## NORTHROP GRUMMAN DEFENSE MISSION SYSTEMS, INC. Defense Mission Systems Division 4010 Sorrento Valley Blvd. San Diego, CA 92121-1498 Phone: 858-597-7253 Email: thomas.adam@ngc.com

February 2, 2006

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

Dear Sir or Madam:

Northrop Grumman Defense Mission Systems, Inc. ("Northrop Grumman") hereby requests a grant of Special Temporary Authority ("STA") to operate fixed/base and airborne mobile experimental radio systems at and around the following three areas of operation from February 15, 2006, until May 15, 2006:

1. An altitude of 12,288 meters within an 8 kilometer radius around Marine Corp Air Station Miramar (San Diego County), California (NAD-83 coordinates: 32-51-39 N. and 117-08-41 W.);

2. An altitude of 12,288 meters within an 8 kilometer radius around Nellis Air Force Base (Clark County), Nevada (NAD-83 coordinates: 36-14-56 N. and 114-57-37 W.); and

3. An altitude of 12,288 meters within an 8 kilometer radius around Roswell (Chaves County), New Mexico (NAD-83 coordinates: 33-23-37 N. and 104-31-13 W.).

The proposed airborne mobile experimental transmissions in the three areas of operation will utilize 8 Qualcomm, model QSEC-2700, CDMA transmitters that will produce a maximum output power of 24.84 dBm or 0.303 Watts ERP in the 1850-1865 MHz frequency band with a bandwidth of 1.25 MHz. The emission designator is 1M25F9W.

The proposed fixed/base experimental transmissions at the three locations will utilize a Qualcomm, CDMA BACN base station transmitter that will produce a maximum output power of 40.82 dBm or 12.08 Watts ERP in the 1930-1945 MHz frequency band with a bandwidth of 1.25 MHz. The emission designator is 1M25F9W. The maximum antenna gain will be 6 dBi.

Northrop Grumman, and its partner, Qualcomm, will coordinate with PCS licensees that may be affected by the experimental operations. Please contact Mr. John Forrester of Qualcomm (Phone: 858-401-9773; Email: <u>jforrest@qualcomm.com</u>) with any questions regarding these coordination efforts.

This STA request is necessitated by Northrop Grumman's need to demonstrate a Battlefield Airborne Communications Node (BACN) for the U.S. Air Force (Contract No. H94-003-04-D-0005-0002). Therefore, Northrop Grumman respectfully requests grant of STA on or before February 13, 2006.

I certify that I am an authorized employee of Northrop Grumman Defense Mission Systems, Inc.

Respectfully submitted, NORTHROP GRUMMAN DEFENSE MISSION SYSTEMS, INC.

By: <u>\s\ Thomas Adam</u>\_\_\_\_\_

Thomas Adam Engineer, Deployment Readiness Group System Test and Evaluation