



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

NATIONAL TECHNICAL SYSTEMS (NTS)
20970 Centre Pointe Parkway
Santa Clarita, CA 91350
Joseph Gomez Phone: (661) 259-8184
E-mail: joseph.gomez@nts.com
Website: <http://www.nts.com>

MECHANICAL

Valid to: March 31, 2020

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
 - 70,000 feet

Icing (Altitude)

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

Test Method(s):

MIL-STD-202: 212;
MIL-STD-750: 2006;
MIL-STD-810: 513;
RTCA DO 160; Section 7

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;
MIL STD 810. M 521;
RTCA DO 160, Section 24

Test:

High Temperature

- up to 2,500 °F

Low Temperature

- -400°F

Temperature Shock

- (-100 to +300) °F

Temperature Humidity

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

Explosive Decompression

- 100,000 ft <100 msec

Jolt and Jumble

Transportation (Loose Cargo)

Rapid Decompression

Rain/Wind

Waterproofness

Salt Fog

Salt Fog & SO₂

Solar Radiation

Hail Strike

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

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;

RTCA DO 160, Section 5

MIL-STD-202: 103 and 106;

RTCA DO 160, Section 6;

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-STD-331: A1 and A2.4

MIL-STD-331: A5;

MIL-STD-810: 514

RTCA DO 160 Section 9;

MIL STD 810, M500, Procedure 1

MIL-STD-810: 506

RTCA/DO-160, Section 10

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

ASTM G85, Annex A2 and A4

MIL-STD-810: 505, Procedure I

ASTM F320

MIL-STD-810: 504;

RTCA/DO-160 Section 11

Test:

Fluid Flow¹

Pressure and Flow Endurance

Fuels (Jet A, JP, Stoddard)

Hot Gas up to 2000 °F

Pressure Drop

- H₂O (0 to 2,300) gpm
- Air (0 to 350) 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, Fuels

Pneumatics

- (0 to 10,000) psig

Fuel Icing

Helium Leak

Water Deluge Testing

Fluid Contamination

Test Method(s):

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

SAE: ARP 1401B

MIL STD 202

MIL C 24 368B (Navy) Section 4.6.7

SAE: ARP 8615

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 April 2017).



Presented this 27th day of September 2018.

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

President and CEO
For the Accreditation Council
Certificate Number 0214.06
Valid to March 31, 2020

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