

**NORTHROP GRUMMAN SPACE TECHNOLOGY**

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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 Space Technology" or "NGST") hereby requests an expedited grant of Special Temporary Authority ("STA") to operate airborne mobile and fixed-ground experimental radio station facilities, as detailed below, for a period beginning on January 29, 2007, and ending on February 19, 2007. Northrop Grumman Space Technology respectfully requests expedited processing and grant of this STA request before January 23, 2007, in order to demonstrate a Wideband Networking Waveform ("WNW") digital command and control network for the U.S. Army at the Yuma Proving Grounds in Arizona.

The Federal Aviation Administration ("FAA"), through the FAA's Western-Pacific Regional Office, has conditionally concurred under temporary coordination assignment NG T070139 (copy attached) to that proposed operations that NGST is requesting herein. The FAA's Western-Pacific Regional Office also has previously conditionally concurred to a similar request for use of frequency 1378 MHz under coordination NG T060359, and the FAA's Southwest Regional Office also has previously conditionally approved a similar request for use of frequency 1378 MHz under coordination ASW06-1799.

The proposed airborne mobile experimental facility will utilize a NGST Radio Systems, model number 000-00-0001, transmitter with a omnidirectional antenna, operating at 1,378 MHz, with a maximum ERP of 100.0 Watts and a data rate of 2 MB per second. The emission designator is 3M00G1D, and the bandwidth will not to exceed 3 MHz. The airborne transmitter will be mounted on an aircraft, flying at a minimum altitude of 3,050 meters and a maximum altitude of 6,100 meters, within a 60 kilometer radius around a centerpoint of 32-50-15.74 N, 114-23-22.62 W (U.S. Army Yuma Proving Grounds, Yuma, Arizona).

The proposed fixed-ground facility will transmit from U.S. Army Yuma Proving Grounds, Yuma, Arizona (32-50-15.74 N, 114-23-22.62 W) with an omnidirectional antennae that will be positioned at ground level with a height of 6.0 meters AGL and an elevation of 98 meters ASL.

The fixed ground station will utilize a NGST Radio Systems, model number 000-00-0001, transmitter operating at 1,378 MHz, with a maximum ERP of 100.0 Watts and a data rate of 2 MB per second. The emission designator is 3M00G1D, and the bandwidth will not to exceed 3 MHz.

I certify that I am an authorized employee of Northrop Grumman Space & Mission Systems Corp.

Respectfully submitted,  
NORTHROP GRUMMAN SPACE &  
MISSION SYSTEMS CORP.

By: Paul Wulff  
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*Manager, Specialty Engineering*