

HUMAN EXPLORATION OF THE SOLAR SYSTEM SYMPOSIUM (A5)  
Going Beyond the Earth-Moon System: Human Missions to Mars, Libration Points, and NEO's (4)

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POSSIBLE SCENARIOS FOR MARS MANNED EXPLORATION

**Abstract**

Over the last five decades there have been numerous studies devoted to developing, launching and conducting a manned mission to Mars by both Russian and U.S. organizations. These studies have proposed various crew sizes, mission length, propulsion systems, habitation modules, and scientific goals. As a first step towards establishing an international partnership approach to a Mars mission, the most recent Russian concepts are explored and then compared to NASA's latest Mars reference mission. The possibility of combining components from different concepts/organizations is explored.