

Redstone Test Center





RTC's Climatic Test capability serves a wide variety of test customers and commodity areas, specializing in missiles and aviation component, subsystem and system level testing. Facilities include those designed both for explosive and non explosive test items.

Basic Climatic Test capabilities provide environments that include, but are not limited to, altitude, extreme temperature, temperature shock, solar radiation, humidity, and combinations of temperature, altitude and humidity. Other specialized environments include salt fog, freezing rain and ice, blowing rain and dripping rain, blowing sand and dust and settling dust. Test engineers and technicians also perform field services that include life cycle environmental profile development; field conditioning and instrumentation; and test specification and development.

Core Competencies

MIL-STD-810 Testing

- Test Chambers (42)
- Temperature Extremes (-100 $^\circ\text{F}$ to 350 $^\circ\text{F}$)
- Chamber Volume (8 ft³ to 18,000 ft³)

Non-Destructive Testing

- Full Metrology (Weight, CG, & Moments)
- X-ray (Film, Direct Digital, CT)
- Dynamic Spin Balance
- CMM (2m X 4m X 1.5m)

Munitions and Ordnance Testing

- Missile/Ordnance Modification
- Inert Certification
- Explosive Prototype Development
- Missile Systems Exploitation
- Flash X-Ray

System Level Environmental Temperature Temperature **Environmental Test Facility Chamber Types** Humidity (17)and Quantities Two New Drive-In Chambers with the Following Temperature Contamination Temperature Specifications: Altitude **Bv** Fluids <u>Shock (13)</u> • Size: 1) 25' x 25' x 25' Temperature Temperature Range: Blowing Dripping Altitude -100°F to 185°F Rain (1) Rain (1) Humidity (3) • Humidity: 20%-95% Settling Salt Fog Blowing Dust Temperature Rate of Change: Dust (1) (2) 35°F/min lcing / Load Capacity: Immersion Blowing Freezing 12,000 lb/ft² (1) Sand (1) Rain (1)

(256) 876-3556

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