

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
RADIO STATION CONSTRUCTION PERMIT
AND LICENSE**

EXPERIMENTAL

(Nature of Service)

WI2XPX

(Call Sign)

XC MO

(Class of Station)

0194-EX-CM-2019

(File Number)

NAME Northrop Grumman Systems Corporation

Subject to the provisions of the Communications Act of 1934, subsequent acts, and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in this license, the licensee hereof is hereby authorized to use and operate the radio transmitting facilities hereinafter described for radio communications in accordance with the program of experimentation described by the licensee in its application for license.

Operation: In accordance with Sec. 5.3(c) of the Commission's Rules

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)	
925-960 MHz	MO	10M0G7D	200 mW (Output Power)	

This authorization effective August 09, 2019 and
will expire 3:00 A.M. EST December 01, 2019

**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 (+/-)
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) 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) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (4) Northrop Grumman Systems Corporation must get the consents of the following within 400 km of the test area:
 - (a) All Cellular licensees (824-849 MHz/869-894 MHz)
 - (b) All Broadband PCS licensees (1850-1910 MHz /1930-1990 MHz)

Special Conditions:

- (5) North Grumman Systems Corporation must:
- > Secure consents from the Advance Wireless Service licensees prior to accessing to 1710-1785 MHz and 2110-2170 MHz bands.
 - > 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 224 miles of the contours of the testing area:
- > 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)
- (7) 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.