

Raytheon IIS  
Experimental Renewal Application WG2XRP  
File No.: 0312-EX-CR-2017

### **Explanation of Experiment**

#### Overview:

Raytheon IIS develops a number of advanced communications technologies that are utilized by federal government customers in their work. These technologies require extensive testing to deliver the advanced performance required. The product development involves testing, refinement of the technology, further testing, further demonstration, additional refinement, etc.

#### Explanation of Experiment:

This is a request to renew operations that are testing physical aspects of point-to-point wireless infrastructure design and the associated propagation techniques. Raytheon is conducting the testing in its wireless lab environment in Sterling, Virginia. This lab was established to gain additional insight into the wide variety of wireless technologies that are currently available and that may be available in the future.

Raytheon is continuing its experimentation with advanced point-to-point wireless infrastructure on 462.45 MHz, 4940 – 4990 MHz, and 5470 – 5725 MHz. The initial experimentation proved very productive however additional experimentation is needed to achieve learn and achieve the desired outcomes. Therefore, Raytheon is seeking to renew WG2XRP.

#### Indoor Area of Operations:

The proposed testing will be conducted in the wireless lab at Raytheon's facilities in Sterling, VA.

#### Stop Buzzer Point of Contact:

Kevin Chapman  
571-250-2083 (office)  
703-283-6708 (mobile)  
[kchapman@raytheon.com](mailto:kchapman@raytheon.com)

#### Conclusion:

The time of use will be very limited, the area of operations is limited to a three mile radius around the two locations on the license, and the duty cycle of the radio transmissions will limit the amount of time that this spectrum would be in use. Raytheon IIS respectfully requests the assistance of the FCC in reviewing and processing this application to meet its customer requirements.

If there are any questions regarding this application, please contact Melvin Peters, Raytheon IIS, 571-250-2087 (office) or 703-201-3817 (mobile) or [mel@raytheon.com](mailto:mel@raytheon.com), or Anne Cortez, WFS, 520-344-8525 or [alc@conspecinternational.com](mailto:alc@conspecinternational.com). Thank you very much for your consideration.