

IAF/IAA SPACE LIFE SCIENCES SYMPOSIUM (A1)
Life Support, habitats and EVA Systems (7)

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COMMERCIAL EVA-2.0 SPACE SUIT DEVELOPMENT

Abstract

Final Frontier Design (FFD) has continued development and testing of a rear entry EVA Space Suit (FFD second generation or EVA 2.0). Several elements of the EVA 2.0 space suit have been newly implemented or refined. The Soft Upper Torso (SUT) with integrated reinforcements, rear entry hatch with locking system, arms with wrist, arm and shoulder bearings, updated mobility joints, Liquid Cooling garment (LCG), and ventilation system were designed and manufactured. Human testing has been conducted at the University of North Dakota under Space Act Agreement with NASA funding. EVA 2.0 legs were designed for microgravity operations. Updated Components are planned including development of the legs for the Moon, as well as integration with life support systems (ECLSS), communication and control systems.