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Committee on the Peaceful **Uses of Outer Space**

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

Note verbale dated 14 January 2021 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 concerning new and previously registered objects launched into outer space (see annex).1

¹ The data on the space object referenced in the annex were entered into the Register of Objects Launched into Outer Space on 28 January 2021.





Annex

Registration data on space objects launched by Japan*

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

Other launching States United States of America

Date and territory or location of launch 15 July 2009 UTC;

Kennedy Space Center of the National Aeronautics and Space Administration,

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 at the International

Space Station (ISS)

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)

Other 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

^{*} The information was submitted using the form prepared pursuant to General Assembly resolution 62/101 and has been reformatted by the Secretariat.

Hagoromo

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

Committee on Space Research

international designator

1990-007B

Name of space object Hagoromo

State of registry Japan

Date and territory or location of launch 24 January 1990 UTC;

Institute of Space and Astronautical Science (ISAS) Kagoshima Space Center,

Kagoshima, Japan

Basic orbital parameters

Nodal period Inclination Apogee Perigee -

General function of space object Technology demonstration for lunar

exploration

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

18 March 1990

Space object owner or operator ISAS

Launch vehicle M-3SII Launch Vehicle Flight No. 5

Celestial body space object is orbiting Moon

Other information Hagoromo was separated from the mother

satellite Hiten (Muses-A) and moved to a lunar orbit on 18 March 1990 UTC

Minerva-II-1A

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

Name of space object Minerva-II-1A National designator/registration number 2014-076A-A

State of registry Japan

Date and territory or location of launch 3 December 2014 at 0422 hours 4 seconds

UTC;

JAXA Tanegashima Space Center,

Kagoshima, Japan

Basic orbital parameters

Nodal period Inclination -

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Apogee -

Perigee -

General function of space object Minerva-II-1A is a rover that landed on the

surface of Ryugu and moved using a

hopping mechanism

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

9 November 2019 at 1000 hours 1 second

UTC

Space object owner or operator JAXA

Website www.hayabusa2.jaxa.jp/en

Launch vehicle H-IIA Launch Vehicle Flight No. 26

Celestial body Ryugu

Other information Minerva-II-1A was attached to asteroid

explorer Hayabusa2, which was launched by an H-IIA rocket on 3 December 2014. It was transferred to asteroid Ryugu by Hayabusa2 and deployed on 21 September

2018 at 0405 hours UTC

Minerva-II-1B

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

Name of space object Minerva-II-1B

National designator/registration number 2014-076A-B

State of registry Japan

Date and territory or location of launch 3 December 2014 at 0422 hours 4 seconds

UTC;

JAXA Tanegashima Space Center,

Kagoshima, Japan

Basic orbital parameters

Nodal period Inclination Apogee Perigee -

General function of space object Minerva-II-1B is a rover that landed on the

surface of Ryugu and moved using a

hopping mechanism

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

9 November 2019 at 1000 hours 1 second

UTC

Space object owner or operator JAXA

Website www.hayabusa2.jaxa.jp/en

Launch vehicle H-IIA Launch Vehicle Flight No. 26

Celestial body Ryugu

Other information Minerva-II-1B was attached to asteroid

explorer Hayabusa2, which was launched by an H-IIA rocket on 3 December 2014. It was transferred to asteroid Ryugu by Hayabusa2 and deployed on 21 September

2018 at 0405 hours UTC

OME-C1

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

Name of space object OME-C1
National designator/registration number 2014-076A-C

State of registry Japan

Date and territory or location of launch 3 December 2014 at 0422 hours 4 seconds

UTC;

JAXA Tanegashima Space Center,

Kagoshima, Japan

Basic orbital parameters

Nodal period Inclination Apogee Perigee -

General function of space object OME-C1 is a cover that protects Minerva-

II-1A and Minerva-II-1B

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

21 September 2018 at 0405 hours UTC

Space object owner or operator JAXA

Website www.hayabusa2.jaxa.jp/en

Launch vehicle H-IIA Launch Vehicle Flight No. 26

Celestial body Ryugu

Other information OME-C1 was attached to asteroid explorer

Hayabusa2, which was launched by an H-IIA rocket on 3 December 2014. It was transferred to asteroid Ryugu by Hayabusa2 and deployed on 21 September 2018 at

0405 hours UTC

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TM-B

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

Name of space object TM-B

National designator/registration number 2014-076A-D

State of registry Japan

Date and territory or location of launch 3 December 2014 at 0422 hours 4 seconds

UTC;

JAXA Tanegashima Space Center,

Kagoshima, Japan

Basic orbital parameters

Nodal period Inclination Apogee -

Perigee -

General function of space object TM-B is a target marker for a touchdown

operation by Hayabusa2

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 October 2018 UTC

Space object owner or operator JAXA

Website www.hayabusa2.jaxa.jp/en

Launch vehicle H-IIA Launch Vehicle Flight No. 26

Celestial body Ryugu

Other information TM-B was attached to asteroid explorer

Hayabusa2, which was launched by an H-IIA rocket on 3 December 2014. It was transferred to asteroid Ryugu by Hayabusa2

and deployed on 25 October 2018 at

0237 hours UTC

DCAM3

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

Name of space object DCAM3

National designator/registration number 2014-076A-G

State of registry Japan

Date and territory or location of launch 3 December 2014 at 0422 hours 4 seconds

UTC:

JAXA Tanegashima Space Center,

Kagoshima, Japan

Basic orbital parameters

Nodal period Inclination Apogee Perigee -

General function of space object DCAM3 is a deployable camera designed

to observe operations by Hayabusa2

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

5 April 2019 at 0722 hours UTC

Space object owner or operator JAXA

Website www.hayabusa2.jaxa.jp/en

Launch vehicle H-IIA Launch Vehicle Flight No. 26

Celestial body Ryugu

Other information DCAM3 was attached to asteroid explorer

Hayabusa2, which was launched by an H-IIA rocket on 3 December 2014. It was transferred to asteroid Ryugu by Hayabusa2 and deployed on 5 April 2019 at 0214 hours

UTC

TM-A

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

Name of space object TM-A

National designator/registration number 2014-076A-H

State of registry Japan

Date and territory or location of launch 3 December 2014 at 0422 hours 4 seconds

UTC:

JAXA Tanegashima Space Center,

Kagoshima, Japan

Basic orbital parameters

Nodal period Inclination Apogee Perigee -

General function of space object TM-A is a target marker for a touchdown

operation by Hayabusa2

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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

30 May 2019 UTC

Space object owner or operator JAXA

Website www.hayabusa2.jaxa.jp/en

Launch vehicle H-IIA Launch Vehicle Flight No. 26

Celestial body Ryugu

Other information TM-A was attached to asteroid explorer

Hayabusa2, which was launched by an H-IIA rocket on 3 December 2014. It was transferred to asteroid Ryugu by Hayabusa2 and deployed on 30 May 2019 at 0218

hours UTC

TM-E

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

Name of space object TM-E

National designator/registration number 2014-076A-K

State of registry Japan

Date and territory or location of launch 3 December 2014 at 0422 hours 4 seconds

UTC;

JAXA Tanegashima Space Center,

Kagoshima, Japan

Basic orbital parameters

Nodal period Inclination Apogee Perigee -

General function of space object TM-E is a target marker for a touchdown

operation by Hayabusa2

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

23 September 2019 UTC

Space object owner or operator JAXA

Website www.hayabusa2.jaxa.jp/en

Launch vehicle H-IIA Launch Vehicle Flight No. 26

Celestial body Ryugu

Other information TM-E was attached to asteroid explorer

Hayabusa2, which was launched by an

H-IIA rocket on 3 December 2014. It was transferred to asteroid Ryugu by Hayabusa2 and deployed on 16 September 2019 at

1617 hours UTC

TM-C

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

Name of space object TM-C

National designator/registration number 2014-076A-L

State of registry Japan

Date and territory or location of launch 3 December 2014 at 0422 hours 4 seconds

UTC;

JAXA Tanegashima Space Center,

Kagoshima, Japan

Basic orbital parameters

Nodal period Inclination Apogee Perigee -

General function of space object TM-C is a target marker for a touchdown

operation by Hayabusa2

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

23 September 2019 UTC

Space object owner or operator JAXA

Website www.hayabusa2.jaxa.jp/en

Launch vehicle H-IIA Launch Vehicle Flight No. 26

Celestial body Ryugu

Other information TM-C was attached to asteroid explorer

Hayabusa2, which was launched by an H-IIA rocket on 3 December 2014. It was transferred to asteroid Ryugu by Hayabusa2 and deployed on 16 September 2019 at

1624 hours UTC

OME-C2

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

Name of space object OME-C2
National designator/registration number 2014-076A-N

State of registry Japan

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Date and territory or location of launch 3 December 2014 at 0422 hours 4 seconds

UTC;

JAXA Tanegashima Space Center,

Kagoshima, Japan

Basic orbital parameters

Nodal period Inclination Apogee Perigee -

General function of space object OME-C2 is a cover that protects Minerva-

II-2

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

2 October 2019 at 1557 hours UTC

Space object owner or operator JAXA

Website www.hayabusa2.jaxa.jp/en

Launch vehicle H-IIA Launch Vehicle Flight No. 26

Celestial body Ryugu

Other information OME-C2 was attached to asteroid explorer

Hayabusa2, which was launched by an H-IIA rocket on 3 December 2014. It was transferred to asteroid Ryugu by Hayabusa2

and deployed on 2 October 2019 at

1557 hours UTC

Minerva-II-2

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

Name of space object Minerva-II-2
National designator/registration number 2014-074A-M

State of registry Japan

Date and territory or location of launch 3 December 2014 at 0422 hours 4 seconds

UTC;

JAXA Tanegashima Space Center,

Kagoshima, Japan

Basic orbital parameters

Nodal period Inclination Apogee Perigee -

General function of space object Scientific observation and engineering

demonstration of the hopping mechanism

for an exploration robot on an asteroid surface with microgravity

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

9 November 2019 at 0303 hours

35 seconds UTC

Space object owner or operator Tohoku University

Website www.hayabusa2.jaxa.jp/en

Launch vehicle H-IIA Launch Vehicle Flight No. 26

Celestial body Ryugu

Other information Minerva-II-2 was attached to asteroid

explorer Hayabusa 2, which was launched by an H-IIA rocket on 3 December 2014. It was transferred to asteroid Ryugu by Hayabusa2 and deployed on 2 October

2019 at 1557 hours UTC

Super Low Altitude Test Satellite (SLATS) "Tsubame"

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

Committee on Space Research

international designator

2017-082B

Name of space object Super Low Altitude Test Satellite (SLATS)

"Tsubame"

State of registry Japan

Registration document ST/SG/SER.E/846

Date and territory or location of launch 23 December 2017 at 0126 hours

22 seconds UTC;

JAXA Tanegashima Space Center,

Kagoshima, Japan

Basic orbital parameters

Nodal period 94.9 minutes
Inclination 98.3 degrees
Apogee 564.6 kilometres
Perigee 461.2 kilometres

General function of space object SLATS will demonstrate orbit control

operations at super low altitudes using ion engine technology developed by JAXA. Technical data related to the atmosphere acquired by SLATS will also be used for

the design of future satellites

Furthermore, SLATS will photograph the Earth and its technology will be evaluated for future Earth observation satellites

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Date of decay/re-entry/deorbit 1 October 2019 at 1013 hours 0 seconds

UTC

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

JAXA Space object owner or operator

Launch vehicle H-IIA Launch Vehicle Flight No. 37

Other information Launching organizations are Mitsubishi

Heavy Industries, Ltd. and JAXA

Basic orbital parameters described are as at

25 January 2018

In the future, orbit control operations will be used to lower the altitude sequentially

H-II Transfer Vehicle "Kounotori 8" (HTV8)

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

Committee on Space Research

international designator

2019-062A

H-II Transfer Vehicle "Kounotori 8" Name of space object

(HTV8)

State of registry Japan

Date and territory or location of launch 24 September 2019 at 1605 hours

05 seconds UTC;

JAXA Tanegashima Space Center,

Kagoshima, Japan

Basic orbital parameters

Perigee

92.9 minutes Nodal period Inclination 51.6 degrees 358.5 kilometres Apogee 346.0 kilometres

General function of space object HTV8 is an uncrewed resupply vehicle

designed to transport various pieces of cargo including research materials, replacement equipment and daily

commodities to ISS

Date of decay/reentry/deorbit 3 November 2019 UTC

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

Space object owner or operator **JAXA**

Launch vehicle H-IIB Launch Vehicle Flight No. 8

Other information Launching organizations are Mitsubishi

Heavy Industries, Ltd. and JAXA

Basic orbital parameters described are as at

28 September 2019

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After delivering its cargo to ISS, HTV8 will be unberthed from ISS and will make a controlled re-entry into the atmosphere

AES Satellite "SOCRATES"

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

2014-029C

Advanced Engineering Services (AES)

Satellite "SOCRATES"

National designator/registration number 2014-029C

State of registry Japan

Registration document ST/SG/SER.E/735

Date and territory or location of launch 24 May 2014 at 0305 hours 14 seconds

UTC;

JAXA Tanegashima Space Center,

Kagoshima, Japan

Basic orbital parameters

Nodal period 97.2 minutes
Inclination 97.9 degrees

Apogee 628.9 kilometres
Perigee 618.4 kilometres

General function of space object Demonstration of the small satellite

standard bus and provision of an environment to demonstrate advanced missions and element technologies in orbit

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

4 June 2019 at 0307 hours 27 seconds

UTC;

Physical conditions when space object is moved to a disposal orbit

After the mission was completed, the satellite stopped functioning by

telecommand. The satellite was made safe by separating the battery from the load

Space object owner or operator AES

Launch vehicle H-IIA Launch Vehicle Flight No. 24 (H-IIA

24F)

Other information Launching organizations are Mitsubishi

Heavy Industries, Ltd. and JAXA

Basic orbital parameters described are as at

30 June 2014

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RSP-00

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

Committee on Space Research

international designator

1998-067PP

Name of space object RSP-00 State of registry Japan

6 October 2018 at 1700 hours 0 seconds Date and territory or location of launch

> UTC; ISS

Basic orbital parameters

Perigee

Nodal period 91 minutes Inclination 51.6 degrees 401.8 kilometres Apogee 393.7 kilometres

General function of space object Technology demonstration of a transmitter

> that realizes higher speed transmissions than a conventional transmitter by sending photos of the Earth taken by RSP-00 itself. A conventional transmitter is also installed

and sends photos

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

6 October 2018 UTC

Space object owner or operator Ryman Sat Project Japan

Other information Launched by H-IIB F7 on 22 September

2018 UTC. RSP-00 was carried on HTV-7

and transported to ISS

Date of launch is the date of deployment from ISS and territory or location of launch

is the location of deployment

SPATIUM-I

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

Committee on Space Research

1998-067PN

international designator

SPATIUM-I Name of space object

State of registry Japan

6 October 2018 UTC; Date and territory or location of launch

ISS

14/20 V 21-00953 Basic orbital parameters

Nodal period 92.4 minutes
Inclination 51.6 degrees
Apogee 393 kilometres
Perigee 388 kilometres

General function of space object Demonstration of an on-board chip-scale

atomic clock (CSAC) and spread spectrum transmission using CSAC as the clock

source

Time-synchronization of multiple ground

stations

Reading of the carrier wave phases of a

single satellite

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

Space object owner or operator Kyushu Institute of Technology, Japan

Website www.facebook.com/Space-Precision-

Atomic-clock-TIming-Utility-Mission-293774767872332/?modal=admin_todo_tour

Other information Launched by an H-IIB rocket on

22 September 2018 and carried to ISS by the

HTV-7 spacecraft

Date of launch is the date of deployment from ISS and territory or location of launch

is the location of deployment

Toki

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

Committee on Space Research

international designator

1998-067MU

Name of space object Toki
State of registry Japan

Registration document ST/SG/SER.E/862

Date and territory or location of launch 7 July 2017 UTC;

ISS

Basic orbital parameters

Nodal period 91.7 minutes
Inclination 51.6 degrees
Apogee 359 kilometres
Perigee 357 kilometres

General function of space object Earth observation, outreach by sound signal

transmission and single event detection

Date of decay/re-entry/deorbit 3 May 2019 UTC

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

Space object owner or operator Kyushu Institute of Technology, Japan

Website birds1.birds-project.com

Other information Launched by Falcon 9 rocket on 4 June

2017 and carried to ISS by the SpaceX

Dragon CRS-11 spacecraft

Date of launch is the date of deployment from ISS and territory or location of launch

is the location of deployment

Uguisu

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

Committee on Space Research

international designator

1998-067QG

Name of space object Uguisu

State of registry Japan

Date and territory or location of launch 17 June 2019 UTC;

ISS

Basic orbital parameters

Nodal period 91.1 minutes
Inclination 51.6 degrees
Apogee 416 kilometres
Perigee 415 kilometres

General function of space object Short message transmission by continuous

beacon, Earth observation by camera module, measurement of the geomagnetic field, posture stabilization, on-orbit operation demonstration of LoRa module and on-orbit operation demonstration of a complex programmable logic device

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

Space object owner or operator Kyushu Institute of Technology, Japan

Website birds3.birds-project.com

Other information Launched by Antares rocket on 17 April

2019 and carried to ISS by the Cygnus

NG-11 spacecraft

Date of launch is the date of deployment from ISS and territory or location of launch

is the location of deployment

NEXUS

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

Committee on Space Research

international designator

2019-003F

Name of space object NEXUS
State of registry Japan

Date and territory or location of launch 18 January 2019 at 0050 hours 20 seconds

UTC;

JAXA Uchinoura Space Center,

Kagoshima, Japan

Basic orbital parameters

Nodal period 93.5 minutes
Inclination 97.3 degrees
Apogee 508.5 kilometres
Perigee 488.5 kilometres

General function of space object NEXUS is a 10 cm cubic amateur satellite.

The aim of the mission is to give a demonstration using transmitters and a linear transponder in the space environment

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

Space object owner or operator Nihon University

Launch vehicle Epsilon Launch Vehicle Flight No. 4

Other information Launched by JAXA

STARS-Me

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

Committee on Space Research

international designator

1998-067PQ

Name of space object STARS-Me

State of registry Japan

Date and territory or location of launch 6 October 2018 at 0800 hours 0 seconds

UTC; ISS

Basic orbital parameters

Nodal period 92.5 minutes
Inclination 51.639 degrees
Apogee 393 kilometres
Perigee 401 kilometres

General function of space object STARS-Me consists of two 1U CubeSats

that have independent basic functionality,

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each satellite communicating independently with the ground station. The two CubeSats are connected by a tether. STARS-Me is first secured together and put into orbit followed by deployment of the tether resulting in the separation of the two satellites. Thereafter, a "climber" will traverse the deployed tether. The climber, using Bluetooth, will transmit data to a ground station via a STARS-Me CubeSat

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

Space object owner or operator Shizuoka University

Website stars.eng.shizuoka.ac.jp/english.html

Other information Launched by an H-IIB rocket on

22 September 2018 and carried to ISS by

the HTV-7 spacecraft

Date of launch is the date of deployment from ISS and territory or location of launch

is the location of deployment

N-SAT-110

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

Committee on Space Research

international designator

2000-060A

Name of space object N-SAT-110

State of registry Japan
Other launching States France

Registration document ST/SG/SER.E/407

Date and territory or location of launch 6 October 2000 at 2300 hours UTC;

Guiana Space Centre, Kourou, French

Guiana

Basic orbital parameters

Nodal period 1,436 minutes
Inclination 0.029 degrees
Apogee 35,797 kilometres
Perigee 35,779 kilometres

General function of space object Domestic communications and domestic

broadcasting

Date of decay/re-entry/deorbit 10 January 2019 at 1055 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

17 January 2019 at 0137 hours UTC

Date when space object is moved to

a disposal orbit

10 January 2019 at 1055 hours UTC

Physical conditions when space object is moved to a disposal orbit

Satellite achieved a disposal altitude of 290 km above the geostationary orbit and all satellite systems were shut down

Fuel deplete operation and battery charge terminate operation were executed without

incident

Geostationary position 110 degrees East

Space object owner or operator SKY Perfect JSAT Corporation

Launch vehicle Ariane 42L

Other information Launch organization is Arianespace

Epsilon Launch Vehicle Flight No. 4 rocket body (third stage)

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

Committee on Space Research

international designator

2019-003H

Name of space object

Epsilon Launch Vehicle Flight No. 4

rocket body (third stage)

State of registry Japan

Date and territory or location of launch

18 January 2019 at 0050 hours 20 seconds

UTC;

JAXA Uchinoura Space Center,

Kagoshima, Japan

Basic orbital parameters

Nodal period 94 minutes
Inclination 97.18 degrees
Apogee 721 kilometres
Perigee 220 kilometres

General function of space object

This space object is part of the spent rocket

body of Epsilon Launch Vehicle Flight No. 4. The launch vehicle consists of a third stage and a post-boost stage; this

object is the third stage

Date of decay/re-entry/deorbit 7 August 2019 UTC

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

Space object owner or operator JAXA

Launch vehicle Epsilon Launch Vehicle Flight No. 4

Other information Launching organization is JAXA. The

rocket body (third stage) has no stored energy at the end of combustion (solid

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rocket motor) and is estimated to decay

within 25 years

Basic orbital parameters were as at separation of the third stage from Epsilon

Launch Vehicle Flight No. 4

Epsilon Launch Vehicle Flight No. 4 rocket body (post-boost stage)

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

Committee on Space Research

international designator

2019-003E

Name of space object Epsilon Launch Vehicle Flight No. 4

rocket body (post-boost stage)

State of registry Japan

Date and territory or location of launch 18 January 2019 at 0050 hours 20 seconds

UTC:

JAXA Uchinoura Space Center,

Kagoshima, Japan

Basic orbital parameters

Nodal period 94 minutes

Inclination 97.33 degrees

Apogee 500 kilometres

Perigee 482 kilometres

General function of space object This space object is part of the spent rocket

body of Epsilon Launch Vehicle Flight No. 4. The launch vehicle consists of a third stage and a post-boost stage; this

object is the post-boost stage

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

Space object owner or operator JAXA

Launch vehicle Epsilon Launch Vehicle Flight No. 4

Other information Launching organization is JAXA. The post-

boost stage is designed to release stored pressure upon passivation and is estimated

to decay within 25 years

Basic orbital parameters were acquired just prior to loss of communication with the

post-boost stage