

GRANT
Astranis Projects USA LLC
ICFS File No. SAT-LOA-20260220-00092

 GRANTED IN PART/DENIED IN PART * Space Bureau	File # SAT-LOA-20260220-00092	
	Call Sign <u>S00833</u> (or other identifier)	Grant Date <u>06/04/2026</u>
	From: <u>See conditions</u>	To: <u>See conditions</u>
	Approved:  Associate Division Chief Satellite Programs and Policy Division	

*with conditions

ICFS File No(s):	SAT-LOA-20260220-00092	GRANTED IN PART / DENIED IN PART – With Conditions  Space Bureau Satellite Programs and Policy Division
Licensee/Grantee:	Astranis Projects USA LLC (Astranis)	
Call Sign:	S00833	
Satellite Name:	ASTRANIS 157E KU GSO SYSTEM (ASTRANIS 157E KU)	
Orbital Location: (required station-keeping tolerance)	157° E.L. (+/- 0.05 degrees east/west station keeping)	
Administration:	United States of America	
Nature of Service:	Fixed-Satellite Service (FSS)	
Scope of Grant:	Grant of launch and operating authority for ASTRANIS 157E KU	
Previous Grants:	N/A	
Service Area(s):	Southeast Asia	
Frequencies:	<u>FSS:</u> 10.95-11.7 GHz (space-to-Earth) 17.7-20.2 GHz (space-to-Earth) 13.75-14 GHz (Earth-to-space) 14-14.5 GHz (Earth-to-space) 27.5-30.0 GHz (Earth-to-space) <u>Telemetry, Tracking & Command Center Frequencies:</u> 19625 MHz 19650 MHz 19675 MHz 19700 MHz 19725 MHz 19750 MHz 19775 MHz 28450 MHz	
Unless otherwise specified herein, operations under this grant must comport with the legal and technical specifications set forth by the applicant or petitioner and with the Federal Communications Commission's rules not waived herein. This grant is also subject to the following conditions: 1. Astranis must prepare the necessary information, as may be required, for submission to the International Telecommunication Union (ITU) to initiate and complete the advance publication, coordination, due diligence, and notification process of this space station, in accordance with the ITU Radio Regulations. Astranis will be held responsible for all cost-recovery fees associated with ITU filings. No protection from interference caused by radio stations authorized by other administrations is guaranteed unless coordination and notification procedures are timely completed or, with respect to individual administrations, coordination agreements are successfully completed. Any radio station authorization for which coordination has not been completed may be subject to additional terms and conditions as required to effect coordination of the frequency assignments of other administrations. <i>See 47 CFR § 25.111(b).</i> 2. In connection with the provision of service in any particular country, Astranis is obliged to comply with the applicable laws, regulations, rules, and licensing procedures of that country.		

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3. Astranis must operate ASTRANIS 157E KU at the 157.0° E.L. orbital location in accordance with any existing or future coordination agreements for this location. In the absence of a coordination agreement, such operations must comply with applicable provisions of the ITU Radio Regulations as the Commission cannot guarantee the success of the required coordination.
4. Prior to conducting operations in the 17.7-20.2 GHz band, Astranis must complete coordination with U.S. Federal systems, in accordance with footnote US334 to the United States Table of Frequency Allocations, 47 CFR § 2.106 (U.S. Table). The use of space-to-Earth operations must be in accordance with any signed coordination agreement with U.S. Federal operators. Two weeks prior to the start of any operations in the 17.7-20.2 GHz band, contact information for a 24/7 point of contact for the resolution of any harmful interference must be provided to Jimmy Nguyen, Email: Jimmy.Nguyen@us.af.mil.
5. Astranis's request for waiver of footnote NG52 of the U.S. Table to use the 10.95-11.7 GHz band to offer domestic services on an unprotected, non-harmful interference basis in the United States is granted, as conditioned. We find that waiver does not undermine the purpose of the rule because the waiver involves only earth stations that are receive-only in the 10.95-11.7 GHz band and thus are not capable of causing interference into fixed stations operating in this band. Furthermore, because Astranis has agreed to accept any level of interference from fixed stations operating into its receive-only earth stations' operations in these bands, fixed station operators will not be required to coordinate their station's operations with the space station operator's receive-only earth stations' operations. Under these circumstances, we determine that an additional coordination burden is not placed upon fixed station operators and their ability to expand service in the future would not be restricted in any manner.
 - a. Astranis's space-to-Earth transmissions in the 10.95-11.7 GHz band that provide domestic service are on an unprotected, non-harmful interference basis relative to fixed stations. As such, Astranis must not cause harmful interference to, or claim protection from, fixed stations to which frequencies in the 10.95-11.7 GHz band have either been already assigned, or to which frequencies in the 10.95-11.7 GHz band may be assigned at a later date. Astranis must terminate operations in the 10.95-11.7 GHz band upon notification that its operations are causing interference to fixed stations operating in this band, and must immediately inform the Commission, in writing, of such an event.
 - b. Astranis must inform its customers, in writing, including end-users receiving services from resellers accessing capacity on the ASTRANIS 157E KU space station, that the service in the 10.95-11.7 GHz band with regard to domestic service is being provided on an uncoordinated basis, and that the potential exists that future licenses fixed stations may cause harmful interference to these unprotected earth stations.
6. We grant Astranis's request to waive section 25.264 of the Commission's rules, 47 CFR § 25.264. Section 25.264 is intended to facilitate reverse band operations in the 17.3 GHz-17.8 GHz band by mitigating interference into Direct Broadcast Satellite (DBS) receivers, and section 25.264(b) requires that an applicant or licensee transmitting in any portion of the 17.3-17.8 GHz band submit power flux density calculations at the locations of U.S. DBS space stations. International use of this frequency band is governed by Appendix 30A of the ITU Radio Regulations, and Astranis states that there are no US Appendix 30A Plan assignments or ITU filings to include new Appendix 30A Plan assignments within two degrees of the 157.0° E.L. orbital location. We conclude that waiver of this rule is appropriate as no DBS operations are affected. This waiver shall terminate in the event that a DBS satellite is launched into a location within 0.2 degrees of the 157.0° E.L. orbital location or the submission of an ITU filing within 0.2 degrees of the 157.0° E.L. orbital location.
7. ASTRANIS 157E KU operations in the 18.8-19.3 GHz (space-to-Earth) and 28.6-29.1 GHz (Earth-to-space) bands must not cause harmful interference to, or claim interference protection from, non-geostationary orbit (NGSO) FSS systems licensed or granted market access in the United States. *See* 47

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CFR § 2.106, NG165. Astranis must terminate operations immediately upon notification of harmful interference.

8. No later than sixty days before the scheduled initial launch of each NGSO FSS satellite system licensed by the United States or granted market access in the United States to operate in the 18.8-19.3 GHz and 28.6-29.1 GHz bands, Astranis must either: (1) notify the Commission in writing when a coordination agreement has been reached with the NGSO satellite system operator and such notification must include a statement from the NGSO satellite system operator affirming the agreement, or (2) seek and obtain the Commission's approval of a modification of this authorization, including detailed technical demonstrations of how Astranis will protect the NGSO FSS satellite system. If neither condition is met, Astranis must refrain from commencing, or cease, operations in the United States in the 18.8-19.3 GHz and 28.6-29.1 GHz bands pursuant to this authorization until such time as compliance is demonstrated. With respect to any NGSO FSS system licensed or granted market access in the United States that is currently operational, Astranis must comply with either (1) or (2) above and must not communicate with U.S.-licensed earth stations in the 18.8-19.3 GHz and 28.6-29.1 GHz bands pursuant to this authorization until such time as compliance is demonstrated and affirmed by the Commission.
9. We grant Astranis' request to waive footnote NG166 of the U.S. Table to allow non-conforming GSO FSS operations in the 19.4-19.6 GHz and 29.1-29.25 GHz bands. Generally, the Commission's rules may be waived for good cause.¹ In evaluating whether good cause exists to waive our rules, we consider whether the particular facts make strict compliance with the requirement inconsistent with the public interest.² We may also take into account concerns of hardship, equity, or more effective implementation of overall policy on an individual basis, and we look to Astranis to articulate a specific pleading, and adduce concrete support, preferably documentary.³ Additionally, Astranis must "plead with particularity the facts and circumstances" which warrant grant of the waiver request.⁴
10. FSS in the 19.4-19.6 GHz and 29.1-29.25 GHz bands is limited to feeder links for NGSO systems providing Mobile-Satellite Service (MSS).⁵ Astranis, however, proposes to use the bands for GSO FSS operations on a non-conforming, non-harmful interference, unprotected basis, and states that it will coordinate with authorized NGSO MSS systems.⁶ We believe that the following conditions sufficiently protect MSS operations in these bands: (1) Prior to Astranis's operations in the 19.4-19.6 GHz and 29.1-29.25 GHz bands, we require that Astranis successfully coordinate with authorized NGSO MSS networks; (2) that Astranis's operations be on an unprotected, non-harmful interference basis with respect to existing and future NGSO MSS operations; (3) that Astranis accept interference from any existing and future NGSO MSS operations; and (4) that Astranis cease operations in the event of harmful interference.
11. We grant Astranis's waiver request of 25.283(c) of the Commission's rules, 47 C.F.R. § 25.283(c). Astranis states that the ASTRANIS 157E KU GSO System satellite uses a hydrazine monopropellant propulsion system, and the monopropellant system tank is a 22-inch flight-heritage titanium tank which uses a rubber diaphragm in a blowdown configuration with helium pressurant. Astranis states that the titanium tank can hold 77 kg of hydrazine with 91 liter volume, and has a burst pressure of 49.3 bar. At end-of-life deorbiting, Astranis expects less than 1 kg of monopropellant to remain, contained by dual-seat solenoid valves which

¹ 47 CFR § 1.3.

² *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

³ *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969); *Northeast Cellular*, 897 F.2d at 1166.

⁴ *WAIT Radio v. FCC*, 418 F.2d at 1157, n.9 (quoting *Pikes Peak Broad. Co. v. FCC*, 422 F.2d 671, 677 (D.C. Cir. 1969); see also *Red Rock Broad., Inc. v. FCC*, 94 F.3d 698, 702 (D.C. Cir. 1996) ("The Commission need not grant a waiver of its Rules unless an application therefor sets out adequate reasons why the Rules should be waived."))

⁵ US Table n. NG166.

⁶ Astranis Projects USA LLC, Application at 10-11.

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close upon passivation. Astranis also expects that approximately 0.1 kg of helium will remain in the tank at end-of-life, at a pressure of approximately 5 bar and disposal temperature of -50C, which is well below the tank's burst rating. Section 25.283(c) specifies that space stations must discharge stored energy sources at end-of-life, but the Commission has concluded that remaining *de minimis* amounts of stored energy sources do not contravene section 25.283(c).⁷ Although the Commission has not specifically determined what constitutes *de minimis*, we conclude that the projected 1 kg of hydrazine monopropellant and 0.1 kg of helium of remaining energy sources on ASTRANIS 157E KU GSO System is *de minimis*.

12. We deny Astranis' request to waive the Commission's surety bond requirement, section 25.165(a), 47 CFR § 25.165(a). The Commission has used the surety bond to help ensure that licensees are financially willing and able to construct a satellite and discourage warehousing of spectrum resources, but Astranis contends that the Commission has determined that GSO space stations raise less warehousing concerns; that the bond requirement cripples innovation, burdens small companies, and "imposes a disproportionate, capital-constraining burden on new market entrants compared to established entities."⁸ When considering whether good cause exists to grant a waiver, the Commission considers whether the particular facts make strict compliance with the requirement inconsistent with the public interest.²⁰ The Commission may also take into account concerns of hardship, equity, or more effective implementation of overall policy on an individual basis, and thus we look to Astranis to articulate a specific pleading, and adduce concrete support, preferably documentary.²¹ Pursuant to this standard, however, we find that this waiver request fails. First, Astranis's complaints regarding the expense of securing and maintaining a United States space station license and the capital constraints it believes these expenses impose on new satellite operators do not demonstrate how compliance with the surety bond requirement is inconsistent with the public interest. Second, Astranis offers no evidence of hardship or how a waiver would enable more effective implementation of overall policy and fails to articulate a specific pleading that distinguishes Astranis's circumstances from that of any other GSO FSS operator seeking to use this spectrum. Accordingly, we deny the request to waive the surety bond requirement.
13. We do, however, defer for 180 days the surety bond requirement. The Commission is considering significant changes to the existing surety bond requirement and tentatively concluded that GSO systems generally raise a lesser concern about spectrum warehousing, and that by reducing the number of situations in which a bond is required U.S. companies are encouraged to license with the Commission rather than foreign administrations.⁹ On its own, a pending rulemaking that provides support for an applicant's waiver request is not sufficient cause for deferral of a Commission rule. Astranis, however, has updated the record for this application¹⁰ and now states that it expects the ASTRANIS 157E KU satellite to be launched in late August 2026.¹¹ While the Commission does not explicitly define what number of days constitutes imminent launch of a satellite, an August 2026 launch deadline greatly reduces the risk that this deferral

⁷ See, e.g., Petition for Declaratory Ruling, ICFS File No. SAT-PPL-20210607-00075 (Astranis states that the remaining monopropellant of less than 1 kg and helium of less than 0.1 kg are *de minimis*); see also, e.g., ICFS File No. SAT-MOD-20200221-00017 (DIRECTV's Spaceway 2 has two helium tanks that each retained 510 grams of helium, and two xenon tanks that each retained 5.05 kg of xenon).

⁸ See ICFS File No. SAT-LOA-20260220-00092, Application for Authority to Launch and Operate the ASTRANIS 157E Ku GSO System at the Nominal 157° E.L. Orbital Location in Ku-band and Ka-band Frequencies at 7.

⁹ *Space Modernization For The 21st Century*, Notice of Proposed Rulemaking, SB Docket No. 25-306, FCC 25-69, 2025 WL 3677900, at *61 (Oct. 28, 2025).

¹⁰ In its September 23, 2025, amendment to the initial filing, Astranis stated that it expected the ASTRANIS 157E to be launched "as early as December 2025." Amendment Application of Astranis Projects USA LLC, Attachment A at p. A-3.

¹¹ Letter from Kim M. Baum, Astranis Space Technologies Corp., to Marlene H. Dortch, Secretary, Federal Communications Commission (May 1, 2026).

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would undermine the policy objectives supported by the surety bond requirement. Additionally, while we cannot prejudge the outcome of a Commission rulemaking, this 180-day deferral is consistent with what has been proposed and can be revisited should it become necessary to protect valuable spectrum resources.

14. This authorization is subject to the following requirements:

- a. Astranis must post a surety bond in satisfaction of 47 CFR §§ 25.165(a)(2) and (b) no later than December 1, 2026, and thereafter maintain on file a surety bond requiring payment in the event of a default in an amount, at minimum, determined according to the formula set forth in 47 CFR § 25.165(a)(2);
- b. Astranis must launch the space station, place it in the assigned orbit, and operate it in accordance with the station authorization no later than June 4, 2031, 47 CFR § 25.164(a). The license term is fifteen years from the date and time as determined pursuant to 47 CFR § 25.121(a)(1);
- c. This authorization will be null and void automatically, without further Commission action if Astranis fails to comply with these requirements. Failure to comply with the milestone requirement of 47 CFR § 25.164(a) will also result in forfeiture of Astranis's surety bond. By June 19, 2031, Astranis must either demonstrate compliance with its milestone requirement or notify the Commission in writing that the requirement was not met. 47 CFR § 25.164(f).

Licensee/grantee is afforded thirty (30) days from the date of release of this action to decline the grant as conditioned. Failure to respond within this period will constitute formal acceptance of the grant as conditioned.

This action is taken pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 CFR § 0.261, and is effective upon release.

Station licenses are subject to the conditions specified in Section 309(h) of the Communications Act of 1934, as amended, 47 U.S.C. § 309(h).

Action Date:	June 4, 2026	
Term Dates	From: See conditions	To: See conditions
Approved: John W. Whaley Associate Division Chief Satellite Programs and Policy Division		