

NORTHROP GRUMMAN SYSTEMS CORPORATION
Facilities Electronic Systems Services
Integrated Systems Sector - Air Combat Systems
3520 East Avenue M, Site 4 (WJ01/46)
Palmdale, CA 93650

November 29, 2005

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

Dear Sir or Madam:

Northrop Grumman Systems Corporation ("Northrop Grumman") hereby requests a grant of Special Temporary Authority ("STA") to permit Northrop Grumman to operate airborne mobile and fixed/base experimental radio station facilities, during daylight hours from December 2, 2005, until December 21, 2005.

The proposed fixed/base and airborne mobile transmission location and area of operation will be as follows:

Fixed/Base Location: Kearny Mesa (San Diego County), CA, (NAD-83 coordinates: 32-49-39 N, 117-08-12 W)

Airborne Mobile Area of Operation: An altitude of 18,288 meters within 483 kilometer radius around the Fixed/Base Location

The proposed airborne mobile and ground fixed-based experimental transmissions will utilize DLS/VIASAT, model AN/USQ-140(V)(2) Link-16 J-TIDS, spread spectrum transceivers, operating between 969 MHz to 1206 MHz, in 3 MHz increments, with a normal output power of 200 Watts. The emission designator will be 6M0G1D for fixed frequency non-hop mode, and 237M0Q1D for wideband frequency hop mode. The pulse rate will be 16,512 pps, the pulse width will be 6.4 us, and the rise and fall times will be 1.0 us. The maximum bit rate will be 119.04 Kbps. The frequency tolerance will be 50 ppm.

The grant of STA is necessary to conduct tests to prove the viability of an airborne communications node. The airborne mobile transceiver will be mounted on NASA's XB-57 Bomber, which is standing-by for the testing. Accordingly, Northrop Grumman respectfully requests expedited processing of this request and a grant of STA by December 2, 2005.

I certify that I am an authorized employee of Northrop Grumman Systems Corporation.

Respectfully submitted,
NORTHROP GRUMMAN SYSTEMS CORPORATION

By: /s/ Fred Berrong
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