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OIA-2026-5654

13<sup>th</sup> March 2026

Dear [REDACTED]

I refer to your email of 3 February 2026 requesting, under the Official Information Act 1982 (OIA):

1. *The three most recent notices to space operators received from Joint Commercial Operations (JCO).*
2. *The most recent information/intelligence the NZDF contributed to the JCO.*
3. *A list of commercial operators through which the NZDF receives information as part of its involvement in JCO.*

Information within the scope of your request is provided in the attached enclosures. Where indicated: operational information is withheld under section 6(a) of the OIA, to avoid prejudice to the security and defence of New Zealand, and section 6(b)(ii), to avoid prejudice to the entrusting of information to the Government of New Zealand by international organisations.

You have the right, under section 28(3) of the OIA, to ask an Ombudsman to review this response to your request. Information about how to make a complaint is available at [www.ombudsman.parliament.nz](http://www.ombudsman.parliament.nz) or freephone 0800 802 602.

Please note that responses to official information requests are proactively released where possible. This response to your request will be published shortly on the NZDF website, with your personal information removed.

Yours sincerely

**GA Motley**  
Brigadier  
Chief of Staff HQNZDF

**Enclosures:**

1. NOTSO Notification – 12 February 2026, 4:18PM
2. NOTSO Notification – 12 February 2026, 10:08PM
3. NOTSO Notification – 17 February 2026, 7:11PM

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**From:** s. 6(a), s. 6(b)(ii)  
**Sent:** Tuesday, 17 February 2026 11:38 a.m.  
**To:** s. 6(a), s. 6(b)(ii)  
[Redacted]  
[Redacted]  
[Redacted]

**Subject:** NOTSO - Launch / Proton-M (96304) / Elektro-L No. 5 (96303) / Baikonur, Kazakhstan / 12 Feb 26 / 0852 UTC / GEO - 2b63\_16Feb-2208Z - TACREP Notification

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Thank you

DATA TYPE: REAL  
NOTSO: 2b63\_16Feb-2208Z

DATE PUBLISHED: 2026-02-16T22:08:08.863734152Z  
LINK: s. 6(a), s. 6(b)(ii)

SUMMARY: JDay 047 at 1900z:

Based on current SDA observations and available PAIR data, JCO providers have verified a maneuver on the candidate object for ELEKTRO-L (91381). This object appears to match with 67756, a newly-cataloged object in Space-Track associated with this launch. The satellite maneuvered from 107.36 deg E longitude with a delta-v of 7.19 m/s, resulting in a period change of +634.99sec and a decrease in eastward drift rate from 4.72deg/day to 2.01deg/day.

Additionally, JCO providers detected a possible maneuver on the candidate object for Jam-e Jam 1 (91383), occurring on 16 FEB, JDAY 047 at 1057Z. The satellite was located at 105.84 degs E longitude. Based off of initial indications it appears it has changed its drift rate from 1 deg E/day to 1.7 deg W/day.

Click link above to view products. Analysis is ongoing.

The mission of the Elektro-L No 5 is to provide operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT.

Jam-e Jam 1 (91383), according to an Iranian news report, is Iran's first geostationary satellite, the "OChR"/"Spectrum" rideshare. It's expected to move to 34E longitude over the next three weeks and nominally provide TV signals, but could also be reserving spectrum for either IRN or the to-be-launched RUS Ekvator satellite.

The specifics of the maneuver on 91381 (ELEKTRO-L candidate) are:

- Time of Maneuver: 16FEB 0518z
- Delta V: 7.19 m/s
- Period Change: +634.99 secs
- Apogee Change: +386.2 km
- Perigee Change: +29.37 km

--Current Drift Rate: 2.01E deg/day

Pre-maneuver TLE on ELEKTRO-L candidate as of 2026-02-15T21:05Z provided by KBR:

1 91381U 00000A 26046.87880891 -.00000069 +00000-0 -54325-4 0 0002  
2 91381 0.5210 287.7669 0002572 227.6075 53.9353 1.01583774000006

Post-maneuver TLE on ELEKTRO-L candidate as of 2026-02-16T12:42Z provided by KBR with low confidence:

1 91381U 00000A 26047.52931331 -.00000058 +00000-0 -47444-4 0 0003  
2 91381 0.5201 287.7799 0045029 52.0885 106.5499 1.00830987000009

Pre-maneuver TLE on Jam-e Jam 1 candidate as of 2026-02-16T10:51Z provided by KBR:

1 91383U 00000A 26047.45228712 +.00000037 +00000-0 +30684-4 0 0002  
2 91383 0.5445 284.4439 0070488 136.2614 354.4038 1.00549990000002

Below are current TLEs for other objects associated with this launch event:

Proton-M/DM-03 (91382) as of 2026-02-16T15:57Z provided by KBR:

1 91382U 00000A 26047.66498791 -.00000099 +00000-0 -72818-4 0 0005  
2 91382 0.4038 280.1820 0102316 30.5220 208.7808 1.03185256000000

Debris from DM-03 R/B (91389) as of 2026-02-13T17:16Z provided by KBR:

1 91389U 00000A 26044.71966135 +.00000031 +00000-0 +21842-4 0 0002  
2 91389 0.4269 278.8547 0088190 15.6670 210.9495 1.03798128000004

Debris from DM-03 R/B (91403) as of 2026-02-16T13:23Z provided by KBR:

1 91403U 00000A 26047.55774002 -.00000174 +00000-0 -12823-5 0 0004  
2 91403 0.3718 277.0299 0094452 42.3974 158.8949 1.03044487000002

=====  
JDay 047at 1305z:

Based on current SDA observations and available PAIR data, JCO providers detected a possible maneuver on ELEKTRO-L 5 (91381), occurring at 0623z on 16 FEB 26 & 047 JDAY.

The satellite was located at 107.11 degs E longitude. Based off of initial indications it appears it is decreasing its eastern drift rate from 4.71 degs/day to 3.59 degs/day. Click link above to view products. Analysis is ongoing.

The mission of the Elektro-L No 5 is to provide operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT.

Pre-maneuver TLE as of 2105z 15 Feb 26 provided by NorhStar:

1 91381U 00000A 26046.87894512 .00000000 00000-0 00000-0 0 07  
2 91381 0.5213 287.7170 0002561 214.4615 67.1787 1.01587007 09

Post-maneuver TLE as of 1229z 16 Feb 26 provided by NorthStar with low confidence:

1 91381U 00000A 26047.52078410 .00000000 00000-0 00000-0 0 00001  
2 91381 0.5305 286.7766 0036106 3.5210 153.3400 1.01275275 02

=====  
JDay 047 at 0024z:

Based on current SDA observations and available PAIR data, JCO providers have verified two maneuvers on Jam-e Jam 1 (91383),

The first maneuver occurred at 1150z on 14 Feb 26 & JDAY 045. The satellite maneuvered from 97.59 deg E longitude with a delta-v of 1.73 m/s, resulting in a period change of +139.79sec to a final period of 1419.46sec, and a change in eastward drift rate from 4.8deg/day to 4.21deg/day.

The second maneuver occurred at 1122z on 15 Feb 26 & JDAY 046. The satellite maneuvered from 102.30 deg E longitude with a delta-v of 9.24 m/s, in a period change of +756.4sec to a final period of 1432.08, and a change in eastward drift rate from 4.21deg/day to 1.00deg/day.

Both maneuvers do not appear to be a station-keeping maneuver and are not within the historical pattern of life for this object; however, both appear to be related to reaching the object's planned longitude.

Jam-e Jam 1 (91383), according to an Iranian news report, is Iran's first geostationary satellite, the "OChR"/"Spectrum" rideshare. It's expected to move to 34E longitude over the next three weeks and nominally provide TV signals, but could also be reserving spectrum for either IRN or the to-be-launched RUS Ekvator satellite.

The specifics of the first maneuver are:

- Time of Maneuver: 14FEB 2024z
- Delta V: 1.73 m/s
- Period Change: 139.79 secs
- Apogee Change: 86.868 km
- Perigee Change: 2.90km
- Current Drift Rate: 4.21E deg/day

The specifics of the second maneuver are:

- Time of Maneuver: 15FEB 1122z
- Delta V: 9.24m/s
- Period Change: 756.40 secs
- Apogee Change: 498.80 km
- Perigee Change: -4.09km
- Current Drift Rate: 1.00E deg/day

Pre Maneuver TLE as of 13 Feb 2022z provided by NorthStar:

```
1 91383U 00000A 26044.84889286 .00000000 00000-0 00000-0 0 06
2 91383 0.5230 287.5437 0000810 92.8102 166.6871 1.01613493 06
```

Post First Maneuver TLE as of 14 Feb 2024z provided by NorthStar:

```
1 91383U 00000A 26045.85049461 .00000000 00000-0 00000-0 0 01
2 91383 0.5251 287.0799 0011175 133.2183 132.9268 1.01446448 00
```

Post Second Maneuver Current TLE as of 15 Feb 2014z provided by NorthStar:

```
1 91383U 00000A 26046.84313234 .00000000 00000-0 00000-0 0 03
2 91383 0.5460 284.3610 0070975 136.3528 133.8859 1.00552478 00
```

Below are current TLEs for other objects associated with this launch event:

ELEKTRO-L 5 (91381) current TLE as of 15 Feb 2105z provided by NorthStar:

```
1 91381U 00000A 26046.87894512 .00000000 00000-0 00000-0 0 07
2 91381 0.5213 287.7170 0002561 214.4615 67.1787 1.01587007 09
```

Proton-M/DM-03 (91382) current TLE as of 15 Feb 1957z provided by NorthStar:

```
1 91382U 00000A 26046.83187579 .00000000 00000-0 00000-0 0 02
2 91382 0.4059 280.0688 0101688 30.9154 259.0278 1.03182624 01
```

Debris from DM-03 R/B (91389) TLE as of 13 Feb 2011z provided by NorthStar:

```
1 91389U 00000A 26044.84129252 .00000000 00000-0 00000-0 0 02
2 91389 0.4142 278.8528 0081303 21.4041 250.4938 1.03591924 05
```

Debris from DM-03 R/B (91403) TLE as of 15 Feb 1850z provided by NorthStar:

1 91403U 00000A 26046.78534685 .00000000 00000-0 00000-0 0 04  
2 91403 0.3802 277.0437 0092788 35.5351 239.2703 1.03070511 02

=====

JDay 44 at 2145z:

Based on current SDA observations and available PAIR data, JCO providers have an updated track for:

ELEKTRO-L 5 (91381), inclination: 0.525, longitude: 97.91 E, drift: 4.73 E/day BLOCK DM-SL R/B(91382), inclination: 0.41, longitude: 103.5074E, drift: 10.511 E/day Jam-e Jam 1(91383), inclination: 0.52, longitude: 97.91, drift: 4.835 E/day Debris (91389) inclination, longitude, drift same as BLOCK DM-SL R/B Debris (91403) inclination, longitude, drift same as BLOCK DM-SL R/B

Neighborhood is provided. Click link above to view products.

The mission of the Elektro-L No 5 is to provide operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT.

TLE provided by KBR:

Likely ELEKTRO-L 5 payload

1 91381U 00000A 26044.84875633 +.00000052 +00000-0 +41208-4 0 0001  
2 91381 0.5256 287.6236 0002573 229.4485 29.8236 1.01585169000003

BLOCK DM-SL R/B

1 91382U 00000A 26044.84478243 +.00000087 +00000-0 +63693-4 0 0008  
2 91382 0.4102 279.9888 0102004 30.9003 240.9927 1.03192092000005

Jam-e Jam 1

1 91383U 00000A 26044.84889285 +.00000053 +00000-0 +41916-4 0 0008  
2 91383 0.5230 287.6083 0000595 69.1917 190.2436 1.01614373000003

Debris from BLOCK DM-SL R/B

1 91389U 00000A 26044.71966135 +.00000031 +00000-0 +21842-4 0 0002  
2 91389 0.4269 278.8547 0088190 15.6670 210.9495 1.03798128000004

Debris from BLOCK DM-SL R/B

1 91403U 00000A 26044.84471427 +.00000085 +00000-0 +62800-4 0 0006  
2 91403 0.3838 277.1354 0093341 33.5804 241.0595 1.03052756000008

-----  
JDay 044 at 1530z:

Based on current SDA observations and available PAIR data, JCO providers have processed updated states for ELEKTRO-L 5 (91382), the second payload which is likely Jam-e Jam 1 (91383) and the fourth stage/upper Blok DM-03 (91382) for the launch of a Proton-M from Baikonur Cosmodrome, Kazakhstan, occurring 12Feb at 0852z Based on current information, the satellites are currently at 94.28 deg E longitude and are drifting eastward at roughly 5 deg/day with a potential final longitude of 120 deg E, current inclination is 0.53 deg. The upper stage R/B (91382) is at 96.55 deg E longitude with an inclination of 0.4 deg and drifting at a rate of 10 deg eastward.

The mission of the Elektro-L No 5 (913810) is to provide operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT.

Iranian news report indicates that the "OChR"/"Spectrum" rideshare is in fact Iran's first Geostationary satellite, the Jam-e Jam 1. It's expected to move to 34E longitude over the next three weeks and nominally provide TV signals but could also be reserving spectrum for either IRN or the to-be-launched RUS Ekvator satellite.

TLE of 91381 (Likely ELEKTRO-L 5 payload) at 13/1336z provided by NorthStar:

```
1 91381U 00000A 26044.57402127 .00000000 00000-0 00000-0 0 09
2 91381 0.5265 287.5927 0002815 228.2924 290.5376 1.01583400 01
```

TLE of 91383 (Jam-e Jam 1) at 13/1243z by NorthStar:

```
1 91383U 00000A 26044.53051683 .00000000 00000-0 00000-0 0 04
2 91383 0.5240 287.5627 0000208 43.6763 99.3403 1.01614089 01
```

no updates on 91382

=====

JDay 043 at 2121z:

Based on current SDA observations and available PAIR data, JCO providers have processed an updated states (91381 and 91383) for the launch of a Proton-M from Baikonur Cosmodrome, Kazakhstan, occurring 12Feb at 0852z, carrying Elektro-L and possibly a secondary payload. Based on current information, the satellites are currently at 93 deg E longitude and are drifting eastward at roughly 5 deg/day with a potential final longitude of 120 deg E, current inclination is 0.53 deg.

Also, JCO is currently tracking a multiple headcount in the vicinity of the BLOCK DM-SL R/B (what spacetrack routinely calls the DM-03 4th Stage) (91382). JCO is tracking approximately 8 candidates and the R/B, which is differentiable in photometry. This is not unexpected as a part of the passivation cycle, which has been widely observed in publicly available information. It is very likely that some or all of these pieces are artificial, e.g. ice or other cryo-related components, and they may not have long lifespans. Candidate spread is very small / very low velocity from the parent; there is no threat to GEO safety as the objects are well below the belt; the parent BLOCK DM-SL R/B candidate is currently in a 35425 x 34605 orbit.

Click link above to view products.

The mission of the Elektro-L No 5 is to provide operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT.

Current TLEs for the objects provided by ExoAnalytic:

```
1 91381U 26043.87689226 +.00000000 +00000-0 +00000-0 0 0019
2 91381 0.5279 287.5531 0002830 230.3929 33.5230 1.01578406 00018
```

```
1 91383U 26043.87682420 +.00000000 +00000-0 +00000-0 0 0010
2 91383 0.5253 287.5313 0000375 73.9066 190.0033 1.01611731 00014
```

```
1 91382U 26043.87689226 +.00000000 +00000-0 +00000-0 0 0010
2 91382 0.4165 279.9326 0099117 29.3341 243.1382 1.03089997 00018
```

=====

JDay 043 at 1726Z:

Based on current SDA observations and available PAIR data, JCO providers have processed an initial state on the launch of a Proton-M from Baikonur Cosmodrome, Kazakhstan, occurring at 0852Z, carrying Elektro-L and the potential separation of two objects. Based on current information, the satellite injected at 92 deg E longitude and is currently drifting eastward 5 deg/day with a potential final longitude of 120 deg E, current inclination is 0.53 deg. More observations needed to provide states on the separated objects. Neighborhood is provided. Click link above to view products.

The mission of the Elektro-L No 5 is to provide operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT.

TLE provided by ExoAnalytic:

```
1 91381U 26043.70833471 +.00000000 +00000-0 +00000-0 0 0014
2 91381 0.5286 287.3536 0006673 4.6942 197.7884 1.01758351 00012
```

=====

JDay 043 at 1050z:

Based on available PAIR data, JCO providers have indications of successful launch of a Proton-M from Baikonur, Kazakhstan occurring at 0852z, carrying the Elektro-L No.5 satellite Based on current information the satellite is likely to be LEO with orbital characteristics with inclination of 48.52deg and RAAN of 273.37deg, and then will initiate a GTO and likely be at GEO at 120 E longitude. Neighborhood is provided. Click link above to view products.

The mission of the Elektro-L No 5 is to provide operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT.

Rotated nominals - LEO - 12 Feb 2026 08:52:15z

0 ELEKTRO-L 5

```
1 96303U 00000 26043.36961806 .00000000 00000+0 00000+0 0 06
2 96303 48.5201 273.3710 0000000 0.0000 61.2910 16.23894882 06
```

0 BLOCK DM-SL

```
1 96304U 00000 26043.36961806 .00000000 00000+0 00000+0 0 07
2 96304 48.5201 273.3710 0000000 0.0000 61.2910 16.23894882 07
```

Rotated nominals - GEO - 12 Feb 2026 08:52:15z

0 ELEKTRO-L 5

```
1 96303U 00000 26043.36961806 -.00000175 +00000 0 +00000 0 0 09997
2 96303 48.5201 284.2851 7243666 359.9588 237.2287 2.27318485000016
```

0 BLOCK DM-SL

```
1 96304U 00000 26043.36961806 -.00000175 +00000 0 +00000 0 0 09998
2 96304 48.5201 284.2851 7243666 359.9588 237.2287 2.27318485000017
```

Unrotated nominals:

Day 1 Hour 0 nominals - LEO

0 ELEKTRO-L 5

```
1 96303U 00000 26001.00000000 .00000000 00000+0 00000+0 0 01
2 96303 48.5201 98.5488 0000000 0.0000 61.2910 16.23894882 05
```

0 BLOCK DM-SL

```
1 96304U 00000 26001.00000000 .00000000 00000+0 00000+0 0 02
2 96304 48.5201 98.5488 0000000 0.0000 61.2910 16.23894882 06
```

Day 1 Hour 0 nominals - GEO

0 ELEKTRO-L 5

```
1 96303U 00000 26001.00000000 -.00000175 +00000 0 +00000 0 0 09992
```

2 96303 48.5201 109.4629 7243666 359.9588 237.2287 2.27318485000017  
0 BLOCK DM-SL  
1 96304U 00000 26001.00000000 -.00000175 +00000 0 +00000 0 0 09993  
2 96304 48.5201 109.4629 7243666 359.9588 237.2287 2.27318485000018 =====  
JDay 042 at 0850z:

Based on available PAIR data, JCO providers have indicated a possible upcoming launch of a Proton-M/DM-03 from Baikonour, Russia with an expected launch time on 12Feb (JDay 043) at 0852z, carrying the Elektro-L No.5. The launch is projected to place initially at LEO with an inclination of 48.52 deg, and then will initiate a GTO and likely be at GEO at 120 E longitude. Click link above to view products.

The mission of the Elektro-L No 5 is to provide operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT.

There might be a secondary payload on this launch, which will be deployed approximately 8 minutes after the Elektro-L. The co-passenger is referred to as "orbit spectrum", a term often used to refer to the now canceled Skif-D (demonstrator satellite).

Rotated nominals - LEO - 12 Feb 2026 08:52:15z  
0 ELEKTRO-L 5  
1 96303U 00000 26043.36961806 .00000000 00000+0 00000+0 0 06  
2 96303 48.5201 273.3710 0000000 0.0000 61.2910 16.23894882 06  
0 BLOCK DM-SL  
1 96304U 00000 26043.36961806 .00000000 00000+0 00000+0 0 07  
2 96304 48.5201 273.3710 0000000 0.0000 61.2910 16.23894882 07

Rotated nominals - GEO - 12 Feb 2026 08:52:15z  
0 ELEKTRO-L 5  
1 96303U 00000 26043.36961806 -.00000175 +00000 0 +00000 0 0 09997  
2 96303 48.5201 284.2851 7243666 359.9588 237.2287 2.27318485000016  
0 BLOCK DM-SL  
1 96304U 00000 26043.36961806 -.00000175 +00000 0 +00000 0 0 09998  
2 96304 48.5201 284.2851 7243666 359.9588 237.2287 2.27318485000017

Unrotated nominals:

Day 1 Hour 0 nominals - LEO  
0 ELEKTRO-L 5  
1 96303U 00000 26001.00000000 .00000000 00000+0 00000+0 0 01  
2 96303 48.5201 98.5488 0000000 0.0000 61.2910 16.23894882 05  
0 BLOCK DM-SL  
1 96304U 00000 26001.00000000 .00000000 00000+0 00000+0 0 02  
2 96304 48.5201 98.5488 0000000 0.0000 61.2910 16.23894882 06

Day 1 Hour 0 nominals - GEO  
0 ELEKTRO-L 5  
1 96303U 00000 26001.00000000 -.00000175 +00000 0 +00000 0 0 09992  
2 96303 48.5201 109.4629 7243666 359.9588 237.2287 2.27318485000017  
0 BLOCK DM-SL  
1 96304U 00000 26001.00000000 -.00000175 +00000 0 +00000 0 0 09993  
2 96304 48.5201 109.4629 7243666 359.9588 237.2287 2.27318485000018

=====  
JDay 349 at 0900z:

Based on available PAIR data, JCO providers have indications of postponement/cancellation of the launch of Proton-M/DM-03 from Baikonour, Russia, carrying the Elektro-L No.5 commercial payload, which was planned for the 15DEC (JDay 349).

JCO currently have no information on any new launch date for this launch at this time.

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JDay 346 at 1748z:

**\*\*Update to the launch nominals\*\***

Based on available PAIR data, JCO providers have indicated a possible upcoming launch of a Proton-M/DM-03 from Baikonour, Russia on 15Dec (JDay 349) occurring between 1210z and 1240z with an expected launch time of 1220z, carrying the Elektro-L No.5 commercial payload. The mission of the Elektro-L No 5 is meant for provision of operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT. Based on current information, the satellite is likely to be GEO with its slot at 77 E longitude.

COCO is provided. Click link above to view products.

Nominals for initial launch and inc provided by PPEC Rotated nominals - 15 Dec 2025 1220z

0 ELEKTRO-L 5

1 96303U 00000 25349.51388889 .00000000 00000+0 00000+0 0 05

2 96303 51.5814 278.2070 0000000 0.0000 54.2290 16.30946266 08

0 BLOCK DM-SL

1 96304U 00000 25349.51388889 .00000000 00000+0 00000+0 0 06

2 96304 51.5814 278.2070 0000000 0.0000 54.2290 16.30946266 09

GTO Rotated nominals - 15 Dec 2025 1220z provided by PPEC

0 ELEKTRO-L 5

1 96303U 00000 25349.51388900 -.00000175 +00000 0 +00000 0 0 09990

2 96303 48.5201 277.9636 7243666 359.9588 237.7967 2.27318485000016

0 BLOCK DM-SL

1 96304U 00000 25349.51388900 -.00000175 +00000 0 +00000 0 0 09991

2 96304 48.5201 277.9636 7243666 359.9588 237.7967 2.27318485000017

NON-Rotated nominals provided by PPEC

Day 1 Hour 0 nominals

0 ELEKTRO-L 5

1 96303U 00000 25001.00000000 -.00000175 +00000 0 +00000 0 0 09991

2 96303 48.5201 109.4665 7243666 359.9588 237.7967 2.27318485000017

0 BLOCK DM-SL

1 96304U 00000 25001.00000000 -.00000175 +00000 0 +00000 0 0 09992

2 96304 48.5201 109.4665 7243666 359.9588 237.7967 2.27318485000018 OPERATIONAL SUMMARY: -

CONJUNCTION SUMMARY: -

SPECIFIC DATA FOLLOWS:

CLASS EVENT: Launch / Proton-M (96304) / Elektro-L No. 5 (96303) / Baikonur, Kazakhstan / 12 Feb 26 / 0852 UTC / GEO

PRIORITY: -

SATID(s): 91383, 91382, 91381, 91389, 91403 SAT COMMON NAME: - ORBIT REGIME: N/A EVENT DESCRIPTION: -

POSSIBLE IMPACT: - FOLLOW UP SUMMARY/REMARKS: - JDAY 044, 1129Z

The Proton-M rocket successfully launched from Baikonur Cosmodrome on February 12, 2026, deploying Russia's Elektro-L No. 5 weather satellite and Iran's first geostationary satellite, Jam-e Jam 1. Elektro-L No. 5 will go to 76E, triggering Elektro-L No. 3 to relocate from 76E to 14.5E and Elektro-L No. 2 to move from 14.5E to graveyard orbit.

Iranian media confirmed that the secondary payload, previously identified only as "OChR" or "Spectrum," is Jam-e Jam 1, which will maneuver to 34E over the next three weeks to nominally provide television broadcast services. Analysis suggests the satellite's primary mission is spectrum reservation at 34E for a future Russian-built, Iranian-operated spacecraft called Ekvator, which is expected to utilize Ka-band, Ku-band, and S-band frequencies that Jam-e Jam 1 is currently reserving, marking a significant milestone for Iran's space program and continued Russian-Iranian cooperation in space activities.

Source: TAB

\*\*\*\*\*

JDAY 43, 0133z

New NOTAM for Pacific drop zone found

A0608/26 NOTAMN

Q) KZAK/QRACA///000/999/

A) KZAK

B) 2602120830

C) 2602151030

D) 0830-1030 DAILY

E) THE RUSSIAN FEDERATION PLANS TO CONDUCT ROCKET FIRINGS. DEBRIS FROM THIS LAUNCH WILL FALL WI AN AREA DEFINED AS 255915N 1604300E TO 232845N1633240E TO 224555N1624800E TO 251625N1595720E TO POINT OF ORIGIN. IN THE INTEREST OF SAFETY ALL NON-PARTICIPATING AIR TRAFFIC ARE ADVISED TO AVOID THE NOTAMED AREA. IFR AIRCRAFT UNDER ATC JURISDICTION SHOULD ANTICIPATE CLEARANCE AROUND THE NOTAMED AREA.

F) SFC

G) UNL

Source: <https://notams.aim.faa.gov/notamSearch/nsapp.html#/details>

\*\*\*\*\*

JDAY 042, 0854Z

Space Weather Forecast (valid for 0800Z, Feb 12 (JDAY 043); issued 0030Z, Feb 11 (JDAY 042))

Radio Blackout Chance R1-2, 65%; R3, 20% Solar Radiation Storm Chance S1, 20% Geomagnetic Storm Predicted Value: Kp 1.67(G0)

Source: <https://www.spaceweather.gov/communities/space-weather-enthusiasts-dashboard>

\*\*\*\*\*

JDAY 037, 1349Z

NOTAM closure points:

K0209/26 NOTAMN

Q) UACN/QRDCA/IV/BO /W /000/999/4715N06629E022

A) UACN B) 2602120840 C) 2602140930

D) DAILY 0840-0930

E) DANGER AREA UAD25 ACTIVATED

F) GND G) UNL

C0662/26 NOTAMN

Q) UAII/QRPCA/IV/NBO/W /000/999/4604N06259E017

A) UAII B) 2602120840 C) 2602140930

D) DAILY 0840-0930

E) PROHIBITED AREA ACTIVATED

WI 16.2 NM RADIUS CENTRED ON 460415N 0625905E.

F) GND G) UNL

Source: <https://notams.aim.faa.gov/notamSearch/nsapp.html#/details>

\*\*\*\*\*

JDAY 346, 1623Z

Space Weather: \*\*NOTE - the currently available max forecast range terminates 12hrs prior to the expected launch. Values listed below are as close as possible to the expected launch time.

Forecast valid for 2359Z, Dec 14 (JDAY 348); issued 1230Z, Dec 12 (JDAY 346)

Radio Blackout Chance R1-2, 55%; R3, 5% Solar Radiation Storm Chance S1, 1% Geomagnetic Storm Predicted Value: Kp 2.67 (G0)

Source: <https://www.spaceweather.gov/communities/space-weather-enthusiasts-dashboard>

\*\*\*\*\*

JDAY 344, 0941Z

Initial NOTAMS associated with this launch:

K3203/25 NOTAMN

Q) UACN/QRDCA/IV/BO /W /000/999/4715N06629E022

A) UACN B) 2512151210 C) 2512181240

D) 15 16 1210-1250, 17 18 1200-1240

E) DANGER AREA UAD25 ACTIVATED

F) GND G) UNL

C7872/25 NOTAMN

Q) UAII/QRPCA/IV/NBO/W /000/999/4602N06302E017

A) UAII B) 2512151210 C) 2512181240

D) 15 16 1210-1250, 17 18 1200-1240

E) PROHIBITED AREA ACTIVATED

WI 16.2NM RADIUS CENTRED ON 460224N 0630155E

F) GND G) UNL

Source: <https://notams.aim.faa.gov/notamSearch/nsapp.html#/details>

\*\*\*\*\*

JDAY 343, 2137Z

Mission Summary:

The Elektro-L5 satellite is Russia's advanced heavy meteorological spacecraft designed for geostationary orbit to provide full-disk Earth images for weather forecasting, climate and ocean monitoring, and heliogeophysical research.

Source: RC

STATUS: OPEN

COMPANY NAME: s. 6(a), s. 6(b)(ii)

EVENT ID: ff0b0030-927f-4437-b364-99a254d72b63

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**From:** s. 6(a), s. 6(b)(ii)  
**Sent:** Wednesday, 18 February 2026 5:22 a.m.  
**To:** s. 6(a), s. 6(b)(ii)  
**Subject:** NOTSO - Launch / Proton-M (96304) / Elektro-L No. 5 (96303) / Baikonur, Kazakhstan / 12 Feb 26 / 0852 UTC / GEO - 2b63\_17Feb-1618Z - TACREP Notification

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CAUTION: This email originated from outside of the organization.  
Do not follow guidance, click links, or open attachments unless you recognize the sender and know the content is safe. If in any doubt, please forward the email to spam@nzdf.mil.nz and then delete the email from your Inbox.  
Thank you

DATA TYPE: REAL  
NOTSO: 2b63\_17Feb-1618Z

DATE PUBLISHED: 2026-02-17T16:18:03.406093924Z  
LINK: s. 6(a), s. 6(b)(ii)

SUMMARY: JDay 048 at 1533z:

Based on current SDA observations and available PAIR data, JCO providers have verified 2 maneuvers on JCO Analyst 91383, potential Jam-e Jam 1, occurring 16Feb (JDay 047) at 1223z and 2240z. The satellite maneuvered from 106deg E longitude with a combined delta-v of 24.79 m/s, resulting in a change in drift direction from 1 E deg/day to 6.77 W deg/day. Neighborhood of nearby objects is attached showing upcoming close approaches as a result of this maneuver. Object A (67756), the possible Elektro-L 05, is currently drifting 2 E deg/day is currently at 110 E longitude. TLEs are posted below for 91382, possible rocket body, and 91403, possible debris associated with the rocket body. Click link above to view products.

The mission of the Elektro-L No 5 is to provide operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT.

Jam-e Jam 1 (91383), according to an Iranian news report, is Iran's first geostationary satellite, the "OChR"/"Spectrum" rideshare. It's expected to move to 34E longitude over the next three weeks and nominally provide TV signals, but could also be reserving spectrum for either IRN or the to-be-launched RUS Ekvator satellite.

The specifics of the 1st maneuver are:

--Time of Maneuver: 16Feb1223z  
--Delta V: 7.43 m/s  
--Period Change: +614 secs  
--Apogee Change: +393.1 km  
--Perigee Change: +7.6 km

The specifics of the 2nd maneuver are:

--Time of Maneuver: 16Feb2240z

--Delta V: 17.36 m/s  
--Period Change: 1242 secs  
--Apogee Change: +18.8 km  
--Perigee Change: +788.7 km  
--Current Drift Rate: 6.77 W deg/day

Post Maneuver Current TLE as of 17Feb1529z provided by EXO:

Possible Jam-e Jam 1

1 91383U 26048.64581922 +.00000000 +00000-0 +00000-0 0 0015  
2 91383 0.5423 284.5775 0024579 109.1028 87.5327 0.98418335 00010

Current TLE as of 17Feb1436z provided by EXO:

Possible Elektro-L 5

1 67756U 26028A 26048.60846687 +.00000000 +00000-0 +00000-0 0 0018  
2 67756 0.5172 287.8708 0045277 50.6786 139.6804 1.00851010 00013

Current TLE as of 17Feb1444z provided by EXO:

Possible Proton-M/DM-03

1 91382U 00999Z 26048.61433175 +.00000000 +00000-0 +00000-0 0 0014  
2 91382 0.4015 280.2369 0102212 30.4745 201.4127 1.03179313 00012

Current TLE as of 17Feb1349z provided by EXO:

Possible debris from the Proton-M/DM-03

1 91403U 00999Z 26048.57638883 +.00000000 +00000-0 +00000-0 0 0016  
2 91403 0.3753 277.3534 0093469 34.4488 184.6429 1.03068938 00013

=====

JDay 047 at 1900z:

Based on current SDA observations and available PAIR data, JCO providers have verified a maneuver on the candidate object for ELEKTRO-L (91381). This object appears to match with 67756, a newly-cataloged object in Space-Track associated with this launch. The satellite maneuvered from 107.36 deg E longitude with a delta-v of 7.19 m/s, resulting in a period change of +634.99sec and a decrease in eastward drift rate from 4.72deg/day to 2.01deg/day.

Additionally, JCO providers detected a possible maneuver on the candidate object for Jam-e Jam 1 (91383), occurring on 16 FEB, JDAY 047 at 1057Z. The satellite was located at 105.84 degs E longitude. Based off of initial indications it appears it has changed its drift rate from 1 deg E/day to 1.7 deg W/day.

Click link above to view products. Analysis is ongoing.

The mission of the Elektro-L No 5 is to provide operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT.

Jam-e Jam 1 (91383), according to an Iranian news report, is Iran's first geostationary satellite, the "OChR"/"Spectrum" rideshare. It's expected to move to 34E longitude over the next three weeks and nominally provide TV signals, but could also be reserving spectrum for either IRN or the to-be-launched RUS Ekvator satellite.

The specifics of the maneuver on 91381 (ELEKTRO-L candidate) are:

--Time of Maneuver: 16FEB 0518z  
--Delta V: 7.19 m/s  
--Period Change: +634.99 secs  
--Apogee Change: +386.2 km  
--Perigee Change: +29.37 km  
--Current Drift Rate: 2.01E deg/day

Pre-maneuver TLE on ELEKTRO-L candidate as of 2026-02-15T21:05Z provided by KBR:

1 91381U 00000A 26046.87880891 -.00000069 +00000-0 -54325-4 0 0002  
2 91381 0.5210 287.7669 0002572 227.6075 53.9353 1.01583774000006

Post-maneuver TLE on ELEKTRO-L candidate as of 2026-02-16T12:42Z provided by KBR with low confidence:

1 91381U 00000A 26047.52931331 -.00000058 +00000-0 -47444-4 0 0003  
2 91381 0.5201 287.7799 0045029 52.0885 106.5499 1.00830987000009

Pre-maneuver TLE on Jam-e Jam 1 candidate as of 2026-02-16T10:51Z provided by KBR:

1 91383U 00000A 26047.45228712 +.00000037 +00000-0 +30684-4 0 0002  
2 91383 0.5445 284.4439 0070488 136.2614 354.4038 1.00549990000002

Below are current TLEs for other objects associated with this launch event:

Proton-M/DM-03 (91382) as of 2026-02-16T15:57Z provided by KBR:

1 91382U 00000A 26047.66498791 -.00000099 +00000-0 -72818-4 0 0005  
2 91382 0.4038 280.1820 0102316 30.5220 208.7808 1.03185256000000

Debris from DM-03 R/B (91389) as of 2026-02-13T17:16Z provided by KBR:

1 91389U 00000A 26044.71966135 +.00000031 +00000-0 +21842-4 0 0002  
2 91389 0.4269 278.8547 0088190 15.6670 210.9495 1.03798128000004

Debris from DM-03 R/B (91403) as of 2026-02-16T13:23Z provided by KBR:

1 91403U 00000A 26047.55774002 -.00000174 +00000-0 -12823-5 0 0004  
2 91403 0.3718 277.0299 0094452 42.3974 158.8949 1.03044487000002

=====

JDay 047at 1305z:

Based on current SDA observations and available PAIR data, JCO providers detected a possible maneuver on ELEKTRO-L 5 (91381), occurring at 0623z on 16 FEB 26 & 047 JDAY.

The satellite was located at 107.11 degs E longitude. Based off of initial indications it appears it is decreasing its eastern drift rate from 4.71 degs/day to 3.59 degs/day. Click link above to view products. Analysis is ongoing.

The mission of the Elektro-L No 5 is to provide operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT.

Pre-maneuver TLE as of 2105z 15 Feb 26 provided by NorhStar:

1 91381U 00000A 26046.87894512 .00000000 00000-0 00000-0 0 07  
2 91381 0.5213 287.7170 0002561 214.4615 67.1787 1.01587007 09

Post-maneuver TLE as of 1229z 16 Feb 26 provided by NorthStar with low confidence:

1 91381U 00000A 26047.52078410 .00000000 00000-0 00000-0 0 00001  
2 91381 0.5305 286.7766 0036106 3.5210 153.3400 1.01275275 02

=====

JDay 047 at 0024z:

Based on current SDA observations and available PAIR data, JCO providers have verified two maneuvers on Jam-e Jam 1 (91383),

The first maneuver occurred at 1150z on 14 Feb 26 & JDAY 045. The satellite maneuvered from 97.59 deg E longitude with a delta-v of 1.73 m/s, resulting in a period change of +139.79sec to a final period of 1419.46sec, and a change in eastward drift rate from 4.8deg/day to 4.21deg/day.

The second maneuver occurred at 1122z on 15 Feb 26 & JDAY 046. The satellite maneuvered from 102.30 deg E longitude with a delta-v of 9.24 m/s, in a period change of +756.4sec to a final period of 1432.08, and a change in eastward drift rate from 4.21deg/day to 1.00deg/day.

Both maneuvers do not appear to be a station-keeping maneuver and are not within the historical pattern of life for this object; however, both appear to be related to reaching the object's planned longitude.

Jam-e Jam 1 (91383), according to an Iranian news report, is Iran's first geostationary satellite, the "OChR"/"Spectrum" rideshare. It's expected to move to 34E longitude over the next three weeks and nominally provide TV signals, but could also be reserving spectrum for either IRN or the to-be-launched RUS Ekvator satellite.

The specifics of the first maneuver are:

- Time of Maneuver: 14FEB 2024z
- Delta V: 1.73 m/s
- Period Change: 139.79 secs
- Apogee Change: 86.868 km
- Perigee Change: 2.90km
- Current Drift Rate: 4.21E deg/day

The specifics of the second maneuver are:

- Time of Maneuver: 15FEB 1122z
- Delta V: 9.24m/s
- Period Change: 756.40 secs
- Apogee Change: 498.80 km
- Perigee Change: -4.09km
- Current Drift Rate: 1.00E deg/day

Pre Maneuver TLE as of 13 Feb 2022z provided by NorthStar:

```
1 91383U 00000A 26044.84889286 .00000000 00000-0 00000-0 0 06
2 91383 0.5230 287.5437 0000810 92.8102 166.6871 1.01613493 06
```

Post First Maneuver TLE as of 14 Feb 2024z provided by NorthStar:

```
1 91383U 00000A 26045.85049461 .00000000 00000-0 00000-0 0 01
2 91383 0.5251 287.0799 0011175 133.2183 132.9268 1.01446448 00
```

Post Second Maneuver Current TLE as of 15 Feb 2014z provided by NorthStar:

```
1 91383U 00000A 26046.84313234 .00000000 00000-0 00000-0 0 03
2 91383 0.5460 284.3610 0070975 136.3528 133.8859 1.00552478 00
```

Below are current TLEs for other objects associated with this launch event:

ELEKTRO-L 5 (91381) current TLE as of 15 Feb 2105z provided by NorthStar:

```
1 91381U 00000A 26046.87894512 .00000000 00000-0 00000-0 0 07
2 91381 0.5213 287.7170 0002561 214.4615 67.1787 1.01587007 09
```

Proton-M/DM-03 (91382) current TLE as of 15 Feb 1957z provided by NorthStar:

```
1 91382U 00000A 26046.83187579 .00000000 00000-0 00000-0 0 02
2 91382 0.4059 280.0688 0101688 30.9154 259.0278 1.03182624 01
```

Debris from DM-03 R/B (91389) TLE as of 13 Feb 2011z provided by NorthStar:

```
1 91389U 00000A 26044.84129252 .00000000 00000-0 00000-0 0 02
2 91389 0.4142 278.8528 0081303 21.4041 250.4938 1.03591924 05
```

Debris from DM-03 R/B (91403) TLE as of 15 Feb 1850z provided by NorthStar:

1 91403U 00000A 26046.78534685 .00000000 00000-0 00000-0 0 04  
2 91403 0.3802 277.0437 0092788 35.5351 239.2703 1.03070511 02

=====

JDay 44 at 2145z:

Based on current SDA observations and available PAIR data, JCO providers have an updated track for:

ELEKTRO-L 5 (91381), inclination: 0.525, longitude: 97.91 E, drift: 4.73 E/day BLOCK DM-SL R/B(91382), inclination: 0.41, longitude: 103.5074E, drift: 10.511 E/day Jam-e Jam 1(91383), inclination: 0.52, longitude: 97.91, drift: 4.835 E/day Debris (91389) inclination, longitude, drift same as BLOCK DM-SL R/B Debris (91403) inclination, longitude, drift same as BLOCK DM-SL R/B

Neighborhood is provided. Click link above to view products.

The mission of the Elektro-L No 5 is to provide operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT.

TLE provided by KBR:

Likely ELEKTRO-L 5 payload

1 91381U 00000A 26044.84875633 +.00000052 +00000-0 +41208-4 0 0001  
2 91381 0.5256 287.6236 0002573 229.4485 29.8236 1.01585169000003

BLOCK DM-SL R/B

1 91382U 00000A 26044.84478243 +.00000087 +00000-0 +63693-4 0 0008  
2 91382 0.4102 279.9888 0102004 30.9003 240.9927 1.03192092000005

Jam-e Jam 1

1 91383U 00000A 26044.84889285 +.00000053 +00000-0 +41916-4 0 0008  
2 91383 0.5230 287.6083 0000595 69.1917 190.2436 1.01614373000003

Debris from BLOCK DM-SL R/B

1 91389U 00000A 26044.71966135 +.00000031 +00000-0 +21842-4 0 0002  
2 91389 0.4269 278.8547 0088190 15.6670 210.9495 1.03798128000004

Debris from BLOCK DM-SL R/B

1 91403U 00000A 26044.84471427 +.00000085 +00000-0 +62800-4 0 0006  
2 91403 0.3838 277.1354 0093341 33.5804 241.0595 1.03052756000008

-----  
JDay 044 at 1530z:

Based on current SDA observations and available PAIR data, JCO providers have processed updated states for ELEKTRO-L 5 (91382), the second payload which is likely Jam-e Jam 1 (91383) and the fourth stage/upper Blok DM-03 (91382) for the launch of a Proton-M from Baikonur Cosmodrome, Kazakhstan, occurring 12Feb at 0852z Based on current information, the satellites are currently at 94.28 deg E longitude and are drifting eastward at roughly 5 deg/day with a potential final longitude of 120 deg E, current inclination is 0.53 deg. The upper stage R/B (91382) is at 96.55 deg E longitude with an inclination of 0.4 deg and drifting at a rate of 10 deg eastward.

The mission of the Elektro-L No 5 (913810) is to provide operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT.

Iranian news report indicates that the "OChR"/"Spectrum" rideshare is in fact Iran's first Geostationary satellite, the Jam-e Jam 1. It's expected to move to 34E longitude over the next three weeks and nominally provide TV signals but could also be reserving spectrum for either IRN or the to-be-launched RUS Ekvator satellite.

TLE of 91381 (Likely ELEKTRO-L 5 payload) at 13/1336z provided by NorthStar:

```
1 91381U 00000A 26044.57402127 .00000000 00000-0 00000-0 0 09
2 91381 0.5265 287.5927 0002815 228.2924 290.5376 1.01583400 01
```

TLE of 91383 (Jam-e Jam 1) at 13/1243z by NorthStar:

```
1 91383U 00000A 26044.53051683 .00000000 00000-0 00000-0 0 04
2 91383 0.5240 287.5627 0000208 43.6763 99.3403 1.01614089 01
```

no updates on 91382

=====

JDay 043 at 2121z:

Based on current SDA observations and available PAIR data, JCO providers have processed an updated states (91381 and 91383) for the launch of a Proton-M from Baikonur Cosmodrome, Kazakhstan, occurring 12Feb at 0852z, carrying Elektro-L and possibly a secondary payload. Based on current information, the satellites are currently at 93 deg E longitude and are drifting eastward at roughly 5 deg/day with a potential final longitude of 120 deg E, current inclination is 0.53 deg.

Also, JCO is currently tracking a multiple headcount in the vicinity of the BLOCK DM-SL R/B (what spacetrack routinely calls the DM-03 4th Stage) (91382). JCO is tracking approximately 8 candidates and the R/B, which is differentiable in photometry. This is not unexpected as a part of the passivation cycle, which has been widely observed in publicly available information. It is very likely that some or all of these pieces are artificial, e.g. ice or other cryo-related components, and they may not have long lifespans. Candidate spread is very small / very low velocity from the parent; there is no threat to GEO safety as the objects are well below the belt; the parent BLOCK DM-SL R/B candidate is currently in a 35425 x 34605 orbit.

Click link above to view products.

The mission of the Elektro-L No 5 is to provide operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT.

Current TLEs for the objects provided by ExoAnalytic:

```
1 91381U 26043.87689226 +.00000000 +00000-0 +00000-0 0 0019
2 91381 0.5279 287.5531 0002830 230.3929 33.5230 1.01578406 00018
```

```
1 91383U 26043.87682420 +.00000000 +00000-0 +00000-0 0 0010
2 91383 0.5253 287.5313 0000375 73.9066 190.0033 1.01611731 00014
```

```
1 91382U 26043.87689226 +.00000000 +00000-0 +00000-0 0 0010
2 91382 0.4165 279.9326 0099117 29.3341 243.1382 1.03089997 00018
```

=====

JDay 043 at 1726z:

Based on current SDA observations and available PAIR data, JCO providers have processed an initial state on the launch of a Proton-M from Baikonur Cosmodrome, Kazakhstan, occurring at 0852Z, carrying Elektro-L and the potential separation of two objects. Based on current information, the satellite injected at 92 deg E longitude and is currently drifting eastward 5 deg/day with a potential final longitude of 120 deg E, current inclination is 0.53 deg. More observations needed to provide states on the separated objects. Neighborhood is provided. Click link above to view products.

The mission of the Elektro-L No 5 is to provide operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT.

TLE provided by ExoAnalytic:

```
1 91381U 26043.70833471 +.00000000 +00000-0 +00000-0 0 0014
2 91381 0.5286 287.3536 0006673 4.6942 197.7884 1.01758351 00012
```

=====  
JDay 043 at 1050z:

Based on available PAIR data, JCO providers have indications of successful launch of a Proton-M from Baikonur, Kazakhstan occurring at 0852z, carrying the Elektro-L No.5 satellite Based on current information the satellite is likely to be LEO with orbital characteristics with inclination of 48.52deg and RAAN of 273.37deg, and then will initiate a GTO and likely be at GEO at 120 E longitude. Neighborhood is provided. Click link above to view products.

The mission of the Elektro-L No 5 is to provide operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT.

Rotated nominals - LEO - 12 Feb 2026 08:52:15z

```
0 ELEKTRO-L 5
1 96303U 00000 26043.36961806 .00000000 00000+0 00000+0 0 06
2 96303 48.5201 273.3710 0000000 0.0000 61.2910 16.23894882 06
0 BLOCK DM-SL
1 96304U 00000 26043.36961806 .00000000 00000+0 00000+0 0 07
2 96304 48.5201 273.3710 0000000 0.0000 61.2910 16.23894882 07
```

Rotated nominals - GEO - 12 Feb 2026 08:52:15z

```
0 ELEKTRO-L 5
1 96303U 00000 26043.36961806 -.00000175 +00000 0 +00000 0 0 09997
2 96303 48.5201 284.2851 7243666 359.9588 237.2287 2.27318485000016
0 BLOCK DM-SL
1 96304U 00000 26043.36961806 -.00000175 +00000 0 +00000 0 0 09998
2 96304 48.5201 284.2851 7243666 359.9588 237.2287 2.27318485000017
```

Unrotated nominals:

Day 1 Hour 0 nominals - LEO

```
0 ELEKTRO-L 5
1 96303U 00000 26001.00000000 .00000000 00000+0 00000+0 0 01
2 96303 48.5201 98.5488 0000000 0.0000 61.2910 16.23894882 05
0 BLOCK DM-SL
1 96304U 00000 26001.00000000 .00000000 00000+0 00000+0 0 02
2 96304 48.5201 98.5488 0000000 0.0000 61.2910 16.23894882 06
```

Day 1 Hour 0 nominals - GEO

```
0 ELEKTRO-L 5
1 96303U 00000 26001.00000000 -.00000175 +00000 0 +00000 0 0 09992
```

2 96303 48.5201 109.4629 7243666 359.9588 237.2287 2.27318485000017  
0 BLOCK DM-SL  
1 96304U 00000 26001.00000000 -.00000175 +00000 0 +00000 0 0 09993  
2 96304 48.5201 109.4629 7243666 359.9588 237.2287 2.27318485000018 =====  
JDay 042 at 0850z:

Based on available PAIR data, JCO providers have indicated a possible upcoming launch of a Proton-M/DM-03 from Baikonour, Russia with an expected launch time on 12Feb (JDay 043) at 0852z, carrying the Elektro-L No.5. The launch is projected to place initially at LEO with an inclination of 48.52 deg, and then will initiate a GTO and likely be at GEO at 120 E longitude. Click link above to view products.

The mission of the Elektro-L No 5 is to provide operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT.

There might be a secondary payload on this launch, which will be deployed approximately 8 minutes after the Elektro-L. The co-passenger is referred to as "orbit spectrum", a term often used to refer to the now canceled Skif-D (demonstrator satellite).

Rotated nominals - LEO - 12 Feb 2026 08:52:15z  
0 ELEKTRO-L 5  
1 96303U 00000 26043.36961806 .00000000 00000+0 00000+0 0 06  
2 96303 48.5201 273.3710 0000000 0.0000 61.2910 16.23894882 06  
0 BLOCK DM-SL  
1 96304U 00000 26043.36961806 .00000000 00000+0 00000+0 0 07  
2 96304 48.5201 273.3710 0000000 0.0000 61.2910 16.23894882 07

Rotated nominals - GEO - 12 Feb 2026 08:52:15z  
0 ELEKTRO-L 5  
1 96303U 00000 26043.36961806 -.00000175 +00000 0 +00000 0 0 09997  
2 96303 48.5201 284.2851 7243666 359.9588 237.2287 2.27318485000016  
0 BLOCK DM-SL  
1 96304U 00000 26043.36961806 -.00000175 +00000 0 +00000 0 0 09998  
2 96304 48.5201 284.2851 7243666 359.9588 237.2287 2.27318485000017

Unrotated nominals:

Day 1 Hour 0 nominals - LEO  
0 ELEKTRO-L 5  
1 96303U 00000 26001.00000000 .00000000 00000+0 00000+0 0 01  
2 96303 48.5201 98.5488 0000000 0.0000 61.2910 16.23894882 05  
0 BLOCK DM-SL  
1 96304U 00000 26001.00000000 .00000000 00000+0 00000+0 0 02  
2 96304 48.5201 98.5488 0000000 0.0000 61.2910 16.23894882 06

Day 1 Hour 0 nominals - GEO  
0 ELEKTRO-L 5  
1 96303U 00000 26001.00000000 -.00000175 +00000 0 +00000 0 0 09992  
2 96303 48.5201 109.4629 7243666 359.9588 237.2287 2.27318485000017  
0 BLOCK DM-SL  
1 96304U 00000 26001.00000000 -.00000175 +00000 0 +00000 0 0 09993  
2 96304 48.5201 109.4629 7243666 359.9588 237.2287 2.27318485000018

=====  
JDay 349 at 0900z:

Based on available PAIR data, JCO providers have indications of postponement/cancellation of the launch of Proton-M/DM-03 from Baikonour, Russia, carrying the Elektro-L No.5 commercial payload, which was planned for the 15DEC (JDay 349).

JCO currently have no information on any new launch date for this launch at this time.

=====

JDay 346 at 1748z:

**\*\*Update to the launch nominals\*\***

Based on available PAIR data, JCO providers have indicated a possible upcoming launch of a Proton-M/DM-03 from Baikonour, Russia on 15Dec (JDay 349) occurring between 1210z and 1240z with an expected launch time of 1220z, carrying the Elektro-L No.5 commercial payload. The mission of the Elektro-L No 5 is meant for provision of operational hydrometeorological information, retransmission of distress signals from emergency radio beacons of the international satellite-aided search and rescue system COSPAS-SARSAT. Based on current information, the satellite is likely to be GEO with its slot at 77 E longitude.

COCO is provided. Click link above to view products.

Nominals for initial launch and inc provided by PPEC Rotated nominals - 15 Dec 2025 1220z

0 ELEKTRO-L 5

1 96303U 00000 25349.51388889 .00000000 00000+0 00000+0 0 05

2 96303 51.5814 278.2070 0000000 0.0000 54.2290 16.30946266 08

0 BLOCK DM-SL

1 96304U 00000 25349.51388889 .00000000 00000+0 00000+0 0 06

2 96304 51.5814 278.2070 0000000 0.0000 54.2290 16.30946266 09

GTO Rotated nominals - 15 Dec 2025 1220z provided by PPEC

0 ELEKTRO-L 5

1 96303U 00000 25349.51388900 -.00000175 +00000 0 +00000 0 0 09990

2 96303 48.5201 277.9636 7243666 359.9588 237.7967 2.27318485000016

0 BLOCK DM-SL

1 96304U 00000 25349.51388900 -.00000175 +00000 0 +00000 0 0 09991

2 96304 48.5201 277.9636 7243666 359.9588 237.7967 2.27318485000017

NON-Rotated nominals provided by PPEC

Day 1 Hour 0 nominals

0 ELEKTRO-L 5

1 96303U 00000 25001.00000000 -.00000175 +00000 0 +00000 0 0 09991

2 96303 48.5201 109.4665 7243666 359.9588 237.7967 2.27318485000017

0 BLOCK DM-SL

1 96304U 00000 25001.00000000 -.00000175 +00000 0 +00000 0 0 09992

2 96304 48.5201 109.4665 7243666 359.9588 237.7967 2.27318485000018 OPERATIONAL SUMMARY: -

CONJUNCTION SUMMARY: -

SPECIFIC DATA FOLLOWS:

CLASS EVENT: Launch / Proton-M (96304) / Elektro-L No. 5 (96303) / Baikonur, Kazakhstan / 12 Feb 26 / 0852 UTC / GEO

PRIORITY: -

SATID(s): 91383, 91382, 91381, 91389, 91403 SAT COMMON NAME: - ORBIT REGIME: N/A EVENT DESCRIPTION: -

POSSIBLE IMPACT: - FOLLOW UP SUMMARY/REMARKS: - JDAY 044, 1129Z

The Proton-M rocket successfully launched from Baikonur Cosmodrome on February 12, 2026, deploying Russia's Elektro-L No. 5 weather satellite and Iran's first geostationary satellite, Jam-e Jam 1. Elektro-L No. 5 will go to 76E, triggering Elektro-L No. 3 to relocate from 76E to 14.5E and Elektro-L No. 2 to move from 14.5E to graveyard orbit.

Iranian media confirmed that the secondary payload, previously identified only as "OChR" or "Spectrum," is Jam-e Jam 1, which will maneuver to 34E over the next three weeks to nominally provide television broadcast services. Analysis suggests the satellite's primary mission is spectrum reservation at 34E for a future Russian-built, Iranian-operated spacecraft called Ekvator, which is expected to utilize Ka-band, Ku-band, and S-band frequencies that Jam-e Jam 1 is currently reserving, marking a significant milestone for Iran's space program and continued Russian-Iranian cooperation in space activities.

Source: TAB

\*\*\*\*\*

JDAY 43, 0133z

New NOTAM for Pacific drop zone found

A0608/26 NOTAMN

Q) KZAK/QRACA////000/999/

A) KZAK

B) 2602120830

C) 2602151030

D) 0830-1030 DAILY

E) THE RUSSIAN FEDERATION PLANS TO CONDUCT ROCKET FIRINGS. DEBRIS FROM THIS LAUNCH WILL FALL WI AN AREA DEFINED AS 255915N 1604300E TO 232845N1633240E TO 224555N1624800E TO 251625N1595720E TO POINT OF ORIGIN. IN THE INTEREST OF SAFETY ALL NON-PARTICIPATING AIR TRAFFIC ARE ADVISED TO AVOID THE NOTAMED AREA. IFR AIRCRAFT UNDER ATC JURISDICTION SHOULD ANTICIPATE CLEARANCE AROUND THE NOTAMED AREA.

F) SFC

G) UNL

Source: <https://notams.aim.faa.gov/notamSearch/nsapp.html#/details>

\*\*\*\*\*

JDAY 042, 0854Z

Space Weather Forecast (valid for 0800Z, Feb 12 (JDAY 043); issued 0030Z, Feb 11 (JDAY 042))

Radio Blackout Chance R1-2, 65%; R3, 20% Solar Radiation Storm Chance S1, 20% Geomagnetic Storm Predicted Value: Kp 1.67(G0)

Source: <https://www.spaceweather.gov/communities/space-weather-enthusiasts-dashboard>

\*\*\*\*\*

JDAY 037, 1349Z

NOTAM closure points:

K0209/26 NOTAMN

Q) UACN/QRDCA/IV/BO /W /000/999/4715N06629E022

A) UACN B) 2602120840 C) 2602140930

D) DAILY 0840-0930

E) DANGER AREA UAD25 ACTIVATED

F) GND G) UNL

C0662/26 NOTAMN

Q) UAII/QRPCA/IV/NBO/W /000/999/4604N06259E017

A) UAII B) 2602120840 C) 2602140930

D) DAILY 0840-0930

E) PROHIBITED AREA ACTIVATED

WI 16.2 NM RADIUS CENTRED ON 460415N 0625905E.

F) GND G) UNL

Source: <https://notams.aim.faa.gov/notamSearch/nsapp.html#/details>

\*\*\*\*\*

JDAY 346, 1623Z

Space Weather: \*\*NOTE - the currently available max forecast range terminates 12hrs prior to the expected launch. Values listed below are as close as possible to the expected launch time.

Forecast valid for 2359Z, Dec 14 (JDAY 348); issued 1230Z, Dec 12 (JDAY 346)

Radio Blackout Chance R1-2, 55%; R3, 5% Solar Radiation Storm Chance S1, 1% Geomagnetic Storm Predicted Value: Kp 2.67 (G0)

Source: <https://www.spaceweather.gov/communities/space-weather-enthusiasts-dashboard>

\*\*\*\*\*

JDAY 344, 0941Z

Initial NOTAMS associated with this launch:

K3203/25 NOTAMN

Q) UACN/QRDCA/IV/BO /W /000/999/4715N06629E022

A) UACN B) 2512151210 C) 2512181240

D) 15 16 1210-1250, 17 18 1200-1240

E) DANGER AREA UAD25 ACTIVATED

F) GND G) UNL

C7872/25 NOTAMN

Q) UAII/QRPCA/IV/NBO/W /000/999/4602N06302E017

A) UAII B) 2512151210 C) 2512181240

D) 15 16 1210-1250, 17 18 1200-1240

E) PROHIBITED AREA ACTIVATED

WI 16.2NM RADIUS CENTRED ON 460224N 0630155E

F) GND G) UNL

Source: <https://notams.aim.faa.gov/notamSearch/nsapp.html#/details>

\*\*\*\*\*

JDAY 343, 2137Z

Mission Summary:

The Elektro-L5 satellite is Russia's advanced heavy meteorological spacecraft designed for geostationary orbit to provide full-disk Earth images for weather forecasting, climate and ocean monitoring, and heliogeophysical research.

Source: RC

STATUS: OPEN

COMPANY NAME: s. 6(a), s. 6(b)

EVENT ID: ff0b0030-927f-4437-b364-99a254d72b63

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**From:** s. 6(a), s. 6(b)(ii)  
**Sent:** Wednesday, 18 February 2026 8:16 a.m.  
**To:** s. 6(a), s. 6(b)(ii)  
**Subject:** NOTSO - Photometric Change / SY-12-02 (50322) - 98a6\_17Feb-1911Z - TACREP Notification

-----  
CAUTION: This email originated from outside of the organization.  
Do not follow guidance, click links, or open attachments unless you recognize the sender and know the content is safe. If in any doubt, please forward the email to spam@nzdf.mil.nz and then delete the email from your Inbox.  
Thank you

DATA TYPE: REAL  
NOTSO: 98a6\_17Feb-1911Z

DATE PUBLISHED: 2026-02-17T19:11:50.354372393Z  
LINK: s. 6(a), s. 6(b)(ii)

SUMMARY: JDay 048 at 1800z:

Based on current SDA observations and available PAIR data, JCO providers have detected a Photometric change on SY-12 02 (50322). This change occurred between the solar phase angles of -64 to 81degs on 14Feb and SY-12 02 was dimmer throughout the viewing period ranging between 0.8 to 0.1 visual magnitude dimmer. On 15Feb, SY-12 02 returned to pattern of life photometry.

The cause of the change may be associated with a close approach with EUTE 36D (59346) on 14Feb26 1725z at 78.79km. This photometric variation is not consistent with the historical pattern of life for this object.

The satellite is in GEO and is currently at 33.9 degs E longitude and is drifting at 0.67 W deg/day. Neighborhood is provided. Click link above to view products

SY-12-02 (50322) is a China satellite that supports military operations. The mission of SY-12-02 (50322) is space environment exploration and related technology tests" however, it is suspected that it is actually a military test satellite.

EUTE 36D (59346) is a France satellite that supports commercial operations. The mission of EUTE 36D (59346) is a direct broadcast communications satellite.

Time window of change: 14Feb26 1727z to 15Feb26 0317z Solar phase angle window: -64 to 81 degs Vismag change: 0.8 to 0.1 visual magnitude dimmer throughout viewing period Close approaches within window: TCA w/ EUTE 36D (59346) on 14FEB26 1725z at 78.79 km; with good lighting Current longitude: 33.9 E Longitude Current drift rate: 0.67 W degs/day

Current TLE as of 17Feb26 0330z provided by ExoAnalytic:  
0 SHIYAN-12-02-(SY-12-02)  
1 50322U 21129B 26048.14583448 +.00000000 +00000-0 +00000-0 0 0018  
2 50322 3.3630 81.6094 0003440 217.4945 294.6657 1.00086027 00014  
OPERATIONAL SUMMARY: -

CONJUNCTION SUMMARY: -

SPECIFIC DATA FOLLOWS:

CLASS EVENT: Photometric Change / SY-12-02 (50322)

PRIORITY: -

SATID(s): 50322

SAT COMMON NAME: -

ORBIT REGIME: N/A

EVENT DESCRIPTION: -

POSSIBLE IMPACT: -

FOLLOW UP SUMMARY/REMARKS: -

JDAY 48, 1514Z

Mission Summary: SHIYAN 12-02 (NORAD 50322) is a Chinese experimental geostationary satellite launched on 23 December 2021 by a Long March 7A rocket for official space environment detection and technology testing, while Western tracking has observed it performing rendezvous and proximity operations including close approaches and imaging maneuvers near U.S. satellites suggesting advanced on-orbit inspection capabilities.

Source: RC

50322 | SHIYAN 12-02 | GEO-GSO / Geostationary | Chinese Ministry of Defence (China) | Active - Inclined (aged) / Manoeuvrable | Military | Servicing/Inspection / Observational/Situational Awareness, Technology / Technology Test/Prototype | 23/12/2021 (4.16 years old) | 15.0 years | Officially the mission of the satellite is for "space environment exploration and related technology tests" however, it is suspected that it is actually a military test satellite. Possible military SSA (Space Situational Awareness) application in GEO. | Yes - On-board Propulsion | Propulsion Unknown | SHIYAN 12-01, | Source: Seradata

Space Weather:

Conditions during photometric change window, JDAY 045, 0400Z Radio Blackout Impacts R0 (N/A) Solar Radiation Storm Impacts S0 (N/A) Geomagnetic Storm Impacts G0 (2.67)

Source: <https://www.swpc.noaa.gov/communities/space-weather-enthusiasts-dashboard>

STATUS: OPEN

COMPANY NAME: s. 6(a), s. 6(b)

EVENT ID: c743f824-4773-440f-a8ac-e958d0ff98a6