

Elbit Systems of America Request for FCC Experimental License

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Question 7: Purpose of Experiment

This application is being made to support testing and evaluation of ELTA radars prior to deployment for the DHS Integrated Fixed Towers (IFT) program. These tests will be conducted to test, configure, calibrate, and demonstrate the IFT system to customers. Tests will be conducted on the roof of Elbit Systems of America's (ESA) facility located at 4700 Marine Creek Parkway, Fort Worth, Texas 76179 (Latitude 32.829693, Longitude -97.383462). The ESA facility is located on 25 acres in Northwest Fort Worth which includes a modern and integrated factory with over 255,000 square feet of environmentally controlled space for Manufacturing, Engineering, and Administration support. 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, aircraft, second time around radar targets and clutter, and other atmospheric disturbances that affect radar performance.

The EL/M-2112 system is a linear FM CW radar for ground surveillance applications. The system will transmit in the 10250 – 10500 MHz frequency band from a slotted waveguide array antenna. The array has a horizontal beam width of 90 degrees and a vertical beam width of 3 degrees with a cosecant squared pattern.