21st IAA SYMPOSIUM ON VISIONS AND STRATEGIES FOR THE FUTURE (D4) Contribution of Moon Village to Solving Global Societal Issues (2)

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ERGONOMICS AND USER ORIENTED DESIGN-ENGINEERING FOR HUMAN SPACEFLIGH

Abstract

In this study we focus in ergonomics and user-oriented design for Humanspaceflight. Wellbeing and safety are keys for succesful space missions. Recent trends in design-engineering for both in the built environment on Earth and within human spaceflight are reviewed trough a literature review; among other, guidelines such as NASA Space Flight Human Systems Standard (SFHSS) and NASA-STD-3001 NASA Human Integration Design Handbook (HIDH), NASA/SP-2010-3407. Noise, acoustics and sound envornments are discussed. We propose novel design-research projects for astronauts working and living in the living lab - on the ISS.