

FS8 Pressure Suit Test Data 2025011704

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Suit model: FS8

Max Suit Pressure: 3.84 PSI

Inflation gas: air (78% nitrogen, 21% oxygen)

Total test duration: 820 seconds (13.6 minutes)

Operational notes: Human in the loop demonstration. Suit data logger began recording suit pressure at about T= 50s and 2psi over ambient. The demonstration began with standing skydiving postures to reach parachute handles and demonstrate a belly down arch position. Suit was then depressurized and the seated position was assumed. Suit pressure was brought back up where hand grip strength was demonstrated as well as an ability to self-release from the seat belt. Noting at T=786s when the restraint harness was released and the suit was freed to expand, there was a nearly instantaneous pressure drop from 3.81 psid to 3.19 psid, after which suit differential pressure immediately began to recover towards steady state pressure (3.8 psid)

