

0170-EX-ST-2000

Orbital Sciences Corporation
20301 Century Blvd.
Germantown, MD 20874
May 8, 1999

Federal Communications Commission Experimental Radio Services
P.O. Box 358320
Pittsburg, PA 15251-5320

Re: Experimental STA for Orbital Sciences Corporation

Dear Sir/Madam,

This letter requests a special temporary authority (STA) for Orbital Sciences Corporation (Orbital) explicitly for the purposes of satellite integration and testing of the OrbView 4 (OV4) spacecraft. This request is to extend the previous STA (reference file # 328ST99) submitted by Orbital for several programs. In June of this year, Orbital will begin communications testing of the OV4 satellite to be launched in year 2001. The mission of this satellite is to support the Air Force Warfighter mission, as well as OrbImage programs. OrbImage has already obtained or is in the process of obtaining NTIA and FCC authorization, as applicable, to transmit at radio frequencies (RF) in the final orbit location and configuration associated with this satellite.

Approval of this STA will allow timely verification of the spacecraft's command, control, telemetry, and imagery RF communications sub-system. Orbital does not anticipate any additional coordination to be required, other than those already existing, for the frequency bands of interest. The parameters of the RF transmissions for this STA are provided in the attachment. It should be noted that additional shielding of emissions is expected since testing will be performed inside Orbital structures, shielded rooms, and/or anechoic chambers.

Please call me (703/428-1266) if you have any questions concerning this STA. Thank you in advance for your prompt attention to this matter.

Sincerely,



James Flower
OV4 RF Subsystem Lead
RF Communications Group
Orbital Sciences

Attachment:

Special Temporary Authority for Orbital Sciences Corporation

Purpose of Operation: Satellites integration and test

Dates of Operation: Effective between June 1, 2000 and December 31, 2000

Station Locations: Germantown, MD NL 39-11-27; WL 77-15-45

Beginning of Life Radio Frequency Parameters (Germantown, MD):

Frequency Span, Null-Null Bandwidth (GHz)	Modulation Type	Maximum Effective Isotropic Radiated Power (EIRP)
2.092 – 2.093	Binary Phase Shift Keying	-60 dBW
8.115 – 8.265	Offset Quadrature Phase Shift Keying	-13 dBW

Orbital Sciences is aware that other stations may be licensed on these frequencies, and if any interference occurs, transmissions associated with this application will be immediately terminated.