

## Explanation of Experiment

### **Background:**

Vertex Aerospace LLC (“Vertex”) is a DoD contractor that integrates radar systems into a variety of defense technologies. As a result, it needs to use a grant of Special Temporary Authority (“STA”) for a period of six months to test a radar emitter to make advances needed by Vertex’s customer.

The current application requests an STA for testing of a radar emitter for the DoD the characteristics of which are classified and have been provided to the FCC. The radar emitter will operate in the 35 GHz band. All other operating parameters are classified.

The test location will be within the Vertex facility at 6125 E 21<sup>st</sup> street, Indianapolis, IN 46219. A diagram of the test site is provided below. For questions, please contact Brian Kavalari, Spectrum Manager, Vertex, [brian.kavalari@gov2x.com](mailto:brian.kavalari@gov2x.com) or 317-517-9989.

### **RF Safety Compliance:**

Vertex will use its established RF Safety Plan for ground vehicle demonstration testing to ensure that no personnel are subjected to RF power density levels exceeding the Maximum Permissible Exposure limits (MPE) set forth in 47 C.F.R. § 1.1310 and the guidelines in FCC OET Bulletin Number 65. The existing RF safety plan limits the time that the radar can be tested, it cordons off the test area at a sufficient distance from the transmitter, which is the only area where the signal strength could exceed the maximum exposure limit, and there are signs posted alerting other Vertex personnel to the testing. The Vertex plant is a secure facility and it is not accessible to the general public. All RF exposure levels will be below the limits set forth in the Commission’s Rules, therefore the proposed operations are in compliance with 47 C.F.R. 1.1307(b) of the Commission’s Rules.

### **Stop Buzzer Point of Contact:**

The Stop Buzzer Point of Contact for the proposed operations is:

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# Vertex Indianapolis Test Site – Antenna Sketch

