

## Northrop Grumman Application for Experimental License

This application for an experimental license is submitted by Northrop Grumman Systems Corporation (Northrop Grumman) to support airborne testing of experimental and developmental sensors. Operations will be across multiple Northrop Grumman research and development efforts. The intention is to use the radio modem as a data telemetry system to permit real time test target location reporting and recording for sensor development. This permits the engineers, during the conduct of the test, to observe the target location and conduct real time performance evaluations and make corrections without the need to land the aircraft and process data.

The Freewave radio / modem is an unlicensed FCC Part 15 device. Northrop Grumman will add a 5-watt amplifier on the transmit side to increase the range so as to correspond with the operational ranges of modern military search radars. A block diagram is included below. Three units will be used on ground target vehicles, operating at the Sussex County Regional Airport in Georgetown, Delaware, or on roads within 40 miles of the airport. The remaining six units will be installed on NGMS aircraft based at Baltimore-Washington International airport (BWI) in Linthicum, Maryland. These aircraft will operate within a radius of 460 kilometers at a maximum altitude of 31,000 feet.

### DIAGRAM

