

## 704 TEST GROUP



### MISSION

Responsible for programming, management, execution, and reporting all test and analysis & evaluation programs in the center's wind tunnels, gas turbine (Get engine) sea level and altitude test cells, space environmental chambers, altitude rocket test cells, ballistic ranges, arc heaters and other aerospace test units including geographically separated units in Maryland (Hypervelocity Tunnel 9 and California National Full-scale Aerodynamics Complex). Evaluates mission support contractor performance and recommends award fee grade in the test and analysis & evaluation programs functional area.

The 704th Test Group oversees and manages three test squadrons (TS) - the 716th TS, the 717th TS and the 718th TS. The 716th TS is responsible for aerodynamic (flight systems) testing; the 717th TS is responsible for aero-propulsion testing; and the 718th TS is responsible for space and missile testing.

Leads and manages developmental testing at the world's largest and most advanced complex of flight simulation test facilities in the world. Leads more than 700 government and contractor personnel operating 58 aerospace test facilities valued at \$7.8 billion. The facilities simulate flight from subsonic to hypersonic speeds at altitudes from sea level to space.

AEDC's total customer funding for all testing in fiscal year 2008 was \$83.7 million - an increase of \$22.6 million from fiscal year 2007 and \$6.7 million increase from fiscal year 2006. The increase was due primarily to an increase in turbine engine testing, which represented slightly more than 64 percent of the total.

Air Force-led projects represented 37 percent of the center's total workload, with joint and commercial programs making up 35 percent of the total. The remaining 28 percent of the workload was composed of a combination of U.S. Navy, U.S. Army, NASA, Missile Defense Agency (MDA) and other government and commercial programs.

## **LINEAGE**

704 Test Group established, 2 May 2006

Activated, 1 Jun 2006

Inactivated, 30 Jun 2010

Activated, 1 Dec 2016

## **STATIONS**

Arnold AFB, TN, 1 Jun 2006-30 Jun 2010

Holloman AFB, NM, 1 Dec 2016

## **ASSIGNMENTS**

Arnold Engineering Development Center, 1 Jun 2006-30 Jun 2010

Arnold Engineering Development Complex, 1 Dec 2016

## **COMMANDERS**

### **HONORS**

#### **Service Streamers**

#### **Campaign Streamers**

#### **Armed Forces Expeditionary Streamers**

#### **Decorations**

Air Force Organizational Excellence Award

1 Jun 2006-31 May 2008

## **EMBLEM**

## **MOTTO**

## **OPERATIONS**

**Fiscal Year 2008 Highlights** A major program AEDC supported in fiscal year 2008 was the F-35 Lightning II Joint Strike Fighter (JSF). In fact, 13 percent of the work done in fiscal year 2008 was for JSF customers. Other work included store separation testing for the Navy's EA-18 Growler, aerodynamic testing of the Orion Crew Exploration Vehicle, Ares and Constellation, NASA's replacement for the Space Shuttle, as well as propulsion testing on the F100, F101, F118 and F119 engines. Additionally, AEDC supported Minuteman, Peacekeeper and Minotaur rocket motor test programs, as well as the Terminal High Altitude Area Defense (THAAD) and Mars Science Laboratory.

Another program heavily supported this fiscal year was the Air Force Alternate Fuels Certification program. AEDC tested both the GE F101 and Pratt & Whitney (P&W) F100 engines fueled by a 50-50 mixture of Fischer-Tropsch (FT) and JP-8 jet fuels. Early in the fiscal year, then Secretary of the

Air Force, Michael Wynne, viewed the ground testing of the F101 engine. The testing helped qualify the first high-performance, afterburning engine with synthetic fuel for a combat aircraft.

#### Fiscal Year 2009 Forecast

In fiscal year 2009, AEDC will continue to provide support to Air Force, Navy, Army, MDA and NASA programs and more. Overall, testing revenue is expected to slightly increase. Estimated revenue increases include \$6.5 million for the 716th TS and \$1.7 million for the 718th TS, while the 717th TS anticipates a \$7.2 million decrease in revenues.

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USAF UNIT HISTORIES

Created: 8 Dec 2019

Updated:

#### Sources

Air Force Historical Research Agency. U.S. Air Force. Maxwell AFB, AL.