

ELTA North America Request for FCC Experimental License

Modification Form 442 File Number: 0109-EX-CM-2017

Modification Form 442 Confirmation Number: EL357032

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Question 7: Purpose of Experiment

This application is being made to support the testing and evaluation of a new radar. 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 on the roof of ELTA's facility located at 8955 Henkels Ln Annapolis Junction, MD in Howard County. This building is a single-story structure located in a mixed-use business development. The antenna, transmitter, and receiver are mounted on the antenna support structure. Other locations will be used for demonstration purposes. These locations are Deer Mill, NM; Gillespie Peak, NM; Fort A.P. Hill, VA; Fort Sill, OK; Ft Huachuca, AZ; Camp Dawson, WV; Camp Shelby, MS; and Camp Roberts, CA; and Sells (Elephant Head, Horse Peak) ,AZ in PIMA county. At all the above locations the antenna will be mounted on a tripod of less than 2 m in height.

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 EL/M-2026B system is a pulsed-Doppler, very short range, air defense radar to support surface-to-air weapon systems. The system will transmit linear FM pulses in the 10.55 GHz to 10.6 GHz band into a planar array antenna.