

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

EXPERIMENTAL

(Nature of Service)

XD FX MO

(Class of Station)

WC9XAJ

(Call Sign)

0394-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:

Test of antenna system.

Station Locations

- (1) Georgetown (SUSSEX), DE - NL 38-41-34; WL 75-21-53; MOBILE: Airborne, max alt = 12,500 ft, within 38 km, centered around NL 38-41-34; WL 75-21-53
- (2) MOBILE: Zone 1. Airborne within coordinates: 39-17-26 N, 076-43- 40 W; 39-53-06 N, 075-35-47 W; 39-43-59 N, 075-24-48 W; and 39-08-29 N, 076-32-33 W (excluding restricted airspace)
- (3) MOBILE: Zone 2. Airborne within coordinates: 39-09-37 N, 076-34-15 W; 39-09-37 N, 075-20-48 W; 38-51-56 N, 075-20-48 W; and 38-51-58 N, 076-34-19 W (excluding restricted airspace)
- (4) MOBILE: Zone 3. Airborne within coordinates: 38-34-18 N, 075-53-17 W; 39-48-31 N, 074-44-12 W; 39-26-35 N, 073-59-01 W; and 38-12-58 N, 075-08-06 W (excluding restricted airspace)
- (5) MOBILE: Zone 4. The area within a 320 km radius around the counterpoint of coordinates: 39-11-08 N, 076-42-11 W (excluding restricted airspace), within 320 km, centered around NL 39-11-08; WL 76-42-11
- (6) Linthicum (ANNE ARUNDEL), MD - NL 39-11-08; WL 76-42-11

Frequency Information

Georgetown (SUSSEX), DE - NL 38-41-34; WL 75-21-53; MOBILE: Airborne, max alt = 12,500 ft, within 38 km, centered around

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
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This authorization effective August 04, 2005 and
will expire 3:00 A.M. EST January 16, 2006

**FEDERAL
COMMUNICATIONS
COMMISSION**



16.5 GHz

MO

12.8 W (ERP)

1G20M0N

16.5 GHz

FX

62 W (ERP)

1G20M0N

MOBILE: Zone 1. Airborne within coordinates: 39-17-26 N, 076-43- 40 W; 39-53-06 N, 075-35-47 W; 39-43-59 N, 075-24-48 W; and 39-08-29 N, 076-32-33 W (excluding restricted airspace)

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
16.5 GHz	MO		12.8 W (Output Power)	
		1G20M0N		

MOBILE: Zone 2. Airborne within coordinates: 39-09-37 N, 076-34-15 W; 39-09-37 N, 075-20-48 W; 38-51-56 N, 075-20-48 W; and 38-51-58 N, 076-34-19 W (excluding restricted airspace)

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
16.5 GHz	MO		12.8 W (Output Power)	
		1G20M0N		

MOBILE: Zone 3. Airborne within coordinates: 38-34-18 N, 075-53-17 W; 39-48-31 N, 074-44-12 W; 39-26-35 N, 073-59-01 W; and 38-12-58 N, 075-08-06 W (excluding restricted airspace)

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
16.5 GHz	MO		12.8 W (Output Power)	
		1G20M0N		

MOBILE: Zone 4. The area within a 320 km radius around the counterpoint of coordinates: 39-11-08 N, 076-42-11 W (excluding restricted airspace), within 320 km, centered around NL 39-11-08; WL 76-42-11

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
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16.5 GHz

MO

12.8 W (Output Power)

600MM0N

600MM0N

600MM0N

Linthicum (ANNE ARUNDEL), MD - NL 39-11-08; WL 76-42-11

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
16.5 GHz	FX	60M0M0N	12.8 W (Output Power)	

180MM0N

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) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (3) The operating frequency shall be the spot frequency of 16500 MHz only.
- (4) The frequency 16500 MHz shall be restricted to this test and shall not be allowed for production purposes.
- (5) Northrop Grumman shall not cause interference to government operations on 16250 MHz and 16450 MHz at Dallgen, VA.

Special Conditions:

- (6) Further testing and development of this product shall meet the standards stated in the NTIA Redbook section 8.2.46.