Orbital Sciences
Date of Submission: 10/3/05

We are seeking this license in order to perform air link testing of multiple commercial satellite programs as part of the integration and test process. (Optus, PAS-11, Horizons-2). There are two basic systems on the satellites that we are going to test, the transponder systems and the tele-command and telemetry data links. CW beacons may also be radiated from the satellites.

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.



