Orbital Sciences Corporation 21830 Atlantic Blvd. Dulles, VA 20166

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

Re: Experimental license for Orbital Sciences Corporation

Dear Sir or Madam:

This letter requests an experimental license for Orbital Sciences Corporation (Orbital) explicitly for the purposes of integration and testing of commercial communications satellites. In March of this year, Orbital will begin communications testing of three Ku band satellites to be launched later in the year and in 2008. The missions of both are to provide video distribution communications for television system operators.

Approval of this experimental license will allow timely verification of the spacecraft's command, control, and telemetry sub-system, as well as the audio/video communications payload. It must be stressed that Orbital strives to **eliminate** any stray emissions from its facility while testing of its satellites. Orbital performs all testing inside Orbital structures (metal buildings), shielded rooms, and/or anechoic chambers. Therefore, Orbital does not anticipate any additional coordination to be required. This license is needed in the event any stray radiation is transmitted into the local area. The parameters of the RF transmissions for this experimental license are provided in the attachment.

We are seeking this license in order to perform testing of multiple commercial satellite programs as part of the integration and test process.

The satellites will be set up indoors in a hibay facility under a nearfield test range. This range has absorber on the ceiling and at selected points around the structure supporting the measurement equipment, but is partially open at the sides. The near field range is enclosed in a steel building which will also attenuate stray leakage from the range facility. The directional antenna(s) on each of the satellites will be pointing up into this absorber during the testing that we will be performing under this license. For the telemetry links and CW beacons, the antennas on the satellite are both directional and omni-directional. Absorber will be placed in and around the satellite in an effort to minimize the radiated energy allowed to escape the near field range.



Please call me (703-404-6530) if you have any questions concerning this STA. Thank you in advance for your prompt attention to this matter.

Sincerely,

Donald L. Winkelman Orbital Sciences Corporation Space Systems Group