

APPLICATION

Microsoft Infrastructure Group, LLC (“Microsoft”) respectfully requests authority to operate two CGC 6.1-meter antennas in Quincy, Washington (“Quincy Earth Station”).¹ The Quincy Earth Station will communicate with Planet Labs Inc.’s (“Planet Labs”) FCC-authorized SKYSAT (Call Sign S2862) non-geostationary satellite orbit (“NGSO”) Earth Exploration Satellite Service (“EESS”) system.

Public Interest Showing

The Quincy Earth Station will enable Earth Observation (“EO”) customers to access Microsoft Azure’s cloud computing network and securely download and process EO data. With growing demand for EO services such as disaster prediction and tracking, increased visibility of supply chains and economic activity, and many others, granting the requested Quincy Earth Station license will serve the public interest by facilitating these critical services and paving the way for Microsoft to offer a new, advanced service for EO customers located throughout the U.S. and elsewhere. This application seeks authority to communicate with the Planet Labs SKYSAT satellite system. Microsoft may seek to add additional points of communication through future applications.

Frequency Plan

The Quincy Earth Station will communicate with the SKYSAT system using its FCC-authorized frequency ranges:

Frequency Band (MHz)	Use
X-band: 8025-8400 MHz	Downlink
S-band: 2025-2110 MHz	Uplink

The antennas will receive in the 8025-8400 MHz band, which is allocated in the U.S. Table of Frequency Allocations on a primary basis to non-government EESS, subject to a case-by-case electromagnetic analysis of compatibility with U.S. government and other authorized operations in the band (footnote US258). Microsoft will complete all necessary coordination with Federal stations.

The Quincy Earth Station will transmit in the 2025-2110 MHz band. This band is authorized for EESS use “subject to such conditions as may be applied on a case-by-case basis” and provided that “[s]uch transmissions shall not cause harmful interference to Federal and non-

¹ These antennas were previously authorized under Experimental Special Temporary Authority, Call Sign WQ9XZJ (granted Sep. 2, 2020). In response to items E11/E12 of the Form 312, Schedule B, Microsoft has provided the NAD-83 coordinates for the antennas. The WGS84 coordinates for the site are very similar: 47° 14’ 22.021” N.L., 119° 53’ 5.552” W.L.

Federal stations operating in accordance with the Table of Frequency Allocations.”² Microsoft will coordinate the use of specific frequencies with Federal stations operating in accordance with the Table of Frequency Allocations. With respect to non-Federal stations, Comsearch has sent a coordination notice to all existing terrestrial licensees with the potential to receive interference within the coordination contours of the Quincy Earth Station. No objections have been received from any of the licensees. A copy of the Comsearch report is attached as **Exhibit 1**.

Conclusion

For the reasons stated herein, the Commission should grant the Quincy Earth station license to permit Microsoft to operate two CGC 6.1-meter antennas in Quincy, Washington.

² 47 C.F.R. § 2.106, footnote US347.