

0045-EX-ST-2000

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BERNHARD · McPHERSON <sup>3</sup>/<sub>8</sub> HAND  
**CHARTERED**

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John M. R. Kneuer  
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January 31, 2000

**HAND DELIVERY**

Magalie Roman Salas, Esq.  
Secretary  
Federal Communications Commission  
Experimental Radio Services  
P.O. Box 358320  
Pittsburgh, PA 15251-5320

**Re: Request for a 90-Day Grant of Special Temporary Authority for Northrop Grumman Corporation to Operate an Experimental Facility Located in Linthicum, Ann Arundel County, Maryland**

Dear Ms. Salas:

On behalf of Northrop Grumman Corporation ("Northrop Grumman") there is submitted herewith, in triplicate, a request for a 90-day grant of Special Temporary Authority ("STA") to operate an experimental facility in Linthicum, Ann Arundel County, Maryland. Northrop Grumman requires the 90-day grant of STA to conduct a qualification test of the MODE-S interrogator/beacon system, which Northrop Grumman is developing for a customer in India. The test is scheduled to commence on February 15, 2000. Therefore, Northrop Grumman respectfully requests that the 90-day STA be granted on or before Friday, February 11, 2000, so that the tests may commence as scheduled on February 15, 2000.

The enclosed STA request consists of a certification bearing the original signature of Steven F. Balaz, Spectrum Licensing Specialist of Northrop Grumman and the requisite Anti-Drug Abuse Act Certification bearing the original signature of John H. Mullan, Vice President and Corporate Secretary of Northrop Grumman.

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Also enclosed are the FCC Form 159 and a check made payable to the "Federal Communications Commission," in the amount of \$45.00 to cover the requisite filing fee.

Questions concerning this filing should be directed to the undersigned.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "John M. R. Kneuer", with a long horizontal flourish extending to the right.

John M. R. Kneuer  
Attorney for Northrop Grumman Corporation

Enclosures

cc: Mr. Carl Huie (w/enclosures)

NORTHROP GRUMMAN CORPORATION  
1745A WEST NURSERY ROAD MS 170  
LINTHICUM, MD 21090

January 21, 2000

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

Dear Madam Secretary:

I, Steven F. Balaz, Spectrum Licensing Specialist of Northrop Grumman Corporation, ("Northrop Grumman"), hereby certify that I am an authorized employee of Northrop Grumman. I hereby request a 90-day grant of Special Temporary Authority ("STA") for Northrop Grumman to operate an experimental facility located in Linthicum (Anne Arundel), Maryland. The transmitter will be operated from a stationary position on an existing 38 meters tall tower located 15 meters above the ground at the NAD-83 coordinates of 39-10-47 N and 076-41-22 W. This site is 47 meters AMSL.

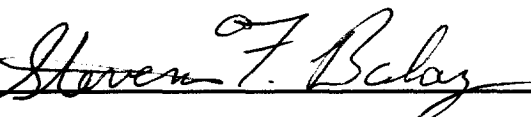
Northrop Grumman has been contracted by a customer in India (Contract # BEL002) to conduct a qualification test of the MODE-S interrogator / beacon system. This test is called a Data Link loop test. This requires the interrogator to send a message to the transponder, which then relays the message back to the interrogator. This requirement was made by the customer only recently. Testing has been scheduled to begin on February 15, 2000.

Grant of STA will enable Northrop Grumman to conduct intermittent transmissions from 8:00 am to 8:00 pm. The beacon transmitter will produce 350W of peak power while transmitting, operating at 1090 MHz and emission 7M11M1D. The horn antenna has a gain of 13dB. The Interrogator currently operates under call sign KA2XBU.

To reduce the potential of RF interference to the ASR-9 radar at BWI Airport, the following provisions have been made:

- A horn antenna which is directed away from the airport will be used.
- An attenuator will be used to reduce the transmitter power to a minimum.
- The beacon will be programmed to an altitude of -900 ft. to avoid TCAS alarms.
- The beacon delay will be set to 50 nmi to prevent the beacon from garbling replies from other aircraft beacons near BWI.
- The 3/A code and Mode S address can be set to any valid value as directed by FAA.

Very truly yours,  
NORTHROP GRUMMAN CORPORATION

By: 

Steven F. Balaz, Spectrum Licensing Specialist