

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

EXPERIMENTAL

(Nature of Service)

WF2XLH

(Call Sign)

XC FX

(Class of Station)

0038-EX-CR-2016

(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(c) of the Commission's Rules

Station Locations

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

Frequency Information

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

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
200-2000 MHz	FX	NON	200 mW (ERP)	
2000-18000 MHz	FX	NON	5 W (ERP)	

Special Conditions:

- (1) Operation on frequency assignments in one of the bands 1435-1535 or 2310-2390 MHz was coordinated prior to authorization with the Western Area Frequency Coordinator (WAFC), Point Mugu, CA, 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 WAFC as necessary to ensure compatibility with existing uses.
- (2) FirstNet can request the FCC to order the licensee to cease operations within 24 hours.

This authorization effective October 01, 2016 and
will expire 3:00 A.M. EST October 01, 2018

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (3) Subject to coordination with the Area Frequency Coordinator, located at the Army Electronic Proving Ground, Ft. Huachuca, Arizona, prior to use within the State of Arizona. Phone: 602-538-6423.
- (4) Operation is subject to prior coordination with the Society of Broadcast Engineers, Inc. (SBE); ATTN: Executive Director; 9102 North Meridian Street, Suite 305; Indianapolis, IN 46260; telephone, (866) 632-4222; FAX, (317) 846-9120; e-mail, executivedir@sbe.org; information, www.sbe.org.
- (5) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (6) 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.
- (7) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (8) Stop Buzzer: 520-794-0875
- (9) Operation is subject to prior coordination with Fixed Microwave and Auxiliary Broadcasting licensees.
- (10) Maintain separation from grandfathered earth stations as defined in Part 90 subpart Z, or coordinate an agreement with the grandfathered earth station licensee in the 3650-3700 MHz.
- (11) Licensee should get consent from existing and future from Educational Broadband Service, Broadband Radio Service and Advanced Wireless Service licensees.
- (12) Operations are not permitted in the following frequencies:

225.0875-225.1125 MHz, 225.2875-225.3125 MHz, 225.5875-225.6125 MHz, 229.0375-229.0625 MHz, 233.4625-233.4875 MHz, 238.4875-238.5125 MHz, 238.5875-238.6125 MHz, 242.9750-243.0250 MHz, 260.2625-260.2875 MHz, 261.1875-261.2125 MHz, 265.2625-265.2875 MHz, 270.0875-270.1125 MHz, 270.6875-270.7125 MHz, 275.2625-275.2875 MHz, 275.8875-275.9125 MHz, 326.7625-326.7875 MHz, 327.6875-327.7125 MHz, 331.9875-332.0125 MHz, 361.4875-361.5125 MHz, 372.1875-372.2125 MHz, 384.9625-384.9875 MHz, 395.0875-395.1125 MHz, 406.0000-406.1000 MHz, 1019-1042 MHz, 1083-1097 MHz, 1216-1237 MHz, 1558-1610 MHz, 2700-3000 MHz, 7210-7240 MHz, 8285-8315 MHz, 15.138-15.174 GHz, and 15.240-15.276 GHz.
- (13) Use of frequencies under the authority of this assignment is subject to further coordination with the FAA Western Coordinator, Los Angeles, CA, as necessary to ensure compatibility with existing uses.
- (14) Do not conduct testing on any one frequency for more than 240 minutes per year.
- (15) The antenna bandwidth shall be limited to 50 degrees at 2 GHz.
- (16) Existing precautions are to remain in place such as reflector toward airport along with other existing precautions to reduce potential RFI.
- (17) Coordinate with the FAA, Sydney Bradfield.
- (18) Limited to 30 milliwatt CW transmissions not to exceed seven milliseconds in duration per frequency step, transmission steps are in no less than 5 MHz increments.

Special Conditions:

- (19) Use antenna that will cover the minimum frequency ranges necessary.
- (20) Limit testing as much as possible to only 15 frequencies tested per day.
- (21) 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 FA8675-06-C-003. 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.
- (22) Operation is subject to prior coordination with the incumbent Advanced Wireless Services (AWS) licensees.
- (23) Operation is subject to prior coordination with SDARS licensees in 2320-2345 MHz.
- (24) Operation must be coordinated with DOD AFC AZ prior to testing.
- (25) Operation is subject to consent of the following within 50 miles of the test area:
 - o All 700 MHz licensees (698-758 MHz; 775-788 MHz)
 - o All Cellular licensees (824-849 MHz/869-894 MHz)
 - o Commercial Air-Ground licensee (849-851 MHz/894-896 MHz)
 - o SMR licensees (806-821 MHz/851-866 MHz)
 - o SMR licensees (896-901 MHz/935-940 MHz)
 - o All Broadband PCS licensee (1850-1910 MHz/1930-1990 MHz)
- (26) Operation is subject to notification of the following within 50 miles of the test area:
 - o Narrowband PCS licensees (901-902 MHz)
 - o Location & Monitoring Service licensees (902-928 MHz)
 - o Paging Service licensees in 454 MHz/459 MHz
 - o General Aviation Air-Ground Service in 454 MHz/459 MHz
 - o 1670-75 MHz Band licensees