

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of

Application of RBC Signals, LLC for a	)	
60-Day Special Temporary Authorization	)	Call Sign: E220185
to Operate with Non-Geostationary Orbit	)	
Spacecraft	)	File No.:
	)	

**REQUEST FOR 60-DAY SPECIAL TEMPORARY
AUTHORIZATION
(6-Meter Antenna S-Band Uplink and X-band Downlink Deadhorse,
Alaska)**

RBC Signals, LLC (“RBC Signals”), pursuant to Section 25.120 of the Commission’s rules, 47 C.F.R. § 25.120, respectfully seeks a 60-day special temporary authorization (“STA”) to operate its fixed 6-meter earth station in Deadhorse, Alaska (the “6m”) to conduct telemetry, tracking, and command (“TT&C”) and payload uplink in portions of the 2025- 2100 MHz band (Earth-to-space) band and TT&C and payload downlink (Space-to-Earth) operations to support the U.S.-licensed satellite Earendil-1¹ scheduled to launch on a Space X Transporter 18, planned for October 2026.

RBC Signals will be filing a modification to its earth station application for this same ground system (E220185) to add this satellite constellation as a point of communication to its earth station license². RBC Signals respectfully requests the Commission grant this 60-day STA to allow it to provide necessary TT&C support during the pendency of the application for longer-term authority. A grant of this STA will allow for payload and TTC support for the Earendil system while the longer-term license works through process.

¹ See Reflect Orbital File No. SAT-LOA-20250701-00129 Call Sign S00711 (Public Notice Feb. 6 2026)

²See RBC Signals, LLC, File No. SES-LIC-20221121-01273, Call Sign E220185 (Granted Nov. 4th 2024).

I. DISCUSSION

RBC Signals is a Redmond, Washington-based company providing innovative earth station services in the United States and around the world both to U.S. government and commercial clients. RBC Signals has provided similar ground station support for multiple spacecraft from this system as well as the ones located nearby at the “Lease Site” and 4.5m earth station with no resulting harmful interference. RBC Signals will continue to ensure that its operations will not cause harmful interference to current or future co-frequency operations and that the interests of the United States are accommodated.

RBC Signals seeks to provide TT&C and payload uplink communications using the 6m antenna in portions of the 2025-2110 MHz (Earth-to-space) band and TT&C and payload downlink in portions of the 8000-8500 MHz band (Space-to-Earth) to support U.S.-licensed satellite operations, as described below.

A. Satellite Overview

Reflect Orbital is deploying Earendil-1 to test the deployment and operation of a highly specular thin film reflector to test sunlight reflection. RBC Signals incorporates by reference the technical and public interest considerations set forth in the underlying satellite applications filed by the satellite operator and highlights the need for TT&C support for this U.S.-licensed satellite.

³ See, e.g., *RBC Signals, LLC*, File Nos. *SES-STA-20250721-00546*, *SES-LIC-20230816-01986*, *1248-EX-CN-2023*, *SES-STA-20250604-00870*

⁴ See, e.g., *RBC Signals, LLC*, File Nos. *SES-LIC-20220509-00468*, *SES-STA-20231106-02412*, *0570-EX-CN-2024*

B. Summary of Frequency Use

Earendil utilizes the frequencies below:

Center Frequency (MHz)	Bandwidth	Direction
2040.346	288 KHz, 576 KHz, 1.16 MHz	Earth to Space
2047.654	288 KHz, 576 KHz, 1.16 MHz	Earth to Space
8495	2.6 MHz, 5.19 MHz	Space to Earth

C. Frequency Allocations and Compatibility

The United States Table of Frequency Allocations (“Table of Allocations”), Section 2.106 of the Commission’s rules, 47 C.F.R. § 2.106, provides that the 2025-2110 MHz band is allocated on a primary basis to non-Federal terrestrial fixed and mobile services. Non-federal Earth-to-space transmissions may be authorized on a case-by-case basis for space research and Earth exploration-satellite service (“EESS”) operations, so long as such operations are conducted on a non-interference basis with Federal and non-Federal users of the band.⁶ RBC Signals will operate these links on a non-interference basis, as required by the Table of Allocations.

The Table of Allocations also provides that the 2025-2110 MHz band is allocated on a primary basis to space operations, EEES, and space research. In the United States, space operations are limited to federal operators, and EEES use by commercial operators is subject to conditions as may be applied on a case-by-case basis and the limitation that any use may not cause harmful interference to authorized operations. RBC Signals understands that there are certain U.S. government operations conducted in the 2025-2110 MHz band, including use by the National Aeronautics and Space Administration (“NASA”).⁷ RBC Signals will continue its coordination efforts with NASA and other government agencies to ensure compatibility of the proposed operations.

⁶ See 47 C.F.R. § 2.106, fn. US347

⁷ See https://www.ntia.doc.gov/files/ntia/publications/compendium/2025.00-2110.00_01MAR14.pdf.

D. Frequency Coordination and Interference

Previous coordination reports which supported these antennas as well as the nearby “Lease Site” and 4.5 meter earth station show no interference cases. RBC Signals understands that the satellite operators have coordinated access to the required frequencies for their respective operations. Nonetheless, RBC Signals will operate the 6m antenna on an unprotected, non-interference basis and if RBC Signals learns that its operations are causing harmful interference to other operations, it will suspend or modify its operations immediately to resolve such interference.

The 24/7 point of contact for the proposed operations is:

John Ames
RBC Signals Operations
Email: john.ames@rbcsignals.com
Mobile: 719.502.6206

E. Waiver Request

To the extent necessary, RBC Signals requests waiver of the Table of Allocations to permit the proposed TT&C transmit operations in the 2025-2110 MHz band. Specifically, a waiver may be appropriate to the extent the Commission concludes that any of the proposed operations do not conform to the available non-Federal allocations in the band.

The Commission may waive any of its rules for “good cause” shown.⁸ In general, waiver is appropriate if (i) special circumstances warrant a deviation from the general rule; and (ii) such deviation would better serve the public interest than would strict adherence to the rule.⁹ Special circumstances justify grant of the requested waivers and grant will not undermine the policy objectives of the rules and will otherwise serve the public interest.

Given RBC Signals’ limited spectrum use, prior use of the same frequency bands for the same classifications of operations using the Deadhorse 6m antenna without interference incident, and successful coordination of these frequencies, the public interest would be served by permitting the Deadhorse 6m antenna to support the operations of the satellites identified herein. RBC Signals will continue to ensure that its earth station transmit operations do not increase the potential for interference into current or future U.S. government or commercial users. RBC Signals therefore respectfully requests, if a waiver is needed, that it be granted by the Commission.

⁸ See 47 C.F.R. § 1.3; *Northeast Cellular Tel. Co. v. FCC*, 897 F.2d 1164 (D.C. Cir. 1990); *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969).

⁹ See *Northeast Cellular*, 897 F.2d at 1166; see also *WAIT Radio*, 418 F.2d at 1157.

F. Public Interest Consideration

RBC Signals is at the forefront of reinventing TT&C and earth station support solutions and grant of the requested application would promote U.S. leadership in innovative satellite technologies and services. RBC Signals will conduct all operations in accordance with the Commission's rules and requirements. RBC Signals incorporates by reference the public interest considerations included in the satellite application, as well as the operational specifications included in the authorizations, of the subject spacecraft.¹⁰

Grant of this application will further the public interest by enabling TT&C support for the Earendil missions. In addition, there have been no instances of harmful interference from TT&C uplink operations at this or nearby facilities in the subject spectrum and RBC Signals will continue to ensure interference-free operations from its Deadhorse 6m antenna.

II. CONCLUSION

Based on the foregoing, RBC Signals respectfully requests that the Commission grant this 60-day STA to enable the Deadhorse 6m antenna to provide TT&C and payload uplink and downlinks services for the Earendil mission as requested herein.

¹⁰ RBC requests leave to update the technical or operational data associated with this application should the Commission seek any clarifying or supplemental information in considering this request.

EXHIBIT A

RBC Signals, LLC – Application for ground station operations to support the Earendil-1 mission from its Deadhorse 6m Antenna in Deadhorse, Alaska Call Sign E220185

Antenna 1	
Antenna Description	Seatel Tracker 6000
Antenna size	6m
Transmit Center Frequency	Summarized Below
Receive Center Frequency	N/A
Polarization	Right Hand Circular
Transmit Gain	34.1 dBi
Latitude (NAD83)	70°12'42.0"N
Longitude (NAD83)	148° 24' 43.0" W
Emission Bandwidths	Maximum EIRP Density per Carrier dBw/4kHz
288 kHz	36.42
576 kHz	33.42
1.16 MHz	30.38

Point of Communication	
Satellite	Earendil-1
Call Sign	S00711
Satellite Type	NGSO
Orbit*	510-625 km; 88° inclination

