



For January 24, 2002

Federal Communications Commission
Experimental Licensing Branch
MS 13001E1
445 12th Street, S.W.
Washington, DC 20554

Subject: Experimental Station License WB2XGM
2002 Annual Progress Report for File Number 0273-EX-PL-1999

Gentlemen:

Orbital Sciences Corporation through its Transportation Management Systems Division (Orbital TMS) hereby submits its 2002 Annual Progress Report for Call Sign WB2XGM, authorized under File Number 0273-EX-PL-1999. The communications equipment is located at 7160 Riverwood Drive, Columbia, MD 21046, in accordance with the license granted to Orbital TMS for the express purpose of experimental operations and technical demonstrations.

The following were our primary frequencies in use during the year:

Frequency	Station Class	Maximum Power Used
452.8 MHz	FX	75W (ERP)
457.8 MHz	MO	40W (ERP)
821.075 MHz	MO	30W (ERP)
821.387 MHz	MO	30W (ERP)
866.075 MHz	FX	160W (ERP)
866.387 MHz	FX	160W (ERP)

Propagation characteristics of the above listed frequencies are confined to within R.F. Loads or minimal area testing via vehicle. This minimal area encompasses approximately 13 circular miles of the TMS Lab location antennas. (The minimal area is a predetermined route for test purposes.) For customer demonstration and acceptance of systems, the 13 circular miles are adequate. Testing is performed via R.F. transmission so as to test the impact of environmental surroundings (I.E. Cosmic and man-made noise) upon the transmitted signals as well as data error rates.

Types of testing performed include voice and data transmission, with voice testing at minimal usage. This involves the use of various test frequencies within the above outlined ranges that simulate our users' systems. The company has coordinated the use of the frequencies with co-channel licensees or monitored the frequencies prior to use to ensure operation on a non-interference basis. Prototype testing is performed within the confines of the facility. However, when mobile operational testing has been required, the prototypes are confined within 13-miles of the facility. The number of prototypes used to facilitate data and voice operational tests are four for any listed frequency at any given time.

If you have any questions please feel free to contact me (443) 259-7015 or kilpatrick.michael@orbital.com. In the alternative, please contact our FCC counsel, Kurt E. DeSoto of Wiley Rein & Fielding LLP, 1776 K Street, N.W. Washington, DC 20006, at (202) 719-7235 or kdesoto@wrf.com.

Respectfully submitted,

A handwritten signature in cursive script that reads "Michael Kilpatrick". The signature is written in dark ink and is positioned above the printed name and title.

Michael Kilpatrick
Facilities Manager
Orbital Sciences Corporation
Transportation Management Systems Division
7160 Riverwood Drive
Columbia, MD 21046