Raytheon Missile Systems Experimental License STA Application File Number: 0928-EX-ST-2019

Explanation of Experiment and Need for an STA

Raytheon Missile Systems (Raytheon) is the primary missile manufacturer in the US, supplying ordinance ready to operate to the US military. This application seeks authorization for the use of a variety of radio systems that are used in the development and testing of its advanced missile systems, to deliver automatic real-time position information to the warfighter on the battlefield.

Need for an STA:

Raytheon is working on just-in-time development of advanced radio performance. Raytheon needs to expedite its testing to meet autumn demonstration deadlines. An STA will assist in accelerating the process. This STA request is filed for operations at Raytheon's facilities in Tucson.

Technical Synopsis:

Spectrum requested:	420-450 MHz
Limited time of use:	sporadic use, when hard-wired connections are detached
Limited area of operations:	operations are limited to Raytheon plant site
Power level is low:	5 W
Operations protect other users:	frequency hopping, listen-before-transmit radios

Description of Operations:

Raytheon is working on the advanced development of radio systems incorporated into its missiles. Raytheon's customers are requesting ever more data from the missile systems while those systems are in operation, to provide the warfighter with local, just-in-time information. The radios being tested here will use a 6 MHz wide channel to provide a variety of data.

Testing will be limited to the lab, to see if the radios in question can deliver the performance being requested by the customers.

Limited Time of Use:

Most testing will be hard-wired. However, on occasion, it will be necessary to test over-the-air transmissions to validate the effectiveness of the radio operations. The time of use of these frequencies is expected to be less than 2 hours per week.

DOD AFC Coordination Completed:

Raytheon has already coordinated the proposed operations with the DOD AFC for Arizona. The coordination number is: 19040901.

Locations of Testing:

Testing will be conducted at two locations at the Raytheon plant in Tucson. All testing is indoors.

Stop Buzzer Point of Contact:

Jim Ortega, Spectrum Manager Raytheon Missile Systems 520-794-0227 (office #, forwards to cell) James.e.ortega@raytheon.com

Conclusion:

Raytheon is seeking an STA for operations at its headquarters facilities to advance the development of communications systems that are being incorporated into its missile systems. The proposed operations will take place indoors, and for less than 2 hours per week.

If there are any questions about this proposed operation, please contact Anne E. Cortez, counsel, Washington Federal Strategies, at 520-360-0925 or <u>alc@conspecinternational.com</u>.