

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

EXPERIMENTAL

(Nature of Service)

XT FX MO

(Class of Station)

WS9XKA

(Call Sign)

1111-EX-ST-2021

(File Number)

NAME AURA Network Systems OpCo, 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:

The market trials will allow AURA to verify and refine the most effective network parameters to securely and reliably enable data and navigation capabilities for autonomous aircraft.

Station Locations

- (1) Concord (CONTRA COSTA), CA - NL 37-58-59; WL 122-03-23; MOBILE: maximum flying altitudes of 20,000 feet MSL., within 80 km, centered around NL 37-58-59; WL 122-03-23
- (2) Rio Vista (SOLANO), CA - NL 38-11-36; WL 121-42-13; MOBILE: maximum flying altitudes of 20,000 feet MSL., within 80 km, centered around NL 38-11-36; WL 121-42-13
- (3) Byron (CONTRA COSTA), CA - NL 37-49-42; WL 121-37-33; MOBILE: maximum flying altitudes of 20,000 feet MSL., within 80 km, centered around NL 37-49-42; WL 121-37-33
- (4) Monterey (MONTEREY), CA - NL 36-35-13; WL 121-50-34; MOBILE: maximum flying altitudes of 20,000 feet MSL., within 80 km, centered around NL 36-35-13; WL 121-50-34
- (5) Paso Robles (SAN LUIS OBISPO), CA - NL 35-40-22; WL 120-37-37; MOBILE: maximum flying altitudes of 20,000 feet MSL., within 80 km, centered around NL 35-40-22; WL 120-37-37
- (6) San Miguel (SAN LUIS OBISPO), CA - NL 35-43-09; WL 120-46-05; MOBILE: maximum flying altitudes of 20,000 feet MSL., within 80 km, centered around NL 35-43-09; WL 120-46-05
- (7) Morrisville (WAKE), NC - NL 35-52-40; WL 78-47-15; MOBILE: maximum flying altitudes of 20,000 feet MSL., within 80 km, centered around NL 35-52-40; WL 78-47-15
- (8) New Bern (CRAVEN), NC - NL 35-04-22; WL 77-02-35; MOBILE: maximum flying altitudes of 20,000 feet MSL., within 80 km, centered around NL 35-04-22; WL 77-02-35

This authorization effective August 25, 2021 and
will expire 3:00 A.M. EST February 01, 2022

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Concord (CONTRA COSTA), CA - NL 37-58-59; WL 122-03-23; MOBILE: maximum flying altitudes of 20,000 feet MSL., within

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
454.675-454.975 MHz	FX	320KW1D	50 W (ERP)	0.0005 %
459.675-459.975 MHz	MO	320KW1D	4 W (ERP)	0.0005 %

Rio Vista (SOLANO), CA - NL 38-11-36; WL 121-42-13; MOBILE: maximum flying altitudes of 20,000 feet MSL., within 80 km,

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
454.675-454.975 MHz	FX	320KW1D	50 W (ERP)	0.0005 %
459.675-459.975 MHz	MO	320KW1D	4 W (ERP)	0.0005 %

Byron (CONTRA COSTA), CA - NL 37-49-42; WL 121-37-33; MOBILE: maximum flying altitudes of 20,000 feet MSL., within 8

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
454.675-454.975 MHz	FX	320KW1D	50 W (ERP)	0.0005 %
459.675-459.975 MHz	MO	320KW1D	4 W (ERP)	0.0005 %

Frequency Information

Monterey (MONTEREY), CA - NL 36-35-13; WL 121-50-34; MOBILE: maximum flying altitudes of 20,000 feet MSL., within 80

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
454.675-454.975 MHz	FX	320KW1D	50 W (ERP)	0.0005 %
459.675-459.975 MHz	MO	320KW1D	4 W (ERP)	0.0005 %

Paso Robles (SAN LUIS OBISPO), CA - NL 35-40-22; WL 120-37-37; MOBILE: maximum flying altitudes of 20,000 feet MSL.

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
454.675-454.975 MHz	FX	320KW1D	50 W (ERP)	0.0005 %
459.675-459.975 MHz	MO	320KW1D	4 W (ERP)	0.0005 %

San Miguel (SAN LUIS OBISPO), CA - NL 35-43-09; WL 120-46-05; MOBILE: maximum flying altitudes of 20,000 feet MSL., '

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
454.675-454.975 MHz	FX	320KW1D	50 W (ERP)	0.0005 %
459.675-459.975 MHz	MO	320KW1D	4 W (ERP)	0.0005 %

Frequency Information

Morrisville (WAKE), NC - NL 35-52-40; WL 78-47-15; MOBILE: maximum flying altitudes of 20,000 feet MSL., within 80 km, c

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
454.675-454.975 MHz	FX	320KW1D	50 W (ERP)	0.0005 %
459.675-459.975 MHz	MO	320KW1D	4 W (ERP)	0.0005 %

New Bern (CRAVEN), NC - NL 35-04-22; WL 77-02-35; MOBILE: maximum flying altitudes of 20,000 feet MSL., within 80 km,

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
454.675-454.975 MHz	FX	320KW1D	50 W (ERP)	0.0005 %
459.675-459.975 MHz	MO	320KW1D	4 W (ERP)	0.0005 %

Special Conditions:

- (1) All transmitting and/or receiving equipment used in the study shall be owned by the licensee.
- (2) Licensee is required to ensure that trial devices are either rendered inoperable or retrieved by them from trial participants at the conclusion of the trial. Licensee is required to notify trial participants in advance that operation of the trial device is subject to this condition.
- (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) All customers participating in the experiment shall be informed that this operation is for experimental purposes only and can be cancelled at any time.
- (5) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (6) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (7) The stop buzzer contact information is: Michael Gagne at (240) 508-6220, mgagne@auranetworksystems.com

Special Conditions:

- (8) Prior to commencing any operations in the frequencies below, the applicant must obtain consent from the following within 200 miles of the contours of the testing area:
 - Mobile Service licensees in 454 MHz/459 MHz
 - General Aviation Air-Ground Service in 454 MHz/459 MHz
- (9) Non-approved equipment must be labeled.
- (10) Non-approved equipment must be retrieved.