

NORTHROP GRUMMAN DEFENSE MISSION SYSTEMS, INC.
3520 East Avenue M, Site 4 (WJ01/46)
Palmdale, CA 93650

March 3, 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. ("NGDMS") hereby requests a grant of Special Temporary Authority ("STA") to cover the operation of facilities pending under the application for a new experimental radio station license, File No. 0400-EX-PL-2005, as amended. NGDMS requests grant of this STA as soon as possible for a period of 90 days, or until the Commission grants the related license application. NGDMS requests the expedited grant of this STA in order to begin testing of Battleground Airborne Communications Node ("BACN") equipment for the U.S. Air Force pursuant to Contract No. H94003-04-D-0005-0002.

The STA will cover airborne mobile and fixed/base ground operations at and around the following three locations:

- Melbourne (Brevard County), Florida (NAD 83 coordinates: NL 28-06-00, WL078-40-00). The airborne mobile area of operation will be within 33 km of the center point of the coordinates listed above, with a maximum altitude of 13,716 meters.
- Marine Corp Air Station Miramar (San Diego County), California (NAD-83 coordinates: NL 32-51-39 and WL 117-08-41). The airborne mobile area of operation will be within 33 km of the center point of the coordinates listed above, with a maximum altitude of 13,716 meters.
- Nellis Air Force Base (Clark County), Nevada (NAD-83 coordinates: NL 36-14-56 and WL 114-57-37). The airborne mobile area of operation will be within 33 km of the center point of the coordinates listed above, with a maximum altitude of 13,716 meters.

The proposed airborne mobile experimental facilities will utilize AetherComm model SSPA X-Band transmitters operating omnidirectional antennas at 10.290 GHz, with a maximum ERP of 100.0W and a data rate of 11.5MB. The emission designator will be 21M4G1D, and the bandwidth will not to exceed 40MHz..

The proposed fixed/base ground facilities will consist of transportable antennas, positioned on a rooftop of buildings, or elsewhere, and will transmit at 9.850 GHz into a 10-degree beamwidth Rozendahl circular horn tracking the airborne test beds, operating with a maximum ERP of 1,000W and a data rate of 11.5 MB. The emission designator will be 800KG1D, and bandwidth will not exceed 2.0 MHz.

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

Respectfully submitted,
NORTHROP GRUMMAN DEFENSE MISSION SYSTEMS, INC.

By: \s\ Fred Berrong
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