



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

NATIONAL TECHNICAL SYSTEMS (NTS)
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MECHANICAL

Valid to: June 30, 2018

Certificate Number: 0214.06

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to the laboratory to perform the following automotive, telecommunications, and aerospace testing:

Test:

Acceleration¹

- 2 Foot Centrifuge
 - 200 g's
- 10 Foot Centrifuge
 - 200 g's
- 25 Foot Centrifuge
 - 40 g's

Drop Impact¹

Mechanical up to 40 feet

Explosive Atmosphere¹

- (0 to 50,000) ft. simulation

Sand and Dust¹

- Ambient to 180°F
- Air Velocity to 60 MPH

Environmental Exposure¹

Temperature/Altitude

- (-65 to 180) °F
- 100,000 feet

Icing (Altitude)

- (-100 to +77) °F
- Up to 55,000 feet
- Rh > 95%

Test Method(s):

MIL-STD-202: 212;
MIL-STD-750: 2006;
MIL-STD-810: 513;
RTCA DO 160, S7

MIL-STD-331: A3 and A4.1;
MIL-STD-810: 516

MIL-STD-810: 511, Procedures I and II;
RTCA DO 160, Section 9

MIL-STD-810: 510;
RTCA DO 160, Section 12;
GR-487-CORE: 3.28.4

MIL-STD-810: 500 and 520;
RTCA DO 160, Section 4

RTCA DO 160, Section 24

Test:

High Temperature

- up to 2,500 °F

Low Temperature

- -400°F

Temperature Shock

- (-100 to +300) °F

Thermal Vacuum

- 10^{-6} torr \pm 300 °F

Temperature Humidity

- (-100 to +300) °F
- (10 to 95)% humidity

Explosive Decompression

- 100,000 ft <100 msec

Fluid Flow¹

Pressure and Flow Endurance

Fuels (propane, butane, JP)

Hot gas up to 2000 °F

Pressure Drop

- H₂O (0 to 2,300) gpm
- Air (0 to 270) lbs/min
- LN₂ (0 to 2,600) gpm
- GN₂ (0 to 600) lbs/min

Temperature Pressure Cycle Testing

Hydraulics

- (0 to 5,000) psig

Leakage

- Ghe, GH2, Air, Oil

Pneumatics

- (0 to 18,000) psig

Jolt and Jumble

Transportation (Loose Cargo)

Test Method(s):

MIL-STD-331: C-6;

MIL-STD-810: 501;

RTCA DO 160, Sections 4 and 5

MIL-STD-810: 502;

RTCA DO 160, Sections 4 and 5

MIL-STD-202: 107;

MIL-STD-331: C-7;

MIL-STD-810: 503;

MIL-STD-883: 1011

MIL-STD-1540D

(with the exception of TQCM data)

MIL-STD-202: 103 and 106;

RTCA DO 160, S6;

MIL-STD-810: 507 and 520 *(except vibration)*;

MIL-STD-2105: 5.1.1 and 5.1.3;

MIL-STD-810: 500, Procedure IV;

RTCA/DO-160, Section 9

MIL-F-8615D²;

MIL-V-8608A²

NTS Test Procedure Number 12942

SOP SAN OPS 026

SAE: ARP868

UTAS-SOW-33344, Paragraph 1.3;

MIL-F-8615D

SAE: ARP868

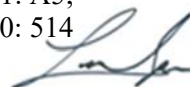
MIL-STD-202H, Method 112E

SOP SAN OPS 025

MIL-STD-331: A1 and A2.4

MIL-STD-331: A5;

MIL-STD-810: 514



Test:

Test Method(s):

Rain/Wind

MIL-STD-810: 506

Waterproofness

RTCA/DO-160, Section 10

Salt Fog

ASTM B117;
MIL-STD-202: 101;
MIL-STD-331: C3;
MIL-STD-810: 509;
MIL-STD-883: 1009;
RTCA/DO-160, Section 14;
GR-487-CORE, 3.34.1

Salt Fog & SO₂

ASTM G85, Annex A2 and A4

Solar Radiation

MIL-STD-810: 505, Procedure I

Hail Strike

ASTM F320

Fluids Susceptibility/Exposure to Fluids (Fluid
Compatibility and
Resistance to Fluids)

MIL-STD-810: 504;
RTCA/DO-160

¹Also using customer specifications based on the above standards and within the listed parameters.

² 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)

Santa Clarita, CA

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 11th day of July 2016.

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

President and CEO
For the Accreditation Council
Certificate Number 0214.06
Valid to June 30, 2018
Revised March 27, 2018

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