# AIRBORNE SYSTEMS TESTING

Innovation. Integrity. Dependability.



DTB offers 70 years of experience in testing aerospace systems for both fixed wing and rotorcraft applications that contribute to Flight Safety and Readiness directives. Our engineering experience runs the gamut from Conformance Inspection or Failure Analysis, to In-flight Instrumentation and Data Acquisition, to Alternate source Qualification Testing.

#### **TESTING SERVICES**

- First Article Inspections
- · Life Cycle and Durability Testing
- Environmental Simulation Testing
- · Dynamics and Vibration Testing
- · EMI, EMC and Electrical Testing
- · Structural and Fatigue Testing
- Alternate Source Qualification Testing
- Instrumentation and Data Acquisition
- Lightning Testing

#### **ENGINEERING SERVICES**

- Design and Program Engineering
- Reverse Engineering
- Metallurgical Engineering
- Design Engineering, Fabrication
- Failure Analysis
- Prototyping
- Static Load

## www.dtb.com



ISO 9001:2015 and AS9100D Registered Testing \* Lab Code 200422-0

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A World of Engineering and Testing Under One Roof<sup>™</sup>

### AIRBORNE SYSTEMS MILITARY & COMMERCIAL

| MILITARY REQUIREMENT | TEST DESCRIPTION                             | COMMERCIAL REQUIREMENT                                                                |
|----------------------|----------------------------------------------|---------------------------------------------------------------------------------------|
| MIL-STD-810          | Acceleration                                 |                                                                                       |
| MIL-STD-810          | Altitude                                     | RTCA/DO-160                                                                           |
| Design Requirement   | Arrested Landing Simulation                  |                                                                                       |
| MIL-STD-461/462/704  | Electrical Power/Power Inputs                | RTCA/DO-160                                                                           |
| Design Requirement   | Emergency Ejection Simulation                |                                                                                       |
| MIL-STD-461/462      | EMI                                          | RTCA/DO-160                                                                           |
| MIL-STD-810          | Explosive Decompression                      |                                                                                       |
| MIL-STD-810          | Explosive Atmosphere/Explosion Proofness     | RTCA/DO-160                                                                           |
|                      | RTCA/DO-160                                  | RTCA/DO-160                                                                           |
| MIL-STD-810          | Fluids Susceptibility                        | RTCA/DO-160                                                                           |
| MIL-STD-810          | Fungus Resistance                            | RTCA/DO-160                                                                           |
| MIL-STD-810          | Humidity                                     | RTCA/DO-160                                                                           |
| MIL-STD-1757         | Icing                                        | RTCA/DO-160                                                                           |
|                      | Lightning (multiple burst / multiple stroke) | RTCA/DO-160-Section 22,<br>SAE ARP5412,<br>EUROCAE/ED-14E,<br>FAA AC:20-136, SAE AE4L |
|                      | Magnetic Effect                              | RTCA/DO-160                                                                           |
| MIL-STD-740          | Noise                                        |                                                                                       |
| MIL-STD-810          | Salt Fog                                     | RTCA/DO-160                                                                           |
| MIL-STD-810          | Sand & Dust                                  | RTCA/DO-160                                                                           |
| MIL-STD-810          | Shock                                        | RTCA/DO-160                                                                           |
| Design Requirement   | Structural Testing                           |                                                                                       |
| MIL-STD-810          | Temperature                                  | RTCA/DO-160                                                                           |
| MIL-STD-810          | Vibration                                    | RTCA/DO-160                                                                           |
| MIL-STD-810          | Wind & Rain/Waterproofness                   | RTCA/DO-160                                                                           |

Note: The above specifications are the most frequently used. Similar tests can be provided for other specifications or for individual requirements.



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