

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

EXPERIMENTAL

(Nature of Service)

WJ9XBE

(Call Sign)

XT FX MO

(Class of Station)

1042-EX-ST-2015

(File Number)

NAME First RF Corporation

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:

Testing a communications system in the lightly regulated E-band.

Station Locations

- (1) MOBILE: FirstRF is an authorized tenant of NIST TMFS, Longmont, CO, within 1 km, centered around NL 40-07-12; WL 105-14-27
- (2) Erie (WELD), CO - NL 40-03-00; WL 105-00-14
- (3) MOBILE: Blouder, CO, within 0.2 km, centered around NL 40-02-00; WL 105-13-44

Frequency Information

MOBILE: FirstRF is an authorized tenant of NIST TMFS, Longmont, CO, within 1 km, centered around NL 40-07-12; WL 105-14-27

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
377.725 MHz	MO	280KF1D	0.61 W (ERP)	0.00025 %
380.35 MHz	MO	280KF1D	0.61 W (ERP)	0.00025 %

This authorization effective October 01, 2015 and
will expire 3:00 A.M. EST March 02, 2016

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: FirstRF is an authorized tenant of NIST TMFS, Longmont, CO, within 1 km, centered around NL 40-07-12; WL 105-14-27

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
385.1 MHz	MO	280KF1D	0.61 W (ERP)	0.00025 %
71-76 GHz	MO	1G15G1D 180MG1D 18M0G1D 1M80G1D	63096 W (ERP)	0.0001 %
81-86 GHz	MO	1G15G1D 180MG1D 18M0G1D 1M80G1D	63096 W (ERP)	0.0001 %

Erie (WELD), CO - NL 40-03-00; WL 105-00-14

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
377.725 MHz	FX	280KF1D	0.61 W (ERP)	0.00025 %
380.35 MHz	FX	280KF1D	0.61 W (ERP)	0.00025 %
385.1 MHz	FX	280KF1D	0.61 W (ERP)	0.00025 %
71-76 GHz	FX	1G15G1D 180MG1D 18M0G1D	63096 W (ERP)	0.0001 %

Frequency Information

Erie (WELD), CO - NL 40-03-00; WL 105-00-14

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
71-76 GHz	FX	1M80G1D	63096 W (ERP)	0.0001 %
81-86 GHz	FX	1G15G1D 180MG1D 18M0G1D 1M80G1D	63096 W (ERP)	0.0001 %

MOBILE: Blouder, CO, within 0.2 km, centered around NL 40-02-00; WL 105-13-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
377.725 MHz	MO	280KF1D	0.61 W (ERP)	0.00025 %
380.35 MHz	MO	280KF1D	0.61 W (ERP)	0.00025 %
385.1 MHz	MO	280KF1D	0.61 W (ERP)	0.00025 %
71-76 GHz	MO	1G15G1D 180MG1D 18M0G1D 1M80G1D	63096 W (ERP)	0.0001 %
81-86 GHz	MO	1G15G1D 180MG1D 18M0G1D	63096 W (ERP)	0.0001 %

Frequency Information

MOBILE: Blouder, CO, within 0.2 km, centered around NL 40-02-00; WL 105-13-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
81-86 GHz	MO	1M80G1D	63096 W (ERP)	0.0001 %

Special Conditions:

- (1) 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.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) First RF Corporation must be made aware that in Boulder, CO, there is a National Science Foundation (NSF) Radio Astronomy Service operating in the 70 - 80 GHz band. The NSF will monitor their operations to ensure no interference is experienced.
- (4) First RF Corporation must successfully coordinate with the existing users prior to accessing to 71-76 GHz and 81-86 GHz.
- (5) In the requested 375 - 386 MHz band, First RF Corporation is authorized to use the following:
 - a.377.725 MHz
 - b.380.35 MHz
 - c.385.100 MHz