

**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 Technology & Mission Systems Corp. ("Northrop Grumman Space Technology" or "NGST") hereby requests an extension of grant of Special Temporary Authority ("STA") under Call Sign WC9XFP (File No. 0359-EX-ST-2005) to continue to operate the airborne mobile and fixed-ground experimental radio station facilities, as detailed below, for a period beginning on October 1, 2005, and ending on February 1, 2006. Northrop Grumman Space Technology requests the extension of the STA in order to continue 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 two airborne mobile experimental facilities will utilize NGST Radio Systems, model number 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 second. 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°59'25.3"N and 117° 04'46.3" in San Diego (San Diego County), California.

The 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° 59'30.6"N and 117° 04'48.24"W) 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° 59'25.3"N and 117° 04'26.5"W) 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, model number 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. 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:           /s/ Paul Wulff            
Paul Wulff  
Manager, Specialty Engineering