

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

EXPERIMENTAL

(Nature of Service)

XD MO

(Class of Station)

WK2XCN

(Call Sign)

0224-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) MOBILE: Tucson AZ Testing on vacant portion of plant site, within 2 km, centered around NL 32-05-47; WL 110-57-06
- (2) MOBILE: San Nicholas Island, CA. over San Nicholas Island & surrounding ocean areas, within 10 km, centered around NL 33-14-57; WL 119-29-58
- (3) MOBILE: Oxnard, CA. flights primarily over ocean, within 10 km, centered around NL 34-06-36; WL 119-06-36
- (4) MOBILE: Over gulf of Mexico from Santa Rosa Island, within 10 km, centered around NL 30-23-15; WL 86-48-12

Frequency Information

MOBILE: Tucson AZ Testing on vacant portion of plant site, within 2 km, centered around NL 32-05-47; WL 110-57-06

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2312-2320 MHz	MO	3M85G1D 7M70G1D 4M06D1D	17.23 W (ERP)	
2345-2507 MHz	MO	3M85G1D 7M70G1D 4M06D1D	17.23 W (ERP)	

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

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Tucson AZ Testing on vacant portion of plant site, within 2 km, centered around NL 32-05-47; WL 110-57-06

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2345-2507 MHz	MO	8M13D1D 15M4G1D 16M3D1D 32M5D1D	17.23 W (ERP)	

MOBILE: San Nicholas Island, CA. over San Nicholas Island & surrounding ocean areas, within 10 km, centered around NL 33-14-57; WL 119-29-58

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2312-2320 MHz	MO	3M85G1D 7M70G1D 4M06D1D	17.23 W (ERP)	
2345-2507 MHz	MO	3M85G1D 7M70G1D 15M4G1D 4M06D1D 8M13D1D 16M3D1D 32M5D1D	17.23 W (ERP)	

MOBILE: Oxnard, CA. flights primarily over ocean, within 10 km, centered around NL 34-06-36; WL 119-06-36

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2312-2320 MHz	MO	3M85G1D 7M70G1D 4M06D1D	17.23 W (ERP)	

Frequency Information

MOBILE: Oxnard, CA. flights primarily over ocean, within 10 km, centered around NL 34-06-36; WL 119-06-36

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2345-2507 MHz	MO	3M85G1D 7M70G1D 15M4G1D 4M06D1D 8M13D1D 16M3D1D 32M5D1D	17.23 W (ERP)	

MOBILE: Over gulf of Mexico from Santa Rosa Island, within 10 km, centered around NL 30-23-15; WL 86-48-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2312-2320 MHz	MO	3M85G1D 7M70G1D 4M06D1D	17.23 W (ERP)	
2345-2507 MHz	MO	3M85G1D 7M70G1D 15M4G1D 4M06D1D 8M13D1D 16M3D1D 32M5D1D	17.23 W (ERP)	

Special Conditions:

- (1) Operation requires consent of affected Educational Broadband Service/Broadband Radio Service (EBS/BRS) licensees.
- (2) Licensee is required to coordinate operations with existing microwave users in the area to avoid interference.
- (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.

Special Conditions:

- (4) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (5) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at https://www.sbe.org/sections/freq_local.php to find the appropriate coordinator.
- (6) Prior to commencing any operations in WCS (2305-2320 MHz/2345-2360 MHz) frequencies, the applicant must obtain consent from the WCS licensees (AT&T; and for operations in the Gulf of Mexico, RigNet SatCom).
- (7) Raytheon Missile Systems must notch out 2400 MHz and 2405.6 MHz at the Oxnard, CA location.
- (8) All operations must be pre-coordinated with the appropriate DoD Area Frequency Coordinator (AFC) as specified in NTIA Manual Annex D.
- (9) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (10) Operations in the WCS bands (2312-2320 MHz and 2345-2507 MHz) must comply with the emission limits applicable to those bands. See 47 C.F.R. § 27.53(a).