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Test Dates:	05/15/2022 – 05/15/2023

By the accompanying application and pursuant to Section 5.61 of the Rules and Regulations of the Federal Communications Commission (“FCC”), Omnispace LLC (“Omnispace”) hereby requests an Experimental Authorization for operation of conventional experimental radio service stations for a period of one year (12 months). This adds to the work of the Experimental Special Temporary Authorization granted under file numbers 0928-EX-ST-2020 and Experimental Radio Station Construction Permit and License 0928-EX-CN-2021 (Call Sign WQ9XRG) necessary in order to provide a demonstration via prototype terminals that will communicate with newly launched Low Earth Orbit (“LEO”) satellites.

Description of Equipment and Testing

The terminals that would be tested under this experimental license would communicate with “OMNI-L1” that was launched successfully on April 1, 2022, from Cape Canaveral by SpaceX and is now on-orbit, and with “OMNI-L2” that will be launched in mid-2022. Both satellites are owned and operated by Omnispace LLC.

The payload frequencies for OMNI-L1 and OMNI-L2 are in the S Band – i.e., 1980-2025 MHz uplink and 2160-2200 downlink, which are notified at the ITU by the National Information and Communication Technology Authority of Papua New Guinea (“PNG”).

By this Experimental Authorization request, Omnispace proposes to transmit and receive signals via OMNI-L1 and OMNI-L2 with an experimental prototype terminal with the following specifications:

Uplink (Tx):	1996-1998 MHz
Downlink (Rx):	2186-2188 MHz
Emission Designator:	800G2D, 150KG7W, 308KG2D, 1M7G2D
Max ERP:	3.15W

The portion of the S Band to be used for prototype testing consists of uplink frequencies in the H block of the Personal Communications Service (“PCS”) band and downlink in the AWS-4 band. Omnispace will coordinate its operations with the appropriate licensee in the H block and AWS-4 band respectively in the Gainesville, Georgia area and will cease operations immediately upon notification of harmful interference to their operations.

Upon grant of the requested Experimental Authorization, Omnispace will conduct testing within a ten-kilometer radius of the remote location listed below on a non-interference basis. Omnispace will deploy one terminal at the following location:

Location	Address	County	Coordinates
Gainesville, Georgia	4929 Gair Loch Lane Gainesville, GA 30506	Hall	N 34°38'90.51" W 84°82'15.57"

Public Interest Statement

As a follow on to the testing that Omnispace and the U.S. Space Force are conducting under the FCC’s experimental STA 0800-EX-ST-2020 (Call Sign WQ9XMR), Omnispace continues to develop equipment to provide low cost, power efficient IoT services over satellite. This Experimental Authorization is required in order to field test promising solutions and to perfect the air interface (modulation and access layer) to ensure best performance to newly launched OMNI-L1 and soon to be launched OMNI-L2 satellites from a location in Gainesville, Georgia. We believe this testing, which as noted above will be conducted on a non-interference basis, serves the public interest as it will be analyzing additional equipment to assist with building future communications capabilities for commercial use, as well as the U.S. military and government to further U.S. national security objectives.

If there are questions concerning this application, the FCC is asked to contact Mindel De La Torre, Chief Regulatory and International Strategy Officer for Omnispace, at mdelatorre@omnispace.com or 202-930-5935.