

**NASA HISTORY PROGRAM
FISCAL YEAR 1994
SUMMARY**

Fiscal year 1994 was productive for the NASA History Office. This program was established in 1959 to preserve and disseminate a record of agency activities for the public interest. Our efforts continued during 1994 toward building a significant collection of reference documents for use by both NASA personnel and the public, providing historical perspective and documentary support for agency executives, and researching and writing NASA history for publication in books, monographs, articles, and reports.

Reference Collection and Research Support:

During the fiscal year the NASA Historical Reference Collection answered a total of 1,983 research requests from government, educational, and private organizations on all manner of divergent research interests. A priority during the year was providing background information and documentary records to aid NASA decision-makers in their work, an "applied history" goal, and of the total number of research requests answered, 1,146 were from NASA personnel or other official requestors. This required a total number of 1,576 work hours by the office staff. Also during the fiscal year, the History Office provided research services to 510 on-site researchers using its collections. The office also wrote several background papers on such topics as Apollo 11, irradiation experiments, and international cooperation in space.

Reference services have extended from providing essential facts and documents to preparing substantive background papers on a variety of subjects. Here are three examples of the substantive information requests handled by this office during the past year.

(a) We worked with NASA's Space Station Redesign Team to prepare background studies, point papers, chronologies, historical analysis, and documents on both the evolution of the present Space Station and on earlier projects that were either cancelled or fundamentally reshaped in NASA's history.

(b) We worked with those involved in the negotiations between the United States and Russia for greater cooperation in space and prepared several chronologies, background papers, and document packages relative to US/USSR cooperation in the past.

(c) We worked closely with NASA personnel (especially Public Affairs and various speechwriters), the public, journalists, and scholars and provided considerable documentation about Project Apollo for the 25th anniversary of the lunar landing. As a result of the number of inquiries we worked up a series of standard handouts that are responsive to most of the requests. We also assisted no fewer than seven filmmakers--U.S., Japanese, and European--who are working on documentaries about Project Apollo. We also answered numerous information requests from museum personnel developing exhibits for the anniversary. These ranged from requests from the National Air and Space Museum to the National Museum of American History to the Kennedy Presidential Library.

One ongoing effort in the office has been the creation of a computer-based inventory and finding aid for NASA's historical reference collection. Beforehand, the only one who knew the contents of the collection in any detail was our archivist, Lee Saegesser. This computer database work is being done under contract in this office. With more than 800 linear feet of material now catalogued--still only about a third of the total holdings in the collection--the data base is starting to fulfill its promise as an important reference tool to historians working in the NASA collections. We are planning to expand this effort in the near term by imaging some documents for electronic storage and retrieval. This will enable us to more effectively meet the needs of NASA executives for whom we provide information and to reduce the amount of paper documentation maintained on site at NASA headquarters.

Publication Program:

The hallmark of the NASA history program continued in fiscal year 1994, as previously, to be the preparation of solid, well-researched works on the history of the U.S. civil space program. During the fiscal year the NASA History Program published several major new books and other less ambitious publications. In December 1993 *The Birth of NASA: The Diary of T. Keith Glennan*, edited by J.D. Hunley, appeared in the "NASA History Series" as SP-4105. Part diary and part recollection, the first NASA administrator describes his experiences in Eisenhower's Washington as he set about the task of organizing a viable civil space program. Glennan also reveals a great deal about Eisenhower as a human being and a president, about the nation's capital at the end of the 1950s and beginning of the 1960s, and about other key figures in the development of NASA. His comments about political leadership in a high technology government organization remain insightful more than thirty years after the fact. I hope you find the book both interesting and worthwhile.

Also in December 1993 *"Suddenly Tomorrow Came . . .": A History of the Johnson Space Center* appeared as NASA SP-4307. Written by Henry C. Dethloff, this book is a comprehensive history of the center that was created to specialize in human spaceflight initiatives. It stresses the origins of the facility as the Manned Spacecraft Center and its institutional development within NASA. Located in Houston, Texas, in 1961, the center was renamed for former president Lyndon B. Johnson, resident of Texas and proponent of the Apollo lunar landing program, in 1973. We also issued a translation of Hermann Noordung's, *The Problem of Traveling in Outer Space: The Rocket Motor* (Berlin, 1929) (NASA TT-10002, 1993). This book will be issued as a more formal publication in the NASA History Series in 1995.

The office published two other special publications during this fiscal year. Lane E. Wallace, *Airborne Trailblazer: Two Decades with NASA Langley's Boeing 737 Flying Laboratory* (NASA SP-4216, 1994), appeared in May. This monograph-length work describes and analyzes the history of one research aircraft, the Boeing 737 used at Langley Research Center since 1974, and its role in furthering aeronautical technology. The author uses this case study as a means of getting at larger questions revolving around the expansion of technological knowledge concerning aviation and its transfer to those who can use it in the broader government scientific establishment, the aerospace industry, and the public. The office also published Ihor Y. Gawdiak, with Helen Fedor, compilers, *NASA Historical Data Book, Vol. IV: NASA Resources, 1969-1978* (NASA SP-4012, 1994). This reference work continues the set of three volumes already published in this series. Finally, the office issued J. Campbell Martin, et al., *NASA Langley Research Center 75th Anniversary Publications, 1992* (NASA HHR-58, 1994), a collection of publications relating to the history of the center.

The NASA History Office also published during the fiscal year its two annual books: *NASA Pocket Statistics, January 1994* (NASA Annual Report, 1994) and *Aeronautics and Space Report of the President, Fiscal Year 1993 Activities* (NASA Annual Report, 1994). Two additional publications, in the "Monographs in Aerospace History" series also appeared: Roger D. Launius and J.D. Hunley, compilers, *An Annotated Bibliography of the Apollo Program* (Monographs in Aerospace History, No. 2, 1994), and Roger D. Launius, *Apollo: A Retrospective Analysis* (Monographs in Aerospace History, No. 3, 1994). Both were issued in commemoration of the 25th anniversary of the first lunar landing.

The office has also sponsored periodically the publication of books outside of normal government channels. Two appeared in 1994. These were Roger D. Launius, editor, *History of Rocketry and Astronautics: Proceedings of the Fifteenth and Sixteenth Symposia of the International Academy of Astronautics* (Univelt, Inc., American Astronautical Society History Series, Volume 11, 1994), and Roger D. Launius, *NASA: A History of the U.S. Civil Space Program* (Krieger, Inc., 1994).

Also during the year, NASA historians worked toward the publication of several other histories on a wide diversity of subjects. Here is a list of major projects presently nearing completion, along with projected publication dates. The dates of publication, of course, may slip due to the exigencies of funding.

a. John M. Logsdon, editor, *Exploring the Unknown: Selected Documents in the History of the U.S. Civil Space Program, Volume I, Organizational Developments*. (NASA SP-4407, February 1995).

b. W. Henry Lambright, *Powering Apollo: James E. Webb of NASA* (New Series in NASA History, Johns Hopkins University Press, March 1995).

c. Hermann Noordung, *The Problem of Space Travel: The Rocket Motor*, translation edited by J.D. Hunley (NASA SP-4026, March 1995).

d. James R. Hansen, *Spaceflight Revolution: NASA Langley From Sputnik to Apollo* (NASA SP-4308, June 1995).

NASA Historical Publications in the News:

Howard E. McCurdy's NASA-sponsored book, *Inside NASA: High Technology and Organizational Change in the U.S. Space Program*, published in the "New Series in NASA History" by the Johns Hopkins University Press in 1993, has enjoyed a good response. Using extensive interviews and complex management analyses, *Inside NASA* seeks to identify and trace the evolution of the organizational culture of NASA from its founding and expansion during the Apollo era through the changes in the 1970s and 1980s. The book examines the reasons for what the author calls the "decline of NASA's technical culture" in the post-Apollo era, shedding new light on the agency's overall situation in recent years.

Because of the book's timely analysis, in the fall of 1993 Dr. McCurdy was asked to testify about NASA's organizational culture before the House Committee on Government Operations. In addition, the book has been used by policy-makers elsewhere in Washington involved in the Clinton Administration's effort to "reinvent government." The ideas expressed in *Inside NASA* have also been cited by writers concerned with reforming government in the *Washington Post*, the *Foreign Service Journal*, and *Government Executive*. This type of use epitomizes "applied history" for decision-makers at its most visible in the Federal government.

In recognition of the contribution it has made to understanding the development of NASA as an institution, the Society for History in the Federal Government has awarded *Inside NASA* its 1993 Henry Adams Prize, annually given for the best analytical work in history emanating from Federal history programs. Copies of *Inside NASA* may be ordered for \$32.95 from the Johns Hopkins University Press, Hampden Station, Baltimore, MD 21211-2190, or by calling its order desk at 1-800-537-5487. The History Office has just learned that the press has decided to issue *Inside NASA* in a paperback edition, which should be available by the fall of 1994. This moves the book into the college textbook market, so if you have a recent U.S. history, or history of technology, or political science or public policy class please consider this book as a text.

Conferences and Symposia:

Transcending National Boundaries in the History of Spaceflight: The NASA History Office, co-sponsored a historiographically-focused symposium at the NASA Headquarters on October 14, 1993, as a means of opening the field of space history in an international context to a larger audience. More than 130 people attended the meeting.

Project Apollo and Society: The NASA History Office organized this session at the

annual meeting of the Society for the History of Technology, held in Washington, D.C., on October 14-17, 1993. It featured papers by NASA contractor Howard McCurdy ("The Possibility of Space Flight"), independent scholar Lawrence Suid ("JFK, the Decision to Go to the Moon, and the Columbus Factor"), and ESA scholar Lorenza Sebesta ("The Post-Apollo Space Program as a Political and Technological Challenge for Europe"). NASA History Office Director Roger Launius chaired the session, while Gordon Patterson from the Florida Institute of Technology provided commentary.

Organizing to Use Space: Historical Perspectives: The NASA History Office also organized this session at the American Astronautical Society annual meeting, bringing together five historians who reviewed various aspects of the space effort during the 1945-1975 period as it is presently understood. It analyzed how the space program developed in that early period, when it was in a state of flux, and asked specific questions about policy formulation strategies used in that era that might also be applicable to the present. The session featured presentations by Howard E. McCurdy, The American University, "Popular Culture and Public Policy in Space Flight during the 1950s," R. Cargill Hall, Center for Air Force History, "The Eisenhower Administration and the Cold War: Framing American Astronautics to Serve National Security," Roger D. Launius, NASA Chief Historian, "NASA, Space Policy, and the Evolution of Space Exploration," Richard Sturdevant, U.S. Space Command History Office, "The Early History of the Military in Space;" and Donald R. Baucom, Ballistic Missile Defense Organization Historian, "The Origins of SDI." These papers are presently being edited for publication in the AAS History Series.

Biographical vs. Organizational Approaches in Space History: Dilemma or Opportunity for Federal Historians?: The office organized this session at the Society for History in the Federal Government annual meeting, held in Washington, DC, on April 21-22, 1994. It included papers by Michael H. Gorn, Center for Air Force History, on "Theodore Von Kármán: A Case Study in Writing Science and Space Biography"; George W. Bradley, Air Force Space Command Historian, "Pioneers in Air Force Space History: A Biographical Approach"; and J.D. Hunley, NASA History Office, "The Importance of Biography in the NASA History Program." The questions asked in each of these papers revolved around the appropriateness of focusing on individuals in aerospace history and whether or not that approach skewed the understanding of the past beyond all hope of coherence.

"We Have a Sporting Chance . . .": This office organized an audio-visual presentation in commemoration of the 25th anniversary of the Apollo 11 lunar landing by Frederick I. Ordway III on July 22, 1994.

Apollo 11 25th Anniversary:

This office was involved in several activities relative to Apollo 11's anniversary. In addition to those already mentioned, a brief synopsis of other efforts follow.

(a). We prepared a short article, "Apollo 11 at Twenty-five," for use by the Public Affairs Office. This has been distributed through PA channels for publication wherever appropriate.

(b). We compiled a short annotated bibliography, "Project Apollo: A Selective Bibliography of Books" for use by the Public Affairs Office. This has been distributed through PA channels for use wherever appropriate.

(c). We prepared two "Monographs in Aerospace History," dealing with Apollo as noted in the publications section of this report. Our initial run of 1,500 copies each was snatched up quickly, and we reprinted another 1,000 for use by the Education Office, which plans to distribute them to teachers throughout the U.S.

(d). We prepared an electronic picture book (EPB) called "Apollo 11 at Twenty-five," which was made available on Mackintosh computer disk and through the Internet. This work consists of 48 photographs with explanatory captions of several paragraphs each. The Space Telescope Science Institute's (STSI) education program did the work

on computer for the product. Its target audience is high school students and is one of a series of NASA electronic picture books that it has produced. The earlier efforts have been oriented toward providing scientific information, but STSI saw an opportunity to move into an area that is appropriate for their educational charter and that has not been explored before. We used the documentation produced for other Apollo historical products to prepare the text for this EPB.

(e). We wrote an historical article for the *Space Times*, the magazine of the American Astronautical Society, on the 25th anniversary of the Apollo 11 flight. The basic text of this article was also distributed by NASA Public Affairs as a news release. It also appeared in the *NASA HQ Bulletin*.

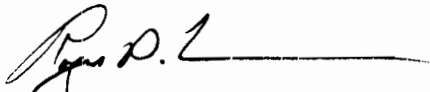
(f). We prepared two exhibits on Apollo 11 for display during the anniversary. The first was a more generic display that was placed in the West Lobby of the NASA Headquarters between June 16-25, 1994. The second was placed in the NASA HQ Library and is more textually oriented, displaying documents, etc.

Professional Activities:

Members of the History Office staff were involved at several levels in professional activities germane to the aerospace history specialty. The first area was as a participant in various professional conferences. Dr. Roger D. Launius and Dr. J.D. Hunley each participated in several conferences and symposia during the year, giving papers and participating in panels. Several staff members also published historical books, articles, and book reviews during the year. A total of 23 articles, two monographs, and several book reviews were published by members of the staff during the year.

AHA Fellowship in Aerospace History:

The American Historical Association awarded one fellowship for the 1993-1994 and a second for the 1994-1995 academic year; NASA funds this program as a means of fostering serious scholarship in aerospace history. Chris Hables Gray received this fellowship for the 1993-1994 term, and researched on "Cyborgs in Space: Space Research and the Spread of Cybernetic Organisms." The 1994-1995 fellow is Eric C. Rau, a Ph.D. candidate in the history of technology from the University of Pennsylvania. He will spend his fellowship term researching the management of large-scale technological projects.



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