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FLYING NAKED – A COST BENEFIT ANALYSIS OF THE USE OF PRESSURE SUITS IN SUBORBITAL SPACEFLIGHT

Abstract

To paraphrase Shakespeare, "To suit or not to suit, that is the question. Whether tis nobler to . . ." Suborbital spaceflight vehicle developers and operators are now facing the choice of whether or not to include the use of personal pressure suits as part of the standard equipment package for flight crews and customers. All suborbital vehicles now in development of course include cabin pressurization and life support systems as part of the vehicle equipment. However, several companies are also choosing to use newly developed commercial emergency pressure suits as safety equipment in addition to the vehicle pressurization systems.

The engineering systems tradeoff is neither simple nor obvious. On one hand, emergency pressurization suits have been standard issue on 100