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**Information furnished in conformity with the Convention  
on Registration of Objects Launched into Outer Space****Note verbale dated 7 July 2023 from the Permanent Mission of  
Japan to the United Nations (Vienna) addressed to the  
Secretary-General**

The Permanent Mission of Japan to the United Nations (Vienna), in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space (General Assembly resolution [3235 \(XXIX\)](#), annex), has the honour to transmit information on new and previously registered space objects (see annexes I and II).<sup>1</sup>

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<sup>1</sup> The data on the space objects referenced in the annexes were entered into the Register of Objects Launched into Outer Space on 22 July 2023.



## Annex I

### Registration information on satellites launched by Japan\*

#### STARS-EC

##### Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1998-067SE
Name of space object	STARS-EC
State of registry	Japan
Registration document	<a href="#">ST/SG/SER.E/1011</a>
Other launching States	United States of America
Date and territory or location of launch	14 March 2021 at 1500 hours 0 seconds UTC; International Space Station (ISS)
Basic orbital parameters	
Nodal period	88.91 minutes
Inclination	51.62 degrees
Apogee	229 kilometres
Perigee	212 kilometres
General function of space object	3U CubeSat with an ultra-small orbital elevator The tether extends from 1U CubeSats positioned at both ends (each portion of the tether is 11 metres in length, amounting to a total of 22 metres in length) The middle 1U CubeSat moves along the tether
Date of decay/re-entry/deorbit	17 April 2022 UTC

##### Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Shizuoka University
Launch vehicle	Antares
Additional information	The space object was launched on 20 February 2021 UTC by an Antares rocket and transported to ISS by Cygnus NG-15  The date of launch is the date of deployment from ISS and the territory or location of launch is the location of deployment

\* The information was submitted using the form prepared pursuant to General Assembly resolution [62/101](#) and has been reformatted by the Secretariat.

## G-satellite

### Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1998-067RK
Name of space object	G-satellite
State of registry	Japan
Registration document	<a href="#">ST/SG/SER.E/1011</a>
Date and territory or location of launch	28 April 2020 at 0855 hours 14 seconds UTC; ISS
Basic orbital parameters	
Nodal period	92.85 minutes
Inclination	51.64 degrees
Apogee	417 kilometres
Perigee	411 kilometres
General function of space object	G-satellite is one of the initiatives to celebrate the Tokyo Olympic Games. It will capture images of the dolls housed inside the satellite and send images and messages to the ground
Date of decay/re-entry/deorbit	21 April 2022 at 0516 hours 0 seconds UTC

### Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	University of Tokyo
Launch vehicle	Falcon 9
Additional information	The satellite was launched by Falcon 9 on 7 March 2020 UTC and carried to ISS by Dragon (SpX-20)  The date of launch is the date of deployment from ISS and the territory or location of launch is the location of deployment

## RWASAT-1

### Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1998-067QV
Name of space object	RWASAT-1
State of registry	Japan
Registration document	<a href="#">ST/SG/SER.E/1011</a>
Date and territory or location of launch	20 November 2019 at 0855 hours 13 seconds UTC; ISS
Basic orbital parameters	
Nodal period	92.71 minutes
Inclination	51.64 degrees

Apogee	415 kilometres
Perigee	400 kilometres
General function of space object	Earth observation and store-and-forward communication
Date of decay/re-entry/deorbit	28 April 2022 at 0713 hours 0 seconds UTC

**Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Space object owner or operator	University of Tokyo
Launch vehicle	H-IIB-F8 (JAXA)
Additional information	The satellite was launched by H-IIB-F8 on 24 September 2019 UTC and carried to ISS by HTV-8 The date of launch is the date of deployment from ISS and the territory or location of launch is the location of deployment

**Tsuru**

**Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space**

Committee on Space Research international designator	1998-067SD
Name of space object	Tsuru
State of registry	Japan
Registration document	<a href="#">ST/SG/SER.E/1011</a>
Date and territory or location of launch	14 March 2021 at 1120 hours 0 seconds UTC; ISS
Basic orbital parameters	
Nodal period	87.7 minutes
Inclination	51.6 degrees
Apogee	191 kilometres
Perigee	190 kilometres
General function of space object	Short message transmission by means of a continuous wave beacon; store-and-forward communication of remote sensing data from ground terminals to ground station; Earth photography using a commercial, off-the-shelf camera module; demonstration of a commercial, off-the-shelf glue; demonstration of active attitude determination and control; demonstration of Perovskite solar cells; demonstration of a loop antenna design using the satellite's structure as an antenna; demonstration of on-board image processing and classification; and demonstration of a latch-up detection circuit
Date of decay/re-entry/deorbit	4 July 2022 at 1702 hours UTC

### **Additional voluntary information for use in the Register of Objects Launched into Outer Space**

#### Change of status in operations

Date when space object is no longer functional 14 June 2022 UTC

Space object owner or operator Kyushu Institute of Technology, Japan

Website <https://birds4.birds-project.com/>

Additional information Launched by an Antares rocket on 20 February 2021 and carried to ISS by the Cygnus NG-15 spacecraft  
The date of launch is the date of deployment from ISS and the territory or location of launch is the location of deployment

### **ALE-DOM**

#### **Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space**

Committee on Space Research international designator 2019-003K

Name of space object ALE-DOM

State of registry Japan

Date and territory or location of launch 18 January 2019 at 0050 hours 20 seconds UTC; Uchinoura Space Center, Kagoshima, Japan

#### Basic orbital parameters

Nodal period 92.75 minutes

Inclination 97.136 degrees

Apogee 417.333 kilometres

Perigee 401.111 kilometres

General function of space object The DOM is a de-orbit device that deploys a thin film to increase atmospheric drag and it is mounted on the ALE-1 satellite. The ALE-1 will deploy the DOM and descend from the launch insertion altitude to an operational altitude of 400 kilometres. After the ALE-1 satellite reaches the operational altitude, the DOM will be detached from it

Date of decay/re-entry/deorbit 4 August 2022 at 0000 hours 0 seconds UTC

#### **Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Space object owner or operator ALE Co., Ltd.

Website [star-ale.com/en/](http://star-ale.com/en/)

Launch vehicle Epsilon Launch Vehicle Flight No. 4 (Epsilon-4)

Additional information After confirming the DOM had reached the operational altitude of 400 kilometres on 27 July 2022, the DOM was detached from ALE-1

**FUTABA****Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space**

Committee on Space Research international designator	1998-067UC
Name of space object	FUTABA
State of registry	Japan
Date and territory or location of launch	12 August 2022 at 0945 hours 0 seconds UTC; ISS
Basic orbital parameters	
Nodal period	92.84 minutes
Inclination	51.64 degrees
Apogee	419 kilometres
Perigee	408 kilometres
General function of space object	Radio-frequency communication with amateur radio (435 MHz band); capturing of the Earth's image; engineering mission relating to crystal growth; and measurement of ultraviolet rays in low Earth orbit
Date of decay/re-entry/deorbit	16 February 2023 UTC

**Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Space object owner or operator	Kyushu Institute of Technology, Japan
Launch vehicle	Space X CRS-25 (launched 15 July 2022)
Additional information	FUTABA was launched by Space X CRS-25 on 15 July 2022 UTC and was delivered to ISS by Dragon C208 The date of launch is the date of deployment from ISS and the territory or location of launch is the location of deployment FUTABA re-entered the atmosphere and decayed on 16 February 2023

**HSU-SAT1****Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space**

Committee on Space Research international designator	1998-067UB
Name of space object	HSU-SAT1
State of registry	Japan
Date and territory or location of launch	12 August 2022 UTC; ISS
Basic orbital parameters	
Nodal period	92.847 minutes
Inclination	51.642 degrees

Apogee	418.685 kilometres
Perigee	408.777 kilometres
General function of space object	<p>The objectives of the HSU-SAT1 satellite are technology demonstration of an electrical power supply, on-board computer and other bus components; the performance of three-axis attitude control by combining aerodynamic stabilization and magnetic torquers; and the use of modulated infrared light emitted from the operator's ground station as a command transmission link. The command format conforms to the infrared remote-control system used in electrical appliances</p> <p>The camera image is downlinked by Slow Scan Television (SSTV). The camera takes a photograph of the Earth with a resolution of 320×240 pixels. The photograph is converted into an analogue SSTV signal, transferred to communication and sent by an FM-SSTV downlink</p> <p>Technology demonstration of a gyro sensor and magnetic sensor whose operation in space has not been confirmed</p>
Date of decay/re-entry/deorbit	11 March 2023 UTC

**Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Space object owner or operator	The General Incorporated Association Future Science Institute
Additional information	<p>This space object was launched by Falcon-9 (Block 5) on 15 July 2022 and shipped to ISS by Dragon CRS-25</p> <p>The date of launch is the date of deployment from ISS and the territory or location of launch is the location of deployment</p> <p>This space object re-entered the atmosphere and disappeared on 11 March 2023</p>

**StriX-1**

**Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space**

Committee on Space Research international designator	2022-113A
Name of space object	StriX-1
State of registry	Japan
Date and territory or location of launch	15 September 2022 at 2038 hours 9 seconds UTC; Mahia Peninsula, New Zealand
Basic orbital parameters	
Nodal period	96 minutes
Inclination	97.631 degrees

Apogee	561 kilometres
Perigee	561 kilometres
General function of space object	StriX-1 is the third synthetic aperture radar (SAR) satellite made by Synspective Inc. for commercial SAR imagery (remote sensing) provision services, including upload and download functionality and clear imaging using up-down chirp antenna signals

#### **Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Space object owner or operator	Synspective Inc.
Website	<a href="http://synspective.com/">synspective.com/</a>
Launch vehicle	Electron #30
Additional information	Launched by Rocket Lab on 15 September 2022

#### **Space Environment Data Acquisition Equipment – Attached Payload (SEDA-AP)**

##### **Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space**

Committee on Space Research international designator	1998-067PU
Name of space object	Space Environment Data Acquisition Equipment – Attached Payload (SEDA-AP)
State of registry	Japan
Registration document	<a href="http://ST/SG/SER.E/966">ST/SG/SER.E/966</a>
Other launching States	United States
Date and territory or location of launch	15 July 2009 UTC; Kennedy Space Center of the National Aeronautics and Space Administration (NASA), United States
Basic orbital parameters	
Nodal period	92.66 minutes
Inclination	51.64 degrees
Apogee	408.0 kilometres
Perigee	402.0 kilometres
General function of space object	This payload is a space environment monitoring facility on ISS
Date of decay/re-entry/deorbit	24 September 2022 UTC

#### **Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Change of status in operations	
Date when space object is no longer functional	20 December 2018 at 2249 hours UTC
Space object owner or operator	Japan Aerospace Exploration Agency (JAXA)
Launch vehicle	STS-127 (Endeavour)



Additional information	SEDA-AP was separated from ISS on 20 December 2018 at 2249 hours UTC SEDA-AP has no battery and is estimated to decay within 25 years SEDA-AP re-entered the atmosphere and decayed on 24 September 2022
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## **Equilibrium Lunar-Earth Point 6U Spacecraft (EQUULEUS)**

### **Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space**

Committee on Space Research international designator	-
Name of space object	Equilibrium Lunar-Earth Point 6U Spacecraft (EQUULEUS)
State of registry	Japan
Other launching States	United States
Date and territory or location of launch	16 November 2022 at 0647 hours 0 seconds UTC; Kennedy Space Center of NASA, United States
Basic orbital parameters	
Nodal period	14,400 minutes
Inclination	30 degrees
Apogee	377,400 kilometres
Perigee	530 kilometres
General function of space object	EQUULEUS is a JAXA and University of Tokyo technology demonstration mission with the primary objective of demonstrating trajectory control techniques exploiting Sun-Earth-Moon dynamics, with the possibility of reaching an Earth-Moon libration orbit. It will also perform scientific observations with a suite of instruments

### **Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Space object owner or operator	JAXA
Launch vehicle	Space Launch System (SLS) Launch Vehicle
Additional information	Basic orbital parameters are as at 16 November 2022, which is the time of separation from SLS The launching organization is NASA

## Outstanding Moon Exploration Technologies Demonstrated By Nano Semi-Hard Impactor (OMOTENASHI)

### Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	-
Name of space object	Outstanding Moon Exploration Technologies Demonstrated By Nano Semi-Hard Impactor (OMOTENASHI)
State of registry	Japan
Other launching States	United States
Date and territory or location of launch	16 November 2022 at 0647 hours 0 seconds UTC; Kennedy Space Center of NASA, United States
Basic orbital parameters	
Nodal period	14,400 minutes
Inclination	30 degrees
Apogee	377,400 kilometres
Perigee	530 kilometres
General function of space object	OMOTENASHI demonstrated CubeSat lunar landing technologies. Because its original plan to land on the lunar surface had failed, the technologies were demonstrated in a heliocentric orbit. The orbiter carried the rocket motor and the surface probe  The rocket motor was planned to be used to cancel the velocity of the surface probe in the vicinity of the Moon. The plan was changed to the conduct of an ignition experiment of the rocket motor in orbit

### Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	JAXA
Launch vehicle	SLS Launch Vehicle
Additional information	Basic orbital parameters are as at 16 November 2022, which is the time of separation from SLS The launching organization is NASA

## IHI-SAT

### Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1998-067TJ
Name of space object	IHI-SAT
State of registry	Japan
Registration document	<a href="#">ST/SG/SER.E/1073</a>
Date and territory or location of launch	24 March 2022 at 0900 hours 0 seconds UTC; ISS

Basic orbital parameters	
Nodal period	92.8 minutes
Inclination	51.64 degrees
Apogee	429.8 kilometres
Perigee	418.8 kilometres
General function of space object	IHI-SAT is equipped with an ultra-high frequency (UHF) receiver for uplink, a super high frequency (SHF) transmitter for downlink and an automatic identification system receiver for the mission
Date of decay/re-entry/deorbit	18 November 2022 UTC

**Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Space object owner or operator	IHI Corporation
Additional information	Launched on 24 March 2022 UTC by Antares and carried to ISS by NG-17 Re-entered the atmosphere and burned up on 18 November 2022 UTC

## Geotail

**Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space**

Committee on Space Research international designator	1992-044A
Name of space object	Geotail
State of registry	Japan
Registration document	<a href="#">ST/SG/SER.E/261</a>
Other launching States	United States
Date and territory or location of launch	24 July 1992 at 1426 hours 0 seconds UTC; Cape Canaveral Station, United States
Basic orbital parameters	
Nodal period	12,350 minutes
Inclination	28.6 degrees
Apogee	341,164 kilometres
Perigee	184 kilometres
General function of space object	To investigate the structure and dynamics of the geomagnetic tail that extends on the nightside of the Earth

**Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Change of status in operations	
Date when space object is no longer functional	28 November 2022 at 0507 hours 13 seconds UTC
Space object owner or operator	Institute of Space and Astronautical Science (ISAS)

Launch vehicle	Delta II
Additional information	<p>The launching organization is NASA</p> <p>By the end of June 2022, Geotail's on-board data recorders (both systems) stopped working, making it impossible to obtain sufficient observation data. Therefore, it was decided to end the observation operation</p> <p>At the end of its operation, Geotail stopped sending and receiving radio signals and it has no battery, pressure vessel or other stored energy source</p>

## TAKA

### Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1998-067UL
Name of space object	TAKA
State of registry	Japan
Date and territory or location of launch	2 December 2022 at 0750 hours 0 seconds UTC; ISS
Basic orbital parameters	
Nodal period	91.01 minutes
Inclination	51.6 degrees
Apogee	178 kilometres
Perigee	175 kilometres
General function of space object	<p>Automatic Packet Reporting System (APRS) digipeater demonstration on a CubeSat</p> <p>Demonstration of ground data acquisition using store-and-forward</p> <p>Demonstration of a mobile phone application displaying BIRDS satellite data</p> <p>Measurement of high-energy electron precipitation in the radiation belt</p> <p>Demonstration of attitude visualization of the satellite</p> <p>Demonstration of an image classification programme by machine learning algorithms</p> <p>Demonstration of land use and cover by a commercial off-the-shelf (COTS) multi-spectrum camera</p> <p>Demonstration of a water quality evaluation of dams and lakes by a COTS multi-spectrum camera</p> <p>Demonstration of analysis of soil nitrogen/fertility levels by a COTS multi-spectrum camera</p>
Date of decay/re-entry/deorbit	14 May 2023 at 1515 hours UTC

### Additional voluntary information for use in the Register of Objects Launched into Outer Space

#### Change of status in operations

Date when space object is no longer functional 20 April 2023 at 1200 hours UTC

Space object owner or operator Kyushu Institute of Technology, Japan

Website [birds5.birds-project.com/](https://birds5.birds-project.com/)

Additional information Launched by an Antares rocket on 6 November 2022 and carried to ISS by the Cygnus NG-18 spacecraft  
The date of launch is the date of deployment from ISS and the territory or location of launch is the location of deployment  
TAKA re-entered the atmosphere and decayed

### ispace HAKUTO-R Mission 1 Lunar Lander

#### Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator 2022-168A

Name of space object ispace HAKUTO-R Mission 1 Lunar Lander

State of registry Japan

Other launching States United States

Date and territory or location of launch 11 December 2022 at 0738 hours 13 seconds UTC; Cape Canaveral/Eastern Test Range, United States

Basic orbital parameters

Nodal period n/a (non-ecliptic orbit)

Inclination 17.7 degrees with respect to the mean equatorial plane

Apogee 1,400,000 kilometres

Perigee n/a (non-ecliptic orbit)

General function of space object The main functions are to perform a soft landing on the lunar surface and to transport payloads, including customer rover and static payloads

Date of decay/re-entry/deorbit 25 April 2023 at 1645 hours 0 seconds UTC

#### Additional voluntary information for use in the Register of Objects Launched into Outer Space

##### Change of status in operations

Date when space object is no longer functional 25 April 2023 at 1645 hours 0 seconds UTC

Physical conditions when space object is moved to a disposal orbit Crash on the lunar surface at:  
latitude: 47.55 degrees north  
longitude: 44.38 degrees east

Space object owner or operator ispace Inc.

Website [ispace-inc.com/project/](https://ispace-inc.com/project/)

Launch vehicle SpaceX Falcon-9 Block 5

Celestial body	The Moon (crashed on the Moon's surface)
Additional information	The launch provider is SpaceX The mission includes regolith capture for commercial transactions with customers. The primary landing site will be at the Atlas crater in the Mare Frigoris. It will be the first privately led Japanese mission to land on the Moon At the final stage, the lunar lander attempted a soft landing but failed and crashed into the lunar surface at 1645 hours on 25 April 2023 UTC

## SPHERE-1

### Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2023-001BR
Name of space object	SPHERE-1
State of registry	Japan
Other launching States	United States
Date and territory or location of launch	3 January 2023 at 1456 hours 0 seconds UTC; Space Launch Complex 40, Cape Canaveral, Florida 32920, United States
Basic orbital parameters	
Nodal period	95.2 minutes
Inclination	97.6 degrees
Apogee	542.8 kilometres
Perigee	515.8 kilometres
General function of space object	The satellite is 6U in size with solar panels and a water resistojet thruster system that uses four thrusters. The satellite's mission is to take pictures with a camera and lens

### Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Owner: Sony Group Corporation
Website	<a href="https://starsphere.sony.com/en/">starsphere.sony.com/en/</a>
Launch vehicle	Launch vehicle: Falcon 9, Launch name: Transporter 6
Additional information	Launch provider: Space X

## OPTIMAL-1

### Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1998-067VA
Name of space object	OPTIMAL-1

State of registry	Japan
Date and territory or location of launch	6 January 2023 at 0900 hours 13 seconds UTC; ISS
Basic orbital parameters	
Nodal period	92.83 minutes
Inclination	51.642 degrees
Apogee	417 kilometres
Perigee	410 kilometres
General function of space object	Earth observation; store-and-forward communication; and demonstration of the propulsion system

**Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Space object owner or operator	ArkEdge Space Inc. and University of Fukui
Launch vehicle	Falcon 9
Additional information	The satellite was launched by Falcon 9 on 27 November 2022 UTC and carried to ISS by Dragon CRS-2 SpX-26  The date of launch is the date of deployment from ISS and the territory or location of launch is the location of deployment

**2023-012A**

**Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space**

Committee on Space Research international designator	2023-012A
Name of space object	-
National designator/registration number	2023-012A
State of registry	Japan
Date and territory or location of launch	26 January 2023 UTC; Tanegashima Space Center, Kagoshima, Japan
Basic orbital parameters	
Nodal period	95 minutes
Inclination	97.4 degrees
Apogee	516 kilometres
Perigee	499 kilometres
General function of space object	Satellite conducting missions assigned by the Government of Japan

**DRUMS TARGET-1****Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space**

Committee on Space Research international designator	2021-102M
Name of space object	DRUMS TARGET-1
State of registry	Japan
Registration document	
Date and territory or location of launch	9 November 2021 at 0055 hours 16 seconds UTC; Uchinoura Space Center, Kagoshima, Japan
Basic orbital parameters	
Nodal period	95.67 minutes
Inclination	97.5 degrees
Apogee	574 kilometres
Perigee	528 kilometres
General function of space object	This object was separated from the DRUMS micro-satellite for the demonstration of approach and capture technologies

**Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Space object owner or operator	Kawasaki Heavy Industries
Website	<a href="https://global.kawasaki.com/en/mobility/air/space/stratospheric_platform.html">global.kawasaki.com/en/mobility/air/space/stratospheric_platform.html</a>
Launch vehicle	Epsilon 5
Additional information	The launching organization is JAXA DRUMS TARGET-1 was separated from the DRUMS micro-satellite on 12 February 2023

**Inter-orbit Communication System-Exposed Facility (ICS-EF) subsystem****Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space**

Committee on Space Research international designator	1998-067RJ
Name of space object	Inter-orbit Communication System-Exposed Facility (ICS-EF) subsystem
State of registry	Japan
Registration document	<a href="https://www.unoosa.org/pdf/2010/10/STSGSERE1011.pdf">ST/SG/SER.E/1011</a>
Other launching States	United States
Date and territory or location of launch	15 July 2009 UTC; Kennedy Space Center of NASA, United States



<b>Basic orbital parameters</b>	
Nodal period	92.66 minutes
Inclination	51.64 degrees
Apogee	408.0 kilometres
Perigee	402.0 kilometres
General function of space object	This system was used for on-orbit communication between the exposed section of the ISS Japanese Experiment Module and the JAXA Data Relay Test Satellite
Date of decay/re-entry/deorbit	18 March 2023 UTC
<b>Additional voluntary information for use in the Register of Objects Launched into Outer Space</b>	
Change of status in operations	
Date when space object is no longer functional	21 February 2020 at 1850 hours UTC
Space object owner or operator	JAXA
Launch vehicle	STS-127 (Endeavour)
Additional information	The launching organization is NASA as part of an ISS payload launch ICS-EF was separated from ISS on 21 February 2020 UTC ICS-EF has no battery, pressure vessel or other stored energy source and will naturally decay within 25 years ICS-EF re-entered the atmosphere and decayed on 18 March 2023

## Annex II

### Registration information on launch vehicles launched by Japan\*

#### H-IIA Launch Vehicle Flight No. 28 Rocket Body

##### Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2015-015B
Name of space object	H-IIA Launch Vehicle Flight No. 28 Rocket Body
State of registry	Japan
Registration document	<a href="#">ST/SG/SER.E/869</a>
Date and territory or location of launch	26 March 2015 UTC; Tanegashima Space Center, Kagoshima, Japan
Basic orbital parameters	
Nodal period	94 minutes
Inclination	97.3 degrees
Apogee	498 kilometres
Perigee	483 kilometres
General function of space object	The space object is the spent rocket body of H-IIA F28
Date of decay/re-entry/deorbit	2 November 2022 UTC

##### Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 28
Additional information	The launching organizations are Mitsubishi Heavy Industries, Ltd. And the Japan Aerospace Exploration Agency  The H-IIA F28 Rocket Body re-entered the atmosphere and decayed on 2 November 2022

#### H-IIA Launch Vehicle Flight No. 27 Rocket Body

##### Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2015-004B
Name of space object	H-IIA Launch Vehicle Flight No. 27 Rocket Body
State of registry	Japan
Registration document	<a href="#">ST/SG/SER.E/869</a>

\* The information was submitted using the form prepared pursuant to General Assembly resolution [62/101](#) and has been reformatted by the Secretariat.

Date and territory or location of launch	1 February 2015 UTC; Tanegashima Space Center, Kagoshima, Japan
Basic orbital parameters	
Nodal period	94 minutes
Inclination	97.5 degrees
Apogee	514 kilometres
Perigee	494 kilometres
General function of space object	The space object is the spent rocket body of H-IIA F27
Date of decay/re-entry/deorbit	1 December 2022 UTC

**Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 27
Additional information	The launching organizations are Mitsubishi Heavy Industries, Ltd. and the Japan Aerospace Exploration Agency  The H-IIA F27 Rocket Body re-entered the atmosphere and decayed on 1 December 2022

**H-IIA Launch Vehicle Flight No. 46 Upper Stage**

**Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space**

Committee on Space Research international designator	2023-012B
Name of space object	H-IIA Launch Vehicle Flight No. 46 Upper Stage
National designator/registration number	2023-012B
State of registry	Japan
Date and territory or location of launch	26 January 2023 UTC; Tanegashima Space Center, Kagoshima, Japan
Basic orbital parameters	
Nodal period	95 minutes
Inclination	97.4 degrees
Apogee	516 kilometres
Perigee	499 kilometres
General function of space object	The space object is the spent upper of H-II A F46