| Name: | Omnispace LLC |
|--------------------|---|
| Applicant: | Mindel De La Torre |
| Address: | 8255 Greensboro Drive, McLean, VA 22102 |
| Phone: | 202-930-5935 |
| Email | mdelatorre@omnispace.com |
| Test Dates: | 1/31/2023 – 1/1/2024 |

This is a simple amendment of the Experimental License granted by OET with the call sign WN2XEM, file number 1343-EX-CN-2022, to add two locations. Omnispace LLC ("Omnispace") hereby requests that our headquarters office location (Tysons, Virginia) and our gateway location (Brewster, Washington) be added to the Experimental License for operation of conventional experimental radio service stations for a period ending 1/1/2024. The devices and spectrum requested are all consistent with that in call sign WN2XEM granted by OET on January 9, 2023.

Description of Equipment and Testing

The MEO satellite with which the terminals will communicate, referred to as "F2," was launched in June 2001 by ICO Global Communications ("ICO") but is now owned and operated by Omnispace LLC. The FCC has previously granted Omnispace a variety of STAs and Experimental Authorizations for testing with the F2 MEO satellite, including most recently call sign WN2XEM, file number 1343-EX-CN-2022, which this application is requesting to amend to add two new locations.

F2 operates in two frequency bands: the Telemetry, Tracking, and Command ("TTC") frequencies and the payload frequencies. The TTC frequencies are in the C Band – i.e., 5150-5250 MHz uplink and 7000-7025 MHz downlink are licensed by the FCC for the Brewster, Washington, gateway (one of the two locations included in this amendment request) – and are notified at the International Telecommunication Union by OFCOM of the United Kingdom. The payload frequencies are in the S Band – i.e., 1985-2015 MHz uplink and 2170-2200 downlink, which are notified at the ITU by the National Information and Communication Technology Authority of Papua New Guinea ("PNG").

By this request to amend the Experimental License with two new locations, Omnispace proposes to continue to transmit and receive signals via F2 with an experimental prototype terminal with the same specifications in call sign WN2XEM, file number 1343-EX-CN-2022:

| Uplink (Tx): | 1995-1997 MHz |
|--------------|---------------|
|--------------|---------------|

| Downlink (Rx): | 2198-2200 MHz |
|-----------------------------|---------------|
| Emission Designator: | 150KG7W |
| Max EIRP: | 2W |

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 Brewster, Washington and Tysons, Virginia areas and will cease operations immediately upon notification of harmful interference to their operations.

Upon grant of the requested amended Experimental Authorization, Omnispace will conduct testing within 5 km radius of the location listed below on a non-interference basis. Omnispace will deploy one terminal at a time at the following location:

| Location | Address | County | Coordinates |
|------------------|---|---------|--------------------------------|
| Tysons, Virginia | 8255 Greensboro Drive Tysons, VA 22102 | Fairfax | N 38° 55' 19" W 77° 13' 49" |

Upon grant of the requested amended Experimental Authorization, Omnispace will conduct testing at the location of Omnispace's gateway in Washington state listed below on a non-interference basis. Omnispace will deploy one terminal at a time at the following location:

| _ | Location | Address | County | Coordinates |
|---|------------|--------------------|----------|----------------|
| | Brewster, | 66C Teleport Drive | Okanogan | N 48° 08' 50" |
| | Washington | Brewster, WA 98812 | | W 119° 41' 34" |

Public Interest Statement

To continue the testing that Omnispace is conducting under the FCC's experimental license 1343-EX-CN-2022 (Call Sign WN2XEM), Omnispace continues to develop equipment to provide low cost, power efficient IoT services over satellite. This request to amend the experimental license 1343-EX-CN-2022 is required in order to field test promising solutions and to perfect the air interface (modulation and access layer) to ensure best performance to our current in-orbit F2 satellite from our headquarters office in Tysons, Virginia and our gateway location in Brewster, Washington. Omnispace has been focusing on state-of-the-art developments in the satellite industry and has been actively participating in the next generation non-terrestrial network standards at 3GPP that are included in Release 17. To that end, Omnispace would like to continue to test new advancements in air interfaces, including innovative small devices for satellite communications. 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.