

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

EXPERIMENTAL

(Nature of Service)

WG9XPR

(Call Sign)

XD FX MO

(Class of Station)

0853-EX-ST-2012

(File Number)

NAME City of Oak Ridge

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:

Demonstration of broadband technology

Station Locations

- (1) Oak Ridge (ROANE), TN - NL 35-56-33; WL 84-22-54; MOBILE: Within 2 miles (3.22 km) of Fixed Base Station., within 3.22 km
- (2) Oak Ridge (ANDERSON), TN - NL 35-59-41; WL 84-14-59; MOBILE: Within 2 miles (3.22 km) of Fixed Base Station., within 3.22 km
- (3) Oak Ridge (ROANE), TN - NL 35-54-34; WL 84-18-19; MOBILE: Within 2 miles (3.22 km) of Fixed Base Station., within 3.22 km

Frequency Information

Oak Ridge (ROANE), TN - NL 35-56-33; WL 84-22-54; MOBILE: Within 2 miles (3.22 km) of Fixed Base Station., within 3.22 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
758-768 MHz	FX	5M00G7D	692 W (ERP)	
		5M00W7W		
		5M00D7D		
		5M00G2D		
		10M0G7D		
		10M0W7W		

This authorization effective May 22, 2013 and
will expire 3:00 A.M. EST November 22, 2013

**FEDERAL
COMMUNICATIONS
COMMISSION**

Frequency Information

Oak Ridge (ROANE), TN - NL 35-56-33; WL 84-22-54; MOBILE: Within 2 miles (3.22 km) of Fixed Base Station., within 3.22 l

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
758-768 MHz	FX	10M0G2D 10M0D7D	692 W (ERP)	
788-798 MHz	MO	5M00G7D 5M00W7W 5M00D7D 5M00G2D 5M00D7D 10M0G7D 10M0W7W 10M0G2D 10M0D7D	1 W (ERP)	

Oak Ridge (ANDERSON), TN - NL 35-59-41; WL 84-14-59; MOBILE: Within 2 miles (3.22 km) of Fixed Base Station., within 3

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
758-768 MHz	FX	5M00G7D 5M00W7W 5M00D7D 5M00G2D 5M00D7D 10M0G7D 10M0W7W 10M0G2D 10M0D7D	692 W (ERP)	
788-798 MHz	MO	5M00G7D 5M00W7W 5M00D7D	1 W (ERP)	

Frequency Information

Oak Ridge (ANDERSON), TN - NL 35-59-41; WL 84-14-59; MOBILE: Within 2 miles (3.22 km) of Fixed Base Station., within 3

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
788-798 MHz	MO	5M00G2D 5M00D7D 10M0G7D 10M0W7W 10M0G2D 10M0D7D	1 W (ERP)	

Oak Ridge (ROANE), TN - NL 35-54-34; WL 84-18-19; MOBILE: Within 2 miles (3.22 km) of Fixed Base Station., within 3.22 l

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
758-768 MHz	FX	5M00G7D 5M00W7W 5M00D7D 5M00G2D 5M00D7D 10M0G7D 10M0W7W 10M0G2D 10M0D7D	692 W (ERP)	
788-798 MHz	MO	5M00G7D 5M00W7W 5M00D7D 5M00G2D 5M00D7D 10M0G7D 10M0W7W 10M0G2D 10M0D7D	1 W (ERP)	

Special Conditions:

- (1) Operation will be confined to three sites in Oak Ridge. The equipment will include three temporary base stations and associated antennae, and a total number of no more than 100 portable units all operating at no more than 2 miles from the base sites.
- (2) Oak Ridge will request authority from the FCC to operate over the 758-768/788-798 MHz bands, which are currently licensed on a nationwide basis to FirstNet.
- (3) FirstNet understands that Oak Ridge has analyzed information from the FCC's license databases and has determined that the proposed operation would not interfere or create a significant potential for interference with any public safety operations in the 700 MHz band.
- (4) Oak Ridge has stated that this temporary operation will not be used in mission-critical operations or in the delivery of live transmissions in duties to protect life, property, or safety. The equipment to be used will include base stations and associated antennae located at the demonstration sites and no more than 100 portable units in testing scenarios only.
- (5) Oak Ridge has stated that the Experimental STA will allow testing of advanced broadband technology. This testing will help further situational awareness, enhance security, and demonstrate surveillance, sensing and other mobile and fixed applications in an area with significant nuclear facilities. In addition, the proposed program would further Federal, State and local partnerships and demonstrate interoperability models for potential public safety broadband network use. Oak Ridge states that such testing, if followed by a lease of FirstNet spectrum, would provide lessons learned about government cooperation and broadband applications that could be invaluable to FirstNet.
- (6) Operation will occur no longer than 180 days from the date on which the FCC grants Oak Ridge an Experimental STA, allowing time during that period for setup and testing, demonstrations, and teardown, unless Oak Ridge and FirstNet successfully conclude negotiations for a lease of FirstNet's licensed spectrum, and the FirstNet Board approves the lease agreement.
- (7) This Experimental ST A is non-renewable and any Experimental STA use of radio frequencies licensed to FirstNet beyond the 180-day period to which this application refers must be made by a separate request for such use by Oak Ridge.