

HUMAN EXPLORATION OF THE SOLAR SYSTEM SYMPOSIUM (A5)  
Human Exploration of the Moon and Cislunar Space (1)

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DEFINING THE TRANSIT HABITAT

**Abstract**

This paper address NASA's plans for defining the Transit Habitat, the next major element needed for human exploration of the solar system. The Transit Habitat, in conjunction with in-space propulsion systems pioneered by the Asteroid Redirect Mission, will provide the means for human explorers to safely traverse long distances in the solar system.

The Transit Habitat builds on the development of the Space Launch System, Orion, and associated Ground Systems to provide a flexible family of systems to explore multiple possible destinations. The International Space Station will pave the way with test of habitat systems and components, as well as gaining additional knowledge of human physiology needed for extended human missions in space.

NASA is developing concepts for the habitation and logistics, the systems technologies to be incorporated (including roadmaps for improved systems based on technology readiness and operational experience gained), and the key assumptions and constraints sufficient to develop requirements for the habitat capability.