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LESSON LEARNED FROM SPACE HAB FOR DISASTER MANAGEMENT LAB: SPIN-IN/OUT OF
TECHNOLOGY AND KNOWLEDGE FOR DISASTER MANAGEMENT FACILITY

Abstract

The purpose of this paper is to discuss development and evaluations of new disaster management facility concept from space to earth. Habitats would be designed to be easy to develop, maintain, and reconfigure, while taking a holistic approach to hazard protection and psychological health.

This paper focuses particularly on building habitats that are affordable, maintainable, expandable, mobile, and self-sustaining. Concepts that are issues both for Space (Spin-in knowledge from Earth to Space) and Earth (Spin-off knowledge from Space to Earth) are included in this study. This paper takes a systematic approach to minimizing both external hazards of extreme environments and internal vulnerabilities that apply to humans regardless of environment. The paper focuses on a specific set of habitat designs for early deep space missions, and the applications of those lessons to small habitats on Earth used in extreme environment context such as disaster facility.