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# 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 20 July 2020 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 2019 and April and May 2020 (see annexes I–III).<sup>1</sup>

The United States requests that the space objects contained in the annexes 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.

<sup>&</sup>lt;sup>1</sup> The data on space objects referenced in the annexes were entered into the Register of Objects Launched into Outer Space on 24 July 2020.





### Registration data on space launches by the United States of America for December 2019\*

The following report supplements the registration data on United States space launches as at 31 December 2019.

		Date of the launch	I	Ва	sic orbital cha	racteristics		
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 were laun	nched since the	last report	and remain in	orbit:			
2019-083A	Dragon CRS-19	5 December 2019	AFETR	92.9	51.64	421	411	Reusable space transportation system
2019-084D	NOOR-1A	6 December 2019	RLLC	92.05	97	403	347	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-084E	NOOR-1B	6 December 2019	RLLC	92	97	399	346	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-089D	LEMUR 2 JPGSquared	11 December 2019	SRI	96.08	36.97	576	566	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-089J	LEMUR 2 HiMomAndDad	11 December 2019	SRI	96.09	36.97	576	566	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-089K	LEMUR 2 Pappy	11 December 2019	SRI	96.09	36.97	578	565	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-089M	LEMUR 2 Theodosia	11 December 2019	SRI	96.09	36.97	576	566	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-091B	Falcon 9 R/B	17 December 2019	AFETR	356.98	26.9	20 323	259	Spent boosters, spent manoeuvring stages, shrouds and other non-functional objects
The followin	g objects not previ	iously reported	have been	identified sinc	e the last rep	ort:		
2019-036T	TBEX-A	25 June 2019	AFETR	95.17	28.53	756	298	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

The following objects achieved orbit since the last report but were no longer in orbit as at 2359Z on 31 December 2019:

2019-094A CST-100 20 December AFETR 89.57 51.59 261 Reusable space transportation system Starliner 2019

The following objects identified in a previous report were no longer in orbit as at 2359Z on 31 December 2019: 2019-022A, 1998-067LS, 2019-094A, 2002-031A, 2000-048A

<sup>\*</sup> The registration data are reproduced in the form in which they were received.

	Basic orbital characteristics Location										
International designation	Name of the space object	Date of the launch	of the launch	Nodal period (min)	Inclination (degrees)	Apogee (km)	Perigee (km)	General function of the space object			
The following objects were launched since the last report but did not achieve orbit:  None.											
	at should be made 6/SER.E/928, for A	1	•		-022E (ORC	(A-1) and (	2019-0220	G (RFTSat) with:			
2019-022G	RFTSat	25 July 2019; deployed: 8 August 2019		94.1	51.6	485	468	Spacecraft engaged in practical applications and uses of space technology such as weather or communications			
2019-022Н	ORCA-1	25 July 2019; deployed: 8 August 2019	Cygnus	94.13	51.64	484	468	Spacecraft engaged in practical applications and uses of space technology such as weather or communications			
In ST/SC	In ST/SG/SER.E/942, for July 2019, replace the entry for 2019-038AD (LEMUR 2 Yndrd) with:										
2019-038AD	LEMUR 2 Yndrd	5 July 2019	VOSTO	95.23	97.52	545	514	Spacecraft engaged in practical applications and uses of space technology such as weather or communications			

Abbreviations: AFETR, United States Air Force Eastern Test Range; RLLC, Rocket Lab Launch Complex, New Zealand; SRI: Satish Dhawan Space Centre, India; VOSTO: Vostochny Cosmodrome, Russian Federation.

## Registration data on space launches by the United States of America for April 2020\*

The following report supplements the registration data on United States space launches as at 30 April 2020.

				Ва	asic orbital cha	racteristics	ï	
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 were laund	ched since the las						
2020-025A	Starlink-1329	22 April 2020	AFETR	92.33	53	391	386	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AA	Starlink-1327	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AB	Starlink-1334	22 April 2020	AFETR	92.15	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AC	Starlink-1336	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AD	Starlink-1342	22 April 2020	AFETR	92.15	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AE	Starlink-1344	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AF	Starlink-1346	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AG	Starlink-1348	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AH	Starlink-1354	22 April 2020	AFETR	92.15	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AJ	Starlink-1355	22 April 2020	AFETR	92.15	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AK	Starlink-1356	22 April 2020	AFETR	92.15	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AL	Starlink-1357	22 April 2020	AFETR	92.15	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AM	Starlink-1358	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

<sup>\*</sup> The registration data are reproduced in the form in which they were received.

				В	asic orbital cha	ıracteristics	s	
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
2020-025AN	Starlink-1361	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AP	Starlink-1363	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AQ	Starlink-1366	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AR	Starlink-1376	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AS	Starlink-1261	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AT	Starlink-1320	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AU	Starlink-1321	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AV	Starlink-1324	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AW	Starlink-1326	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AX	Starlink-1328	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AY	Starlink-1330	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025AZ	Starlink-1331	22 April 2020	AFETR	92.15	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025B	Starlink-1338	22 April 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025BA	Starlink-1332	22 April 2020	AFETR	92.15	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025BB	Starlink-1333	22 April 2020	AFETR	92.15	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025BC	Starlink-1335	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025BD	Starlink-1337	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025BE	Starlink-1340	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

			_	В	asic orbital cha	racteristics	5	_
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
2020-025BF	Starlink-1343	22 April 2020	AFETR	92.15	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025BG	Starlink-1345	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025BH	Starlink-1347	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025BJ	Starlink-1349	22 April 2020	AFETR	92.15	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025BK	Starlink-1360	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025BL	Starlink-1364	22 April 2020	AFETR	92.15	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025BM	Starlink-1365	22 April 2020	AFETR	92.27	53	388	384	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025C	Starlink-1339	22 April 2020	AFETR	92.21	53	384	382	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025D	Starlink-1341	22 April 2020	AFETR	92.14	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025E	Starlink-1350	22 April 2020	AFETR	92.26	53	387	384	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025F	Starlink-1352	22 April 2020	AFETR	92.27	53	387	384	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025G	Starlink-1353	22 April 2020	AFETR	92.23	53	385	383	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025Н	Starlink-1362	22 April 2020	AFETR	92.37	53	392	389	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025J	Starlink-1367	22 April 2020	AFETR	92.29	53	390	383	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025K	Starlink-1368	22 April 2020	AFETR	92.25	53	388	382	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025L	Starlink-1369	22 April 2020	AFETR	92.3	53	390	385	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025M	Starlink-1371	22 April 2020	AFETR	92.14	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025N	Starlink-1372	22 April 2020	AFETR	92.3	53	389	386	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025P	Starlink-1373	22 April 2020	AFETR	92.38	53	392	390	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

				Ва	asic orbital cha	racteristic	s ·	
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
2020-025Q	Starlink-1374	22 April 2020	AFETR	92.18	53	384	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025R	Starlink-1375	22 April 2020	AFETR	92.26	53	388	382	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025S	Starlink-1377	22 April 2020	AFETR	92.23	53	385	382	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025T	Starlink-1378	22 April 2020	AFETR	92.31	53	390	386	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025U	Starlink-1379	22 April 2020	AFETR	92.32	53	390	387	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025V	Starlink-1390	22 April 2020	AFETR	92.39	53	394	389	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025W	Starlink-1294	22 April 2020	AFETR	92.14	53	385	374	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025X	Starlink-1322	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025Y	Starlink-1323	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-025Z	Starlink-1325	22 April 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
The following	g objects not previo	ously reported have	ve been identif	fied since t	he last repor	t:		
2020-011D	ULTP	7 March 2020; deployed on 13 May 2020	Cygnus	94.23	51.65	486	476	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 2359Z on 30 April 2020: None.

The following objects achieved orbit since the last report but were no longer in orbit as at 2359Z on 30 April 2020: None.

The following objects identified in a previous report were no longer in orbit as at 2359Z on 30 April 2020: 2020-001AL, 1998-067NY, 2019-084E, 2020-016A, 1976-080A, 1998-067PY, 1998-067NH

The following objects were launched since the last report but did not achieve orbit: None.

Revisions that should be made to previously reported data:

None.

#### **Annex III**

### Registration data on space launches by the United States of America for May 2020\*

The following report supplements the registration data on United States space launches as at 31 May 2020.

				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
The following	g objects were laun	ched since the la						
2020-029A	USA 299	17 May 2020	AFETR	92.3	45	392	383	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-029B	USA 300	17 May 2020	AFETR	92.3	45	392	383	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-033A	Crew Dragon Demo-2	30 May 2020	AFETR	92.94	51.65	420	417	Reusable space transportation system

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 31 May 2020:

The following objects achieved orbit since the last report but were no longer in orbit as at 2359Z on 31 May 2020:

None

The following objects identified in a previous report were no longer in orbit as at 2359Z on 31 May 2020:

2019-029AV, 2020-001BD, 2020-011A, 2002-005E

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

None.

Revisions that should be made to previously reported data:

None.

Abbreviations: AFETR, United States Air Force Eastern Test Range.

<sup>\*</sup> The registration data are reproduced in the form in which they were received.