

Counter UAS Training Operations and Demonstration Events

There will be NO C-UAS (RF jamming) operations at this event. Only radar, optical and thermal imaging detect and track operations.

Location (Antenna) 1 - TSA Air Marshal Counter UAS Training Operations

Date of events: Week of July 12-16, 2021

Area of operation:

- Within 1 km radius centered on Tipton Airport Authority, 7515 General Aviation Dr, Fort Meade, MD 20755
- Latitude: 39° 5'12.79"N
- Longitude: 76°45'35.49"W

Mode of radar operation:

- Manufacturer: Bligher
- Model: A422-HP-WB wideband passive scanning radar in 180-degree radiation pattern.
- Ku Band 15.7-17.2 GHz
- Emission Designator: 26M0Q3N
- Authorized Power: 562 W ERP
- Antenna Centerline: 12 feet

Interference mitigation:

Terrain obstructions and 180-degree directional operation with radar pointing away from areas of concern such as BWI ASDE-X system will be used to mitigate interference. Referencing Figure 1, radar will be directed southwest. The terrain profile shown in Figure 1 indicates 30 meter high terrain obstructions and a distance of 12.5 km separating the airports.

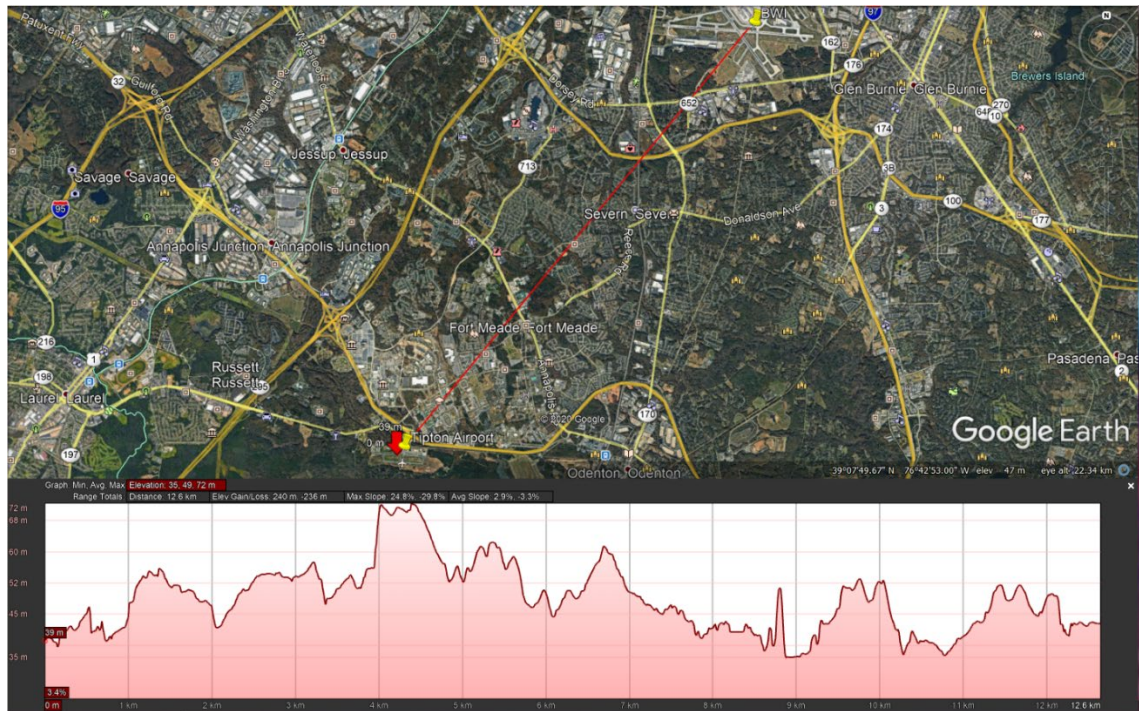


Figure 1 - Terrain Profile between Tipton Airport and BWI – Tipton Airport at left of profile, BWI at right

Training Operations:

Liteye will position the Radar, Camera and Operating System in a predetermined location that mitigates possible interference and can support training activities for personnel. Liteye will be providing personnel to operate the system, UAS pilots will be provided by Red-6. All UAS flight operations will occur in Class G airspace <122 meters (400 feet).

The window for training is July 12-16 and is not expected to be delayed or postponed unless impacted by weather or Government directives regarding COVID-19 dictate otherwise.

The training use of this radar and corresponding camera/operating system is to provide TSA personnel an introduction to Counter Unmanned Aerial Systems and specifically to the Liteye AUDS system. Goals include detection and surveillance of intentional and unintentional aerial and ground threats posed to critical assets, personnel and facilities involved in airport operations. Additionally, the following objectives will be pursued:

- Detect, surveil, and collect data on arial and ground-based intrusions; collect detect/surveil performance data on all intrusions.
- Evaluate system configuration requirements best suited to meet local challenges
- Determine gaps in current surveillance capabilities
- Analyze and report on operations and site security requirements and identify improvements to procedures and improved material solutions for security of airports and TSA personnel, equipment, and facilities.