

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

EXPERIMENTAL

(Nature of Service)

WL2XMK

(Call Sign)

XD MO

(Class of Station)

0055-EX-CN-2021

(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(j) of the Commission's Rules

Station Locations

- (1) MOBILE: Tucson, AZ. four paths shown in exhibit, within 12 km, centered around NL 32-05-30; WL 110-56-48

Frequency Information

MOBILE: Tucson, AZ. four paths shown in exhibit, within 12 km, centered around NL 32-05-30; WL 110-56-48

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
32.85 GHz	MO	2G10Q0N	1528 W (ERP)	
35.4 GHz	MO	1G20Q0N	1528 W (ERP)	
39.5 GHz	MO	3G00Q0N	1528 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.

This authorization effective February 23, 2021 and
will expire 3:00 A.M. EST March 01, 2023

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (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) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (4) The stop buzzer point of contact is Jim Ortega at (520) 794-0227.
- (5) Operation is subject to prior coordination with the Fixed Microwave Service licensees in accordance with 47 C.F.R, Part 101.103(d).
- (6) All operations shall be pre-coordinated with the National Science Foundation, 4201 Wilson Boulevard, Room 1030, Arlington, VA 22230, Telephone: 703-292-4896, at least 7 days in advance of operation in order to protect Radio Astronomy operations at Kitt Peak, AZ.
- (7) The band 33.9 - 34.8 GHz shall be excluded from operations.
- (8) The band 37 - 38 GHz shall be excluded from operations, as aeronautical mobile operations are prohibited in this frequency band.
- (9) Prior to commencing any operations in the 40-41 GHz frequency band, experimental licensee must notify licensee of HNS License Sub, LLC (Call sign E170162, S3017. Name: Ms. Jennifer A. Manner, Phone Number: 301-428-5893 E-Mail: jennifer.manner@echostar.com). The notice must include the name and contact information of the stop buzzer personnel that will be available to cease operations in the event of reported interference. The notification should include the testing parameters (specific location(s), antenna gain(s), antenna height(s), antenna orientation, EIRP, EIRP density) and day and times of each test.