National Aerospace Training and Research Center

is issued a Safety Element Approval, subject to the provisions of 51 USC Subtitle V, ch. 509, and the orders, rules, and regulations issued under it.

This Safety Element Approval is issued to the National Aerospace Training and Research Center for its ability to use the Falcon 12/4 Altitude Chamber to replicate any pressure experienced at altitudes from zero (0) feet up to 100,000 feet. This includes rapid decompression up to equalization altitudes of 30,800 feet.

This Safety Element Approval is granted subject to the terms, conditions, and limitations set forth in safety approval order A and any subsequent orders issued by the Associate Administrator for Commercial Space Transportation.

The holder of this Safety Element Approval must at all times comply with the regulations prescribed by the Associate Administrator for Commercial Space Transportation relating to this Safety Element Approval.
1. **Authority:** This Order is issued to the National Aerospace Training and Research Center (NASTAR) under 51 U.S.C. Subtitle V, chapter 509.

2. **Purpose:** This Order modifies Safety Element Approval No. SEA 12-004 (Rev 1) issued concurrently by the Federal Aviation Administration’s (FAA) Office of Commercial Space Transportation (AST). This Order prescribes as conditions to the Safety Element Approval certain requirements applicable to the approved safety element.

3. **Scope:** The FAA verifies that the Falcon 12/4 Altitude Chamber is capable of replicating any pressure experienced at altitudes from zero (0) feet up to 100,000 feet with an initial climb rate of 20,000 feet per minute and with a tolerance of altitude accuracy of +/- 250 feet, as represented in NASTAR’s application. The FAA verifies that the Falcon 12/4 Altitude Chamber can conduct rapid decompressions up to equalization altitudes of 30,800 feet with a tolerance of altitude accuracy of +/- 1000 feet.

4. **Maintenance:** NASTAR must follow the Falcon 12/4 Altitude Chamber maintenance procedures as represented in NASTAR’s application.

5. **Calibration:** NASTAR must follow all calibration procedures as represented in NASTAR’s application.

6. **Crew Qualification and Training:** NASTAR may offer the Falcon 12/4 Altitude Chamber to a prospective launch or reentry operator to meet the applicable components of the crew qualification and training requirements of 14 CFR § 460.5.
7. Safety Element Approval Term: Safety Approval No. SEA 12-004 (Rev 2) expires in 5 years from the effective date of the Safety Approval.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: ________________________________
Michelle S. Murray, Manager
Safety Authorization Division

Original Issued: September 11, 2012
Rev 2 Issued: September 13, 2022
Rev 2 Effective: September 11, 2022

Revision History:

Original Safety Approval Order – Issued September 11, 2012

Revision 1 – Issued September 7, 2017
1) Redesignated Safety Approval Order “SA 12-004A” to “SA 12-004A (Rev 1)”
2) Added “Rev 1 Issued: September 7, 2017”

Revision 2 – Issued September 13, 2022
1) Redesignated Safety Approval Number: SA 12-004 (Rev 1) to SEA 12-004 (Rev 2)
2) Replaced “Safety Approval” with “Safety Element Approval” to reflect name change
3) Changed “Effective” date to “September 11, 2022”
Revision History:

Original Safety Approval – Issued September 11, 2012

Revision 1 – Issued September 7, 2017

1) Redesignated Safety Approval Number “SA 12-004” to “SA 12-004 (Rev 1)”

2) Added “Rev 1 Issued: September 7, 2017”


Revision 2 – Issued September 12, 2022

1) Redesignated Safety Approval Number: SA 10-001 (Rev 1) to Safety Element Approval Number: SEA 10-001 (Rev 2)

2) Replaced “Safety Approval” with “Safety Element Approval” to reflect name change

3) Changed “Effective” date to “September 11, 2022”