

GRANT
Astranis Projects USA LLC
ICFS File No. SAT-LOA-20260112-00024

 GRANTED* Space Bureau	File # SAT-LOA-20260112-00024 Call Sign <u>S00784</u> Grant Date <u>05/06/2026</u> (or other identifier) From: <u>See conditions</u> To: <u>See conditions</u> Approved:  Associate Division Chief Satellite Programs and Policy Division
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*with conditions

ICFS File No(s):	SAT-LOA-20260112-00024	GRANTED With Conditions  Space Bureau Satellite Programs and Policy Division
Licensee/Grantee:	Astranis Projects USA LLC (Astranis)	
Call Sign:	S00784	
Satellite Name:	ASTRANIS 131W GSO SYSTEM (ASTRANIS 131W)	
Orbital Location: (required station-keeping tolerance)	131.1° W.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 131W	
Previous Grants:	N/A	
Service Area(s):	United States, Canada, Mexico	
Frequencies:	FSS: 10.7-12.2 GHz (space-to-Earth) 17.3-20.2 GHz (space-to-Earth) 12.75-13.25 GHz (Earth-to-space) 13.75-14.5 GHz (Earth-to-space) 27.5-30.0 GHz (Earth-to-space) <u>Telemetry, Tracking & Command Center Frequencies:¹</u> 19625 MHz (space-to-Earth) 19650 MHz (space-to-Earth) 19675 MHz (space-to-Earth) 19700 MHz (space-to-Earth) 19725 MHz (space-to-Earth) 19750 MHz (space-to-Earth) 19775 MHz (space-to-Earth) 28450 MHz (Earth-to-space)	
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: 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>		

¹ "The frequencies and beams used for TT&C are provided in the Schedule S. The TT&C earth station locations and precise TT&C frequencies will be provided to the FCC at a later date." Technical Appendix at B.6.

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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 131W at the 131.1° W.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 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 (pfd) 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. Astranis states, however, that there are no US Appendix 30A Plan assignments or ITU filings to include new Appendix 30A Plan assignments within two degrees of the 131.1° W.L. orbital location and that it is not aware of any new ITU filings within two degrees of this 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 131.1° W.L. orbital location or the submission of an ITU filing within 0.2 degrees of the 131.1° W.L. orbital location.
6. Astranis's request for waiver of footnote NG52 of the U.S. Table is granted as conditioned. We find that, with respect to use of the 10.7-11.7 GHz band and 12.75-13.25 GHz band, waiver of footnote NG52 to allow domestic operations would not undermine protection for terrestrial services. Astranis states that its operations in the 10.7-11.7 GHz will be on an unprotected, non-harmful interference basis with respect to terrestrial services, and that operations in the 12.75-13.25 GHz band will be limited to aeronautical and maritime operations that pose limited possibility of interference to terrestrial systems.² We require that Astranis operations in both the 10.7-11.7 GHz and 12.75-13.25 GHz bands be on an unprotected, non-harmful interference basis with respect to terrestrial systems. Astranis must not cause harmful interference relative to, or claim protection from, fixed stations to which frequencies in the 10.7-11.7 GHz and 12.75-13.25 GHz bands have either been already assigned, or to which frequencies in the 10.7-11.7 GHz and 12.75-13.25 GHz bands may be assigned at a later date. Astranis must terminate operations in the 10.7-11.7 GHz and 12.75-13.25 GHz bands upon notification that its operations are causing harmful interference to fixed stations operating in one or both of these bands, and must immediately inform the Commission, in writing, of such an event. Astranis is required to inform its customers, in writing, including any end-users receiving service from resellers accessing capacity on the ASTRANIS 131W space station, that domestic service in the United States in the 10.7-11.7 GHz and 12.75-13.25 GHz frequency bands is being provided on an unprotected basis, and is subject to interference from fixed stations authorized to operate in these bands.
7. ASTRANIS 131W operations in the 18.8-19.3 GHz (space-to-Earth) and 28.6-29.1 GHz (Earth-to-space) frequency bands must not cause harmful interference to, or claim interference protection from, NGSO FSS

² Astranis states that for any fixed earth stations in the 12.75-13.25 GHz band where NG52 is not met, it will seek a waiver through an earth station application. Narrative at 9.

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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.

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 frequency bands, Astranis must either: (1) notify the Commission in writing when an 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.³ 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 frequency 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 frequency bands pursuant to this authorization until such time as compliance is demonstrated and affirmed by the Commission.
9. We grant Astranis's 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) petition to dismiss or deny this waiver request.⁴ Generally, the Commission's rules may be waived for good cause.⁵ 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.⁶ 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.⁷ Additionally, Astranis must "plead with particularity the facts and circumstances" which warrant grant of the waiver request.⁸
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).⁹ Astranis, however, proposes to use the bands for GSO FSS operations

³ Astranis argues that it should be able to operate on an unprotected, non-interference basis pending completion of coordination with NGSO systems, and that the Commission has similarly authorized Amazon Leo (Amazon) to operate on such a basis relative to other operators. Consolidated Opposition and Response of Astranis Projects USA LLC at 9-10 (Consolidated Opposition). In the case of the Amazon waiver referenced by Astranis, however, waiver was granted partially due to indeterminate time frames by which the ITU would render a favorable or unfavorable finding concerning Amazon's equivalent power-flux density limits. Among the other requirements as a condition of this waiver, Amazon was required to make available to any requesting party the data used as input to the ITU approved validation software. The Commission determined that it was in the public interest to partially waive section 25.146(c) so that Amazon could begin operations. *Kuiper Systems LLC, Request for Modification of the Authorization for the Kuiper NGSO Satellite System*, Order and Authorization, 39 FCC Rcd 3987, 3992-3996, paras. 10-16 (2024). Astranis contends that NGSO systems leverage a "veto power" over GSO systems, but Astranis does not indicate that it has begun or attempted coordination discussions with Amazon and/or that Amazon will not or is not negotiating in good faith the terms for coordination. Absent evidence of any party not negotiating in good faith, we will assume that the parties are conducting themselves accordingly.

⁴ Petition of Iridium Constellation LLC to Dismiss or Deny in Part.

⁵ 47 CFR § 1.3.

⁶ *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

⁷ *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969); *Northeast Cellular*, 897 F.2d at 1166.

⁸ *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."))

⁹ US Table n. NG166.

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on a non-conforming, non-interference, non-protected basis, and states that it will coordinate with authorized NGSO MSS systems.¹⁰ 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,¹¹ and that the service area of ASTRANIS 131W covers many areas beyond 225 km.¹² Astranis further argues that the coverage area of ASTRANIS 131W enables operation of its earth stations with sufficient geographic separation from the five Iridium gateways that are associated with the interference risks that the Ka-Band Plan was designed to mitigate.¹³ 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"¹⁴; and that Astranis neglects to consider how it would geographically isolate from the feeder link earth stations of other operating NGSO MSS systems.¹⁵

11. 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.¹⁶ 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 frequency bands, we require that Astranis successfully coordinate with authorized NGSO MSS networks;¹⁷ (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.
12. We deny Astranis' request to waive the Commission's surety bond requirement, section 25.165(a), 47 CFR § 25.165(a). Although 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, Astranis contends that the Commission has determined in a Notice of Proposed Rulemaking (NPRM) that for GSO

¹⁰ Consolidated Opposition and Response of Astranis Projects USA LLC at 5 (Consolidated Opposition). 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 Projects USA LLC, Application at 12-13.

¹¹ Consolidated Opposition at 6.

¹² *Id.* "With Astranis's spot beam technology, it is technically and logically inconsistent to allow a mere five earth station sites to effectively preclude the use of valuable spectral resource across North America." *Id.*

¹³ *Id.*

¹⁴ Petition of Iridium Constellation to Dismiss or Deny in Part at p. 2, 4-5. *See also* Reply of Iridium Constellation LLC to Consolidated Opposition and Response.

¹⁵ *See also* Reply of Iridium Constellation LLC to Consolidated Opposition and Response at 3.

¹⁶ *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).

¹⁷ Astranis states that it has begun coordination discussions with Iridium regarding the 19.4-19.6 GHz, 29.1-29.25 GHz and 29.25-29.3 GHz frequency bands. Consolidated Opposition at 7.

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operations the surety bond is not necessary due to fewer warehousing concerns.¹⁸ Astranis further contends that there is a precedent of the Commission granting waivers pending the outcome of rulemaking proceedings.¹⁹ When considering the waiver request pursuant to the standard discussed in the above paragraph,²⁰ however, we find that this waiver request fails. First, although the Commission has proposed to eliminate the surety bond requirement for GSO space stations, the Commission has identified numerous considerations that must be explored before a final determination is reached.²¹ Thus, the Commission has not acknowledged for all GSO applications under all circumstances that the GSO surety bond rule is no longer necessary to protect against warehousing. While the Commission might ultimately eliminate the surety bond requirement, at this point we cannot presume the Commission's final words on this matter, and to grant this waiver request is to prejudge and possibly preempt the pending consideration. Second, Astranis contends that the Commission could waive the surety bond requirement during the pendency of the NPRM and condition this authorization upon compliance with whatever bond requirement is ultimately adopted;²² this request, however, fails to articulate a specific pleading that distinguishes Astranis's circumstances from that of any other GSO FSS operator seeking to use this spectrum. Additionally, Astranis's argument 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, and offer no evidence of hardship or how a waiver would enable more effective implementation of overall policy. Given the pending determination of this matter and the general pleading offered by Astranis, 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.²³ 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 application and now states that it expects the ASTRANIS 131W satellite to be launched in late

¹⁸ See *Space Modernization for the 21st Century*, Notice of Proposed Rulemaking, SB Docket No. 25-306, FCC 25-59 ¶ 177 (rel. Oct. 29, 2025); see also Astranis 131W Application at 6-7 (Narrative) and Consolidated Opposition and Response of Astranis Projects USA LLC at 2 (Consolidated Opposition).

¹⁹ *Id.* at 2. Astranis cites an example where the Commission waived a rule pending the outcome of a rulemaking proceeding. The order cited by Astranis, however, was a situation where the rule waived by the Commission was one that presumed that frequencies could not be shared although the satellite system's design actually enabled sharing. Thus, the Commission concluded that adhering to the rule and requiring band-splitting would be an inefficient use of scarce spectrum resources. See *WorldVu Satellites Limited*, Order and Declaratory Ruling, 32 FCC Rcd 5366, 5374-75 ¶ 18 (2017).

²⁰ See para. 9, *supra*.

²¹ "We seek comment on our proposals to limit the types of space station licensees required to post a surety bond. What are the costs and benefits of removing the requirements as proposed such that the changes are warranted? ... Alternatively, in contrast to our proposal, should the Commission continue to require surety bonds for all licensed systems or for some additional classifications or types of systems or operators? Additionally, given that a threshold such as this creates incentives for licensees to "structure" licenses to avoid the bond, should we establish requirements to prevent circumventing the purpose of the surety bond, and what would they be?" See *Space Modernization for the 21st Century*, SB Docket No. 25-306, Notice of Proposed Rulemaking, FCC 25-69, 2025, *61, para. 176 (Oct. 28, 2025).

²² Consolidated Opposition at 3.

²³ *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).

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August 2026.²⁴ 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 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. 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 131W 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 hydrazine 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 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).²⁵ 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 131W is *de minimis*.

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 November 2, 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 May 6, 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 May 21, 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).

²⁴ Letter from Kim M. Baum, Astranis Space Technologies Corp., to Marlene H. Dortch, Secretary, Federal Communications Commission (May 1, 2026).

²⁵ 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).

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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:	May 6, 2026	
Term Dates	From: See conditions	To: See conditions

Approved:

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