

Raytheon IIS  
Experimental License Renewal Application  
Call Sign: WH2XFJ  
File No: 0258-EX-CR-2017

## Explanation of Experiment

### **Background:**

Raytheon IIS is a federal contractor that develops radar and radio systems that are incorporated into a variety of defense technologies and border security applications. As a result, it needs to experiment with and develop new radios and to test the radio systems to make advances needed by Raytheon's customers.

The current application is for extended development and testing of a mobile surveillance system based on the use of commercial off-the-shelf radar, electro-optical/infrared cameras, and microwave communications to monitor international borders. It is based on the Motorola PTP 48600 surveillance system, which has been adapted to enhance its capabilities.

### **Synopsis:**

- Spectrum required: 4900-4940 MHz
- Operations ongoing since 2014. No changes requested.
- Operations are both mobile and fixed.

### **System Under Development:**

The development and testing uses the radio frequencies as part of a comprehensive system that can track intrusions on the border and trigger a rapid response.

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

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

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### **Conclusion:**

This experimental license renewal application is being filed to continue Raytheon's experimentation with the use of COTS components to develop a more effective border intrusion protection system. The testing is expected to continue for an additional two years, at least. For questions about this application, please contact Brian Kavalor, Spectrum Manager, RTSC, [brian\\_r\\_kavalor@raytheon.com](mailto:brian_r_kavalor@raytheon.com) or 317-306-7793, or Anne Cortez, WFS, [alc@conspecinternational.com](mailto:alc@conspecinternational.com) or 520-360-0925.