

QUEST



Volume 21, Number 3
2014

www.spacehistory101.com

THE HISTORY OF SPACEFLIGHT

Q U A R T E R L Y



AN INTERVIEW WITH
JAMES WEBB:
ADMINISTRATION OF
EXPLORATION

IGY SCIENTIFIC COMMUNITIES
AND THE PREHISTORY OF
TIROS

AMERICAN INTELLIGENCE ON
SOVIET MISSILE PROGRAMS,
1945-1954

MAKING HISTORY:
THE RAMOS PROGRAM

Features

- 4 **The Promise and the Threats of Satellite Capabilities: IGY Scientific Communities and the Prehistory of TIROS**
By Angelina Long Callahan
- 21 **An Interview with James Webb**
By T. H. Baker
- 37 **American Intelligence on Soviet Missile Programs, 1945-1954**
By Christopher Gainor
- 47 **Making History: The RAMOS Program**
By Doran J. Baker, A.T. Stair Jr., Bartell C. Jensen, M.K. Jeppesen

Book Reviews

- 51 **Operation Paperclip: The Secret Intelligence Program that Brought Nazi Scientists to America**
Book by Annie Jacobsen
Review by Michael J. Neufeld
- 52 **Lucky Planet: Why Earth Is Exceptional—and What That Means for Life in the Universe**
Book by David Waltham
Review by Linda Billings

FRONT COVER CAPTION

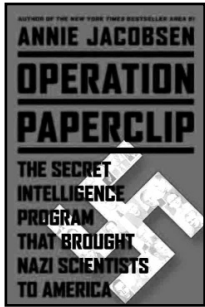
Circa 1957, the artwork was used by Convair Astronautics (San Diego, California), a division of General Dynamics, in an advertisement celebrating the successful test flight of the Atlas Intercontinental Ballistic Missile. The first successful test launch of an SM-65 Atlas missile took place on 17 December 1957. Though the artwork is unsigned, Convair's resident artist at that time was John Sentovic. In 1994, General Dynamics sold its Space Systems Division to Martin Marietta (now Lockheed Martin). Permission to use the image has been granted by Lockheed Martin and the original ad can be found in the personal archives of Paul Carsola, a researcher who has contributed to *Quest* in the past.

Book Reviews

- 54 **Just Say Yes: What I've Learned about Life, Luck, and the Pursuit of Opportunity**
Book by Bernard Schwartz
Review by Scott Sacknoff
- 55 **A Brief History of Rocketry in ISRO**
Book by P.V. Manoranjan Rao and P. Radhakrishwan
Review by Asif A. Siddiqi
- 57 **The International Atlas of Mars Exploration: The First Five Decades**
Book by Philip Stooke
Review by Maria Lane
- 59 **Wizards, Aliens, and Starships: Physics and Math in Fantasy and Science Fiction**
Book by Charles L. Adler
Review by Jonathan T. Malay
- 60 **Sally Ride: America's First Woman in Space**
Book by Lynn Sherr
Review by Valerie Neal
- 61 **A Single Sky: How an International Community Forged the Science of Radio Astronomy**
Book by David P.D. Munns
Review by Roger D. Launius
- 62 **Exploring Science through Science Fiction**
Book by Barry Luokkala
Review by Emily Margolis
- 63 **Beyond the God Particle**
Book by Leon Lederman and Christopher Hill
Review by Roger D. Launius
- 64 **Wheels Stop: The Tragedies and Triumphs of the Space Shuttle Program, 1986-2011**
Book by Rick Houston
Review by Stephen Waring

BOOK REVIEW

OPERATION PAPERCLIP: THE SECRET INTELLIGENCE PROGRAM THAT BROUGHT NAZI SCIENTISTS TO AMERICA



By Annie Jacobsen

Little, Brown, 2014

ISBN: 978-0-316-22104-7

Pages: xii + 575

Price: \$30.00, hardcover

Several people have asked my opinion of this book, which drew favorable reviews in the *New York Times* and other media outlets. I should mention that I answered several inquiries from the author on the phone, I am prominently mentioned in the acknowledgments, and my Werner von Braun biography is extensively cited in the notes. Indeed several pages in the text are essentially lifted from *Von Braun* (with attribution). Unfortunately, I cannot endorse *Operation Paperclip* because: it is error-ridden, it produces no fundamentally new information, it is unbalanced, and its notes are poor. It is not an academic work and cannot be criticized for trying to be one, but the net result is that, despite her discovery or development of several new sources, it does not advance the topic much beyond what was revealed in the muckraking Paperclip investigative journalism of the 1980s.

My negative impression of her accuracy set in early. On page 7 she calls the V-1 cruise missile the V-2's "earlier version." On page 8 she writes that the military leader of the German Army rocket program, Gen. Walter Dornberger, "often wore a long-shin-length leather coat to match the Reichsführer-SS [Heinrich Himmler]"—a ludicrous detail, as Dornberger wore Wehrmacht standard issue. I have written extensively about Dornberger's collaboration with the SS in the criminal enterprise of the concentration camps connected to the V-2 program, but also about the Army-SS rivalry in the program—Dornberger was no toady of Himmler. The next several pages are an overwritten scene of Albert Speer's presenting the Knight's Cross to Dornberger, von Braun, and two others, based on my quotations and summary from Dornberger's memoir. But in the process Jacobsen adds many invented details for dramatic effect. On page 13, she describes von Braun associate Arthur Rudolph (best known for being forced to leave the United States in 1984 over his involvement with the Mittelwerk V-2 factory), as a "high-school graduate," even though he had a two-year engineering technology degree. It is a minor error, but when multiplied by a hundred it casts doubt on the whole. In my primary area of expertise, the V-2 and von Braun, every discussion of these stories throughout the book is error-ridden. Jacobsen also misidentifies Third Reich leaders and organiza-

tions, gets the details of the reorganization of the U.S. military in 1947 wrong, and misspells the name of famous diplomat George F. Kennan in every reference to him. It leads me to doubt the accuracy of every story in the book that I do not know so intimately.

The lack of any fundamentally new information is also troubling. I do not mean that there is nothing new in the book or that it is without value. *Operation Paperclip* is very readable and it covers many stories told in the previous literature better than they were before. Jacobsen found new sources to interview and she and her researchers (of which she lists several) have been to archives that Linda Hunt and Tom Bower, the two primary journalists of the earlier phase, have not cited.¹ But much space is devoted to colorful and interesting descriptions of the various Allied holding facilities for Nazi leaders, the war crimes trials in Germany, and the growth of the Gehlen Organization (the ex-SS-dominated intelligence group in the U.S. occupation zone that became the West German intelligence agency BND). Most of this information is only tangentially related to Operation Overcast (the original name) or Paperclip. A large fraction of the book concentrates on chemical and biological warfare and aerospace medicine, subjects that continue to shock in the willingness of members of the U.S. military to recruit Third Reich specialists connected to concentration-camp experiments on inmates, while covering-up or whitewashing the Nazi records of those they recruited. Jacobsen develops these stories more than Hunt or Bower did, but I did not find anything that struck me as fundamentally new. The author herself acknowledges the pioneering work of Linda Hunt in using Freedom of Information Act to produce much new information in the 1980s. Her own contributions to research seem slight by comparison.

Jacobsen, following the tradition of Hunt and Bower, concentrates on the scandals, which inevitably leads to an imbalance in presentation. Little is said about the substantive contributions of von Braun and company to U.S. ballistic missile and space programs, and the same is true of the specialists the U.S. Air Force recruited—numerically the largest group taken by any of the services. (She of course uses the clichéd, but ominous-sounding term "Nazi scientists," although the majority were engineers and many were not members of the Nazi Party, SA or SS.²) Even in the case of the frightening and repulsive cases of nerve gas and biological weapons development, was it in the U.S. national interest to walk away from those weapons (and some of the people needed to acquire expertise in them), knowing that the Soviet Union would get that knowledge too? The Cold War led to some appalling moral compromises but it had a deterministic arms-race logic that was difficult to escape. Jacobsen calls Paperclip a "nefarious child of the Second World War" that "created a host of monstrous offspring" [371]. Black-

and-white judgments are easy—and a tradition for this topic—but it hardly leads to a balanced assessment.

As for the notes, they are in the unfortunate trade-press tradition of page references in the back, primarily for quotations—but not even consistently for those. Despite the impressive looking bibliography, the notes are mostly to secondary sources, and proper archival citations to Paperclip and other documents are never given—that too continues the tradition of Hunt and Bower. And I cannot help remarking that, when she uses a note to make an (irrelevant) aside about the bombing of Auschwitz question (regarding John J. McCloy, who was U.S. High Commissioner to Germany in the early fifties), it has at least two factual errors [518].

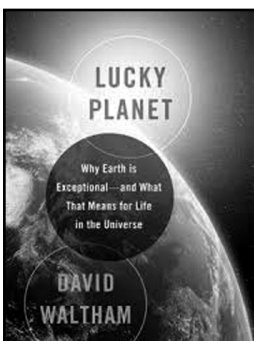
Operation Paperclip is not the book that the scholarly world, or the general public, need on this topic. It is unfortunate that the first scholarly work, by Clarence G. Lasby,³ remains the only balanced one, although it is completely dated by the revelations of the 1980s and the scholarship that has appeared since. A new study is needed, one informed by new historiographic perspectives, as well as by all the archival sources that have become available. I am not going to write that book, so I hope somebody does. It could make a fruitful doctoral dissertation.

Michael J. Neufeld
National Air and Space Museum
Smithsonian Institution
Washington, DC

BOOK REVIEW

LUCKY PLANET:

WHY EARTH IS EXCEPTIONAL—AND WHAT THAT MEANS FOR LIFE IN THE UNIVERSE



by David Waltham

Basic Books, 2014
ISBN 978-0-465-03999-9
Pages: 208
Price: \$26.99, hardcover

In *Lucky Planet*, David Waltham attempts to persuade the reader that Earth is the only habitable planet in the universe. Chapter by chapter, he constructs a scientific argument intended to support this claim.

Waltham is a geophysicist and self-described astrobiologist with the Department of Earth Sciences at Royal Holloway College, University of London. He is widely published in the peer-reviewed literature, and in his papers he has been constructing his argument for “exceptional Earth” for a number of years—

Notes

1 See Linda Hunt, “U.S. Coverup of Nazi Scientists,” *Bulletin of the Atomic Scientists* (April 1985), 16-24, and *Secret Agenda: The United States Government, Nazi Scientists and Project Paperclip, 1945 to 1990* (New York: St. Martin's Press, 1991); Tom Bower, *The Paperclip Conspiracy. The Battle for the Spoils and Secrets of Nazi Germany* (London: Michael Joseph, 1987). See also Christopher Simpson, *Blowback: America's Recruitment of Nazis and the Its Effects on the Cold War* (New York: Weidenfeld & Nicholson, 1988), which focuses primarily on the CIA and intelligence.

2 I decided that the Soviet term “specialists” was more useful in my global survey of the recruitment of German and Austrian aerospace experts: “The Nazi Aerospace Exodus: Towards a Global, Transnational History,” *History and Technology* 28 (2012), 49-67.

3 *Project Paperclip: German Scientists and the Cold War* (New York: Atheneum, 1971). Also valuable from an occupation-centered perspective is John Gimbel's *Science, Technology and Reparations: Exploitation and Plunder in Postwar Germany* (Stanford: Stanford University Press, 1990).

see, for example, “Anthropic selection for the Moon's mass,” *Astrobiology* 4(4), 2004; “The large-moon hypothesis: can it be tested?” *International Journal of Astrobiology* 5(4), 2006; “Half a billion years of good weather: Gaia or good luck?” *Astronomy & Geophysics* 48(3), 2007. In the latter paper, Waltham provides an analysis that “implies possible selection for a stable climate [on Earth], which, if true, undermines the Gaia hypothesis and also suggests that planets with Earth-like levels of biodiversity are likely to be very rare.” In his book, “distinguishing between Gaia—the hypothesis that Earth and its life function as a self-regulating organism—and Goldilocks—the idea that Earth is ‘just right’ for life—is a major theme,” Waltham writes.

Waltham goes for Goldilocks. His thesis, in his own words, is that “good fortune, infrequently repeated elsewhere in the Universe, played a significant role in allowing the long-term life-friendliness of our home” [1]. He argues that Earth has had a stable climate for 4 billion years, for reasons unlikely to be repeated elsewhere.

Waltham is not the first scientist to claim that Earth is a rarity. Perhaps the best-known advocates of the so-called rare-Earth hypothesis are Peter Ward and Donald Brownlee, who presented their case in their 2000 book *Rare Earth: Why Complex Life is*

QUEST

THE HISTORY OF SPACEFLIGHT
Q U A R T E R L Y

Subscription Information

Quest Magazine
P.O. Box 5752
Bethesda, MD 20824-5752
Phone: +1 703-524-2766
e-mail: quest@spacebusiness.com
www.spacehistory101.com

Publisher: Scott Sacknoff

Editor: Dr. David Christopher Arnold

Assistant Editors

Howard Trace—Oral Histories

Keith Scala—Technology

Dr. Christopher Gainor—International

Dr. Roy Houchin II—Military Space

Joel Powell—Human Flight &
Robotics

Cover Graphics: Gary Milgrom

Proofreader: Joni Wilson

1-Year Subscription	2-Years
United States: \$29.95	\$50.00
Global: \$44.95	\$75.00

ISSN 1065-7738

The editorial office of *Quest: The History of Spaceflight Quarterly* (ISSN 1065-7738) is located at the ISBC, 6615 Hillandale Road, Chevy Chase, MD 20815-6424. E-mail quest@spacebusiness.com for information regarding submission of articles or letters to the editor.

Quest is published quarterly, four times per year by the International Space Business Council LLC, 6615 Hillandale Road, Chevy Chase, MD 20815-6424 USA. Periodical postage paid at Bethesda, Maryland, and additional offices.

Postmaster: Send all inquiries, letters, and changes of address to *Quest: The History of Spaceflight Quarterly*, P.O. Box 5752, Bethesda, MD 20824-5752 USA.

©2014 International Space Business Council LLC, All Rights Reserved. Reproduction of whole or in part without permission is prohibited. Printed in the United States of America.

QUEST

THE HISTORY OF SPACEFLIGHT
QUARTERLY



Published since 1992, *Quest* is the **only** journal exclusively focused on preserving the history of spaceflight. Each 64-page issue features the people, programs, and politics that made the journey into space possible. Written by professional and amateur historians along with people who worked in the programs, *Quest* is designed to bring you the stories and behind-the-scenes insight that will fascinate and captivate.

Preserving the history of space...

One Story at a Time™

Mailing Address

Quest
P.O. Box 5752
Bethesda, MD 20824-5752
United States
Tel: (703) 524-2766
quest@spacebusiness.com

Quest on the Internet

www.spacehistory101.com

ISSN: 1065-7738

Publisher: Scott Sacknoff
Editor: Dr. David Arnold

www.spacehistory101.com

United States

4 issues / 1 Year: \$29.95
8 issues / 2 Years: \$50.00

Canada / Mexico

4 issues / 1 Year: \$34.95
8 issues / 2 Years: \$65.00

Outside North America

4 issues / 1 Year: \$44.95
8 issues / 2 Years: \$75.00

Yes! I Want to Help Preserve the History of the Space Industry.

Please send me the next: 4 issues (1 year) or 8 issues (2 years) of *Quest*!

Name: _____

Address: _____

City: _____

State: _____

Zip: _____ Country: _____

Phone: _____

E-mail: _____

I've enclosed a check*. Please charge my credit card.

Credit Card #: _____

Exp Date: _____

Signature: _____

* In U.S. dollars drawn on a U.S. bank