

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

EXPERIMENTAL
(Nature of Service)

XT FX MO
(Class of Station)

WH2XKP
(Call Sign)

0066-EX-CM-2020
(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) Mojave (KERN), CA - NL 35-03-32; WL 118-09-05; MOBILE: Airborne at max altitude of 50,000 ft, within 185 km, centered around NL 35-03-32; WL 118-09-05
- (2) Red Bluff (TEHAMA), CA - NL 40-09-20; WL 122-15-05; MOBILE: Airborne at max altitude of 50,000 ft, within 185 km, centered around NL 40-09-20; WL 122-15-05
- (3) McClellan Park (SACRAMENTO), CA - NL 38-39-39; WL 121-23-35; MOBILE: Airborne at max altitude of 50,000 ft, within 185 km, centered around NL 38-39-39; WL 121-23-35
- (4) San Diego (SAN DIEGO), CA - NL 32-59-33; WL 117-06-57
- (5) Carlsbad (SAN DIEGO), CA - NL 33-05-45; WL 117-18-59; MOBILE: Airborne at max altitude of 50,000 ft, within 185 km, centered around NL 33-05-45; WL 117-18-59
- (6) Newport (NEWPORT), RI - NL 41-31-57; WL 71-18-26; MOBILE: airborne at max altitude 50,000 ft, within 185 km, centered around NL 41-31-57; WL 71-18-26
- (7) Grand Forks (GRAND FORKS), ND - NL 47-56-38; WL 97-10-40; MOBILE: airborne at max altitude of 50,000 ft, within 185 km, centered around NL 47-56-38; WL 97-10-40

Frequency Information

Mojave (KERN), CA - NL 35-03-32; WL 118-09-05; MOBILE: Airborne at max altitude of 50,000 ft, within 185 km, centered arc

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14.61 GHz	MO	64M0G1D 21M4G1D	30 W (ERP)	

This authorization effective April 17, 2020 and
will expire 3:00 A.M. EST October 01, 2024

FEDERAL
COMMUNICATIONS
COMMISSION



Frequency Information

Mojave (KERN), CA - NL 35-03-32; WL 118-09-05; MOBILE: Airborne at max altitude of 50,000 ft, within 185 km, centered arc

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14.62 GHz	MO	21M4G1D 64M0G1D	30 W (ERP)	
15.15-15.35 GHz	FX	21M4G1D 64M0G1D	30 W (ERP)	

Red Bluff (TEHAMA), CA - NL 40-09-20; WL 122-15-05; MOBILE: Airborne at max altitude of 50,000 ft, within 185 km, centered arc

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14.61 GHz	MO	21M4G1D 64M0G1D	30 W (ERP)	
14.62 GHz	MO	21M4G1D 64M0G1D	30 W (ERP)	
15.15-15.35 GHz	FX	21M4G1D 64M0G1D	30 W (ERP)	

McClellan Park (SACRAMENTO), CA - NL 38-39-39; WL 121-23-35; MOBILE: Airborne at max altitude of 50,000 ft, within 185 km, centered arc

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14.61 GHz	MO	21M4G1D 64M0G1D	30 W (ERP)	

Frequency Information

McClellan Park (SACRAMENTO), CA - NL 38-39-39; WL 121-23-35; MOBILE: Airborne at max altitude of 50,000 ft, within 185

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14.62 GHz	MO	21M4G1D 64M0G1D	30 W (ERP)	
15.15-15.35 GHz	FX	21M4G1D 64M0G1D	30 W (ERP)	

San Diego (SAN DIEGO), CA - NL 32-59-33; WL 117-06-57

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
15.15-15.35 GHz	FX	64M0G1D 21M4G1D	30 W (Output Power)	

Carlsbad (SAN DIEGO), CA - NL 33-05-45; WL 117-18-59; MOBILE: Airborne at max altitude of 50,000 ft, within 185 km, cent

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14.61 GHz	MO	21M4G1D 64M0G1D	30 W (ERP)	
14.62 GHz	MO	21M4G1D 64M0G1D	30 W (Output Power)	
15.15-15.35 GHz	FX	64M0G1D 21M4G1D	30 W (Output Power)	

Frequency Information

Newport (NEWPORT), RI - NL 41-31-57; WL 71-18-26; MOBILE: airborne at max altitude 50,000 ft, within 185 km, centered at

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14.61 GHz	MO	21M4G1D 64M0G1D	30 W (ERP)	
14.62 GHz	MO	64M0G1D 21M4G1D	30 W (ERP)	
15.15-15.35 GHz	FX	21M4G1D 64M0G1D	30 W (ERP)	

Grand Forks (GRAND FORKS), ND - NL 47-56-38; WL 97-10-40; MOBILE: airborne at max altitude of 50,000 ft, within 185 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14.61 GHz	MO	21M4G1D 64M0G1D	30 W (ERP)	
14.62 GHz	MO	21M4G1D 64M0G1D	30 W (ERP)	
15.15-15.35 GHz	FX	21M4G1D 64M0G1D	30 W (ERP)	

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.

Special Conditions:

- (3) Northrop Grumman Systems Corporation must coordinate with the Western Area Frequency Coordinator (WAFC), Mr. J. Szelog at (760) 939-6948 prior to any California operations to mitigate harmful interference to Navy and Marine Corps assignments. Northrop Grumman Systems Corporation must also comply with any and all restrictions that may be levied by WAFC.
- (4) Upon notification from the FCC, operation on 15.15-15.35 GHz at Red Bluff and San Diego, CA is subject to immediate cessation, if it causes harmful interference to Navy and Marine Corps operations assignments.