

NORTHROP GRUMMAN SYSTEMS CORPORATION

1745A WEST NURSERY ROAD

LINTHICUM, MD 21090

Phone: 410-765-5626

Email: jan.sochurek@ngc.com

December 8, 2004

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 an 180-day extension of the grant of Special Temporary Authority ("STA") under Call Sign WB9XMK, which authorizes Northrop Grumman to operate an experimental airborne radar located aboard one of our flight test aircraft based at our Linthicum (Anne Arundel County), Maryland facility. The transmitter operates while in flight at altitudes up to 3500 mAMSL. The area of operation will be within a radius of 320 km of NAD-83 coordinates 39-11-08 N and 076-41-11 W. The current grant of STA under Call Sign WB9XMK (File No. 0358-EX-ST-2004) will expire on January 27, 2005.

Northrop Grumman requires this extension of STA to continue to conduct target data collection flights using a Northrop Grumman experimental TESAR radar system. The tests require the radar to be flown over specific types of terrain and targets to produce the necessary data. Northrop Grumman is conducting these tests of the TESAR technology for internal research and development purposes and to fulfill contracts with various governmental agencies.

Grant of STA will enable Northrop Grumman to continue to conduct intermittent transmissions during various times of day as required. The radar transmitter will produce 320W of peak power while transmitting, operating within the band 16.2 to 16.8 GHz and therefore an emission of up to 600M00Q0N. The antenna has a gain of 22dB.

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

Respectfully submitted,
NORTHROP GRUMMAN SYSTEMS CORPORATION

By: \s\ Jan E. Sochurek.
Jan E. Sochurek
Spectrum Licensing Specialist