



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

Note verbale dated 30 June 2023 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 April 2023 (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 the space objects referenced in the annex were entered into the Register of Objects Launched into Outer Space on 10 July 2023.



Annex

Registration data on space launches by the United States of America for April 2023*

The following report supplements the registration data on United States space launches as at 30 April 2023.

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 30 April 2023:									
2023-050A	Checkmate 8	2 April 2023	AFWTR	104	81	953	942	C	-
2023-050B	Checkmate 5	2 April 2023	AFWTR	104	81	953	942	C	-
2023-050C	Checkmate 4	2 April 2023	AFWTR	103.99	81	953	942	C	-
2023-050D	Checkmate 6	2 April 2023	AFWTR	103.99	81	953	942	C	-
2023-050E	Checkmate 7	2 April 2023	AFWTR	103.99	81	953	941	C	-
2023-050F	Checkmate 2	2 April 2023	AFWTR	103.99	81	953	941	C	-
2023-050G	Checkmate 1	2 April 2023	AFWTR	103.98	81	952	941	C	-
2023-050H	Checkmate 3	2 April 2023	AFWTR	103.98	81	952	941	C	-
2023-050J	BB 2	2 April 2023	AFWTR	104.19	81	963	949	C	-
2023-050K	BB 1	2 April 2023	AFWTR	104.08	81	960	943	C	-
2023-052B	Falcon 9 R/B	7 April 2023	AFETR	529.38	27.14	30 413	186	D	-
2023-054E	Lemur 2 Onereflection	15 April 2023	AFWTR	94.61	97.4	506	493	C	-
2023-054K	Lemur 2 Spacegus	15 April 2023	AFWTR	94.59	97.4	506	491	C	-
2023-054L	CIRBE	15 April 2023	AFWTR	94.59	97.39	504	494	C	-
2023-054M	It's About Time	15 April 2023	AFWTR	94.61	97.41	508	492	C	-
2023-054P	Hawk-7A	15 April 2023	AFWTR	94.58	97.41	507	490	C	-
2023-054R	Hawk-7B	15 April 2023	AFWTR	94.59	97.4	507	490	C	-
2023-054T	GHOST-1	15 April 2023	AFWTR	94.6	97.41	508	491	C	-
2023-054U	Vigoride 6	15 April 2023	AFWTR	94.57	97.41	507	489	C	-
2023-054V	GHOST-2	15 April 2023	AFWTR	94.58	97.41	507	489	C	-
2023-054W	Umbra-06	15 April 2023	AFWTR	95.14	97.4	527	523	C	-
2023-054X	Tomorrow-R1	15 April 2023	AFWTR	94.57	97.41	507	489	C	-
2023-054Y	Hawk-7C	15 April 2023	AFWTR	94.59	97.41	508	489	C	-
2023-054AE	Lemur 2 Romeo-N-LEO	15 April 2023	AFWTR	94.48	97.4	504	483	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)		
2023-056A	Starlink-30096	19 April 2023	AFETR	87.94	42.99	177	167	C	-
2023-056B	Starlink-30107	19 April 2023	AFETR	94.16	43	479	477	C	-
2023-056C	Starlink-30106	19 April 2023	AFETR	94.16	43	479	477	C	-
2023-056D	Starlink-30095	19 April 2023	AFETR	91.03	43	329	321	C	-
2023-056E	Starlink-30103	19 April 2023	AFETR	94.17	43	479	477	C	-
2023-056F	Starlink-30113	19 April 2023	AFETR	94.16	43	479	477	C	-
2023-056G	Starlink-30098	19 April 2023	AFETR	94.16	43	479	477	C	-
2023-056H	Starlink-30090	19 April 2023	AFETR	94.16	43	479	477	C	-
2023-056J	Starlink-30049	19 April 2023	AFETR	93.26	43	435	433	C	-
2023-056K	Starlink-30083	19 April 2023	AFETR	90.99	43	327	319	C	-
2023-056L	Starlink-30089	19 April 2023	AFETR	90.84	43	321	311	C	-
2023-056M	Starlink-30086	19 April 2023	AFETR	93.21	43	433	431	C	-
2023-056N	Starlink-30109	19 April 2023	AFETR	93.23	43	434	432	C	-
2023-056P	Starlink-30108	19 April 2023	AFETR	91.6	43	356	350	C	-
2023-056Q	Starlink-30104	19 April 2023	AFETR	94.16	43	479	477	C	-
2023-056R	Starlink-30101	19 April 2023	AFETR	94.16	43	478	478	C	-
2023-056S	Starlink-30111	19 April 2023	AFETR	93.19	43	432	430	C	-
2023-056T	Starlink-30097	19 April 2023	AFETR	93.2	43	432	430	C	-
2023-056U	Starlink-30099	19 April 2023	AFETR	92.75	43	411	407	C	-
2023-056V	Starlink-30094	19 April 2023	AFETR	93.17	43	431	429	C	-
2023-056W	Starlink-30112	19 April 2023	AFETR	93.18	43	431	429	C	-
2023-058A	Starlink-6038	27 April 2023	AFWTR	92.42	97.66	394	392	C	-
2023-058B	Starlink-5954	27 April 2023	AFWTR	92.42	97.66	394	392	C	-
2023-058C	Starlink-6039	27 April 2023	AFWTR	92.42	97.66	394	392	C	-
2023-058D	Starlink-5988	27 April 2023	AFWTR	92.42	97.66	394	392	C	-
2023-058E	Starlink-5876	27 April 2023	AFWTR	92.42	97.66	394	392	C	-
2023-058F	Starlink-6033	27 April 2023	AFWTR	92.42	97.66	394	392	C	-
2023-058G	Starlink-6035	27 April 2023	AFWTR	92.42	97.66	394	392	C	-
2023-058H	Starlink-6034	27 April 2023	AFWTR	92.42	97.66	394	392	C	-
2023-058J	Starlink-5981	27 April 2023	AFWTR	92.41	97.66	394	392	C	-
2023-058K	Starlink-5980	27 April 2023	AFWTR	92.42	97.66	394	392	C	-
2023-058L	Starlink-5997	27 April 2023	AFWTR	92.41	97.66	394	392	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)		
2023-058M	Starlink-5992	27 April 2023	AFWTR	92.42	97.66	394	392	C	-
2023-058N	Starlink-5984	27 April 2023	AFWTR	92.41	97.66	394	392	C	-
2023-058P	Starlink-5967	27 April 2023	AFWTR	92.42	97.66	394	392	C	-
2023-058Q	Starlink-5991	27 April 2023	AFWTR	92.41	97.66	394	392	C	-
2023-058R	Starlink-5093	27 April 2023	AFWTR	92.41	97.66	394	392	C	-
2023-058S	Starlink-5553	27 April 2023	AFWTR	92.41	97.66	394	392	C	-
2023-058T	Starlink-5548	27 April 2023	AFWTR	92.41	97.66	394	392	C	-
2023-058U	Starlink-5559	27 April 2023	AFWTR	92.41	97.66	394	392	C	-
2023-058V	Starlink-5562	27 April 2023	AFWTR	92.41	97.66	394	392	C	-
2023-058W	Starlink-5561	27 April 2023	AFWTR	92.41	97.66	394	392	C	-
2023-058X	Starlink-5554	27 April 2023	AFWTR	92.41	97.66	394	392	C	-
2023-058Y	Starlink-5552	27 April 2023	AFWTR	92.41	97.66	394	392	C	-
2023-058Z	Starlink-5540	27 April 2023	AFWTR	92.41	97.66	394	392	C	-
2023-058AA	Starlink-5543	27 April 2023	AFWTR	92.41	97.66	394	391	C	-
2023-058AB	Starlink-5955	27 April 2023	AFWTR	92.41	97.66	394	392	C	-
2023-058AC	Starlink-5976	27 April 2023	AFWTR	92.41	97.66	393	391	C	-
2023-058AD	Starlink-5974	27 April 2023	AFWTR	92.41	97.66	394	392	C	-
2023-058AE	Starlink-5979	27 April 2023	AFWTR	92.41	97.66	393	391	C	-
2023-058AF	Starlink-5837	27 April 2023	AFWTR	92.41	97.66	393	392	C	-
2023-058AG	Starlink-5829	27 April 2023	AFWTR	92.4	97.66	393	391	C	-
2023-058AH	Starlink-5888	27 April 2023	AFWTR	92.41	97.66	393	391	C	-
2023-058AJ	Starlink-5887	27 April 2023	AFWTR	92.4	97.66	393	391	C	-
2023-058AK	Starlink-5886	27 April 2023	AFWTR	92.4	97.66	393	391	C	-
2023-058AL	Starlink-5891	27 April 2023	AFWTR	92.4	97.66	393	391	C	-
2023-058AM	Starlink-5885	27 April 2023	AFWTR	92.4	97.66	393	391	C	-
2023-058AN	Starlink-5874	27 April 2023	AFWTR	92.4	97.66	393	391	C	-
2023-058AP	Starlink-5877	27 April 2023	AFWTR	92.4	97.66	393	391	C	-
2023-058AQ	Starlink-5533	27 April 2023	AFWTR	92.4	97.66	393	391	C	-
2023-058AR	Starlink-5535	27 April 2023	AFWTR	92.4	97.66	393	391	C	-
2023-058AS	Starlink-5538	27 April 2023	AFWTR	92.4	97.66	393	391	C	-
2023-058AT	Starlink-5482	27 April 2023	AFWTR	92.4	97.66	393	391	C	-
2023-058AU	Starlink-5551	27 April 2023	AFWTR	92.4	97.67	393	391	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)		
2023-058AV	Starlink-5549	27 April 2023	AFWTR	92.4	97.66	393	391	C	-
2023-058AW	Starlink-5550	27 April 2023	AFWTR	92.4	97.67	393	391	C	-
2023-058AX	Starlink-5972	27 April 2023	AFWTR	92.4	97.66	393	391	C	-
1998-067VC	ARKSAT-1	Deployed: 24 April 2023	ISS	92.73	51.64	414	403	C	-
1998-067VF	LightCube	Deployed: 24 April 2023	ISS	92.73	51.64	413	403	C	-
The following objects not previously reported were identified after the last report and remained in orbit as at 2359Z on 30 April 2023:									
2022-057AU	SBUDNIC	25 May 2022	AFETR	95.05	97.52	526	516	A	-
2022-144J	USA 344	1 November 2022	AFETR	1 445.64	2.77	36 001	35 945	C	-
2023-001BC	OrbiterSN1	3 January 2023	AFETR	94.94	97.48	526	506	C	-
2023-041B	Global-19	24 March 2023	RLLC	93.49	42.02	451	439	C	-
2023-041C	Global-5	24 March 2023	RLLC	93.45	42.02	451	437	C	-
The following objects achieved orbit after the last report but were no longer in orbit as at 2359Z on 30 April 2023:									
None.									
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 30 April 2023:									
1998-067UG	-	-	-	-	-	-	-	-	1 April 2023
2003-057B	-	-	-	-	-	-	-	-	1 April 2023
2021-006ET	-	-	-	-	-	-	-	-	1 April 2023
2021-059BK	-	-	-	-	-	-	-	-	1 April 2023
2022-002CX	-	-	-	-	-	-	-	-	1 April 2023
2022-002CY	-	-	-	-	-	-	-	-	2 April 2023
2022-002CZ	-	-	-	-	-	-	-	-	2 April 2023
2023-026W	-	-	-	-	-	-	-	-	3 April 2023
2017-068K	-	-	-	-	-	-	-	-	4 April 2023
2020-001BB	-	-	-	-	-	-	-	-	4 April 2023
2021-006AH	-	-	-	-	-	-	-	-	4 April 2023
2021-006P	-	-	-	-	-	-	-	-	4 April 2023
2018-004R	-	-	-	-	-	-	-	-	5 April 2023
2017-019B	-	-	-	-	-	-	-	-	6 April 2023

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)		
2022-136G	-	-	-	-	-	-	-	-	6 April 2023
1970-025EG	-	-	-	-	-	-	-	-	8 April 2023
1998-067UE	-	-	-	-	-	-	-	-	8 April 2023
2016-062D	-	-	-	-	-	-	-	-	8 April 2023
2018-004W	-	-	-	-	-	-	-	-	8 April 2023
2019-018P	-	-	-	-	-	-	-	-	8 April 2023
2019-018R	-	-	-	-	-	-	-	-	8 April 2023
2021-006AN	-	-	-	-	-	-	-	-	8 April 2023
2021-006BW	-	-	-	-	-	-	-	-	8 April 2023
2021-006ES	-	-	-	-	-	-	-	-	8 April 2023
2021-024AM	-	-	-	-	-	-	-	-	8 April 2023
2023-021AQ	-	-	-	-	-	-	-	-	8 April 2023
1998-067UX	-	-	-	-	-	-	-	-	10 April 2023
2016-062C	-	-	-	-	-	-	-	-	10 April 2023
2020-061AM	-	-	-	-	-	-	-	-	10 April 2023
2021-006AQ	-	-	-	-	-	-	-	-	10 April 2023
2021-006BD	-	-	-	-	-	-	-	-	10 April 2023
2021-006X	-	-	-	-	-	-	-	-	10 April 2023
1998-067UF	-	-	-	-	-	-	-	-	12 April 2023
2019-071J	-	-	-	-	-	-	-	-	12 April 2023
2021-006AU	-	-	-	-	-	-	-	-	12 April 2023
2021-006AZ	-	-	-	-	-	-	-	-	12 April 2023
2021-006Q	-	-	-	-	-	-	-	-	12 April 2023
2019-018B	-	-	-	-	-	-	-	-	13 April 2023
1975-052LC	-	-	-	-	-	-	-	-	14 April 2023
1991-082AA	-	-	-	-	-	-	-	-	14 April 2023
1994-029GM	-	-	-	-	-	-	-	-	15 April 2023
2019-018M	-	-	-	-	-	-	-	-	15 April 2023
2020-074D	-	-	-	-	-	-	-	-	15 April 2023
2021-006EU	-	-	-	-	-	-	-	-	15 April 2023
2023-033A	-	-	-	-	-	-	-	-	15 April 2023
2023-026M	-	-	-	-	-	-	-	-	16 April 2023

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)		
1977-065GA	-	-	-	-	-	-	-	-	19 April 2023
2018-004N	-	-	-	-	-	-	-	-	19 April 2023
2018-004Q	-	-	-	-	-	-	-	-	19 April 2023
2019-081L	-	-	-	-	-	-	-	-	19 April 2023
2020-061AP	-	-	-	-	-	-	-	-	19 April 2023
2021-006EV	-	-	-	-	-	-	-	-	19 April 2023
2021-006R	-	-	-	-	-	-	-	-	19 April 2023
2002-004A	-	-	-	-	-	-	-	-	20 April 2023
2020-012AA	-	-	-	-	-	-	-	-	20 April 2023
2021-006EW	-	-	-	-	-	-	-	-	20 April 2023
2007-006C	-	-	-	-	-	-	-	-	21 April 2023
2019-074BK	-	-	-	-	-	-	-	-	21 April 2023
2022-025M	-	-	-	-	-	-	-	-	21 April 2023
2022-149A	-	-	-	-	-	-	-	-	22 April 2023
2016-062F	-	-	-	-	-	-	-	-	25 April 2023
2020-061AQ	-	-	-	-	-	-	-	-	25 April 2023
2021-006EX	-	-	-	-	-	-	-	-	25 April 2023
2019-018AE	-	-	-	-	-	-	-	-	26 April 2023
2020-061AR	-	-	-	-	-	-	-	-	26 April 2023
2021-006EY	-	-	-	-	-	-	-	-	26 April 2023
1991-082CF	-	-	-	-	-	-	-	-	27 April 2023
2020-006C	-	-	-	-	-	-	-	-	27 April 2023
2021-002N	-	-	-	-	-	-	-	-	27 April 2023
2017-019D	-	-	-	-	-	-	-	-	29 April 2023
2019-081J	-	-	-	-	-	-	-	-	29 April 2023
2020-061AG	-	-	-	-	-	-	-	-	29 April 2023
The following objects were not previously reported and were no longer in orbit as at 2359Z on 30 April 2023:									
2018-004AK	Tyvak-61C	12 January 2018	-	-	-	-	-	-	8 April 2023
2013-072D	AeroCube 5A	-	-	-	-	-	-	-	19 April 2023
The following objects were deployed on a non-Earth celestial body:									
None.									

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)		

Revisions that should be made to previously reported data:

None.

Abbreviations and key

Location of the launch: AFETR, United States Air Force Eastern Test Range; AFWTR, United States Air Force Western Test Range; ISS, International Space Station; and RLLC, Rocket Lab Launch Complex, New Zealand.

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