



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT U.S. SPACE & DEFENSE
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MECHANICAL

Valid to: March 31, 2026

Certificate Number: 214.06

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

- 10 Foot Centrifuge
- 200 g's
- 25 Foot Centrifuge
- 32 g's

Drop Impact¹

Mechanical up to 20 feet

Explosive Atmosphere¹

- (0 to 50,000) ft. Simulation

Sand and Dust¹

- Ambient to 80°F
- Air Velocity to 60 MPH

Environmental Exposure¹

- Temperature/Altitude
- Ambient to 180°F
- 70,000 feet

Icing (Altitude)

- (-40 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:

Environmental Exposure (continued)¹

High Temperature

- up to 1,000°F

Low Temperature

- -40°F

Temperature Shock

- (-100 to +300)°F

Temperature Humidity

- (32 to 160) °F
- (10 to 95) % humidity

Explosive Decompression

- 80,000 ft <100 msec

Jolt and Jumble

Transportation (Loose Cargo)

Rapid Decompression

Rain/Wind

Waterproofness

Salt Fog

Salt Fog & SO₂

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: 504;
RTCA/DO-160 Section 11

Test:

Fluid Flow¹

Pressure and Flow Endurance

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

Leakage

- GHe, Air, Oil, Fuels

Pneumatics

- (0 to 10,000) psig

Helium Leak

Fluid Contamination

Test Method(s):

MIL-F-8615D;
MIL-V-8608A

SOP SAN OPS 026

SAE ARP868

UTAS-SOW-33344, Paragraph 1.3;
MIL-F-8615D

MIL-STD-202H, Method 112E

SOP SAN OPS 025

MIL-STD-202

SAE ARP 8615

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



Accredited Laboratory

A2LA has accredited

ELEMENT U.S. SPACE & DEFENSE

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 17025:2017 *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 25th day of March 2024.

A blue ink signature of Trace McInturff, written in a cursive style.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 214.06
Valid to March 31, 2026
Revised May 1, 2024

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