

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

EXPERIMENTAL

(Nature of Service)

XC MO

(Class of Station)

WH2XXZ

(Call Sign)

0412-EX-PL-2015

(File Number)

NAME System & 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: Parking lot near STR offices in Woburn, MA, within 0.3 km, centered around NL 42-29-41; WL 71-07-43
- (2) MOBILE: Wooded area at Harvard Forest in Petersham, MA, within 3 km, centered around NL 42-32-20; WL 72-10-41
- (3) MOBILE: Avon Park Air Force Testing Range, Avon Park, FL, within 10 km, centered around NL 27-39-04; WL 81-20-36
- (4) MOBILE: Areas within Hawaii Experimental Tropical Forest, within 3 km, centered around NL 19-55-48; WL 155-17-13
- (5) MOBILE: Areas within Luquillo Experimental Forest, PR, within 3 km, centered around NL 18-19-34; WL 65-48-58

Frequency Information

MOBILE: Parking lot near STR offices in Woburn, MA, within 0.3 km, centered around NL 42-29-41; WL 71-07-43

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
72-73 MHz	MO	1M00F3N	10 W (ERP)	7.5E-6 %
74.6-74.8 MHz	MO	200KF3N	1 W (Output Power)	7.5E-6 %

This authorization effective November 19, 2015 and
will expire 3:00 A.M. EST December 01, 2016

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Parking lot near STR offices in Woburn, MA, within 0.3 km, centered around NL 42-29-41; WL 71-07-43

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
75.2-75.4 MHz	MO	200KF3N	1 W (Output Power)	7.5E-6 %
75.4-76 MHz	MO	600KF3N	10 W (ERP)	7.5E-6 %
420-450 MHz	MO	3M02F3N 25M0F3N	10 W (ERP)	7.5E-6 %
929-960 MHz	MO	3M02F3N 25M0F3N	10 W (ERP)	7.5E-6 %

MOBILE: Wooded area at Harvard Forest in Petersham, MA, within 3 km, centered around NL 42-32-20; WL 72-10-41

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
72-73 MHz	MO	1M00F3N	10 W (ERP)	7.5E-6 %
74.6-74.8 MHz	MO	200KF3N	1 W (Output Power)	7.5E-6 %
75.2-75.4 MHz	MO	200KF3N	1 W (Output Power)	7.5E-6 %
75.4-76 MHz	MO	600KF3N	10 W (ERP)	7.5E-6 %
420-450 MHz	MO	3M02F3N	10 W (ERP)	7.5E-6 %

Frequency Information

MOBILE: Wooded area at Harvard Forest in Petersham, MA, within 3 km, centered around NL 42-32-20; WL 72-10-41

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
420-450 MHz	MO	25M0F3N	10 W (ERP)	7.5E-6 %
929-960 MHz	MO	3M02F3N 25M0F3N	10 W (ERP)	7.5E-6 %

MOBILE: Avon Park Air Force Testing Range, Avon Park, FL, within 10 km, centered around NL 27-39-04; WL 81-20-36

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
72-73 MHz	MO	1M00F3N	10 W (ERP)	7.5E-6 %
74.6-74.8 MHz	MO	200KF3N	1 W (Output Power)	7.5E-6 %
75.2-75.4 MHz	MO	200KF3N	1 W (Output Power)	7.5E-6 %
75.4-76 MHz	MO	600KF3N	10 W (ERP)	7.5E-6 %
420-450 MHz	MO	3M02F3N 25M0F3N	10 W (ERP)	7.5E-6 %
929-960 MHz	MO	3M02F3N 25M0F3N	10 W (ERP)	7.5E-6 %

Frequency Information

MOBILE: Areas within Hawaii Experimental Tropical Forest, within 3 km, centered around NL 19-55-48; WL 155-17-13

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
72-73 MHz	MO	1M00F3N	10 W (ERP)	7.5E-6 %
74.6-74.8 MHz	MO	200KF3N	1 W (Output Power)	7.5E-6 %
75.2-75.4 MHz	MO	200KF3N	1 W (Output Power)	7.5E-6 %
75.4-76 MHz	MO	600KF3N	10 W (ERP)	7.5E-6 %
420-450 MHz	MO	3M02F3N 25M0F3N	10 W (ERP)	7.5E-6 %
929-960 MHz	MO	3M02F3N 25M0F3N	10 W (ERP)	7.5E-6 %

MOBILE: Areas within Luquillo Experimental Forest, PR, within 3 km, centered around NL 18-19-34; WL 65-48-58

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
72-73 MHz	MO	1M00F3N	10 W (ERP)	7.5E-6 %
74.6-74.8 MHz	MO	200KF3N	1 W (Output Power)	7.5E-6 %

Frequency Information

MOBILE: Areas within Luquillo Experimental Forest, PR, within 3 km, centered around NL 18-19-34; WL 65-48-58

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
75.2-75.4 MHz	MO	200KF3N	1 W (Output Power)	7.5E-6 %
75.4-76 MHz	MO	600KF3N	10 W (ERP)	7.5E-6 %
420-450 MHz	MO	3M02F3N 25M0F3N	10 W (ERP)	7.5E-6 %
929-960 MHz	MO	3M02F3N 25M0F3N	10 W (ERP)	7.5E-6 %

Special Conditions:

- (1) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (2) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at http://freq.sbe.org/pdf_files/coordinators.pdf to find the appropriate coordinator.
- (3) The occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (4) Licensee is required to coordinate operations with existing microwave users in the area to avoid interference.
- (5) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by DARPA contract nos. HR0011-14-C- 0045(10060) and D14PC00069. 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.