#### Markets we serve:

- Aviation / Aerospace
- · Military / Commercial
- · Rail / Mass Transit Systems
- Armament / Ballistics
- · Off-Highway and Heavy Equipment
- Shipboard

DTB consistently delivers the highest quality of products and services, ensuring your success and satisfaction. Our personnel are committed to handle your project with integrity, expertise and dependability.

The corporation has accreditations, certifications, and approvals for the following:

- ISO 9001:2015 and AS9100D
- American Association for Laboratory Accreditation (A2LA) Accredited in Mechanical, Vibration, and Electrical\*
- IAPMO Approved
- NVLAP Accredited for EC & T
- DLA Approved for Environmental and Dynamics Testing
- Approved Government Property System from DCMA
- · Department of the Navy Approved for Light and Medium Weight Hammer Shock

At a minimum, DTB can test to the following standards and specifications:

- MIL-S-901
- MIL-STD-461
- MIL-STD-108
- MIL-STD-462
- MIL-STD-1399
- MIL-STD-464
- MIL-STD-167-1
- MIL-STD-810
- MIL-STD-2036
- RTCA/DO-160
- Automotive Standards, like CISPR, ISO, SAE, Ford, etc.



Over 300,000 sq. ft., operational 24/7



Static Load Testing Services



Vibration Testing

Our Facilities (Operating 24/7) Stand Apart by Providing a Full Spectrum of Engineering, Testing, Logistic and Technical Publication Services with the Innovation, Integrity and Dependability You Can Count On. Since 1950, Our Goal has been to Build Long-Term Relationships by Exceeding Customer Expectations with Superior Services and Competitive Pricing. At DTB, we are Committed to Helping you Overcome your most Complex Challenges.



# COMPANY OVERVIEW ENGINEERING & TEST DIVISION

Innovation. Integrity. Dependability.



Dayton T. Brown, Inc. is one of the largest Independent Engineering and Testing Facilities in the country. We provide a comprehensive range of both engineering and testing services for commercial and military manufacturers to help bring their products to market. Our 32 acre facility offers 24/7 scheduling to meet the most demanding program needs of our customers.



DTB's Tenured Engineers have Developed Innovative Solutions for Your Most Complex Testing and Engineering Requirements Since 1950.

#### www.dtb.com





ISO 9001:2015 and AS9100D

Visit our web site at: www.dtb.com







ISO 9001:2015 and AS9100D Registered





#### **Shock and Vibration Testing**

- Acceleration
- Acoustic Noise
- Combined Environments Vibration
- CIA SET Shock Towers
- Inclination
- Pyrotechnic Shock
- · LWHS and MWHS Facilities
- · Random, Sine, etc.
- Seismic Vibration
- Transportation and Packaging Shock/Vibration
- · Unholtz-Dickie Electrodynamic Facilities; 55,000 Ft. Lbs. to 24,000 Ft. Lbs.



Vibration Test Facility (Inverted)

#### **Environmental Simulation Testing**

- Altitude
- Combined Environments Temperature / Altitude / Humidity
- **Explosive Atmosphere**
- **Explosive and Rapid Decompression**
- Fluid Compatibility
- Fungus
- High/Low Temperature
- Humidity
- · Icing/Freezing Rain
- Salt Fog
- Sand and Dust
- · Solar Radiation Walk In Facility
- SO<sub>2</sub> Testing
- Thermal Vacuum
- Thermal Shock
- Wind and Rain Exposure

## A World of Engineering and Testing All Under One Roof™



EMI/EMC Testing in our Anechoic Chambel

#### **EMI/EMC** and **Electrical Testing**

- Electrical MIL-STD-1399
- Electromagnetic Pulse (EMP)
- Electrostatic Discharge (ESD)
- Radiated and Conducted Emissions
- Liahtnina
- Magnetic Field Emissions and Immunity
- Power Quality
- Radiated, Conducted, and Inducted Susceptibility
- Shielding Effectiveness
- Tempest

#### **Structural and Fatigue Testing**

- Composite Material Testing
- Coupon Testing
- Damage Tolerance Analysis
- Flight Test Support
- Fatigue
- Fatigue Life Prediction
- Hydraulic Pressure Testing
- Instrumentation and Data Acquisition
- Load Development
- Material Testing
- Static
- Strain Gauge Services

#### **Safety and Survival Testing**

- · Air Crew Equipment Validation
- Deployment Performance Evaluation
- Life Support Systems
- · Optics and Laser Eye Protection
- Pneumatics
- Windblast Testing



**Ballistic Threat Standards Testing** 

#### **Ballistics Testing**

- 100-Meter Indoor Firing Range
- · Accelerated Life Testing
- Ballistics Testing, Including Weapons, Ammo, Armor, and Vests
- Electrical Aircraft Interface Systems
- Failure and Materials Analysis
- Handcuff Testing per NIJ 0307.01
- Mechanical and Electrical Armament Equipment
- · Structural and "Up-Armor" Testing
- Transparent Armor per ATPD 2352
- Nondestructive Testing
- Proof Testing
- Weapons Development Testing TOPS

#### **Rail/Transit Engineering and Testing Services**

- AAR
- AREMA 11.5.1
- NYCT-1N, 17S
- Accepted by NYCT
- NYCT-CETP

MIL-STD-461

- Control Plans EN50121
- PTC/ATC/CBTC/SSI Track Circuit Testing
- EMI/EMC Site Surveys
  UMTA
- MIL-STD-810
- · Wayside Systems
- Computer Based Data Acquisition System
- Full Vehicle Qualification/Compliance Testing
- Vibration/Shock/Acoustic Surveys

#### **Armament and Munitions Testing**

- Bomb Rack Cartridge Testing
- Bomb Rack Qualification
- Flight Test Support
- · Missile Qualification

### **Life Cycle Testing**

- Accelerated Life Testing
- Life Cycle with Environmental Exposure

DAYTON T. BROWNING

#### **Optical Testing**

- Deviation Analysis
- Diffuse Transmittance
- · Distortion Analysis
- Haze
- Illuminance
- Laser Power
- Luminous Transmittance
- Luminous Intensity
- Luminance
- · Neodymium Laser
- Reflectance
- Spectrophotometry
- Spherical and Cylindrical Power
- · Vertical/Horizontal Prismatic Deviation



Reliability Testing

### **Engineering Services**

- Alternate Source Identification
- CAD/CAE Capabilities
- Corrosion Investigations
- Dimensional / CMM Inspection
- Failure Analysis
- · Kinematic Studies
- · Metallurgical Services
- Nondestructive Testing
- Prototype Design and Fabrication
- Product Improvement and Validation
- Quality Audits
- Rapid Prototyping
- Reverse/Re-Engineering
- Reliability/Maintainability Modeling
- Site Surveys
- Stress Analysis
- Thermal Modeling
- · Test Facility Design and Development
- Test Plan/Procedure Development
- · Vendor Qualification