



## Overview

ACETEF is an installed systems test facility, which consists of an anechoic chamber surrounded by aircraft simulation, warfare simulation, threat and electronic combat stimulation, communication stimulation and sensor stimulation facilities. ACETEF aircraft testing includes EA-6B, EP-3E, F/A-18, Joint Strike Fighter (simulation), E-2C and many other platforms. ACETEF has been linked with other laboratories, Navy and Department of Defense sites around the country to provide complex simulations of large-scale military operations. This enables the Network Centric Warfare capabilities of these platforms to be fully integrated and tested within the Battle Force and joint environments.

The ACETEF is connected to ranges and facilities throughout the U.S. and worldwide through various media – fiber optic, SIPRNET, ethernet, microwave and telecommunications. Depending on simulation requirements, customers can avail themselves of the services of a single arena element, a combination of elements or a national integrated network of simulation capabilities.



**Air Combat Environment  
Test and Evaluation Facility**



**Aircraft Test and  
Evaluation Facility**



**Advanced Systems  
Integration Laboratory**

**For more information contact (301) 342-6004**



## Capabilities

The ACETEF provides a multitude of resources and capabilities that are used for research, development, test and evaluation (RDT&E) in support of the systems development process.

This premiere ground test facility tests installed aircraft systems in an integrated multispectral warfare environment using state-of-the-art simulation and stimulation technology.

Aircraft platforms, typically placed in an anechoic chamber, are deceived through a combination of simulation by digital computers and stimulation by computer-controlled environment generators providing radio frequency, electro-optical and laser stimuli that closely duplicate real signals in a combat mission environment.

ACETEF laboratories provide signal generation, man-in-the-loop cockpits and high-performance computing (HPC) in a warfare environment.



▲ **Shielded Hangar and Advanced Systems Integration Laboratory**



## Specialized Laboratories and Facilities

### *Communications, Navigation and Identification*

Provides open- and closed-loop simulation of friendly, foreign and hostile SNI and electronic warfare (EW) surveillance.

### *Electromagnetic Environmental Effects Facilities*

Provides the Navy with expertise in aircraft E<sup>3</sup> RDT&E. Over 15 specialized facilities are located at the Patuxent River Complex with runways and complete aircraft support nearby.

### *Electronic Warfare Integrated Systems Test Laboratory*

Provides realistic open-loop multispectral environment stimulation to electronic warfare (EW) systems during development and operational testing.

### *High Performance Computing*

Provides modeling and simulation support for a wide range of aviation test and evaluation support functions.

### *Propulsion Systems Evaluation Facility*

Tests every aspect of propulsion systems on many diverse platforms.