

ELTA North America Request for FCC Experimental License

Form 442 File Number: 0452-EX-CN-2019
Form 442 Confirmation Number: EL808647

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Question 7: Purpose of Experiment

This application is being made to support the testing and evaluation of ELTA radars. These tests will be conducted to test and verify new radar processing software and algorithms, develop equipment designs, conduct production tests and equipment calibration, and demonstrate products to customers. Tests will be conducted in Howard County, Maryland, on a designated tripod. This location is isolated and is surrounded with trees and foliage. The antenna, transmitter, and receiver are mounted on the antenna support tripod.

It is essential that these tests be performed outside of a laboratory or anechoic chamber to create the necessary radar environment that includes land and foliage clutter, ground moving vehicles, birds, fixed and rotary wing aircraft, second time around radar targets and clutter, and other atmospheric disturbances that affect radar performance.

The ELM-2135 system is utilized for demonstrating its drone fending capabilities.

The system operates in the X-Band, and specifically from 9.7GHz to 9.95GHz.

The array has a 45 degree polarization with 22dBi gain phased array antenna, and a horizontal beam width of 7.5 degrees and vertical beam width of 14.5 degrees.