

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

|                                   |   |           |
|-----------------------------------|---|-----------|
| In the Matter of                  | ) |           |
|                                   | ) |           |
| Heighliner Corp.                  | ) | File No.  |
|                                   | ) |           |
| Application for Special Temporary | ) | Call Sign |
| Authority Renewal                 | ) |           |

**REQUEST FOR RENEWAL OF SPECIAL TEMPORARY AUTHORITY**

Heighliner Corp. (“Heighliner”), a wholly owned subsidiary of Astranis Space Technologies Corp. (“Astranis”), hereby requests renewal of Special Temporary Authority (“STA”) for an additional 30 days to perform demonstrations of earth station antennas at each of the following locations—Astranis headquarters (“Pier 70”) in San Francisco, CA, Clarksville, MD and Summit Point, WV—communicating with UtilitySat. All operations will be identical to those previously reviewed and approved by the Commission.<sup>1</sup>

Grant of the requested STA renewal will serve the public interest, convenience, and necessity by allowing Astranis to capture critical performance data for the UtilitySat spacecraft. Facilitating these demonstrations ensures the technical viability of next-generation satellite infrastructure so we can continue to support our commercial and government partners, while posing no risk of harmful interference to authorized primary spectrum users. Astranis will continue to operate the spacecraft on a non-interference, non-protected basis and will immediately cease transmissions upon notification of any interference.

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<sup>1</sup> See ICFS File No. SES-STA-20260311-00605 (granted March 13, 2026) (STA); *see also* ICFS File No. SES-STA-20260617-01800 (most recent STA renewal).

Heighliner respectfully requests a renewal of its STA for an additional 30-day period, commencing July 31, 2026 and concluding August 30, 2026. All operations will conform to the original test plan, as set forth in Exhibit A.<sup>2</sup>

Respectfully submitted,

/s/ Kailey D. Lauter

Kailey D. Lauter  
Regulatory Counsel

/s/ Kimberly M. Baum

Kimberly M. Baum  
Head of Regulatory  
Astranis  
575 20th Street  
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202 286 6089

Dated: July 27, 2026

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<sup>2</sup> Exhibit A and its Attachment A remain unchanged from the original filing and are resubmitted here for administrative ease (*except* for updated dates).

## Exhibit A

### Technical Appendix

1. **Description demonstration** – This special temporary authority (STA) will be used to perform demonstrations of Kymeta U8 antennas communicating with Utilitysat.
  
2. **Satellite and its orbit** – The earth stations will communicate with the Utilitysat satellite while it is in geostationary transfer orbit with a perigee of ~10, 345 km, an apogee of ~73, 990km, and an inclination of ~9.04 degrees. The gain contours for the Utilitysat satellite beams used during these operations are presented in Attachment A to this technical appendix.
  
3. **Earth stations** – The following table provides the earth station locations, earth station sizes, antenna manufacturer, number of earth stations and frequencies that will be used at each test location.

| Location                                                               | Earth station antenna size (m) | Antenna manufacturer | # of earth station antennas at this location | Downlink Frequencies (GHz) | Uplink Frequencies (GHz) | Purpose                |
|------------------------------------------------------------------------|--------------------------------|----------------------|----------------------------------------------|----------------------------|--------------------------|------------------------|
| Pier 70, San Francisco, CA<br>Lat: 37°45'34.4"N<br>Long: 122°23'07.2"W | 0.82 x 0.82                    | Kymeta U8 Goshawk    | 10                                           | 10.95 - 11.2               | 14.0 - 14.2              | Customer demonstration |
| Clarksville, MD<br>Lat: 39°09'58.6"N<br>Long: 76°53'50.7"W             | 0.82 x 0.82                    | Kymeta U8 Goshawk    | 10                                           | 10.95 - 11.2               | 14.0 - 14.2              | Customer demonstration |
| Summit Point, WV<br>Lat: 39°14'10.3"N<br>Long: 77°58'32.2"W            | 0.82 x 0.82                    | Kymeta U8 Goshawk    | 10                                           | 10.95 - 11.2               | 14.0 - 14.2              | Customer demonstration |

4. **Emission designators** – Emission designators for customer demonstrations ranges from 3M00G7W to 50M0G7W

5. **EIRP and EIRP density** – The following table provides the antenna gain, uplink and downlink EIRP and EIRP density for each of the antennas. All antennas meet the relevant gain pattern defined in Section 25.209 and off-axis EIRP limits in Section 25.218 of the Commission’s rules

| Location                   | Earth station Tx/Rx gain (dBi) | Earth station Peak EIRP (dBW) | Earth station Peak EIRP density (dBW/Hz) | Satellite Beam Peak EIRP (dBW) | Satellite Beam Peak EIRP density (dBW/Hz) | Purpose                |
|----------------------------|--------------------------------|-------------------------------|------------------------------------------|--------------------------------|-------------------------------------------|------------------------|
| Pier 70, San Francisco, CA | 35/34                          | 47                            | -23                                      | 42.7, 47.2*                    | -22 , -17.5*                              | Customer demonstration |
| Clarksville, MD            | 35/34                          | 47                            | -23                                      | 42.7, 47.2*                    | -22 , -17.5*                              | Customer demonstration |
| Summit Point, WV           | 35/34                          | 47                            | -23                                      | 42.7, 47.2*                    | -22 , -17.5*                              | Customer demonstration |

\*The Ku-band downlink customer demonstration links will employ an adaptive power control technique to ensure that the maximum Ku-band downlink PFD does not exceed  $-124 \text{ dBW/m}^2/\text{MHz}$ , equivalent to an EIRP density of  $14 \text{ dBW} / 4 \text{ kHz}$  from 35, 678 km. Astranis proposes to use a maximum EIRP density of  $-22 \text{ dBW/Hz}$  for altitudes between 35, 768 km and 60, 000 km, and a maximum downlink EIRP density of  $-17 \text{ dBW/Hz}$  at altitudes of 60, 000 km or greater. Scaling the EIRP density levels as the altitude increases enables Astranis to maintain a power-flux density (received power) on the ground equivalent to the allowed EIRP density in FCC’s two-degree spacing rules (Section 25.140) for Ku-band frequencies.

6. **The demonstrations will be conducted on a non-harmful interference, non-protected basis.** Upon notification of harmful interference, Astranis will immediately cease operations. In addition, the following constraints will ensure that operations described in this STA are compatible with other satellite systems:
- Operations will be restricted to when the satellite is at an altitude of 35 786 km or greater.
  - Operations will be restricted to an active arc of periods where the topocentric angle at the earth station is greater than or equal to 5 degrees to the GSO arc (i.e., providing much greater than 2-degree spacing).
  - Operations will be restricted such that the power-flux density on the ground will be equivalent to or less than that resulting from GSO two-degree spacing levels in Section 25.140 of the Commission’s rules.
  - The Ku downlink transmissions will employ a power control technique to ensure that the PFD on the ground is equivalent to the PFD from a  $-22 \text{ dBW/Hz}$  EIRP emission from GSO altitude.

- e. The combination of restrictions 6a through 6d above will ensure that emissions from Utilitysat will be substantially lower than that from typical two-degree spaced GSO satellite operations.
- 7. **Contact information** — Astranis Mission Operations: +1 (877) 362-1747 and +1 844-278-7647, moc@astranis.com and spectrum@astranis.com
- 8. **RF Radiation Hazard Analyses** –
  - a. Astranis incorporates by reference the Radiation Hazard and safety analyses previously submitted to and granted by the commission for the following antenna types
    - i. Kymeta U8 Goshawk – SES-MOD-20200611-00674
- 9. **Requested dates of operation** – 30 days from July 31, 2026 – August 30, 2026

### **Certification of Person Responsible for Preparing Engineering Information**

I hereby certify that I am the technically qualified person responsible for the preparation of the engineering information contained in the application, that I am familiar with Part 25 of the Commission's Rules, that I have either prepared or reviewed the engineering information submitted in this application and that it is complete and accurate to the best of my knowledge and belief.

July 27, 2026

/s/ Arvin Tangestanian

Arvin Tangestanian  
Spectrum Engineer  
Astranis

## ATTACHMENT A

### Utilitysat Satellite Beam Transmit Gain Contours

All contour levels are -2,-4,-6,-8,-10,-15, and -20 dB from peak

**Figure A-1.** Ku-band satellite transmit beam gain contours to be used during testing



