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Note verbale dated 10 February 2022 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 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 the space objects referenced in the annex were entered into the Register of Objects Launched into Outer Space on 7 March 2022.



Annex

A. Registration data on space launches by the United States of America for December 2021*

The following report supplements the registration data on United States space launches as at 31 December 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 December 2021:									
2021-115A	Starlink-3219	2 December 2021	AFETR	93.48	53.22	446	443	C	-
2021-115B	Starlink-3218	2 December 2021	AFETR	93.48	53.22	446	443	C	-
2021-115C	Starlink-3237	2 December 2021	AFETR	95.44	53.22	541	538	C	-
2021-115D	Starlink-3242	2 December 2021	AFETR	95.44	53.22	541	538	C	-
2021-115E	Starlink-3240	2 December 2021	AFETR	95.44	53.22	541	538	C	-
2021-115F	Starlink-3251	2 December 2021	AFETR	95.44	53.22	541	538	C	-
2021-115G	Starlink-3249	2 December 2021	AFETR	95.44	53.22	541	538	C	-
2021-115H	Starlink-3228	2 December 2021	AFETR	95.44	53.22	541	538	C	-
2021-115J	Starlink-3246	2 December 2021	AFETR	95.44	53.2	541	538	C	-
2021-115K	Starlink-3252	2 December 2021	AFETR	95.44	53.21	541	538	C	-
2021-115L	Starlink-3238	2 December 2021	AFETR	93.48	53.22	446	443	C	-
2021-115M	Starlink-3113	2 December 2021	AFETR	95.44	53.21	541	538	C	-
2021-115N	Starlink-3148	2 December 2021	AFETR	93.48	53.22	446	443	C	-
2021-115P	Starlink-3225	2 December 2021	AFETR	93.48	53.22	446	443	C	-
2021-115Q	Starlink-3143	2 December 2021	AFETR	93.48	53.21	446	443	C	-
2021-115R	Starlink-3155	2 December 2021	AFETR	95.44	53.19	541	538	C	-
2021-115S	Starlink-3226	2 December 2021	AFETR	93.48	53.21	446	443	C	-
2021-115T	Starlink-3244	2 December 2021	AFETR	93.48	53.22	446	443	C	-
2021-115U	Starlink-3202	2 December 2021	AFETR	93.48	53.22	447	443	C	-
2021-115V	Starlink-3239	2 December 2021	AFETR	93.48	53.22	446	443	C	-
2021-115W	Starlink-3231	2 December 2021	AFETR	93.48	53.22	447	443	C	-
2021-115X	Starlink-3241	2 December 2021	AFETR	93.48	53.22	447	443	C	-
2021-115Y	Starlink-3233	2 December 2021	AFETR	93.48	53.22	446	443	C	-
2021-115Z	Starlink-3247	2 December 2021	AFETR	93.48	53.22	447	443	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)		
2021-115AA	Starlink-3248	2 December 2021	AFETR	93.48	53.22	446	443	C	-
2021-115AB	Starlink-3250	2 December 2021	AFETR	93.48	53.22	446	443	C	-
2021-115AC	Starlink-3236	2 December 2021	AFETR	93.48	53.22	447	443	C	-
2021-115AD	Starlink-3229	2 December 2021	AFETR	93.48	53.21	447	443	C	-
2021-115AE	Starlink-3209	2 December 2021	AFETR	93.48	53.22	447	443	C	-
2021-115AF	Starlink-3200	2 December 2021	AFETR	93.48	53.22	446	443	C	-
2021-115AG	Starlink-3193	2 December 2021	AFETR	93.48	53.22	447	443	C	-
2021-115AH	Starlink-3210	2 December 2021	AFETR	93.48	53.21	446	443	C	-
2021-115AJ	Starlink-3207	2 December 2021	AFETR	93.48	53.22	447	443	C	-
2021-115AK	Starlink-3197	2 December 2021	AFETR	93.48	53.22	447	443	C	-
2021-115AL	Starlink-3194	2 December 2021	AFETR	93.48	53.22	447	443	C	-
2021-115AM	Starlink-3204	2 December 2021	AFETR	93.48	53.22	446	443	C	-
2021-115AN	Starlink-3199	2 December 2021	AFETR	93.48	53.22	446	443	C	-
2021-115AP	Starlink-3203	2 December 2021	AFETR	93.48	53.22	447	443	C	-
2021-115AQ	Starlink-3195	2 December 2021	AFETR	93.48	53.22	446	443	C	-
2021-115AR	Starlink-3198	2 December 2021	AFETR	93.48	53.22	446	443	C	-
2021-115AS	Starlink-3206	2 December 2021	AFETR	93.48	53.22	446	443	C	-
2021-115AT	Starlink-3227	2 December 2021	AFETR	93.48	53.22	446	443	C	-
2021-115AU	Starlink-3190	2 December 2021	AFETR	93.48	53.22	447	443	C	-
2021-115AV	Starlink-3192	2 December 2021	AFETR	93.48	53.22	446	443	C	-
2021-115AW	Starlink-3196	2 December 2021	AFETR	93.48	53.22	447	443	C	-
2021-115AX	Starlink-3208	2 December 2021	AFETR	93.48	53.22	447	443	C	-
2021-115AY	Starlink-3191	2 December 2021	AFETR	93.48	53.22	447	443	C	-
2021-115AZ	Starlink-3201	2 December 2021	AFETR	93.48	53.22	447	443	C	-
2021-115BA	Global-12	2 December 2021	AFETR	93.21	53.21	442	421	C	-
2021-115BB	Global-13	2 December 2021	AFETR	93.2	53.22	442	421	C	-
2021-118A	STPSat-6	7 December 2021	AFETR	1 436.11	0.02	35 790	35 783	C	-
2021-118B	LDPE 1	7 December 2021	AFETR	1 445.77	0.08	35 991	35 961	C	-
2021-118C	Atlas 5 Centaur R/B	7 December 2021	AFETR	1 518.71	0.12	38 644	36 133	D	-
2021-120A	Global-17	9 December 2021	RLLC	93.23	42.01	436	429	C	-
2021-120B	Global-16	9 December 2021	RLLC	93.19	42.01	436	426	C	-
2021-121A	IXPE	9 December 2021	AFETR	96.59	0.23	603	588	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)		
2021-125A	Starlink-3317	18 December 2021	AFWTR	91.55	53.22	352	350	C	-
2021-125B	Starlink-3313	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125C	Starlink-3309	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125D	Starlink-3297	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125E	Starlink-3288	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125F	Starlink-3304	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125G	Starlink-3303	18 December 2021	AFWTR	91.32	53.22	340	339	C	-
2021-125H	Starlink-3306	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125J	Starlink-3307	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125K	Starlink-3298	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125L	Starlink-3305	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125M	Starlink-3271	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125N	Starlink-3296	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125P	Starlink-3301	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125Q	Starlink-3245	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125R	Starlink-3286	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125S	Starlink-3287	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125T	Starlink-3289	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125U	Starlink-3292	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125V	Starlink-3291	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125W	Starlink-3293	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125X	Starlink-3282	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125Y	Starlink-3284	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125Z	Starlink-3283	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125AA	Starlink-3265	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125AB	Starlink-3285	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125AC	Starlink-3277	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125AD	Starlink-3281	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125AF	Starlink-3279	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125AG	Starlink-3274	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125AH	Starlink-3272	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125AJ	Starlink-3275	18 December 2021	AFWTR	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)		
2021-125AK	Starlink-3276	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125AL	Starlink-3268	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125AM	Starlink-3273	18 December 2021	AFWTR	91.54	53.22	351	349	C	-
2021-125AN	Starlink-3259	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125AP	Starlink-3261	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125AQ	Starlink-3269	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125AR	Starlink-3266	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125AS	Starlink-3263	18 December 2021	AFWTR	91.54	53.22	351	349	C	-
2021-125AT	Starlink-3267	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125AU	Starlink-3264	18 December 2021	AFWTR	91.54	53.22	351	349	C	-
2021-125AV	Starlink-3270	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-125AW	Starlink-3235	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125AX	Starlink-3255	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125AY	Starlink-3256	18 December 2021	AFWTR	91.22	53.22	335	334	C	-
2021-125AZ	Starlink-3257	18 December 2021	AFWTR	91.54	53.22	351	349	C	-
2021-125BA	Starlink-3254	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125BB	Starlink-3260	18 December 2021	AFWTR	90.51	53.22	300	299	C	-
2021-125BC	Starlink-3258	18 December 2021	AFWTR	91.53	53.22	350	349	C	-
2021-125BD	Starlink-3262	18 December 2021	AFWTR	91.53	53.22	351	349	C	-
2021-126B	Falcon 9 R/B	19 December 2021	AFETR	1 380.7	26.91	69 212	179	D	-
2021-127A	Dragon CRS-24	21 December 2021	AFETR	92.93	51.65	423	414	E	-
2021-130A	James Webb Space Telescope	25 December 2021	FRGUI	Earth-Sun Lagrange point 2				C	-

The following objects not previously reported were identified after the last report and remained in orbit as at 2359Z on 31 December 2021:

1970-027C	Titan 3C Transtage R/B	8 April 1970	AFETR	3 251.34	4.11	12 4807	7 837	D	-
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The following objects achieved orbit after the last report but were no longer in orbit as at 2359Z on 31 December 2021:

2021-125AE	Starlink-3280	18 December 2021	AFWTR	89.05	53.22	267	188	C	28 December 2021
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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 2021:

2021-104X	-	-	-	-	-	-	-	-	1 December 2021
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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)		
2020-062Q	-	-	-	-	-	-	-	-	4 December 2021
1998-067NG	-	-	-	-	-	-	-	-	8 December 2021
1998-067RE	-	-	-	-	-	-	-	-	10 December 2021
2020-070Z	-	-	-	-	-	-	-	-	12 December 2021
2020-001C	-	-	-	-	-	-	-	-	13 December 2021
2021-005R	-	-	-	-	-	-	-	-	14 December 2021
2021-072A	-	-	-	-	-	-	-	-	15 December 2021
2019-037F	-	-	-	-	-	-	-	-	16 December 2021
2021-006A	-	-	-	-	-	-	-	-	17 December 2021
2021-006E	-	-	-	-	-	-	-	-	17 December 2021
1998-067RV	-	-	-	-	-	-	-	-	20 December 2021
2019-074AV	-	-	-	-	-	-	-	-	20 December 2021
2019-074R	-	-	-	-	-	-	-	-	20 December 2021
2020-074BJ	-	-	-	-	-	-	-	-	20 December 2021
2021-024AG	-	-	-	-	-	-	-	-	20 December 2021
2021-024L	-	-	-	-	-	-	-	-	20 December 2021
2018-099V	-	-	-	-	-	-	-	-	21 December 2021
2020-012AU	-	-	-	-	-	-	-	-	25 December 2021
2021-006F	-	-	-	-	-	-	-	-	26 December 2021
2021-006H	-	-	-	-	-	-	-	-	27 December 2021
2021-006G	-	-	-	-	-	-	-	-	30 December 2021
2021-006J	-	-	-	-	-	-	-	-	30 December 2021

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 RLLC, Rocket Lab Launch Complex, New Zealand.

General function of the space object:

- A Spacecraft engaged in investigation of space flight 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

B. Revisions that should be made to previously reported data *

<i>Registration document</i>	<i>International designation</i>	<i>Original common name of the space object</i>	<i>Updated common name of the space object</i>
ST/SG/SER.E/1010	2021-041BE	Capella-6	Capella-6 (Whitney)
ST/SG/SER.E/1004	2021-023E	Gunsmoke-J 1	Gunsmoke-J 3
A/AC.105/INF.178	1967-66D	OPS 9934 (IDSCS 19)	OPS 9334 (DATS)
A/AC.105/INF.194	1968-50A	OPS 9341 (IDSCS 20)	OPS 9341 (IDSCS 19)
A/AC.105/INF.194	1968-50B	OPS 9342 (IDSCS 21)	OPS 9342 (IDSCS 20)
A/AC.105/INF.194	1968-50C	OPS 9343 (IDSCS 22)	OPS 9343 (IDSCS 21)
A/AC.105/INF.194	1968-50D	OPS 9344 (IDSCS 23)	OPS 9344 (IDSCS 22)
A/AC.105/INF.194	1968-50E	OPS 9345 (IDSCS 24)	OPS 9345 (IDSCS 23)
A/AC.105/INF.194	1968-50F	OPS 9346 (IDSCS 25)	OPS 9346 (IDSCS 24)
A/AC.105/INF.194	1968-50G	OPS 9347 (IDSCS 26)	OPS 9374 (IDSCS 25)
A/AC.105/INF.194	1968-50H	OPS 9348 (IDSCS 27)	OPS 9348 (IDSCS 26)
ST/SG/SER.E/967	2020-085S	Spacebee-32	SpaceBEE-29
ST/SG/SER.E/967	2020-085T	Spacebee-30	SpaceBEE-32
ST/SG/SER.E/967	2020-085W	Spacebee-29	SpaceBEE-30
ST/SG/SER.E/983	2021-015M	SpaceBEE-80	SpaceBEE-78
ST/SG/SER.E/995	2021-015P	SpaceBee-79	SpaceBEE-80
ST/SG/SER.E/983	2021-015R	SpaceBEE-77	SpaceBEE-79

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