

History of Rocketry and Astronautics

**Proceedings of the Forty-Seventh History Symposium of
the International Academy of Astronautics**

Beijing, China, 2013

Andrew S. Erickson, Volume Editor

Rick W. Sturdevant, Series Editor

AAS History Series, Volume 45

A Supplement to Advances in the Astronautical Sciences

IAA History Symposia, Volume 33

Copyright 2015
by
AMERICAN ASTRONAUTICAL SOCIETY
AAS Publications Office
P.O. Box 28130
San Diego, California 92198

Affiliated with the American Association for the Advancement of Science
Member of the International Astronautical Federation

First Printing 2015

ISSN 0730-3564
ISBN 978-0-87703-625-8 (Hard Cover)
ISBN 978-0-87703-626-5 (Soft Cover)

Published for the American Astronautical Society
by Univelt, Incorporated, P.O. Box 28130, San Diego, California 92198
Web Site: <http://www.univelt.com>

Printed and Bound in the U.S.A.

Contents

	Page
Foreword	vii
Preface	ix
PART I	
Memoirs and Organizational Histories	
Chapter 1. Heinz-Hermann Koelle and His Contributions to Space Development, Charles A. Lundquist and Francis L. Williams	3
Chapter 2. David Gordon Fearn: The Father of the European Ion Engine, John Harlow and Mali Perera.	15
Chapter 3. Vladimir Ivanovich Yazdovsky: Biomedical Researcher Supporting Manned Spaceflight, Alexander A. Medenkov	33
Chapter 4. Entering the Sixtieth Year of <i>Acta Astronautica</i> , Yi-Wei Chang, Jeng-Shing Chern, and Jean-Pierre Marec	49
PART II	
Scientific and Technical Histories	
Chapter 5. Spaceport Australia: Early Proposals for Equatorial Launch Facilities in Australia, Kerrie Dougherty	75
Chapter 6. New Observations on Reaction-Propelled Manned Aircraft Concepts, ca. 1670–1900, A Survey: Part 1 (1670–1869), Frank H. Winter, Kerrie Dougherty and Philippe Cosyn	95

	Page
Chapter 7. To Ride a Comet: Twenty-Fifth Anniversary of Israel's Shavit Satellite Launch Vehicle, Tal Inbar	123
Chapter 8. New Horizon: Twenty-Fifth Anniversary of Israel's First Satellite, <i>Ofek-1</i> , Tal Inbar	135
Chapter 9. The Japanese Rockoon Program for the IGY: Technology and Japanese Society, Shizuko Hamada-Poret	145
PART III History of Chinese Contribution to Astronautics	
Chapter 10. Intersection of the Careers of Rudolf Hermann and Qian Xuesen, Charles A. Lundquist and Shi Tsan Wu	161
Chapter 11. A 1946 Proposal for a Chinese Rocket Program, Marsha Freeman	177
Chapter 12. The Development History of Chinese Launch Vehicles, Haipeng Chen, Bing Zhang, Xiaojun Wang, Guoai Li, Shuhui Zhang and Xudong Qin	193
Chapter 13. Six Decades of Chinese Space History: A Comparative History of Rocket and Satellite Development, Andrew S. Erickson	205
Index	265
AAS History Series	269