A Selected Annotated Bibliography

on Martian Exploration

- Baker, Victor R. The Channels of Mars. Austin: University of Texas Press, 1982. A detailed scientific study of the features seen from Earth that were first popularized as canals.
- Bradbury, Ray; Clarke, Arthur C.; Murray, Bruce C.; and Sagan, Carl. Mars and the Mind of Man. New York: Harper and Row, 1973. A superb analysis by a stellar collection of authors, this book discusses the place of the planet Mars in the mythology and science of humanity from the ancients to the late twentieth century.
- Braun, Wernher von. *The Mars Project*. Urbana: University of Illinois Press, 1953. Originally published in Germany the year before, this important study describes in some detail the technical and scientific attributes of a human expedition to Mars that the authors says was feasible in the mid-1950s.
- Burgess, Eric. To the Red Planet. New York: Columbia University Press, 1978. A very good general interest discussion of what had been learned about Mars from several probes, including the Viking mission if the 1970s.
- Caidin, Martin. *Destination Mars*. Garden City, NY: Doubleday and Co., 1972. A popular discussion of the possibilities of undertaking a human expedition to Mars as a follow-on to the successful Apollo program that landed an American on the Moon in 1969.
- Carr, Michael H. The Surface of Mars. New Haven, CT: Yale University Press, 1981. A scientific investigation of the geological features of Mars.
- . Water on Mars. New York: Oxford University Press, 1996. A new book discussing the scientific possibility that water might have once existed on Mars, and of course water is a critical component of life as its exists on Earth.
- Collins, Michael. Mission to Mars: An Astronaut's Vision of Our Future in Space. New York: Grove Weidenfeld, 1990. A very fine argument on behalf of an aggressive exploration of the Red Planet, including a recapitulation of the earlier advocacies of this effort.
- Cooper, Henry S.F. The Search for Life on Mars: Evolution of an Idea. New York: Holt, Rinehart, & Winston, 1980. An excellent encapsulation of the lure of Mars for Americans because of the hope that life might presently, or at some time in the past, be found.
- Ezell, Edward Clinton, and Ezell, Linda Neumann. On Mars: Exploration of the Red Planet,

1958-1978. Washington, DC: NASA Special Publication-4212, 1984. A detailed study of NASA's efforts to send space probes to Mars, culminating with the soft-landing of the two Viking spacecraft in the mid-1970s.

- Fisher, David E. The Third Experiment: Is There Life on Mars? New York: Atheneum, 1985. This is a fine popular account of the Viking biology experiments that took place on Mars during the mid-1970s landings.
- Glasstone, Samuel. *The Book of Mars*. Washington, DC: NASA Special Publication-179, 1968. This important book explores the development of human knowledge about Mars separating what was known through science, especially space science, and what had been handed down in myth. An excellent point of departure for any investigation of the scientific understanding of the planet, but now outdated because of the results of probes since 1968.
- Hartmann, William K., and Raper, Odell. The New Mars: The Discoveries of Mariner 9.
 Washington, DC: NASA Special Publication-337, 1974. A reasonably well-done description of the mission to Mars by Mariner 9 in the early 1970s.
- Hoyt, William Graves. Lowell and Mars. Tucson: University of Arizona Press, 1976. An outstanding biography of Percival Lowell, pioneering American astronomer, and his lifelong fascination with Mars and the possibility that it had once been the home of intelligent life that had built canals observable from Earth.
- Keiffer, H.H.; Jakosky, B.M.; Snyder, C.W.; and Matthews, M.S. Editors. *Mars.* Tucson: University of Arizona Press, 1992. A detailed collection of scientific papers on the makeup and evolution of the red planet.
- Ley, Willy, et al. The Exploration of Mars. New York: Viking, 1956. Illustrated by Chesley Bonestell, this is an exquisite large format book that posited the future exploration of the red planet.
- Lowell, Percival. *Mars as the Abode of Life*. New York: Macmillan, 1908. No one did more to popularize the idea of life of Mars than astronomer Percival Lowell. This book specifically addresses the question.
- . Mars and its Canals. New York: Macmillan, 1906. Percival Lowell, a Brahmin from Massachusetts, became interested in Mars during the latter part of the nineteenth century. Using personal funds and grants from other sources he built what became the Lowell Observatory near Flagstaff, Arizona, to study the planets. This research led him to argue that Mars had once been a watery planet and that the topographical features known as canals had been built by intelligent beings. Over the course of the next forty years others used Lowell's observations of Mars as a foundation for their arguments. The idea of intelligent life on Mars stayed in the popular imagination for many years thereafter.

- . Mars. Boston: Houghton Mifflin, 1895. Perhaps the earliest thorough study of the planet published in America, Lowell argued that the features viewed on the Martian surface were canals that perhaps carried water. This book discusses the astronomical information associated with Mars as it stood at the turn of the twentieth century and posited that the canals might make possible life on the planet.
- Matsunaga, Senator Spark M. *The Mars Project: Journeys Beyond the Cold War*. New York: Hill and Wang, 1986. Written by the then senator from Hawaii, the author posits that in the post-Cold War era cooperation rather than competition should inform space policy. In that context, he advocates the development of a cooperative mission to Mars with the United States and the Soviet Union/Russia.
- Mutch, T.A. et al. The Geology of Mars. Princeton, NJ: Princeton University Press, 1976. A detailed collection of scientific papers on the geology of the red planet.
- Putnam, W.L. Editor. The Explorers of Mars Hill: A Centennial History of Lowell Observatory. Phoenix, AZ: Phoenix Publishing, 1994. No observatory in the United States has been more significant than the Lowell established in the last decade of the nineteenth century outside Flagstaff, Arizona. This centennial history describes the origins and development of the observatory from its founding by Percival Lowell to the 1990s.
- Richardson, Robert Shirley. Exploring Mars. New York: McGraw-Hill, 1954. Focusing on astronomy, this small book discusses the scientific knowledge available about the planet in the early 1950s.
- _____, and Bonestell, Chesley. *Mars.* New York: Harcourt, Brace, and World, 1964. Illustrated by quintessential space artist Chesley Bonestell, this large format book captures the excitement of Martian exploration and the possibilities of eventual colonization of the planet.
- Stoker, Carol A., and Emmart, Carter. Editors. Strategies for Mars: A Guide to Human Exploration. San Diego, CA: Univelt, Inc., 1996. The most up-to-date and useful of several books related to Mars exploration, this collection of essays provides a rationale, technology assessment, and political analysis of the endeavor through the lens of quite a lot of historical perspective.
- Strughold, Hubertus. The Red and Green Planet: A Physiological Study of the Possibility of Life on Mars. Albuquerque: University of New Mexico Press, 1953. Strughold was one of the leading authorities of the 1950s on space medicine and this scientific book suggested it was possible that life either had or possibly still did exist on Mars in some form.
- Viking Lander Imaging Team. *The Martian Landscape*. Washington, DC: NASA SP-425, 1978. An outstanding scientific study of the results of the Viking project to Mars in the mid-1970s.

Washburn, Mark. Mars at Last! New York: G.P. Putnam, 1977. The first popular account of the Viking mission to Mars that landed probes on the planet's surface.

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Wilford, John Noble. Mars Beckons: The Mysteries, the Challenges, the Expectations of Our Next Great Adventure in Space. New York: Alfred A. Knopf, 1990. A superior explanation of the possibilities of Mars exploration, including a discussion of earlier plans to send humans to the red planet.

> Roger D. Launius NASA History Office August 16, 1996

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