# NASA HISTORY: CALENDAR YEAR 2002 IN REVIEW

## Introduction:

During 2002 the efforts of the NASA History Office continued to focus on our core goals of conducting a high quality, academically sound program of research pertinent to NASA leadership's concerns; effectively acquire, preserve, and make available documentary information in the NASA Historical Reference Collection; and disseminate historical information and understanding to the widest practicable audience. In accomplishing this mission the NASA History Office is pursuing several objectives:

- Conduct an active, high-quality history publication program.
- Provide prompt and accurate responses to all requestors of NASA historical information.
- Aggressively disseminate historical information and understanding to the broadest possible audience.
- Facilitate scholarly research on NASA's historical achievements by academic experts outside NASA, to enhance understanding of this key aspect of U.S. history.
- Comply with legislation requiring NASA to prepare the multiagency, consolidated report summarizing the Government's aeronautics and space activities for the year.
- Focus on applied historical research efforts of interest and use to NASA executive leadership.
- Aggressively acquire, preserve, and make available documentary information in the NASA Historical Reference Collection.
- Use technology to collect, preserve, and disseminate NASA history.
- Achieve agency-wide involvement in the preservation and dissemination of history.

We accomplish this by developing 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 dissemination through a variety of publications and electronic media.

# Communicate Knowledge Performance Targets and Indicators:

# TABLE 1

# **Communicate Knowledge-History FY 2002 Metrics**

Strategic Plan	Strategic Plan	Annual Performance	Indicators
Goal  Ensure that NASA's	Objective Improve the external	Goal Share the experience of	Produce 10 new historical
customers receive	constituent communities'	expanding the frontiers	publications chronicling and
the information	knowledge, understanding,	of air and space with the	placing NASA's activities and
derived from the	and use of the results and	public and other	achievements in perspective for
Agency's research	opportunities associated	stakeholders by meeting	the American public.
and development	with NASA's programs	5 of the 6 indicators for	_
efforts that they		this goal.	
want, when they		_	
want it, for as long			
as they want it.			
Ensure that NASA's	Improve the external	Share the experience of	Produce one new electronic
customers receive	constituent communities'	expanding the frontiers	document—CD/ROM—
the information	knowledge, understanding,	of air and space with the	making available to a larger
derived from the	and use of the results and	public and other	audience documents significant
Agency's research	opportunities associated	stakeholders by meeting	in the history of the Agency.
and development	with NASA's programs	5 of the 6 indicators for	
efforts that they		this goal.	
want, when they			
want it, for as long			
as they want it.			
Ensure that NASA's	Disseminate scientific	Inform, provide status,	Create one additional on-line
customers receive	information generated by	enthuse, and explain	exhibit on the NASA History
information derived	NASA programs to our	results, relevance and	web page.
from the Agency's	customers	benefits of NASA's	
efforts in a timely		programs by meeting 3	
and useful form.		of the 4 indicators for	
		this goal.	
Ensure that NASA's	Disseminate scientific	Inform, provide status,	The History Office shall
customers receive	information generated by	enthuse, and explain	respond to requests for
information derived	NASA programs to our	results, relevance and	information within fifteen
from the Agency's	customers	benefits of NASA's	working days 90 percent of the
efforts in a timely		programs by meeting 3	time.
and useful form.		of the 4 indicators for	
		this goal.	

# Communicate Knowledge Goals and Achievements for FY2002

## Metric 1

NASA's activities and achievements will be chronicled and put into perspective for the American public, through 10 new historical publications.

New Publications:

- 1. Morgan, Clay. Shuttle-Mir: The U.S. and Russia Share History's Highest Stage (NASA SP-2001-4225, October 2001).
- 2. Launius, Roger D., and Howard E. McCurdy. *Imagining Space: Achievements, Predictions, Possibilities, 1950-2050* (Chronicle Books, October 2001).
- 3. Bednarek, Janet R. Daly. *America's Airports: Airfield Development, 1918-1947* (Texas A&M University Press, October 2001, Centennial of Flight Series, No. 1).
- 4. Aeronautics and Space Report of the President, 1999 Activities (NASA Annual Report, October 2001).
- 5. McCurdy, Howard E. Faster, Cheaper, Better: Low-Cost Innovation in the U.S. Space Program, "New Series in NASA History" (Johns Hopkins University Press, November 2001).
- 6. Mudgway, Douglas. *Uplink-Downlink: A History of the Deep Space Network* (NASA SP-2002-4227, March, 2002).
- 7. Siddiqi, Asif A. *Deep Space Chronicle: A Chronology of Deep Space and Planetary Probes* 1958-2000 (NASA SP-2002-4524).
- 8. Johnson, Stephen B. *The Secret of Apollo: Systems Management in American and European Space Programs* (Baltimore: Johns Hopkins University Press, 2002).
- 9. Renstrom, Arthur G. Wilbur and Orville Wright: A Bibliography Commemorating the One-Hundredth Anniversary of the First Powered Flight on December 17, 1903 (NASA SP-2002-4527).
- 10. Leary, William M. We Freeze to Please: A History of NASA's Icing Research Tunnel and the Quest for Safety (NASA SP-2002-4226).
- 11. The First Century of Flight: NACA/NASA Contributions to Aeronautics. Timeline Poster.

#### Reprinted Publications:

These publications were originally published in the NASA History Series and have been reprinted by outside presses.

- 1. The Mission Transcript Collection: U.S. Human Spaceflight Missions From Mercury Redstone 3 to Apollo 17 (CG Publishing, Inc.).
- 2. Swanson, Glen W, ed. "Before This Decade is Out...": Personal Reflections on the Apollo Program (Gainesville: University Press of Florida, 2002).
- 3. Reed, R. Dale. *Wingless Flight: The Lifting Body Story* (Lexington: The University Press of Kentucky, 2002).

**Data Quality for Metric 1:** These publications are fully peer-reviewed and their quality is comparable to that of an academic press' publications. They are analytical and scholarly in their

treatment of complex technical and historical issues.

#### Metric 2

Documents significant in the Agency's history will be made available to a larger audience by producing one, new electronic document- a CD/ROM.

Shuttle-Mir: The U.S. and Russia Share History's Highest Stage (CD-ROM, NASA SP-2001-4603, December 2001).

**Data Quality for Metric 2:** NASA History CD-ROMs are peer reviewed to ensure high quality standards.

#### Metric 3

The History Office will create one additional online-exhibit on the NASA History Web page.

- 1. NASA Historical Databooks, volumes III-VI (SP-4012)
  - http://history.nasa.gov/SP-4012/cover.html
- 2. Magellan: The Unveiling of Venus (JPL-400-345)
  - http://history.nasa.gov/JPL-400-345/magellan.htm
- 3. Guide to Magellan Image Interpretation (JPL-93-24)
  - http://history.nasa.gov/JPL-93-24/jpl 93-24.htm
- *4. The Space Shuttle (SP-407)* 
  - http://history.nasa.gov/SP-407/sp407.htm
- 5. The Space Shuttle Decision: NASA's Search for a Reusable Space Vehicle (SP-4221)
  - http://history.nasa.gov/SP-4221/sp4221.htm
- 6. Far Travelers: The Exploring Machines (NASA-SP-480)
  - http://history.nasa.gov/SP-480/sp480.htm
- 7. The Apollo Program Summary Report (JSC-09423)
  - http://history.nasa.gov/apsr/apsr.htm
- 8 .Sun: Solar Results from Skylab (SP-402)
  - http://history.nasa.gov/SP-402/sp402.htm
- 9. The Voyage of Mariner 10: Mission to Venus and Mercury (SP-424)
  - http://history.nasa.gov/SP-4306/sp4306.htm

- 10.Engines and Innovations: Lewis Laboratory and American Propulsion Technology (SP-4306) http://history.nasa.gov/SP-4306/sp4306.htm
- 11. Deep Space Chronicle: a Chronology of Deep Space and Planetary Probes 1958-2000 (Monograph in Aerospace History #24)

http://history.nasa.gov/monograph24/Table%20of%20Contents.pdf

12. Atlas of Mercury (SP-423)

http://history.nasa.gov/SP-423/sp423.htm

- 13. The Long Duration Exposure Facility (LDEF): Mission 1 Experiments (SP-473)
  - http://history.nasa.gov/SP-473/sp473.htm
- 14. Model Research (SP-4103)

http://history.nasa.gov/SP-4103/sp4103.htm

15. Uplink-Downlink: A History of the Deep Space Network 1957-1997 (NASA SP-2001-4227) http://history.nasa.gov/SP-4227/Uplink-Downlink.pdf

**Data Quality for Metric 3:** These new historical sites fall into two categories: electronic versions of previously published materials and totally new materials. The electronic versions of books are faithful to the original hard copies, which were fully peer reviewed, in that they include all the text, images, and even original pagination. New sites that are not versions of existing books are fully peer reviewed for quality before they are placed on the Web.

#### Metric 4

The History Office will meet the need for a timely and effective response to the public by meeting or exceeding 90% of the time a 15-day response standard.

The History Office has responded to its over 200 monthly email inquiries within 7 days 95 percent of the time.

**Data Quality for Metric 4:** The NASA History Office responds to these inquiries by using its extensive Historical Reference Collection, consisting of over 1,500 linear feet of key primary and secondary sources on a wide range of aerospace history topics. This Historical Reference Collection has been used by numerous researchers both in and outside of NASA to answer with confidence a wide range of historical queries.

# Reference Collection and Research Support:

## **Information Requests**

During calendar year 2002 NASA History Office personnel answered a total number of 14,674 research requests from government, educational, and private organizations on all manner of divergent research interests. Also during the year, the History Office provided research services to 826 on-site researchers using its collections. Table 2 breaks down the number and type of information requests handled by NASA history personnel during calendar year 2002.

Table 2 also depicts the large percentage of e-mail requests for information that the History Office is receiving. With the advance of this technology, querying the History Office has become easier than ever, and it represents a growing workload that must be met in the future. We remain committed to providing quality, timely service for those seeking information about NASA's history but the challenges of doing so are becoming increasingly difficult as the number of requests continue to rise.

While the History Office has been able to reduce the amount of time given to each information request, demonstrating efficiency not previously obvious, the annual workload for information requests is more than two full-time equivalent personnel. Since the History Office does not have these resources in-house, we have relied on student interns for some of this work, but the rise in the workload is a matter that requires continued attention if we are to meet the requirements of NASA on this score. Table 3 reports the trend for the number of information requests since 1990.

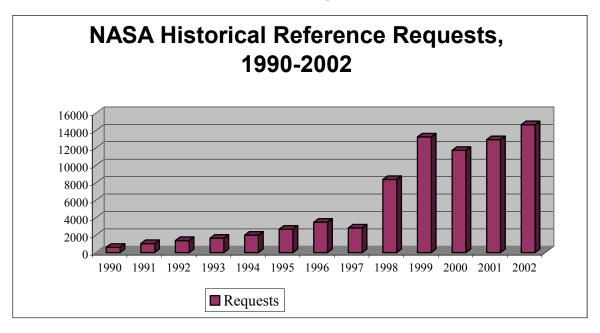
NASA Historical Reference Requests,
2002

1400
1200
1000
800
400
200
Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct. Nov. Dec.

Written/Phone Requests Email Requests On-Site Researchers

TABLE 2

TABLE 3



# **New Archival Accessions and Ongoing Archival Projects:**

# Reference:

Colin Fries, John Hargenrader, and Jane Odom answered approximately 1196 individual reference requests from staff and visitors and from others who emailed or phoned. They provided research services to over 800 on-site researchers. Beyond headquarters staff we hosted researchers from Johnson Space Center, Langley Research Center, and Marshall Space Flight Center. We had local visitors from the National Air and Space Museum, the National Research Council, the State Department, Air and Space Magazine, and The George Washington University. Our out of town visitors came from Syracuse University, Purdue University, University of North Dakota, University of Pennsylvania, Florida International University, and the Smithsonian Astrophysical Observatory. Our foreign national visitors came from Canada, the United Kingdom, Australia, Japan, and Germany.

#### Acquisitions:

The NASA History Office staff received approximately 57 boxes of material from various sources during 2002. Archivists appraised the material for historical value and arranged and filed those items that were retained. Two large collections were readied for transfer to the National Archives and Records Administration. These were the Daniel Goldin Collection, 220 cubic feet, and the Dale Myers Collection, 32 cubic feet. Note: Both of these collections were received in previous years so their volume will not be reflected in this year's acquisitions total. A description follows giving more details on notable acquisitions received this calendar year.

- 5 cubic feet of material on the Arecibo telescope, Voyager, Magellan, and radar astronomy from former contract historian, Andrew Butrica.
- 2 cubic feet of Hawaii Infrared Telescope Facility files Code S.
- 3 cubic feet of Chron Files, 1997-99, from Code CIC.
- 5 cubic feet of Mars Climate Orbiter Investigations Board Report Files from Code S.
- 2 cubic feet of space science material from Code S.
- 14 cubic feet of Advanced Programs files, 1995-99, from Code M.
- .5 cubic foot of Advisory Group for Aeronautical Research and Development (AGARD) material, 1973-84, from NASA retiree, Jack Brewer.
- 1 cubic foot of Space Station technology transfer files, 1988-94, from Code I.
- .5 cubic foot Gemini photography collection, 1965-66, from Woods Hole Oceanographic Institution Library.
- 11 cubic feet of NASA history documents, audio-visual materials, and books from Roger Launius upon his departure from the Agency in July.
- .5 cubic foot on confirmation hearings of Fred Gregory (Deputy Admin.) and Kathie Olson and Richard Russell (OSTP assoc. dir.) from Code L.
- 1 cubic foot of Nimbus weather satellite files from former deputy project manager, Wilbur Huston
- 2 cubic feet of Code M files on Space Shuttle/ISS pricing and analysis, 1988-98, from Code M.
- .5 cubic foot of books, including press info books from Code P.
- 1 cubic foot Mission Operations Directorate (JSC) Training Videos and Manual, 1991, from Code M.

#### Processing of Administrator's Collection:

In December 2001 the History Office received a third accession (52 cubic feet) of Dan Goldin material. In March we hired a temporary archivist under the NCI contract to arrange, describe, and catalog this material. He did so in approximately two months, adding nearly 1500 records to the Code A database (an electronic finding aid specifically created for this project). This completes work on the 220 box collection of official material document Goldin's tenure at NASA. Two previous accessions of Goldin files had been received in 1998 and 2000 and processed accordingly. The collection is arranged into seven distinct series or types of material—

Trips, Meetings, Town Meetings, Subject Files, Speeches, Hearings, and Tapes. It will prove to be an invaluable resource to NASA staff as well as researchers from outside the Agency. The Goldin Collection is currently being stored on the concourse level in a secure room (the records retirement room) and plans are being made for its transfer to the National Archives downtown.

### Other Processing Activities:

During 2002 the History Office staff were busy processing (arranging, describing, cataloging) a number of collections, some from our backlog, others that were received recently. These included:

- NASA Names Collection
- Miscellaneous Biographical Files
- Long Range Planning Files
- Infrared Telescope Facility Files
- Space Station Files
- Shuttle Mission Files
- Space Exploration Initiative Files
- Roger Launius History Collection
- Propulsion Files
- Dale Myers Collection
- Planetary Radar Astronomy Files
- Single Stage to Orbit Files
- Earth Observing Satellite Files
- Space Science Files
- White House Collection
- Office of Policy and Plans Files
- National Advisory Committee on Aeronautics Files

All total, the History Office staff processed 148 cubic feet of files, making these materials more accessible to our visitors. Since work is ongoing on the Launius, White House, and Propulsion Collections those processing statistics are not included here.

#### Preservation:

Quick action saved all but a couple of photographs that stuck together when a leak occurred above Lektriever 4 in August 2002. We sent four cubic feet of material away to a preservation company to be freeze-dried, standard archival practice for water-damaged items. Those materials were returned after a few weeks and are in fairly good shape. While the information is still there, some papers were curled and/or water stained and some photographs remain slightly curled. The curling will relax with time. The worst of the water stained items were simply photocopied and the photocopy filed in our reference collection.

# Oral History Projects:

Recording, transcribing, and permanently accessioning in the NASA Historical Reference Collection the recollections of NACA/NASA personnel has been one of the most important activities undertaken by the NASA History Office since its inception in 1959. Many NASA oral histories originated when historians interviewed participants to obtain firsthand information to facilitate writing their volumes in the NASA History Series. Other oral histories can be more properly categorized as exit interviews. NASA Historical Reference Collection holds over 2,000 separate oral histories on a widely divergent set of individuals. They include oral histories focusing on all the major projects of the agency, and organizational culture, engineering practice, program management, aerospace medicine, and other specialized topics.

Other NASA centers also have large collections of oral histories. The Johnson Space Center, for example, has a collection of over 2,000 oral histories. While the majority of the oral histories available from NASA have been conducted during the course of writing specific historical works, increasingly so as time progresses, the agency has undertaken oral history for its own sake as a means of preserving knowledge. Often supporters of this effort have been motivated by the realization that the first generation of agency officials are passing from the scene, and that it is important to capture as much of their knowledge as possible. Accordingly, several discrete projects have been taken, and some are still underway, recording the recollections of key officials.

Often these oral history efforts record the entire careers of individuals covering a broad spectrum of activities. They have a similarity to the oral histories of Columbia's Oral History Research Office; and to the senior officer oral history programs of the various armed services. In every case these works are transcribed, edited, and placed in the history collections of the agency. They often also are copied and find permanent retention in various presidential libraries and university special collections.

#### **Herstories:**

Started in 1999, this effort was completed in 2002 and has resulted in collecting oral histories with women whose contributions range from involvement with the inception of NASA to providing direction for the Agency. Participants included luminaries such as:

Eilene Galloway -- involved in the legislative process leading to the National Aeronautics and Space Act of 1958 and has continued to support NASA's efforts through the decades and still today, serving as a consultant and/or on a number of advisory boards

Dr. Nancy Grace Roman -- senior woman at NASA HQ in the 1960s, when she served as an astronomer in the Office of Space Science and Applications, and later as administrator of astronomical programs

Dr. Donna Shirley – started as an aerodynamic analyst in 1966 at NASA's Jet Propulsion Lab and in 1991 served as the chief engineer of a \$1.6 billion project to explore asteroids, a comet, and Saturn, as well as started a low-cost program that continues to send missions to Mars when she was a director of the Mars Exploration Program.

A number of interviews were conducted with women who worked at the NACA / NASA

Flight Research Center in Edwards, CA. These include: Beverly Swanson Cothren, a computer (mathematician) at NACA Langley Laboratory, VA, and at the Dryden Flight Research Center, (DFRC); Constance Eaton Harney, who began as a programmer at Edwards and retired as the DFRC Deputy Chief, Computer Systems, Flight Control Rooms, & Information Networks; Mary (Tut) Hedgepeth, a computer at NACA Langley and at DFRC, later worked for the USAF; Betty Scott Love, first a computer, then became a DFRC engineer; Sheryll Goecke Powers, a DFRC engineer who began as a co-op student engineer; Bertha Ryan, a DFRC engineer who participated in the research on lifting bodies and later worked for the US Navy; Harriet DeVries Smith, a DFRC engineering aide, promoted to engineer, and later worked as a Congressional aide.

Added to the "Herstories" effort most recently were oral histories with **Dr. Laurel**Wilkening, nationally known Planetary Scientist, who served as Vice Chairman on the National Commission on Space, 1985, and the Advisory Committee on the Future of the U.S. Space Program (Augustine Committee), 1990; **Dr. Bonnie Dalton**, current Deputy Director for the Astrobiology and Space Research Directorate at NASA Ames, who started in 1963 at Ames as a bacteriologist and has continued to make significant contributions to the life sciences program; **Annie C. Easley**, who started in 1955 as a NACA computer at the Lewis Research Center and retired in December 1989 as an engineer who developed and implemented computer code used in determining solar, wind, and energy projects for NASA; **Dr. Carolyn Huntoon**, who began her career with the NASA Johnson Space Center as a Senior Research Physiologist in 1968, and in 1994 became its Center Director, and later served in positions for NASA Headquarters and the Department of Energy.

# **Administrators Oral History Project:**

Started in 2001, this effort gathers information and knowledge from individuals who have served in major administrative roles for the Agency regarding organizational culture, methodology, program management, decisionmaking rationales, and details of events that occurred during that person's tenure. An ongoing project, the following oral histories were completed this past year.

**James Beggs** – NASA Administrator, 1981-1985; **Arnold Frutkin** – NASA Assistant Administrator for International Affairs; **J. R. Thompson** – NASA Deputy Administrator, and Director Marshall Space Flight Center, Alabama, 1986-1989; **Harold Finger** – NACA Engineer; Director, Nuclear Systems, NASA Headquarters, 1958-1967.

Among those scheduled for 2003 are Dr. Wesley Huntress, Associate Administrator of the Office of Space Science, 1993 - 1998, Charles Kennel, NASA Associate Administrator for Mission to Planet Earth, 1994-1996, and current Chair of the NASA Advisory Committee; and Courtney Stadd, current NASA Chief of Staff and White House Liaison, regarding his involvement in the commercialization of space.

# **Oral History Projects at Johnson Space Center:**

The Johnson Space Center has an exemplary oral history program led by Rebecca Wright of Veridian Corporation. Ms. Wright's team has conducted many of the above administrator and herstories oral histories.

At the end of 2002, the Johnson Space Center had over 2,200 oral histories. This collection is now housed at the University of Houston-Clear Lake, located near the NASA Center. The materials were moved from the NASA site in the summer of 2002 and are now accessible to the public at the University's Library. The University provides a full-time archivist and part-time assistant dedicated to responding to inquiries, accessioning the contents, helping researchers, and maintaining records of usage and additions to the collection. A reception to announce the opening of the collection was hosted by the University in July 2002 and more than 250 people attended and toured the facilities.

Assisting in accessibility is a new History Website provided by the NASA Johnson Space Center as of September 1, 2002. The website contains links to the history database that contain the contents in the JSC History Collection. Also included on the website are transcripts of all the oral histories conducted for the JSC Oral History Project, as well as those recently conducted for the oral history projects sponsored by the NASA Headquarters History Office (<u>Administrators</u>; <u>Herstory</u>; <u>Aviatrix Pioneers</u>; <u>Ballistic Missile Development Pioneers</u>). Available on the site are numerous links to NASA sites from throughout the agency regarding the history of the Agency, the Centers, and the programs. Site address is: www.jsc.nasa.gov/history

# **NASA Career Oral History Project:**

Beginning in 1994, the NASA History Office supported the conducting of a set of more than one hundred oral histories, amounting to more than five hundred hours of interviews documenting significant aspects of NASA's spaceflight and other major programs. Among the interviewees were:

- Jimmy Carter—space policy during his presidential administration
- Aaron Cohen—Johnson Space Center (JSC) management, space policy, program management
- Charles Donlan—Mercury program, astronaut selection, early spaceflight as a reality, Space Task Group (STG), Manned Orbiting Research Laboratory (MORL), long-term space plans in the early 1970s, congressional and military relations with NASA, Pratt–Whitney orbiter contract, Viking, and Pathfinder
- Lennard Fisk—space science in the 1980s
- James Fletcher—his career as NASA administrator
- Gerald Ford—space policy during his presidential administration
- Robert Frosch—NASA and space policy

- Noel Hinners—space science in the 1970s
- John Hodge—mission control, space station management
- George Low—his career as NASA deputy administrator
- Hans Mark—space policy in the 1970s and 1980s
- Story Musgrave—selection and training of a shuttle astronaut
- Dale Myers—his career as NASA deputy administrator
- Thomas Paine—his career as NASA administrator
- Frank Press—science advice to the president
- Robert Seamans—his career as NASA deputy administrator
- James Webb—his career as NASA administrator
- Caspar Weinberger—space policy since the 1970s

These efforts have continued to the present.

# **Other NASA Related Oral History Projects**

In early 2002 the University of Mississippi School of Law, National Remote Sensing and Space Law Center, conducted two oral history interviews documenting the legislative history of the "United Nations Principles on Relating to Remote Sensing of the Earth from Outer Space." The NASA History Office received copies of these interviews per an agreement with the University of Mississippi. The interviewees were S. Neil Hosenball, retired NASA Counsel and leader of a U.S. delegation to the United Nations; and Kenneth D. Hodgkins, State Department official.

The History Office also received a series of interviews documenting the NASA Exobiology Program. The interviews were conducted between 1997-2002 by James Strick and given to us in 2002 by Steve Dick, Naval Observatory Historian.

# NASA History Office Online Catalog (Database):

The current database began operating in May 1998 and has begun to alleviate the press of space in the NASA History Office as we image and store electronically discreet parts of the NASA Historical Reference Collection. Planning began the previous year on a long-term effort to scan and create in an electronic format a database of historically significant, one-of-a-kind documents from a paper collection maintained only in the NASA Historical Reference Collection. This project accomplishes several tasks:

• Preserves unique records of the agency that are critical to understanding the agency and its historical development;

- Allows the disposition of paper originals to the National Archives where they belong in keeping with the Archive's mission of maintaining a record of the activities of the federal government;
- Frees space within the NASA History Office for its continued collection of the historically significant documents of the agency; and
- Makes these historical materials available to a much wider body of researchers from NASA, other government agencies, the academic community, and the public.

To start the process we requested a review of the viability of placing in electronic form (online or on CD-ROM) several major collections as candidates for placement in electronic form. Some of the significant scanning efforts the NASA History Office has completed to date include:

- Mission Operations Reports of NASA space flights, 1958-96, 8 cubic feet. The NASA
  Historical Reference Collection has the only complete set of these, and the originals have
  now been transferred to the National Archives. The electronic version is available for
  research through the History Office Online Catalog.
- NASA Human Space flight "Air-to-Ground" Mission Transcripts, 1961-72, 12 cubic feet. A CD/ROM has recently been prepared that contains electronic versions of the Mercury/Gemini/Apollo transcripts.
- Selected NASA Oral Histories, 1951-97. The electronic version is available for research through the History Office Online Catalog.
- NASA Political Cartoon Collection, 1957-2000. Originals have been retired to the National Archives. The electronic version is available for research through the History Office Online Catalog.
- Administrator Goldin's Speeches, 1989-2001, 15 cubic feet. Originals are part of the Administrator's Collection that will go to National Archives. Electronic versions are available for research through the History Office Online Catalog and on CD.
- Code I Chronological Files, 1994-97, 4 cubic feet. The electronic version is available for research through the History Office Online Catalog.
- HQ and Center Telephone Directories, 1958-2002, 10 cubic feet. The electronic version is available for research through the History Office Online Catalog.

At the end of 2001, the NASA History Office has underway the following scanning efforts:

- Code Q Aerospace Safety Advisory Panel reports, 1971-2002, 2 cubic feet.
- Headquarters Press Releases, 1958-61, 1977-2002, 6 cubic feet. Note: History Office copies of releases for 1962-76 are microforms and therefore are not candidates for scanning at this time.
- Headquarters and Center Newsletters, 1960-2002, 12 cubic feet.

More specifically, during this year we scanned and checked into the DMS 50,709 items,

creating 448 cataloging records describing these documents. Just over 2,700 database records describing our non-scanned holdings were updated, and 237 new cataloging records were created as materials and were subsequently added to the reference collection. Through these efforts we have succeeded in making NASA historical materials more widely available to NASA staff and visitors who come from outside the Agency.

The scanning activity focused on three large and important collections. Through a coordinated effort with David Lengyel and his staff in Code Q, we acquired a full set of Aerospace Safety Advisory Panel annual reports and other background documents to scan. These are now available on our history web site with a link from the Code Q web site to our site.

- Code Q Aerospace Safety Advisory Panel reports, 1971-2002, 2 cubic feet.
- Headquarters Press Releases, 1958-61, 1977-2002, 6 cubic feet. Note: History Office copies of releases for 1962-76 are microforms and therefore were not candidates for scanning at this time.
- Headquarters and Center Newsletters, 1960-2002, 12 cubic feet.

# Special Staff Studies:

A priority during the year was providing background information and documentary records to aid NASA decision-makers in their work. In so doing, the office prepared several types of historical background papers and staff studies on a variety of subjects:

- Launius, Roger D., "Administrator Visits By Country," February 5, 2002.
- Launius, Roger D., "Administrator Visits by Date Order," February 5, 2002.
- Launius, Roger D., "ARG Directors," May 2, 2002.
- Launius, Roger D., "Centennial of Flight Exhibit Scenarios," May 8, 2002.
- Launius, Roger D., "Flown Astronauts-Nationalities," May 30, 2002.
- Launius, Roger D., "Tech Policy Toolkit," June 3, 2002.
- Launius, Roger D., "Great Nations Dare," June 6, 2002.
- Launius, Roger D., "Sabbath-Talker," June 7, 2002.
- Launius, Roger D., "International Space Station," June 17, 2002.
- Launius, Roger D., "Space Research," June 17, 2002.
- Launius, Roger D., "Higher and Faster," June 18, 2002.

- Launius, Roger D., "Flying To and From Earth Orbit," June 18, 2002.
- Launius, Roger D., "Apollo-Kathy," June 20, 2002.
- Launius, Roger D., "Dawn of the Space Age-Kathy," June 20, 2002.
- Launius, Roger D., "Aerospace Deterrence," July 3, 2002.
- Launius, Roger D., "Timeline," July 5, 2002.
- Launius, Roger D., "Cape-Talker," July 17, 2002.
- Launius, Roger D., "Revolution in Space Science," July 5, 2002.
- Launius, Roger D., "Space Launch Initiative," July 5, 2002.
- Launius, Roger D., "Understanding the Earth," July 5, 2002.

# NASA History Program Review, March 2002:

Since early in the history of NASA, the Agency's History Program began holding periodic meetings with our center history points of contact and with a group of outside scholars and aerospace professionals to assess the state of the program. These annual reviews have been exceptionally important in helping to shape the direction and even the nature of the NASA History Program. It is an important opportunity to draw together the resources working on historical issues at NASA, and to reflect on the nature of the program and plan for the future.

In 2002, we held the program review on April 24-25 at the Stennis Space Center in Mississippi. The agenda for this program review included:

- Overview of NASA History Program
- History Publication Program Status Review
- New Historical Projects
- Communication Efforts and Staff Support

# Support to National History Day:

National History Day is a highly regarded and academically challenging history program. This educational contest fosters academic achievement and intellectual growth. In addition to acquiring useful historical knowledge and perspective during the series of district, state and national competitions, students develop critical thinking and problem solving skills that will help them manage and use information now and in the future.

During 2002 the NASA History Office provided information to National History Day participants through an extensive World Wide Web page, <a href="http://history.nasa.gov">http://history.nasa.gov</a>, with an

average monthly hit rate of more than 600,000. The History Office also provided to NASA's Teacher Resource Centers package of historical publications and materials that were accessed by teachers around the nation.

# Support to Centennial of Flight Commission:

The History Office has been supporting extensively the activities if the Centennial of Flight Commission. NASA Chief Historian Roger D. Launius was asked by Gen. John R. Dailey, chair of the Commission to serve as co-chair of a "History and Education Panel." This panel has been assigned four major tasks:

- 1. Develop criteria and oversee process for how events on the Commission's website calendar (located at http://www.centennialofflight.gov) should receive recognition of the Commission.
- 2. Develop criteria and oversee process for the use of the Centennial of Flight Commission's logo on various products seeking the Commission's endorsement. These may include educational and historical publications, multimedia activities, and events, as well as commercial items.
- 3. Provide subject matter expertise on all manner of products being prepared for the Commission. These include a set of posters underway through Code FE, a major website with a timeline of the history of aeronautics, and brochures and exhibit content.
- 4. Develop criteria and oversee process for the designation of Centennial Partners.

This has required considerable time, and it is doubtful that it will abate anytime soon.

# NASA Historical Publication Program:

A very important element of the NASA history program continued this last year with the preparation of solid, well-researched works on the history of the U.S. civil space program. During the year 2002 the NASA History Office published several major new books and other publications. These are shown in the list below:

# **Special Publications**

- On the Shoulders of Titans: A History of Project Gemini (NASA SP-4203) by Barton C. Hacker and James M. Grimwood. [Reprint, originally published in 1977.]
- *Uplink/Downlink: A History of the Deep Space Network* (NASA SP-2002-4227, February 2002), by Douglas J. Mudgway.
- Merlin, Peter W. *Mach 3+: NASA/USAF YF-12 Flight Research, 1969-1979* (NASA SP-2002-4525, April 2002).
- Siddiqi, Asif A. *Deep Space Chronicle: Robotic Exploration Missions to the Planets* (NASA SP-2000-4524, June 2002).
- Celebrating a Century of Flight (NASA SP-2002-09-511-HQ).

#### **Other Publications**

• Aeronautics and Space Report of the President, 2000 Activities (NASA annual report, October 2002).

# **NASA History Office Books from Other Publishers**

- Heppenheimer, T.A. *Space Shuttle Decision, 1965-1972 (History of the Space Shuttle, Volume 1)* (Smithsonian Institution Press, April 2002. Reprint of NASA SP-4221, 1999).
- Heppenheimer, T.A. *Development of the Space Shuttle, 1972-1981 (History of the Space Shuttle, Volume 2)* (Smithsonian Institution Press, April 2002.
- McCurdy, Howard E. Faster, Better, Cheaper: Low-Cost Innovation in the U.S. Space Program (Johns Hopkins University Press, 2002).
- Reed, Dale R. and Darlene Lister. *Wingless Flight: The Lifting Body Story*. (University Press of Kentucky, 2002).[reprint]
- Space Policy in the 21st Century edited by W. Henry Lambright. (Baltimore: Johns Hopkins New Series in NASA History, 2002).
- To Reach The High Frontier: A History of U.S. Launch Vehicles edited by Roger D. Launius and Dennis R. Jenkins (Lexington: The University Press of Kentucky, 2002).

# **Historical Publications Nearing Publication:**

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.

Schultz, James. Crafting Flight: Early Aircraft Pioneers and the Story of the Contributions of the Men and Women of NASA Langley Research Center (SP-2003-4316, 2003): This is an updating and reprinting of his work prepared in the 1980s (Winds of Change) and is an illustrated Center history. It will be fully corrected and peer reviewed prior to publication. It is should be available in spring 2003.

Hansen, James R. General Editor. *The Wind and Beyond: Journey into the History of Aerodynamics in America; Volume I: The Ascent of the Airplane* (NASA SP-2003-4409): This six-volume work will be a companion relating to aeronautics to the highly-regarded *Exploring the Unknown* series of documentary volumes on space flight. The contract for this effort has been awarded to Auburn University, which has a team under the leadership of Dr. Hansen researching the subject. This first volume should appear by early summer 2003.

Dawson, Virginia P., and Mark D. Bowles. *Centaur: The Biography of a Knowledge Rocket* (NASA SP-2003-4230, 2003): This project history on the Centaur will use it as a case study in how technological knowledge has been advanced, over the history of NASA, discussing the nature and development of technological R&D, and analyzing the role of technology transfer in the aerospace arena. This book, which may come with a DVD, is scheduled for release in early

summer 2003.

Chambers, Joseph R. Concept to Reality: Contributions of the Langley Research Center to the U.S. Civil Aircraft of the 1990s (NASA SP-2002-4529, 2002): This work was prepared at the Langley Research Center. This monograph should be available in summer 2003.

# **NASA History in the News**

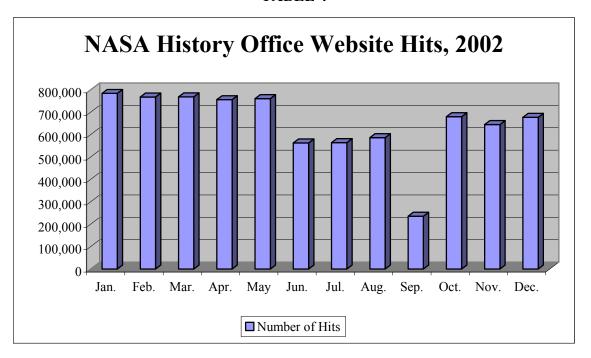
Challenge To Apollo Receives AAS EMME Award:

The American Astronautical Society (AAS) named Asif A. Siddiqi as the recipient of the 2000 Emme Award for Astronautical Literature for his book *Challenge to Apollo: The Soviet Union and the Space Race, 1945-1974*. Named in honor of the first NASA Historian, Eugene M. Emme, the Emme award was created in 1982 to annually recognize an outstanding book serving public understanding about the impact of astronautics on society and its potential for the future. Our congratulations to Asif Siddiqi for this well-deserved award.

# NASA History Web Site:

For the last several years the NASA History Office has been working to place as much information as possible on-line in an easy to navigate World Wide Web site that will be useful to all. During 2002, the NASA History Office substantially increased its electronic resources, especially on the World Wide Web. Our main page has continued to be <a href="http://history.nasa.gov">http://history.nasa.gov</a> and the generic history office e-mail account for public information requests is <a href="histinfo@hq.nasa.gov">histinfo@hq.nasa.gov</a>. In addition to being one of the largest NASA Web sites, the NASA History site continues to be one of the most popular NASA Headquarters sites, as seen from Table 4, which shows the number of hits to the History Website per month.

**TABLE 4** 



Throughout the year there were **7,795,524 hits** on the NASA History Web site. During the last year, we added over thirty significant, new Web pages or sites. While some of these were put together and/or hosted at field centers or other NASA offices, outside volunteers take the credit for most of these new sites. These volunteers have scanned and formatted for the Web a number of book-length publications that are typically out of print and thus not easily found in hard copy elsewhere. The volunteers live and work literally around the world, from the U.S. to Switzerland to Australia. NASA History interns and the NASA Headquarters printing and design office also made significant contributions to our Web presence.

Volunteer Chris Gamble assisted with a great number of projects, with some help from the NASA text processing office, which entailed scanning and formatting thousands of pages of text and complex graphics. He has formatted a number of long and complicated books and other publications for our Web site, including such items as the multi-volume "Rogers Commission Report."

In addition, volunteer Eric Jones continued his stellar work editing the Apollo Lunar Surface Journal (<a href="http://history.nasa.gov/alsj/">http://history.nasa.gov/alsj/</a>) with the help of his own dedicated team of international volunteers. Eric usually sends a number of updated electronic files to be uploaded to this Web site each month.

In a similar vein, voluntees David Woods and Frank O'Brien edit the highly informative Apollo 15 Flight Journal (<a href="http://history.nasa.gov/ap15fj/index.htm">http://history.nasa.gov/ap15fj/index.htm</a>). The new companion site on the flight of Apollo 8 has been launched and is located at (<a href="http://history.nasa.gov/ap08fj/index.htm">http://history.nasa.gov/ap08fj/index.htm</a>).

The NASA History Office is also pleased to have a special new on-line resource for historical photos. GReat Images in NASA (GRIN) is now on-line at <a href="http://grin.hq.nasa.gov">http://grin.hq.nasa.gov</a> and features over 1,000 historically significant black and white and color images in four resolutions ranging from thumbnail to a high resolution that is suitable for publishing. Public users may

download any of these images without charge. While other somewhat similar photo databases are on-line, the specific format of this one is rather unique and has been well received. We hope to add many more images to GRIN in the future.

More details about the NASA History Office's new Web sites are below:

- From Engineering Science to Big Science: the NACA and NASA Collier Trophy Research Project Winners (SP-4219, 1998), edited by Pamela E. Mack, is now available on-line at <a href="http://history.nasa.gov/SP-4219/Cover4219.htm">http://history.nasa.gov/SP-4219/Cover4219.htm</a> on the Web. This book is also for sale in hard copy from the Government Printing Office. A very special thanks to volunteer John Henry for scanning and formatting the text and images of this excellent set of historical case studies for the Web.
- NASA History Databooks, volumes V and VI. Covering the time period1979-1988, these books are valuable reference works. They are now available in text-searchable pdf format from <a href="http://history.nasa.gov/SP-4012/cover.html">http://history.nasa.gov/SP-4012/cover.html</a> on the Web. Thanks to Joel Vendette of the Printing and Design Office for setting these files up for the Web. We hope to add volumes I through IV to the Web eventually. Hard copies of these databooks are also for sale from the Government Printing Office.
- Stages to Saturn: A Technological History of the Apollo/SaturnLaunch Vehicle (NASA SP-4206) by Roger E. Bilstein. This landmark book is now available on-line, available at http://history.nasa.gov/SP-4206/sp4206.htm. Special thanks to Chris Gamble for formatting the text and images of this book for the Web.
- On the Moon with Apollo 16: A Guidebook to the Descartes Region (NASA EP-95, 1972) by Gene Simmons. It is available at <a href="http://history.nasa.gov/EP-95/ep95.htm">http://history.nasa.gov/EP-95/ep95.htm</a> on the Web. Another useful and interesting volume on human lunar exploration. Special thanks to volunteer Chris Gamble for formatting this book for the Web.
- Pioneer Odyssey (NASA SP-349/396, revised edition, 1977) by Richard Fimmel, William Swindell, and Eric Burgess is also available at <a href="http://history.nasa.gov/SP-349/sp349.htm">http://history.nasa.gov/SP-349/sp349.htm</a> on the Web. This richly illustrated book covers some of the important discoveries made by the Pioneer 10 and 11 spacecraft. Special thanks to volunteer Chris Gamble for formatting this book for the Web.
- A complete set of annual reports from the Aerospace Safety Advisory Panel (ASAP) from the time of its formation in 1971 to the present. In addition to these annual reports, we have also placed on-line several related historical documents:
  - o Public Law establishing ASAP (August 21, 1967)
  - o The NASA Management Instruction (NMI) establishing ASAP (December 7, 1967)
  - o Implementation Recommendations for the ASAP (December 15, 1967)
  - o ASAP Lessons Learned Regarding Spacecraft Design (November 1986)
  - o Latest Charter (May 1, 2001)

- O Cumulative Membership List (through April 1, 2002) This material is available at <a href="http://history.nasa.gov/asap/asap.html">http://history.nasa.gov/asap/asap.html</a> on the Web. Special thanks to David Lengyel and Susan Burch from Code Q, as well as John Hargenrader, for helping get all this information organized and on-line.
- We are pleased to announce the availability of two new books on the NASA History Web site. *Managing NASA in the Apollo Era* (NASA SP-4102, 1982) by Arnold S. Levine is now available at http://history.nasa.gov/SP-4102/sp4102.htm and *The Star Splitters: The High Energy Astronomy Observatories* (SP-466, 1984) by Wallace H. Tucker is available at http://history.nasa.gov/SP-466/sp466.htm on the Web. Special thanks to Chris Gamble for formatting the full text and images of both books for the Web.
- The Space Shuttle at Work (NASA SP-432/EP-156, 1979) by Howard Allaway is on-line at http://history.nasa.gov/SP-432/sp432.htm and National Space Transportation System: Overview (NASA, September 1988) is on-line at http://history.nasa.gov/shuttleoverview1988/overview88.htm on the Web. These two short publications provide some excellent basic information on the Shuttle.
- *Magellan: The Unveiling of Venus* (JPL-400-345, March 1989) is on-line at http://history.nasa.gov/JPL-400-345/magellan.htm on the Web. This brief but richly illustrated booklet covers an important planetary science topic.
- *NASA Historical Databook, volume III* (SP-4012) is now on-line at http://history.nasa.gov/SP-4012/vol3/sp4012v3.htm on the Web. Covering the time period 1969-1978, this book is a valuable reference works.
- The Star Splitters: The High Energy Astronomy Observatories (SP-466, 1984) by Wallace H. Tucker. Our special thanks go to Chris Gamble, who formatted the text and scanned all the photos for this attractive Web version. This book is accessible at http://history.nasa.gov/SP-466/sp466.htm on the Web.
- The 40th Anniversary of the Mercury-Atlas 6 (Friendship 7) mission. This historic mission on 20 February 1962 made John H. Glenn, Jr., the first American to orbit the Earth. Check out biographies, photos, links to many other relevant sites, and more. The special anniversary site is now available from http://history.nasa.gov/friendship7/index.html on the Web.
- *Planetary Geology in the 1980s* (SP-467, 1985) by Joseph Veverka is now available at http://history.nasa.gov/SP-467/sp467.htm on the Web. A very solid narrative with some images, this work is a useful glimpse into the science of planetary geology.
- The Space Shuttle Decision: NASA's Search for a Reusable Space Vehicle (NASA SP-4221, 1999) by T.A. Heppenheimer is now on-line. It is an excellent historical account of the political decision to build the Shuttle. The entire work is available at http://history.nasa.gov/SP-4221/sp4221.htm on the Web. This book is also for sale in hardcover from the Government Printing Office (see http://history.nasa.gov/gpo/order.html on the Web).
- *The Space Shuttle* (NASA SP-407, 1976) is also now on-line. It provides some general information about the Space Shuttle's capabilities and may be found at http://history.nasa.gov/SP-407/sp407.htm on the Web.

- Guide to Magellan Image Interpretation (NASA JPL-93-24) by John Ford, Jeffrey Plaut, et. al., is available at http://history.nasa.gov/JPL-93-24/jpl\_93-24.htm on the Web. Thanks to volunteer Chris Gamble for scanning and formatting these three publications for the Web.
- Engines and Innovation: Lewis Laboratory and American Propulsion Technology (SP-4306, 1991) by Virginia P. Dawson is now on-line at <a href="http://history.nasa.gov/SP-4306/sp4306.htm">http://history.nasa.gov/SP-4306/sp4306.htm</a> on the Web. While this book is approximately ten years old, it is an excellent history of what is now known as NASA Glenn Research Center at Lewis Field and focuses on propulsion work, a mainstay of this center's mission. The full text and images of this publication are available on the on-line version. Special thanks to volunteer Chris Gamble for formatting this book for the Web.
- Deep Space Chronicle: a Chronology of Deep Space and Planetary Probes, 1958-2000 (Monograph in Aerospace History #24) by Asif A. Siddiqi is now on-line at http://history.nasa.gov/monograph24/Table%20of%20Contents.pdf on the Web. This monograph is an excellent reference to the various deep space spacecraft that have been launched by the U.S., Soviet Union/Russia, and other countries since the beginning of the space age. The on-line version is set up with fully text searchable pdf files. Thanks to Cindy Min of the Headquarters printing and design office for setting up these pdf files.
- Uplink-Downlink: A History of the Deep Space Network 1957-1997 (Washington, D.C.: NASA SP-2001-4227, 2002) by Douglas J. Mudgway is now available at <a href="http://history.nasa.gov/SP-4227/Uplink-Downlink.pdf">http://history.nasa.gov/SP-4227/Uplink-Downlink.pdf</a> in fully text-searchable pdf files on the Web. This book is an excellent history of the Deep Space Network (DSN), the critical component necessary for tracking, controlling, and transmitting data to and from spacecraft. Now over forty years old, the remarkably reliable DSN has quietly but essentially functioned as a literal guide for a variety of evolving, unique planetary spacecraft. Thanks to Cindy Min for setting up these pdf files. Hard copies of this book are also available for sale from the Government Printing Office.
- Model Research (SP-4103, 1985) by Alex Roland is now available at
   <a href="http://history.nasa.gov/SP-4103/sp4103.htm">http://history.nasa.gov/SP-4103/sp4103.htm</a> on the Web. This book, in two volumes, is a
   history of the National Advisory Committee for Aeronautics (NACA). Though it is nearly
   twenty years old, it is an exciting and impressive look into the organization that, during its
   time, set the standard for aeronautical research. Thanks to volunteer Chris Gamble for
   formatting the book for the Web.
- The Long Duration Exposure Facility (LDEF): Mission 1 Experiments (SP-473, 1984) ed. by Lenwood G. Clark, William H. Kinar, et. al., is now available at <a href="http://history.nasa.gov/SP-473/sp473.htm">http://history.nasa.gov/SP-473/sp473.htm</a> on the Web. This book highlights one of the many NASA experiments deployed by the Space Shuttle in the 1980s. Special thanks toChris Gamble for formatting this book for the Web.
- Atlas of Mercury (SP-423, 1978) by Merton E. Davies, Stephen E.Dwornik, et. al., is now available at <a href="http://history.nasa.gov/SP-423/sp423.htm">http://history.nasa.gov/SP-423/sp423.htm</a> on the Web. This book truly is an atlas, showcasing pictures taken by the Mariner 10 mission of the planet Mercury. Thanks to Chris Gamble for formatting this book for the Web.
- The *Apollo 13 Review Board* (a.k.a. Cortright Commission) report is now available from http://history.nasa.gov/ap13rb/ap13index.htm on the Web in fully text-searchable pdf files. This is the report issued after the Apollo 13 accident which prevented the mission from

- landing on the Moon. Thanks to Colin Fries and Sivram Prasad of the History Office for their help in scanning and formatting this report for the Web.
- NASA Office of Defense Affairs: The First Five Years (HHR-32, 1970) by W. Fred Boone is on-line at <a href="http://history.nasa.gov/HHR-32/HHR-32.htm">http://history.nasa.gov/HHR-32/HHR-32.htm</a> on the Web. Admiral Boone led the Office of Defense Affairs from December 1, 1962 through January 1, 1968, a formative early period in space history when cooperation between NASA, a civilian agency, and the military was especially important. This significant narrative charts these early efforts in coordination. Special thanks to Chris Gamble for scanning and formatting this book for the Web.
- Evolution of the Solar System (NASA SP-345, 1976), by Hannes Alfven and Gustaf Arrhenius, is on-line at <a href="http://history.nasa.gov/SP-345/sp345.htm">http://history.nasa.gov/SP-345/sp345.htm</a> on the Web. This is an excellent volume on planetary science. While it includes some scientific equations, it also includes many diagrams and images and the authors strove to make the material understandable to the educated lay reader. Special thanks to Chris Gamble for scanning and formatting this book for the Web.
- The Saturn Illustrated Chronology (MHR-5, Marshall Space Flight Center, fifth edition, 1971) is now available at <a href="http://history.nasa.gov/MHR-5/cover.htm">http://history.nasa.gov/MHR-5/cover.htm</a> on the Web. This book covers the first eleven years of the Saturn program, from April 1957 through April 1968. Abounding with pictures about the Saturn program, it is a magnificent pictorial chronology of the program that has launched so many NASA spacecraft over the years. Special thanks to Malcolm Munro for all of his hard work in scanning and formatting this beautiful chronology for the Web.
- Spacelab: An International Short-Stay Orbiting Laboratory (NASA EP-165), by Walter Froehlich, is now available online at <a href="http://history.nasa.gov/EP-165/ep165.htm">http://history.nasa.gov/EP-165/ep165.htm</a> in html format. The full text and rich images from this informative book about Europe's first major undertaking in human spaceflight are available thanks to volunteer Chris Gamble's expert help.
- *NASA Sounding Rockets, 1958-1968: A Historical Summary* (NASA SP-4401, 1971), by William R. Corliss. The full text and images from this book describing our initial forays into the upper atmosphere at the dawn of the space age is now available online at <a href="http://history.nasa.gov/SP-4401/sp4401.htm">http://history.nasa.gov/SP-4401/sp4401.htm</a> thanks to volunteer Chris Gamble's help.
- The First Century of Flight: NACA/NASA Contributions to Aeronautics is now on-line at <a href="http://history.nasa.gov/centtimeline/index.html">http://history.nasa.gov/centtimeline/index.html</a> on the Web. This is an electronic version of an attractive and informative timeline poster that is also available in hard copy format. Special thanks to Tony Springer, who supplied the content; Ray Brown, who created the hard copy version; and Douglas Ortiz, who created the Web version.
- A Historic Meeting at the White House on Human Spaceflight involving President Kennedy and NASA Administrator James Webb on November 20, 1962. This meeting, with a number of other high-level participants, was prompted in part by press reports that NASA was not devoting enough attention to the Apollo lunar landing program and the possible requirement for an additional supplemental appropriation of over \$400 million to NASA's current budget. This meeting is a window into the role that human spaceflight played in international and domestic politics in the early 1960s. This site is at <a href="http://history.nasa.gov/JFK-Webbconv/index.html">http://history.nasa.gov/JFK-Webbconv/index.html</a> on the Web and includes the full conversation in streaming audio

- format, the written transcript, and other supporting materials. Special thanks to Dwayne A. Day, Glen Swanson, Douglas Ortiz, and Sivram Prasad for their help setting up this site.
- Science in Orbit: The Shuttle & Spacelab Experience: 1981-1986 (NASA NP-119, Marshall Space Flight Center, 1988) is now on-line at http://history.nasa.gov/NP-119/NP-119.htm on the Web. Provided by the European Space Agency, the Spacelab entails both an enclosed laboratory and an exposed platform for scientific experiments in space. Thanks to volunteer Chris Gamble for scanning and formatting this informative guide to this unique facility.
- Origins of NASA Names (NASA SP-4402, 1976) by Helen T. Wells, Susan H. Whiteley, and Carrie Karegeannes is now on-line at <a href="http://history.nasa.gov/SP-4402/SP-4402.htm">http://history.nasa.gov/SP-4402/SP-4402.htm</a> on the Web. Since this book was published over 25 years ago and has not been updated for republication, much of the material is dated. For example, several NASA Field Centers have had name changes in the intervening years. Nevertheless, we hope that this on-line version provides useful reference information for researchers. It is divided into chapters on launch vehicles, satellites, space probes, human space flight, sounding rockets, and NASA facilities with some added appendices. It is a unique etymological resource. Special thanks to volunteer Chris Gamble for his help scanning and formatting this book for the Web.

# Professional Activities:

Members of the History Office staff were involved at several levels in professional activities germane to aerospace history during 2002. The first area was as co-organizers of various professional conferences or symposia. Second, Dr. Roger D. Launius and Stephen J. Garber each participated in conferences and symposia during the year, giving papers and participating in panels.

Jane Odom attended the Mid-Atlantic Regional Archives Conference meeting in Towson, MD on April 19, 2002 where she attended sessions on team management, preservation, and oral history.

Several staff members also published historical books, articles, and book reviews during the year. Here is a list of NASA History Office public presentations at conferences and other gatherings:

Presentation	Presenter
1/14 – "We can lick gravity, but sometimes the paperwork is overwhelming': NASA, Oral History, and the Contemporary Past," AIAA-2002-1111, presentation in "Space History (HIS-2)" session at 40th AIAA Aerospace Sciences Meeting and Exhibit, Reno, NV	Roger Launius
1/14 – "Evolution of Flight" committee meeting, 40th AIAA Aerospace Sciences Meeting and Exhibit, Reno, NV	Roger Launius
1/15 – History Technical Committee meeting at 40th AIAA Aerospace Sciences Meeting and Exhibit, Reno, NV	Roger Launius

1/15 – "NACA/NASA and the National Unitary Wind Tunnel Plan, 1945-1965," presentation in "History of the Unitary Plan Act Wind Tunnels (GT-4)" session at 40th AIAA Aerospace Sciences	Roger Launius
Meeting and Exhibit, Reno, NV  2/7 – Briefing on "Evolving Public Perceptions of NASA," Code S	Roger Launius
3/16-19 – 15 <sup>th</sup> annual seminar in "Mutual Concerns of Air and Space Museums," Wyndham City Center, Washington, DC	Roger Launius Steve Garber
3/20-21 – 40 <sup>th</sup> Annual Goddard Memorial Symposium, American Astronautical Society, Greenbelt Marriott, Greenbelt, MD	Roger Launius
4/11 – Society for History in the Federal Government annual meeting, Library of Congress, Jefferson Building, Washington, DC	Roger Launius Steve Garber
4/11-14 – Joint Organization of American Historians/National Council on Public History annual meeting, Renaissance Hotel, Washington, DC	Roger Launius
4/14 – "'We can lick gravity, but sometimes the paperwork is overwhelming': NASA, Oral History, and the Contemporary Past," presentation in "Oral History in the Federal Government" session at Joint Organization of American Historians/National Council on Public History annual meeting, Renaissance Hotel, Washington, DC	Roger Launius
4/14 – On camera interview with History Channel, "Modern Marvels" series, Mittelwerk	Roger Launius
4/22 – "Space Flight in Art and Literature," presentation at AIAA Global Conference, Hyatt Crystal City, VA	Roger Launius
4/22-24 – Global Air & Space 2002 International Business Forum and Exhibition, Arlington, VA	Roger Launius
5/21-22 – AIAA X-Vehicles Conference, Santa Clara, CA. Roger Launius participated in this symposium, moderating a panel on the history of X-vehicles in which USAF historian Richard Hallion, DFRC engineer Dale Reed, and Air Force Flight Test Center engineer Johnny Armstrong discussed aspects of the X-15 and lifting body programs.	Roger Launius
5/22-23 – NASA Turning Goals into Reality (TGIR) Conference, Santa Clara, CA	Roger Launius

6/14 – Centennial of Flight Commission telecon, NASA HQ.	Roger Launius
6/19 – Centennial of Flight Commission Meeting, FAA Building.	Roger Launius
6/25 – Stennis Space Center History Project, interview with Roy Estess.	Roger Launius

# Personnel Issues:

## **Goodbye to Roger Launius**

Dr. Roger D. Launius left the NASA History Office at the end of July, after almost twelve years as the NASA Chief Historian. An incredibly productive historian, Roger built upon a strong tradition of NASA History to make it one of the most well-respected Federal history programs. He has moved on to the National Air and Space Museum and has continued to be extremely helpful on an informal, advisory basis. Stephen Garber has been named the Acting Head of the History Office until a permanent successor is appointed.

# **Thanks to NASA History Office Interns**

During 2002, the NASA History Office was fortunate to have several excellent interns. In the summer, Jennifer Davis rejoined the office after spending fall 2001 here and made many improvements and additions to the GRIN on-line photo database. Kathy Keltner, a Ph.D. student from Ohio University, did some specialized, cutting-edge statistical research on popular perceptions of NASA during the Apollo era. Charles Brooks, an undergraduate from Alabama State University, was the first student intern that the NASA History Office had hosted from the National Equal Opportunity in Higher Education (NAFEO) program and helped out with many information requests, as well as researching and writing biographical sketches for an upcoming NASA History Series publication.

Jennifer Troxell, a master's student in political science at American University, also began work in our office during the summer. She has handled special projects such as doing research on telemedicine and preparing this annual report.

In the fall, two local undergraduate interns began work. Amber Pezan is a senior at Georgetown University and Sivram Prasad is a sophomore at American University. They have been of great help with information requests, review of manuscripts, archival preservation, and a variety of other tasks.

-Stephen Garber Acting Chief, NASA History Office February 24, 2003