

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION**

EXPERIMENTAL

(Nature of Service)

XC FX

(Class of Station)

WS9XXP

(Call Sign)

1491-EX-ST-2021

(File Number)

NAME Raytheon Company (Missiles & Defense - M)

This Special Temporary Authorization is granted upon the express condition that it may be terminated by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises. Nothing contained herein shall be construed as a finding by the Commission that the authority herein granted is or will be in the public interest beyond the express terms hereof.

This Special Temporary Authorization shall not vest in the grantee any right to operate the station nor any right in the use of the frequencies designated in the authorization beyond the term hereof, nor in any other manner than authorized herein. Neither the authorization nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This authorization is subject to the right of use of control the Government of the United States conferred by Section 706 of the Communications Act of 1934.

Special Temporary Authority is hereby granted to operate the apparatus described below:

Purpose Of Operation:

Transceiver test and development

Station Locations

- (1) Tucson (PIMA), AZ - NL 32-05-50; WL 110-48-46
- (2) Tucson (PIMA), AZ - NL 32-06-26; WL 110-56-40
- (3) Tucson (PIMA), AZ - NL 32-06-20; WL 110-56-52
- (4) Tucson (PIMA), AZ - NL 32-06-26; WL 110-57-25

Frequency Information

Tucson (PIMA), AZ - NL 32-05-50; WL 110-48-46

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1435-1525 MHz	FX	59M0F1D	10 W (ERP)	
1710-2000 MHz	FX	59M0F1D	10 W (ERP)	

This authorization effective November 03, 2021 and
will expire 3:00 A.M. EST April 30, 2022

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Tucson (PIMA), AZ - NL 32-06-26; WL 110-56-40

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1435-1525 MHz	FX	59M0F1D	10 W (ERP)	
1710-2000 MHz	FX	59M0F1D	10 W (ERP)	

Tucson (PIMA), AZ - NL 32-06-20; WL 110-56-52

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1435-1525 MHz	FX	59M0F1D	10 W (ERP)	
1710-2000 MHz	FX	59M0F1D	10 W (ERP)	

Tucson (PIMA), AZ - NL 32-06-26; WL 110-57-25

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1435-1525 MHz	FX	59M0F1D	10 W (ERP)	
1710-2000 MHz	FX	59M0F1D	10 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) Operation in the 1695-1780 MHz, 1915-1920 MHz, 1995-2020 MHz or 2110-2200 MHz band requires consent of local Advanced Wireless Service (AWS) licensee(s) to avoid interference.
- (3) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (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) All reasonable steps shall be taken to ensure that the unwanted emissions power does not exceed -28 dBW/27 MHz in the 1400-1427 MHz band. Stations that do not meet this limit shall first attempt to operate in the 1452-1525 MHz band prior to operating in the 1435-1452 MHz band.
- (6) Raytheon Company must coordinate with the following POC prior to operations:
 - a. David Schafer , nrao-rfi@nrao.edu
- (7) Prior to commencing any operations in the frequencies below, Raytheon Company (Missiles & Defense - M) must obtain consent from the following within 50 miles of the contours of the testing area:
 - *1670-1675 MHz Band licensee (Crown Castle International), and the lessee (One Dot Six Corp)
 - *Broadband PCS licensees (1850-1910 MHz/1930-1990 MHz)
 - *1910-1915 MHz/1990-1995 MHz Bands licensee
- (8) All testing must conduct in-door in labs at Raytheon Company's location at Tucson, PIMA, AZ.
- (9) For indoor operation, the non-ionizing radiation levels for the authorized antenna must meet the power density of 1mW/cm² limit for General Population/Uncontrolled Exposure (MPE). The licensee shall, at all times, take all necessary measures to ensure that operation of this (these) authorized antenna (s) does not create potential exposure of humans to radiofrequency radiation in excess of the FCC exposure limits defined in 47 CFR §§ 1.1307(b) and 1.1310. Physical measures must be taken to ensure compliance with limits for both occupational/controlled exposure and for general population/uncontrolled exposure, as defined in these rule sections.
- (10) Further requests for extension of the authority granted herein must be filed on Form 442, "Application for New or Modified Radio Station Authorization under Part 5 of FCC Rules - Experimental Radio Service." Future STA requests to extend this authorization will not be considered.
- (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. 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.