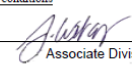


GRANT
Astranis Projects USA LLC
ICFS File Nos. SAT-LOA-20250618-00152
and SAT-AMD-20250919-00292

 GRANTED IN PART/DEFERRED IN PART * Space Bureau	File # SAT-LOA-20250618-00152 and SAT-AMD-20250919-00292		Grant Date <u>04/23/2026</u>
	Call Sign <u>S3236</u> (or other identifier)		
	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-20250618-00152 and SAT-AMD-20250919-00292	GRANTED IN PART / DENIED IN PART – With Conditions  Space Bureau Satellite Programs and Policy Division
Licensee/Grantee:	Astranis Projects USA LLC (Astranis)	
Call Sign:	S3236	
Satellite Name:	ASTRANIS 157E GSO SYSTEM (ASTRANIS 157E)	
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	
Previous Grants:	N/A	
Service Area(s):	Asia and Oceania, including the Philippines, Taiwan, Japan, Northern Marianas, Guam and surrounding waters	
Frequencies:	<u>FSS:</u> 17.7-20.2 GHz (space-to-Earth) 27.5-30.0 GHz (Earth-to-space) <u>Telemetry, Tracking & Command Center Frequencies:</u> 19700.0 MHz 28450.0 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. *See* 47 CFR § 25.111(b).
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.
3. Astranis must operate ASTRANIS 157E 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. 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

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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 six degrees of the 157.0° E.L. 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.

6. ASTRANIS 157E 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 CFR § 2.106, NG165. Astranis must terminate operations immediately upon notification of harmful interference.
7. 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.
8. 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, and deny Iridium Constellation LLC's (Iridium) request to dismiss or deny this waiver request.¹ Generally, the Commission's rules may be waived for good cause.² 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.³ 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.⁴ Additionally, Astranis must "plead with particularity the facts and circumstances" which warrant grant of the waiver request.⁵
9. 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).⁶ 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

¹ Petition of Iridium Constellation LLC to Dismiss or Deny in Part.

² 47 CFR § 1.3.

³ *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

⁴ *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969); *Northeast Cellular*, 897 F.2d at 1166.

⁵ *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."))

⁶ US Table n. NG166.

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authorized NGSO MSS systems.⁷ Astranis contends that Iridium's operations will be protected because the ITU states that a geographic separation between NGSO MSS feeder links and GSO systems of at least 225 km is sufficient to reduce interference to acceptable levels,⁸ and that the service area of Astranis 157E covers many areas beyond 225 km.⁹ Astranis states that the closest Iridium feeder link stations to ASTRANIS 157E are approximately 5,500 km away.¹⁰ Astranis further argues that the coverage area of ASTRANIS 157E enables operation of its earth stations with sufficient geographic separation from the Iridium gateways that are associated with the interference risks that the Ka-Band Plan was designed to mitigate.¹¹ Iridium argues that the proposed usage contravenes the Commission's Ka-band plan and that reliance on the ITU geographic separation recommendations is misguided; that the waiver request is general and fails to distinguish Astranis from any other GSO FSS desiring to use these frequencies; that grant of the waiver would result in similar requests that would lead to rewriting "the Commission's band plan without the benefit of a rulemaking"¹²; and that Astranis neglects to consider how it would geographically isolate from the feeder link earth stations of other operating NGSO MSS systems.¹³

10. Strict adherence to the Ka-band plan is not necessarily in the public interest if waiver would not undermine the policy goal of protecting from harmful interference NGSO MSS feeder links and facilitates benefit to the public. Further, we disagree that grant of this waiver would essentially rewrite the Commission's Ka-band plan and result in GSO FSS proliferation in NGSO MSS feeder links.¹⁴ We believe that the following conditions sufficiently allay Iridium's concerns regarding the protection of its operations: (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;¹⁵ (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 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 79 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 close upon passivation. Astranis also expects that 0.1 kg of helium will remain in the tank at end-of-life, at a pressure of 5 bar and disposal temperature of -50C, which is well below the tank's burst rating. Section

⁷ Astranis Projects USA LLC, Application at 12-13 (Astranis Application). Astranis states that it has begun coordination discussions with Iridium in the 29.25-29.3 GHz frequency band. *See* Letter from Kimberly M. Baum, Astranis Space Technologies, to Marlene H. Dortch, Secretary, Federal Communications Commission, p. 2 (Dec. 20, 2025) (*Astranis Iridium Letter*). In the 19.4-19.6 GHz band, Astranis states that it will meet the Commission's power flux density limits, and in the 29.1-29.25 GHz band, Astranis states that it will operate on a non-interference basis with regard to current and future Fixed-Service and MSS, and cease operations in the event of harmful interference. Astranis Application at 12-13.

⁸ *Id.* at 2-3.

⁹ *See, e.g.,* Opposition to Petition of Iridium to Dismiss or Deny at 2-3.

¹⁰ *Id.* at 3.

¹¹ *Id.*

¹² Petition of Iridium Constellation to Dismiss or Deny in Part at p. 2, 4-5.

¹³ *Id.* at 5.

¹⁴ *See Space Exploration Holdings, LLC, Request for Deployment and Operating Authority for the SpaceX Gen2 NGSO Satellite System*, Authorization and Order, DA 26-36, 2026 WL 103236, at para. 12 (Jan. 9, 2026).

¹⁵ *See Astranis Iridium Letter, supra.*

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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).¹⁶ Although the Commission has not specifically determined what constitutes *de minimis*, we conclude that the projected 1 kg of hydrazine and 0.1 kg of helium of remaining energy sources on ASTRANIS 157E 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 argues that the imminent launch of the ASTRANIS 157E and the short-term usage of the requested frequencies (less than five years) alleviates warehousing concerns.¹⁷ Astranis further contends that because it has less financial resources than larger competitors¹⁸ it is similarly situated as small satellite companies are, *i.e.*, Astranis should be given the same extended time period by which to post the bond as is given to small satellite companies.¹⁹ 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, launch of ASTRANIS 157E System was not imminent, and, to date, the satellite has not been launched; thus, to waive the surety bond requirement given the indefinite launch date would be contrary to the policy behind the surety bond requirement. Second, 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. Third, 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.¹⁷ 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 application¹⁸ and now states that it expects the ASTRANIS 157E satellite to be launched in late August 2026.¹⁹ 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 would undermine the policy objectives supported by the surety bond requirement. Additionally, while we

¹⁶ 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).

¹⁷ *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).

¹⁸ 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.

¹⁹ Letter from Kim M. Baum, Astranis Space Technologies Corp., to Marlene H. Dortch, Secretary, Federal Communications Commission (Apr. 24, 2026).

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cannot prejudice 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. We dismiss Astranis's request for waiver of section 25.116(b)(5) of the Commission's rules, 47 CFR § 25.116(b)(5) as MOOT.

15. 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 October 20, 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 October 20, 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 November 4, 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:	April 23, 2026 Reissued: April 24, 2026
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Term Dates	From: see conditions	To: see conditions
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Approved:

John W. Whaley
Associate Division Chief
Satellite Programs and Policy Division