

December 2, 2019

Federal Communications Commission

Office of Engineering and Technology
445 12th Street SW
Washington, DC 20554

The objective of the experiment, for which AiRXOS requests an Experimental Radio Station Authorization, is the field evaluation of short-range (< 50 km) commercial radars in detecting a variety of airborne objects which may pose a hazard to safe operation of an unmanned aviation system (UAS). The data collected will be incorporated into technical data packages in support of proposed UAS operations to the Federal Aviation Administration (FAA) on behalf of AiRXOS customers. The data will also be used to craft policy recommendations by AiRXOS to the FAA for the safe, effective use of UAS.

In these field evaluations, the use of the radar units will only be observational. Data will be collected directly from the units and anecdotally from operator field observations. The data will be analyzed to characterize the efficacy of these units in detecting airborne objects of various sizes, velocities, cross-sections, and orientations relative to the radar. The radar units will not be used in any way to maneuver or alert an airborne vehicle. All existing rules and regulations regarding operation of a manned or unmanned aircraft will be observed. Therefore, this is not a request for radio operation as part of an aviation activity, but rather simply a measurement of the capability of these radars to detect dynamically moving objects.

Sincerely,

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