

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

EXPERIMENTAL

(Nature of Service)

XC MO

(Class of Station)

WJ2XXY

(Call Sign)

0168-EX-CM-2019

(File Number)

NAME Systems & Technology Research

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(c) of the Commission's Rules

Station Locations

- (1) MOBILE: Boston, MA: max altitude 10,000 ft. AGL, within 112 km, centered around NL 42-21-46; WL 71-00-23
- (2) MOBILE: Grayson County: max altitude 10,000 ft. AGL, within 63 km, centered around NL 33-42-41; WL 96-40-18
- (3) MOBILE: Ann Arbor, MI: max altitude 10,000 ft. AGL, within 50 km, centered around NL 42-13-22; WL 83-44-44
- (4) MOBILE: Valhermoso Springs, AL: max altitude 10,000 ft. AGL, within 40 km, centered around NL 34-36-40; WL 86-40-25

Frequency Information

MOBILE: Boston, MA: max altitude 10,000 ft. AGL, within 112 km, centered around NL 42-21-46; WL 71-00-23

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
9.2-10.2 GHz	MO	800MQ3N	1.55 MW (ERP)	0.1 %

This authorization effective July 23, 2019 and
will expire 3:00 A.M. EST January 01, 2021

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Grayson County: max altitude 10,000 ft. AGL, within 63 km, centered around NL 33-42-41; WL 96-40-18

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
8.5-8.9 GHz	MO	400MQ3N	1.55 MW (ERP)	0.1 %
9.2-10.2 GHz	MO	800MQ3N	1.55 MW (ERP)	0.1 %

MOBILE: Ann Arbor, MI: max altitude 10,000 ft. AGL, within 50 km, centered around NL 42-13-22; WL 83-44-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
8.5-8.9 GHz	MO	400MQ3N	1.55 MW (ERP)	0.1 %
9.2-10.2 GHz	MO	800MQ3N	1.55 MW (ERP)	0.1 %

MOBILE: Valhermoso Springs, AL: max altitude 10,000 ft. AGL, within 40 km, centered around NL 34-36-40; WL 86-40-25

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
8.5-8.9 GHz	MO	400MQ3N	1.55 MW (ERP)	0.1 %
9.2-10.2 GHz	MO	800MQ3N	1.55 MW (ERP)	0.1 %

Special Conditions:

- (1) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (2) The occupied bandwidth of the emission shall not extend beyond the band limits set forth above.

Special Conditions:

- (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) NTIA's concurrence is based upon the expectation that the authorized emission bandwidth shall be so located within the band that it does not extend beyond the upper or lower limits of the requested band in this application.
- (5) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by the USAF AFRL contract number FA8750-18-C-0023 and the U.S. Navy contract number FA8750-19-C-0001. 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.
- (6) Systems & Technology Research must note that operation in the 9.2-10.2 GHz band is subject to immediate shutdown, if it causes harmful interference to NASA EXRAD Radar.
- (7) STOP BUZZER POC IS NATHAN MERRITT
Phone: (339)999-2696 Email: nathan.merritt@stresearch.com
- (8) FREQUENCY REQUEST 8.1-8.9 GHz IN BOSTON, MA IS DENIED DUE TO NASA OBJECTION.
- (9) This authorization SUPERSEDES the previously issued authorization with the same call sign and file number: added contract number to grant condition