Life support Challenges for Human Space Exploration (10)
Life Support Technologies and Systems (1)

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EARLY ENVIRONMENTAL CONTROL AND LIFE SUPPORT TECHNOLOGY TESTING – PATHS TO MOVE BEYOND LEO

Abstract

Early implementation of NASA's flexible path for space exploration will depend heavily on the development path for Environmental Control and Life Support technology, including results from detailed system testing. To contribute to that process, engineers at Boeing and Hamilton Sundstrand are examining the impact of early choices for ECLS systems on later hardware options. A combination of flight tests, that offer insight into the operational environment, and ground tests, that offer more control and data, will provide the greatest flexibility in development path and future options. A preliminary integrated path for complementary flight and ground ECLS testing was identified.

This paper will discuss the investigation and present its principal results.