Dayton T. Brown, Inc. is a 300,000 sq. ft. independent engineering and test organization whose existing management system was developed to accommodate over 2,000 programs per year. These projects range from a brief test or evaluation to a complex support engineering, research and development program of many years’ duration. Dayton T. Brown, Inc. provides complete “cradle to grave” integrated product support services encompassing engineering design and analysis, prototyping, fabrication, test and evaluation, test equipment development, and support and documentation development and support.

**TESTING**
- Simulate and record natural and induced environments on units under test.
- Test to Government, military and commercial specifications and standards.
- Perform nondestructive and destructive testing.

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**ENGINEERING**
- Site Surveys
- Quality Audits
- Failure Analysis
- Software Testing
- Reverse/Re-Engineering
- Software Development
- ATE Software Design & Development
- Data Acquisition & Interface
- Prototype Design & Fabrication
- Failure Modes & Effects Analysis
- Test Facility Design & Development
- Performance Test Equipment Design & Fabrication
- Reliability/Maintainability Modeling
- Product Improvement & Validation
- Development and Validation of Procurement Packages
- Hardware Standardization Programs

**A World of Engineering and Testing Under One Roof™**
Design Engineering, Fabrication:
- Structural Fixture Design
- Mechanical Systems Design
- 2D and 3D Computer Aided Design
- N + 1 Aircraft Interfaces
- Complete Welding and Machining Capabilities
- Aircraft Assembly per Specification
- Automated and Manual Test Facility Design

Alternate Source Qualification Testing:
- Two (2) Specimens Required
- Compare to OEM Test Results
- AMCOM Approved Test Plans Available
- AMCOM Validated Test Setups Available
- Over 40 Fixtures Available for Part Qualification

Instrumentation and Data Acquisition:
- Strain Gauging
- Crack Wires
- Deflection Measurements
- Load Measurements
- Servo Controlled Fatigue and Static Load Application
- Automated Real Time Data Acquisition to 100 Channels
- Electrical/Electronic Parameter Acquisition
- Data Acquisition During Environmental Exposure

Engineering and Analysis:
- Loads Development
- Finite Element Analysis (FEA)
- Specification Development
- Design Improvements
- Test Plan Procedure Development
- Reliability and Maintainability Analysis
- Reverse/Reengineering Programs
- Life Extension Programs
- Fatigue Analysis
- Logistic Support Analysis and Documentation

Failure Analysis:
- Scanning Electron Microscope (SEM)
- Optical Microscopy
- Metallography
- Digital Image Capturing

Inspection Laboratory:
- Leitz and Starrett Coordinate Measuring Machines (CMM)
- Hardness
- Liquid Penetrant
- Magnetic Particle
- Complete Inventory of Dimensional Measurement Equipment
- Coating Evaluation