Redstone Test Center

Aviation Systems Test and Integration Lab (AvSTIL)

The Aviation Systems Test and Integration Laboratory offers an innovative approach to aviation system and subsystem testing by fully immersing aviation platforms in a controllable, repeatable and simulated testing environment, allowing engineers the ability to fine-tune scenarios, produce more precise test and evaluation results, thereby reducing overall program risk to project managers prior to flight test. The AvSTIL serves as the only U.S. Army installed test facility capable of testing tactical hardware as installed onto aircraft, thus eliminating some of the uncertainties commonly attributed to bench level component testing.

The AvSTIL is capable of simulating all current aircraft survivability equipment, aircraft 1553 bus traffic (to include EGI), as well as pilot static and radar altimeter information. The AvSTIL houses a test control center equipped with all necessary instrumentation to plan, execute and report on advanced flight tests and is collocated with a suite of Army aircraft to include the AH-64D/E, CH-47D/F, UH-60A/L/M, OH-58D and RQ-7 Shadow UAS.

Core Competencies

- Integrated Aircraft Survivability Equipment Testing
- Unmanned Aircraft System & Manned-Unmanned Teaming
- Navigation Testing
- Software Regression
- Aircraft Platform Interoperability
- Pre-Flight Confidence Testing
- Integration Check-Out

Capability Highlight

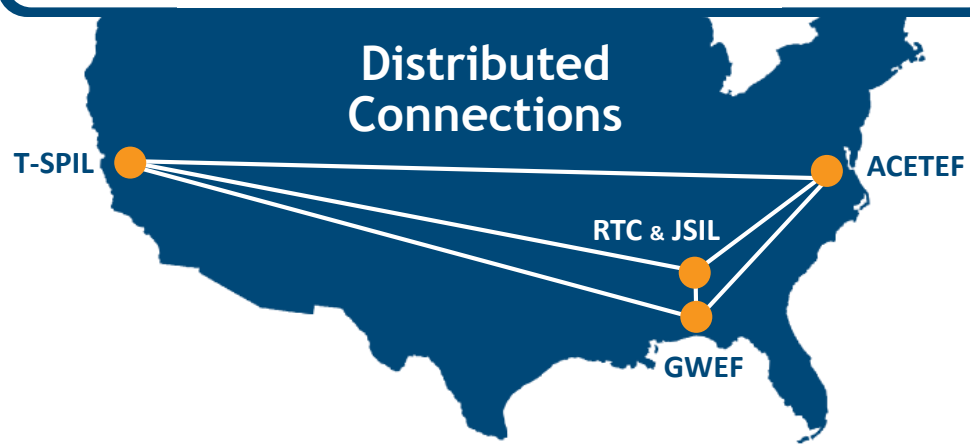
Multispectral test capability for integrated testing of installed ASE (CMWS/ICMD, APR-39 RSDS, AVR-2B LDS).

Enhanced projection capability for providing simulated missiles to CMWS during aircraft virtual flight.

Provides AH-64D/E simulated manned unmanned teaming protocols for simulated UAS payload control during levels of interoperability two, three and four.

Aircraft Compatibility

Distributed Connections



(256) 876-3556 www.rtc.army.mil