# Sorakagami Aerospace Operations Suite

First introduced in YE 44 to satisfy all the requirements of the Next Gen Fighter Program in a single package. In Yamataigo, sorakagami (空鏡) means "sky mirror," evoking the evening sky at sunset, and referencing that it is an aerospace-operations extension of KAIMON's Kagami Integrated Sensor System.

Year of Creation	YE 44
Designer	Yugumo Fleetworks, KAIMON/Ascendant
Nomenclature	See: Nomenclature Catalog
Alt. Nomenclature	N/A
Manufacturer	Yugumo Corporation
Fielded by	Yugumo Corporation
Availability	Mass Production
Price	Varies

# **History**

# **Description**

The exceptional computing powers of the KAIMON system allow the it to easily host a wide array of additional sensor and electronic warfare systems. The KAIMON's sensor-fusion-first interface delivers the enormous amount of data collected by the craft in pertinent, actionable, distraction-free format.

### **Compatibility**

A plaform must have KAIMON computing, communications, and sensors as prerequisites for compatibility.

#### Cost

The Sorakagami Aerospace Operations Suite has cost that varies by application. It is standard on small craft<sup>1)</sup>, or on larger craft intended to serve as a carrier<sup>2)</sup>.

Tier Group	Factory Cost	Retrofit Cost
Personnel (1-3)	1000 KS + 1200 KS/Tier	1250 KS + 1500 KS/Tier
Armor (4-6)	1600 KS + 1800 KS/Tier	1750 KS + 2100 KS/Tier
Mecha (7-9)	2000 KS + 2400 KS/Tier	2500 KS + 2800 KS/Tier
Starship (10-12)	2400 KS + 3200 KS/Tier	2750 KS + 4000 KS/Tier
Capital Ship (13-15)	3600 KS + 4200 KS/Tier	4200 KS + 5400 KS/Tier

### **Usage**

An add-on module for Yugumo Corporation vessels with KAIMON, system is designed to facilitate small craft operations by merging traditional aerospace systems with spacefaring technology.

# **Features and Capabilities**

The *Sorakagami* has a range of features and capabilities pertaining to small craft aerospace sensing. All of these additional systems have tight, two-way integration with the default KAIMON Kagami Integrated Sensor System Combined Sensor Palettes, able to take advantage of, and augment, the KAIMON system's robust battlespace awareness and coordination, data sharing networks.

Additionally, the system adds calibration modes to the host platform's antigravity, artificial gravity, and inertial dampening systems to decrease G-force burdens on the pilot and crew for high-speed maneuvering in both atmospheric and space flight.

#### **Integrations**

The *Sorakagami* has plug and play compatibility with several external packages, bridging them with KAIMON and integrating them with its own sensors. In particular, *Sorakagami* has particularly tight integration with ELECTRA and *Umikagami Subsurface Operations Suite*.

#### **Third-Party**

These vendor systems may be installed on a *Sorakagami* with minimal labor and zero configuration:

- OH-V1-E4400 sensor package.
- Ke-V9-E3301 Unified Tactical Sensor Array / FTL Ansible.
- Ke-T8-E3102 Tactical Sensors Package.
- Ke-O4-E4500 Life Form Scanner.

### Radar Systems

As nadar is the sensing system of choice at the ranges and speeds of atmospheric flight, the Sorakagami possesses advanced RF-spectrum sensors that current, primarily spacefaring vehicles may no longer have:

- • 
   • Terrain-following radar and 
   • radar altimeter.
- Joint precision approach and landing system (JPALS).
- Ryu Heavy Industries Visual Synthetic Aperture Radar (ViSAR).

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- Multi-domain signal processing.
- Pulse-Doppler mode.
- **Ground-penetrating mode.**
- Both stationary and moving target indication.
- @ Look-down/shoot-down capability.
- Atmospheric weather surveillance radar.
- Enhanced @IFF.

#### **Imaging and Visualization**

In addition to RF-based sensors, the *Sorakagami* has a full suite of broad-spectrum audiovisual sensors, that work in conjunction with both the radar systems and the base Kagami ISS.

- @ IRST/ @ FLIR.
- Thermographic Imaging.
- **a** Lidar arrays:
  - ¬ Flash and collimated/continuous scanning modes.
  - Downward-looking (altimeter), upwards looking (atmospheric), and lateral (acollision avoidance).
  - Terrain Countour Matching.
- Sodar wind-speed measurement.
- Real time, 360- Steradian multi-spectrum audio/video capture, processing, and analysis.
- Visual/audio a IFF confirmation.

### **Battlespace Communications, Command, and Control**

Only available on Starship and Capital Ship Tier craft, this data-sharing feature operates in both hub-and-spoke and ad-hoc-mesh sensor and command networks, to increase the situational awareness of all craft in the battlespace. It provides not only data sharing, but data processing sharing, load-balancing and distributing processing and analysis tasks among the battlegroup to increase the speed and resilience of analysis. All KAIMON involved in an operation can (and should) be made subordinate nodes of the system, but *Sorakagami*-equipped craft benefit the most. Additionally, *Sorakagami* BCCC vessels can be subordinate or peer nodes of each one another, allowing for varying network topologies and hierarchical structures.

This feature greatly increases the air traffic control of carriers and command ships by leveraging the *Sorakagami's* sensor features for ATC operations.

### **Aerodynamic Shield Optimization Protocol**

Sorakagami includes software upgrades that allow for the shaping of a craft's shield systems into optimal aerodyne geometries for subsonic, transonic, supersonic, and hypersonic travel, tailored to the sensed external atmospheric fluid environment and airspeed in realtime.

# Star Army Small Aerospace Operations Package, Type 44

The Star Army of Yamatai variant of the *Sorakagami* features a a few restricted systems not available to the public:

- PANTHEON compatibility and integration.
- SACNES Interface
- Deeper SPINE integration.
- THOUGHT Software Package.
- THOUGHT Immersion System.

# **Nomenclature Catalog**

Catalog of Standard Product Nomenclature System.

Taka-Class Shuttle	Yu-T1-E4402
Mökin-Class Patrol Craft	Yu-V1-E4402
Amatsubame-Class Runabout	Yu-T2-E4402
Mozu-Class Starfighter	Yu-V2-E4402
Sagi-class Heavy Lift Transport	Yu-T3-E4402
Washi-class Cutter	Yu-V3-E4402
Misha-Class Explorer	Yu-Y1-E4402
<b>Tanya-Class Expeditionary Heavy Cruiser</b>	Yu-C1-E4402

## **OOC Notes**

Yuuki created this article on 2022/10/29 17:52. Approved as a sub-article.

Products & Items Database		
Product Categories subsystems		
Product Name	Sorakagami Aerospace Operations Suite	
Nomenclature	See Nomenclature List	
Manufacturer	Yugumo Corporation	
Year Released	YE 44	

1)

Tier 9 (Heavy Mecha) or lower

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Like the Tanya-Class Expeditionary Heavy Cruiser

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