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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 9 March 2021 from the Permanent Mission of
New Zealand to the United Nations (Vienna) addressed to the
Secretary-General**

The Permanent Mission of New Zealand 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 herewith information concerning objects launched into outer space from New Zealand during the period from October to December 2020 (see annex).¹

¹ The data on space objects referenced in the annex were entered into the Register of Objects Launched into Outer Space on 12 March 2021.



Annex

Information on space objects launched from New Zealand*

I. Objects registered by New Zealand

A. Objects launched by New Zealand during the period from 1 October to 31 December 2020

International designator	National designator	Name	Date and time of the launch (New Zealand time)	Other launching States	Basic orbital parameters				General function of the space object	Additional voluntary information		
					Nodal period (minutes)	Inclination (degrees)	Apogee (km)	Perigee (km)		Owner or operator	Launch vehicle	Website
2020-077L	NZ-2020-24	Electron Rocket Body	28 October 2020, 1021 hrs	United States of America	87.55	97.47	173	134.00	Rocket body	Rocket Lab USA, Inc.	Electron	www.rocketlabusa.com
2020-077M	NZ-2020-25	Electron Kick Stage Rocket Body	28 October 2020, 1021 hrs	United States	94.93	96.63	524	506.00	Rocket body	Rocket Lab USA, Inc.	Electron	www.rocketlabusa.com
2020-085AG	NZ-2020-33	SpaceBEENZ-1	20 November 2020, 1520 hrs	-	94.64	97.37	513	489.00	Technology demonstration/communications	Swarm Technologies (Swarm NZ Limited)	Electron	swarm.space
2020-085AE	NZ-2020-34	SpaceBEENZ-2	20 November 2020, 1520 hrs	-	94.64	97.37	513	489.00	Technology demonstration/communications	Swarm Technologies (Swarm NZ Limited)	Electron	swarm.space
2020-085K	NZ-2020-35	SpaceBEENZ-3	20 November 2020, 1520 hrs	-	94.64	97.38	513	489.00	Technology demonstration/communications	Swarm Technologies (Swarm NZ Limited)	Electron	swarm.space
2020-085L	NZ-2020-36	SpaceBEENZ-4	20 November 2020, 1520 hrs	-	94.64	97.37	513	490.00	Technology demonstration/communications	Swarm Technologies (Swarm NZ Limited)	Electron	swarm.space
2020-085N	NZ-2020-37	SpaceBEENZ-5	20 November 2020, 1520 hrs	-	94.65	97.37	513	490.00	Technology demonstration/communications	Swarm Technologies	Electron	swarm.space

* The data are reproduced in the form in which they were received.

International designator	National designator	Name	Date and time of the launch (New Zealand time)	Other launching States	Basic orbital parameters				General function of the space object	Additional voluntary information		
					Nodal period (minutes)	Inclination (degrees)	Apogee (km)	Perigee (km)		Owner or operator	Launch vehicle	Website
2020-085P	NZ-2020-38	SpaceBEENZ-6	20 November 2020, 1520 hrs	-	94.65	97.37	513	490.00	Technology demonstration/communications	(Swarm NZ Limited) Swarm Technologies (Swarm NZ Limited)	Electron	swarm.space
2020-085B	NZ-2020-57	Electron Rocket Body	20 November 2020, 1520 hrs	United States	87.54	97.35	173	132.00	Rocket body	Rocket Lab USA, Inc.	Electron	www.rocketlabusa.com
020-098B	NZ-2020-59	Electron Kick Stage Rocket Body	20 November 2020, 1520 hrs	United States	94.67	97.37	514	491.00	Rocket body	Rocket Lab USA, Inc.	Electron	www.rocketlabusa.com
2020-098C	NZ-2020-60	Electron Rocket Body	15 December 2020, 2309 hrs	United States	87.04	97.32	140	116.00	Rocket body	Rocket Lab USA, Inc.	Electron	www.rocketlabusa.com

B. Objects no longer in orbit

International designator	National designator	Name	Date and time of the launch (New Zealand time)	General function of the space object	Date of re-entry (UTC)
2020-098C	NZ-2020-60	Electron Rocket Body	15 December 2020, 2309 hrs	Rocket body	28 December 2020
2020-085B	NZ-2020-57	Electron Rocket Body	20 November 2020, 1520 hrs	Rocket body	30 November 2020
2020-077L	NZ-2020-24	Electron Rocket Body	28 October 2020, 1021 hrs	Rocket body	11 November 2020
2019-084B	NZ-2019-35	Electron Kick Stage Rocket Body	6 December 2019, 2118 hrs	Rocket body	8 November 2020

C. Objects identified in a previous report that remain in orbit but are no longer operational

<i>International designator</i>	<i>National designator</i>	<i>Name</i>	<i>Date of the launch (UTC)</i>	<i>General function of the space object</i>	<i>Date when space object was no longer functional (UTC)</i>
None					

D. Objects identified in a previous report that have been moved to a disposal orbit

<i>International designator</i>	<i>National designator</i>	<i>Name</i>	<i>Date of the launch (UTC)</i>	<i>General function of the space object</i>	<i>Geostationary position (degrees East)</i>	<i>Date when space object was moved to a disposal orbit</i>	<i>Physical conditions when space object was moved to a disposal orbit (change in orbit, passivation and other measures recommended in space debris mitigation guidelines)</i>
None							

E. Objects the registration or ownership of which has been transferred from New Zealand to another country

<i>International designator</i>	<i>National designator</i>	<i>Name</i>	<i>Date of change in supervision (UTC)</i>	<i>Identity of the new owner or operator</i>	<i>Identity of the previous owner or operator</i>	<i>Previous orbital position</i>	<i>New orbital position</i>	<i>Change of function of the space object</i>
None								

F. Objects the registration or ownership of which has been transferred to New Zealand

<i>International designator</i>	<i>National designator</i>	<i>Name</i>	<i>Date of change in supervision (UTC)</i>	<i>Identity of the new owner or operator</i>	<i>Identity of the previous owner or operator</i>	<i>Previous orbital position</i>	<i>New orbital position</i>	<i>Change of function of the space object</i>
None								

G. Objects the registration or ownership of which has been transferred from one country to another, excluding New Zealand

<i>International designator</i>	<i>National designator</i>	<i>Name</i>	<i>Date of change in supervision (UTC)</i>	<i>Identity of the new owner or operator</i>	<i>Identity of the previous owner or operator</i>	<i>Previous orbital position</i>	<i>New orbital position</i>	<i>Change of function of the space object</i>
None								

II. Revisions to previously reported information

A. Revision to previous notification of space objects launched from New Zealand during the period from 1 January to 30 June 2020 (ST/SG/SER.E/952)

Annex, section I, table A

The third row *should read*

International designator	National designator	Name	Date and time of the launch (New Zealand time)	Other launching States	Basic orbital parameters				General function of the space object	Additional voluntary information		
					Nodal period (minutes)	Inclination (degrees)	Apogee (km)	Perigee (km)		Owner or operator	Launch vehicle	Website
2020-037F	NZ-2020-09	Electron Kick Stage Rocket Body/Photon Pathfinder ^a	13 June 2020, 1712 hrs	United States	96.52	97.71	601	584	Rocket body	Rocket Lab USA	Electron	www.rocketlabusa.com

^a The Photon Pathfinder is the same space object as the Electron Kick Stage Rocket Body, essentially extending the function of the third stage so that it may act as a satellite in its own right. The space object will have the same national designator and international designator. New Zealand remains the country registering this space object.

B. Revision to previous notification of space objects launched from New Zealand during the period from 1 July to 30 September 2020 (ST/SG/SER.E/959)

Annex, section I, table A, first row

For RLFL14 read Photon Pathfinder¹

¹ Also reported as RLFL 14 on space-track.org and as Photon First Light in promotional statements by Rocket Lab.

III. Notification of space objects launched from New Zealand during the period from 1 October to 31 December 2020

The following space objects are not registered by New Zealand.

A. Objects launched by New Zealand

International designator	National designator	Name	Date and time of the launch (New Zealand time)	Other launching States	Basic orbital parameters				General function of the space object	Additional voluntary information		
					Nodal period (minutes)	Inclination (degrees)	Apogee (km)	Perigee (km)		Owner or operator	Launch vehicle	Website
2020-077A	NZ-2020-14	Flock 4EP 1	28 October 2020, 1021 hrs	United States	94.99	97.49	527	510.00	Remote sensing	Planet Labs, Inc.	Electron	www.planet.com
2020-077H	NZ-2020-15	Flock 4EP 2	28 October 2020, 1021 hrs	United States	94.89	97.49	523	504.00	Remote sensing	Planet Labs, Inc.	Electron	www.planet.com
2020-077G	NZ-2020-16	Flock 4EP 3	28 October 2020, 1021 hrs	United States	94.91	97.49	524	504.00	Remote sensing	Planet Labs, Inc.	Electron	www.planet.com
2020-077J	NZ-2020-17	Flock 4EP 4	28 October 2020, 1021 hrs	United States	94.88	97.49	522	503.00	Remote sensing	Planet Labs, Inc.	Electron	www.planet.com
2020-077E	NZ-2020-18	Flock 4EP 5	28 October 2020, 1021 hrs	United States	94.92	97.49	524	505.00	Remote sensing	Planet Labs, Inc.	Electron	www.planet.com
2020-077K	NZ-2020-19	Flock 4EP 6	28 October 2020, 1021 hrs	United States	94.91	97.49	522	506.00	Remote sensing	Planet Labs, Inc.	Electron	www.planet.com
2020-077B	NZ-2020-20	Flock 4EP 7	28 October 2020, 1021 hrs	United States	94.98	97.49	527	508.00	Remote sensing	Planet Labs, Inc.	Electron	www.planet.com
2020-077D	NZ-2020-21	Flock 4EP 8	28 October 2020, 1021 hrs	United States	94.95	97.49	523	509.00	Remote sensing	Planet Labs, Inc.	Electron	www.planet.com
2020-077C	NZ-2020-22	Flock 4EP 9	28 October 2020, 1021 hrs	United States	94.96	97.48	525	509.00	Remote sensing	Planet Labs, Inc.	Electron	www.planet.com
2020-077F	NZ-2020-23	CE-Sat IIB	28 October 2020, 1021 hrs	Japan	94.93	97.49	524	506.00	Technology demonstration	Canon Electronics	Electron	en.canon-elec.co.jp/space/
2020-085A	NZ-2020-26	Object A	20 November 2020, 1520 hrs	TBD	94.64	97.37	510	492.00	TBD	TBD	Electron	-
2020-085D	NZ-2020-27	Object D	20 November 2020, 1520 hrs	TBD	94.65	97.37	513	490.00	TBD	TBD	Electron	-
2020-085C	NZ-2020-28	Corvus BC5	20 November 2020, 1520 hrs	United States	94.62	97.37	511	489.00	Technology demonstration and remote sensing	Astro Digital	Electron	astrodigital.com

International designator	National designator	Name	Date and time of the launch (New Zealand time)	Other launching States	Basic orbital parameters				General function of the space object	Additional voluntary information		
					Nodal period (minutes)	Inclination (degrees)	Apogee (km)	Perigee (km)		Owner or operator	Launch vehicle	Website
2020-085M	NZ-2020-29	BRO-2	20 November 2020, 1520 hrs	France	94.69	97.38	513	494.00	Remote sensing	Unseenlabs, SAS	Electron	unseenlabs.space
2020-085Q	NZ-2020-30	BRO-3	20 November 2020, 1520 hrs	France	94.7	97.36	513	495.00	Remote sensing	Unseenlabs, SAS	Electron	unseenlabs.space
2020-085AB	NZ-2020-31	Dragracer 1 (Alchemy)	20 November 2020, 1520 hrs	United States	94.18	97.36	484	474.00	Technology demonstration	Millennium Space Systems, Inc.	Electron	millennium-space.com
2020-085AC	NZ-2020-32	Dragracer 2 (Augury)	20 November 2020, 1520 hrs	United States	94.74	97.37	516	495.00	Technology demonstration	Millennium Space Systems, Inc.	Electron	millennium-space.com
2020-085AA	NZ-2020-39	SpaceBEE-22	20 November 2020, 1520 hrs	United States	94.67	97.37	513	491.00	Technology demonstration/ communications	Swarm Technologies, Inc.	Electron	swarm.space
2020-085AH	NZ-2020-40	SpaceBEE-23	20 November 2020, 1520 hrs	United States	94.67	97.37	513	491.00	Technology demonstration/ communications	Swarm Technologies, Inc.	Electron	swarm.space
2020-085Z	NZ-2020-41	SpaceBEE-24	20 November 2020, 1520 hrs	United States	94.67	97.37	514	491.00	Technology demonstration/ communications	Swarm Technologies, Inc.	Electron	swarm.space
2020-085Y	NZ-2020-42	SpaceBEE-25	20 November 2020, 1520 hrs	United States	94.66	97.37	514	491.00	Technology demonstration/ communications	Swarm Technologies, Inc.	Electron	swarm.space
2020-085AD	NZ-2020-43	SpaceBEE-26	20 November 2020, 1520 hrs	United States	94.67	97.37	514	491.00	Technology demonstration/ communications	Swarm Technologies, Inc.	Electron	swarm.space
2020-085X	NZ-2020-44	SpaceBEE-27	20 November 2020, 1520 hrs	United States	94.67	97.37	513	492.00	Technology demonstration/ communications	Swarm Technologies, Inc.	Electron	swarm.space
2020-085V	NZ-2020-45	SpaceBEE-28	20 November 2020, 1520 hrs	United States	94.67	97.37	513	492.00	Technology demonstration/ communications	Swarm Technologies, Inc.	Electron	swarm.space
2020-085W	NZ-2020-46	SpaceBEE-29	20 November 2020, 1520 hrs	United States	94.67	97.37	513	492.00	Technology demonstration/ communications	Swarm Technologies, Inc.	Electron	swarm.space
2020-085T	NZ-2020-47	SpaceBEE-30	20 November 2020, 1520 hrs	United States	94.67	97.37	513	492.00	Technology demonstration/ communications	Swarm Technologies, Inc.	Electron	swarm.space

International designator	National designator	Name	Date and time of the launch (New Zealand time)	Other launching States	Basic orbital parameters				General function of the space object	Additional voluntary information		
					Nodal period (minutes)	Inclination (degrees)	Apogee (km)	Perigee (km)		Owner or operator	Launch vehicle	Website
2020-085U	NZ-2020-48	SpaceBEE-31	20 November 2020, 1520 hrs	United States	94.67	97.37	514	491.00	Technology demonstration/ communications	Swarm Technologies, Inc.	Electron	swarm.space
2020-085S	NZ-2020-49	SpaceBEE-32	20 November 2020, 1520 hrs	United States	94.67	97.37	513	492.00	Technology demonstration/ communications	Swarm Technologies, Inc.	Electron	swarm.space
2020-085R	NZ-2020-50	SpaceBEE-33	20 November 2020, 1520 hrs	United States	94.67	97.37	513	492.00	Technology demonstration/ communications	Swarm Technologies, Inc.	Electron	swarm.space
2020-085E	NZ-2020-51	SpaceBEE-34	20 November 2020, 1520 hrs	United States	94.62	97.37	511	489.00	Technology demonstration/ communications	Swarm Technologies, Inc.	Electron	swarm.space
2020-085F	NZ-2020-52	SpaceBEE-35	20 November 2020, 1520 hrs	United States	94.62	97.37	512	489.00	Technology demonstration/ communications	Swarm Technologies, Inc.	Electron	swarm.space
2020-085G	NZ-2020-53	SpaceBEE-36	20 November 2020, 1520 hrs	United States	94.62	97.37	511	489.00	Technology demonstration/ communications	Swarm Technologies, Inc.	Electron	swarm.space
2020-085H	NZ-2020-54	SpaceBEE-37	20 November 2020, 1520 hrs	United States	94.62	97.37	512	489.00	Technology demonstration/ communications	Swarm Technologies, Inc.	Electron	swarm.space
2020-085J	NZ-2020-55	SpaceBEE-38	20 November 2020, 1520 hrs	United States	94.62	97.37	512	489.00	Technology demonstration/ communications	Swarm Technologies, Inc.	Electron	swarm.space
2020-085AF	NZ-2020-56	SpaceBEE-39	20 November 2020, 1520 hrs	United States	94.63	97.37	512	489.00	Technology demonstration/ communications	Swarm Technologies, Inc.	Electron	swarm.space
2020-098A	NZ-2020-58	Strix-Alpha	15 December 2020, 2309 hrs	Japan	94.68	97.37	514	493.00	Remote sensing	Synspective, Inc.	Electron	synspective.com

Abbreviations:

TBD, to be determined

IV. Objects launched by New Zealand that are no longer in orbit

The following space objects are not registered by New Zealand.

<i>International designator</i>	<i>National designator</i>	<i>Name</i>	<i>Date and time of the launch (New Zealand time)</i>	<i>Other launching States</i>	<i>General function of the space object</i>	<i>Date of re-entry (UTC)</i>
2019-084D	NZ-2019-29	NOOR-1A	6 December 2019	United States	Technology demonstration/communications	29 December 2020