

HUMAN SPACE ENDEAVOURS SYMPOSIUM (B3)
Overview Session (Present and Near-Term Human Space Flight Programmes) (1)

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THE TRANSITION FROM ISS TO DEEP SPACE EXPLORATION

Abstract

The assembly of the International Space Station (ISS) was an unprecedented exercise in political cooperation and programmatic discipline. Over the course of a decade, fifteen nations worked together to build a spacecraft that has shattered every significant record for size and capability. While the scale of this project was unprecedented for its time, future missions to the moon, asteroids, or Mars are likely to be similar in scope. Careful management of the transition from ISS to deep space exploration is needed to ensure that the hard won experience gained from ISS is used to win a similar success for exploration.

We will review the history of the ISS assembly missions with an emphasis on lessons applicable to deep space exploration. A reference design for moon, asteroid, and mars missions will be used to illustrate how these lessons are applied in the new program. A summary of key next steps will be provided so that actions can be taken while ISS is still operational.