

NORTHROP GRUMMAN SPACE TECHNOLOGY

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June 9, 2005

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

Dear Sir or Madam:

Northrop Grumman Space Technology & Mission Systems Corp. ("Northrop Grumman Space Technology" or "NGST") hereby requests a 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 July 1, 2005, and ending on September 30, 2005. Northrop Grumman Space Technology requests this STA in order to test and demonstrate a Wideband Networking Waveform ("WNW") digital command and control network for a customer in support of the Airborne and Maritime/Fixed Station Joint Tactical Radio System (AMF JTRS), Contract Number: FA8709-04-C-0011.

The proposed two airborne mobile experimental facilities will utilize *NGST Radio Systems 000-00-0001* transmitters with a omnidirectional antenna, operating at 1,345 MHz, with a maximum ERP of 100.0 Watts and a data rate of 2 MB per sec MB. The emission designator is 3M0F7W, and the bandwidth will not to exceed 3 MHz. The airborne transmitters will be mounted on 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°59.421 NL and 117°04.771 WL* in San Diego (San Diego County), California.

The proposed two fixed-ground facilities will transmit from parking lots adjacent to the following two buildings located at NGST's Rancho Carmel facility in San Diego (San Diego County), California:

- 15180 Innovation Drive (*32°59.510 NL and 117°04.804 WL*) with an omnidirectional antennae that will be positioned at ground level with a height of 25.0 meters AGL and an elevation of 254.5 meters ASL.

- 1 Rancho Carmel ($32^{\circ} 59.421 \text{ NL}$ and $117^{\circ} 04.771 \text{ WL}$) with an omnidirectional antennae that will be positioned at ground level with a height of 2.0 meters AGL and an elevation of 249.0 meters ASL.

The two fixed ground stations will utilize *NGST Radio Systems 000-00-0001* transmitters operating at 1,345 MHz, with a maximum ERP of 100.0 Watts and a data rate of 2 MB per second MB. The emission designator is 3M0F7W, and the bandwidth will not to exceed 3 MHz.

The testing will be performed during daylight hours, and in 1-hour increments.

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

Respectfully submitted,
NORTHROP GRUMMAN SPACE TECHNOLOGY &
MISSION SYSTEMS CORP.

By: 

Paul Wulff

Manager, Specialty Engineering