

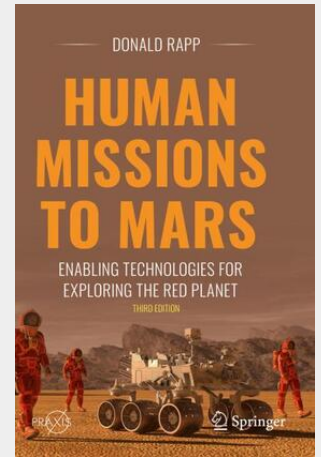
Rapp

Human Missions to Mars

Enabling Technologies for Exploring the Red Planet

In this book, Donald Rapp looks at human missions to Mars from a technological perspective. He divides the mission into a number of stages: Earth's surface to low-Earth orbit (LEO); departing from LEO toward Mars; Mars orbit insertion and entry, descent and landing; ascent from Mars; trans-Earth injection from Mars orbit and Earth return. A mission to send humans to explore the surface of Mars has been the ultimate goal of planetary exploration since the 1950s, when von Braun conjectured a flotilla of 10 interplanetary vessels carrying a crew of at least 70 humans. Since then, more than 1,000 studies were carried out. This third edition provides extensive updating and additions to the last edition, including new sections, and many new figures and tables, and references.

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