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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 16 October 2018 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 space objects launched by Japan (see annex).

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Annex

Registration data on space objects launched by Japan*

De-orbit Mechanism Demonstration CubeSat “Freedom”

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

Committee on Space Research international designator	1998-067KS
Name of space object	De-orbit Mechanism Demonstration CubeSat “Freedom”
National designator	1998-067KS
State of registry	Japan
Date and territory or location of launch	16 January 2017 at 0910 hours UTC; International Space Station (ISS)
Basic orbital parameters	
Nodal period	93 minutes
Inclination	51.7 degrees
Apogee	420 kilometres
Perigee	400 kilometres
General function of space object	To demonstrate a thin-film deployment mechanism called the De-Orbit Mechanism (DOM)
Date of decay/re-entry/de-orbit	6 February 2017

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

Space object owner or operator	Nakashimada Engineering Works, Ltd., and Tohoku University
Other information	“Freedom” was released into low Earth orbit from ISS using the robotic arm of the Japanese Experiment Module “Kibo” The date of launch is the date when “Freedom” was released into orbit from ISS The basic orbital parameters provided are those as at 16 January 2017

ITF-2

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

Committee on Space Research international designator	1998-067KU
Name of space object	ITF-2

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

National designator	1998-067KU
State of registry	Japan
Date and territory or location of launch	16 January 2017 at 0910 hours 0 seconds UTC; ISS
Basic orbital parameters	
Nodal period	91 minutes
Inclination	51.6 degrees
Apogee	339 kilometres
Perigee	336 kilometres
General function of space object	ITF-2 sends a 435 MHz telemetry beacon by means of a Morse code audio tone on a frequency modulation (FM) transmitter running at 300 milliwatts output. The audio tone can be received using simple equipment such as a handheld transceiver with a simple Yagi-Uda antenna. Verification of a new type of transmitter in the space environment. Verification of a new type of small patch antenna

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

Space object owner or operator	University of Tsukuba
Other information	Date of launch is the date of deployment from ISS

Waseda-Sat3

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

Committee on Space Research international designator	1998-067KV
Name of space object	Waseda-Sat3
National designator	1998-067KV
State of registry	Japan
Date and territory or location of launch	16 January 2017 at 0910 hours 0 seconds UTC; ISS
Basic orbital parameters	
Nodal period	91 minutes
Inclination	53 degrees
Apogee radius	6,699 kilometres
Perigee radius	6,694 kilometres
General function of space object	Test of an experimental de-orbit system that uses folding membranes

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

Space object owner or operator	Waseda University
Other information	Date of launch is the date of deployment from ISS

EGG

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

Committee on Space Research international designator	1998-067KW
Name of space object	EGG
National designator	1998-067KW
State of registry	Japan
Date and territory or location of launch	16 January 2017 at 0920 hours UTC; ISS
Basic orbital parameters	
Nodal period	92.7 minutes
Inclination	51.6 degrees
Apogee radius	6,791.6 kilometres
Perigee radius	6,769.9 kilometres
General function of space object	Experimental engineering satellite for inflatable aeroshell deployment, orbital decay by means of aerodynamic drag and operations using the Global Positioning System and the Iridium Global Cellular Telecommunications System
Date of decay/re-entry/de-orbit	14 May 2017 at 2040 hours 0 seconds UTC

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

Change of status	
Date when space object was no longer functional	14 May 2017 at 2040 hours 0 seconds UTC
Date when space object was moved to a disposal orbit	11 February 2017 at 0900 hours 0 seconds UTC
Physical condition when space object was moved to a disposal orbit	The space object was functioning normally. The 0.8 m-diameter aeroshell was deployed
Space object owner or operator	University of Tokyo
Other information	Date of launch is the date of deployment from ISS

AOBA Velox-III

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

Committee on Space Research international designator	1998-067KX
Name of space object	AOBA Velox-III
National designator	1998-067KX
State of registry	Japan
Date and territory or location of launch	16 January 2017 UTC; ISS
Basic orbital parameters	
Nodal period	91.1 minutes
Inclination	51.6 degrees
Apogee	330 kilometres
Perigee	325 kilometres
General function of space object	In-orbit demonstration of a pulsed plasma thruster (PPT)-driven electric propulsion system. Detection of nuclear radiation-induced failure of microprocessors

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	http://kitsat.net/av3/index.html (in Japanese)
Other information	Date of launch is the date of deployment from ISS

Second Quasi-Zenith Satellite “Michibiki”

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

Committee on Space Research international designator	2017-028A
Name of space object	Second Quasi-Zenith Satellite “Michibiki”
State of registry	Japan
Date and territory or location of launch	1 June 2017 at 0017 hours 46 seconds UTC; Tanegashima Space Center, Kagoshima Prefecture, Japan
Basic orbital parameters	
Nodal period	1,436 minutes
Inclination	44.28 degrees
Apogee	38,933 kilometres
Perigee	32,641 kilometres

General function of space object	The second satellite employed in the Quasi-Zenith Satellite System, a Japanese satellite navigation system operating from an inclined elliptical geosynchronous orbit to achieve optimal high-elevation visibility in urban canyons and mountainous areas

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

Space object owner or operator	National Space Policy Secretariat, Cabinet Office, Japan
Website	http://qzss.go.jp/en
Launch vehicle	H-IIA Launch Vehicle, flight No. 34 (H-IIA-F34)
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and the Japan Aerospace Exploration Agency (JAXA)

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
National designator	1998-067MU
State of registry	Japan
Date and territory or location of launch	7 July 2017 UTC; ISS
Basic orbital parameters	
Nodal period	91.68 minutes
Inclination	51.635 degrees
Apogee	359 kilometres
Perigee	357 kilometres
General function of space object	Earth observation, outreach by means of sound signal transmission, and single event detection

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	http://birds1.birds-project.com
Other information	Date of launch is the date of deployment from ISS

Third Quasi-Zenith Satellite “Michibiki”

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

Committee on Space Research international designator	2017-048A
Name of space object	Third Quasi-Zenith Satellite “Michibiki”
State of registry	Japan
Date and territory or location of launch	19 August 2017 at 0529 hours 0 seconds UTC; Tanegashima Space Center, Kagoshima Prefecture, Japan
Basic orbital parameters	
Nodal period	1,436 minutes
Inclination	0.07 degrees
Apogee	35,792 kilometres
Perigee	32,780 kilometres
General function of space object	The third satellite employed in the Quasi-Zenith Satellite System, a Japanese satellite navigation system operating from a geostationary orbit

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

Geostationary position	127 degrees East
Space object owner or operator	National Space Policy Secretariat, Cabinet Office, Japan
Website	http://qzss.go.jp/en
Launch vehicle	H-IIA Launch Vehicle, flight No. 35 (H-IIA-F35)
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd., and JAXA

BSAT-4a

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

Committee on Space Research international designator	2017-059B
Name of space object	BSAT-4a
State of registry	Japan
Other launching States	France
Date and territory or location of launch	29 September 2017 at 2156 hours 33 seconds UTC; Kourou, French Guiana
Basic orbital parameters	
Nodal period	1,436.08 minutes

Inclination	0.05 degrees
Apogee	35,806 kilometres
Perigee	35,766 kilometres
General function of space object	Satellite communications and domestic broadcasting services

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

Geostationary position	110 degrees East
Space object owner or operator	Broadcasting Satellite System Corporation (B-SAT)
Launch vehicle	Ariane 5
Other information	Launching organization is Arianespace

Fourth Quasi-Zenith Satellite “Michibiki”

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

Committee on Space Research international designator	2017-062A
Name of space object	Fourth Quasi-Zenith Satellite “Michibiki”
State of registry	Japan
Date and territory or location of launch	9 October 2017 at 2201 hours 37 seconds UTC; Tanegashima Space Center, Kagoshima Prefecture, Japan
Basic orbital parameters	
Nodal period	1,436 minutes
Inclination	40.59 degrees
Apogee	38,919 kilometres
Perigee	32,650 kilometres
General function of space object	The fourth satellite employed in the Quasi-Zenith Satellite System, a Japanese satellite navigation system operating from an inclined elliptical geosynchronous orbit to achieve optimal high-elevation visibility in urban canyons and mountainous areas

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

Space object owner or operator	National Space Policy Secretariat, Cabinet Office, Japan
Website	http://qzss.go.jp/en
Launch vehicle	H-IIA Launch Vehicle, flight No. 36 (H-IIA-F36)
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd., and JAXA

2018-052A

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

Committee on Space Research international designator	2018-052A
National designator	2018-052A
State of registry	Japan
Date and territory or location of launch	12 June 2018 UTC; Tanegashima Space Center, Kagoshima Prefecture, Japan
Basic orbital parameters	
Nodal period	95 minutes
Inclination	97.4 degrees
Apogee	516 kilometres
Perigee	497 kilometres
General function of space object	Satellite conducting missions assigned by the Government of Japan