

## **FCC form 442, Question 7, Experimentation Description**

Ref. file # 0516-EX-PL-2007

Orbital Sciences Corporation is under various contracts to design, build, test, deliver and launch launch vehicles with resident GPS receivers. Orbital is required to verify nominal operation of these GPS receivers, which are a part of a vehicle resident GPS system. The launch vehicle will be carried aboard a larger aircraft, then dropped from the aircraft, and then ignited during free fall from the aircraft. GPS system operation will be verified a short time before the vehicle is dropped. Because of the configuration of the aircraft with the launch vehicle mated to it, a GPS booster station is required to increase the signal level enough so that the GPS receivers can acquire the GPS satellite signal. Note that the location of the aircraft with the launch vehicle attached will be at approximately 39000 ft, near the Kwajalein atoll.