

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

EXPERIMENTAL

(Nature of Service)

XT MO

(Class of Station)

WJ2XUP

(Call Sign)

0214-EX-CM-2019

(File Number)

NAME AeroVironment, Inc.

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) MOBILE: Ground Based Locations within 9.26 km of center, within 9.26 km, centered around NL 35-03-20; WL 118-01-46
- (2) MOBILE: Airborne UAV operations 9.26km of center 2730m AGL, within 9.26 km, centered around NL 35-03-20; WL 118-01-46
- (3) MOBILE: Ground Based Locations within 9.26km of center, within 9.26 km, centered around NL 34-50-03; WL 118-04-19
- (4) MOBILE: Airborne UAV operations 9.26km center, 2730m AGL, within 9.26 km, centered around NL 34-50-03; WL 118-04-19
- (5) MOBILE: Ground Based Locations within 11.11km of center, within 11.11 km, centered around NL 20-46-43; WL 156-56-21
- (6) MOBILE: AirborneUAV operations 11.11km of center 25.9kmAGL, within 11.11 km, centered around NL 20-46-43; WL 156-56-21
- (7) MOBILE: Ground Based Locations within 9.26 km of center, within 9.26 km, centered around NL 34-50-03; WL 118-04-19
- (8) MOBILE: Ground Based Locations within 9.26km of center, within 9.26 km, centered around NL 35-03-20; WL 118-01-46
- (9) MOBILE: AirborneUAV operations 9.26km center 2730mAGL, within 9.26 km, centered around NL 35-03-20; WL 118-01-46
- (10) MOBILE: AirborneUAV operations 9.26km of center 2730mAGL, within 9.26 km, centered around NL 34-50-03; WL 118-04-19
- (11) MOBILE: Ground Based Locations 11.11km of center, within 11.11 km, centered around NL 20-46-44; WL 156-56-21
- (12) MOBILE: AirborneUAV operations 11.11km of center 2730mAGL, within 11.11 km, centered around NL 20-46-44; WL 156-56-21
- (13) MOBILE: laboratory tests 1 km radius, within 1 km, centered around NL 34-16-58; WL 118-46-45

This authorization effective October 09, 2019 and
will expire 3:00 A.M. EST December 01, 2019

FEDERAL
COMMUNICATIONS
COMMISSION



Station Locations

(14) MOBILE: laboratory tests 1 km radius, within 1 km, centered around NL 34-17-13; WL 118-52-09

Frequency Information

MOBILE: Ground Based Locations within 9.26 km of center, within 9.26 km, centered around NL 35-03-20; WL 118-01-46

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
454.7-454.975 MHz	MO	25K0F1B	2 W (ERP)	0.0005 %
459.7-459.975 MHz	MO	25K0F1B	2 W (ERP)	0.0005 %

MOBILE: Airborne UAV operations 9.26km of center 2730m AGL, within 9.26 km, centered around NL 35-03-20; WL 118-01-46

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
454.7-454.975 MHz	MO	25K0F1B	2 W (ERP)	0.0005 %
459.7-459.975 MHz	MO	25K0F1B	2 W (ERP)	0.0005 %

MOBILE: Ground Based Locations within 9.26km of center, within 9.26 km, centered around NL 34-50-03; WL 118-04-19

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
454.7-454.975 MHz	MO	25K0F1B	2 W (ERP)	0.0005 %
459.7-459.975 MHz	MO	25K0F1B	2 W (ERP)	0.0005 %

Frequency Information

MOBILE: Airborne UAV operations 9.26km center, 2730m AGL, within 9.26 km, centered around NL 34-50-03; WL 118-04-19

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
454.7-454.975 MHz	MO	25K0F1B	2 W (ERP)	0.0005 %
459.7-459.975 MHz	MO	25K0F1B	2 W (ERP)	0.0005 %

MOBILE: Ground Based Locations within 11.11km of center, within 11.11 km, centered around NL 20-46-43; WL 156-56-21

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
454.7-454.975 MHz	MO	25K0F1B	5 W (ERP)	0.0005 %
459.7-459.975 MHz	MO	25K0F1B	5 W (ERP)	0.0005 %

MOBILE: AirborneUAV operations 11.11km of center 25.9kmAGL, within 11.11 km, centered around NL 20-46-43; WL 156-56-21

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
454.7-454.975 MHz	MO	25K0F1B	5 W (ERP)	0.0005 %
459.7-459.975 MHz	MO	25K0F1B	5 W (ERP)	0.0005 %

Frequency Information

MOBILE: Ground Based Locations within 9.26 km of center, within 9.26 km, centered around NL 34-50-03; WL 118-04-19

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5040.9675 MHz	MO	85K0G2D	2 W (ERP)	0.0005 %

MOBILE: Ground Based Locations within 9.26km of center, within 9.26 km, centered around NL 35-03-20; WL 118-01-46

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5040.8825 MHz	MO	85K0G2D	2 W (ERP)	0.0005 %

MOBILE: AirborneUAV operations 9.26km center 2730mAGL, within 9.26 km, centered around NL 35-03-20; WL 118-01-46

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5040.8825 MHz	MO	85K0G2D	2 W (ERP)	0.0005 %

MOBILE: AirborneUAV operations 9.26km of center 2730mAGL, within 9.26 km, centered around NL 34-50-03; WL 118-04-19

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5040.9675 MHz	MO	85K0G2D	2 W (ERP)	0.0005 %

Frequency Information

MOBILE: Ground Based Locations 11.11km of center, within 11.11 km, centered around NL 20-46-44; WL 156-56-21

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5040.8825 MHz	MO	85K0G2D	2 W (ERP)	0.0005 %

MOBILE: Airborne UAV operations 11.11km of center 2730m AGL, within 11.11 km, centered around NL 20-46-44; WL 156-56-21

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5040.8825 MHz	MO	85K0G2D	2 W (ERP)	0.0005 %

MOBILE: laboratory tests 1 km radius, within 1 km, centered around NL 34-16-58; WL 118-46-45

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
454.7-454.975 MHz	MO	25K0F1B	2 W (ERP)	0.0005 %
459.7-459.975 MHz	MO	25K0F1B	2 W (ERP)	0.0005 %

MOBILE: laboratory tests 1 km radius, within 1 km, centered around NL 34-17-13; WL 118-52-09

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
454.7-454.975 MHz	MO	25K0F1B	2 W (ERP)	0.0005 %
459.7-459.975 MHz	MO	25K0F1B	2 W (ERP)	0.0005 %

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) This frequency assignment in the band 5091-5101 MHz was coordinated prior to authorization with the Area Frequency Coordinator (AFC), who also coordinated it, as appropriate, with the Aerospace and Flight Test Radio Coordinating Council. Use of the frequency under the authority of this assignment is subject to such further coordination with the AFC as necessary to ensure compatibility with existing users.
- (3) Prior to commencing any operations, the applicant must obtain consent from the following within 78 miles of the contours of the testing area:
Paging Service licensees in 454 MHz/459 MHz band frequencies.
General Aviation Air-Ground Service in 454 MHz/459 MHz band frequencies.
- (4) Applicant should be aware that the 5040-5050 MHz and 5091-5101 MHz bands are allocated to federal services, and applicant should have no expectation of automatic approval in those bands in future submissions.
- (5) Aircraft operations are limited to U.S.-registered aircraft, and the authorized station must not be used for air traffic control communications.
- (6) The stop buzzer contact for this project is John Logan.
Phone Number: 2027875621
E-Mail Address: johnelogan@jelogan.com
- (7) AIRCRAFT SHALL NOT EXCEED 3000 FT. ALTITUDE
- (8) Bart Decker, 805 391-1335 and Decker@AVINC.com, will act as a "stop buzzer" if any matters involving interference arise during the testing.
- (9) Prior to commencing any operations in the frequencies below, AeroVironment, Inc. must obtain consent from the Paging Service licensees in 454 MHz/459 MHz and General Aviation Air-Ground Service in 454 MHz/459 MHz, within the islands of Hawaii, and within 134 miles of the contours of the testing areas in California