

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

EXPERIMENTAL

(Nature of Service)

WO9XFR

(Call Sign)

XT FX

(Class of Station)

0522-EX-ST-2019

(File Number)

NAME Capital Sciences, LLC

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:

Interface testing of radar with system

Station Locations

(1) Herndon (FAIRFAX), VA - NL 38-57-20; WL 77-23-00

Frequency Information

Herndon (FAIRFAX), VA - NL 38-57-20; WL 77-23-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
24450-24650 MHz	FX	190MFXN	486 W (ERP)	

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.

This authorization effective April 08, 2019 and
will expire 3:00 A.M. EST October 09, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (3) Further requests for extension of the authority granted herein must be filed on Form 442, "Application for New or Modified Radio Station Authorization under Part 5 of FCC Rules - Experimental Radio Service." Future STA requests to extend this authorization will not be considered.
- (4) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.
- (5) Experimental station shall use the minimum power level necessary to close the communications link to minimize potential interference to licensed users.
- (6) The stop buzzer contact for this project :
David Stewart
dstewart@capsci.com
(cell) 703-283-7083
- (7) Capital Sciences, LLC must adhere to the following:
 - a) Radius of operations limited to 1.15 mile of the provided lat/long coordinates (N 38 57 20 W 77 23 00).
 - b) Capital Sciences, LLC must be aware that the frequency band 24.45-24.65 GHz is allocated for radionavigation purposes. Therefore, the experimental station on this grant shall only be used for Detect and Avoid (DAA) operations. It shall not be used for radiolocation purposes such as UAS detection for security perimeters, drone interdiction or counter-UAS purposes, which are incompatible with DAA operations in the same band.