

Elbit Systems of America Request for FCC Experimental License

Form 442 File Number: 0211-EX-CN-2017

Form 442 Confirmation Number: EL645154

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Question 7: Purpose of Experiment

This application is being made to support testing and evaluation of Elbit FOPEN radars in Texas and Arizona. These operations will be conducted to test, configure, calibrate, and to demonstrate the radar 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. Other locations will include two in McAllen, TX; one in Marna, AZ; and three in Sonoita, AZ. The antenna, transmitter, and receiver are mounted on an 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 Elbit FOPEN system is a linear FM CW radar for ground surveillance applications through foliage. The system will transmit from 615 – 765 MHz from a dipole array antenna. The array has a horizontal beam width of 90 degrees and a vertical beam width of 20 degrees.