Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Heighliner Corp.	)	File No.
	)	
Application for Special Temporary Authorization	)	Call Sign
	)	

REQUEST FOR SPECIAL TEMPORARY AUTHORIZATION

Heighliner Corp. ("Heighliner"), a wholly owned subsidiary of Astranis Space Technologies Corp. ("Astranis"), hereby requests Special Temporary Authority ("STA") for 60 days to perform testing and demonstrations of up to 25 temporary-fixed Ku-band earth station antennas in the contiguous United States ("CONUS") and United States ("U.S.") territories communicating with UtilitySat. Heighliner was previously granted STA to perform demonstrations using a limited number of earth stations[1] and now seeks authority to conduct similar demonstrations with earth stations in CONUS and U.S. territories. Federal Communications Commission ("Commission") precedent supports granting authority for such temporary testing regimes and demonstrations.[2]

Grant of the requested STA 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

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[1] *See* Heighliner Corp., *Application for Special Temporary Authority*, ICFS File No. SES-STA-20260311-00605 (granted Mar. 13, 2026) (STA); *see also* Heighliner Corp., *Application for Renewal of Special Temporary Authority*, ICFS File No. SES-STA-20260827-02409 (filed Aug. 27, 2026) (most recent STA renewal).

[2] *See, e.g.*, Intelsat License LLC, *Request for Special Temporary Authority 0.4m Ku-band antennas*, ICFS File No. SES-STA-20250605-00878 (granted June 27, 2025) (granting Intelsat a 30-day STA to operate up to 75 Ku-band satellite antennas to perform testing, demonstrations, and customer service); Heighliner Corp., *STA for testing with mobility terminals and the NuView satellites*, ICFS File No. SES-STA-20260723-02095 (granted Aug. 19, 2026) (latest STA renewal granting Heighliner 60-day STA to operate 12 mobile earth stations for testing purposes throughout CONUS).

infrastructure so Astranis can continue to support commercial and government partners, while posing no risk of harmful interference to authorized primary spectrum users. Astranis will operate the UtilitySat spacecraft on a non-interference, non-protected basis and will immediately cease transmissions upon notification of harmful interference.

Heighliner respectfully requests STA for a 60-day period. All operations will conform to the test plan set forth in Exhibit A.

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
San Francisco, CA 94107
202 286 6089

Dated: September 3, 2026

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
CONUS and U.S. territories	0.82 x 0.82	Kymeta U8 Goshawk	100	10.95 - 11.2	14.0 - 14.2	Customer demonstrations

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.

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)
35/34	47	-23	42.7, 47.2*	-22 , -17.5*

*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 dBW/m^2/MHz, equivalent to an EIRP density of 14 dBW / 4 kHz from 35, 678 km. Astranis proposes to use a maximum EIRP density of –22 dBW/Hz for altitudes between 35, 768 km and 60, 000 km, and a maximum downlink EIRP density of –17 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:
    a. Operations will be restricted to when the satellite is at an altitude of 35 786 km or greater.
    b. 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).
    c. 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.
    d. 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 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

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.

September 3, 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 over the western United States

Figure A-2. Ku-band satellite transmit beam gain contours to be used during testing over the central United States

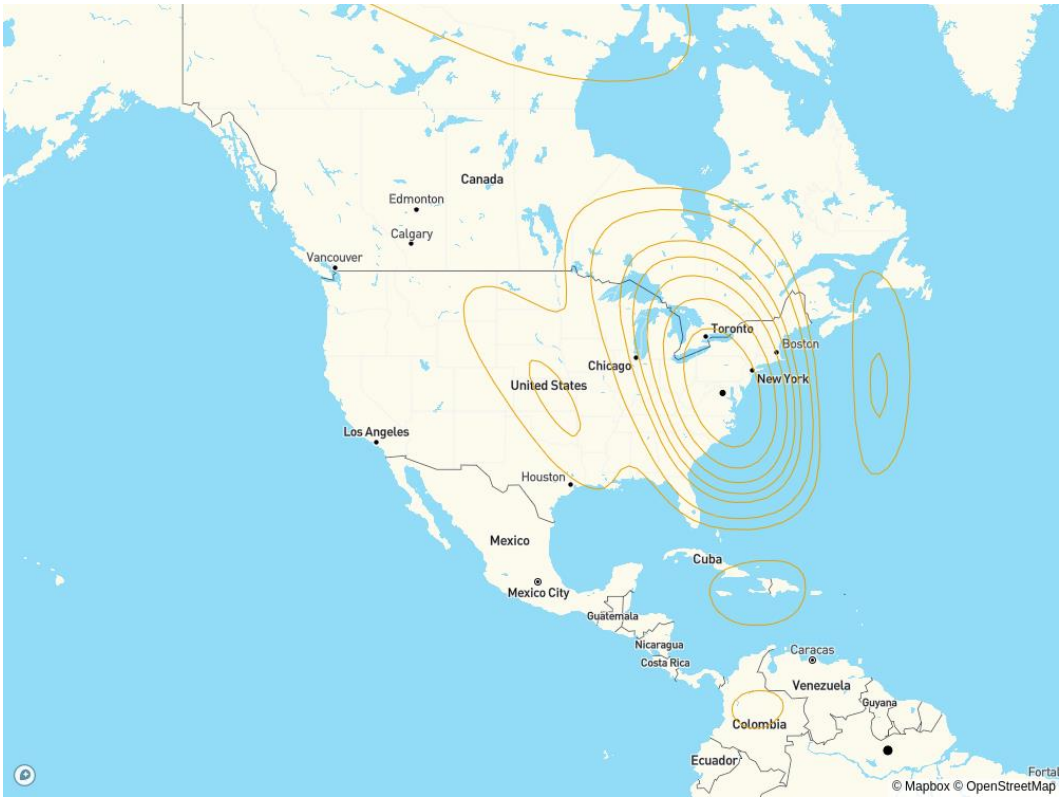

Figure A-3. Ku-band satellite transmit beam gain contours to be used during testing over the Eastern United States