UNCOMMON SOLDIER

Alfred Mordecai (1804–1887) played an important role in introduction of rocket weapons into the American Army. Mordecai was born to a North Carolina Jewish family and he was a most uncommon soldier. Mordecai exemplified growing professionalism and modernization of the American army and introduction of new technology. He graduated first in the West Point class (of 35 cadets) of 1823.

When the Army Ordnance Department was reestablished by the act of 5 April 1832, Mordecai was appointed one of its first 10 captains. He directed fabrication of rockets for the first American rocket battery during the Mexican War. During his military career, Mordecai commanded three of the largest Army arsenals, in Washington, D.C., Frankfort, Pennsylvania, and Watervliet, New York. He also became well known for his original research on ammunition and ballistics.

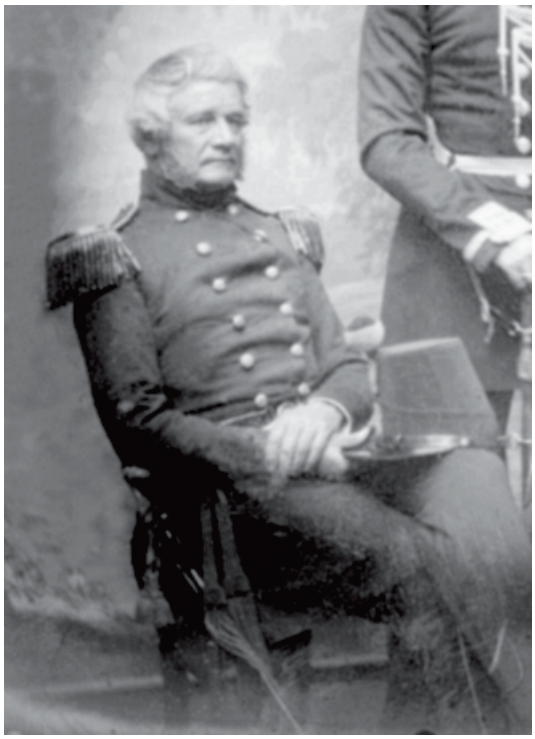


Fig. 6.4. Alfred Mordecai, ca. 1855. Photo courtesy of the Library of Congress.

As a member of the Ordnance Board, appointed in 1839, Mordecai worked on unification of artillery systems. In 1840, he visited Europe with a commission studying artillery, ordnance, and arsenals in several countries. In 1849 Mordecai published a book, *Artillery for the United States Land Service.* This influential tract became the first full and accurate description of the artillery systems.

In 1855 Secretary of War Jefferson Davis sent Mordecai to Europe with the special commission to study and report on the latest military developments during the Crimean War. (Other commission members were Major Robert Delafield and Captain George B. McClellan.)

Mordecai retired to a private life in Philadelphia at the beginning of the Civil War, being torn between his ties to the "aged mother, brothers, and sisters in the South" (Virginia and North Carolina) and his allegiance to the U.S. Army and his son, who graduated West Point and fought for the Union. After the Civil War, Mordecai worked as an engineer on the construction of a transcontinental railroad from Vera Cruz and served secretary and treasurer of the Pennsylvania Railroad Company.

Winner of the *Luigi Napolitano Book Award* (2006) from the International Academy of Astronautics

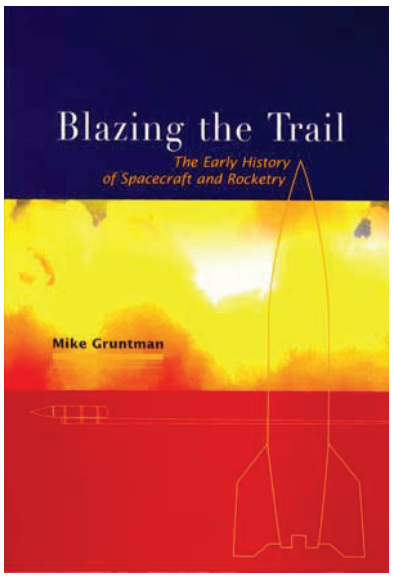
Blazing the Trail

The Early History of Spacecraft and Rocketry

Mike Gruntman

AIAA, Reston, Va., 2004
ISBN 156347705X; 978-1563477058

505 pages with 340 figures
Index: 2750+ entries, including 650 individuals



This book presents the fascinating story of the events that paved the way to space. It introduces the reader to the history of early rocketry and the subsequent developments which led into the space age. People of various nations and from various lands contributed to the breakthrough to space, and the book takes the reader to faraway places on five continents.

This world-encompassing view of the realization of the space age reflects the author's truly unique personal experience, a life journey from a child growing up on the Tyuratam launch base in the 1950s and early 1960s, to an accomplished space physicist and engineer to the founding director of a major U.S. nationally recognized program in space engineering in the heart of the American space industry.

Most publications on the topic either target narrow aspects of rocket and spacecraft history or are popular books that scratch the surface, with minimal and sometimes inaccurate technical details.

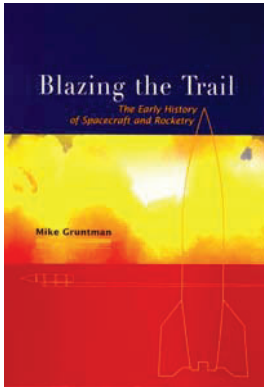
This book bridges the gap. It is a one-stop source of numerous technical details usually unavailable in popular publications. The details are not overbearing and anyone interested in rocketry and space exploration will navigate through the book without difficulty. The book also includes many quotes to give readers a flavor of how the participants viewed the developments. There are 340 figures and photographs, many appearing for the first time.

Table of contents

Book details (including **index** and **reviews**) at: **http://astronauticsnow.com/blazingthetrail/**

About the author. Dr. Mike Gruntman is professor of astronautics at the University of Southern California. An accomplished physicist, Mike is actively involved in research and development programs in space science and space technology. He has authored and co-authored more than 300 scholarly publications, including 6 books.

Mike Gruntman **http://astronauticsnow.com/blazingthetrail/** **mikeg@usc.edu**



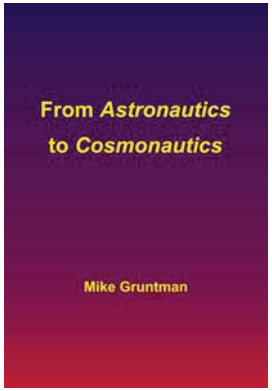
Winner of the Luigi Napolitano Award (2006) from the International Academy of Astronautics

Mike Gruntman, Blazing the Trail: The Early History of Spacecraft and Rocketry, AIAA, Reston, Va., 2004

ISBN 978-1-56347-705-8
475 pages, 340 figures, 250+ references

Mike Gruntman, Intercept 1961. The Birth of Soviet Missile Defense, AIAA, Reston, Va., 2015

ISBN 978-1-62410-349-0 (print)
eISBN: 978-1-62410-350-6
(electronic; pdf at http://arc.aiaa.org)
330 pages, 120+ figures, 200+ references



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ISBN 978-1-4196-7085-5
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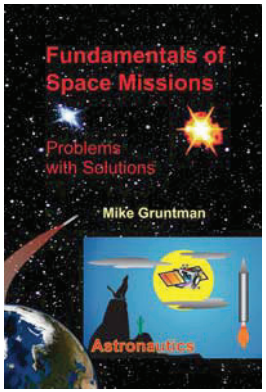
84 pages, 24 photographs, 75 references



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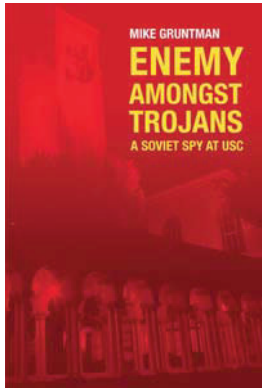

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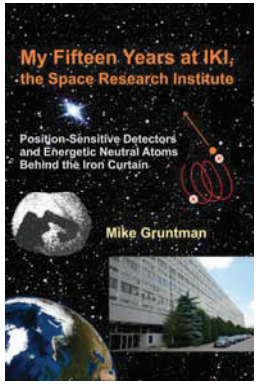

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328 pages, 150+ figures, 180+ references

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