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

Note verbale dated 27 February 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 December 2022 (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 2 March 2023.



Annex

Registration data on space launches by the United States of America for December 2022*

The following report supplements the registration data on United States space launches as at 31 December 2022.

International designation	Name of the space object	Date of the launch	Location of the launch	Basic orbital characteristics				General function of the space object	
				Nodal period (minutes)	Inclination (degrees)	Apogee (km)	Perigee (km)		Date of decay
The following objects were launched after the last report and remained in orbit as at 2359Z on 31 December 2022:									
2022-168B	Lunar Flashlight	11 December 2022	AFETR					C	-
2022-168C	Falcon 9 R/B	11 December 2022	AFETR					D	-
2022-170A	Galaxy 35	13 December 2022	FRGUI	1 436.08	0.04	35 796	35 776	C	-
2022-170B	Galaxy 36	13 December 2022	FRGUI	1 436.09	0.02	35 794	35 779	C	-
2022-174C	Falcon 9 R/B	16 December 2022	AFETR	198.26	9.62	6 990	2 779	D	-
2022-175A	Starlink-5464	17 December 2022	AFETR	91.84	53.21	365	364	C	-
2022-175B	Starlink-5215	17 December 2022	AFETR	91.84	53.22	366	364	C	-
2022-175C	Starlink-5220	17 December 2022	AFETR	92.91	53.21	418	416	C	-
2022-175D	Starlink-5202	17 December 2022	AFETR	92.91	53.22	418	416	C	-
2022-175E	Starlink-5214	17 December 2022	AFETR	92.91	53.22	418	416	C	-
2022-175F	Starlink-5191	17 December 2022	AFETR	92.91	53.21	418	416	C	-
2022-175G	Starlink-5458	17 December 2022	AFETR	92.91	53.22	418	416	C	-
2022-175H	Starlink-5466	17 December 2022	AFETR	92.91	53.22	418	416	C	-
2022-175J	Starlink-5471	17 December 2022	AFETR	92.91	53.22	418	416	C	-
2022-175K	Starlink-5472	17 December 2022	AFETR	92.91	53.21	418	416	C	-
2022-175L	Starlink-5444	17 December 2022	AFETR	91.54	53.21	351	349	C	-
2022-175M	Starlink-5404	17 December 2022	AFETR	92.91	53.21	418	416	C	-
2022-175N	Starlink-5448	17 December 2022	AFETR	91.53	53.21	350	349	C	-
2022-175P	Starlink-5451	17 December 2022	AFETR	91.84	53.21	365	364	C	-
2022-175Q	Starlink-5452	17 December 2022	AFETR	91.53	53.21	351	349	C	-
2022-175R	Starlink-5453	17 December 2022	AFETR	92.91	53.22	418	416	C	-
2022-175S	Starlink-5454	17 December 2022	AFETR	91.53	53.21	351	349	C	-
2022-175T	Starlink-5465	17 December 2022	AFETR	92.91	53.21	418	416	C	-
2022-175U	Starlink-5470	17 December 2022	AFETR	92.91	53.21	418	416	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)		
2022-175V	Starlink-5468	17 December 2022	AFETR	92.91	53.21	418	416	C	-
2022-175W	Starlink-5450	17 December 2022	AFETR	91.53	53.21	351	349	C	-
2022-175X	Starlink-5447	17 December 2022	AFETR	91.53	53.22	351	349	C	-
2022-175Y	Starlink-5449	17 December 2022	AFETR	91.53	53.21	350	350	C	-
2022-175Z	Starlink-5443	17 December 2022	AFETR	91.53	53.21	350	349	C	-
2022-175AA	Starlink-5437	17 December 2022	AFETR	91.53	53.22	351	349	C	-
2022-175AB	Starlink-5439	17 December 2022	AFETR	91.53	53.21	350	349	C	-
2022-175AC	Starlink-5442	17 December 2022	AFETR	92.91	53.21	418	416	C	-
2022-175AD	Starlink-5440	17 December 2022	AFETR	91.53	53.22	351	349	C	-
2022-175AE	Starlink-5438	17 December 2022	AFETR	91.54	53.22	351	349	C	-
2022-175AF	Starlink-5441	17 December 2022	AFETR	92.91	53.21	419	415	C	-
2022-175AG	Starlink-5399	17 December 2022	AFETR	91.53	53.22	350	349	C	-
2022-175AH	Starlink-5446	17 December 2022	AFETR	90.95	53.22	322	320	C	-
2022-175AJ	Starlink-5445	17 December 2022	AFETR	91.53	53.21	351	348	C	-
2022-175AK	Starlink-5425	17 December 2022	AFETR	91.53	53.21	351	349	C	-
2022-175AL	Starlink-5431	17 December 2022	AFETR	92.91	53.21	418	416	C	-
2022-175AM	Starlink-5433	17 December 2022	AFETR	91.54	53.22	351	349	C	-
2022-175AN	Starlink-5392	17 December 2022	AFETR	92.91	53.21	418	416	C	-
2022-175AP	Starlink-5436	17 December 2022	AFETR	91.53	53.21	352	348	C	-
2022-175AQ	Starlink-5415	17 December 2022	AFETR	91.53	53.21	350	349	C	-
2022-175AR	Starlink-5435	17 December 2022	AFETR	92.91	53.22	418	416	C	-
2022-175AS	Starlink-5420	17 December 2022	AFETR	91.53	53.22	350	350	C	-
2022-175AT	Starlink-5421	17 December 2022	AFETR	91.53	53.22	351	348	C	-
2022-175AU	Starlink-5428	17 December 2022	AFETR	91.53	53.21	351	349	C	-
2022-175AV	Starlink-5429	17 December 2022	AFETR	92.91	53.21	418	416	C	-
2022-175AW	Starlink-5426	17 December 2022	AFETR	90.71	53.22	310	309	C	-
2022-175AX	Starlink-5430	17 December 2022	AFETR	92.68	53.21	407	405	C	-
2022-175AY	Starlink-5422	17 December 2022	AFETR	91.53	53.22	350	349	C	-
2022-175AZ	Starlink-5417	17 December 2022	AFETR	91.53	53.21	350	349	C	-
2022-175BA	Starlink-5412	17 December 2022	AFETR	91.53	53.22	350	349	C	-
2022-175BB	Starlink-5410	17 December 2022	AFETR	91.53	53.21	351	349	C	-
2022-175BC	Starlink-5413	17 December 2022	AFETR	91.53	53.22	350	349	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)		
2022-175BD	Starlink-5414	17 December 2022	AFETR	91.53	53.21	350	349	C	-
2022-175BE	Starlink-5408	17 December 2022	AFETR	91.53	53.21	351	349	C	-
2022-175BF	Starlink-5424	17 December 2022	AFETR	91.53	53.21	351	349	C	-
2022-177A	Starlink-5382	28 December 2022	AFETR	91.63	43	355	353	C	-
2022-177B	Starlink-5385	28 December 2022	AFETR	91.63	43	355	353	C	-
2022-177C	Starlink-5101	28 December 2022	AFETR	91.63	43	355	353	C	-
2022-177D	Starlink-5106	28 December 2022	AFETR	91.63	43	355	353	C	-
2022-177E	Starlink-4643	28 December 2022	AFETR	91.63	43	355	353	C	-
2022-177F	Starlink-4801	28 December 2022	AFETR	91.63	43	355	353	C	-
2022-177G	Starlink-5107	28 December 2022	AFETR	91.63	43	356	353	C	-
2022-177H	Starlink-5383	28 December 2022	AFETR	91.63	43	355	353	C	-
2022-177J	Starlink-5381	28 December 2022	AFETR	91.63	43	355	353	C	-
2022-177K	Starlink-5380	28 December 2022	AFETR	91.63	43	355	353	C	-
2022-177L	Starlink-5394	28 December 2022	AFETR	91.63	43	355	353	C	-
2022-177M	Starlink-5395	28 December 2022	AFETR	91.63	43	356	353	C	-
2022-177N	Starlink-5393	28 December 2022	AFETR	91.63	43	355	353	C	-
2022-177P	Starlink-5391	28 December 2022	AFETR	91.63	43	355	353	C	-
2022-177Q	Starlink-5386	28 December 2022	AFETR	91.63	43	355	353	C	-
2022-177R	Starlink-5389	28 December 2022	AFETR	91.63	43	355	353	C	-
2022-177S	Starlink-5384	28 December 2022	AFETR	91.62	43	355	353	C	-
2022-177T	Starlink-5369	28 December 2022	AFETR	91.63	43	355	353	C	-
2022-177U	Starlink-5372	28 December 2022	AFETR	91.62	43	355	353	C	-
2022-177V	Starlink-5110	28 December 2022	AFETR	91.62	43	355	353	C	-
2022-177W	Starlink-5368	28 December 2022	AFETR	91.62	43	355	353	C	-
2022-177X	Starlink-4659	28 December 2022	AFETR	91.62	43	355	353	C	-
2022-177Y	Starlink-5387	28 December 2022	AFETR	91.62	43	355	353	C	-
2022-177Z	Starlink-5304	28 December 2022	AFETR	91.62	43	355	353	C	-
2022-177AA	Starlink-5388	28 December 2022	AFETR	91.62	43	355	353	C	-
2022-177AB	Starlink-5082	28 December 2022	AFETR	91.62	43	355	353	C	-
2022-177AC	Starlink-5360	28 December 2022	AFETR	91.62	43	355	353	C	-
2022-177AD	Starlink-5061	28 December 2022	AFETR	91.04	43	327	325	C	-
2022-177AE	Starlink-5432	28 December 2022	AFETR	91.62	43	355	353	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)		
2022-177AF	Starlink-5434	28 December 2022	AFETR	91.62	43	355	353	C	-
2022-177AG	Starlink-5087	28 December 2022	AFETR	91.62	43	355	353	C	-
2022-177AH	Starlink-5084	28 December 2022	AFETR	91.62	43	355	353	C	-
2022-177AJ	Starlink-5418	28 December 2022	AFETR	91.62	43	355	353	C	-
2022-177AK	Starlink-5427	28 December 2022	AFETR	91.62	43	355	353	C	-
2022-177AL	Starlink-5419	28 December 2022	AFETR	91.62	43	355	353	C	-
2022-177AM	Starlink-5416	28 December 2022	AFETR	91.62	43	355	353	C	-
2022-177AN	Starlink-5086	28 December 2022	AFETR	91.61	43	355	352	C	-
2022-177AP	Starlink-5078	28 December 2022	AFETR	91.62	43	355	353	C	-
2022-177AQ	Starlink-5407	28 December 2022	AFETR	91.61	43	355	353	C	-
2022-177AR	Starlink-5409	28 December 2022	AFETR	91.61	43	355	352	C	-
2022-177AS	Starlink-5406	28 December 2022	AFETR	91.61	43	355	352	C	-
2022-177AT	Starlink-5400	28 December 2022	AFETR	91.61	43	355	353	C	-
2022-177AU	Starlink-5403	28 December 2022	AFETR	91.61	43	355	353	C	-
2022-177AV	Starlink-5405	28 December 2022	AFETR	91.61	43	355	352	C	-
2022-177AW	Starlink-5359	28 December 2022	AFETR	91.61	43	355	352	C	-
2022-177AX	Starlink-5411	28 December 2022	AFETR	91.61	43	357	351	C	-
2022-177AY	Starlink-5398	28 December 2022	AFETR	91.61	43	354	352	C	-
2022-177AZ	Starlink-5396	28 December 2022	AFETR	91.61	43	355	352	C	-
2022-177BA	Starlink-5379	28 December 2022	AFETR	91.61	43	354	352	C	-
2022-177BB	Starlink-5402	28 December 2022	AFETR	91.61	43	355	352	C	-
2022-177BC	Starlink-5401	28 December 2022	AFETR	91.61	43	354	352	C	-
2022-177BD	Starlink-5397	28 December 2022	AFETR	91.61	43	355	352	C	-
2022-177BE	Starlink-5390	28 December 2022	AFETR	91.64	43	356	354	C	-
2022-177BF	Starlink-5091	28 December 2022	AFETR	91.61	43	354	352	C	-
The following objects not previously reported were identified after the last report and remained in orbit as at 2359Z on 31 December 2022:									
1998-067UE	D3	6 September 2022	ISS	92.19	51.64	385	378	A	-
1998-067UH	CAPSAT 1	6 September 2022	ISS	91.27	51.63	342	332	A	-
1998-067UJ	JAGSAT 1	6 September 2022	ISS	91.05	51.63	332	320	C	-

The following objects achieved orbit after the last report but were no longer in orbit as at 2359Z on 31 December 2022:

None.

International designation	Name of the space object	Date of the launch	Location of the launch	Basic orbital characteristics				General function	
				Nodal period (minutes)	Inclination (degrees)	Apogee (km)	Perigee (km)	of the space object	Date of decay
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 December 2022:									
2018-096H	-	-	-	-	-	-	-	-	2 December 2022
2018-096Q	-	-	-	-	-	-	-	-	2 December 2022
2020-085U	-	-	-	-	-	-	-	-	3 December 2022
2017-008DD	-	-	-	-	-	-	-	-	4 December 2022
2021-015M	-	-	-	-	-	-	-	-	4 December 2022
2018-096X	-	-	-	-	-	-	-	-	5 December 2022
2017-008P	-	-	-	-	-	-	-	-	7 December 2022
2017-008Z	-	-	-	-	-	-	-	-	7 December 2022
2017-008X	-	-	-	-	-	-	-	-	8 December 2022
2021-009X	-	-	-	-	-	-	-	-	10 December 2022
2022-156A	-	-	-	-	-	-	-	-	11 December 2022
2016-040T	-	-	-	-	-	-	-	-	13 December 2022
2017-008F	-	-	-	-	-	-	-	-	13 December 2022
2017-008H	-	-	-	-	-	-	-	-	13 December 2022
2021-015R	-	-	-	-	-	-	-	-	13 December 2022
2017-008BT	-	-	-	-	-	-	-	-	14 December 2022
2017-008L	-	-	-	-	-	-	-	-	14 December 2022
2018-096S	-	-	-	-	-	-	-	-	14 December 2022
2020-085R	-	-	-	-	-	-	-	-	14 December 2022
2020-085T	-	-	-	-	-	-	-	-	14 December 2022
2021-015P	-	-	-	-	-	-	-	-	14 December 2022
2018-096T	-	-	-	-	-	-	-	-	15 December 2022
2021-051A	-	-	-	-	-	-	-	-	18 December 2022
2017-008BJ	-	-	-	-	-	-	-	-	19 December 2022
2021-015K	-	-	-	-	-	-	-	-	20 December 2022
1978-026AK	-	-	-	-	-	-	-	-	21 December 2022
2017-008DB	-	-	-	-	-	-	-	-	21 December 2022
1970-025FB	-	-	-	-	-	-	-	-	22 December 2022
2016-040N	-	-	-	-	-	-	-	-	22 December 2022
2017-008DC	-	-	-	-	-	-	-	-	22 December 2022

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)		
2018-004AE	-	-	-	-	-	-	-	-	22 December 2022
2021-015L	-	-	-	-	-	-	-	-	22 December 2022
2022-045W	-	-	-	-	-	-	-	-	26 December 2022
2017-008AM	-	-	-	-	-	-	-	-	28 December 2022
2017-008BG	-	-	-	-	-	-	-	-	28 December 2022
2017-008CS	-	-	-	-	-	-	-	-	28 December 2022
2017-008CW	-	-	-	-	-	-	-	-	28 December 2022
2017-008CY	-	-	-	-	-	-	-	-	28 December 2022
2017-019C	-	-	-	-	-	-	-	-	28 December 2022
2017-019E	-	-	-	-	-	-	-	-	28 December 2022
2018-096R	-	-	-	-	-	-	-	-	28 December 2022
2021-015J	-	-	-	-	-	-	-	-	28 December 2022
2017-008CC	-	-	-	-	-	-	-	-	29 December 2022
2018-111T	-	-	-	-	-	-	-	-	29 December 2022
2017-008R	-	-	-	-	-	-	-	-	30 December 2022
2019-051B	-	-	-	-	-	-	-	-	30 December 2022
2017-008CE	-	-	-	-	-	-	-	-	31 December 2022
The following objects were not previously reported and were no longer in orbit as at 2359Z on 31 December 2022:									
2018-104E	CeREs - OBJECT E	16 December 2018	-	-	-	-	-	-	14 December 2022
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; FRGUI, French Guiana Space Port, French Guiana; and ISS, International Space Station.

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