

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
RADIO STATION CONSTRUCTION PERMIT
AND LICENSE**

EXPERIMENTAL

(Nature of Service)

WL2XIQ

(Call Sign)

XT FX

(Class of Station)

0900-EX-CN-2020

(File Number)

NAME Design, Analysis and Research Corporation

Subject to the provisions of the Communications Act of 1934, subsequent acts, and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in this license, the licensee hereof is hereby authorized to use and operate the radio transmitting facilities hereinafter described for radio communications in accordance with the program of experimentation described by the licensee in its application for license.

Operation: In accordance with Sec. 5.3(h) of the Commission's Rules

Station Locations

(1) Lawrence (DOUGLAS), KS - NL 38-55-55; WL 95-13-33

Frequency Information

Lawrence (DOUGLAS), KS - NL 38-55-55; WL 95-13-33

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	2M04W7D	31.6 pW (ERP)	0.01 %

Special Conditions:

- (1) GPS re-radiators are limited to a maximum EIRP value that will result in power levels not to exceed a power spectral density of -140 dBm/24 MHz measured at a distance of 100 ft from the building where the test is being conducted. Any malfunction, misalignment, or tampering of the equipment or its location which results in an increased power spectral density outside the building could cause harmful radio frequency interference to GPS receivers, including those in aircraft and/or ground based facilities.
- (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.

This authorization effective November 20, 2020 and
will expire 3:00 A.M. EST December 01, 2022

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (4) The test equipment shall only be used indoor and shall be under the control of the licensee.
- (5) GPS re-radiators must operate in accordance with Section 8.3.28 of the NTIA Manual. Power spectral density of the signal should be very well controlled beyond the building.
- (6) Operation is limited to activity for the purpose of testing radio navigation satellite service (RNSS) equipment and systems.
- (7) Licensee shall post signs on doors to the test area notifying that, "GPS re-radiator is in use and the GPS information you receive may be in error."
- (8) GPS users in the area of potential interference to GPS reception must be notified that GPS information may be impacted for periods of time.
- (9) Stop Buzzer: The designated point of contact to terminate the systems if interference occurs is Steven McArthur at (785) 832-0434 x131.