

**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: E230151
Extension to Operate with Non-	)	
Geostationary Orbit Spacecraft	)	File No.: Extension of SES-STA- 2025060400870, License SES-MOD-20241024-02204

**REQUEST FOR 60-DAY SPECIAL TEMPORARY
AUTHORIZATION EXTENSION
(3.9m Antenna S-band Uplink – 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 an extension of its 60-day special temporary authorization (“STA”) to operate its fixed 3.9-meter earth station in Deadhorse, Alaska (the “Deadhorse 3.9m”) to conduct telemetry, tracking, and command (“TT&C”) uplink operations in portions of the 2025- 2100 MHz band (Earth-to-space) band to support the U.S.-licensed GHOS^t constellation of satellites (1-6).

RBC Signals is pursuing an earth station application to add this antenna and satellites as points of communication to its Deadhorse location¹. In preparation for that filing, RBC Signals respectfully requests the Commission grant this 60-day STA extension to allow it to provide necessary TT&C support during the preparation and pendency of its application for longer-term authority.

¹See SES-MOD-20241024-02204 Filed 10/24/2024 for Callsign E230151

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 the nearby Deadhorse 3.7m, 6.0m² and 4.5m earth station with no resulting harmful interference. RBC Signals will continue to ensure that its TT&C 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 uplink communications using the Deadhorse 3.9m in portions of the 2025-2110 MHz (Earth-to-space) band to support U.S.-licensed satellite operations, as described below.

A. Satellite Overview

Orbital Sidekick has been authorized to operate the GHOS-1-6 satellites,³ all of which were launched on a series of SpaceX Transporter missions. RBC Signals incorporates by reference the technical and public interest considerations set forth in the underlying satellite applications filed by the satellite operators and highlights the need for TT&C support for these U.S.-licensed satellites.

² See, e.g., RBC Signals, LLC, File Nos. SES-STA-20230123-00086 (granted Mar. 30, 2023), SES-STA-20221014-01134 (granted Dec. 14, 2022), and SES-STA-20220929-01060 (granted Nov. 28, 2022).

³ Orbital Sidekick, Inc., File No. SAT-LOA-20220325-00035, Call Sign S3139 (granted Dec. 7, 2022).

B. Summary of Frequency Use

In Table 1 below, RBC Signals presents information on the frequencies requested herein, which are identical for all proposed satellite points of communications and within the range previously coordinated for use by the Deadhorse 3.9m earth station.⁵

Table 1 - Summary of Frequency Use

Satellite	Transmit Center Frequency MHz	Emission Designator
GHOST Constellation	2055	300KG1D

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, EECS, and space research. In the United States, space operations are limited to federal operators, and EECS 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

⁵ See *supra* n. 1 and 2.

⁶ See 47 C.F.R. § 2.106, fn. US347.

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.

D. Frequency Coordination and Interference

Previous coordination reports which supported the nearby Deadhorse 3.7m, 6.0m 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. RBC Signals notes that it has operated in the subject transmit spectrum using the Deadhorse 6.0m, 4.5 meter and 3.7m without any harmful interference incidents.

Nonetheless, RBC Signals will operate the Deadhorse 3.9m 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

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

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 frequencies for the same operations using the Deadhorse 3.9m without interference incident, and successful coordination of these frequencies, the public interest would be served by permitting the 3.9m Earth Station 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.

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.

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.

Grant of this application will further the public interest by enabling TT&C support for the GHOS-1-6 missions. In addition, there have been no instances of harmful interference from TT&C uplink operations at this facility in the subject spectrum and RBC Signals will continue to ensure interference-free operations from its Deadhorse 3.9m earth station.

II. CONCLUSION

Based on the foregoing, RBC Signals respectfully requests that the Commission grant this 60-day STA extension to enable the Deadhorse 3.9m to continue to provide TT&C uplink services GHOS-1-6 as requested herein until the license modification can complete for a longer term authorization.

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 GHOS-1-6 from its 3.9 meter earth station in Deadhorse, Alaska

Antenna	
Antenna Description	Safran Legion 400
Antenna size	3.9m
Transmit Center Frequency	2055 MHz
Transmit Bandwidth	300 KHz
Transmit Gain	36.7 dB
Transmit EIRP	50 dBw
EIRP Density Per Carrier dBW/4KHz	41.8
Receive Center Frequency GHz	25.725, 26.25, 26.775, 26.8
Receive Polarization	Right Hand Circular
Receive Bandwidth	450, 450, 450, 86.4 MHz
Latitude (NAD83)	70° 11' 28.71" N
Longitude (NAD83)	148° 26'0.93" W
Point of Communication	
Satellite	GHOS-1-6
Call Sign	S3139
Satellite Type	NGSO
Orbit	525 km; 97.5° inclination

