

Raytheon Company (Missiles & Defense – M)
Experimental License Modification Application
Call Sign: WK2XUC
File Number: 0224-EX-CM-2020

Explanation of Experiment - Updated

Raytheon Company (Missiles & Defense – M) (Raytheon) is the primary missile manufacturer in the US, supplying ordinance ready to operate to the US military. Raytheon’s experience with missiles has led its customers to seek UAV technology based on some of its existing platforms and knowledge. This has led Raytheon to develop advanced UAV technology as well. These UAV systems are essential to the national security of the United States. This application is for the testing of innovations in UAV system performance.

This application only seeks to modify a location to correct the coordinates of site 2 and to add a radius of operations to site 3.

Technical Synopsis:

Spectrum requested: Spectrum bands already authorized on license
Limited time of use: 1-2 hours per day of radio use
Limited area of operations: 1 km, radius around each location, maximum 3000 feet elevation
Power levels are low: 430 MHz 10 W, L band 5.5 W, S Band 5.4 W, C band 6 W, 6750 10 W

Description of Operations:

Raytheon is continuing experimentation on its Coyote UAV. The testing in Tucson is designed to determine whether the Coyote system can perform the tasks required in the contract. Periodically, the customer will attend demonstrations to evaluate the progress of the UAV development. This application seeks authorization for operations that will allow for advanced development of the UAV platform at Raytheon’s facilities.

This UAV platform has been designed to perform a range of tasks. They include surveillance and monitoring. Those tasks require the UAV to carry a range of radio links to ensure its proper performance. Each link is described in more detail below.

Modifications proposed: updated location information is highlighted in the table below. These are the only two changes proposed to the license.

Location	Latitude	Longitude	Radius of Operations
Raytheon Building M07	32-08-13 N	110-55-20 W	1 km
Raytheon Airport Site	32-06-16 N	110-57-11 W	1 km
Raytheon Rita Road	32-05-39 N	110-48-27 W	1 km

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 experimental license to continue operations at its headquarters facilities to advance the development of its Coyote UAV system. The proposed testing will be limited in nature. The testing is required under federal contract number HQ 0727-18-F-1632. The advanced testing will support demonstrations for the customer. The radio use will be limited, because the systems will not be tested in all locations at the same time. Furthermore, only selected parts of the frequency bands requested will be in use at any time. The bands were requested to expedite local spectrum coordination.

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