

GRANT
Basalt Technologies Corp.
SAT-LOA-20250310-00067

 GRANTED* Space Bureau	File # SAT-LOA-20250310-00067	
	Call Sign: <u>S3225</u> (or other identifier)	Grant Date: <u>07/16/2026</u>
	From: <u>May 3, 2026</u>	To: <u>May 3, 2032</u>
	Approved: <u>Carolyn A. Mahoney</u> Acting Division Chief Satellite Programs and Policy Division	

*with conditions

ICFS File No(s):	SAT-LOA-20250310-00067 ¹	GRANTED With Conditions  Space Bureau Satellite Programs and Policy Division
Licensee/Grantee:	Basalt Technologies Corp. (Basalt)	
Call Sign:	S3225	
Satellite Name:	BSLT-1, BSLT-2, BSLT-3 (Spirit-EEL)	
Orbital Location: (required station-keeping tolerance)	Non-geostationary satellite orbit (NGSO). Deploy and operate at 510 km (+/- 20 km) with an inclination of 97.45 degrees (+/- 1.5 degrees).	
Administration:	United States of America	
Nature of Service:	Earth Exploration Satellite Service (EESS), Space Operation Service (SOS), and Mobile Satellite Service (MSS).	
Scope of Grant:	Authority to construct, deploy and operate two 3U CubeSat NGSO satellites: BSLT-1 and BSLT-2 ²	
Previous Grants:	Authority to deploy and operate a single NGSO satellite, BSLT-3. ³ Modification of Authority for the BSLT-3 satellite (of the Spirit-EEL constellation) to revise the orbital parameters. ⁴	
Service Area(s):	Global, subject to conditions in specific frequency bands.	
Frequencies:	<u>MSS:</u> 399.9-400.05 MHz (center frequency 400.0375 MHz, bandwidth 9.89 kHz) (Earth-to-space) (backup) <u>SOS:</u> 401-402 MHz (center frequency 401.2 MHz, bandwidth 9.89 kHz) (space-to-Earth) (backup) <u>EESS/SOS:</u> 2025-2110 MHz (center frequency 2074.3 MHz, bandwidth 220 kHz) (Earth-to-space) (primary) 2200-2290 MHz (center frequency 2268.8 MHz, bandwidth 39.2 kHz) (space-to-Earth) (primary, outside U.S. only)	

¹ Basalt Technologies Corp., Application for Authority to Launch and Operate the Spirit-EEL Non-Geostationary Orbit System in the Earth Exploration-Satellite Service, Space Operation Service, and Mobile Satellite Service, ICFS File No. SAT-LOA-20250310-00067 (filed Mar. 10, 2025) (Application). This Application was placed on public notice on May 9, 2025. Satellite Licensing Division and Satellite Programs and Policy Division Information, Space Station Applications Accepted for Filing, Public Notice, Report No. SAT-01917 (May 9, 2025). No comments were filed.

² Basalt's constellation, Spirit-EEL, is composed of three-3U cubesats: BSLT-1, BSLT-2, and BSLT-3. Authority for BSLT-3 was granted on January 24, 2026. *See Basalt Technologies Corp.*, ICFS File No. SAT-LOA-20250310-00067 (granted-in-part/deferred-in-part Jan. 24, 2026) (*BSLT-3 Partial Grant*). The Spirit-Eel constellation will demonstrate the use of artificial intelligence to manage and control Earth imaging spacecraft. Basalt states that there will always be humans involved who will have final decision-making authority in every satellite operation decision. *See* Letter from George John, Counsel for Basalt, to Jon Markman, Acting Division Chief, Satellite Programs and Policy Division, ICFS File No. SAT-LOA-20250310-00067 (April 22, 2025).

³ *BSLT-3 Partial Grant*.

⁴ *See Basalt Technologies Corp.*, ICFS File No. SAT-MOD-20260227-00099 (granted May 21, 2026) (*BSLT-3 Modification*).

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Unless otherwise specified herein, operations under this grant must comport with the legal and technical specifications and commitments 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. Basalt's request for its Application to be processed under the rules for streamlined licensing of small satellites was previously GRANTED.⁵ We found that the operations requested in the Application met the criteria listed in section 25.122 of the Commission's rules, 47 CFR § 25.122, for streamlined small satellite applicants. We concluded that Basalt's operations are compatible with existing operations in the requested bands and will not materially constrain future space station entrants from using the requested bands.
2. Basalt's request for a waiver of the U.S. Table of Frequency Allocations (U.S. Table), 47 CFR § 2.106(a), to use the 399.9-400.05 MHz band on a non-conforming, non-interference basis is GRANTED.⁶ The U.S. Table allocates the 399.9-400.05 MHz band to the MSS on a primary basis for both Federal and non-Federal use. MSS use of the band is limited to non-voice, non-geostationary (NVNG) MSS. We find this non-conforming use for back-up services is in the public interest. Accordingly Basalt's operations in the 399.9-400.05 MHz band may not cause interference to and must not claim protection from interference caused to it by any other lawfully operating station.
3. Space-to-Earth and Earth-to-space operations must be strictly limited to durations when the Spirit-EEL satellites are visible to the corresponding earth station locations listed in the Appendix of this grant, noting any additional restrictions within this grant.⁷ The only permissible exception to this condition is temporary UHF beacon operations during Spirit-EEL commissioning phase (first three days).⁸
4. Transmissions in the 401-402 MHz band may only be made to/from earth stations coordinated with Federal agencies, including National Aeronautics and Space Administration (NASA), Department of Commerce/National Oceanic and Atmospheric Administration (DOC/NOAA), and the United States Air Force Spectrum Management Office (AFSMO). Any use of Federal ground stations must be coordinated by Basalt's Federal government customers with AFSMO (jimmy.nguyen@us.af.mil), NASA (HQ-SatCoord@mail.nasa.gov) and DOC/NOAA (spectrum.coordinator@noaa.gov). A list of coordinated non-Federal earth stations is attached in the Appendix. Basalt must provide the FCC with an updated list of coordinated non-Federal earth stations within ten business days following any changes to that list.
5. To protect NOAA radiosondes operations in the United States, operations in the 401.2 MHz (space-to-Earth) frequency must not exceed the long-term interference criteria limit of -162.4 dBW, as specified in Table 2 (Type C) of Recommendation ITU-R RS.1263-3.
6. We previously dismissed Basalt's request for a waiver to operate in the 2025-2110 MHz band to conduct SOS, along with EESS as moot.⁹ Basalt's operations must not cause

⁵ See *BSLT-3 Partial Grant* at Condition 1.

⁶ We previously granted this waiver with respect to Basalt's operations with the BSLT-3 satellite. See *BSLT-3 Partial Grant* at Condition 2. We now grant this waiver with respect to the entire Spirit-EEL constellation.

⁷ See Appendix.

⁸ See Application, Narrative at n. 2. Basalt explains that "each satellite [will] have a UHF (space-to-Earth) beacon with an automatic cessation mechanism that would support only the mission's commissioning phase (first three days)."

⁹ See *BSLT-3 Partial Grant* at Condition 12.

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- harmful interference to, or claim protection from, stations of primary services to which frequencies are already assigned or to which frequencies may be assigned at a later date.
7. Basalt's earth station transmissions in the 2025-2110 MHz band must be coordinated with fixed and mobile stations in the band (e.g., via the Society of Broadcast Engineers (SBE)).
 8. Basalt's uplink (Earth-to-space) transmissions to the Spirit-EEL constellation in the 2025-2110 MHz band from Awarua, New Zealand must not exceed the duty cycle of 14% when there is line-of-sight with NOAA's SWFO satellite (NORAD ID: TBD).
 9. For downlink (space-to-Earth) transmissions centered at 2268.8 MHz, Basalt must limit the maximum Spirit-EEL duty cycles to 36.4% per earth station.
 10. The U.S. Table allocates the 2200-2290 MHz band, inter alia, to SOS (space-to-Earth) on a secondary basis for non-Federal use.¹⁰ Basalt's operations in the band will be outside of the United States only. We authorize Basalt to operate in this band subject to the laws, regulations and requirements applicable to any such operations in foreign jurisdictions. Transmissions within the space operations service must be strictly limited to durations when Basalt's Spirit-EEL space stations referenced in this license are visible to corresponding earth station locations listed in the Appendix of this grant, subject to any additional restrictions in this grant.¹¹
 11. Basalt's transmissions in the 2025-2110 MHz and 2200-2290 MHz bands may only be made to/from Federal earth stations or non-Federal earth stations coordinated with NASA, AFSMO, DOC/NOAA, and the Department of the Navy (DON). A list of coordinated non-Federal earth stations is attached in the Appendix.¹² Basalt must provide the FCC with an updated list of coordinated non-Federal earth stations within ten business days following any changes to this list.
 12. Unless extended by the Commission for good cause shown, this authorization will become null and void in the event that the Spirit-EEL space stations are not constructed and launched in accordance with the schedule set forth below:¹³
 - a. In the event two Spirit-EEL satellites have not been launched and placed into the assigned orbit and begun operations in accordance with this grant by February 24, 2027, Basalt must post a surety bond in satisfaction of 47 CFR § 25.165(a) no later than February 24, 2027, 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)(1);

¹⁰ 47 CFR § 2.106(a).

¹¹ See Appendix.

¹² *Id.*

¹³ Under section 25.164(h) of the Commission's rules, satellite authorization applications granted in different stages are subject to the earliest of the milestone schedules for the entire satellite system. 47 CFR § 25.164(h). Basalt requests that we find it to have satisfied the milestone requirement with respect to its first satellite, BSLT-3. See Letter from George John, Counsel, Basalt Technologies Corp., to Marlene H. Dortch, Secretary, FCC, ICFS File No. SAT-LOA-20250310-00067 (dated Jul. 15, 2026) (Basalt July 2026 Letter); see also *BSLT-3 Partial Grant* at Condition 13. Given the requirement in 47 CFR § 25.164(h) to apply the earliest milestone schedule to applications granted in different stages, we decline to conclude that Basalt has satisfied its section 25.164(b)(1) milestone requirement and apply the same milestone requirement to the full Spirit-Eel constellation.

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b. Basalt must launch the remaining Spirit-EEL space station, place it into its assigned orbit, and operate it in accordance with this grant no later than January 24, 2032.¹⁴ c. Failure to post and maintain the surety bond will render this grant null and void without further Commission action. Failure to meet the milestone requirements of 47 CFR § 25.164(b) may result in reduction of Basalt's authorization to the number of satellites in use on the milestone date. Failure to comply with the milestone requirement will also result in the forfeiture of Basalt's surety bond.¹⁵ 13. The license term is six years and began on May 3, 2026.¹⁶ 14. Basalt must file a certification within five business days of placing each of the Spirit-EEL space stations into operation, and within 30 days after deployment of each Spirit-Eel satellite, Bassalt must file a notification with the Commission specifying its apogee and perigee altitudes and its orbital inclination. 15. We previously granted Bassalt's request for waiver of the requirements to submit certain information in the Schedule S form.¹⁷ 16. Bassalt's request for waiver of the application completeness requirements in section 25.112 of the Commission's rules, 47 CFR § 25.112, is DISMISSED as unnecessary.¹⁸		
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:	July 16, 2026	
Term Dates	From: May 3, 2026	To: May 3, 2032

¹⁴ 47 CFR § 25.164(b).

¹⁵ 47 CFR § 25.165(c).

¹⁶ See *BSLT-3 Partial Grant* at Condition 14. BSLT-3 was deployed and placed in its assigned orbit on May 3, 2026. See Basalt July 2026 Letter.

¹⁷ See *BSLT-3 Partial Grant* at Condition 11.

¹⁸ The Commission's rules allow the Space Bureau to seek additional information and permits applicants to supplement their applications. See 47 CFR §§ 1.65, 25.111(a).

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Approved:

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Acting Division Chief, Satellite Programs and Policy Division
Space Bureau

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Appendix
Earth Stations

Transmit and Receive

San Francisco, CA USA	(UHF transmit/receive; S-band transmit only)
Dundee Scotland	(S-band)
Dubai, UAE	(S-band)
Awarua, New Zealand	(S-band)
Guildford, United Kingdom	(S-band)
Zallaq, Bahrain	(S-band)
Singapore	(S-band)
Cordoba, Argentina	(S-band)
Dublin, Ireland	(S-band)