United Nations ST/sg/ser.e/796



Distr.: General 21 December 2017

Original: English

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 29 March 2017 from the Permanent Mission of the United States of America to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of the United States of America 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 registration data on objects launched into outer space by the United States for the period from May to December 2015 (see annexes I–VIII).¹

The United States requests that the space objects contained in the annexes to this document be placed on the Register of Objects Launched into Outer Space maintained by the United Nations. In submitting this request, the United States notes that, consistent with its long-standing registration practice, the United States is not necessarily a launching State for each of the space objects it registers. The United States makes this request in the spirit of contributing to the practical effectiveness of the treaties and is providing information to the greatest extent practicable.

¹ The data on space objects referenced in the annexes were entered into the Register of Object Launched into Outer Space as at 30 June 2017.





Annex I

Registration data on space launches by the United States of America for May 2015*

The following report supplements the registration data on United States space launches as at 31 May 2015. All launches were made from the territory of the United States unless otherwise specified.

				Ва	sic orbital ch	aracteristi	cs	
International designation	Name of the space object	Date of the launch	Location of the launch	Nodal period (min)	Inclination (degrees)	Apogee (km)	Perigee (km)	General function of the space object
The following	g objects were launch	ed since the la	st report and re	main in o	bit:			
2015-025A	OTV 4 (USA 261)	20 May 2015	_	95.2	55	700	355	Reusable space transportation systems
2015-025B	USS Langley	20 May 2015	_	95.2	55	700	355	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-025C	OptiCube 01	20 May 2015	_	95.2	55	700	355	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-025D	ParkinsonSat (PSat)	20 May 2015	_	95.2	55	700	355	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-025E	BRICSat P	20 May 2015	_	95.2	55	700	355	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-025F	OptiCube 02	20 May 2015	_	95.2	55	700	355	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-025G	GEARRS 2	20 May 2015	_	95.2	55	700	355	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-025H	OptiCube 03	20 May 2015	_	95.2	55	700	355	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-025J	Aerocube 8A	20 May 2015	_	95.2	55	700	355	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-025K	Aerocube 8B	20 May 2015	_	95.2	55	700	355	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-025L	LightSail A	20 May 2015	_	95.2	55	700	355	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-026A	DirecTV 15	27 May 2015	French Guiana	630.2	4.4	35 683	258	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

^{*} The registration data are reproduced in the form in which they were received.

		Date of the launch		Ва	sic orbital ch	aracteristi	CS	
International designation	Name of the space object		Location of the launch	Nodal period (min)	Inclination (degrees)	Apogee (km)	Perigee (km)	General function of the space object
The following	g objects not previou	ısly reported ha	ave been identif	ied since t	he last repor	t:		
None.								
The following	g objects not previou	sly reported ha	ave been identif	ied since t	he last repor	t but are	no longer	in orbit as at 235 9Z on 31 May 2015:
	Atlas 5 Centaur	20 May	_	95.2	55	700	355	Spent boosters, spent manoeuvring stage, shrouds and other non-functional objects
2015-025M	R/B	2015						other non ranetional objects
	R/B g objects achieved or		ast report but are	e no longe	r in orbit as a	at 2359Z	on 31 Ma	3
			ast report but are	e no longe	r in orbit as a	at 2359Z	on 31 Ma	3
The following		rbit since the la	•					y 2015:

None.

Revisions that should be made to previously reported data:

The following objects were launched since the last report but did not achieve orbit:

Registration data on space launches by the United States of America for June 2015*

The following report supplements the registration data on United States space launches as at 30 June 2015. All launches were made from the territory of the United States unless otherwise specified.

The following objects were launched since the last report and remain in orbit:

None.

The following objects not previously reported have been identified since the last report:

None.

The following objects not previously reported have been identified since the last report but are no longer in orbit as at 2359Z on 30 June 2015:

None.

The following objects achieved orbit since the last report but are no longer in orbit as at 2359Z on 30 June 2015:

None.

The following objects identified on a previous report are no longer in orbit as at 2359Z on 30 June 2015:

1997-074A, 1998-067FT

The following objects were launched since the last report but did not achieve orbit:

None.

Revisions that should be made to previously reported data:

^{*} The registration data are reproduced in the form in which they were received.

Annex III

Registration data on space launches by the United States of America for July 2015*

The following report supplements the registration data on United States space launches as at 31 July 2015. All launches were made from the territory of the United States unless otherwise specified.

			Location of the launch	В	asic orbital ch	aracteristi	cs	_
	Name of the space object	Date of the launch		Nodal period (min)	Inclination (degrees)	Apogee (km)	Perigee (km)	General function of the space object
The following	objects were laur	nched since th	e last report and re	main in or	bit:			
2015-033A	Navstar 74 (USA 262)	15 July 2015	_	729.7	54.9	20 509	20 436	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-033B	Atlas 5 Centaur R/B	15 July 2015	_	752.9	55.3	21 644	20 453	Spent boosters, spent manoeuvring stages, shrouds and other non-functional objects
2015-036A	WGS 7 (USA 263)	24 July 2015	-	1 314.4	24.1	66 151	587	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-036B	Delta 4 R/B	24 July 2015	-	1 324.4	24.2	66 696	487	Spent boosters, spent manoeuvring stages, shrouds and other non-functional objects
The following	objects not previ	ously reported	l have been identif	ied since th	ne last report:			
1998-067GJ	Flock 1E 5	14 July 2015	Launched from ISS Kibo Module	92.5	51.6	401	396	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067GK	Flock 1E 6	14 July 2015	Launched from ISS Kibo Module	92.5	51.6	401	396	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067GL	Flock 1E 3	14 July 2015	Launched from ISS Kibo Module	92.5	51.6	401	396	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067GM	Flock 1E 4	14 July 2015	Launched from ISS Kibo Module	92.5	51.6	401	396	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067GN	Flock 1E 7	14 July 2015	Launched from ISS Kibo Module	92.5	51.6	401	396	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

^{*} The registration data are reproduced in the form in which they were received.

				B_{ϵ}	asic orbital ch	aracteristi	CS	
International Name of the designation space object		Location of the launch	Nodal period (min)	Inclination (degrees)	Apogee (km)	Perigee (km)	General function of the space object	
1998-067GP	Flock 1E 8	14 July 2015	Launched from ISS Kibo Module	92.5	51.6	401	396	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067GQ	Flock 1E 9	15 July 2015	Launched from ISS Kibo Module	92.5	51.6	401	396	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067GR	Flock 1E 10	15 July 2015	Launched from ISS Kibo Module	92.5	51.6	401	396	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067GS	Flock 1E 13	15 July 2015	Launched from ISS Kibo Module	92.5	51.6	401	396	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067GT	Flock 1E 14	15 July 2015	Launched from ISS Kibo Module	92.5	51.6	401	396	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067GU	Arkyd 3R	16 July 2015	Launched from ISS Kibo Module	92.5	51.6	401	396	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067GV	Centennial 1	16 July 2015	Launched from ISS Kibo Module	92.5	51.6	401	396	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

The following objects not previously reported have been identified since the last report but are no longer in orbit as at 2359Z on 31 July 2015: None.

The following objects achieved orbit since the last report but are no longer in orbit as at 2359Z 3 on 31 July 2015:

The following objects identified on a previous report are no longer in orbit as at 2359Z on 31 July 2015: 2013-064U

The following objects were launched since the last report but did not achieve orbit:

None.

Revisions that should be made to previously reported data:

SI/SG/SER.E//

Annex IV

Registration data on space launches by the United States of America for August 2015*

The following report supplements the registration data on United States space launches as at 31 August 2015. All launches were made from the territory of the United States unless otherwise specified.

The following objects were launched since the last report and remain in orbit:

None.

The following objects not previously reported have been identified since the last report:

None.

The following objects not previously reported have been identified since the last report but are no longer in orbit as at 2359Z on 31 August 2015:

None.

The following objects achieved orbit since the last report but are no longer in orbit as at 2359Z on 31 August 2015:

None.

The following objects identified on a previous report are no longer in orbit as at 2359Z on 31 August 2015:

1998-067FP, 1998-067FS, 1998-067GA

The following objects were launched since the last report but did not achieve orbit:

None.

Revisions that should be made to previously reported data:

^{*} The registration data are reproduced in the form in which they were received.

Registration data on space launches by the United States of America for September 2015*

The following report supplements the registration data on United States space launches as at 30 September 2015. All launches were made from the territory of the United States unless otherwise specified.

				B_{ϵ}	asic orbital c	haracterisi	tics	
International designation	Name of the space object	Date of the launch	Location of the launch	Nodal period (min)	Inclination (degrees)	Apogee (km)	Perigee (km)	General function of the space object
The following	g objects were lau	nched since the	last report and ren	nain in orb	oit:			
2015-044A	MUOS 4	2 September 2015	_	702.3	19	35 762	3 824	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-044B	Atlas 5 Centaur R/B	2 September 2015	_	688.3	19.1	35 198	3 693	Spent boosters, spent manoeuvring stages, shrouds and other non-functional objects

The following objects not previously reported have been identified since the last report:

None.

The following objects not previously reported have been identified since the last report but were no longer in orbit as at 2359Z on 30 September 2015:

None.

The following objects achieved orbit since the last report but were no longer in orbit as at 2359Z on 30 September 2015:

None.

The following objects identified in a previous report were no longer in orbit as at 2359Z on 30 September 2015:

2009-014B, 2013-064F, 1998-067GC, 1998-067GD

The following objects were launched since the last report but did not achieve orbit:

None.

Revisions that should be made to previously reported data:

^{*} The registration data are reproduced in the form in which they were received.

Annex VI

Registration data on space launches by the United States of America for October 2015*

The following report supplements the registration data on United States space launches as at 31 October 2015. All launches were made from the territory of the United States unless otherwise specified.

				Bas	ic orbital cha	ıracteristics	;	_
International Name of the designation space object	Date of the launch	Location of the launch	Nodal period (min)	Inclination (degrees)	Apogee (km)	Perigee (km)	General function of the space object	
The followin	g objects were l	aunched since the l	ast report and	remain in orl	oit:			
2015-056B	Atlas 5 Centaur R/B	2 October 2015	_	703.3	26.7	35 330	4 310	Spent boosters, spent manoeuvring stages, shrouds and other non-functional objects
2015-058A	USA 264	8 October 2015	_	98.3	62.7	1 178	186	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-058B	Aerocube 5C	8 October 2015	_	98.3	62.7	1 178	186	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-058C	Aerocube 7	8 October 2015	_	98.3	62.7	1 178	186	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-058D	FOX 1	8 October 2015	_	98.3	62.7	1 178	186	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-058E	BisonSat	8 October 2015	_	98.3	62.7	1 178	186	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-058F	ARC 1	8 October 2015	_	98.3	62.7	1 178	186	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-058G	Snap 3 Alice	8 October 2015	_	98.3	62.7	1 178	186	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-058Н	LMRST-Sat	8 October 2015	_	98.3	62.7	1 178	186	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-058J	Snap-3 Eddie	8 October 2015	_	98.3	62.7	1 178	186	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-058K	PropCube 3	8 October 2015	-	98.3	62.7	1 178	186	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-058L	SINOD-D 1	8 October 2015	-	98.3	62.7	1 178	186	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-058M	Snap-3 Jimi	8 October 2015	_	98.3	62.7	1 178	186	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

^{*} The registration data are reproduced in the form in which they were received.

				Basic orbital characteristics				
International designation	Name of the space object	Date of the launch	Location of the launch	Nodal period (min)	Inclination (degrees)	Apogee (km)	Perigee (km)	General function of the space object
2015-058N	PropCube 1	8 October 2015	_	98.3	62.7	1 178	186	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-058P	SINOD-D 3	8 October 2015	_	98.3	62.7	1 178	186	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-058Q	Atlas Centaur R/B	8 October 2015	_	98.3	62.7	1 178	186	Spent boosters, spent manoeuvring stages, shrouds and other non-functional objects
2015-062A	Navstar 75 (USA 265)	31 October 2015	-	729.1	55	20 486	20 426	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-062B	Atlas 5 Centaur R/B	31 October 2015	_	755.2	55.3	21 713	20 473	Spent boosters, spent manoeuvring stages, shrouds and other non-functional objects
The following	g objects not pre	eviously reported ha	ve been ident	tified since th	ne last repo	rt:		
1998-067HB	Flock 2B-1	6 October 2015	Launched from ISS Kibo Module	92.61	51.64	407	398	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067HC	Flock 2B-2	6 October 2015	Launched from ISS Kibo Module	92.61	51.64	407	398	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067HD	Flock 2B-3	6 October 2015	Launched from ISS Kibo Module	92.61	51.64	407	398	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067HE	Flock 2B-4	6 October 2015	Launched from ISS Kibo Module	92.61	51.64	407	398	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067HF	Flock 2B-5	6 October 2015	Launched from ISS Kibo Module	92.61	51.64	407	398	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067HG	Flock 2B-6	6 October 2015	Launched from ISS Kibo Module	92.61	51.64	407	398	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067НН	Flock 2B-7	6 October 2015	Launched from ISS	92.61	51.64	407	398	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

			Location of the launch	Bas	ic orbital cha	racteristic	S	
	Name of the space object	Date of the launch		Nodal period (min)	Inclination (degrees)	Apogee (km)	Perigee (km)	General function of the space object
			Kibo Module					
1998-067НЈ	Flock 2B-8	6 October 2015	Launched from ISS Kibo Module	92.61	51.64	407	398	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067HK	Flock 2B-10	6 October 2015	Launched from ISS Kibo Module	92.61	51.64	407	398	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067HL	Flock 2B-9	6 October 2015	Launched from ISS Kibo Module	92.61	51.64	407	398	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

The following objects not previously reported have been identified since the last report but were no longer in orbit as at 23 59Z on 31 October 2015:

The following objects achieved orbit since the last report but were no longer in orbit as at 2359Z on 31 October 2015:

None.

The following objects identified in a previous report were no longer in orbit as at 2359Z on 31 October 2015:

1998-067FR, 1998-067FN, 1998-067FQ, 1998-067FU, 1998-067FX, 2013-064K

The following objects were launched since the last report but did not achieve orbit:

None.

Revisions that should be made to previously reported data:

Registration data on space launches by the United States of America for November 2015*

The following report supplements the registration data on United States space launches as at 30 November 2015. All launches were made from the territory of the United States unless otherwise specified.

The following objects were launched since the last report and remain in orbit:

None.

The following objects not previously reported have been identified since the last report:

None.

The following objects not previously reported have been identified since the last report but are no longer in orbit as at 2359Z on 30 November 2015:

None.

The following objects achieved orbit since the last report but are no longer in orbit as at 2359Z on 30 November 2015:

None.

The following objects identified on a previous report are no longer in orbit as at 2359Z on 30 November 2015:

2007-014A, 2008-017A, 2013-064P, 2013-064AD, 1998-067FZ

The following objects were launched since the last report but did not achieve orbit:

None.

Revisions that should be made to previously reported data:

^{*} The registration data are reproduced in the form in which they were received.

Annex VIII

Registration data on space launches by the United States of America for 31 December 2015*

The following report supplements the registration data on United States space launches as at 31 December 2015. All launches were made from the territory of the United States unless otherwise specified.

			Location of the launch	В	asic orbital ch	aracteristi	CS	
	Name of the space object	Date of the launch		Nodal period (min)	Inclination (degrees)	Apogee (km)	Perigee (km)	General function of the space object
The following	objects were las	unched since the la	ast report and re	main in or	bit:			
2015-072A	Cygnus ORB-4	6 December 2015	_	89.2	51.6	398	392	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-081A	Orbcomm FM 114	22 December 2015	_	97.5	47	660	616	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-081B	Orbcomm FM 119	22 December 2015	_	97.5	47	660	617	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-081C	Orbcomm FM 105	22 December 2015	_	97.5	47	661	617	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-081D	Orbcomm FM 110	22 December 2015	_	97.5	47	661	617	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-081E	Orbcomm FM 118	22 December 2015	_	97.5	47	661	618	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-081F	Orbcomm FM 112	22 December 2015	_	97.5	47	660	617	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-081G	Orbcomm FM 113	22 December 2015	_	97.5	47	658	615	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-081Н	Orbcomm FM 115	22 December 2015	_	97.5	47	660	616	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-081J	Orbcomm FM 108	22 December 2015	-	97.5	47	659	617	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-081K	Orbcomm FM 117	22 December 2015	-	97.5	47	659	616	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2015-081L	Orbcomm FM 116	22 December 2015	_	97.5	47	657	616	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

^{*} The registration data are reproduced in the form in which they were received.

				В	asic orbital ch	aracteristi	cs	_
International designation	Name of the space object	Date of the launch	Location of the launch	Nodal period (min)	Inclination (degrees)	Apogee (km)	Perigee (km)	General function of the space object

The following objects not previously reported have been identified since the last report:

None.

The following objects not previously reported have been identified since the last report but are no longer in orbit as at 2359Z on 31 December 2015:

None.

The following objects achieved orbit since the last report but are no longer in orbit as at 2359Z on 31 December 2015:

None.

The following objects identified on a previous report are no longer in orbit as at 2359Z on 31 December 2015:

2013-064X, 2013-064L, 2013-064M, 2013-064Q, 2013-064V, 2013-064Y, 2013-064AC, 2013-064AE, 2013-064AF, 1998-067FV, 1998-067GU

The following objects were launched since the last report but did not achieve orbit:

None.

Revisions that should be made to previously reported data: