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**Information furnished in conformity with the Convention
on Registration of Objects Launched into Outer Space****Note verbale dated 19 January 2022 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 1 November 2020 to 31 December 2021 (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 21 February 2022.



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 November 2020 to 31 December 2021

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
2020-085A	NZ-2020-26	Electron Kick Stage Rocket Body	20 November 2020, 1520 hours	United States of America	94.64	97.37	510	492	Rocket body	Rocket Lab USA	Electron	www.rocketlabusa.com
2020-085D	NZ-2020-27	APSS-1 QuakeTEC	20 November 2020, 1520 hours	United States	94.65	97.37	513	490	Payload: technology demonstration	University of Auckland	Electron	-
2021-068B	NZ-2021-13	Electron Rocket Body	29 July 2021, 2311 hours	United States	90.9	37.01	343	215	Rocket body	Rocket Lab USA	Electron	www.rocketlabusa.com
2021-068C	NZ-2021-14	Electron Kick Stage Rocket Body	29 July 2021, 2311 hours	United States	93.69	37.02	570	339	Rocket body	Rocket Lab USA	Electron	www.rocketlabusa.com
2021-106C	NZ-2021-16	Electron debris – payload adapter	18 November 2021, 1438 hours	United States	93.14	42.02	437	419	Rocket body	Rocket Lab USA	Electron	www.rocketlabusa.com
2021-106D	NZ-2021-17	Electron Rocket Body	18 November 2021, 1438 hours	United States	89.29	42.02	294	185	Rocket body	Rocket Lab USA	Electron	www.rocketlabusa.com
2021-106E	NZ-2021-18	Electron Kick Stage Rocket Body	18 November 2021, 1438 hours	United States	88.7	42.01	269	152	Rocket body	Rocket Lab USA	Electron	www.rocketlabusa.com
2021-120D	NZ-2021-21	Electron Rocket Body	9 December 2021, 1302 hours	United States	87.33	42	152	132	Rocket body	Rocket Lab USA	Electron	www.rocketlabusa.com
2021-120E	NZ-2021-22	Electron Rocket Body	9 December 2021, 1302 hours	United States	89.91	42.03	373	166	Rocket body	Rocket Lab USA	Electron	www.rocketlabusa.com

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

** See www.space-track.org.

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
2021-120C	NZ-2021-25	Electron debris – payload adapter	9 December 2021, 1302 hours	United States	92.94	42.01	422	415	Rocket body: debris	Rocket Lab USA	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)
2019-016B	NZ-2019-003	Electron Rocket Body Stage 3	29 March 2019, 1227 hours	Rocket body	25 June 2021
2019-037H	NZ-2019-010	Electron Rocket Body Stage 3	29 June 2019, 1630 hours	Rocket body	16 March 2020
2021-004C	NZ-2021-03	Electron Rocket Body	20 January 2021, 1926 hours	Rocket body	16 September 2021
2021-023F	NZ-2021-11	Electron Rocket Body	23 March 2021, 1030 hours	Rocket body	15 January 2022
2021-068B	NZ-2021-13	Electron Rocket Body	29 July 2021 2311 hours	Rocket body	15 November 2021
2021-106D	NZ-2021-17	Electron Rocket Body	18 November 2021, 1438 hours	Rocket body	30 November 2021
2021-106E	NZ-2021-18	Electron Kick Stage Rocket Body	18 November 2021, 1438 hours	Rocket body	22 November 2021
2021-120D	NZ-2021-21	Electron Rocket Body	9 December 2021, 1302 hours	Rocket body	17 December 2021
2021-120E	NZ-2021-22	Electron Kick Stage Rocket Body	9 December 2021, 1302 hours	Rocket body	14 December 2021

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

No revisions.

III. Notification of space objects launched from New Zealand during the period from 1 March to 31 December 2021

The following space objects are not registered by New Zealand.

Objects launched by New Zealand¹

International designator	National designator	Name	Date and time of the launch (New Zealand)	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
2021-023J	NZ-2021-12	M2-B	23 March 2021, 1030 hours	Australia	95.67	45.01	556	545	Technology demonstration	University of New South Wales	Electron	-
2021-068A	NZ-2021-15	STP-27RM (Monolith)	29 July 2021, 2311 hours	United States of America	96.76	37.02	570	339	Classified	United States Air Force Research Lab	Electron	-
2021-106A	NZ-2021-19	Global-14	18 November 2021, 1438 hours	United States	93.25	42.02	439	428	Remote sensing	BlackSky Global	Electron	-
2021-106B	NZ-2021-20	Global-15	18 November 2021, 1438 hours	United States	93.23	42.02	439	426	Remote sensing	BlackSky Global	Electron	-
2021-120B	NZ-2021-23	Global-16	9 December 2021, 1302 hours	United States	93.2	42.01	436	427	Remote sensing	BlackSky Global	Electron	-
2021-120A	NZ-2021-24	Global-17	9 December 2021, 1302 hours	United States	93.24	42.01	436	430	Remote sensing	BlackSky Global	Electron	-

Note: Orbital parameters identified as at 17 January 2022 (source: www.space-track.org).

¹ On 15 May 2021, New Zealand launched the Global-10 and Global-11 space objects on behalf of a foreign satellite operator. As a result of a technical failure involving the Electron rocket launched from LC-1, Mahia Peninsula, New Zealand, the payloads on-board the Electron rocket failed to reach orbit.

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)</i>	<i>Other launching States</i>	<i>General function of the space object</i>	<i>Date of re-entry (UTC)</i>
2019-016A	NZ-2019-001	R3D2	29 March 2019, 1227 hours	United States of America	Technology demonstration	23 May 2021
2020-085AB	NZ-2020-31	Dragracer 1 (Alchemy)	20 November 2020, 1520 hours	United States	Technology demonstration	19 July 2021

Note: Orbital parameters identified as at 17 January 2022 (source: www.space-track.org).