

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

EXPERIMENTAL

(Nature of Service)

WL2XML

(Call Sign)

XC FX MO

(Class of Station)

0830-EX-CN-2020

(File Number)

NAME Raytheon Company (Missiles and Defense - M)

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) Tucson (PIMA), AZ - NL 32-06-16; WL 110-57-11
- (2) MOBILE: Tucson, AZ. area in triangle in exhibit coordinates at center, within 0.35 km, centered around NL 32-05-39; WL 110-56-57
- (3) MOBILE: Tucson, AZ, within 0.6 km, centered around NL 32-05-44; WL 110-55-58

Frequency Information

Tucson (PIMA), AZ - NL 32-06-16; WL 110-57-11

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
430-449 MHz	FX	40K0F1D	48.4 W (ERP)	
1370-1390 MHz	FX	4M06D1D 8M22D1D 16M4D1D	10.6 W (ERP)	
2377 MHz	FX	4M06D1D 8M22D1D	8.2 W (ERP)	

This authorization effective March 11, 2021 and
will expire 3:00 A.M. EST January 01, 2023

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Tucson (PIMA), AZ - NL 32-06-16; WL 110-57-11

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2377 MHz	FX	16M4D1D	8.2 W (ERP)	
2382 MHz	FX	4M06D1D 8M22D1D 16M4D1D	8.2 W (ERP)	
2387 MHz	FX	4M06D1D 8M22D1D 16M4D1D	8.2 W (ERP)	
2392 MHz	FX	4M06D1D 8M22D1D 16M4D1D	8.2 W (ERP)	
4435-4940 MHz	FX	4M06D1D 8M22D1D 16M4D1D	20 W (ERP)	
4950-4990 MHz	FX	4M06D1D 8M22D1D 16M4D1D	20 W (ERP)	
6750-8000 MHz	FX	600MF3N	76.4 W (ERP)	

Frequency Information

MOBILE: Tucson, AZ. area in triangle in exhibit coordinates at center, within 0.35 km, centered around NL 32-05-39; WL 110-56-57

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
430-449 MHz	MO	40K0F1D	48.4 W (ERP)	
1370-1390 MHz	MO	4M06D1D 8M22D1D 16M4D1D	10.6 W (ERP)	
2377 MHz	MO	4M06D1D 8M22D1D 16M4D1D	8.2 W (ERP)	
2382 MHz	MO	4M06D1D 8M22D1D 16M4D1D	8.2 W (ERP)	
2387 MHz	MO	4M06D1D 8M22D1D 16M4D1D	8.2 W (ERP)	
2392 MHz	MO	4M06D1D 8M22D1D 16M4D1D	8.2 W (ERP)	
4435-4940 MHz	MO	4M06D1D 8M22D1D 16M4D1D	20 W (ERP)	

Frequency Information

MOBILE: Tucson, AZ. area in triangle in exhibit coordinates at center, within 0.35 km, centered around NL 32-05-39; WL 110-56-57

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
4950-4990 MHz	MO	4M06D1D 8M22D1D 16M4D1D	20 W (ERP)	
6750-8000 MHz	MO	600MF3N	76.4 W (ERP)	

MOBILE: Tucson, AZ, within 0.6 km, centered around NL 32-05-44; WL 110-55-58

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
430-449 MHz	MO	40K0F1D	48.4 W (ERP)	
1370-1390 MHz	MO	4M06D1D 8M22D1D 16M4D1D	10.6 W (ERP)	
2377 MHz	MO	4M06D1D 8M22D1D 16M4D1D	8.2 W (ERP)	
2382 MHz	MO	4M06D1D 8M22D1D 16M4D1D	8.2 W (ERP)	
2387 MHz	MO	4M06D1D 8M22D1D	8.2 W (ERP)	

Frequency Information

MOBILE: Tucson, AZ, within 0.6 km, centered around NL 32-05-44; WL 110-55-58

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2387 MHz	MO	16M4D1D	8.2 W (ERP)	
2392 MHz	MO	4M06D1D 8M22D1D 16M4D1D	8.2 W (ERP)	
4435-4940 MHz	MO	4M06D1D 8M22D1D 16M4D1D	20 W (ERP)	
4950-4990 MHz	MO	4M06D1D 8M22D1D 16M4D1D	20 W (ERP)	
6750-8000 MHz	MO	600MF3N	76.4 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 authorization with the Area Frequency Coordinator, Ft. Huachuca, AZ, 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 the AFC, Ft. Huachuca, as necessary to ensure compatibility with existing uses.
- (2) One or more frequency assignments were coordinated prior to authorization with FAA Headquarters, 800 Independence Avenue, S.W., Washington, DC 20591; Telephone: 202-267-8699.
- (3) 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.
- (4) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.

Special Conditions:

- (5) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (6) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (7) The licensee coordinate with the local Society of Broadcast Engineers frequency coordinator AND the affected Fixed Microwave Service licensees prior to operation in 6750-8000 MHz band.
- (8) Raytheon Company (Missiles and Defense - M) must notch out the following (+/- 15 MHz): 7195 MHz, 7345 MHz, 7375 MHz, 7465 MHz, and 7495 MHz in order to protect ongoing operations in the requested area.
- (9) The stop buzzer is Jim Ortega at (520) 794-0227.
- (10) Raytheon Company (Missiles and Defense - M) must comply with ITU Resolution 750, out of band emission limits in 1370-1390 MHz band.
- (11) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by the U.S. Government; contract number HQ 0727-18-F-1632. 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.