

Request for Special Temporary Authority (STA)

This research project is designed to evaluate a Broadside-to-Endfire Array (AESA) performance. An Agilent/Keysight signal generator (Model number 82620B) is employed as the RF signal source. The signal is passed through Northrop Grumman designed-and-built control boards that provide power control and amplification. The signal is then fed through a manifold to 128 columns with 16 radiating sights per column.

The tests will be conducted at the Northrop Grumman test range on Ridge Road in Hanover, MD. Antenna Gain is 22 dBi, with a main beam width of 5 degrees. Total output power will be managed to be under 100 Watts ERP. The antenna will be oriented such that it transmits on an azimuth of 120 degrees from true North to a ground target horn located at the far southeast corner of the range complex.