

From: Thomas Vitale

To: Doug Young

Date: November 11, 2016

Subject: Request for Info - File #0205-EX-CN-2016

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Message:

Please let us know if you require additional information. Here are our responses to your questions:

1. Explain what this radar does and what the market for it is, i.e., give a more detailed description of the proposed experiment.

>> The radar will be used to demonstrate Unmanned Aircraft System (UAS) / Drone detection capabilities in a variety of scenarios. The system will support two primary markets: (1) Drone security (ensuring drones are not entering airspace where they shouldn't be) for critical infrastructure protection, stadiums, theme parks, etc. (2) Safe UAS integration into the national airspace system (NAS) by deploying this sensor to monitor the airspace being traversed by UAS. These experiments will be conducted in concert with various groups including the FAA, NASA, state agencies, and commercial partners and will be used to demonstrate safe operation of UAS for various use cases to the FAA.

2. Why are 20 radars needed?

>> Over the next two years, we will be producing on the order of 20 systems that will be used to validate performance and perform experiments in support of the markets listed above. Each of these systems will be operated for periods of a few days to several months in various locations where the use case is being tested. It is unlikely that all 20 will be operated simultaneously but this could happen on infrequent occasions for very short periods of time.

3. You state that you only need a 5 MHz band. The FCC will not choose frequencies for you, and it is difficult to see how any 5 MHz band would be available nationwide. How do you want to proceed, as it will be difficult, and probably impossible, to clear the entire 9300-9800 MHz band nationwide?

>> Our exhibit 1 indicates that we are flexible to operate over the range of 9300 – 9800 MHz and only require a 5MHz band within that frequency range to perform our mission, and plan to coordinate with the required agencies prior to operation. This will allow flexibility to identify a mutually acceptable frequency prior to operation during the coordination step we proposed.