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15. From Earth's Orbit to the Outer Planets and Beyond: Psychological Issues in Space -- Afterword. From the Past to the Future.

Sommario/riassunto

As we stand poised on the verge of a new era of spaceflight, we must rethink every element, including the human dimension. This book explores some of the contributions of psychology to yesterday's great space race, today's orbiter and International Space Station missions, and tomorrow's journeys beyond Earth's orbit. Early missions into space were typically brief, and crews were small, often drawn from a single nation. As international cooperation in space exploration has increased over the decades, the challenges of communicating across cultural boundaries and dealing with interpersonal conflicts have become all the more important, requiring different coping skills and sensibilities than "the right stuff" expected of early astronauts. As astronauts travel to asteroids or establish a permanent colony on the Moon, with the eventual goal of reaching Mars, the duration of expeditions will increase markedly, as will the psychosocial stresses. Away from their home planet for extended times, future spacefarers will need to be increasingly self-sufficient, while simultaneously dealing with the complexities of heterogeneous, multicultural crews. "On Orbit and Beyond: Psychological Perspectives on Human Spaceflight," the second, considerably expanded edition of "Psychology of Space Exploration: Contemporary Research in Historical Perspective," provides an analysis of these and other challenges facing future space explorers while at the same time presenting new empirical research on topics ranging from simulation studies of commercial spaceflights to the psychological benefits of viewing Earth from space. This second edition includes an all new section exploring the challenges astronauts will encounter as they travel to asteroids, Mars, Saturn, and the stars, requiring an unprecedented level of autonomy. Updated essays discuss the increasingly important role of China in human spaceflight. In addition to examining contemporary psychological research, several of the essays also explicitly address the history of the psychology of space exploration. Leading contributors to the field place the latest theories and empirical findings in historical context by exploring changes in space missions over the past half century, as well as reviewing developments in the psychological sciences during the same period. The essays are innovative in their approaches and conclusions, providing novel insights for behavioral researchers and historians alike.