

Preface

Current planning for a manned expedition to Mars envisions a total mission duration of 2½ years and a crew size of six or seven people [1]. Such an expedition might reasonably occur in the mid-2030s, when Earth and Mars will be optimally aligned so as to minimize travel time and energy needs. Given the high cost of transporting and landing people on the Red Planet, the mission likely will be multinational and will involve an international crew of men and women who are highly trained and selected to form a cohesive group.

Since much of the mission will take place in an isolated and confined vehicle traveling in deep space under conditions of high radiation and microgravity, there will be three potential “show-stoppers” that will impact on the crew (excluding accidents and the possibility of a micrometeoroid collision): high radiation, which can be minimized by proper shielding of the space vehicle; microgravity, which can be minimized by a strict exercise regime to stimulate and tone bone and muscle; and the effects of isolation and confinement on crewmember psychology and interpersonal interactions, which will be the subject of this book.

The New Martians is first and foremost a science fiction novel. It is a tale of the first crew sent to Mars, whose mission goals are to explore the planetary surface and to search for evidence of life. The story takes place during the return phase of the mission, when the crew is confronted with a series of life-threatening events. The novel explores real psychological and interpersonal issues that could affect such a crew and is told from multiple points of view that attempt to penetrate the thoughts and feelings of the expedition participants.

As suggested by the subtitle of this book, *A Scientific Novel*, the story will be followed by an appendix that reviews the science behind the story. The results from actual psychological and interpersonal studies of people living and working on-orbit will be summarized and linked to specific events in the novel. This addition is one of the unique features of the science fiction stories that are part of the new “Science and Fiction” series being introduced by Springer Publications.

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foremost are the staff at Springer Publications, especially Dr. Harry Blom and Maury Solomon, who published the textbook I co-wrote with Dr. Dietrich Manzey entitled *Space Psychology and Psychiatry*. Harry put me in touch with Clive Horwood, the respected publisher of Praxis Publications, who in turn produced my two celestial cartography books under the Springer/Praxis label: *Star Maps: History, Artistry and Cartography*, and *Solar System Maps: From Antiquity to the Space Age*. Clive in turn put me in contact with Dr. Christian Caron, the editor of Springer's Science and Fiction series, and he selected my novel as the first work of fiction in this exciting new series. I am grateful to Chris for his helpful comments on an earlier draft of this novel, along with the comments made by Dr. Dirk Schulze-Makuch, who is on the series' editorial board. I am also grateful for the useful comments made to an earlier draft of this book by a number of friends and colleagues: Drs. Oliver Angerer, Craig Kundrot, Lyn Motai, Steve Vander Ark, and Walter Sipes. Kudos also to members of my science fiction book club who read the draft and made helpful comments: Diane Caradeuc, Ruth Corwin, Dr. Shirley Huang, Susan Kern, Brenda Paske, and Dr. Richard Ray. Last but not least, I am grateful to my wife Carolynn, who has read and commented on many of my science fiction writings and who has continued to support me in this and many other activities over the years. Of course, I am solely responsible for the ideas and concepts that appear in this book.

1. Kanas, N., Manzey, D. (2008). *Space Psychology and Psychiatry*, 2nd Edition. El Segundo, California: Microcosm Press; and Dordrecht, The Netherlands: Springer.

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