

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

EXPERIMENTAL

(Nature of Service)

WL9XDH

(Call Sign)

XT FX

(Class of Station)

0283-EX-ST-2018

(File Number)

NAME F2 Labs

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 perform radiated immunity testing.

Station Locations

- (1) Cleveland (CUYAHOGA), OH - NL 41-32-57; WL 81-27-29
- (2) Cleveland (CUYAHOGA), OH - NL 41-32-57; WL 81-27-29
- (3) Cleveland, OH - NL 41-32-57; WL 81-27-29

Frequency Information

Cleveland (CUYAHOGA), OH - NL 41-32-57; WL 81-27-29

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
80-108 MHz	FX	1K00A3N	1.5 W (ERP)	
401-608 MHz	FX	1K00A3N	1.5 W (ERP)	

This authorization effective March 05, 2018 and
will expire 3:00 A.M. EST June 06, 2018

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Cleveland (CUYAHOGA), OH - NL 41-32-57; WL 81-27-29

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
614-756 MHz	FX	1K00A3N	1.5 W (ERP)	
798-960 MHz	FX	1K00A3N	1.5 W (ERP)	

Cleveland (CUYAHOGA), OH - NL 41-32-57; WL 81-27-29

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1720 MHz	FX	N0N	500 mW (ERP)	
1845 MHz	FX	N0N	500 mW (ERP)	
1970 MHz	FX	N0N	500 mW (ERP)	
2450 MHz	FX	N0N	500 mW (ERP)	
5500 MHz	FX	N0N	500 mW (ERP)	
5785 MHz	FX	N0N	500 mW (ERP)	

Frequency Information

Cleveland, OH - NL 41-32-57; WL 81-27-29

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
80-108 MHz	FX	1K00N0N 1K00A3N	500 mW (ERP)	

Special Conditions:

- (1) Operation in the 1695-1780 MHz, 1915-1920 MHz, 1995-2020 MHz or 2110-2200 MHz band requires consent of local Advanced Wireless Service (AWS) licensee(s) to avoid interference.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) 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.
- (4) Stop Buzzer, Ken Littell at 440-635-7112.
- (5) The applicant must obtain consents from the Advance Wireless Service licensees prior to accessing to 1720 MHz.
- (6) F2 Labs must notch the following frequencies to protect aeronautical flight safety in the area.
412.9375 MHz +/- 12.5 KHz
413.0375 MHz +/- 12.5 KHz
413.1375 MHz +/- 12.5 KHz
- (7) The following frequencies must be notched to protect National Weather Service operations in the area.
415.85 MHz +/- 12.5KHz
410.70 MHz +/- 25KHz
- (8) F2 Lab must notch 406-406.1MHz band to protect safety of life operations. ITU Radio Regulations, Appendix 15 prohibits any possible interference within the 406-406.1 frequency range.
- (9) The following frequencies must be notched to protect EMS and law enforcement communications in the area.
458.350 MHz +/- 6.25 KHz
458.475 MHz +/- 6.25 KHz
458.575 MHz +/- 6.25 KHz
465.225 MHz +/- 6.25 KHz
465.325 MHz +/- 6.25 KHz
465.425 MHz +/- 6.25 KHz

Special Conditions:

- (10) The applicant must coordinate with the local Society of Broadcast Engineers frequency coordinator prior to operation in 80-108 MHz, 401-608 MHz, 614-756 MHz and 798-960 MHz bands.
- (11) Operation is subject to coordinate with the affected Fixed Microwave Services licensees prior to performing the test.
- (12) Licensee must prior coordinate testing with other authorized Band 14 operations. Failure to effectively coordinate shall result in FirstNet seeking immediate suspension of the experimental license by the FCC.
- (13) Licensee must accept interference from others operating in the band and must not cause interference to FirstNet operations or those approved to operate in Band 14 per license (i.e. AT&T testing or public safety entities authorized to operate on Band 14).
- (14) Licensee POC shall submit a "Stop Buzzer" contact to FirstNet at peter.tomczak@firstnet.gov upon authorization issuance with "kill switch" authority; license POC agrees to immediately cease operations on Band 14 if notified of any interference concerns until any issues are resolved.
- (15) Licensee agrees that this license may be subject to further review by the FCC and possible re-coordination with FirstNet.
- (16) The applicant must obtain consents of the following within 50 miles of the test area:
 - Paging Service licensees in 454MHz/459 MHz
 - General Aviation Air-Ground Service in 454 MHz/459 MHz
 - 700 MHz licensees (698-758 MHz and 775-788 MHz)
 - SMR licensees (809-824 MHz/854-869 MHz)
 - Cellular licensees (824-849 MHz/869-894 MHz)
 - Commercial Air-Ground licensee (849-851 MHz/894-896 MHz)
 - SMR licensees (896-901 MHz/935-940 MHz)
 - Narrowband PCS licensees (901-902 MHz)
 - Location & Monitoring Service licensees (902-928 MHz)
 - Paging Service licensees in 929 MHz and 931 MHz
 - Broadband PCS licensees (1850-1910 MHz/1930-1990 MHz)
- (17) F2 Labs must notch out the following frequencies:

406.025 MHz, 406.050 MHz
(+/- 5.5k) 411.500 MHz, 412.975 MHz, 413.000 MHz, 413.025 MHz, 413.825 MHz.
(+/- 12.5 kHz): 413.1375 MHz, 412.9375 MHz, 413.0375 MHz.
- (18) F2 Labs shall provide notification to NASA Glenn Research Center Spectrum Manager, Bob Jones at 216.433.3457 or rejones@nasa.gov, at least 3 days prior to operations within the 401-608 MHz frequency band.
- (19) F2 Labs should be aware that due to the geographic location and altitude of this application, NTIA is concerned that the potential for interference with Canadian national licensees is a possibility and that should interference occur, NTIA expects F2 Labs to adhere to the standard restrictions/conditions as if interference with an authorized US licensee had occurred