

NORTHROP GRUMMAN MISSION SYSTEMS
Radio Systems

December 20, 2007

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

Dear Sir or Madam:

Northrop Grumman Space & Mission Systems Corp. ("Northrop Grumman Mission Systems" or "NGMS") hereby requests a grant of Special Temporary Authority ("STA") to operate fixed-base and mobile experimental radio station facilities, as detailed below, for a 180 day period beginning on February 8, 2007. Northrop Grumman Mission Systems requests this STA in order to test and demonstrate the Warfighter Information Network – Tactical ("WIN-T") system, which is envisioned by the U.S. Army to be the wireless network that interconnects mobile and fixed Command Posts ("CPs"), Tactical Operations Centers ("TOCs") and other command centers. As such, the proposed operations under this STA request are intended to demonstrate the capability of next generation modular CPs to operate cooperatively utilizing WIN-T networks. The proposed operations will involve a demonstration, in which a fixed prototype CP will exchange data with a mobile partial CP utilizing WIN-T links.

The proposed fixed/base and mobile operations will utilize Harris High-Band Networking Radios. The fixed/base antenna will be located at 215 Wynn Dr, Huntsville (Madison County), Alabama (Coordinates: 34°43'16.72"N; 86°39'19.42"W), which has an elevation of 204 meters. The proposed mobile operations will be located within a 30 kilometer radius of the fixed/base location. The operations will occur during daylight hours. While the fixed/base location will utilize a steered directional antenna set at between 10 and 30 meters, the mobile location will use a steered directional antenna set at between 5 and 20 meters. The antennae are TDD/TDMA Directive Beam Pointing antennae and have a beam width of < 20 degrees Az. The requested frequency range for the transmissions is 4.5 to 4.99 GHz (10 MHz steps), with an emission designator of 22M0G7W. The modulation will be selectable from 64 QAM, 16 QAM, QPSK and BPSK; and data rate will be auto ranging from 6 to 54 Mbps.

Respectfully submitted,

By: /s/ Fred Berrong
Fred Berrong
On behalf of Northrop Grumman Space &
Mission Systems Corp.