the social sciences. Public libraries may find that the less expensive *Encyclopedia of Adoption* meets their needs sufficiently until the ABC-Clio *Handbook* is updated.—*Joann E. Donatiello, Population Research Librarian, Donald E. Stokes Library, Princeton University, New Jersey*

Satellites. Frontiers in Space series. By Joseph A. Angelo Jr. New York: Facts On File, 2006. 336p. acid free $39.50 (ISBN 0-8160-5772-9).

Satellites is Joseph A. Angelo Jr.'s most recent contribution to Facts On File's Frontiers in Space series, a multivolume set targeted to high school students that "explores the scientific principles, technical applications, and impacts of space technology on modern society" (ix). This volume is a fine addition to the series. The author succeeds in meeting the set's mission by effectively interweaving the scientific, technical, historical, commercial, and political aspects of the development of satellite technology. Through its twelve chapters, seventy black-and-white photographs and illustrations, sidebars, chronology, glossary, and index, *Satellites* provides a basic yet thorough introduction to the subject. Through narrative that is engaging, informative, and at times, impassioned, Angelo answers the questions, "what Earth-orbiting spacecraft are, where they came from, how they work, and why they are so important" (xv).

The volume is sensibly arranged, with chapter 1 providing a solid historical foundation as well as a preview of the entire work. The concluding section of this chapter, "Satellites Transform Human Civilization," identifies six broad areas profoundly impacted by satellite technology. These correspond to the different satellite types that are the focus of subsequent chapters (for example, "Weather Satellites," "Military Satellites," and "Communication Satellites"). These chapters effectively illuminate the complex factors involved in technological change and provide insight into the broader context and impact of the work of aerospace engineers. There is some repetition of concepts and events because chapter content unfolds in parallel historical sequences, but this may serve as reinforcement of key details and themes for readers.

Basic concepts related to satellite orbital theory and design are presented in chapter 2, "How a Satellite Works," although many technical terms used in this chapter and elsewhere are not defined at first use. The index and glossary will thus be helpful tools for readers who desire additional information. For example, "electromagnetic spectrum" is not discussed in-depth until chapter 9, but readers needing earlier clarification will find that the index does point them to this later text reference, as well as to a helpful illustration. (The glossary also contains a definition.) The work includes numerous sidebars that expand upon topics mentioned in the chapters. These one-to-two-page discussions yield intriguing insights from a striking variety of perspectives: biographical, conceptual, organizational, and technical.

Because this book has the format of an introductory textbook rather than a ready-reference resource, it is not surprising that many interesting details—for example, the number of currently active satellites—can be discovered only through careful reading of the text. A reader would not necessarily know to look under "space debris" in the index for information about currently active satellites.

References include print as well as Web sources. One notable omission is a history of astronomy. Such sources would serve as a valuable supplement, especially to the author's treatment of pre-twentieth-century developments.

Angelo's passion for his subject comes through in his emphasis on the impact of satellites on civilization. This theme is fully realized in the final chapters, which deal with remote sensing and the use of satellites in the multidisciplinary field of Earth system science. In these chapters Angelo expands on a point raised frequently throughout the work, that satellites can help humans work toward "intelligent stewardship of Earth" (213). With its emphasis on the global impact and importance of satellites, this book will appeal to readers interested in earth and environmental sciences as well as astronomy and space technology. Angelo's treatment of satellites in the context of contemporary life and environmental concerns will undoubtedly be "career-inspiring" (xiii) to students considering a future in science or engineering. This work fills a gap in the literature between more juvenile treatments of the subject and more advanced works. *Satellites* is recommended for science collections in high school, college, and public libraries.—*JoAnn Palmeri, Department of the History of Science, University of Oklahoma, Norman*

Science Fact and Science Fiction: An Encyclopedia. By Brian Stableford. New York: Routledge, 2006. 729p. $165 (ISBN 0-415-97460-7).

Science fiction fans are a special group. When they know about something, they really know about it. No amount of information is too much. That's why there is an insatiable demand for more reference works explaining more esoteric aspects of the genre, which makes it surprising that we have had to wait this long for a really good reference work on the science that makes it science fiction. *Science Fact and Science Fiction* treats the truly scientific underpinnings of the field; it eschews the space opera, space cowboys, generic star wars, and fantasy that often are lumped with science fiction in favor of acoustics, chemistry, engineering, paleontology, physics, zoology, even food science.

Science Fact and Science Fiction is an A–Z encyclopedia with alphabetical and thematic lists of entries *and* a good index. If you've ever been frustrated trying to find a topic in a purely alphabetical work ("okay, it's not under that heading, maybe if I try this one"), you will appreciate this book's three-pronged approach to finding information. Entries are by topic or person (galaxy, Galileo) and are substantive, including useful embedded bibliographies. The paper is not acid free and there is some show-through, but the type is legible and the margins are adequate. The bibliography at the end is comprehensive: included are works by Jung, Marshall McLuhan, Loren Eisley, and Stephen Hawking as well as traditional sci-fi writers. As always, one can quibble about one's