

### **Description of Experimental Program**

In its 6 GHz Report & Order, the Commission designated additional spectrum for unlicensed operations, envisioning its use for “new innovative technologies and services that will advance the Commission's goal of making broadband connectivity available to all Americans, especially those in rural and underserved areas.” *Unlicensed Use of the 6 GHz Band*, 35 FCC Rcd 3852, 3853 (2020). Through this application for experimental license, Connection Concepts, LLC, dba Verde Valley Internet (“Verde Valley”) seeks to advance these goals through further testing of available equipment across the UNII-5 band to collect additional data on the use of these bands for delivery of enhanced fixed wireless broadband services on a shared basis with incumbent users.

*Experimental Program:* As authorized by Special Temporary Authority WU9XLM, Verde Valley has deployed Cambium 6 GHz equipment from a 2.5-meter pole atop Squaw Peak with up to six existing customer locations located within a 12-mile radius in order to evaluate the greater throughput capabilities available in these bands using 40 MHz and 80 MHz channels. Of particular importance is the performance of the equipment under the unique topographical conditions of Yavapai County, where atmospheric inversion is a concern due to substantial variations in altitude between transmit and receive locations.

Based on initial results of the STA, Verde Valley now seeks to expand the trial to add two additional sectorized antenna locations and four additional customer locations, each within 5 KM of the associated access point. The fixed base access point transmitters will operate with an output power of 100 mW and an antenna gain of 16 dBi and the fourteen customer premises units will operate at 20 mW output power and an antenna gain of 23 dBi.

*No Market Trial:* No market trial is proposed. The purpose of the experimental license is purely for equipment evaluation purposes and is limited to just six customer locations. This limited deployment is solely for the purpose of evaluating the capabilities of the Cambium equipment under local conditions. Customers will continue to be charged for service under existing agreements but will not be charged for any equipment or otherwise be solicited to purchase any capability that they are not already receiving under their current service. Verde Valley will retrieve all the devices from the customer participants upon the completion of the experiment or will repurpose the antennas for operation in authorized licensed or unlicensed spectrum.

*Non-Harmful Interference Operation:* Verde Valley’s data collection program will operate without causing harmful interference to incumbent users and will work with any nearby licensed incumbents that it identifies, based on information provided in the FCC’s databases, to ensure that its operations will avoid any harmful impact on such existing users.