

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

EXPERIMENTAL

(Nature of Service)

XT FX

(Class of Station)

WJ2XXW

(Call Sign)

0036-EX-CM-2020

(File Number)

NAME Raytheon Company

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) Tucson (PIMA), AZ - NL 32-08-13; WL 110-55-20
- (2) Tucson (PIMA), AZ - NL 32-06-15; WL 110-57-45
- (3) Avon Park (HIGHLANDS), FL - NL 27-35-30; WL 81-31-48
- (4) Barking Sands (KAUAI), HI - NL 22-04-08; WL 159-46-44
- (5) Wellton (YUMA), AZ - NL 32-39-45; WL 113-28-39
- (6) North Charleston (CHARLESTON), SC - NL 32-53-50; WL 80-02-27
- (7) Cherry Point (CRAVEN), NC - NL 34-54-10; WL 76-52-34
- (8) China Lake (KERN), CA - NL 35-39-36; WL 117-49-40
- (9) Virginia Beach City, VA - NL 36-46-11; WL 75-57-14
- (10) Dugway (TOOELE), UT - NL 40-12-49; WL 112-45-24
- (11) Edwards AFB (KERN), CA - NL 34-55-21; WL 117-51-20
- (12) Eglin (OKALOOSA), FL - NL 30-28-07; WL 86-30-54
- (13) El Centro (IMPERIAL), CA - NL 32-50-03; WL 115-34-44
- (14) Fallon (CHURCHILL), NV - NL 39-29-52; WL 118-44-49
- (15) Florence (PINAL), AZ - NL 33-04-29; WL 111-22-12
- (16) Nellis AFB (CLARK), NV - NL 36-14-52; WL 115-01-16
- (17) Patuxent River (ST MARYS), MD - NL 38-17-51; WL 76-23-27
- (18) Point Mugu (VENTURA), CA - NL 34-05-51; WL 119-04-50
- (19) Quantico (PRINCE WILLIAM), VA - NL 38-30-33; WL 77-18-11
- (20) Redstone Arsenal (MADISON), AL - NL 34-40-04; WL 86-40-57
- (21) San Clemente Island (LOS ANGELES), CA - NL 32-54-10; WL 118-29-54
- (22) San Nicolas Island (LOS ANGELES), CA - NL 33-14-57; WL 119-29-58
- (23) 29 Palms (KERN), CA - NL 34-22-26; WL 115-56-04
- (24) Holloman AFB (OTERO), NM - NL 32-52-03; WL 106-06-30
- (25) Yuma Proving Ground (YUMA), AZ - NL 32-51-23; WL 114-24-22

This authorization effective February 10, 2020 and
will expire 3:00 A.M. EST January 15, 2021

FEDERAL
COMMUNICATIONS
COMMISSION



Frequency Information

Tucson (PIMA), AZ - NL 32-08-13; WL 110-55-20

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Tucson (PIMA), AZ - NL 32-06-15; WL 110-57-45

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Avon Park (HIGHLANDS), FL - NL 27-35-30; WL 81-31-48

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Barking Sands (KAUAI), HI - NL 22-04-08; WL 159-46-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Frequency Information

Wellton (YUMA), AZ - NL 32-39-45; WL 113-28-39

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

North Charleston (CHARLESTON), SC - NL 32-53-50; WL 80-02-27

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Cherry Point (CRAVEN), NC - NL 34-54-10; WL 76-52-34

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

China Lake (KERN), CA - NL 35-39-36; WL 117-49-40

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Frequency Information

Virginia Beach City, VA - NL 36-46-11; WL 75-57-14

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Dugway (TOOELE), UT - NL 40-12-49; WL 112-45-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Edwards AFB (KERN), CA - NL 34-55-21; WL 117-51-20

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Eglin (OKALOOSA), FL - NL 30-28-07; WL 86-30-54

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Frequency Information

El Centro (IMPERIAL), CA - NL 32-50-03; WL 115-34-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Fallon (CHURCHILL), NV - NL 39-29-52; WL 118-44-49

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Florence (PINAL), AZ - NL 33-04-29; WL 111-22-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Nellis AFB (CLARK), NV - NL 36-14-52; WL 115-01-16

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Frequency Information

Patuxtent River (ST MARYS), MD - NL 38-17-51; WL 76-23-27

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Point Mugu (VENTURA), CA - NL 34-05-51; WL 119-04-50

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Quantico (PRINCE WILLIAM), VA - NL 38-30-33; WL 77-18-11

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Redstone Arsenal (MADISON), AL - NL 34-40-04; WL 86-40-57

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Frequency Information

San Clemente Island (LOS ANGELES), CA - NL 32-54-10; WL 118-29-54

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

San Nicolas Island (LOS ANGELES), CA - NL 33-14-57; WL 119-29-58

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

29 Palms (KERN), CA - NL 34-22-26; WL 115-56-04

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Hollomon AFB (OTERO), NM - NL 32-52-03; WL 106-06-30

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Frequency Information

Yuma Proving Ground (YUMA), AZ - NL 32-51-23; WL 114-24-22

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0G1D	0.233 pW (ERP)	

Special Conditions:

- (1) GPS re-radiators are limited to a maximum ERP value that will result in power levels not to exceed a power spectral density of -140 dBm/24 MHz measured at a distance of 100 ft outside the building of operation. Any malfunction, misalignment, or tampering of the equipment or its location which results in an increased power spectral density outside the building could cause harmful radio frequency interference to GPS receivers, including those in aircraft and/or ground based facilities.
- (2) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (3) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (4) 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.
- (5) The designated point-of-contact to terminate transmissions if interference occurs is Mr. Jim Ortega at (520) 794-0227.
- (6) Operation is limited to activity for the purpose of testing radionavigation satellite service (RNSS) equipment and systems.
- (7) GPS users in the area of potential interference to GPS reception must be notified that GPS information may be impacted for periods of time.
- (8) Raytheon Missile Systems shall post signs on doors to the test area notifying that, "GPS re-radiator is in use and the GPS information you receive may be in error."
- (9) The test equipment shall only be used indoors and shall be under the control of Raytheon Missile Systems.