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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 13 September 2018 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 the period from May to September 2017 (see annexes I–V).¹

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.

¹ The data on space objects referenced in the annexes were entered into the Register of Objects Launched into Outer Space on 1 October 2018.



Annex I

Registration data on space launches by the United States of America for May 2017*

The following report supplements the registration data on United States space launches as at 31 May 2017. All launches were made from the territory of the United States unless otherwise specified.

| International designation | Name of the space object | Date of the launch | Location of the launch | Basic orbital characteristics | | | | General function of the space object |
|---|--------------------------|--------------------|-------------------------------|-------------------------------|-----------------------|-------------|--------------|---|
| | | | | Nodal period (min) | Inclination (degrees) | Apogee (km) | Perigee (km) | |
| The following objects were launched since the last report and remain in orbit: | | | | | | | | |
| 2017-022A | USA 276 | 1 May 2017 | – | 92.3 | 50 | 395 | 388 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-025B | Falcon 9 R/B | 15 May 2017 | – | 1 410.7 | 24.5 | 70 190 | 385 | Spent boosters, spent manoeuvring stage, shrouds and other non-functional objects |
| The following objects not previously reported have been identified since the last report: | | | | | | | | |
| 1998-067LK | Columbia | 16 May 2017 | Deployed from ISS Kibo Module | 92.5 | 51.6 | 405 | 394 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 1998-067LL | SGSat | 16 May 2017 | Deployed from ISS Kibo Module | 92.5 | 51.6 | 405 | 393 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 1998-067LM | CXBN-2 | 16 May 2017 | Deployed from ISS Kibo Module | 92.5 | 51.6 | 405 | 394 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 1998-067LN | Icecube | 16 May 2017 | Deployed from ISS Kibo Module | 92.5 | 51.6 | 405 | 394 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 1998-067LS | Altair Pathfinder | 17 May 2017 | Deployed from ISS Kibo Module | 92.5 | 51.6 | 405 | 393 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 1998-067LT | Sharce | 17 May 2017 | Deployed from ISS Kibo Module | 92.5 | 51.6 | 405 | 394 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 1998-067LW | CSUNSat 1 | 17 May 2017 | Deployed from ISS Kibo Module | 92.5 | 51.6 | 405 | 394 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |

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

| <i>International designation</i> | <i>Name of the space object</i> | <i>Date of the launch</i> | <i>Location of the launch</i> | <i>Basic orbital characteristics</i> | | | | <i>General function of the space object</i> |
|---|---------------------------------|---------------------------|-------------------------------|--------------------------------------|------------------------------|--------------------|---------------------|---|
| | | | | <i>Nodal period (min)</i> | <i>Inclination (degrees)</i> | <i>Apogee (km)</i> | <i>Perigee (km)</i> | |
| 1998-067MA | Challenger | 25 May 2017 | Deployed from ISS Kibo Module | 92.5 | 51.6 | 405 | 394 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 1998-067MS | Atlantis | 26 May 2017 | Deployed from ISS Kibo Module | 92.5 | 51.6 | 405 | 393 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| The following objects not previously reported have been identified since the last report but are no longer in orbit as at 2359Z on 31 May 2017: | | | | | | | | |
| None. | | | | | | | | |
| The following objects achieved orbit since the last report but are no longer in orbit as at 2359Z on 31 May 2017: | | | | | | | | |
| 2017-022B | Falcon 9 R/B | 1 May 2017 | – | 92.3 | 50 | 394 | 238 | Spent boosters, spent manoeuvring stage, shrouds and other non-functional objects |
| The following objects identified in a previous report are no longer in orbit as at 2359Z on 31 May 2017: | | | | | | | | |
| 1975-072B, 1998-067HU | | | | | | | | |
| The following objects were launched since the last report but did not achieve orbit: | | | | | | | | |
| None. | | | | | | | | |
| Revisions that should be made to previously reported data: | | | | | | | | |
| None. | | | | | | | | |

Annex II

Registration data on space launches by the United States of America for June 2017*

The following report supplements the registration data on United States space launches as at 30 June 2017. All launches were made from the territory of the United States unless otherwise specified.

| International designation | Name of the space object | Date of the launch | Location of the launch | Basic orbital characteristics | | | | General function of the space object |
|--|--------------------------|--------------------|------------------------|-------------------------------|-----------------------|-------------|--------------|---|
| | | | | Nodal period (min) | Inclination (degrees) | Apogee (km) | Perigee (km) | |
| The following objects were launched since the last report and remain in orbit: | | | | | | | | |
| 2017-030A | Dragon CRS-11 | 3 June 2017 | – | 92.66 | 51.64 | 408 | 402 | Reusable space transportation systems |
| 2017-032A | EchoStar 21 | 8 June 2017 | – | 637.7 | 49 | 32 912 | 415 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-036G | Lemur 2 Shainajohl | 23 June 2017 | Sriharikota, India | 94.6 | 97.4 | 523 | 508 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-036H | Lemur 2 Xueniterence | 23 June 2017 | Sriharikota, India | 94.6 | 97.4 | 523 | 508 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-036J | Lemur 2 Lucybryce | 23 June 2017 | Sriharikota, India | 94.6 | 97.4 | 523 | 508 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-036K | Lemur 2 Kungfoo | 23 June 2017 | Sriharikota, India | 94.6 | 97.4 | 523 | 508 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-036Q | Lemur 2 Lynsey-Symo | 23 June 2017 | Sriharikota, India | 94.6 | 97.4 | 523 | 508 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-036R | Lemur 2 Lisasaurus | 23 June 2017 | Sriharikota, India | 94.6 | 97.4 | 523 | 508 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-036S | Lemur 2 Sam-Amelia | 23 June 2017 | Sriharikota, India | 94.6 | 97.4 | 523 | 508 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-036T | Lemur 2 Mcpeake | 23 June 2017 | Sriharikota, India | 94.6 | 97.4 | 523 | 508 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-038B | Falcon 9 R/B | 23 June 2017 | – | 1 285.3 | 23.9 | 65 350 | 211 | Spent boosters, spent manoeuvring stage, shrouds and other non-functional objects |
| 2017-039A | Iridium 113 | 25 June 2017 | – | 96.9 | 86.7 | 637 | 621 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-039B | Iridium 123 | 23 June 2017 | – | 96.9 | 86.7 | 640 | 618 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |

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

| <i>International designation</i> | <i>Name of the space object</i> | <i>Date of the launch</i> | <i>Location of the launch</i> | <i>Basic orbital characteristics</i> | | | | <i>General function of the space object</i> |
|--|---------------------------------|---------------------------|-------------------------------|--------------------------------------|------------------------------|--------------------|---------------------|---|
| | | | | <i>Nodal period (min)</i> | <i>Inclination (degrees)</i> | <i>Apogee (km)</i> | <i>Perigee (km)</i> | |
| 2017-039C | Iridium 120 | 25 June 2017 | – | 97 | 86.7 | 636 | 620 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-039D | Iridium 115 | 25 June 2017 | – | 96.9 | 86.7 | 639 | 624 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-039E | Iridium 118 | 25 June 2017 | – | 96.9 | 86.7 | 639 | 624 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-039F | Iridium 117 | 25 June 2017 | – | 96.9 | 86.7 | 636 | 623 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-039G | Iridium 126 | 25 June 2017 | – | 96.9 | 86.7 | 637 | 618 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-039H | Iridium 124 | 23 June 2017 | – | 96.9 | 86.7 | 636 | 623 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-039J | Iridium 128 | 25 June 2017 | – | 97 | 86.7 | 641 | 625 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-039K | Iridium 121 | 25 June 2017 | – | 97 | 86.7 | 637 | 621 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| The following objects not previously reported have been identified since the last report: | | | | | | | | |
| 2017-019B | Lemur 2 Angela | 8 June 2017 | Deployed from Cygnus OA-8 | 94.3 | 51.6 | 491 | 475 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-019C | Lemur 2 Jennybarna | 8 June 2017 | Deployed from Cygnus OA-8 | 94.3 | 51.6 | 491 | 475 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-019D | Lemur 2 Robmoore | 8 June 2017 | Deployed from Cygnus OA-8 | 94.3 | 51.6 | 491 | 476 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2019-019E | Lemur 2 Spirovision | 8 June 2017 | Deployed from Cygnus OA-8 | 94.3 | 51.6 | 491 | 476 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| The following objects not previously reported have been identified since the last report but are no longer in orbit as at 2359Z on 30 June 2017: | | | | | | | | |
| None. | | | | | | | | |

| Basic orbital characteristics | | | | | | | | |
|--|--------------------------|--------------------|------------------------|--------------------|-----------------------|-------------|--------------|--------------------------------------|
| International designation | Name of the space object | Date of the launch | Location of the launch | Nodal period (min) | Inclination (degrees) | Apogee (km) | Perigee (km) | General function of the space object |
| The following objects achieved orbit since the last report but are no longer in orbit as at 2359Z on 30 June 2017: | | | | | | | | |
| None. | | | | | | | | |
| The following objects identified in a previous report are no longer in orbit as at 2359Z on 30 June 2017: | | | | | | | | |
| 1998-032D, 1998-067HQ, 2016-019B, 2017-019A | | | | | | | | |
| The following objects were launched since the last report but did not achieve orbit: | | | | | | | | |
| None. | | | | | | | | |
| Revisions that should be made to previously reported data: | | | | | | | | |
| None. | | | | | | | | |

Annex III

Registration data on space launches by the United States of America for July 2017*

The following report supplements the registration data on United States space launches as at 31 July 2017. All launches were made from the territory of the United States unless otherwise specified.

| International designation | Name of the space object | Date of the launch | Location of the launch | Basic orbital characteristics | | | | General function of the space object |
|--|--------------------------|--------------------|------------------------|-------------------------------|-----------------------|-------------|--------------|---|
| | | | | Nodal period (min) | Inclination (degrees) | Apogee (km) | Perigee (km) | |
| The following objects were launched since the last report and remain in orbit: | | | | | | | | |
| 2017-041A | Intelsat 35E | 5 July 2017 | – | 1 436.1 | 0.02 | 35 796 | 35 778 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-041B | Falcon 9 R/B | 5 July 2017 | – | 773 | 25.8 | 42 749 | 297 | Spent boosters, spent manoeuvring stages, shrouds and other non-functional objects |
| 2017-042N | Lemur 2 Greenberg | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042P | Lemur 2 Andis | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042Q | Lemur 2 Monson | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042R | Lemur 2 Furiaus | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042S | Lemur 2 Peterg | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042T | Lemur 2 Dembitz | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042V | Nanoace | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042W | Lemur 2 Zachary | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042X | Corvus BC2 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042Y | Corvus BC1 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AB | Flock 2K 03 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |

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

| <i>International designation</i> | <i>Name of the space object</i> | <i>Date of the launch</i> | <i>Location of the launch</i> | <i>Basic orbital characteristics</i> | | | | <i>General function of the space object</i> |
|----------------------------------|---------------------------------|---------------------------|-------------------------------|--------------------------------------|------------------------------|--------------------|---------------------|---|
| | | | | <i>Nodal period (min)</i> | <i>Inclination (degrees)</i> | <i>Apogee (km)</i> | <i>Perigee (km)</i> | |
| 2017-042AC | Flock 2K 04 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AD | Flock 2K 01 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AE | Flock 2K 02 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AF | Flock 2K 47 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AG | Flock 2K 48 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AH | Flock 2K 45 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AJ | Flock 2K 24 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AK | Flock 2K 46 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AL | Flock 2K 23 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AM | Flock 2K 21 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AN | Flock 2K 22 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AP | Flock 2K 07 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AQ | Flock 2K 08 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AR | Flock 2K 05 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AS | Flock 2K 40 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AT | Flock 2K 39 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AU | Flock 2K 37 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AV | Flock 2K 38 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |

| <i>International designation</i> | <i>Name of the space object</i> | <i>Date of the launch</i> | <i>Location of the launch</i> | <i>Basic orbital characteristics</i> | | | | <i>General function of the space object</i> |
|----------------------------------|---------------------------------|---------------------------|-------------------------------|--------------------------------------|------------------------------|--------------------|---------------------|---|
| | | | | <i>Nodal period (min)</i> | <i>Inclination (degrees)</i> | <i>Apogee (km)</i> | <i>Perigee (km)</i> | |
| 2017-042AW | Flock 2K 31 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AX | Flock 2K 32 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AY | Flock 2K 29 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042AZ | Flock 2K 30 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BA | Flock 2K 44 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BB | Flock 2K 43 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BC | Flock 2K 41 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BD | Flock 2K 36 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BE | Flock 2K 35 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BF | Flock 2K 34 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BG | Flock 2K 33 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BH | Flock 2K 28 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BJ | Lemur 2 Artfischer | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BK | Flock 2K 27 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BL | Flock 2K 26 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BM | Flock 2K 25 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BN | Flock 2K 20 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BP | Flock 2K 19 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |

| <i>International designation</i> | <i>Name of the space object</i> | <i>Date of the launch</i> | <i>Location of the launch</i> | <i>Basic orbital characteristics</i> | | | | <i>General function of the space object</i> |
|----------------------------------|---------------------------------|---------------------------|-------------------------------|--------------------------------------|------------------------------|--------------------|---------------------|---|
| | | | | <i>Nodal period (min)</i> | <i>Inclination (degrees)</i> | <i>Apogee (km)</i> | <i>Perigee (km)</i> | |
| 2017-042BQ | Flock 2K 18 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BR | Flock 2K 17 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BS | Flock 2K 16 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BT | Flock 2K 15 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BU | Flock 2K 13 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BV | Flock 2K 14 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BW | Flock 2K 12 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BX | Flock 2K 11 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BY | Flock 2K 10 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042BZ | Flock 2K 09 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-042CA | Flock 2K 06 | 14 July 2017 | – | 95.5 | 97.6 | 602 | 586 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |

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

None.

The following objects not previously reported have been identified since the last report but are no longer in orbit as at 2359Z on 31 July 2017:

None.

The following objects achieved orbit since the last report but are no longer in orbit as at 2359Z on 31 July 2017:

None.

The following objects identified on a previous report are no longer in orbit as at 2359Z on 31 July 2017:

2013-041B, 2017-030A, 1998-067JQ, 1998-067LB

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

None.

Revisions that should be made to previously reported data:

None.

Annex IV

Registration data on space launches by the United States of America for August 2017*

The following report supplements the registration data on United States space launches as at 31 August 2017. All launches were made from the territory of the United States unless otherwise specified.

| International designation | Name of the space object | Date of the launch | Location of the launch | Basic orbital characteristics | | | | General function of the space object |
|---|--------------------------|--------------------|------------------------|-------------------------------|-----------------------|-------------|--------------|---|
| | | | | Nodal period (min) | Inclination (degrees) | Apogee (km) | Perigee (km) | |
| The following objects were launched since the last report and remain in orbit: | | | | | | | | |
| 2017-045A | Dragon CRS-12 | 14 August 2017 | — | 92.4 | 51.6 | 398 | 393 | Reusable space transportation systems |
| 2017-047A | TDRS 13 | 18 August 2017 | — | 718.8 | 26.2 | 35 757 | 4 648 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-047B | Atlas 5 Centaur R/B | 18 August 2017 | — | 693.7 | 26.4 | 34 757 | 4 405 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-050A | ORS 5 Sensorsat | 26 August 2017 | — | 96.7 | 0.1 | 613 | 589 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-050E | Minotaur R/B | 26 August 2017 | — | 96.7 | 0.1 | 613 | 589 | Spent boosters, spent manoeuvring stages, shrouds and other non-functional objects |
| 2017-050G | Minotaur R/B | 26 August 2017 | — | 94.9 | 24.7 | 598 | 431 | Spent boosters, spent manoeuvring stages, shrouds and other non-functional objects |
| The following objects not previously reported have been identified since the last report: | | | | | | | | |
| None. | | | | | | | | |
| The following objects not previously reported have been identified since the last report but were no longer in orbit as at 2359Z on 31 August 2017: | | | | | | | | |
| None. | | | | | | | | |
| The following objects achieved orbit since the last report but were no longer in orbit as at 2359Z on 31 August 2017: | | | | | | | | |
| None. | | | | | | | | |
| The following objects identified in a previous report were no longer in orbit as at 2359Z on 31 August 2017: | | | | | | | | |
| 2015-011E | | | | | | | | |
| The following objects were launched since the last report but did not achieve orbit: | | | | | | | | |
| None. | | | | | | | | |
| Revisions that should be made to previously reported data: | | | | | | | | |
| None. | | | | | | | | |

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

Annex V

Registration data on space launches by the United States of America for September 2017*

The following report supplements the registration data on United States space launches as at 30 September 2017. All launches were made from the territory of the United States unless otherwise specified.

| International designation | Name of the space object | Date of the launch | Location of the launch | Basic orbital characteristics | | | | General function of the space object |
|---|--------------------------|--------------------|------------------------|-------------------------------|-----------------------|-------------|--------------|---|
| | | | | Nodal period (min) | Inclination (degrees) | Apogee (km) | Perigee (km) | |
| The following objects were launched since the last report and remain in orbit: | | | | | | | | |
| 2017-052A | OTV 5 (USA 277) | 7 September 2017 | – | 89.9 | 56.9 | 356 | 182 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| 2017-056A | USA 278 | 24 September 2017 | – | 707.7 | 63.7 | 37 661 | 2 196 | Spacecraft engaged in practical applications and uses of space technology such as weather or communications |
| The following objects not previously reported have been identified since the last report: | | | | | | | | |
| None. | | | | | | | | |
| The following objects not previously reported have been identified since the last report but were no longer in orbit as at 23 59Z on 30 September 2017: | | | | | | | | |
| 2017-052B | Falcon 9 R/B | 7 September 2017 | – | 89.9 | 56.9 | 356 | 182 | Spent boosters, spent manoeuvring stages, shrouds and other non-functional objects |
| The following objects achieved orbit since the last report but were no longer in orbit as at 2359Z on 30 September 2017: | | | | | | | | |
| None. | | | | | | | | |
| The following objects identified in a previous report were no longer in orbit as at 2359Z on 30 September 2017: | | | | | | | | |
| 1997-051F, 1998-051E, 1998-067HX, 1998-067HY, 2017-045A | | | | | | | | |
| The following objects were launched since the last report but did not achieve orbit: | | | | | | | | |
| None. | | | | | | | | |
| Revisions that should be made to previously reported data: | | | | | | | | |
| None. | | | | | | | | |

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