

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

EXPERIMENTAL

(Nature of Service)

XD      FX MO

(Class of Station)

WG2XGW

(Call Sign)

0178-EX-TC-2019

(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 32-06-23; WL 110-56-17
- (2) Tucson (PIMA), AZ - NL 32-06-23; WL 110-56-17; MOBILE: Tucson, AZ - airborne operations base, within 120 km, centered around NL 32-06-23; WL 110-56-17

Frequency Information

Tucson (PIMA), AZ - NL 32-06-23; WL 110-56-17

| Frequency     | Station Class | Emission Designator                                            | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|----------------------------------------------------------------|------------------|---------------------------|
| 2200-2290 MHz | FX            | 24M0F1D<br>24M0G1D<br>24M0Q1D<br>30M0F1D<br>30M0G1D<br>30M0Q1D | 40 W (ERP)       |                           |
| 2310-2390 MHz | FX            | 24M0F1D<br>24M0G1D<br>24M0Q1D<br>30M0F1D                       | 40 W (ERP)       |                           |

This authorization effective January 22, 2020 and  
will expire 3:00 A.M. EST August 01, 2022

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

Tucson (PIMA), AZ - NL 32-06-23; WL 110-56-17

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 2310-2390 MHz | FX            | 30M0G1D<br>30M0Q1D  | 40 W (ERP)       |                           |

Tucson (PIMA), AZ - NL 32-06-23; WL 110-56-17; MOBILE: Tucson, AZ - airborne operations base, within 120 km, centered a

| Frequency     | Station Class | Emission Designator                                            | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|----------------------------------------------------------------|------------------|---------------------------|
| 2200-2290 MHz | MO            | 24M0F1D<br>24M0G1D<br>24M0Q1D<br>30M0F1D<br>30M0G1D<br>30M0Q1D | 40 W (ERP)       |                           |
| 2310-2390 MHz | MO            | 30M0Q1D<br>30M0G1D<br>30M0F1D<br>24M0Q1D<br>24M0G1D<br>24M0F1D | 40 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.
- (2) 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.
- (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.

**Special Conditions:**

- (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. Thomas J. Fagan at 520-794-0227.
- (6) All airborne operations shall be coordinated at least 7 days in advance with the NASA White Sands Center (WSC) POC as designated by the NASA GSFC SM, Scott Galbraith at 301-286-5089, [vincent.s.galbraith@nasa.gov](mailto:vincent.s.galbraith@nasa.gov) and Dale Fink at 301-286-4464, [dale.fink@nasa.gov](mailto:dale.fink@nasa.gov) Operations within 3 days may coordinate directly with the NASA WSC Operations Center at 575-527-7157.