

➤ Program Description and Objectives

- The Northeast UAS Airspace Integration Research Alliance (NUAIR Alliance) and Griffiss International Airport will support the installation of state-of-the-art instrumentation for tracking Unmanned Aircraft Systems (UAS) operations at Griffiss International Airport in Rome, NY and at approved locations in Central and Northern New York, and the Mohawk Valley.
- The Federal Aviation Administration (FAA) has ruled that UAS must be able to sense and avoid other aircraft. This project will allow NUAIR and its alliance partners to deploy state-of-the-art range instrumentation that can track UAS in the air and provide safety-enhancing sense-and-avoid capabilities, addressing a current challenge faced by the industry due to the lack of an on-board pilot. This testing capability is the first of its kind at any UAS test site in the country, making Griffiss a strategic location for the emerging UAS industry.
- Saab Sensis will deploy a Wide Area Multilateration (WAM) six (6) Remote Unit (RU5) system at Griffiss International Airport in support of the Range Instrumentation project with NUAIR.
- Multilateration is the process of calculating a target location by performing Time Difference of Arrival processing (similar to triangulation), on RF signals received at multiple sensors.
 - The Multilateration system consists of: Omni-directional antennas, 6 remote units, and processors.
 - The antennas receive and transmits RF signal in a circular pattern.
 - Remote Units receive timestamps and decode transponders. The RU also interrogates transponders.
 - The processor performs the MLAT processing.