

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

EXPERIMENTAL

(Nature of Service)

XT FX

(Class of Station)

WL2XNL

(Call Sign)

0229-EX-CM-2021

(File Number)

NAME Numerica 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(j) of the Commission's Rules

Station Locations

- (1) Boulder (BOULDER), CO - NL 40-08-15; WL 105-15-18
- (2) Briggsdale (WELD), CO - NL 40-35-44; WL 104-23-37
- (3) Fort Collins (LARIMER), CO - NL 40-31-01; WL 105-00-53

Frequency Information

Boulder (BOULDER), CO - NL 40-08-15; WL 105-15-18

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
15.7-17.2 GHz	FX	20M0Q1N	3.33 kW (ERP)	1 %

Briggsdale (WELD), CO - NL 40-35-44; WL 104-23-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
16.2-17.2 GHz	FX	20M0Q1N	3.33 kW (ERP)	1 %

This authorization effective December 02, 2021 and
will expire 3:00 A.M. EST April 01, 2023

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Fort Collins (LARIMER), CO - NL 40-31-01; WL 105-00-53

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
16.2-17.2 GHz	FX	20M0Q1N	3.33 kW (ERP)	1 %

Special Conditions:

- (1) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (2) 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.
- (3) Stop Buzzer Point of Contact: Evan Everett at 713-855-5121, evan.everett@numerica.us
- (4) Numerica Corporation will sector blank transmissions in the direction of Denver International Airport. Proponent agree to sector blank away from Denver and keep emissions 270-290 degree North to avoid impact to FAA operations.
- (5) No guarantee of FAA to support this development/testing in the future or at other locations in the 15.7 to 16.2 GHz band. Numerica Corporation should be aware that the 15.7 to 16.2 GHz band is used by FAA Automated Surface Detection (ASD) systems in airports. The FAA does not concur with the radar mounted on a moving vehicle.
- (6) Experimental licensee is prohibited from operating in the 15.7-16.2 GHz frequency band at the Fort Collins, CO and Briggsdale, CO locations due to federal agency objection.
- (7) This authorization SUPERSEDES the previously issued authorization with the same call sign and file number: condition 6