Raytheon Missile Systems
Experimental STA Application
File Number: 2091-EX-ST-2019

Explanation of Experiment and Need for STA

Raytheon Missile Systems (Raytheon) builds a number of advance missile systems for the US Department of Defense and other approved customers. Those systems routinely incorporate telemetry technology to perform in accordance with customer requirements.

Work on this system is essential to Raytheon's ability to deliver high quality weapons systems that are an important part of US national security.

This application is for the expedited testing of a telemetry systems that are incorporated into a Raytheon product. The drone system under development has been requested by the US Department of Defense. This work will ensure that the systems perform with the quality assurance needed to meet military specifications.

Need for STA

Raytheon is seeking an STA because the proposed testing is expected to last from December 1 through mid-May as Raytheon works with its customers to fine-tune the operation of telemetry embedded in a drone.

The short duration of the testing is the reason that an STA is appropriate in this instance.

Technical Synopsis

Spectrum Required:	2210-2254 MHz
Power level:	5 W, 5 W ERP
Time of use:	1-2 hours per day
Area of Operation:	remote desert area in Arizona, ground testing
Emission designator:	6M60F1D

Description of Operations

Raytheon is doing ground testing of the telemetry system in an airborne weapon system. The telemetry will come from a transmitter on a drone that will be operated at the location on the license. It will be sending information to a receiver that is 4 kilometers away.

Time of Use

The estimated time of use is only 1-2 hours per day. The use of the spectrum is limited because there is additional work needed on the system apart from the spectrum testing.

Area of Operation

The telemetry system will be operated from a drone at a remote desert location at Yuma Proving Ground. It will be communicating with a target based four kilometers away, across the desert.

The proposed operations are set at Yuma Proving Ground. In this case, an FCC STA is appropriate because Raytheon will be operating its radios, and as the controlling entity, it needs an authorization for the operations.

Stop Buzzer

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Conclusion

Raytheon is seeking an STA for short-term, ground-based testing of a telemetry system. Raytheon will control the operations and needs this authorization to have that authority. The area of operations is limited and remote. The time of use is very limited.

Should there be any questions about these proposed operations, please contact Anne E. Cortez, WFS, 520-360-0925 or alc@conspecinternational.com.