SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

NATIONAL TECHNICAL SYSTEMS (NTS) - LONGMONT
1601 Dry Creek Drive
Suite 2000
Longmont, CO 80503
Mr. Michael Jasiewicz Phone: 720 745 6009

MECHANICAL

Valid To: May 31, 2018 Certificate Number: 0214.44

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following environmental simulation tests:

| **Test Technology:** | **Test Method(s)[1,2]:** |
|---|---|
| ***Vibration*** | |
| Electrodynamic Shakers:<br>Sine/Random/Mixed-Mode<br>Sine-on-Random, Random-on-Random<br>(5 to 3000) Hz<br>1" Stroke<br>18,000 lbs force | MIL STD-810[2] (Methods 514, 519, and 526);<br>RTCA/DO-160[2] (Section 8);<br>MIL STD-202E, F, and G (Methods 201, 203, 204, and 214) |
| Siesmic Hydraulic Shaker:<br>(5 to 500) Hz<br>12" Stroke<br>12,000 lbs force | |
| ***Shock*** | |
| Vibration Shock – Electrodynamic Shakers:<br>(5 to 3,000) Hz<br>1" Stroke<br>18,000 lbs force<br>Up to 30 g's and 11 milliseconds | MIL STD-810[2] (Method 516);<br>RTCA/DO-160[2] (Section 7);<br>MIL STD-202E, F, and G (Method 213) |
| Mechanical (Drop) Shock<br>Drop Towers<br>½ Sine, Square Wave, Trapezoidal Pulse Shape<br>Up to 6000 g's<br>Down to 1 millisecond | MIL STD-810[2] (Method 516);<br>MIL STD-202E, F, and G (Method 213) |
| ***Acceleration*** | |
| R=36", 100 g's | MIL-STD-810[2] (Method 513) |

| **Test Technology:** | **Test Method(s)[1,2]:** |
|---|---|
| ***Temperature/Altitude***<br>(-2,000 to 200,000) ft<br>(-60 to 160) °C | MIL STD-810[2] (Method 516);<br>RTCA/DO-160[2] (Section 7);<br>MIL STD-202E, F, and G (Method 213) |
| ***Rapid Decompression*** | MIL STD-810[2] (Method 500);<br>RTCA/DO-160[2] (Section 4) |
| ***High Temperature***<br>To 160 °C | MIL STD-810[2] (Method 501) |
| ***Low Temperature***<br>To -100 °C | MIL STD-810[2] (Method 502) |
| ***Temperature Shock***<br>(-60 to 160) °C | MIL STD-810[2] (Method 503);<br>MIL STD-202[2] (Method 107) |
| ***Temperature Humidity***<br>(5 to 95) %RH | MIL STD-810[2] (Method 507);<br>RTCA/DO-160[2] (Section 6);<br>MIL STD-202[2] (Method 103) |
| ***Temperature Cycling***<br>(-60 to 160) °C | MIL STD-810[2] (Method 520);<br>RTCA/DO-160[2] (Section 5) |

[1] When the date, revision or edition of a test method standard is not identified on the scope of accreditation, the laboratory is required to be using the current version within one year of the date of publication, per part C., Section 1 of A2LA *R101 - General Requirements- Accreditation of ISO-IEC 17025 Laboratories*. If a specifier/regulator imposes a different transition period, this will supersede the A2LA one-year implementation period.

[2] Accreditation includes all final published versions of this method.

On the following types of products: Aerospace, Military, Medical and IT Equipment

# Accredited Laboratory

A2LA has accredited

## NATIONAL TECHNICAL SYSTEMS (NTS) - LONGMONT

*Longmont, CO*

for technical competence in the field of

## Mechanical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009*).

Presented this 21st day of March 2017.

President and CEO
For the Accreditation Council
Certificate Number 0214.44
Valid to May 31, 2018
Revised February 28, 2018

*For the tests to which this accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation.*