March 19, 2013

Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street, SW Room TWA325 Washington, DC 20554

> Re: Application of Oceus Networks for Temporary Spectrum Use, File No. 0203-EX-ST-2013

Dear Ms. Dortch:

The First Responder Network Authority ("FirstNet") consents to the application of Oceus Networks ("Oceus") for special temporary authority ("STA") to conduct trials of deployable aerial communications architecture ("DACA") using standard commercially available LTE-based public safety user devices in the 758-768/788-798 MHz frequency band ("public safety broadband spectrum") licensed to FirstNet. Oceus and Space Data Corporation ("Space Data") (collectively "DACA Partners") seek to determine if emergency responders can use a near-space platform to restore LTE coverage rapidly following a disaster or to provide service where terrestrial LTE coverage is unavailable. Oceus states that it will file results from the trial in the Commission's DACA inquiry.¹

The DACA Partners propose initial flight tests at Space Data's facilities in Chandler, Arizona with live testing to occur in Boulder, Colorado. The proposed test would extend for a 92–day period from March 15, 2013 to June 15, 2013. The DACA Partners state that the Public Safety Research program (PSCR), a partnership of the National Telecommunications and Information Administration and the National Institute of Standards and Technology, will participate in data collection and utilize the PSCR public safety broadband testbed to monitor potential interference to existing systems.

The DACA Partners had obtained an STA previously, with the concurrence of the Public Safety Spectrum Trust. However, difficulties obtaining the necessary supply of user devices stalled the testing. The previous STA expired December 25, 2012.

FirstNet's concurrence is premised on temporary operations that conform to the following parameters:

- 1) The DACA Partners will conduct flight qualification testing near Space Data's headquarters in Chandler, Arizona. The equipment will include one aerial platform provided by Space Data with a payload to include a portable LTE base station and associated antenna. The focus of this test is to ensure that Space Data's command and control link can successfully turn on the base station. During live testing in Boulder, Colorado, the base station will transmit from about 65,000 feet in the 700 MHz public safety broadband spectrum. During the test, performance of the DACA platform with respect to coverage, interference to terrestrial systems in the same frequency, and to the PSCR test bed system will be closely monitored.
- Oceus requests authority from the FCC to operate over the 758-768/788-798 MHz bands, which are currently licensed on a nationwide basis to FirstNet.
- 3) Operation will begin when the Commission grants the requested STA and will continue for no longer than 92 days.

¹ Utilizing Rapidly Deployable Aerial Communications Architecture in Response to an Emergency, PS Docket No. 11-15, 27 FCC Rcd 6402 (2012).

- 4) The DACA Partners have analyzed information in the FCC's license databases and state that the proposed operation would not interfere with or create a significant potential for harmful interference to any public safety operations in the 700 MHz band. The Adams County, Colorado Communications Center (ADCOM911), is a Broadband Technology Opportunities Program public safety broadband system located in the vicinity of the Boulder testing. ADCOM911 has stated that it does not expect to be operational during the time of the proposed experiment. ADCOM 911 also states that there are no active public safety narrowband systems within its jurisdiction in the subject frequency bands. The City of Glendale, Arizona Police Department, an agency that operates narrowband public safety systems in the vicinity of the proposed flight testing, also has no objection.
- 5) The DACA Partners state that they will comply with all applicable Federal Aviation Administration regulations. Occus and the DACA Partners have also agreed to hold FirstNet and its officers, agents and employees, harmless from any liability, loss or damage that may occur from the completion of these tests.
- 6) Operation of the experiment will not be used in mission-critical operations or in the delivery of live transmissions in duties to protect life, property, or safety. Operations will be confined to test flights of approximately four hours each, with the possibility that repeat testing may be required within the 92-day period of the STA.
- 7) The DACA Partners have provided an overall project manager and a "stop-button" contact for these experiments. Douglas Sharp, director of engineering at Oceus, is the overall contact for the project and the "stop button" contact in case of interference. He may be reached at (720) 373-1515; <u>dsharp@oceusnetworks.com</u>.
- 8) The DACA Testing Partners understand that this experimental STA is non-renewable and that any Experimental STA use of radio frequencies licensed to FirstNet beyond the 92-day period to which this application refers must be made by a separate request for such use by the DACA Partners.

FirstNet concurs with the proposed operation by Oceus on certain frequencies currently licensed to FirstNet for purposes of testing the use of a near-space platform in rapidly restoration of LTE-based public safety operations following a disaster or in providing service where terrestrial coverage is unavailable. This consent is subject to the FirstNet's ongoing ability to monitor any operations and use of FirstNet's licensed spectrum.

Respectfully submitted,

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Susan G. Swenson Board Member First Responder Network Authority

cc: Genaro Fullano, Associate Chief Public Safety and Homeland Security Bureau Douglas Sharp, Director of Engineering Oceus Networks Janice Obuchowski, President Freedom Technologies Jay Chauhan, Counsel Freedom Technologies