

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

EXPERIMENTAL

(Nature of Service)

XT MO

(Class of Station)

WK2XYP

(Call Sign)

0323-EX-CN-2020

(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: Airborne UAV operations, 100km center, 24.4km AGL, within 100 km, centered around NL 32-59-31; WL 106-58-17

Frequency Information

MOBILE: Airborne UAV operations, 100km center, 24.4km AGL, within 100 km, centered around NL 32-59-31; WL 106-58-17

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5140-5150 MHz	MO	3M90G1D	5 W (ERP)	2 %

Special Conditions:

- (1) Subject to coordination with the Area Frequency Coordinator located at White Sands Missile Range, New Mexico, prior to use in the State of New Mexico or other U. S. Territory within a 150 mile radius of WSMR plus the area of Utah and Colorado that lies South of 41 degrees North and between 108 degrees and 111 degrees West. Phone: 505-678-5417 or 3702.
- (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) The occupied bandwidth of the emission shall not extend beyond the band limits set forth above.

This authorization effective May 29, 2020 and
will expire 3:00 A.M. EST June 01, 2021

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (4) Proof of concept only and approval subject to cancellation cease operations within 60 day notification of AEROMACS system being installed at any airport within radio line of sight at 85,000 AGL.
- (5) OPERATIONS MUST BE COORDINATED WITH THE SPACEPORT AMERICA, DIRECTOR OF AEROSPACE OPERATIONS, WHO, IN TURN, WILL COORDINATE OPERATIONS WITH WSMR, THROUGH THE WSMR LIAISON TO THE SPACEPORT.
- (6) FAA IS CONDITIONALLY CONCURRING WITH THIS HAPS TESTING AS A SHORT-TERM, PROOF OF CONCEPT OPERATION ONLY. THE FAA WILL NOT ENDORSE NOR APPROVE THE USE OF 5091-5150 MHZ FOR THE DEVELOPMENT OF ANY AVIATIONRELATED COMMERCIAL APPLICATIONS BEYOND AEROMACS OPERATIONS. HOWEVER, THE FAA IS GIVING AN EXCEPTION FOR TELEMETRY TESTING AT TRUTH OR CONSEQUENCES DUE TO THE UNIQUE, HIGH-ALTITUDE NATURE OF THE PROPONENT'S REQUIREMENTS. THE PROPONENT SHALL CEASE OPERATIONS WITHIN 60 DAYS UPON BEING NOTIFIED THAT AN AEROMACS SYSTEM IS BEING INSTALLED AT AN AIRPORT WITHIN RADIO LINE OF SIGHT OF 85,000 FEET AGL. IN ADDITION, THE FAA IS ONLY APPROVING 5140-5150 MHZ AS A TEMPORARY MEASURE TO SUPPORT THIS TEST. AEROVIROMENT MUST BE PREPARED TO FIND A SUITABLE FREQUENCY BAND OTHER THAN 5091-5150 MHZ TO SUPPORT THE DEVELOPMENT AND FUTURE OPERATION OF THIS HAPS PLATFORM. FURTHER RENEWALS AND EXPANSION OF HAPS OPERATIONS BEYOND THIS LOCATION IS DEPENDENT UPON A TRANSITION PLAN TO ANOTHER FREQUENCY BAND. FINALLY, ALL OPERATIONS SHALL BE COORDINATED WITH DOD WSMR AREA FREQUENCY COORDINATOR PRIOR TO START, TO AVOID RADIO FREQUENCY INTERFERENCE WITH OTHER TELEMETRY OPERATIONS.