

# REDSTONE TEST CENTER (RTC)

## REDSTONE ARSENAL, AL

**Mission:** Provide superior technical expertise, as well as state-of-the-art facilities and capabilities to plan, execute, analyze, and report test results on aviation systems, missiles, and sensors at all levels.



### CORE COMPETENCIES

#### AIRCRAFT FLIGHT TESTING

- Test Pilot School Trained:
  - Experimental Test Pilots
  - Flight Test Engineers
- Flight Quality, Engine and Aircraft Performance
- Structural and Rotary Dynamics
- Aircraft Survivability
- Aircraft Icing – Natural & Artificial
- Aviation Systems Test & Integration Lab (AvSTIL)

#### MISSILES

- Mobile & Fixed TM Ground Stations
- Advanced Optical & Radar Target Tracking
- Liquid, Solid & Hybrid Rocket Motor Testing
- Warhead and Small Rocket Testing
- Custom Surveillance Test Vans
- Missile Seeker and All Up Round HWIL Facilities

#### SENSORS

- EO/IR, LASER, Visible, Hyperspectral and Acoustic Laboratories
- Open Air Sensor Testing
- Captive Carry & Ground Based Sensor Testing

### SUPPORTING FUNCTIONS

#### INSTRUMENTAL

- Aviation and Missile Custom Instrumentation
- Test Set Design / Build / Field to Support Systems Life-Cycle Sustainment
- Extreme Miniaturization of Instrumentation / ASIC
- Custom Design/Build TM Kits and FTSs for R&D and Fielded Systems

#### ADVANCED T&E METHODS

- Distributed Test and Modeling & Simulation
- Leaders in Live-Virtual-Constructive Distributed Environment (LVC-DE) for System of System Testing
- Combined Scalable Tactical Emulated Network and LVC-DE

#### ENVIRONMENTAL

- Internationally Recognized Experts: Dynamics, Climatics & E3
- Contributing authors: MIL-STDs, TOPs/ITOPs, STANAGs
- One-of-a-Kind Large Capacity 6DOF Motion Replication
- Over 40 Environmental Chambers

### BACKGROUND

- Location: Redstone Arsenal
- Size: 12,540 acres (33% of Redstone Arsenal's total size)
- Workforce:
  - 69% contractor, 28% civilian, 3% military
  - 70+% engineers & engineering technicians
- NOT a Major Range and Test Facility Base

