

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

EXPERIMENTAL

(Nature of Service)

XD FX

(Class of Station)

WF2XUK

(Call Sign)

0175-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) Redstone Arsenal (MADISON), AL - NL 34-37-42; WL 86-35-46
- (2) Redstone Arsenal (MADISON), AL - NL 34-37-43; WL 86-35-43
- (3) Redstone Arsenal (MADISON), AL - NL 34-37-42; WL 86-35-39
- (4) Redstone Arsenal (MADISON), AL - NL 34-37-40; WL 86-35-37
- (5) Redstone Arsenal (MADISON), AL - NL 34-37-37; WL 86-35-37
- (6) Redstone Arsenal (MADISON), AL - NL 34-37-35; WL 86-35-39
- (7) Redstone Arsenal (MADISON), AL - NL 34-37-38; WL 86-35-43

Frequency Information

Redstone Arsenal (MADISON), AL - NL 34-37-42; WL 86-35-46

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

This authorization effective January 22, 2020 and
will expire 3:00 A.M. EST June 01, 2021

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Redstone Arsenal (MADISON), AL - NL 34-37-42; WL 86-35-46

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)	
5400-5600 MHz	FX	6M84P0N	0.25 W (ERP)	
5400-5600 MHz	FX	6M84P0N	25 W (ERP)	
5650-5900 MHz	FX	6M84P0N	0.25 W (ERP)	
5650-5900 MHz	FX	6M84P0N	25 W (ERP)	

Redstone Arsenal (MADISON), AL - NL 34-37-43; WL 86-35-43

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

Frequency Information

Redstone Arsenal (MADISON), AL - NL 34-37-43; WL 86-35-43

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

Redstone Arsenal (MADISON), AL - NL 34-37-42; WL 86-35-39

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

Frequency Information

Redstone Arsenal (MADISON), AL - NL 34-37-42; WL 86-35-39

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)	
5400-5600 MHz	FX	6M84P0N	0.25 W (ERP)	
5400-5600 MHz	FX	6M84P0N	25 W (ERP)	
5650-5900 MHz	FX	6M84P0N	0.25 W (ERP)	
5650-5900 MHz	FX	6M84P0N	25 W (ERP)	

Redstone Arsenal (MADISON), AL - NL 34-37-40; WL 86-35-37

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

Frequency Information

Redstone Arsenal (MADISON), AL - NL 34-37-40; WL 86-35-37

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)	
5400-5600 MHz	FX	6M84P0N	0.25 W (ERP)	
5400-5600 MHz	FX	6M84P0N	25 W (ERP)	
5650-5900 MHz	FX	6M84P0N	0.25 W (ERP)	
5650-5900 MHz	FX	6M84P0N	25 W (ERP)	

Redstone Arsenal (MADISON), AL - NL 34-37-37; WL 86-35-37

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

Frequency Information

Redstone Arsenal (MADISON), AL - NL 34-37-37; WL 86-35-37

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)	
5400-5600 MHz	FX	6M84P0N	0.25 W (ERP)	
5400-5600 MHz	FX	6M84P0N	25 W (ERP)	
5650-5900 MHz	FX	6M84P0N	0.25 W (ERP)	
5650-5900 MHz	FX	6M84P0N	25 W (ERP)	

Redstone Arsenal (MADISON), AL - NL 34-37-35; WL 86-35-39

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

Frequency Information

Redstone Arsenal (MADISON), AL - NL 34-37-35; WL 86-35-39

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)	
5400-5600 MHz	FX	6M84P0N	0.25 W (ERP)	
5400-5600 MHz	FX	6M84P0N	25 W (ERP)	
5650-5900 MHz	FX	6M84P0N	0.25 W (ERP)	
5650-5900 MHz	FX	6M84P0N	25 W (ERP)	

Redstone Arsenal (MADISON), AL - NL 34-37-38; WL 86-35-43

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

Frequency Information

Redstone Arsenal (MADISON), AL - NL 34-37-38; WL 86-35-43

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)	
5400-5600 MHz	FX	6M84P0N	0.25 W (ERP)	
5400-5600 MHz	FX	6M84P0N	25 W (ERP)	
5650-5900 MHz	FX	6M84P0N	0.25 W (ERP)	
5650-5900 MHz	FX	6M84P0N	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 authorization with the HQ USAF Frequency Coordinator, Alexandria, VA., 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 HQ USAF Frequency Coordinator, Alexandria, VA., as necessary to ensure compatibility with existing uses.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (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) Operation must be consented by all WCS licensees (2305-2320 MHz/2345-2360 MHz) within 50 miles of the test area.

Special Conditions:

- (5) Operation must be consented by SDARS (2320-2345 MHz) licensee(s) within 50 miles of the test area.