

4.3 EVALUATION OF COMMERCIAL SPACE PRESSURE SUIT AS AN APPROACH TO ENHANCE SAFETY AND HEALTH OF COMMERCIAL SPACEFLIGHT TRAVELERS



Summary

The purpose of this study is to evaluate the use of a new generation life support space suit as means to optimize human safety, protection, and performance during upcoming commercial space flights. As limited to no publically available data exists on commercial human spaceflight, this study is the first of its kind to understand the impact of a pressure suit during commercial suborbital flights.

Two subjects will evaluate a Contingency Hypobaric Astronaut Protective Suit (CHAPS) under G during a series of centrifuge runs at the National AeroSpace Training and Research(NASTAR) Center. Use of the Phoenix Centrifuge at NASTAR Center will permit realistic evaluation due to the replication of acceleration forces and physiologic conditions encountered upon humans during launch and reentry phases of suborbital space flight.

Objectives

- To elicit detailed feedback to enhance spacecraft seat and life support equipment designs
- To aid in the development of protocols associated with future suborbital research
- To integrate feedback into space training programs to provide space travelers with the best, most realistic training available that focuses on optimizing their health, safety and enjoyment in overall space flight experience



Customer/Partner

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Status

Complete (January 2012)

Publications

Research summary available online

www.nastarcenter.com/nastar-center-supports-commercial-space-pressure-suit-evaluation-in-centrifuge