Omnispace LLC Application for Modification of Experimental License Form 442, Exhibit 1

Application for Modification of Experimental License

Omnispace LLC ("Omnispace") hereby requests a modification of its experimental license with call sign WH2XXM. As discussed in its initial application, Omnispace uses this license to test and develop prototype terminals that will communicate with an existing Medium Earth Orbit ("MEO") satellite. Omnispace now requests authorization to conduct additional, similar tests at remote terminals near Huntsville, Alabama and Sperryville, Virginia.

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"). F2 was registered under the Convention on Registration of Objects Launched into Outer Space by the United Kingdom. F2 has never been used for commercial services. In 2012, Omnispace bought the F2 satellite and proceeded with developing a business plan by which the satellite could be used for commercial services.

The 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 – and are operated under the authority of the United Kingdom. The payload frequencies are in the S Band – *i.e.*, 1985-2015 MHz uplink and 2170-2200 downlink. In 2012, Omnispace entered into an arrangement with Papua New Guinea ("PNG") pursuant to which PNG registered the S Band frequencies with the International Telecommunication Union and authorized Omnispace to operate F2 using such frequencies. Primary satellite control is provided by Intelsat, Ltd. ("Intelsat") from its control center in Long Beach, California. The control signals are transmitted by fiber optics to a third-party-owned C Band uplink facility in Brewster, Washington. These arrangements with Intelsat and the uplink operator. The S Band frequencies have not been in commercial operation. Omnispace uses its experimental license to transmit signals from the prototype terminals to F2 on the 1990.0-1990.6 MHz band and receive signals from F2 on the prototype terminals on the 2175.0-2175.6 MHz band.

Omnispace has discussed its proposed additional operations with the sole 1990-1990.6 MHz and 2175.0-2175.6 MHz licensee in the proposed new operating areas, Sprint/Nextel. As demonstrated through the letter included here as Attachment 1, Sprint/Nextel has consented to Omnispace's operations on the S Band frequencies specified herein. Omnispace will coordinate its operations with Sprint/Nextel and will cease operations immediately upon notification of harmful interference to Sprint/Nextel's operations.

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Upon grant of the requested modification, Omnispace will conduct testing within a ten-mile radius of the remote locations listed below. Omnispace will deploy no more than three terminals at each of the following locations:

Location	Address	County	Coordinates
Sperryville, VA	11871 Lee Highway	Rappahannock	N 38° 39' 07.16"
	Sperryville, VA 22740		W 78° 15' 12.9"
Princeton, AL	51 County Road 3	Jackson	N 34° 50' 37.94"
	Princeton, AL 35766		W 86° 14' 34.01"

Because the F2 satellite is only visible in the United States a few hours each day, Omnispace will conduct testing at intervals of no more than two hours at a time. Total testing time will not exceed five hours each day while the license is valid.

Program Objectives and Contribution to the Development of the Radio Art

Omnispace's objective in conducting the research described above is to test the technical capabilities of prototype terminals with the F2 satellite. Upon successful completion of testing, which – as noted above – will occur on a non-interference and coordinated basis, Omnispace intends to pursue the manufacture of commercial terminals for deployment primarily in remote regions of the world. Services using F2 and the terminals are expected to reach and provide many benefits to individuals in remote locations and other service points around the globe. Accordingly, grant of this modification will foster the transformation of the unused F2 resource into a satellite with related terminals that can provide innovative services that will benefit the public.

If there are questions concerning this application, the FCC is asked to contact communications counsel for Omnispace, Sallye Clark of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. at 202.434.7405 or <u>sclark@mintz.com</u>.

Attachment 1



September 16, 2016

VIA EMAIL

Joseph Bravman Ph.D Omnispace LLC 21700 Atlantic Boulevard, Suite 240 Sterling, VA 20166

Re: Omnispace Experimental License Additional Test Locations

Dear Dr. Bravman:

Sprint Corporation, on behalf of its wholly owned subsidiary, Nextel West Corp. ("Sprint"), hereby provides this letter of concurrence to Omnispace, LLC for amendment of its Experimental Authorization ("Experimental"), File Number 0415-EX-PL-2015, Call Sign WHZ2XXM. Sprint understands that Omnispace is seeking FCC authority to test its prototype terminals in additional locations with the F2 satellite launched by ICO Global Communications. The tests will be conducted using the F2 payload frequencies in the S Band – *i.e.*, 1990.0-1990.6 MHz uplink and 2175.0-2175.6 MHz downlink – at remote terminals near Huntsville, Alabama and Sperryville, Virginia. The prototype terminals will be tested and operated in accordance with the parameters set forth in the Experimental authorization. The proposed testing will be conducted on a non-interference basis and for intermittent periods of time, not to exceed an overall period of one year. Sprint and Omnispace will periodically review, at least once every six months, Omnispace's testing locations in order to confirm that Omnispace's testing activities are not interfering with Sprint operations in the test locations.

Sprint concurs to Omnispace's requests for additional test locations under its Experimental Authorization in Huntsville, Alabama and Sperryville, Virginia for testing of 1.9 GHz spectrum at 1990-1990.6 MHz for the additional one year period of time. Sprint is authorized under call signs WQKV571 (Huntsville, AL - TN) and WQKS987 (Washington-Baltimore, DC-MD-VA), which covers these two testing locations as indicated in the application provided by Omnispace.

Accordingly, Sprint concurs to the secondary use of 1990.0-1990.6 MHz in Huntsville, Alabama and Sperryville, Virginia. If there are any questions regarding this matter or additional information is required, please contact the undersigned at (703) 433-4212 or James.Goldstein@Sprint.com.

Sincerely,

Jomes & Blister

James B. Goldstein Senior Counsel Sprint Corporation Legal and Government Affairs 900 7th Street, NW Suite 700 Washington, DC 20001 (703) 433-4212 James.Goldstein@Sprint.com