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Review: the other Return to the Moon

by Jeff Foust

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Return to the Moon

by Rick N. Tumlinson with Erin R. Medicott (eds.)

Apogee Books, 2005

softcover, 208 pp., illus.

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US\$22.95/C\$28.95

On one hand, it's a sign that a particular idea had captured hold of the hearts and minds of at least a segment of the public. On the other hand, it's a cultural faux pas equivalent to two women showing up to a party in identical dresses. These are two interpretations of what happens when two books are published at about the same time on similar subjects with identical titles: in this case Return to the Moon. One book is written by Apollo 17 astronaut Harrison Schmitt, and advocates going back to the Moon primarily to help solve inevitable energy crises on Earth. (See "Review: Return to the Moon", The Space Review, January 3, 2006). The other Return to the Moon is a collection of essays by a wide range of experts that, together, advocates a return to the Moon for much more than energy alone.

This Return to the Moon is an outgrowth of a conference of the same title that the Space Frontier Foundation has organized nearly every year since 1999. While many of the contributors of essays in this book are affiliated with the Foundation and/or have spoken at one of its conferences, the editors have cast a wide net. The list of authors includes policy experts (Howard McCurdy and Courtney Stadd), scientists (Alan Binder and Paul Spudis), entrepreneurs (David Gump and Dennis Wingo), professional writers (Andrew Chaikin and Robert Zimmerman), and activists (Charles Lurio and Rick Tumlinson), among others: more than 20 in total. About the only obvious category of writers not included in the book is an astronaut, although the book does include an essay by Philip Chapman, who was selected as a scientist-astronaut in 1967 but never flew in space.

Given this book's pedigree, it should come to no surprise that a common theme throughout these essays is the need for a greater role for the commercial sector if NASA's plans to send humans back to the Moon are to succeed in the long haul.

Binder, principal investigator on the Lunar Prospector mission, compares the costs of commercially-operated versus government-run lunar missions in his essay. Patrick Collins, one of the pioneers in the study of space tourism, argues that there would be strong demand for lunar tourism operations. Wingo provides a capsule summary of his argument that the Moon may be rich in platinum group metals (see "Review: Moonrush", The Space Review, August 16, 2004). Other essays tackle property rights, business plans, and the "frontier model" espoused by Tumlinson that explains the roles of and interaction between the public and private sectors in space exploration and development.

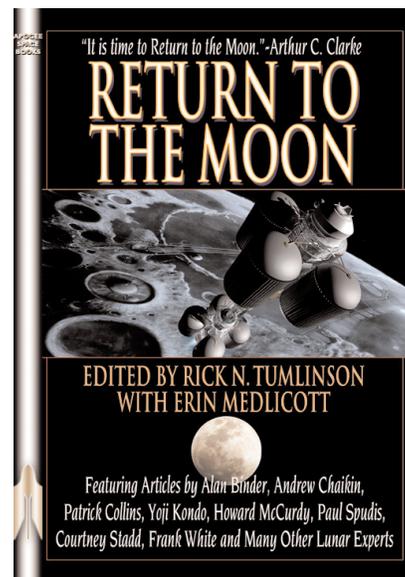
To be certain, not every essay in the book is staked to the theme of commercialization of the Moon. McCurdy, in an updated version of testimony he gave at a Senate hearing in 2004, explains how the Vision for Space Exploration and a return to the Moon will transform NASA, regardless of the role played by the commercial sector. Astrophysicist Yoji Kondo explains why the Moon is an ideal site for observatories, and Pete Worden describes the need to create a "lunar technology reservation" where potentially dangerous technologies, from artificial intelligence to nanotech, can be studied without jeopardizing the Earth. Ironically, helium-3, the centerpiece of Schmitt's book, is rarely mentioned in any of the essays in this book.

As one might imagine given the number of authors, the quality of the essays varies throughout the book. Most of the essays are relatively short—the longest run only about 12 pages—so it's hard to get into a rhythm reading the book, although there is an effort to organize the essays by topic. The essays could have used a little more editing: in one essay the numeral "4" is replaced with the word "four" in some numbers, leading to odd constructs like "\$four75 billion (200four dollars)". There's also no index, frustrating

when you want to see both where and how frequently certain topics are mentioned.

Does Return to the Moon make a compelling case? The book is less about why humans should go back to the Moon in general than why any future human return to the Moon must have a significant, if not primary, commercial element. That turns out to also be a central theme of Schmitt's book of the same name: while he extols the virtues of helium-3, he also argues that private enterprise has to play a central role in acquiring it on the Moon. If space advocates want to change NASA's current plans—which relegate commercialization to an ancillary role in sending humans back to the Moon—then books like Return to the Moon (either one) may help, but are only the first steps of many towards their goal.

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