

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

EXPERIMENTAL

(Nature of Service)

WP9XGD

(Call Sign)

XT MO

(Class of Station)

1689-EX-ST-2019

(File Number)

NAME Harsha Chenji (Ohio University)

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:

It is to test the DistressNet-NG system, a research and development for public safety communications. Cellular smartphones are expected to roam between fixed eNodeB transmitters.

Station Locations

- (1) MOBILE: An isolated plateau near Gypsum, CO, within 5 km, centered around NL 39-36-58; WL 107-00-58
- (2) MOBILE: An isolated plateau near Gypsum, CO, within 5 km, centered around NL 39-41-07; WL 106-55-49
- (3) MOBILE: An isolated plateau near Gypsum, CO, within 5 km, centered around NL 39-40-04; WL 107-00-21
- (4) MOBILE: In/around the NIST laboratory buildings, indoors

Frequency Information

MOBILE: An isolated plateau near Gypsum, CO, within 5 km, centered around NL 39-36-58; WL 107-00-58

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
824-849 MHz	MO	20M0D7W	500 mW (ERP)	1 %
869-894 MHz	MO	20M0D7W	3 W (ERP)	1 %

This authorization effective October 08, 2019 and
will expire 3:00 A.M. EST October 13, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: An isolated plateau near Gypsum, CO, within 5 km, centered around NL 39-36-58; WL 107-00-58

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
869-894 MHz	MO	20M0D7W	3 W (ERP)	1 %
1710-1785 MHz	MO	20M0D7W	500 mW (ERP)	1 %
1805-1880 MHz	MO	20M0D7W	2 W (ERP)	1 %
2496-2690 MHz	MO	20M0D7W	3 W (ERP)	1 %
2500-2570 MHz	MO	20M0D7W	500 mW (ERP)	1 %
2620-2690 MHz	MO	20M0D7W	3 W (ERP)	1 %

MOBILE: An isolated plateau near Gypsum, CO, within 5 km, centered around NL 39-41-07; WL 106-55-49

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
824-849 MHz	MO	20M0D7W	500 mW (ERP)	1 %
869-894 MHz	MO	20M0D7W 20M0D7W	3 W (ERP)	1 %

Frequency Information

MOBILE: An isolated plateau near Gypsum, CO, within 5 km, centered around NL 39-41-07; WL 106-55-49

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1710-1785 MHz	MO	20M0D7W	500 mW (ERP)	1 %
1805-1880 MHz	MO	20M0D7W	2 W (ERP)	1 %
2496-2690 MHz	MO	20M0D7W	3 W (ERP)	1 %
2500-2570 MHz	MO	20M0D7W	500 mW (ERP)	1 %
2620-2690 MHz	MO	20M0D7W	3 W (ERP)	1 %

MOBILE: An isolated plateau near Gypsum, CO, within 5 km, centered around NL 39-40-04; WL 107-00-21

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
824-849 MHz	MO	20M0D7W	500 mW (ERP)	1 %
869-894 MHz	MO	20M0D7W 20M0D7W	3 W (ERP)	1 %
1710-1785 MHz	MO	20M0D7W	500 mW (ERP)	1 %

Frequency Information

MOBILE: An isolated plateau near Gypsum, CO, within 5 km, centered around NL 39-40-04; WL 107-00-21

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1805-1880 MHz	MO	20M0D7W	2 W (ERP)	1 %
2496-2690 MHz	MO	20M0D7W	3 W (ERP)	1 %
2500-2570 MHz	MO	20M0D7W	500 mW (ERP)	1 %
2620-2690 MHz	MO	20M0D7W	3 W (ERP)	1 %

MOBILE: In/around the NIST laboratory buildings, indoors

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
824-849 MHz	MO	20M0D7W	500 mW (ERP)	1 %
869-894 MHz	MO	20M0D7W 20M0D7W	3 W (ERP)	1 %
1710-1785 MHz	MO	20M0D7W	500 mW (ERP)	1 %
1805-1880 MHz	MO	20M0D7W	2 W (ERP)	1 %

Frequency Information

MOBILE: In/around the NIST laboratory buildings, indoors

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2496-2690 MHz	MO	20M0D7W	3 W (ERP)	1 %
2500-2570 MHz	MO	20M0D7W	500 mW (ERP)	1 %
2620-2690 MHz	MO	20M0D7W	3 W (ERP)	1 %

Special Conditions:

- (1) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (2) 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.
- (3) Prior to commencing any operations in the frequencies below, the applicant must obtain consent from the following within 50 miles of the contours of the testing area:
Cellular licensees (824-849 MHz/869-894 MHz)
Broadband PCS licensees (1850-1910 MHz/1930-1990 MHz)
- (4) Licensee shall secure consents from the Advance Wireless Service licensees prior to operation in 1710-1785 MHz band.
- (5) Licensee shall obtain consents from the Educational Broadband Service and the Broadband Radio Service licensees prior to operation in any the frequency bands from 2496 MHz to 2690 MHz.
- (6) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.