



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

NATIONAL TECHNICAL SYSTEMS (NTS)

New Jersey Facility
36 Gilbert Street South
Tinton Falls, NJ 07701
David Potpinka Phone: 732 936 0800

MECHANICAL

Valid to: September 30, 2019

Certificate Number: 0214.21

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 Description/Equipment
Parameters:**

Test Standard(s)/Method(s)¹:

Explosive Atmosphere²
40,000 ft. max

MIL-STD-810* (Method 511.5); RTCA DO 160 (Section 9)

Thermal Shock²
(-60 to 148.7) °C

MIL-STD-810* (Method 503)

High/Low Temperature²
(25 to 180) °C

MIL-STD-202* (Methods 103, 106, 107, 108);
MIL-STD-810* (Methods 501, 502, 509, 507);
GR-63-CORE* (Section 5.1)

Temp & Temp/Humidity²
(25 to 70) °C
(5 °C per minute ramp)
(25 to 95) %RH

MIL-STD-883* (Methods 1004, 1005, 1008, 1010, 1011,
1012, 1013); RTCA DO 160* (Sections 5, 6);
GR-63-CORE* (Section 5.1)

Temperature/Altitude²
(-65 to 80) °C
90,000 ft.

MIL-STD-810* (Methods 500, 520);
RTCA DO 160* (Section 4); GR-63-CORE* (Section 5.1)

Blowing Rain²
(up to 100 mph)
(up to 6 inches per hour)

MIL-STD-810* (Method 506) Procedure I

Fungus Resistance

MIL-STD-810* (Method 508); GR-487;
RTCA DO 160* (Section 13); ASTM G21

Salt Fog/Spray

MIL-STD-810* (Method 509); RTCA DO 160* (Section 14);
ASTM B117

Sand and Dust

MIL-STD-810* (Method 510.5);
MIL-STD-202* (Method 110A);
ETSI EN 300 019* (Sections 2-1, 2-2, 2-3, 2-4);
RTCA DO 160* (Section 12)

Test Description/Equipment Parameters:

Test Standard(s)/Method(s)¹:

Resistance to Solvents	MIL-STD-202* (Method 215)
Fluid Susceptibility	RTCA DO 160* (Section 11)
Icing/Freezing Rain	MIL-STD-810* (Method 521)
Hail/Ballistic Impact	ASTM E822; ASTM F320; ANSI Z87.1; MIL-PRF-31013
Waterproofness	RTCA DO 160* (Section 10)
Leakage (Immersion)	MIL-STD-810* (Method 512)
Vibration ² (5 to 3000) Hz with combined environmental temperature: (0 to 190) °C; Sine: 13,000 force lbs. Random: 12,000 force lbs. Stroke 1 inch Shock: up to 100 g's, up to 11 msec. (sine, random, random on random, sine on random, sine on sine, high frequency, fatigue, shock)	MIL-STD-202* (Methods 201, 204, 213, 214); MIL-STD-810* (Methods 514, 516, 519); MIL-STD-883* (Methods 2002, 2005, 2007, 2026); RTCA DO 160* (Sections 7, 8); GR-63-CORE* (Section 5.4); ETSI EN 300 019*
Drop/Shock/Incline Tests ² (up to 1500g's) (0.5 to 20 msec half Sine)	GR-63-CORE* Section 5.3; ETSI EN 300 019*; MIL-STD-810* (Method 516)
Acoustic Noise ² (30 to 130) db (25 Hz to 10kHz)	GR-63-CORE* (Section 5.6); MIL-STD-740-1 (Inactive as of 9/25/2012) ³

On the Following Product Types: Aerospace, Defense, Telecommunications, Electrical, Electronics, Automotive, Information Processing, Scientific Instruments, and Commercial

*Note: The laboratory's accreditation includes all revisions of the standards identified by this mark above.

¹When 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*.

²Also using customer specific test methods utilizing any combination of test equipment parameters listed.

³ This laboratory's scope contains withdrawn or superseded methods. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered "historical" and not that the laboratory's accreditation for the method has been withdrawn.



Accredited Laboratory

A2LA has accredited

NATIONAL TECHNICAL SYSTEMS (NTS)

Tinton Falls, NJ

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 15th day of November 2017.

A handwritten signature in black ink, written over a horizontal line.

President & CEO
For the Accreditation Council
Certificate Number 0214.21
Valid to September 30, 2019

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