

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

EXPERIMENTAL

(Nature of Service)

XD FX

(Class of Station)

WF2XLI

(Call Sign)

0051-EX-CR-2019

(File Number)

NAME Raytheon Missile Systems

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 32-06-15; WL 110-57-13
- (2) East Camden (OUACHITA), AR - NL 33-37-09; WL 92-45-33
- (3) Tucson (PIMA), AZ - NL 32-07-42; WL 110-56-06
- (4) Tucson (PIMA), AZ - NL 32-07-39; WL 110-56-07
- (5) Tucson (PIMA), AZ - NL 32-07-38; WL 110-56-07
- (6) Tucson (PIMA), AZ - NL 32-05-40; WL 110-48-35
- (7) Tucson (PIMA), AZ - NL 32-08-16; WL 110-55-15
- (8) Tucson (PIMA), AZ - NL 32-08-13; WL 110-55-14
- (9) Tucson (PIMA), AZ - NL 32-08-23; WL 110-54-57
- (10) Tucson (PIMA), AZ - NL 32-08-23; WL 110-55-00

Frequency Information

Tucson (PIMA), AZ - NL 32-06-15; WL 110-57-13

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
420-430 MHz	FX	66K0F3D 90K0F3D 180KF3D	0.5 mW (ERP)	
1435-1525 MHz	FX	27M0F1D	20 W (ERP)	

This authorization effective February 01, 2019 and
will expire 3:00 A.M. EST February 01, 2021

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Tucson (PIMA), AZ - NL 32-06-15; WL 110-57-13

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1435-1525 MHz	FX	27M0Q1D	20 W (ERP)	
2200-2290 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2310-2360 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2360-2390 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
5400-5900 MHz	FX	6M84P0N 15M0P0N	0.25 W (ERP)	
5400-5900 MHz	FX	6M84P0N 15M0P0N 15M0P0N	25 W (ERP)	
5400-5900 MHz	FX	15M0M1D	76.6 W (ERP)	

East Camden (OUACHITA), AR - NL 33-37-09; WL 92-45-33

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
420-430 MHz	FX	66K0F3D	0.5 mW (ERP)	

Frequency Information

East Camden (OUACHITA), AR - NL 33-37-09; WL 92-45-33

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
420-430 MHz	FX	90K0F3D 180KF3D	0.5 mW (ERP)	
1435-1525 MHz	FX	27M0F1D 27M0Q1D	20 W (ERP)	
2200-2290 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2310-2360 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2360-2390 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
5400-5900 MHz	FX	6M84P0N 15M0P0N	25 W (ERP)	
5400-5900 MHz	FX	15M0M1D	76.6 W (ERP)	
5400-5900 MHz	FX	6M84P0N 15M0P0N	0.25 W (ERP)	

Frequency Information

Tucson (PIMA), AZ - NL 32-07-42; WL 110-56-06

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
420-430 MHz	FX	66K0F3D 90K0F3D 180KF3D	0.5 mW (ERP)	
1435-1525 MHz	FX	27M0F1D 27M0Q1D	20 W (ERP)	
2200-2290 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2310-2360 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2360-2390 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
5400-5600 MHz	FX	6M84P0N 15M0P0N	0.25 W (ERP)	
5400-5600 MHz	FX	6M84P0N 15M0P0N	25 W (ERP)	
5400-5900 MHz	FX	15M0M1D	76.6 W (ERP)	

Frequency Information

Tucson (PIMA), AZ - NL 32-07-42; WL 110-56-06

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5650-5900 MHz	FX	6M84P0N 15M0P0N	0.25 W (ERP)	
5650-5900 MHz	FX	6M84P0N 15M0P0N	25 W (ERP)	

Tucson (PIMA), AZ - NL 32-07-39; WL 110-56-07

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
420-430 MHz	FX	66K0F3D 90K0F3D 180KF3D	0.5 mW (ERP)	
1435-1525 MHz	FX	27M0F1D 27M0Q1D	20 W (ERP)	
2200-2290 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2310-2360 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2360-2390 MHz	FX	27M0F1D	40 W (ERP)	

Frequency Information

Tucson (PIMA), AZ - NL 32-07-39; WL 110-56-07

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2360-2390 MHz	FX	27M0Q1D	40 W (ERP)	
5400-5900 MHz	FX	15M0M1D	76.6 W (ERP)	
5400-5600 MHz	FX	6M84P0N 15M0P0N	0.25 W (ERP)	
5400-5600 MHz	FX	6M84P0N 15M0P0N	25 W (ERP)	
5650-5900 MHz	FX	6M84P0N 15M0P0N	0.25 W (ERP)	
5650-5900 MHz	FX	6M84P0N 15M0P0N	25 W (ERP)	

Tucson (PIMA), AZ - NL 32-07-38; WL 110-56-07

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
420-430 MHz	FX	66K0F3D 90K0F3D 180KF3D	0.5 mW (ERP)	
1435-1525 MHz	FX	27M0F1D	20 W (ERP)	

Frequency Information

Tucson (PIMA), AZ - NL 32-07-38; WL 110-56-07

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1435-1525 MHz	FX	27M0Q1D	20 W (ERP)	
2200-2290 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2310-2360 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2360-2390 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
5400-5600 MHz	FX	6M84P0N 15M0P0N	0.25 W (ERP)	
5400-5600 MHz	FX	6M84P0N 15M0P0N	25 W (ERP)	
5400-5900 MHz	FX	15M0M1D	76.6 W (ERP)	
5650-5900 MHz	FX	6M84P0N 15M0P0N	0.25 W (ERP)	
5650-5900 MHz	FX	6M84P0N	25 W (ERP)	

Frequency Information

Tucson (PIMA), AZ - NL 32-07-38; WL 110-56-07

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5650-5900 MHz	FX	15M0P0N	25 W (ERP)	

Tucson (PIMA), AZ - NL 32-05-40; WL 110-48-35

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
420-430 MHz	FX	66K0F3D 90K0F3D 180KF3D	0.5 mW (ERP)	
1435-1525 MHz	FX	27M0F1D 27M0Q1D	20 W (ERP)	
2200-2290 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2310-2360 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2360-2390 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
5400-5600 MHz	FX	6M84P0N 15M0P0N	0.25 W (ERP)	

Frequency Information

Tucson (PIMA), AZ - NL 32-05-40; WL 110-48-35

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5400-5600 MHz	FX	6M84P0N 15M0P0N	25 W (ERP)	
5400-5900 MHz	FX	15M0M1D	76.6 W (ERP)	
5650-5900 MHz	FX	6M84P0N 15M0P0N	25 W (ERP)	
5650-5900 MHz	FX	6M84P0N 15M0P0N	0.25 W (ERP)	

Tucson (PIMA), AZ - NL 32-08-16; WL 110-55-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
420-430 MHz	FX	66K0F3D 90K0F3D 180KF3D	0.5 mW (ERP)	
1435-1525 MHz	FX	27M0F1D 27M0Q1D	20 W (ERP)	
2200-2290 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	

Frequency Information

Tucson (PIMA), AZ - NL 32-08-16; WL 110-55-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2310-2360 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2360-2390 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
5400-5900 MHz	FX	15M0M1D	76.6 W (ERP)	
5400-5600 MHz	FX	6M84P0N 15M0P0N	25 W (ERP)	
5400-5600 MHz	FX	6M84P0N 15M0P0N	0.25 W (ERP)	
5650-5900 MHz	FX	6M84P0N 15M0P0N	25 W (ERP)	
5650-5900 MHz	FX	6M84P0N 15M0P0N	0.25 W (ERP)	

Tucson (PIMA), AZ - NL 32-08-13; WL 110-55-14

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
420-430 MHz	FX	66K0F3D	0.5 mW (ERP)	

Frequency Information

Tucson (PIMA), AZ - NL 32-08-13; WL 110-55-14

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
420-430 MHz	FX	90K0F3D 180KF3D	0.5 mW (ERP)	
1435-1525 MHz	FX	27M0F1D 27M0Q1D	20 W (ERP)	
2200-2290 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2310-2360 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2360-2390 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
5400-5600 MHz	FX	6M84P0N 15M0P0N	0.25 W (ERP)	
5400-5600 MHz	FX	6M84P0N 15M0P0N	25 W (ERP)	
5400-5900 MHz	FX	15M0M1D	76.6 W (ERP)	
5650-5900 MHz	FX	6M84P0N	0.25 W (ERP)	

Frequency Information

Tucson (PIMA), AZ - NL 32-08-13; WL 110-55-14

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5650-5900 MHz	FX	15M0P0N	0.25 W (ERP)	
5650-5900 MHz	FX	6M84P0N 15M0P0N	25 W (ERP)	

Tucson (PIMA), AZ - NL 32-08-23; WL 110-54-57

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
420-430 MHz	FX	66K0F3D 90K0F3D 180KF3D	0.5 mW (ERP)	
1435-1525 MHz	FX	27M0F1D 27M0Q1D	20 W (ERP)	
2200-2290 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2310-2360 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2360-2390 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	

Frequency Information

Tucson (PIMA), AZ - NL 32-08-23; WL 110-54-57

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5400-5600 MHz	FX	6M84P0N 15M0P0N	25 W (ERP)	
5400-5900 MHz	FX	15M0M1D	76.6 W (ERP)	
5400-5600 MHz	FX	6M84P0N 15M0P0N	0.25 W (ERP)	
5650-5900 MHz	FX	6M84P0N 15M0P0N	25 W (ERP)	
5650-5900 MHz	FX	6M84P0N 15M0P0N	0.25 W (ERP)	

Tucson (PIMA), AZ - NL 32-08-23; WL 110-55-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
420-430 MHz	FX	66K0F3D 90K0F3D 180KF3D	0.5 mW (ERP)	
1435-1525 MHz	FX	27M0F1D 27M0Q1D	20 W (ERP)	

Frequency Information

Tucson (PIMA), AZ - NL 32-08-23; WL 110-55-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2200-2290 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2310-2360 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
2360-2390 MHz	FX	27M0F1D 27M0Q1D	40 W (ERP)	
5400-5600 MHz	FX	6M84P0N 15M0P0N	0.25 W (ERP)	
5400-5600 MHz	FX	6M84P0N 15M0P0N	25 W (ERP)	
5400-5900 MHz	FX	15M0M1D	76.6 W (ERP)	
5650-5900 MHz	FX	6M84P0N 15M0P0N	0.25 W (ERP)	
5650-5900 MHz	FX	6M84P0N 15M0P0N	25 W (ERP)	

Special Conditions:

- (1) This frequency assignment in one of the bands 1435-1525, 2310-2320 and 2345-2390 MHz was coordinated prior to its authorization with AFMO CONUS, Ft. Sam Houston, TX, who also coordinated it, as appropriate, with the Aerospace and Flight Test Radio Coordinating Council. Use of this frequency under the authority of this assignment is subject to such further coordination with AFMO CONUS, Ft. Sam Houston, TX, as necessary to ensure compatibility with existing uses.
- (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.
- (4) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (5) Subject to coordination with the Area Frequency Coordinator, located at Ft. Huachuca, Arizona, prior to use within the State of Arizona. Phone: 602-538-6423.
- (6) Operation is subject to prior coordination and consent of Satellite Digital Audio Radio Service (SDARS) licensees in the band 2320-2345 MHz.
- (7) Stop Buzzer Point of Contact is Mr. Jim Ortega at (520) 794-0227.
- (8) OPERATION IS PROHIBITED IN 5600-5650 MHZ BAND.