

## **ELTA North America Request for FCC Experimental License**

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Form 442 Confirmation Number: EL286423

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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 McAllen, TX Hidalgo County and Marana, AZ Pima County on a designated tower. Those location are isolated and has surrounded with trees and foliage. The antenna, transmitter, and receiver are mounted on the antenna support structure.

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-2112FP system is a linear FMCW radar for Foliage Penetration applications. The system will transmit in the 1200-1300 MHz frequency band from a Slotted waveguide antenna. The array has a horizontal beamwidth of 90 degrees and a vertical beamwidth of 15 degrees.