AeroVironment, Inc. Application for an Experimental License

### **Statement in Support of Application for Experimental License**

AeroVironment, Inc. (AV) designs, develops, manufactures, supports and operates unmanned aircraft systems ("UAS"). As part of the engineering and production process, AV tests the UAS communications systems to make sure specifications are met and to learn how it can better serve its customers. In this application, AV seeks authority to conduct laboratory radio tests in the 5140-5150 MHz band segments at AV facilities in Simi Valley, CA and Moorpark, CA.

The laboratory testing supports AeroVironment's Hawk30 Hight Altitude Platform System (HAPS), now referenced as Sunglider, for unmanned aircraft. The project encompasses solar-powered high-altitude long endurance (HALE) unmanned aircraft. The tests are solely for the purpose of supporting prototype aircraft under development. It does not encompass any ongoing commercial operations.

AV currently holds an experimental license, WK2XYP, for flight operations within the 5140-5150 MHz segment at a site located at Spaceport America, New Mexico.

An experimental license for laboratory testing within the 5140-5150 MHz segment at Simi Valley, CA and Moorpark, CA, WK2XFQ, expired on July 1, 2020.

### **Technology**

The Quansonix QSX-VDR2-1100-05-04-05AB-LD-VP will use the 5140-5150 MHz segment only for one-way simulated air to ground telemetry during the laboratory tests.

Radio and Antenna details are provided in separate attachments.

### Locations

- Simi Valley, Ventura County, CA North 34° 16' 58" West 118° 46' 45" (Laboratory Testing)
- Moorpark, Ventura County, CA North 34° 17' 13" West 118° 52' 09" (Laboratory Testing)

# **Coordination by the Federal Aviation Administration**

The coordination by the Federal Aviation Administration (FAA) for operations at 5140-5150 MHz is provided in an attachment for each site.

#### **AFTRCC Coordination**

Coordination by the Aerospace and Flight Test Coordinating Council (AFTRCC) is attached.

#### **Deference to Licensed Users**

AeroVironment commits to operations respecting other users of the band and those in adjacent segments. Should any interference occur, AeroVironment will take immediate steps to resolve the interference, including, if necessary, discontinuing operations.

### **Stop Buzzer**

Bart Decker, Flight Standards Manager, is available by telephone at (805) 391-1335 and electronic mail at Decker@avinc.com and will act as a "stop buzzer" if any matters involving interference arise during the testing.

### **Request for Waiver of Station Identification**

AeroVironment asks for a waiver of the station identification requirements stated in Section 5.115 of the Commission's rules.

## Diagram

A diagram of the proposed laboratory operations is provided in an attachment.

AeroVironment values the work and consideration of the Commission, NTIA and coordinating agencies. Please call upon us with any questions.