General Radar seeks Experimental Licensing Authority for testing of a proprietary radar system used to track small uncrewed aircraft systems ("sUAS") and distinguish sUAS from other flying objects (e.g., other aircraft, birds, etc.). The Applicant's radar system is designed specifically for small radar cross section (RCS) targets in high clutter environments. Low utilization by the public and minimal traffic presents an optimal environment for clear-span radiating tests with minimal multi-path or spurious interference.

General Radar's radar systems utilize an active electronically scanned array (AESA) phased array antenna. The AESA system generates a beam of radio waves that can be electronically steered to point in different directions without moving the antenna. Antenna elements are connected to a transmit/receive module (TRM) under the control of a computer, which performs the functions of a transmitter and/or receiver for the antenna array.

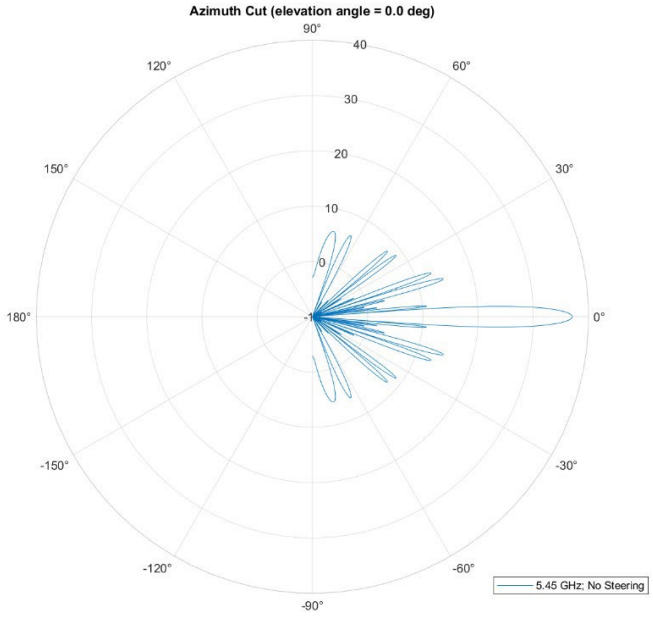
Government Contract Information

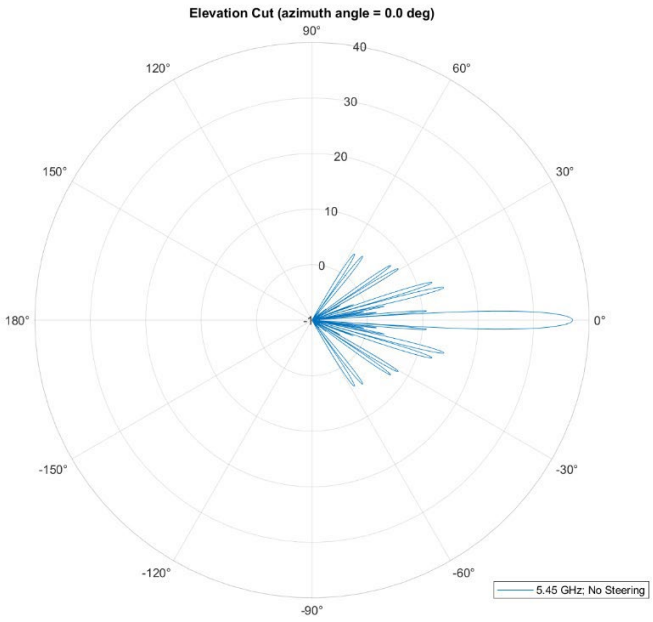
General Radar is developing this radar technology for USAF under Contract No. FA220423CB001.

Technical Information

Transmit duty cycle: 20%

Antenna is Active Electronically Steered Array with main beam gain: 36.5 dBi





Avoiding Harmful Interference

Applicant agrees to have 15 degree avoidance angle from the JASON-3 (NORAD ID: 41240) and JASON-CS/Sentinel-6 (NORAD ID: 46984) satellites. The avoidance angle is measured from the boresight of the test site ground station antenna and the satellite path.