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World Warning Agency for Satellites
World Data Center A for Rockets and Satellites
Code 630.2
Goddard Space Flight Center
Greenbelt, Maryland 20771
U.S.A.

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SPACEWARN BULLETIN

SPX-382

August 31, 1985

World Warning Agency for Satellites
World Data Center A for Rockets and Satellites
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Goddard Space Flight Center
Greenbelt, Maryland, U.S.A.

SPACEWARN Activities ✓

A. List of Recent International Designations. (Launches reported for the first time are indicated in *italics*. Catalog numbers are in parentheses.)

| | | | |
|--------------------------------------|---------|--|---------|
| 1985-078A (15999) <i>Cosmos 1679</i> | Aug. 29 | 067A (15940) <i>Cosmos 1672</i> | Aug. 7 |
| 077A (15977) <i>Cosmos 1678</i> | Aug. 29 | 066B (15938) <i>Oscar 30</i> | Aug. 3 |
| 078D (15995) <i>Syncom IV-4</i> | Aug. 29 | 066A (15935) <i>Oscar 24</i> | Aug. 3 |
| 078C (15994) <i>ASC-1</i> | Aug. 27 | 065A (15931) <i>Cosmos 1671</i> | Aug. 2 |
| 078B (15993) <i>Aussat 1</i> | Aug. 27 | 064A (15930) <i>Cosmos 1670</i> | Aug. 1 |
| 078A (15992) <i>STS-51I</i> | Aug. 27 | 063B (15929) <i>Plasma Diagnostics Package</i> | July 29 |
| 075A (15986) <i>Cosmos 1677</i> | Aug. 23 | 063A (15925) <i>STS-51F</i> | July 29 |
| 074A (15977) <i>Molniya 1-84</i> | Aug. 22 | 062A (15918) <i>Cosmos 1669</i> | July 19 |
| 073A (15967) <i>Planet A</i> | Aug. 18 | 061A (15909) <i>Molniya 3-25</i> | July 17 |
| 072A (15959) <i>Cosmos 1676</i> | Aug. 16 | 060A (15906) <i>Cosmos 1668</i> | July 15 |
| 071A (15952) <i>Cosmos 1675</i> | Aug. 12 | 059A (15891) <i>Cosmos 1667</i> | July 10 |
| 070A (15948) <i>Raduga 18</i> | Aug. 8 | 058A (15889) <i>Cosmos 1666</i> | July 8 |
| 069A (15944) <i>Cosmos 1674</i> | Aug. 8 | 057A (15877) <i>Cosmos 1665</i> | July 3 |
| 068A (15942) <i>Cosmos 1673</i> | Aug. 8 | | |

B. Text of Launching Announcements. (Received between July 31, 1985, and August 31, 1985.)

1985-078A (Category III) Recent reports indicate the launch of *Cosmos 1679* on August 29, 1985, by the U.S.S.R. Confirmation has not yet been received from the launching agency.

1985-077A (Category III) Recent reports indicate the launch of *Cosmos 1678* on August 29, 1985, by the U.S.S.R. Confirmation has not yet been received from the launching agency.

1985-076D (Category II) *Syncom IV-4* was launched from the orbiting *STS-51I* on August 29, 1985, for the Leasat Network. Orbit elements are period 636.3 min, inclination 27.2°, apogee 35861 km, perigee 393 km.

1985-076C (Category II) *ASC 1* was launched from the orbiting *STS-51I* on August 27, 1985, for the American Satellite Company (ASC). Orbit elements are period 639.6 min, inclination 27.1°, apogee 36058 km, perigee 366 km.

1985-076B (Category II) *Aussat 1* was launched from the orbiting *STS-51I* on August 27, 1985, for Australia. Orbit elements are period 651.7 min, inclination 24.3°, apogee 36287 km, perigee 755 km.

- 1985-076A
(Category II) STS-51I (Space Transportation System-51I) was launched on August 27, 1985, from the Kennedy Space Center. Orbit elements are period 92.0 min, inclination 28.5°, apogee 385 km, perigee 355 km. On board are J. H. Engle, R. O. Covey, J. D. van Hoften, W. F. Fisher and J. M. Lounge. The payload included Aussat 1, ASC 1 and Syncom IV-4. The Space Shuttle Discovery mission also included the repair of a dormant fuel-laden Leasat satellite.
- 1985-075A
(Category III) Recent reports indicate the launch of Cosmos 1677 on August 23, 1985, by the U.S.S.R. Confirmation has not yet been received from the launching agency.
- 1985-074A
(Category III) Recent reports indicate the launch of Molniya 1-64 on August 22, 1985, by the U.S.S.R. Confirmation has not yet been received from the launching agency.
- 1985-073A
(Category II) Planet A was launched by the Institute of Space and Astronautical Science (ISAS) on August 18, 1985, from the Kagoshima Space Center, Japan. The spacecraft is cylindrical with a 1.4 meter diameter and 0.7 meter height and weighs 139.7 kg. On board is an ultraviolet imaging camera to observe the hydrogen corona around the coma of the comet Halley and an energy analyzer of ions and electrons to measure solar wind and probably cometary charged particles. The spacecraft transmits on 2293.89 MHz with 0.07/5 Watts with coherent/non-coherent modes for ranging/telemetry. The orbit parameters are epoch 04h 10m 32s August 22, 1985 (UTC), inclination 0.888°, perihelion 100.480 million km, aphelion 151.467 million km, period 282.2 days. The closest encounter to the comet Halley is 1256 (GMT), March 8, 1986, distance 211 thousand km. The spacecraft is renamed "Suisei" (the Japanese word for comet). Mid-course correction will be carried out later if necessary.
- 1985-072A
(Category III) Recent reports indicate the launch of Cosmos 1676 on August 16, 1985, by the U.S.S.R. Confirmation has not yet been received from the launching agency.
- 1985-071A
(Category III) Recent reports indicate the launch of Cosmos 1675 on August 12, 1985, by the U.S.S.R. Confirmation has not yet been received from the launching agency.
- 1985-070A
(Category III) Recent reports indicate the launch of Raduga 16 on August 8, 1985, by the U.S.S.R. Confirmation has not yet been received from the launching agency.
- 1985-069A
(Category III) Recent reports indicate the launch of Cosmos 1674 on August 8, 1985, by the U.S.S.R. Confirmation has not yet been received from the launching agency.

1985-068A
(Category III) Recent reports indicate the launch of Cosmos 1673 on August 8, 1985, by the U.S.S.R. Confirmation has not yet been received from the launching agency.

1985-067A
(Category III) Recent reports indicate the launch of Cosmos 1672 on August 7, 1985, by the U.S.S.R. Confirmation has not yet been received from the launching agency.

1985-066B
(Category III) Oscar 30 was launched on August 3, 1985, by the U.S. Orbit elements were inclination 89.8°, period 107.9 min, apogee 1259 km, perigee 1001 km.

1985-066A
(Category III) Oscar 24 was launched on August 3, 1985, by the U.S. Orbit elements were inclination 89.8°, period 107.9 min, apogee 1259 km, perigee 1002 km.

1985-065A
(Category III) Recent reports indicate the launch of Cosmos 1671 on August 2, 1985, by the U.S.S.R. Confirmation has not yet been received from the launching agency.

1985-064A
(Category III) Recent reports indicate the launch of Cosmos 1670 on August 1, 1985, by the U.S.S.R. Confirmation has not yet been received from the launching agency.

C. Spacecraft Particularly Suited for International Participation (Category I).

1. Spacecraft with essentially continuous radio beacons on frequencies less than 150 MHz, or higher frequencies if especially suited for ionospheric or geodetic studies. ("NNSS" denotes U.S. Navy Navigational Satellite System; *italics* indicate updated information since the last issue.)

| <u>Designation</u> | <u>National Name</u> | <u>Frequency (MHz)</u> | <u>Reference in COSPAR Info Bulletins</u> |
|--------------------|----------------------|---|---|
| 1968-100A | ATS 1 | <i>Aug. 15, 1985, 1305 UT; 136.460000 and 137.350000. 133.120°W. Inclination 11.872°.</i> | No. 37, p. 35 |
| 1967-034A | NNSS 30120 | 150 at 0.75 W; also 400 at 1.25 W. Inclination 90.214°. | |
| 1967-048A | NNSS 30130 | 150 at 0.75 W; also 400 at 1.25 W. Inclination 89.627°. | |
| 1967-092A | NNSS 30140 | 150 at 0.75 W; also 400 at 1.25 W. Inclination 89.245°. | |
| 1968-012A | NNSS 30180 | 150 at 0.75 W; also 400 at 1.25 W. Inclination 89.989°. | |

| <u>Designation</u> | <u>National Name</u> | <u>Frequency (MHz)</u> | <u>Reference in COEPAR Info Bulletins</u> |
|--------------------|----------------------|--|---|
| 1970-067A | NNSS 30190 | 150 at 0.75 W; also 400 at 1.25W. Inclination 90.023°. | |
| 1973-081A | NNSS 30200 | 150 at 0.75 W; also 400 at 1.25 W. Inclination 90.1°. | |
| 1975-100A | GOES 1 | Aug. 15, 1985, 1413 UT; 136.380000. 102.080°W. Inclination 5.443°. | No. 75, p. 46 |
| 1977-048A | GOES 2 | Aug. 12, 1985, 0357 UT; 136.380000. 112.200°W. Inclination 3.618°. | No. 80, p. 54 |
| 1977-080A | SIRIO | Feb. 28, 1985, 1323 UT; 136.137600 and 136.138100. 66.439°E. | |
| 1978-012A | IUE | Aug. 9, 1985, 0000 UT; 136.860000. Inclination 29.711°. | |
| 1978-062A | GOES 3 | Aug. 1, 1985, 0400 UT; 136.380000 and 137.190000. 134.510°W. Inclination 2.444°. | |
| 1979-057A | NOAA 6 | Aug. 12, 1985, 2156 UT; 136.770000. Inclination 98.522°. | |
| 1981-059A | NOAA 7 | Aug. 7, 1985, 0140 UT; 136.770000 and 137.770000. Inclination 99.097°. | |
| 1983-022A | NOAA 8 | July 25, 1985, 0234 UT; 136.770000 and 137.770000. Inclination 98.662°. | |
| 1984-123A | NOAA 9 | Aug. 3, 1985, 1030 UT; 136.770000 and 137.770000. Inclination 98.951°. | |

2. § Satellites that provide telemetered information on a continuing basis.
Information not currently available.

3. § Optical objects used for geophysical studies.

4. § Satellites useful for simultaneous observation programs with small cameras.

§ This section will appear quarterly and when updated information is available.

5. Long-lived satellite objects that are nearing their decay into the atmosphere. Orbital observations of these objects (total lifetime more than 90 days) during the decaying phase are useful for atmospheric studies. Objects with an expected lifetime of less than 90 days are included for completeness. The predicted dates of decays are given.

| <u>Expected Decay</u> <u>Dates 1985</u> | | <u>Expected Decay</u> <u>Dates 1985</u> | |
|--|----------|--|----------|
| 1960-XI 1 | Oct. 20 | 1985-036G | Sept. 30 |
| 1960-XI 2 | Sept. | 1985-049B | Sept. 3 |
| 1975-079A | Sept. | 1985-049C | Sept. 18 |
| 1980-089BV | Sept. 23 | 1985-060D | Sept. 7 |
| 1980-089Q | Sept. 11 | 1985-065C | Sept. 6 |
| 1982-033ES | Oct. 9 | 1985-065D | Sept. 17 |
| 1982-033EV | Oct. 19 | 1985-065E | Sept. 5 |
| 1983-051C | Sept. 6 | 1985-067E | Sept. 16 |
| 1983-091A | Oct. 14 | 1985-071B | Oct. 11 |
| 1984-025D | Oct. 10 | 1985-071C | Sept. 15 |
| 1985-012C | Sept. 19 | 1985-071E | Sept. 25 |
| 1985-027K | Oct. 13 | 1985-057C | Oct. 3 |

6. Actual decay dates (Category I). Those objects previously reported in Section C.5 are indicated by #.

| <u>1985</u> | | <u>1985</u> | |
|--------------------------|---------|-------------------------|---------|
| #1980-089AJ | Aug. 17 | 1985-060K | Aug. 2 |
| 1982-033ET | Aug. 24 | 1985-061B | Aug. 22 |
| 1982-033EU | Aug. 12 | 1985-061C | Aug. 23 |
| 1982-082C | Aug. 23 | 1985-062A (Cosmos 1669) | Aug. 30 |
| #1982-111A (OPS 9627) | Aug. 13 | 1985-063A (STS-51F) | Aug. 6 |
| #1983-020C | Aug. 5 | 1985-063B | Aug. 6 |
| #1983-102A (Cosmos 1502) | Aug. 29 | 1985-065A (Cosmos 1671) | Aug. 16 |
| #1984-073C | Aug. 28 | 1985-065B | Aug. 10 |
| #1985-012F | July 28 | 1985-065F | Aug. 21 |
| #1985-027M | Aug. 7 | 1985-065G | Aug. 25 |
| #1985-036E | Aug. 10 | 1985-067A (Cosmos 1672) | Aug. 21 |
| 1985-039A (Cosmos 1654) | Aug. 7 | 1985-067B | Aug. 11 |
| 1985-039C | Aug. 14 | 1985-067C | Aug. 28 |
| #1985-039E | Aug. 18 | 1985-067G | Aug. 22 |
| #1985-044G | Aug. 18 | 1985-067H | Aug. 24 |
| #1985-045B | Aug. 24 | 1985-068B | Aug. 14 |
| 1985-057D | Aug. 4 | 1985-068C | Aug. 10 |
| 1985-060E | Aug. 4 | 1985-070B | Aug. 11 |
| 1985-060F | Aug. 2 | 1985-070C | Aug. 9 |
| 1985-060G | Aug. 1 | 1985-072B | Aug. 22 |
| 1985-060H | Aug. 9 | 1985-087E | Aug. 18 |
| 1985-060J | July 31 | | |