



704 TG/OL-AC FACT SHEET

- Aerospace Vehicle Survivability Facility -



The Aerospace Vehicle Survivability Facility (AVSF) is operated by the 704th Test Group's Aerospace Survivability and Safety Office (704 TG/OL-AC) at Wright-Patterson AFB, OH. The 704 TG/OL-AC is part of the 704th Test Group (704 TG) at Holloman AFB, NM. The AVSF is the United States Air Force responsible test organization for developing and executing aircraft Title 10, Live Fire Test and Evaluation (LFT&E) programs. This unique test facility conducts research, development, test, evaluation, modeling, and simulation of aerospace vehicle combat survivability to evaluate and enhance system performance of today's and tomorrow's weapon systems under realistic threat conditions.

TEST SITE 3 – Upper



- High-Speed Airflow (up to 400 Knots)
- 60' x 80' Elevated Test Platform
- Ballistically Certified (API & HEI threats)
- Explosively Certified (up to 0.9 lbs.)
- Primary Test Site for Dry Bay Fire, Hydrodynamic Ram, Ullage Explosion

TEST SITE 3 – Lower



- High-Speed Airflow (up to 400 Knots)
- 20' x 60' Partially Enclosed Test Area
- Only DoD High Energy Laser (HEL) Certified Test Site w/Fuel, Airflow, & Explosives Capabilities

TEST SITE 3 – North



- 20' x 20' Partially Enclosed Test Area
- Ballistically Certified (API & HEI threats)
- Primary Test Site for Threat Characterization, Aircraft Structure, & Component Vulnerability Studies

TEST SITE 1



- 75-foot Indoor Gun Range
- Ballistically Certified (API & HEI threats)
- Explosively Certified (up to 2.8 lbs.)
- Primary Test Site for Armor Qualification, Threat Characterization, Threat Exploitation, Model Development, and Validation Studies

TEST SITE A



- Indoor Laboratory Test Area
- Simulated Hydrodynamic Ram Effects in Aircraft Structures (RAMGUN)
- Evaluation of Bonded & Mechanically Fastened Skin/Spar Designs

Standard Test Capabilities

- **Live Fire/Vulnerability Test and Evaluation**
 - Vulnerability Testing of Aircraft Systems, Sub-Systems, Components, and Sub-Components
 - Primary Test Focus Areas Include Flammable Fluids, Structural Integrity, Flight Control Systems, Crew & Passenger Armor, and Vulnerability Reduction Technologies
 - Test Sites Approved For Ballistic Testing of Armor Piercing Incendiary (API) & High-Explosive Incendiary (HEI) Threats
- **Enclosed HEL Vulnerability Testing**
 - HEL Vulnerability Testing w/Simulated Airflow Conditions
 - Simulation of Directed Energy Laser Threats
 - Quality Airflow up to 400 Knots for Sustained Fire Investigations and Structural Integrity Determination
- **State-of-the-Art Data Collection**
 - Modern Test Acquisition and Control Systems
 - Extensive High-Speed & IR Video Capabilities With Capabilities of up to 100,000 Frames per Second
- **Realistic Air Flow for Testing in Flight Conditions**
 - Evaluation of Parachute Performance

Engineering & Test Support

- **USAF Subject Matter Experts** – Lead Organization for Aircraft Vulnerability RDT&E and Title 10, LFT&E
- **Acquisition Support** – Development of Requirements, Specifications, Test Strategies & Proposals Evaluations
- **Combat Damage Predictions** – Vulnerability Assessments for Conventional, Unconventional, and Emerging Threats
- **Advanced Modeling and Simulation** – Evaluate Aircraft Structural Response to Ballistically-Induced Damage
- **Data Reduction and Reporting** – Complete Data Reduction, Statistical Analysis & Reporting
- **Advanced Engineering RDT&E** – Analysis and Development of Vulnerability Technologies to Meet Customer RDT&E Needs

THE AVSF IS CUSTOMER-FOCUSED – WORKING TOGETHER TO ENHANCE THE ARMED FORCE'S COMBAT EFFECTIVENESS

Point of Contact

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