

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

EXPERIMENTAL

(Nature of Service)

WI2XPX

(Call Sign)

XC MO

(Class of Station)

0360-EX-ST-2020

(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 extend earlier work to test methods of transmitting data from an aircraft-mounted pod to an Apple iPad receiver within an aircraft. No communication is intended or

Station Locations

- (1) MOBILE: max altitude 25,000 ft MSL, within 50 km, centered around NL 31-34-39; WL 111-19-38

Frequency Information

MOBILE: max altitude 25,000 ft MSL, within 50 km, centered around NL 31-34-39; WL 111-19-38

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
824-849 MHz	MO	10M0D7D	200 mW (Output Power)	
869-894 MHz	MO	10M0G7D	200 mW (Output Power)	
880-915 MHz	MO	10M0D7D	200 mW (Output Power)	

This authorization effective March 20, 2020 and
will expire 3:00 A.M. EST September 21, 2020

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: max altitude 25,000 ft MSL, within 50 km, centered around NL 31-34-39; WL 111-19-38

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
925-960 MHz	MO	10M0G7D	200 mW (Output Power)	
1710-1785 MHz	MO	10M0D7D	200 mW (Output Power)	
1805-1880 MHz	MO	10M0G7D	200 mW (Output Power)	
1850-1910 MHz	MO	10M0D7D	200 mW (Output Power)	
1920-1980 MHz	MO	10M0D7D	200 mW (Output Power)	
1930-1990 MHz	MO	10M0G7D	200 mW (Output Power)	
2110-2170 MHz	MO	10M0G7D	200 mW (Output Power)	

Special Conditions:

- (1) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (2) 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.
- (3) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.

Special Conditions:

- (4) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by ANG Op Utility Eval (OUE) No. 4 contract no. HQ-0727-17-F-1422. The use of this radio station in any other manner or for any other purpose will constitute a violation of the privileges herein authorized. Except as subsequently authorized by the Commission, this radio station shall not be operated after the expiration date of the contract designated in the related application and enumerated above.
- (5) Northrop Grumman Systems Corporation must
 - a. Secure consents from the Advance Wireless Service licensees prior to accessing to 1710-1785 MHz and 2110-2170 MHz bands.
 - b. Coordinate with the local Society of Broadcast Engineers frequency coordinator and the affected Fixed Microwave Service licensees prior to operation in 925-960 MHz band.
- (6) Prior to commencing any operations in the frequencies below, Northrop Grumman Systems Corporation must obtain consent from the following within 225 miles of the contours of the testing area:
 - > Cellular licensees (824-849 MHz/869-894 MHz)
 - > SMR licensees (896-901 MHz/935-940 MHz)
 - > B/ILT licensees (896-901 MHz/935-940 MHz)
 - > Narrowband PCS licensees (901-902/930-931/940-941 MHz)
 - > Location & Monitoring Service licensees (902-928 MHz)
 - > Paging Service licensees in 929 MHz and 931 MHz
 - > Broadband PCS licensees (1850-1910 MHz/1930-1990 MHz)