Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of

Amendment of Application of RBC Signals, LLC for an Earth Station License to Operate with Certain Low-Earth Orbit Non-Geostationary Satellite Orbit Cubesats	))))	Call Sign: E180010 File Nos. SES-LIC-20180201-00081 and SES-AMD-_____

APPLICATION AMENDMENT

RBC Signals, LLC ("RBC Signals"), pursuant to Section 25.116(a) of the Commission's rules, 47 C.F.R. § 25.116(a), hereby amends its pending application for a fixed earth station license, Call Sign E180010,[1] by: (i) removing certain satellite points of communication; (ii) increasing the antenna quantity; and (iii) updating the location of the earth station facility. The remaining information provided in the application to provide tracking, telemetry, and command ("TT&C") and mission downlink services for low-Earth orbit ("LEO") cubesats has not changed. Grant of the application, as amended, will serve the public interest by facilitating the development and commercial deployment of next-generation LEO satellites.

I. DISCUSSION

RBC Signals seeks to update certain information regarding its proposed earth station operations from the Deadhorse, Alaska facility. First, RBC Signals no longer seeks to add the U.S.-licensed Arkyd 6A and Arkyd 6B cubesats as authorized points of communication under its earth station license. RBC Signals will no longer operate in the 449.93-450.07 MHz (Earth-to-space), 450.20-450.25 MHz (Earth-to-space) or 401.43-401.57 MHz (space-to-earth) bands and removes its request to operate the 450 MHz Yagi earth station.

[1] *See* RBC Signals, LLC, File No. SES-LIC-20180201-00081, Call Sign 180010.

Second, RBC Signals seeks to increase the total number of the 400 MHz Yagi[2] earth stations that it will operate from the Deadhorse, Alaska facility. In the Form 312 Schedule B, RBC Signals indicated it would operate one (1) 400 MHz Yagi earth station. RBC Signals updates its application to request authority to operate a total of five (5) 400 MHz Yagi earth stations, each dedicated to a specific satellite mission. The increase in antenna quantity will allow RBC Signals to more effectively serve its satellite customers.

RBC Signals submits an amended Form 312 Schedule B with this filing, which updates the satellite points of communication and antenna count, and removes the 450 MHz Yagi. Table 1, below, provides an updated overview of RBC Signals' operations with each proposed satellite point of communication, including antenna quantities.

Table 1. Proposed Satellite Points of Communication [Updated]

Satellites	Satellite Operator	Frequency Bands (MHz)	Service	Associated Earth Station(s)
Landmapper-BC	Astro Digital US Inc.	402.58-402.62; 402.88-402.92	TT&C Uplink	400 MHz Yagi
		400.155-400.195; 400.48-400.52	TT&C Downlink	
		25500-27000	Mission Data Downlink	ViaSat 5.4m
Blue Diamond Red Diamond Green Diamond	Sky and Space Global Ltd. (UK)	399.926-399.950	TT&C Uplink	400 MHz Yagi (x2)
		401.05-401.25	TT&C Downlink	
Astranis Demosat-2	Astranis Space Technologies Corporation	401.6-401.75	TT&C Uplink	400 MHz Yagi (x2)
			TT&C Downlink	

[2] The M2 Antenna Systems Model 400CP30A.

Grant of earth station authority, including this amendment, will allow RBC Signals to perform long-term support functions to facilitate the development of next-generation cubesats. In addition to the amended Form 312 Schedule B, RBC Signals submits an amended Technical Appendix, which reflects RBC Signals' revised scope of operations. In addition, RBC Signals incorporates by reference the satellite mission and spectrum use discussions in the original application narrative, including associated waiver requests.[3]

Finally, as reflected in the amended Form 312 Schedule B, RBC Signals updates the geographic coordinates of the Deadhorse, Alaska facility. To provide more reliable ground station support, RBC Signals has relocated its Deadhorse, Alaska earth station operations to a facility that is less than 1 km westward from the originally proposed facility. RBC Signals anticipates operations from this facility, which is in a less densely populated area and closer to the shoreline of Colleen Lake, will reduce the potential for interference to other users and enhance operations in the subject bands. Nonetheless, if RBC Signals learns that its operations are causing harmful interference to other operations, it will suspend or modify its operations to resolve such interference.

II. PUBLIC INTEREST

RBC Signals' earth station operations, as requested in the application and amendment, will support diverse EESS systems and applications from asset tracking and atmospheric monitoring services (including emergency response and natural resource protection) to the development of affordable narrowband mobile communication services to users in Asia, Africa, and Latin America. Moreover, the requested authority will facilitate U.S.-based ground support for state-of-the-art

[3] *See Earth Station License Application*, Legal Narrative, III (requesting waivers of Sections 2.106, 25.114 and 25.137 of the Commission's Rules, 47 C.F.R. §§ 2.106, 25.114 and 25.137).

cubesats providing innovative satellite services that will improve how individuals, governments, and businesses send, receive, and process critical data and information.

Grant of this earth station license will further the public interest by positioning the United States as a leader in the development and encouragement of pioneering satellite technologies. The satellites that RBC Signals proposes to support are at the forefront of reinventing satellite connectivity solutions and grant of a license would further cement U.S. dedication to the advancement of satellite services in the United States.

III. CONCLUSION

Based on the foregoing, RBC Signals respectfully requests that the Commission grant its earth station license application, as amended, to provide TT&C and mission support services from a facility in Deadhorse, Alaska.