



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

NATIONAL TECHNICAL SYSTEMS (NTS) - LONGMONT  
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Suite 2000  
Longmont, CO 80503  
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MECHANICAL

Valid To: February 29, 2020

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 on the following types of products: Aerospace, Automotive, Military, Medical and IT Equipment.

**Test Technology/Equipment Parameters<sup>3</sup>:**

**Test Method(s)<sup>1,2</sup>:**

***Vibration<sup>3</sup>***

Electrodynamic Shakers:  
Sine/Random/Mixed-Mode  
Sine-on-Random, Random-on-Random  
(5 to 3000) Hz  
1” Stroke  
18,000 lbs force

MIL STD-810<sup>2</sup> (Methods 514, 519, and 526);  
RTCA/DO-160<sup>2</sup> (Section 8);  
MIL STD-202E, F, and G (Methods 201, 203,  
204, and 214)

Siesmic Hydraulic Shaker:  
(5 to 500) Hz  
12” Stroke  
12,000 lbs force

***Shock<sup>3</sup>***

Vibration Shock – Electrodynamic Shakers:  
(5 to 3,000) Hz  
1” Stroke  
18,000 lbs force  
Up to 30 g’s and 11 milliseconds

MIL STD-810<sup>2</sup> (Method 516);  
RTCA/DO-160<sup>2</sup> (Section 7);  
MIL STD-202E, F, and G (Method 213)

Mechanical (Drop) Shock  
Drop Towers  
½ Sine, Square Wave, Trapezoidal Pulse Shape  
Up to 4000 g’s  
Down to 1 millisecond

MIL STD-810<sup>2</sup> (Method 516);  
MIL STD-202E, F, and G (Method 213)

***Acceleration<sup>3</sup>***

R=36”, 100 g’s

MIL-STD-810<sup>2</sup> (Method 513)

**Test Technology/Equipment Parameters<sup>3</sup>:**

**Test Method(s)<sup>1,2</sup>:**

***Temperature/Altitude<sup>3</sup>***  
(-1500 to 100,000) ft  
(-50 to 160) °C

MIL STD-810<sup>2</sup> (Method 516);  
RTCA/DO-160<sup>2</sup> (Section 7);  
MIL STD-202E, F, and G (Method 213)

***Rapid Decompression***

MIL STD-810<sup>2</sup> (Method 500);  
RTCA/DO-160<sup>2</sup> (Section 4)

***High Temperature<sup>3</sup>***  
To 160 °C

MIL STD-810<sup>2</sup> (Method 501)

***Low Temperature<sup>3</sup>***  
To -100 °C

MIL STD-810<sup>2</sup> (Method 502)

***Temperature Shock<sup>3</sup>***  
(-50 to 100) °C

MIL STD-810<sup>2</sup> (Method 503);  
MIL STD-202<sup>2</sup> (Method 107)

***Temperature Humidity<sup>3</sup>***  
(5 to 95) %RH  
(20 to 60) °C

MIL STD-810<sup>2</sup> (Method 507);  
RTCA/DO-160<sup>2</sup> (Section 6);  
MIL STD-202<sup>2</sup> (Method 103)

***Temperature Cycling<sup>3</sup>***  
(-50 to 160) °C

MIL STD-810<sup>2</sup> (Method 520);  
RTCA/DO-160<sup>2</sup> (Section 5)

<sup>1</sup> 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.

<sup>2</sup> Accreditation includes all final published versions of this method.

<sup>3</sup> Also using customer-specified methods directly related to the parameters and types of tests listed above.



## *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 April 2017).



Presented this 8<sup>th</sup> day of October 2018.

A handwritten signature in black ink, appearing to read "L. Sen", written over a horizontal line.

President and CEO  
For the Accreditation Council  
Certificate Number 0214.44  
Valid to February 29, 2020

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