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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 8 June 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 June and July 2019 and for the period from January to March 2020 (see annexes I-V).<sup>1</sup>

The United States requests that the space objects contained in the annexes to this 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 16 June 2020.



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## Annex I

### **Registration data on space launches by the United States of America for June 2019**<sup>\*</sup>

				Basi	c orbital cha	racteristics	7	
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	iched since the	last report and	remain in or	bit:			
2019-034A	AT&T T-16	20 June 2019	_	1 436.07	0.01	35 789	35 783	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-036A	Prox-1	25 June 2019	_	99.13	24	725	709	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-036AA	Oculus-ASR Sphere 1	25 June 2019	_	95.33	28.52	764	306	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-036AB	Prometheus 2-6	25 June 2019	_	96.15	28.53	845	304	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-036AC	LightSail	25 June 2019	_	99.14	24	726	709	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-036B	NPSat1	25 June 2019	_	99.12	24	725	708	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-036C	OTB	25 June 2019	_	99.12	24	725	708	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-036F	DSX	25 June 2019	_	316.92	42.41	12 035	6 004	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-036G	Falcon Heavy R/B	25 June 2019	_	306.86	42.22	11 936	5 448	Spent boosters, spent manoeuvring stages, shrouds and other non-functional objects
2019-036T	TBEX-A	25 June 2019	_	96.12	28.53	843	301	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-036D	GPIM	25 June 2019	_	99.2	24	729	715	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-036Н	TEPCE	25 June 2019	_	96.4	28.5	862	315	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-036J	FalconSat-7	25 June 2019	_	96.3	28.5	860	315	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-036K	Oculus-ASR	25 June 2019	_	96.3	28.5	860	314	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

The following report supplements the registration data on United States space launches as at 30 June 2019.

				Ba	sic orbital cha	racteristic	\$	
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
2019-036P	Armadillo	25 June 2019	-	96.1	28.5	836	306	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-036R	PSAT2	25 June 2019	_	96.1	28.5	838	305	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-0368	BRICSat 2	25 June 2019	_	96.0	28.5	831	304	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-036W	TBEX-B	25 June 2019	_	95.7	28.5	808	298	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-036X	CP-9 LEO	25 June 2019	_	95.9	28.5	823	297	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-037C	Global-3	29 June 2019	_	93.66	45.01	461	446	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-037K	Prometheus 2-7	29 June 2019	-	93.67	45.02	461	447	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-037B	Prometheus 2-9	29 June 2019	_	93.67	45.01	460	448	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-037F	SpaceBee-9	29 June 2019	_	93.6	45	472	449	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-037G	SpaceBee-8	29 June 2019	_	93.6	45	472	449	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
he following	g objects not previo	ously reported h	nave been ident	tified since	the last repor	rt:		
998-067QJ	Pinot/RedEye	27 June 2019	_	92.8	51.6	417	405	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
The following None.	g objects not previo	ously reported h	nave been ident	ified since	the last repor	rt but wer	e no long	er in orbit as at 23 59Z on 30 June 2019:
The following None.	g objects achieved	orbit since the l	last report but v	were no lon	ger in orbit a	is at 2359	Z on 30 J	une 2019:
	g objects identified 5A, 1977-018B	in a previous r	eport were no l	longer in or	bit as at 2359	9Z on 30	June 2019	9:
	g objects were laun	ched since the	last report but	did not achi	ieve orbit:			
	t should be made to	o previously re	ported data:					
None		1 1 1						

None.

## Annex II

### **Registration data on space launches by the United States of America for July 2019**<sup>\*</sup>

				Ba	sic orbital cha	iracteristic	25	
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 launc	hed since the la	st report and re	emain in o	rbit:			
2019-038AB	LEMUR 2 GregRobinson	5 July 2019	VOSTO	95.26	97.49	547	515	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-038L	LEMUR 2 LillyJo	5 July 2019	VOSTO	95.25	97.49	547	514	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-038S	LEMUR 2 Wanli	5 July 2019	VOSTO	95.25	97.49	547	515	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-038T	LEMUR 2 Morag	5 July 2019	VOSTO	95.25	97.49	546	515	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-038AD	LEMUR 2 Yndrd	5 July 2019	VOSTO	95.25	97.49	545	516	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-038V	LEMUR 2 DustInTheWind	5 July 2019	VOSTO	95.25	97.49	547	515	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-038X	LEMUR 2 Alex- Maddy	5 July 2019	VOSTO	95.25	97.49	546	515	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-038Y	Momentus-X1	5 July 2019	VOSTO	95.25	97.49	546	515	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-038Z	LEMUR 2 EJatta	5 July 2019	VOSTO	95.24	97.49	547	514	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-044A	Dragon CRS-18	25 July 2019	AFETR	92.84	51.65	418	410	Reusable space transportation system
Deployments j	from the Internation	al Space Station	n					
1998-067QN	VCC A	3 July 2019	KM	92.79	51.64	414	409	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067QQ	VCC C	3 July 2019	KM	92.79	51.64	414	409	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067QR	VCC B	3 July 2019	KM	92.8	51.64	414	409	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

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

				Ba	sic orbital cha	aracteristic	cs.	
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 not previo	usly reported l	nave been identif	ied since	the last repor	t:		
None.	5 5 1	5 1			1			
The following	g objects not previo	usly reported l	nave been identif	ied since	the last repor	t but wer	e no long	er in orbit as at 2359Z on 31 July 2019:
None.		• •			-			
The following	g objects achieved o	orbit since the	last report but w	ere no lon	ger in orbit a	s at 2359	Z on 31 J	uly 2019:
None.								
The following	g objects identified	in a previous r	eport were no lo	nger in or	bit as at 2359	9Z on 31	July 2019	):
2015-03	6B							
The following	g objects were laund	ched since the	last report but di	d not achi	eve orbit:			
None.								
	t should be made to	previously re	ported data:					
Revisions tha	t bhould be made to	1 2 .						

Russian Federation.

# S Annex III

### **Registration data on space launches by the United States of America for January 2020**<sup>\*</sup>

				Ba	sic orbital cha	iracteristic	es.	
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	hed since the las	t report and re	emain in o	rbit:			
2020-001A	Starlink-1073	7 January 2020	AFETR	94.98	53	519	517	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AA	Starlink-1082	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AB	Starlink-1083	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AC	Starlink-1091	7 January 2020	AFETR	91.53	53	591	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AD	Starlink-1094	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AE	Starlink-1096	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AF	Starlink-1100	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AG	Starlink-1108	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AH	Starlink-1109	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AJ	Starlink-1110	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AK	Starlink-1116	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AL	Starlink-1118	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AM	Starlink-1122	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

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

				Ba	sic orbital cha	aracteristic	cs.	
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
2020-001AN	Starlink-1125	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AP	Starlink-1126	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AQ	Starlink-1117	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AR	Starlink-1124	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AS	Starlink-1066	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AT	Starlink-1069	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AU	Starlink-1070	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AV	Starlink-1074	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AW	Starlink-1075	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AX	Starlink-1076	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AY	Starlink-1077	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001AZ	Starlink-1080	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001B	Starlink-1084	7 January 2020	AFETR	91.53	53	351	509	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001BA	Starlink-1081	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001BB	Starlink-1085	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001BC	Starlink-1086	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001BD	Starlink-1087	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001BE	Starlink-1088	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

				Ba	sic orbital cha	iracteristic	2S	
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
2020-001BF	Starlink-1089	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001BG	Starlink-1090	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001BH	Starlink-1092	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001BJ	Starlink-1093	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001BK	Starlink-1095	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001BL	Starlink-1107	7 January 2020	AFETR	91.1	53	344	342	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001BM	Starlink-1115	7 January 2020	AFETR	91.1	53	344	342	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001C	Starlink-1097	7 January 2020	AFETR	94.93	53	516	514	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001D	Starlink-1098	7 January 2020	AFETR	94.92	53	516	514	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001E	Starlink-1099	7 January 2020	AFETR	94.93	53	517	514	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001F	Starlink-1101	7 January 2020	AFETR	94.99	53	519	517	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001G	Starlink-1102	7 January 2020	AFETR	94.97	53	518	516	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001H	Starlink-1103	7 January 2020	AFETR	94.95	53	517	515	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001J	Starlink-1104	7 January 2020	AFETR	94.94	53	517	515	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001K	Starlink-1106	7 January 2020	AFETR	94.99	53	519	517	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001L	Starlink-1111	7 January 2020	AFETR	94.97	53	518	516	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001M	Starlink-1112	7 January 2020	AFETR	95	53	520	518	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001N	Starlink-1113	7 January 2020	AFETR	94.8	53	510	508	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

				Ba	sic orbital cha	aracteristic	es.	
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
2020-001P	Starlink-1114	7 January 2020	AFETR	94.82	53	511	509	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001Q	Starlink-1119	7 January 2020	AFETR	94.81	53	510	508	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001R	Starlink-1121	7 January 2020	AFETR	94.99	53	519	517	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001S	Starlink-1123	7 January 2020	AFETR	94.92	53	516	514	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001T	Starlink-1128	7 January 2020	AFETR	94.84	53	513	509	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001U	Starlink-1130	7 January 2020	AFETR	94.82	53	511	509	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001V	Starlink-1144	7 January 2020	AFETR	94.95	53	517	515	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001W	Starlink-1171	7 January 2020	AFETR	91.53	53	354	345	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001X	Starlink-1172	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001Y	Starlink-1178	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-001Z	Starlink-1179	7 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006A	Starlink-1132	29 January 2020	AFETR	90.67	53	312	303	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AA	Starlink-1161	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AB	Starlink-1163	29 January 2020	AFETR	90.65	53	311	302	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AC	Starlink-1164	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AD	Starlink-1167	29 January 2020	AFETR	90.62	53	308	302	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AE	Starlink-1168	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AF	Starlink-1170	29 January 2020	AFETR	90.56	53	308	296	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

				Ва	sic orbital cha	aracteristic	25	
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
2020-006AG	Starlink-1172	29 January 2020	AFETR	91.53	53	350	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AH	Starlink-1174	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AJ	Starlink-1180	29 January 2020	AFETR	91.53	53	351	348	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AK	Starlink-1182	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AL	Starlink-1177	29 January 2020	AFETR	90.64	53	311	301	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AM	Starlink-1149	29 January 2020	AFETR	90.49	53	303	295	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AN	Starlink-1153	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AP	Starlink-1151	29 January 2020	AFETR	91.53	53	350	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AQ	Starlink-1160	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AR	Starlink-1190	29 January 2020	AFETR	92.09	53	379	375	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AS	Starlink-1173	29 January 2020	AFETR	90.65	53	311	302	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AT	Starlink-1179	29 January 2020	AFETR	90.21	53	290	279	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AU	Starlink-1181	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AV	Starlink-1185	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AW	Starlink-1183	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AX	Starlink-1136	29 January 2020	AFETR	90.62	53	309	301	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AY	Starlink-1176	29 January 2020	AFETR	90.62	53	290	278	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006AZ	Starlink-1127	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

			_	Ba	sic orbital cha	racteristic	25	_
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
2020-006B	Starlink-1120	29 January 2020	AFETR	92.08	53	377	376	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006BA	Starlink-1137	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006BB	Starlink-1142	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006BC	Starlink-1146	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006BD	Starlink-1147	29 January 2020	AFETR	91.53	53	350	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006BE	Starlink-1152	29 January 2020	AFETR	91.53	53	350	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006BF	Starlink-1175	29 January 2020	AFETR	91.53	53	350	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006BG	Starlink-1184	29 January 2020	AFETR	91.53	53	351	348	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006BH	Starlink-1186	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006BJ	Starlink-1193	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006BK	Starlink-1194	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006BL	Starlink-1195	29 January 2020	AFETR	91.53	53	350	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006BM	Starlink-1196	29 January 2020	AFETR	91.53	53	350	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006C	Starlink-1129	29 January 2020	AFETR	92.21	53	384	382	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006D	Starlink-1131	29 January 2020	AFETR	92.08	53	377	376	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006E	Starlink-1134	29 January 2020	AFETR	92.22	53	384	382	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006F	Starlink-1135	29 January 2020	AFETR	92.22	53	384	383	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006G	Starlink-1140	29 January 2020	AFETR	92.23	53	385	383	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

				Ba	sic orbital cha	aracteristic	25	
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
2020-006Н	Starlink-1141	29 January 2020	AFETR	92.23	53	385	383	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006J	Starlink-1148	29 January 2020	AFETR	92.25	53	386	384	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006K	Starlink-1155	29 January 2020	AFETR	92.05	53	376	374	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006L	Starlink-1156	29 January 2020	AFETR	92.24	53	385	384	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006M	Starlink-1157	29 January 2020	AFETR	92.03	53	375	373	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006N	Starlink-1158	29 January 2020	AFETR	92.25	53	386	384	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006P	Starlink-1159	29 January 2020	AFETR	92.03	53	375	374	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006Q	Starlink-1162	29 January 2020	AFETR	92.02	53	374	373	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006R	Starlink-1165	29 January 2020	AFETR	92.06	53	376	375	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006S	Starlink-1166	29 January 2020	AFETR	92.05	53	376	374	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006T	Starlink-1169	29 January 2020	AFETR	92.06	53	377	375	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006U	Starlink-1171	29 January 2020	AFETR	92.04	53	375	374	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006V	Starlink-1178	29 January 2020	AFETR	92.07	53	377	375	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006W	Starlink-1133	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006X	Starlink-1139	29 January 2020	AFETR	91.54	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006Y	Starlink-1145	29 January 2020	AFETR	91.53	53	351	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-006Z	Starlink-1150	29 January 2020	AFETR	90.65	53	309	304	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-007A	USA-294	31 January 2020	RLLC	96.3	70	583	580	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

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				Ba	sic orbital cha	iracteristic	<i>cs</i>	
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 not previo	usly reported ha	ve been identif	fied since t	the last repor	t:		
1998-067QY	STPSat 4	20 November 1998;	KM	92.9	51.6	423	416	Spacecraft engaged in practical applications and uses o space technology such as weather or communications
		deployed: 29 January 2020						
The following	objects not previo	usly reported hav	ve been identif	fied since t	the last repor	t but wer	e no long	er in orbit as at 2359Z on 31 January 2020:
2017-052C	USA 295	7 September 2017	AFETR	89.9	56.9	356	182	Spacecraft engaged in practical applications and uses o space technology such as weather or communications
2017-052D	USA 296	7 September 2017	AFETR	89.9	56.9	356	182	Spacecraft engaged in practical applications and uses o space technology such as weather or communications
2017-052E	USA 297	7 September 2017	AFETR	89.9	56.9	356	182	Spacecraft engaged in practical applications and uses o space technology such as weather or communications
The following None.	s objects achieved o	orbit since the las	st report but w	ere no long	ger in orbit a	s at 2359	Z on 31 J	anuary 2020:
The following 2019-083	g objects identified	in a previous rep	oort were no lo	nger in orl	bit as at 2359	9Z on 31	January 2	020:
The following None.	objects were laund	ched since the la	st report but di	id not achi	eve orbit:			
Revisions that None.	t should be made to	previously repo	rted data:					

ST/SG/SER.E/942

New Zealand.

## Annex IV

### **Registration data on space launches by the United States of America for February 2020**<sup>\*</sup>

				Ва	sic orbital cha	aracteristic	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
The following	s objects were launc	ched since the la	st report and re	emain in o	rbit:			
2020-010B	Atlas 5 Centaur R/B	10 February 2020	AFETR	Н	eliocentric C	orbit (Sun	)	Spent boosters, spent manoeuvring stage, shrouds and other non-functional objects
2020-011A	Cygnus NG-13	15 February 2020	WLPIS	92.97	51.64	423	417	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-011C	Antares R/B	15 February 2020	WLPIS	87.4	51.58	151	140	Spent boosters, spent manoeuvring stage, shrouds and other non-functional objects
2020-012A	Starlink-1138	17 February 2020	AFETR	94.52	53	496	494	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AA	Starlink-1203	17 February 2020	AFETR	94.15	53	478	476	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AB	Starlink-1204	17 February 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AC	Starlink-1206	17 February 2020	AFETR	92.14	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AD	Starlink-1208	17 February 2020	AFETR	92.14	53	385	374	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AE	Starlink-1209	17 February 2020	AFETR	90.5	53	345	253	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AF	Starlink-1210	17 February 2020	AFETR	92.14	53	385	374	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AG	Starlink-1211	17 February 2020	AFETR	92.15	53	384	375	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AH	Starlink-1218	17 February 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AJ	Starlink-1219	17 February 2020	AFETR	92.14	53	385	374	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

The following report supplements the registration data on United States space launches as at 29 February 2020.

				Ba	sic orbital cha	aracteristic	es .	
International designation	Name of the space object	Date of the launch		Nodal period (min)	Inclination (degrees)	Apogee (km)	Perigee (km)	General function of the space object
2020-012AK	Starlink-1220	17 February 2020	AFETR	91.39	53	361	324	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AL	Starlink-1231	17 February 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AM	Starlink-1232	17 February 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AN	Starlink-1233	17 February 2020	AFETR	92.14	53	380	349	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AP	Starlink-1245	17 February 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AQ	Starlink-1254	17 February 2020	AFETR	92.14	53	385	374	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AR	Starlink-1271	17 February 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AS	Starlink-1105	17 February 2020	AFETR	92.15	53	385	374	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AT	Starlink-1187	17 February 2020	AFETR	91.98	53	375	369	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AU	Starlink-1188	17 February 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AV	Starlink-1189	17 February 2020	AFETR	94.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AW	Starlink-1191	17 February 2020	AFETR	94.14	53	384	375	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AX	Starlink-1212	17 February 2020	AFETR	92.14	53	383	377	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AY	Starlink-1214	17 February 2020	AFETR	92.14	53	384	375	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012AZ	Starlink-1215	17 February 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012B	Starlink-1143	17 February 2020	AFETR	94.52	53	496	495	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012BA	Starlink-1217	17 February 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012BB	Starlink-1221	17 February 2020	AFETR	92.16	53	386	375	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

				Ba	sic orbital cha	aracteristic	<i>cs</i>	
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
2020-012BC	Starlink-1222	17 February 2020	AFETR	92.16	53	384	377	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012BD	Starlink-1226	17 February 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012BE	Starlink-1227	17 February 2020	AFETR	92.15	53	385	374	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012BF	Starlink-1229	17 February 2020	AFETR	92.14	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012BG	Starlink-1235	17 February 2020	AFETR	91.5	53	349	348	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012BH	Starlink-1238	17 February 2020	AFETR	92.14	53	385	374	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012BJ	Starlink-1243	17 February 2020	AFETR	94.47	53	494	492	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012BK	Starlink-1246	17 February 2020	AFETR	94.51	53	496	494	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012BL	Starlink-1247	17 February 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012BM	Starlink-1270	17 February 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012BS	Falcon 9 R/B	17 February 2020	AFETR	87.53	52.99	164	140	Spent boosters, spent manoeuvring stage, shrouds and other non-functional objects
2020-012C	Starlink-1192	17 February 2020	AFETR	94.5	53	495	494	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012D	Starlink-1200	17 February 2020	AFETR	94.5	53	495	493	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012E	Starlink-1201	17 February 2020	AFETR	92.46	53	397	393	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012F	Starlink-1202	17 February 2020	AFETR	94.42	53	492	490	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012G	Starlink-1205	17 February 2020	AFETR	92.14	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012H	Starlink-1216	17 February 2020	AFETR	94.41	53	491	489	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012J	Starlink-1224	17 February 2020	AFETR	94.45	53	493	491	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

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				Ba	sic orbital cha	racteristic	25	
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
2020-012K	Starlink-1225	17 February 2020	AFETR	94.45	53	493	491	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012L	Starlink-1228	17 February 2020	AFETR	91.12	53	338	321	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012M	Starlink-1230	17 February 2020	AFETR	94.46	53	493	492	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012N	Starlink-1234	17 February 2020	AFETR	90.79	53	350	276	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012P	Starlink-1236	17 February 2020	AFETR	94.47	53	494	492	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012Q	Starlink-1237	17 February 2020	AFETR	94.42	53	491	489	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012R	Starlink-1239	17 February 2020	AFETR	94.4	53	490	488	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-0128	Starlink-1240	17 February 2020	AFETR	94.4	53	491	489	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012T	Starlink-1241	17 February 2020	AFETR	94.39	53	490	488	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012U	Starlink-1244	17 February 2020	AFETR	94.51	53	496	494	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012V	Starlink-1269	17 February 2020	AFETR	94.49	53	495	493	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012W	Starlink-1154	17 February 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012X	Starlink-1197	17 February 2020	AFETR	92.14	53	380	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012Y	Starlink-1198	17 February 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-012Z	Starlink-1199	17 February 2020	AFETR	92.14	53	385	374	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
Deployments	from the Internation	nal Space Station						
1998-067QZ	HARP	19 February 2020	КМ	92.9	51.64	422	411	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067RB	CryoCube	19 February 2020	КМ	92.9	51.64	421	412	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

				Ba	sic orbital cha	ıracteristic	25	
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
1998-067RC	Argus-02-US	19 February F 2020	КМ	92.89	51.64	422	410	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067RD	Phoenix	19 February F 2020	KM	92.88	51.64	422	410	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067RE	SOCRATES-BEL	19 February F 2020	KM	92.88	51.64	422	409	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067RF	RadSat-u	19 February F 2020	KM	92.89	51.64	422	411	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
1998-067RH	SORTIE	19 February F 2020	KM	92.91	51.64	423	411	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
The following	objects not previou	usly reported have	been identif	ied since	the last repor	·t:		
2019-071C	Orbital Factory 2	2 November C 2019;	Cygnus	93.93	51.64	476	458	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
		deployed: 1 February 2020						
2019-071D	AeroCube 14A	2 November 0 2019;	Cygnus	93.93	51.64	476	458	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
		deployed: 1 February 2020						
2019-071E	SwampSat 2	2 November 0 2019;	Cygnus	93.9	51.64	474	456	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
		deployed: 1 February 2020						
2019-071F	AeroCube 14B	2 November 0 2019;	Cygnus	93.93	51.64	475	458	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
		deployed: 1 February 2020						
2019-071G	AeroCube 15B	2 November 0 2019;	Cygnus	93.92	51.64	474	458	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
		deployed: 1 February 2020						

				Ba	sic orbital cha	aracteristic	25	
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
2019-071H	AeroCube 15A	2 November 2019; deployed: 1 February 2020	Cygnus	93.91	51.64	474	458	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-071J	HuskySat	2 November 2019; deployed: 1 February 2020	Cygnus	93.92	51.64	474	457	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-071K	VPM	5 December 2019; deployed: 1 February 2020	Cygnus	93.91	51.64	474	457	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-071L	CIRiS	5 December 2019; deployed: 1 February 2020	Cygnus	93.91	51.64	474	457	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-071M	MakerSat	5 December 2019; deployed: 1 February 2020	Cygnus	93.91	51.64	474	458	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-071P	EdgeCube	5 December 2019; deployed: 1 February 2020	Cygnus	93.91	51.64	473	458	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-071Q	MiniCarb	5 December 2019; deployed: 1 February 2020	Cygnus	93.92	51.64	474	459	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

				Ba	isic orbital cha	iracteristic	cs	
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
2019-071R	ORCA	5 December 2019; deployed: 1 February 2020	Cygnus	93.9	51.64	473	457	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-022L	AC-10 Probe Gangestad	17 April 2019	Cygnus	93.9	51.6	463	446	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
The following None.	objects not previo	usly reported hav	ve been identif	fied since	the last repor	t:		
The following None.	objects not previo	usly reported hav	ve been identi	fied since	the last repor	t but wer	e no long	er in orbit as at 2359Z on 29 February 2020:
The following None.	objects achieved o	orbit since the las	at report but w	ere no lon	ger in orbit a	s at 2359	Z on 29 F	February 2020:
e	objects identified H, 2019-022J, 201	1 1		U		9Z on 29	February	2020:
The following None.	objects were laund	ched since the las	st report but di	id not achi	ieve orbit:			
Revisions that	should be made to	previously repo	rted data:					

Abbreviations: AFETR, United States Air Force Eastern Test Range; KM, International Space Station Kibo Module; WLPIS, Wallops Island, United States.

### **Registration data on space launches by the United States of America for March 2020**<sup>\*</sup>

				Ba	sic orbital cha	aracteristic	cs	
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 la	st report and re	emain in o	rbit:			
2020-016A	Dragon CRS-20	7 March 2020	AFETR	92.86	51.64	422	408	Reusable space transportation system
2020-019A	Starlink-1279	18 March 2020	AFETR	92.14	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AA	Starlink-1267	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AB	Starlink-1268	18 March 2020	AFETR	92.14	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AC	Starlink-1272	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AD	Starlink-1274	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AE	Starlink-1280	18 March 2020	AFETR	93.23	53	433	432	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AF	Starlink-1283	18 March 2020	AFETR	91.58	53	353	351	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AG	Starlink-1284	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AH	Starlink-1289	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AJ	Starlink-1290	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AK	Starlink-1291	18 March 2020	AFETR	92.15	52.99	385	374	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AL	Starlink-1292	18 March 2020	AFETR	92.15	53	381	377	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AM	Starlink-1297	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

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

				Ba	sic orbital cha	aracteristi	cs	
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
2020-019AN	Starlink-1303	18 March 2020	AFETR	92.14	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AP	Starlink-1307	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AQ	Starlink-1312	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AR	Starlink-1255	18 March 2020	AFETR	92.13	53	381	377	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AS	Starlink-1213	18 March 2020	AFETR	92.14	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AT	Starlink-1256	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AU	Starlink-1257	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AV	Starlink-1259	18 March 2020	AFETR	92.14	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AW	Starlink-1260	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AX	Starlink-1263	18 March 2020	AFETR	94.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AY	Starlink-1265	18 March 2020	AFETR	94.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019AZ	Starlink-1275	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019B	Starlink-1301	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019BA	Starlink-1278	18 March 2020	AFETR	93.36	53	441	437	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019BB	Starlink-1282	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019BC	Starlink-1285	18 March 2020	AFETR	92.14	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019BD	Starlink-1293	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019BE	Starlink-1296	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

				Ba	sic orbital cha	aracteristic	2S	
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
2020-019BF	Starlink-1298	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019BG	Starlink-1309	18 March 2020	AFETR	91.14	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019BH	Starlink-1316	18 March 2020	AFETR	92.14	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019BJ	Starlink-1318	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019BK	Starlink-1286	18 March 2020	AFETR	93.55	53	453	443	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019BL	Starlink-1299	18 March 2020	AFETR	93.29	53	436	435	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019BM	Starlink-1308	18 March 2020	AFETR	93.75	53	461	456	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019C	Starlink-1306	18 March 2020	AFETR	93.61	53	453	450	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019D	Starlink-1311	18 March 2020	AFETR	92	53	374	372	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019E	Starlink-1313	18 March 2020	AFETR	92.14	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019F	Starlink-1317	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019G	Starlink-1262	18 March 2020	AFETR	93.86	53	464	463	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019Н	Starlink-1273	18 March 2020	AFETR	93.91	53	468	464	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019J	Starlink-1276	18 March 2020	AFETR	93.84	53	463	462	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019K	Starlink-1277	18 March 2020	AFETR	93.83	53	463	461	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019L	Starlink-1281	18 March 2020	AFETR	93.95	53	471	465	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019M	Starlink-1287	18 March 2020	AFETR	93.84	53	466	463	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019N	Starlink-1288	18 March 2020	AFETR	93.92	53	468	464	Spacecraft engaged in practical applications and uses of space technology such as weather or communications

				Ba	sic orbital cha	aracteristi	cs	_
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
2020-019P	Starlink-1295	18 March 2020	AFETR	93.88	53	465	463	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019Q	Starlink-1300	18 March 2020	AFETR	93.87	53	465	463	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019R	Starlink-1302	18 March 2020	AFETR	93.9	53	467	464	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-0198	Starlink-1304	18 March 2020	AFETR	93.94	53	470	464	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019T	Starlink-1305	18 March 2020	AFETR	93.85	53	464	462	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019U	Starlink-1310	18 March 2020	AFETR	93.81	53	462	460	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019V	Starlink-1319	18 March 2020	AFETR	93.82	53	463	460	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019W	Starlink-1207	18 March 2020	AFETR	92.14	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019X	Starlink-1258	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019Y	Starlink-1264	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-019Z	Starlink-1266	18 March 2020	AFETR	92.15	53	381	379	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-022A	TDO-Spacecraft 2	26 March 2020	AFETR	624.76	26.5	35 460	201	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2020-022B	AEHF-6 (USA 298)	26 March 2020	AFETR	1 171.18	9.62	35 312	25 542	Spacecraft engaged in practical applications and uses of space technology such as weather or communications
2019-022C	Atlas 5 Centaur R/B	26 March 2020	AFETR	838.59	13.4	35 294	10 864	Spent boosters, spent manoeuvring stage, shrouds and other non-functional objects

The following objects not previously reported have been identified since the last report:

The following objects not previously reported have been identified since the last report but were no longer in orbit as at 23 59Z on 31 March 2020: None.

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

None.

None.

International designation	Name of the space object			Basic orbital characteristics				
			Location of the launch	Nodal period (min)	Inclination (degrees)	Apogee (km)	Perigee (km)	General function of the space object
	g objects identified	1	eport were no lo	onger in or	bit as at 2359	9Z on 31	March 20	)20:
	2BS, 1989-097B, 20							
The following	g objects were laund	ched since the	last report but d	id not achi	eve orbit:			
None.								
Revisions tha	t should be made to	previously rep	oorted data:					
Mana								

None.

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