DS LAW PLLC, 1629 K St. NW Ste 300, Washington, DC 20006,

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

EXPERIMENTAL	WM2XEX
(Nature of Service)	(Call Sign)
XT FX MO	0886-EX-CN-2021
(Class of Station)	(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(J) of the Commission's Rules

Station Locations

(1) MOBILE: Max height 25,000 AMSL, within 320 km, centered around NL 35-04-05; WL 118-10-15
(2) Red Bluff (TEHAMA), CA - NL 40-05-25; WL 122-09-04; MOBILE: Max altitude 25,000 ft AMSL, within 320 km, centered around NL 40-05-25; WL 122-09-04
(3) Fresno (FRESNO), CA - NL 36-46-43; WL 119-43-17; MOBILE: Max altitude 25,000 ft AMSL, within 320 km, centered around NL 36-46-43; WL 119-43-17
(4) Carlsbad (SAN DIEGO), CA - NL 33-13-05; WL 117-21-07; MOBILE: max altitude 25,000 ft AMSL, within 320 km, centered around NL 33-13-05; WL 117-21-07
(5) Sacramento (SACRAMENTO), CA - NL 38-33-17; WL 121-17-53; MOBILE: max altitude 25,000 ft AMSL, within 320 km, centered around NL 38-33-17; WL 121-17-53
(6) Emerado (GRAND FORKS), ND - NL 47-57-01; WL 97-23-37; MOBILE: max altitude 25,000 ft AMSL, within 320 km, centered around NL 47-57-01; WL 97-23-37
(7) Key West (MONROE), FL - NL 24-33-22; WL 81-45-40; MOBILE: max altitude 25,000 ft AMSL, within 320 km, centered around NL 24-33-22; WL 81-45-40

Frequency Information

MOBILE: Max height 25,000 AMSL, within 320 km, centered around NL 35-04-05; WL 118-10-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
9.5-10 GHz	FX	500MQ3N	425 W (Output Power)	

This authorization effective December 08, 2021 and will expire 3:00 A.M. EST December 01, 2023

FEDERAL COMMUNICATIONS COMMISSION

Frequency Information

Red Bluff (TEHAMA), CA - NL 40-05-25; WL 122-09-04; MOBILE: Max altitude 25,000 ft AMSL, within 320 km, centered arou

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
9.5-10 GHz	FX	500MQ3N	425 W (Output Power)	

Fresno (FRESNO), CA - NL 36-46-43; WL 119-43-17; MOBILE: Max altitude 25,000 ft AMSL, within 320 km, centered around

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
9.5-10 GHz	FX	500MQ3N	425 W (Output Power)	

Carlsbad (SAN DIEGO), CA - NL 33-13-05; WL 117-21-07; MOBILE: max altitude 25,000 ft AMSL, within 320 km, centered ar

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
9.5-10 GHz	FX	500MQ3N	425 W (Output Power)	

Sacramento (SACRAMENTO), CA - NL 38-33-17; WL 121-17-53; MOBILE: max altitude 25,000 ft AMSL, within 320 km, cente

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
9.5-10 GHz	FX	500MQ3N	425 W (Output Power)	

Frequency Information

Emerado (GRAND FORKS), ND - NL 47-57-01; WL 97-23-37; MOBILE: max altitude 25,000 ft AMSL, within 320 km, centered

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
9.5-10 GHz	FX	500MQ3N	425 W (Output Power)	

Key West (MONROE), FL - NL 24-33-22; WL 81-45-40; MOBILE: max altitude 25,000 ft AMSL, within 320 km, centered arour

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
9.5-10 GHz	FX	500MQ3N	425 W (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) Prior to operation, Northrop Grumman Systems Corporation must be coordinate with Edwards AFB SMO James Littlefield (james.littlefield.1@us.af.mil, 412cs.spectrum.management@us.af.mil, DSN 527-4763, COMM (661) 277-4763) and WAFC.

(3) All operations shall be coordinated with the NASA EXRAD RADAR point of contact Gerry Heymsfield at 301-614-6369 or GERALD.M.HEYMSFIELD@NASA.GOV, at least 7 days in advance of operation.