



Unmanned Aircraft System (UAS) Program at SRNL

The SRNL UAS Program was created in 2017 and has been growing, evolving, adapting, and innovating ever since. The mission is to provide support to 1) the Savannah River Site and its various tenants and SRNL, 2) the Armed Forces, U.S. Government, Law Enforcement, and Intelligence Community, and 3) emergency response, as necessary.

- The SRNL UAS team consists of a program manager, operations manager, an aviation safety officer, six FAA Part 107 certified pilots, and a trusted operator program level 2 remote pilot. Another individual serves as ground control support and as a visual observer
- Currently has 20 UAS aircraft (rotary and fixed wing) in its fleet
- In 2021, logged over 100 flight hours and more than 350 flights
- Missions include exercises with the military, infrastructure inspections, aerial photography and videography, emergency response exercise support, training and currency, research and development activities, and other U.S. government support
- Recipient of the 2020 and 2021 Department of Energy (DOE) UAS Unit Award, and the 2021 U.S. General Services Administration (GSA) Premiere Federal Aviation Unmanned Aircraft Systems (UAS) Award



Members of the SRNL UAS Team with DOE and GSA awards

Large-scale Capabilities and Operations

- Ground-based radar system – 3-paneled system, 360° coverage
- 1500-acre testing/operational range with varying physical terrain
- Several types of UASs – commercial, custom and military
- Federal Communications Commission (FCC) Experimental Station License
- Access to meteorological instrumentation and onsite tower data
- Power and internet equipped space in testing area
- Beyond Visual Line of Site (BVLOS) Certificate of Authorization (COA)
- Night operations, 1200' above ground level (AGL) ceiling
- Mobile command vehicle available
- Large scale R&D laboratory support



Reactor building inspection & herbicide application; fixed-wing aircraft.

Successful Partnerships

- Defense Threat Reduction Agency (DTRA)
- Virginia Tech (Unmanned Systems Laboratory)
- U.S. Army and the United States Military Academy (West Point)
- U.S. Air Force
- U.S. Marines
- U.S. Naval Academy
- South Carolina National Guard
- Federal Bureau of Investigation (FBI) - Support of training classes
- Transportation Security Administration (TSA)
- Savannah River Site, some examples include:
 - Area Completion Projects - reactor building inspections and roof-top herbicide application
 - SRS Emergency Management - emergency response exercises



Members of the UAS Team during flight operations.