Raytheon Missile Systems
Modification to Experimental License Application
File Number: 0053-EX-ML-2011

Exhibit 1

Explanation of Program of Experimentation

Overview: This application proposes two changes to the existing license, WB2XDC. Still, the operations proposed here are generally the same as those already licensed in Louisville, Kentucky. The changes proposed: 1. add a new location with proposed operations across a frequency band at the Raytheon Missile Systems Plant in Tucson, Arizona, and 2. expand the operations in Louisville to cover the same frequency band in Louisville that is proposed in Tucson.

Location of the testing: The experiments that Raytheon conducts use several narrow radar beams, pointed away from any population centers in the area of operations. For instance, in Tucson, the radar would be pointed south, toward the desert and away from the center of Tucson. In Louisville, the plant uses the surrounding geography to avoid transmitting toward any population centers.

Nature of Experimentation: Raytheon uses those radar beams to test and develop improved search and tracking radar. The proposed operations would enhance the testing and allow for advanced development of radar technologies.

Raytheon works to minimize the use of any single channel, to use narrow, focused beam transmissions, and to limit its testing to the minimum power needed for the advancement of the technology being developed.

Stop Buzzer: The stop buzzer point of contact for the proposed operation is:

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Conclusion: These modifications are needed to allow for the advanced development and testing of search and track radar systems.

Should there be any questions about this application, please contact Thomas J. Fagan, Spectrum Manager, Raytheon Missile Systems, 520-794-0227 or tjfagan@raytheon.com, or Anne Linton, WFS, 520-344-8525 or alc@conspecinternational.com.