

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION**

EXPERIMENTAL

(Nature of Service)

XD FX MO

(Class of Station)

WC9XAT

(Call Sign)

0681-EX-ST-2005

(File Number)

NAME Northrop Grumman Systems Corporation

This Special Temporary Authorization is granted upon the express condition that it may be terminated by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises. Nothing contained herein shall be construed as a finding by the Commission that the authority herein granted is or will be in the public interest beyond the express terms hereof.

This Special Temporary Authorization shall not vest in the grantee any right to operate the station nor any right in the use of the frequencies designated in the authorization beyond the term hereof, nor in any other manner than authorized herein. Neither the authorization nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This authorization is subject to the right of use of control the Government of the United States conferred by Section 706 of the Communications Act of 1934.

Special Temporary Authority is hereby granted to operate the apparatus described below:

Purpose Of Operation:

Testing an electronically scanned phased array antenna consisting of ground fixed/base and airborne transmitter units as part of an internal research and development project.

Station Locations

- (1) Linthicum (ANNE ARUNDEL), MD - NL 39-11-08; WL 76-41-11; MOBILE: Airborne, max. altitude 20,000 feet, within 500 km
- (2) St. Inigoes (ST MARYS), MD - NL 38-08-45; WL 76-25-42; MOBILE: Airborne, max. altitude 20,000 feet, within 200 km
- (3) Whitehorn (HUMBOLDT), CA - NL 40-01-00; WL 125-02-39; MOBILE: Within a 50 km radius of centerpoint. Ground operations only, within 50 km

Frequency Information

Linthicum (ANNE ARUNDEL), MD - NL 39-11-08; WL 76-41-11; MOBILE: Airborne, max. altitude 20,000 feet, within 500 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
8500-9000 MHz	FX	1G30P0N	10 kW (ERP)	
8500-9000 MHz	MO	1G30P0N	10 kW (ERP)	

This authorization effective January 04, 2006 and
will expire 3:00 A.M. EST May 16, 2006

**FEDERAL
COMMUNICATIONS
COMMISSION**

Frequency Information

Linthicum (ANNE ARUNDEL), MD - NL 39-11-08; WL 76-41-11; MOBILE: Airborne, max. altitude 20,000 feet, within 500 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
9200-9800 MHz	MO	1G30P0N	10 kW (ERP)	
9200-9800 MHz	FX	1G30P0N	10 kW (ERP)	

St. Inigoes (ST MARYS), MD - NL 38-08-45; WL 76-25-42; MOBILE: Airborne, max. altitude 20,000 feet, within 200 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
8500-9000 MHz	FX	1G30P0N	10 kW (ERP)	
8500-9000 MHz	MO	1G30P0N	10 kW (ERP)	
9200-9800 MHz	FX	1G30P0N	10 kW (ERP)	
9200-9800 MHz	MO	1G30P0N	10 kW (ERP)	

Whitehorn (HUMBOLDT), CA - NL 40-01-00; WL 125-02-39; MOBILE: Within a 50 km radius of centerpoint. Ground operation

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
8500-9000 MHz	FX	1G30P0N	10 kW (ERP)	

Frequency Information

Whitehorn (HUMBOLDT), CA - NL 40-01-00; WL 125-02-39; MOBILE: Within a 50 km radius of centerpoint. Ground operation

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
8500-9000 MHz	MO	1G30P0N	10 kW (ERP)	
9200-9800 MHz	FX	1G30P0N	10 kW (ERP)	
9200-9800 MHz	MO	1G30P0N	10 kW (ERP)	

Special Conditions:

- (1) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (2) No interference is to be caused to NASA assignments in the Greenbelt, MD area for the following frequencies: 8750 MHz, 9310 MHz, 9375 MHz and 9410 MHz.
- (3) The stop buzzer numbers below are always available during testing:

Rod Fremd - (410) 765-5623
pager - (410) 541-1707

- (4) No transmissions in the band 9000-9200 MHz per FAA.
- (5) For the Humboldt, CA location only: No transmission in the range 9405-9415 MHz.
- (6) No interference to Kingsley Field, OR (420922 N, 1214400 W) operations in the bands 8742-8758 MHz, 8770-8780 MHz and 8806-8816 MHz.
- (7) This is an extension of STA 0140-EX-ST-2005 for Linthicum and ST. Inigoes, MD. The testing needs to be completed by May 15, 2006 or Northrop Grumman needs to apply for a FCC experimental license. NTIA will not grant a further STA extension for these 2 locations.