

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

EXPERIMENTAL

(Nature of Service)

WN9XKN

(Call Sign)

XT MO

(Class of Station)

0010-EX-ST-2019

(File Number)

NAME Echodyne Corp.

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:**

The purpose of the operations is to test the MESA-SSR radar.

Station Locations

- (1) MOBILE: Seattle, WA, within 1 km, centered around NL 47-35-43; WL 122-19-54
- (2) MOBILE: Atlanta, GA, within 1 km, centered around NL 33-45-20; WL 84-24-03

**Frequency Information**

MOBILE: Seattle, WA, within 1 km, centered around NL 47-35-43; WL 122-19-54

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
24.45-24.65 GHz	MO	190MFXN	486 W (ERP)	

This authorization effective January 29, 2019 and will expire 3:00 A.M. EST February 10, 2019

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

MOBILE: Atlanta, GA, within 1 km, centered around NL 33-45-20; WL 84-24-03

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
24.45-24.65 GHz	MO	190MFXN	486 W (ERP)	0.001 %

## Special Conditions:

(1) The radar shall not be used for air traffic control purposes or separation of aircraft.

(2) The stop buzzer contact for this project is Jeff Finan, Phone: (425) 445-0631  
Email: jeff@echodyne.com

(3) Licensee should be aware that other stations may be licensed on these frequencies and if any interference occurs, the experimental licensee of this authorization will be subject to immediate shut down.

In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.

The authorized station must be in compliance with environmental requirement set forth in Section 1.1307 of the Commission's Rules.

The authorized station must be in compliance with the Federal Aviation Administration (FAA) requirements as set forth in Section 17.4 of the Commission's Rules.

This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.

Experimental station shall use the minimum power level necessary to close the communications link to minimize potential interference to licensed users.

**Special Conditions:**

- (4) Echodyne and the Federal Bureau of Investigations must be aware that the frequency band 24.45-24.65 GHz is allocated for radionavigation purposes. Specifically, the FAA is promoting the use for Detect and Avoid (DAA) for UAS in this band. Therefore, the development of a security applications such as ground-based UAS detection is incompatible with DAA operations in the same band. Echodyne should seek development of their UAS detection radar system in an appropriate radiolocation band, such as 24.05-24.25 GHz.

Due to the sensitivity of the proposed operations during the Super Bowl, the FAA will conditionally concur with this STA as a one-time demonstration of proof-of-concept only. Any renewal or expansion of this STA or other requests to use 24.45-24.65 GHz for non-DAA operations will be opposed by the FAA.