditure.

His awareness of the Sakura-class Light Gunship design led him to believe that the minimally used Mounting Ports on each side of the Sakura had more potential than they were given credit for. As they were, only Auxiliary Engines and Positron Railguns were utilized on these ports. Furthermore, creating these systems could assist his first assignment and his former CO, Ketsurui Hanako of the YSS Sakura, to whom he was still loyal.

With this in mind, Yaichiro endeavored to design a module that had its own supplemental power source. This would allow increased versatility of the Sakura, and permit units to be outfitted with mission specific tools without costly overhauls or the design of an entirely new vessel.

This data is near universal for all SEMs, though the modules can have additional and different components to assist in their respective functions.

It is of note that the uniqueness of the design requires a new designation to be integrated into the nomenclature system-"M" for Module.

Universal SEM Systems

Hull

There are two sections of Zesuaium-reinforced Yamataium Armor with Xiulurium coating, one for the top half and one for the bottom half of the SEM.

Wired Communication Links and Data Storage

The SEM usually does not possess its own computer system normally, but contains wired communication systems to connect the vessel's IES and communications system, as well as data storage relevant to the function of the device. Usually this data storage device is small, and acts only as a loader for the IES in the Sakura, and as a "black box". It is heavily shielded, to try and allow it to survive the destruction of its module and/or the Sakura it is linked to. All computations and commands are issued by the IES interface on the connected Sakura.

HSCS conduits and Passageways

The SEM contains passage ways to permit travel between the Sakura and the SEM, lined with HSCS conduit. While the SEM lacks HSCS fluid or nodal capability on its own, it can utilize such systems from the Sakura it is linked to.

The passageways have thick walls made of Zesuaium-reinforced Yamataium and Yarvex mesh, as well as Zesuaium-reinforced Yamataium bulkheads half a meter thick every ten meters down the corridor. These are normally open, but can be programmed as needed. They can be used to prevent depressurization, lock certain people or people below a given rank out of the SEM, or trap an enemy lured into the corridor. These are under the control of the IES as well as the CO.

Aether Generator

The SEM has its own Aether Generator to supplement that of the Sakura. The Sakura does not lose power to the SEM, so SEM use does not prevent the Sakura from firing its Main Gun, for example. However, the Sakura can pull power from the SEM if needed for emergencies.

Capacitor Banks

The SEM relies on ins own Aether Generators to power the Capacitor Banks. The banks are linked to power any devices on board, which are continuously charged by the Aether generators. Rather than draw massive amounts of power at once for the SEM, they continuously charge, and when the capacitors are discharged, the banks are charged gradually again. The charging rate can be configured via IES, but the faster the rate, the more the drain of the SEM's Aether generators.

Docking Ports

For emergencies such as when the Sakura is disabled, or other unforeseen instances, a small collection of docking ports can be found, meant for shuttles and Power Armors from the Sakura attached to it.

Life Support

The SEM has basic Life Support, specifically air scrubbers, oxygen tanks, water and ration storage. It is meant to be an emergency "life raft" of sorts, should the attached Sakura be destroyed, but lacks any form of engine capacity unless connected to an external computer. If engines are needed, shuttles can be connected to the unit, though acceleration will be very slow.

Quick Release

In an emergency, the Sakura can detach from the SEM in less than one second, and vice versa. However, this requires permission from the IES being disconnected, the highest ranking and surviving officer on the Sakura being disconnected, or the CO.

Self Destruct

With the potentially sensitive nature of the components of a module designed for any specific mission, it is possible to detach the vessel from a SEM and detonate it, using the Aether generator to overload and destroy the SEM.

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Theory of Operation

The SEM works by acting as an addition to a Sakura-class Light Gunship, connected via the Mounting Ports, and drawing from the Aether Generator built into it rather than tapping into that of the Sakura. This Aether generator loads into capacitor banks and allows the vessel to utilize components normally too power-hungry or too massive to be installed in the Sakura by normal means.

Possibilities include custom weapons for specific applications, crew training modules, infantry and/or cargo storage, more powerful interdiction devices, massive subspace communication jammers, powerful fleet-area PSCs, elaborate sensor systems, and even fleet-area active psionic attack devices.

Data for SEM Base

Item	Point Cost (Each)	Number	Description	Subtotal
Main Generator	400	1	Aether	400
Armor	50 x DR	2, DR 9	Zesuaium-Reinforced Yamataium	900
Stealth Armor	200	2	Xiulurium	400
Secondary Generator	200	1	Capacitor	200
Life Support	200	1	HSCS/Conventional	200
Total SRP Cost				2100

Current Models

Ke-S3-M2900 - Mini Striker SEM (Approved) Ke-S3-M2901 - Mobile Trainer SEM (Approved) Ke-S3-M2902 - Interdiction Field SEM (Approved)

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