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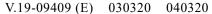
### Committee on the Peaceful Uses of Outer Space

Information furnished in conformity with the Convention on Registration of Objects Launched into Outer Space

Note verbale dated 27 August 2019 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 April to June 2019 (see annex).







#### Annex

### Information on space objects launched from New Zealand\*

### I. Objects registered by New Zealand

#### A. Objects launched by New Zealand (April-June 2019)

|                             |                        |                     | Date and time<br>of the launch<br>(New Zealand time) | Other                          |                           | Basic orbital p          | arametersa     |                 |  | Additional voluntary information |                   |                      |  |
|-----------------------------|------------------------|---------------------|--|--------------------------------|---------------------------|--------------------------|----------------|-----------------|--|----------------------------------|-------------------|----------------------|--|
| International<br>designator | National<br>designator | Name                |  | launching<br>States            | Nodal period<br>(minutes) | Inclination<br>(degrees) | Apogee<br>(km) | Perigee<br>(km) | <ul> <li>General function<br/>of the space<br/>object</li> </ul> | Owner or operator                | Launch<br>vehicle | Website              |  |
| 2019-026D                   | NZ-2019-004            | Electron<br>Stage 2 | 5 May 2019,<br>1800 hrs                              | United<br>States of<br>America | 87.86                     | 40                       | 197            | 140             | Rocket body  | Rocket Lab<br>USA                | Electron          | www.rocketlabusa.com |  |
| 2019-026C                   | NZ-2019-005            | Electron<br>Stage 3 | 5 May 2019,<br>1800 hrs                              | United<br>States               | 94.67                     | 40.03                    | 509            | 496             | Rocket body  | Rocket Lab<br>USA                | Electron          | www.rocketlabusa.com |  |
| 2019-037J                   | NZ-2019-009            | Electron<br>Stage 2 | 29 June 2019,<br>1630 hrs                            | United<br>States               | 91.11                     | 45.01                    | 383            | 275             | Rocket body  | Rocket Lab<br>USA                | Electron          | www.rocketlabusa.com |  |
| 2019-037Н                   | NZ-2019-010            | Electron<br>Stage 3 | 29 June 2019,<br>1630 hrs                            | United<br>States               | 92.04                     | 45.01                    | 455            | 294             | Rocket body  | Rocket Lab<br>USA                | Electron          | www.rocketlabusa.com |  |

<sup>&</sup>lt;sup>a</sup> As at 16 July 2019 (source: www.space-track.org).

#### B. Objects no longer in orbit

| International<br>designator | 1141101141  |                     | Date and time<br>of the launch<br>(New Zealand time) | General<br>function of the<br>space object | Date of<br>re-entry (UTC) |
|-----------------------------|-------------|---------------------|--|--|---------------------------|
| 2019-016C                   | NZ-2019-002 | Electron<br>Stage 2 | 29 March 2019,<br>1227 hrs                           | Rocket body                                | 15 April 2019             |
| 2019-026D                   | NZ-2019-004 | Electron<br>Stage 2 | 5 May 2019,<br>1800 hrs                              | Rocket body                                | 17 May 2019               |
| 2019-037J                   | NZ-2019-009 | Electron<br>Stage 2 | 29 June 2019,<br>1630 hrs                            | Rocket body                                | 2 July 2019               |

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

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

| International<br>designator | National<br>designator | Name | Date of the<br>launch<br>(UTC) | General<br>function of<br>the space<br>object | Date when space object is no longer functional (UTC) |
|-----------------------------|------------------------|------|--------------------------------|---|--|
| None                        |                        |      |                                |   |  |

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

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

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

| International<br>designator | J |  | Date of change in supervision (UTC) | Identity of the new owner or operator | Identity of the previous owner or operator | Previous orbital position | New orbital position | Change of function of the space object |
|-----------------------------|---|--|-------------------------------------|---------------------------------------|--|---------------------------|----------------------|--|
| None                        |   |  |                                     |                                       |  |                           |                      | _                                      |

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

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

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

| International<br>designator |  |  |  |  | Identity of the previous owner or operator | Previous orbital position | New orbital position | Change of function of the space object |
|-----------------------------|--|--|--|--|--|---------------------------|----------------------|--|
| None                        |  |  |  |  |  |                           |                      |  |

#### II. Revisions to previously reported information

No revisions.

## III. Notification of space objects launched from New Zealand during the period from November 2018 to June 2019

Note: The following space objects are not registered by New Zealand

|                             |                        |                     |   | Other                        | Ва                        | sic orbital para         | <i>imeters</i> <sup>a</sup> |                 |  | Additional voluntary information |                   |         |
|-----------------------------|------------------------|---------------------|---|------------------------------|---------------------------|--------------------------|-----------------------------|-----------------|--|----------------------------------|-------------------|---------|
| International<br>designator | National<br>designator | Name                | Date and time of the launch (New Zealand) | Other<br>launching<br>States | Nodal period<br>(minutes) | Inclination<br>(degrees) | Apogee<br>(km)              | Perigee<br>(km) | General function of the space object             | Owner or operator                | Launch<br>vehicle | Website |
| 2018-088A                   | NZ-2018-009            | CICERO 10           | 11 November 2018,<br>1650 hrs             | Norway                       | 94.75                     | 85.04                    | 517                         | 496             | Remote sensing                                   | -                                | -                 | -       |
| 2018-088D                   | NZ-2018-010            | Irivne-01           | 11 November 2018,<br>1650 hrs             | United States                | 94.65                     | 85.04                    | 516                         | 487             | Education  | -                                | -                 | -       |
| 2018-088E                   | NZ-2018-013            | Proxima I           | 11 November 2018,<br>1650 hrs             | Australia                    | 94.65                     | 85.03                    | 517                         | 487             | Technology<br>demonstration and<br>communication | -                                | -                 | -       |
| 2018-088G                   | NZ-2018-014            | Proxima II          | 11 November 2018,<br>1650 hrs             | Australia                    | 94.65                     | 85.03                    | 517                         | 487             | Technology<br>demonstration and<br>communication | -                                | -                 | -       |
| 2018-104G                   | NZ-2018-017            | CHOMPTT             | 16 December 2018,<br>1933 hrs             | United States                | 94.59                     | 85.04                    | 510                         | 487             | Technology demonstration                         | -                                | -                 | -       |
| 2018-104J                   | NZ-2018-019            | DaVinci             | 16 December 2018,<br>1933 hrs             | United States                | 94.65                     | 85.03                    | 512                         | 492             | Educational                                      | -                                | -                 | -       |
| 2018-104M                   | NZ-2018-023            | SHFT-1<br>(Goergen) | 16 December 2018,<br>1933 hrs             | United States                | 94.63                     | 85.03                    | 508                         | 493             | Science  | -                                | -                 | -       |

|                             |                        |                                       |   | Other               | Ba                        | isic orbital par         | ametersa       |                 |   | Additional voluntary information |                   |         |
|-----------------------------|------------------------|---------------------------------------|---|---------------------|---------------------------|--------------------------|----------------|-----------------|---|----------------------------------|-------------------|---------|
| International<br>designator | National<br>designator | Name                                  | Date and time of the launch (New Zealand) | launching<br>States | Nodal period<br>(minutes) | Inclination<br>(degrees) | Apogee<br>(km) | Perigee<br>(km) | General function of the space object              | Owner or operator                | Launch<br>vehicle | Website |
| 2018-104B                   | NZ-2018-024            | Shields-1                             | 16 December 2018,<br>1933 hrs             | United States       | 94.67                     | 85.03                    | 511            | 494             | Technology demonstration                          | -                                | -                 | -       |
| 2018-104D                   | NZ-2018-025            | STF-1                                 | 16 December 2018,<br>1933 hrs             | United States       | 94.7                      | 85.03                    | 513            | 495             | Science and technology demonstration              | -                                | -                 | -       |
| 2018-104N                   | NZ-2018-026            | AeroCube 11<br>EagleScout<br>(TOMSat) | 16 December 2018,<br>1933 hrs             | United States       | 94.64                     | 85.04                    | 511            | 491             | Technology<br>demonstration                       | -                                | -                 | -       |
| 2018-104A                   | NZ-2018-027            | AeroCube 11-R3<br>(TOMSat)            | 16 December 2018,<br>1933 hrs             | United States       | 94.63                     | 85.03                    | 511            | 490             | Technology demonstration                          | -                                | -                 | -       |
| 2019-016A                   | NZ-2019-001            | R3D2                                  | 29 March 2019,<br>1227 hrs                | United States       | 93.09                     | 39.52                    | 430            | 422             | Technology demonstration                          | -                                | -                 | -       |
| 2019-026A                   | NZ-2019-006            | Falcon<br>ODE/AFOTEC-1                | 5 May 2019,<br>1800 hrs                   | United States       | 94.72                     | 40.02                    | 509            | 501             | Technology demonstration                          | -                                | -                 | -       |
| 2019-026E                   | NZ-2019-007            | Harbinger                             | 5 May 2019,<br>1800 hrs                   | United States       | 94.71                     | 40.02                    | 509            | 499             | Remote sensing and technology demonstration       | -                                | -                 | -       |
| 2019-026B                   | NZ-2019-008            | SPARC-1                               | 5 May 2019,<br>1800 hrs                   | United States       | 94.65                     | 40.02                    | 509            | 495             | Technology demonstration                          | -                                | -                 | -       |
| 2019-037C                   | NZ-2019-011            | Global-3                              | 29 June 2019,<br>1630 hrs                 | United States       | 93.66                     | 45.01                    | 459            | 447             | Remote sensing                                    | -                                | -                 | -       |
| 2019-037B                   | NZ-2019-012            | Prometheus 2-9                        | 29 June 2019,<br>1630 hrs                 | United States       | 93.67                     | 45.01                    | 459            | 449             | Technology<br>demonstration and<br>communications | -                                | -                 | -       |
| 2019-037K                   | NZ-2019-013            | Prometheus 2-7                        | 29 June 2019,<br>1630 hrs                 | United States       | 93.67                     | 45.01                    | 459            | 449             | Technology<br>demonstration and<br>communications | -                                | -                 | -       |
| 2019-037G                   | NZ-2019-015            | SpaceBee 8                            | 29 June 2019,<br>1630 hrs                 | United States       | 93.53                     | 45.02                    | 457            | 438             | Technology<br>demonstration and<br>communications | -                                | -                 | -       |
| 2019-037F                   | NZ-2019-016            | SpaceBee 9                            | 29 June 2019,<br>1630 hrs                 | United States       | 93.55                     | 45.01                    | 458            | 438             | Technology<br>demonstration and<br>communications | -                                | -                 | -       |

<sup>&</sup>lt;sup>a</sup> As at 16 July 2019 (source: www.space-track.org).