

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

EXPERIMENTAL

(Nature of Service)

WH9XZC

(Call Sign)

XT    FX

(Class of Station)

0966-EX-ST-2014

(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:**

To test a communications system in the lightly regulated E-band with a pointing acquisition radio at 340 MHz. U.S. Government contract: DARPA contract HR0011-14-C-0061.

Station Locations

- (1) Longmont (BOULDER), CO - NL 40-07-12; WL 105-14-27
- (2) Erie (WELD), CO - NL 40-03-00; WL 105-00-14

**Frequency Information**

Longmont (BOULDER), CO - NL 40-07-12; WL 105-14-27

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
340 MHz	FX	280KF1D	0.61 W (ERP)	0.00025 %
		480KF1D		
71-76 GHz	FX	900MG1D	63096 W (ERP)	0.0001 %
		180MG1D		
		18M0G1D		

This authorization effective February 01, 2015 and will expire 3:00 A.M. EST July 30, 2015

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



Frequency Information

Longmont (BOULDER), CO - NL 40-07-12; WL 105-14-27

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
71-76 GHz	FX	1M80G1D	63096 W (ERP)	0.0001 %
81-86 GHz	FX	900MG1D 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 (+/-)
340 MHz	FX	280KF1D 480KF1D	0.61 W (ERP)	0.00025 %
71-76 GHz	FX	900MG1D 180MG1D 18M0G1D 1M80G1D	63096 W (ERP)	0.0001 %
81-86 GHz	FX	900MG1D 180MG1D 1M80G1D 18M0G1D	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.

**Special Conditions:**

- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) The applicant must register with a third-party Database Manager, as specified in Section 101.1523 of the Commission's Rule.
- (4) In the requested 330 – 350 MHz band, First RF Corporation is authorized to use the following: 340 MHz at 280KF1D and 480KF1D emissions.
- (5) 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.