

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

EXPERIMENTAL

(Nature of Service)

WS9XVO

(Call Sign)

XT FX

(Class of Station)

1643-EX-ST-2021

(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:

The purpose of the operation is to demonstrate high capacity backbone gateway capabilities in the KU-band that will enable data flow substantially faster than currently available speeds.

Station Locations

(1) San Diego (SAN DIEGO), CA - NL 32-49-38; WL 117-07-43

Frequency Information

San Diego (SAN DIEGO), CA - NL 32-49-38; WL 117-07-43

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
15.85 GHz	FX	59M0D1D 461MD1D	400 mW (ERP)	
16.4 GHz	FX	59M0D1D 461MD1D	400 mW (ERP)	
16.65 GHz	FX	59M0D1D	400 mW (ERP)	

This authorization effective November 01, 2021 and
will expire 3:00 A.M. EST May 02, 2022

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

San Diego (SAN DIEGO), CA - NL 32-49-38; WL 117-07-43

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
16.65 GHz	FX	461MD1D	400 mW (ERP)	
16.8 GHz	FX	59M0D1D 461MD1D	400 mW (ERP)	
17.1 GHz	FX	59M0D1D 461MD1D	400 mW (ERP)	
17.15 GHz	FX	59M0D1D 461MD1D	400 mW (ERP)	

Special Conditions:

- (1) Licensee should be aware that other stations may be licensed on these frequencies and if any interference occurs, the licensee of this authorization will be subject to immediate shut down.
- (2) Northrop Grumman Systems Corporation may not operate in the 15.85 - 16.4 GHz band due to harmful interference.
- (3) Prior to commencing any in the 17.3-17.7 GHz band, experimental licensee must notify licensees of DIRECTV Enterprises, LLC (Phone Number: 310-964-3589 E-Mail: nm704u@att.com Attention: Navid Motamed) and DirecTV/AT&T (Mr. Raquel Noriega Email: raquel.noriega@att.com). The notice must include the name and contact information of the stop buzzer personnel that will be available to cease operations in the event of reported interference. The notification should include the testing parameters (specific location(s), antenna gain(s), antenna pattern, antenna height(s), antenna orientation, EIRP, EIRP density) and day and times of each test.

Special Conditions:

- (4) Prior to commencing any in the 17.3-17.7 GHz band, experimental licensee must notify licensees of DISH Operating L.L.C. (Blanket Earth Stations call sign: E140100. Phone Number: 202-463-3709 E-Mail: Alison.Minea@dish.com Attention: Alison Minea). The notice must include the name and contact information of the stop buzzer personnel that will be available to cease operations in the event of reported interference. The notification should include the testing parameters (specific location(s), antenna gain(s), antenna pattern, antenna height(s), antenna orientation, EIRP, EIRP density) and day and times of each test.