



STOCKBRIDGE EXPERIMENTATION & TEST FACILITY

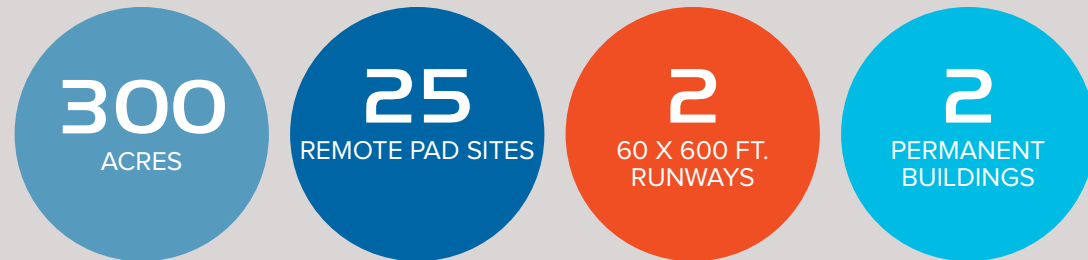
Controlled Contested
Environment & Small
Unmanned Aircraft
System (SUAS)
Experimentation Range

Stockbridge Site Features:

Controlled Contested Environment & Small Unmanned Aircraft System (SUAS) Experimentation Range at a glance

The Information Directorate's Stockbridge Site provides a truly unique capability to support real world, outdoor, and tactical edge experimentation for a wide range of technologies. Twenty-five remote nodes, or "pads" spread across Stockbridge's 300 acres provide shelter, power, antenna/towers, and fiber optic and network connectivity to a control center located in a Main building. This infrastructure supports cost effective, rapid performance of experiments and tests to support multiple technology areas, including RF communications, spectrum, networking, cyber, sensor and information.

Metrics

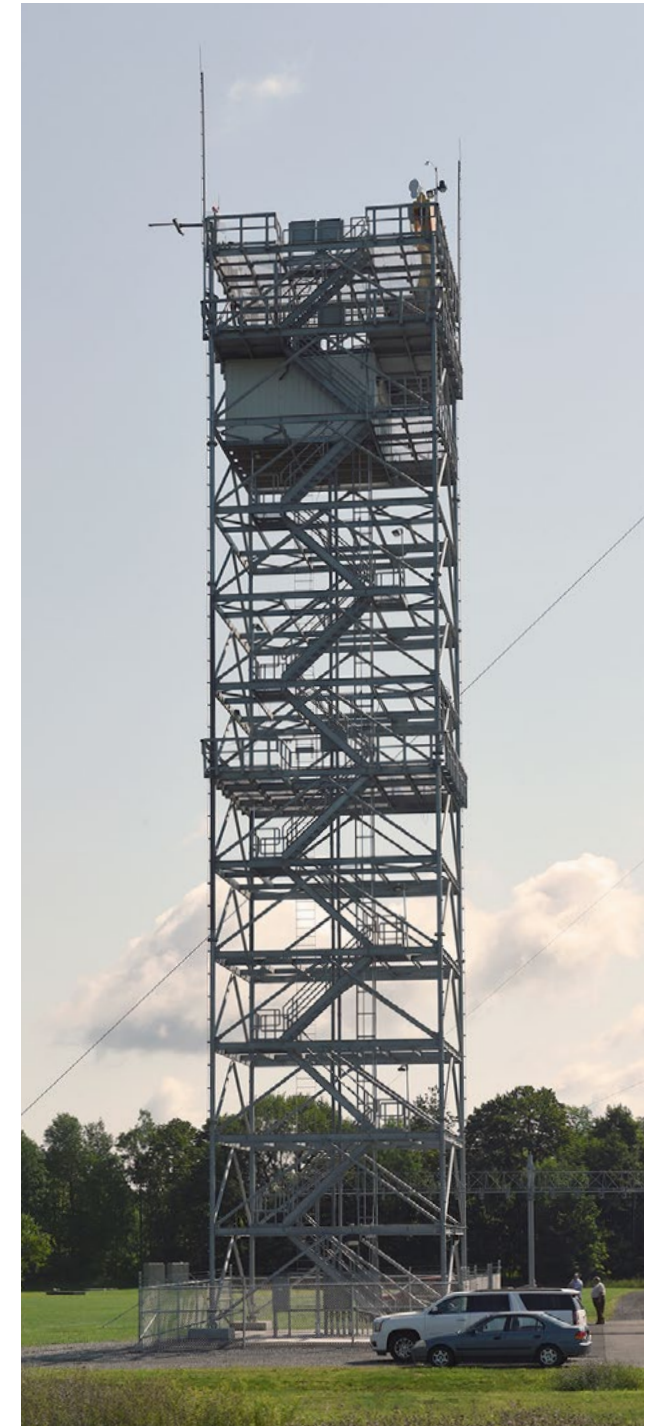


Controllable Contested Environment (CCE)

As part of the Stockbridge test facility, the CCE supports the generation and creation of repeatable and configurable RF environments. This supports R&D in many technology areas, including dynamic spectrum access techniques, policy based routing approaches, and cognitive network node performance in challenging environments. The CCE's twenty-five remote pad sites with shelters, towers, power and fiber provide a flexible capability to support experiments. Available assets can also provide ground based mobile experiment support.

120 Foot Walk Up Tower

Located adjacent to the Main building, this large tower provides line of sight capability to the Information Directorate main campus in Rome, NY, and the Newport site. Equipped with enclosed workspace, power, network connectivity and flexible equipment mounting, the tower provides elevated experimentation with an easy walk up configuration.



STOCKBRIDGE



Small Unmanned Aerial System (SUAS) Airfield

Two – 60 foot x 600 foot runways and a wide variety of fixed wing and vertical take-off and landing (VTOL) platforms enable airborne testing of payloads up to fifteen pounds. Current flight approvals enable testing within a sixteen square mile area surrounding the site.

RF Control

An evolving distributed management and control architecture enables flexible, repeatable and configurable RF and spectrum assets. Using a combination of equipment, including signal generators, commercial and military radios, and the electromagnetically quiet environment provides signal sources over a wide range of frequencies to support and control a variety of RF testing.

Main & Butler Building

Two permanent buildings support a wide range of capabilities. The Main building provides laboratory space, meeting space, and serves as a hub for communications and management. The Butler building provides storage and larger experimentation workspace.

Main Tower

The 240 foot main tower and a 183 foot Jib tower utilize a remotely controlled mobile cart. This provides a flexible and rapid capability to put assets above ground and supports large airframe and vehicle antenna evaluations.

Spectrum Assessment

The collection of scalable spectrum assessment hardware and tools enables collection and characterization of RF spectrum to deliver valuable experimental data to support analysis and testing of all types of communications, information and cyber systems.

At a Glance:

Highlights

- 300 acres of rural land varying in relative distance, topology, and density
- Electromagnetically quiet environment
- Heavy-duty turntable with a 200' high arch measurement probe
- 120' walkup tower for line of site and optical links
- Buildings to support experiments
- Flexible frequency authorizations
- 24 locations with power and network
- Existing towers for antenna mounting
- Flexible network architecture
- Diverse set of small UAS platforms; fixed wing, vertical take-off and landing
- Flight approvals for experimentation
- Trained and experienced personnel

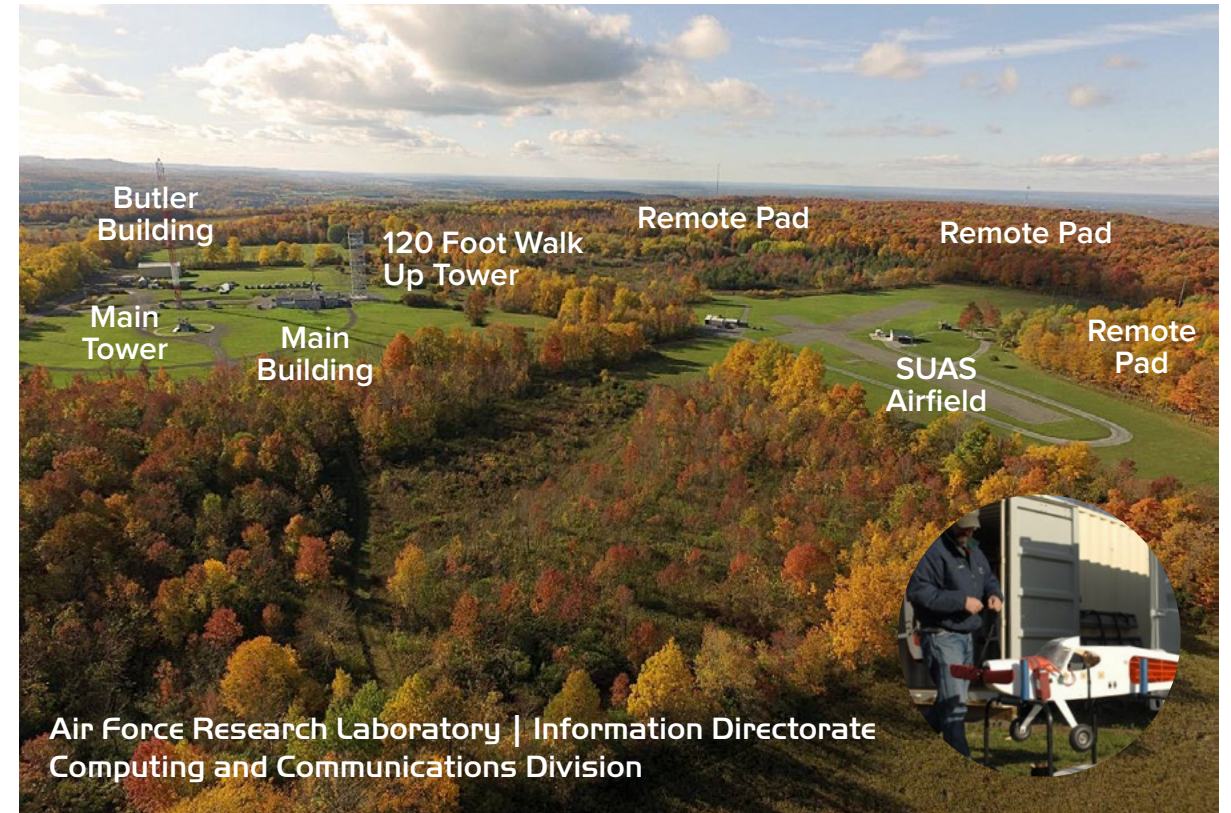
Broad Range of Capabilities

- Mobile Network experimentation
- Dynamic Spectrum access
- Radio and link performance testing
- Protocol analysis
- RF measurements
- Network testing
- SUAS Flight testing
- Cyber assessment and experimentation



Doing Business at Stockbridge:

The Stockbridge Facility is available to both Government and commercial customers for test purposes. Stockbridge provides an agile, flexible experimentation and developmental test environment capable of supporting a wide range of ground or airborne testing. Our unique configuration of test nodes greatly reduces set up time and allows for greater time spent on testing. Experimental and test range services are performed on a cost reimbursable basis through various agreement mechanisms.



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