United Nations ST/SG/SER.E/1031

Secretariat

Distr.: General
14 December 2021

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 1 December 2021 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 August to October 2021 (see annex).[1]

The United States requests that the space objects contained in the annex to the present 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 annex were entered into the Register of Objects Launched into Outer Space on 3 December 2021.

Please recycle

Annex

Registration data on space launches by the United States of America for the period from August to October 2021*

The following report supplements the registration data on United States space launches as at 31 October 2021.

International designation	*Name of the space object*	*Date of the launch*	*Location of the launch*	*Basic orbital characteristics*				*General function of the space object*	*Date of decay*
				Nodal period (minutes)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*		
The following objects were launched after the last report and remained in orbit as at 2359Z on 31 October 2021:									
2021-072A	Cygnus NG-16	10 August 2021	WLPIS	93.01	51.64	424	420	C	-
2021-082B	Starlink-3096	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082C	Starlink-3090	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082D	Starlink-3077	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082E	Starlink-3078	14 September 2021	AFWTR	91.74	70	363	357	C	-
2021-082F	Starlink-3073	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082G	Starlink-3084	14 September 2021	AFWTR	91.73	70	362	357	C	-
2021-082H	Starlink-3055	14 September 2021	AFWTR	91.73	70	362	357	C	-
2021-082J	Starlink-3058	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082K	Starlink-3057	14 September 2021	AFWTR	91.73	70	362	357	C	-
2021-082L	Starlink-3118	14 September 2021	AFWTR	91.74	70	363	357	C	-
2021-082M	Starlink-3093	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082N	Starlink-3042	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082P	Starlink-3109	14 September 2021	AFWTR	91.74	70	363	357	C	-
2021-082Q	Starlink-3100	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082R	Starlink-3119	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082S	Starlink-3116	14 September 2021	AFWTR	91.74	70	363	357	C	-
2021-082T	Starlink-3071	14 September 2021	AFWTR	91.73	70	362	357	C	-
2021-082U	Starlink-3048	14 September 2021	AFWTR	91.74	70	363	357	C	-
2021-082V	Starlink-3053	14 September 2021	AFWTR	91.73	70	362	357	C	-
2021-082W	Starlink-3104	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082X	Starlink-3102	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082Y	Starlink-3081	14 September 2021	AFWTR	91.74	70	362	357	C	-

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

International designation	*Name of the space object*	*Date of the launch*	*Location of the launch*	*Basic orbital characteristics*				*General function of the space object*	*Date of decay*
				Nodal period (minutes)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*		
2021-082Z	Starlink-3072	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AA	Starlink-3068	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AB	Starlink-3060	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AC	Starlink-3085	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AD	Starlink-3051	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AE	Starlink-3083	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AF	Starlink-3056	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AG	Starlink-3095	14 September 2021	AFWTR	91.73	70	362	357	C	-
2021-082AH	Starlink-3080	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AJ	Starlink-3082	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AK	Starlink-3088	14 September 2021	AFWTR	91.73	70	362	357	C	-
2021-082AL	Starlink-3106	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AM	Starlink-3052	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AN	Starlink-3089	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AP	Starlink-3054	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AQ	Starlink-3101	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AR	Starlink-3046	14 September 2021	AFWTR	91.74	70	363	357	C	-
2021-082AS	Starlink-3074	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AT	Starlink-3107	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AU	Starlink-3091	14 September 2021	AFWTR	91.73	70	362	357	C	-
2021-082AV	Starlink-3045	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AW	Starlink-3047	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AX	Starlink-3087	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082AY	Starlink-3069	14 September 2021	AFWTR	91.73	70	362	357	C	-
2021-082AZ	Starlink-3103	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082BA	Starlink-3086	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082BB	Starlink-3043	14 September 2021	AFWTR	91.73	70	362	357	C	-
2021-082BC	Starlink-3050	14 September 2021	AFWTR	91.74	70	362	357	C	-
2021-082BD	Starlink-3059	14 September 2021	AFWTR	91.73	70	362	357	C	-
2021-088A	Landsat 9	27 September 2021	AFWTR	98.34	98.22	688	671	C	-
2021-088D	CUTE-LASP	27 September 2021	AFWTR	95.9	97.62	574	550	C	-
2021-088E	CuPID	27 September 2021	AFWTR	95.89	97.62	574	550	C	-

International designation	*Name of the space object*	*Date of the launch*	*Location of the launch*	*Basic orbital characteristics*				*General function of the space object*	*Date of decay*
				Nodal period (minutes)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*		
2021-093A	Lucy	16 October 2021	AFETR	Heliocentric orbit				C	-
2021-093B	Atlas Centaur R/B	16 October 2021	AFETR	Heliocentric orbit				D	-
The following objects not previously reported were identified after the last report and remained in orbit as at 2359Z on 31 October 2021:									
1998-067SV	CAPSat	29 August 2021	TTMTR	92.88	51.64	418	413	C	-
2020-029C	FalconSat-8	17 May 2020	AFETR	92.3	45	392	383	C	-
The following objects achieved orbit after the last report but were no longer in orbit as at 2359Z on 31 October 2021:									
2021-072B	Antares R/B	10 August 2021	WLPIS	87.31	51.59	152	131	D	18 August 2021
2021-078A	Dragon CRS-23	29 August 2021	AFETR	93.01	51.64	424	420	E	1 October 2021
2021-082A	-	-	-	-	-	-	-	-	29 September 2021
2021-084A	Inspiration-4	16 September 2021	AFETR	91.84	51.64	369	360	E	18 September 2021
The following objects were launched after the last report but did not achieve orbit:									
None.									
The following objects identified in a previous report were no longer in orbit as at 2359Z on 31 October 2021:									
2020-057Y	-	-	-	-	-	-	-	-	1 August 2021
2019-074T	-	-	-	-	-	-	-	-	17 August 2021
2020-062BA	-	-	-	-	-	-	-	-	17 August 2021
2020-055AG	-	-	-	-	-	-	-	-	18 August 2021
2020-006AB	-	-	-	-	-	-	-	-	19 August 2021
2020-062BE	-	-	-	-	-	-	-	-	20 August 2021
2020-074Y	-	-	-	-	-	-	-	-	23 August 2021
2020-074AJ	-	-	-	-	-	-	-	-	24 August 2021
1964-086A	-	-	-	-	-	-	-	-	25 August 2021
2021-041BA	-	-	-	-	-	-	-	-	25 August 2021
2013-064Z	-	-	-	-	-	-	-	-	26 August 2021
2020-006AZ	-	-	-	-	-	-	-	-	26 August 2021
2020-088B	-	-	-	-	-	-	-	-	26 August 2021
1998-067NE	-	-	-	-	-	-	-	-	28 August 2021
2020-070J	-	-	-	-	-	-	-	-	29 August 2021
2020-073P	-	-	-	-	-	-	-	-	4 September 2021
2020-073AD	-	-	-	-	-	-	-	-	6 September 2021
2020-074AL	-	-	-	-	-	-	-	-	11 September 2021
2020-088W	-	-	-	-	-	-	-	-	11 September 2021

International designation	*Name of the space object*	*Date of the launch*	*Location of the launch*	*Basic orbital characteristics*				*General function of the space object*	*Date of decay*
				Nodal period (minutes)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*		
2020-057BF	-	-	-	-	-	-	-	-	12 September 2021
2020-062BJ	-	-	-	-	-	-	-	-	12 September 2021
2020-088D	-	-	-	-	-	-	-	-	13 September 2021
2020-001BK	-	-	-	-	-	-	-	-	20 September 2021
2019-029BE	-	-	-	-	-	-	-	-	26 September 2021
2020-073AB	-	-	-	-	-	-	-	-	29 September 2021
2020-001BA	-	-	-	-	-	-	-	-	30 September 2021
2020-057AE	-	-	-	-	-	-	-	-	30 September 2021
2015-025K	-	-	-	-	-	-	-	-	2 October 2021
2020-074AQ	-	-	-	-	-	-	-	-	2 October 2021
2019-029AY	-	-	-	-	-	-	-	-	3 October 2021
2020-073BD	-	-	-	-	-	-	-	-	3 October 2021
2020-088F	-	-	-	-	-	-	-	-	3 October 2021
2015-025J	-	-	-	-	-	-	-	-	11 October 2021
1998-067QR	-	-	-	-	-	-	-	-	13 October 2021
2019-074AN	-	-	-	-	-	-	-	-	15 October 2021
1998-067QN	-	-	-	-	-	-	-	-	18 October 2021
2020-001Y	-	-	-	-	-	-	-	-	18 October 2021
2019-071E	-	-	-	-	-	-	-	-	19 October 2021
1998-067PX	-	-	-	-	-	-	-	-	21 October 2021
2020-088AZ	-	-	-	-	-	-	-	-	22 October 2021
2020-062BG	-	-	-	-	-	-	-	-	23 October 2021
2020-038AM	-	-	-	-	-	-	-	-	25 October 2021
2019-036X	-	-	-	-	-	-	-	-	28 October 2021
2020-088BL	-	-	-	-	-	-	-	-	30 October 2021
2020-006V	-	-	-	-	-	-	-	-	31 October 2021
2021-012BL	-	-	-	-	-	-	-	-	31 October 2021
Revisions that should be made to previously reported data:									
The international designators and parameters for the objects listed below and originally registered in document ST/SG/SER.E/983 should read as shown:									
2021-006EH	ARCE-1A	24 January 2021	AFETR	95.2	97.5	537	521	C	-

International designation	*Name of the space object*	*Date of the launch*	*Location of the launch*	*Basic orbital characteristics*				*General function of the space object*	*Date of decay*
				Nodal period (minutes)	*Inclination (degrees)*	*Apogee (km)*	*Perigee (km)*		
2021-006BY	P2-10	24 January 2021	AFETR	95.2	97.5	536	523	C	-

Abbreviations and key

Location of the launch: AFETR, United States Air Force Eastern Test Range; AFWTR, United States Air Force Western Test Range; TTMTR, Baikonur Cosmodrome, Kazakhstan; WLPIS, Wallops Island, United States.

General function of the space object:

A Spacecraft engaged in investigation of spaceflight techniques and technology

B Spacecraft engaged in research and exploration of the upper atmosphere

C Spacecraft engaged in practical applications and uses of space technology such as weather or communications

D Spent boosters, spent manoeuvring stages, shrouds and other non-functional objects

E Reusable space transportation systems