



# Redstone Test Center



## Component Testing

RTC engineers and technicians perform a wide variety of component level tests that include dimensional inspection, mechanical function, structural loading, and pressure/flow. Test capabilities include first article testing, quality verification, lot acceptance testing, vendor qualification testing, failure analysis, life cycle testing, engineering evaluations, research and development testing, stockpile reliability testing, and engineering investigation projects.

Facilities/equipment capabilities include an environment controlled laboratory which houses a wide variety of standard and specialized super high accuracy dimensional metrology equipment; electrical and optical components test labs; a wide range of static and dynamic structural load test stands, hydraulics and pressure test laboratories, and multiple high bay facilities that can accommodate very large test items.

Although missile and aviation systems components and repair parts are the majority of the items tested, full system performance evaluations can be performed with a wide range test equipment, instrumentation and data acquisition equipment available.

Non-Destructive Test Capabilities include Metrology (Weight, CG, & Moments), X-ray (High Energy/Low Energy, Film, Digital Radiography, Computed Radiography and 3-D Computed Tomography), Radiographic Interpretation, Dynamic Spin Balance, and Coordinate Measuring.

### Core Test Competencies

- Dimensional Metrology
- Pressure/Flow
- Hydraulics/Filter
- Static/Dynamic Structural Loading
- Fatigue Structural Loading
- Rotational Dynamic Loading
- Materials/Metallurgical Analysis
- Non-Destructive Inspection
- Transportability Testing
- Engineering Investigations
- Electronics/Electrical/Cable
- Electro-mechanical Component
- Electrical Components
- Optical Components
- Multi-Physics Engineering Analysis

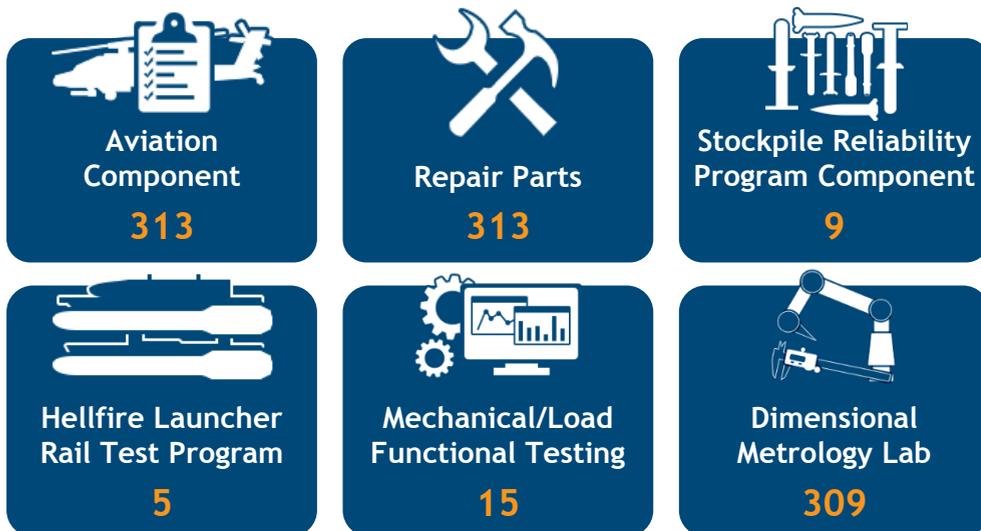
### Capability Highlight

State of the Art Material Analysis Laboratory



Scanning electron microscope for high magnification imagery and chemical composition analysis

### Test Activities and Number of Tests Performed



\* Number of tests performed over 4 quarters