

# **NASA HISTORY: CALENDAR YEAR 2009 IN REVIEW**

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### **I. Introduction**

Throughout the year, the NASA History Division continued to focus on its core goals of conducting a high-quality, academically sound program of research pertinent to NASA leadership's concerns; effectively acquiring, preserving and making available documentary information in the NASA Historical Reference Collection; and disseminating historical information to the widest practicable audience.

Among the Division's highlights for 2009 were a symposium on the 40<sup>th</sup> anniversary of the Apollo Moon landing entitled "Apollo: History and Legacy" held on the 16<sup>th</sup> of July 2009 at the NASA HQ Auditorium and the publication of several books in aerospace history ranging from topics as diverse as unmanned aircraft systems to heliospheric science to the Soviet space program of the 1960s. The discussion at the 40<sup>th</sup> anniversary symposium was moderated by NASA Chief Historian Steven J. Dick and speakers and panelists included Associate Administrator Chris Scolese; the Charles A. Lindbergh chair in aerospace history at the National Air and Space Museum (NASM), Dr. John Logsdon; the Senior Curator in Space History at NASM, Dr. Roger Launius; the chair of the Space History Division, NASM, Dr. Michael Neufeld; the Deputy Director of the Constellation Systems Division, Cristina Guidi; and author Craig Nelson.

## II. NASA Historical Publication

An important element of the NASA History Program continued with the preparation of solid, well-researched works on the history of the U.S. civil space program.

### *New Publications*

*Astronautics and Aeronautics: A Chronology, 1996-2000.* (NASA SP-2009-4030) by Marieke Lewis and Ryan Swanson. A chronological compilation of narrative summaries of news reports and government documents highlighting significant events and developments in the United States and foreign aeronautics and astronautics. This work is a day by day recounting of major activities from 1996-2000.

*Research in NASA History. A Guide to the NASA History Program.* Third Edition. Monograph in Aerospace History, No. 43, 2009. (NASA SP-2009-4543) compiled by Steven J. Dick, Stephen J. Garber, and Jane H. Odom. This third edition updates information on the NASA history resources available in the Washington, DC, area and at the NASA centers.

*Rockets and People: Hot Days of the Cold War, Volume III.* (NASA SP-2009-4110) by Boris Chertok. In volume three, Chertok recollects the great successes and continues the fascinating narrative of the Soviet space program in the 1960s, arguably the peak of the effort. He devotes a significant portion of the volume to the early years of Soviet human spaceflight from 1961 to 1967.

*Nose Up: High Angle-of-Attack and Thrust Vectoring Research at NASA Dryden 1979-2001.* Monograph in Aerospace History, No. 34, 2009. (NASA SP-2009-4534) by Lane Wallace and Christian Gelzer. An analysis of the research, development and testing undertaken at Dryden pertaining to aircraft lift and vertical takeoff.

*NASA Historical Data Book Volume VII: NASA Launch Systems, Space Transportation, Human Spaceflight, and Space Science 1989-1998.* (NASA SP-2009-4012) by Judy A. Rumerman. A fundamental reference tool, this new work presents information, much of it statistical, documenting the development of critical areas of NASA responsibility for the period between 1989 and 1998.

*Ikhana: Unmanned Aircraft System Western States Fire Missions.* Monograph in Aerospace History, No. 44, 2009. (NASA SP-2009-4544) by Peter W. Merlin. A unique look at the technological development and missions of the Ikhana unmanned aircraft.

*The Sun, the Earth, and Near-Earth Space: A Guide to the Sun-Earth System.* (NASA NP-2009-1-066-GSFC) by John A. Eddy. This is an accessible primer for students and other interested lay readers on the subject of heliospheric science. This publication is not part of the formal NASA History Series.

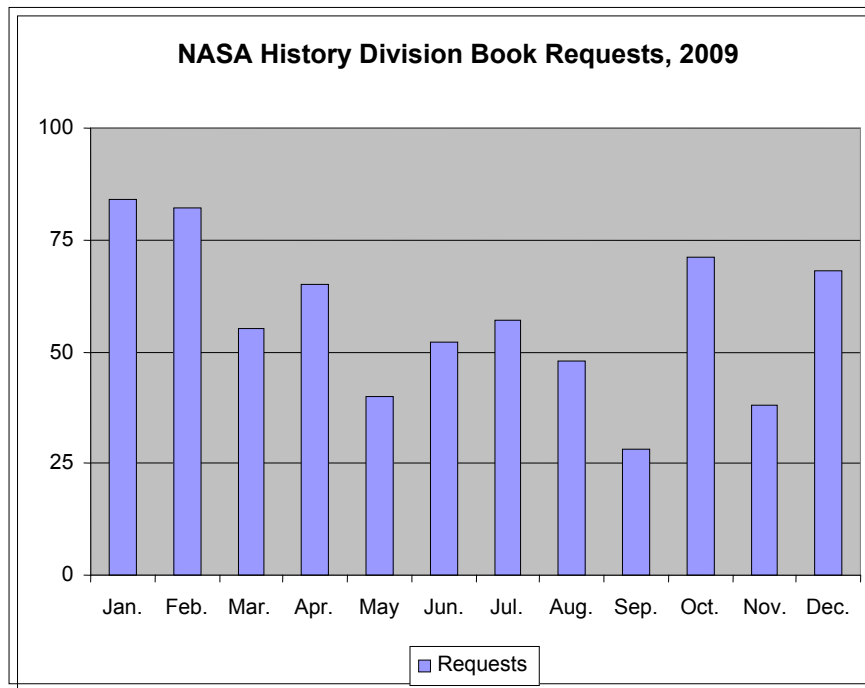
### ***Dover Agreement***

As part of an effort to give NASA history the widest possible dissemination to the public, the History Division signed an agreement with Dover Publications to reprint selected out of print books in the NASA History Series. The first three books reprinted are Constance Green and Milton Lomask, *Vanguard: A History*, Courtney Brooks, James Grimwood and Loyd S. Swenson, Jr., *Chariots for Apollo: A History of Manned Lunar Spacecraft*, and Edward Ezell and Linda Ezell, *On Mars: Exploration of the Red Planet, 1958-1978*.

### ***Book Requests***

The History Division tracks the number of individuals who visit our office with book requests. In 2009 we received 875 requests; the monthly totals are reported in Table 1 below.

**TABLE 1**

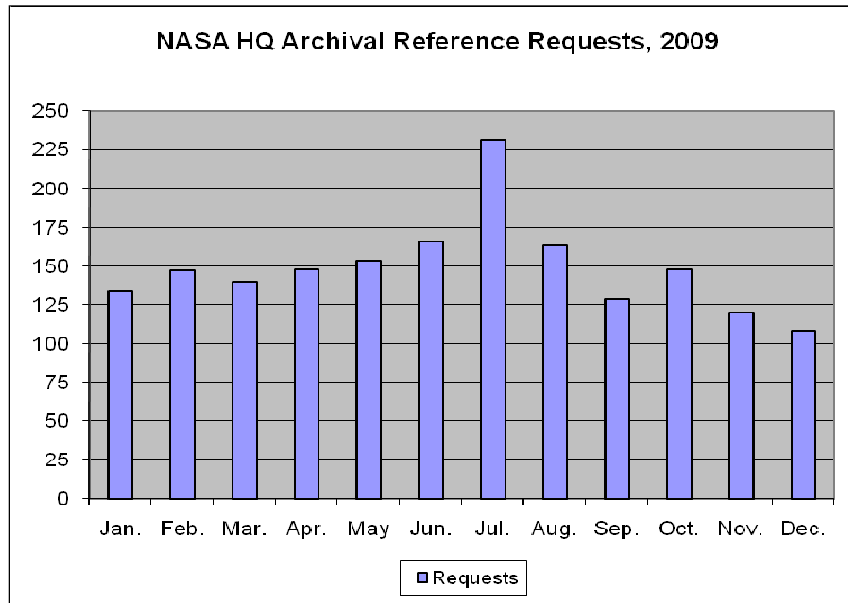


## **III. Historical Reference Collection**

### **Reference Requests**

During calendar year 2009, NASA History Division personnel answered a total of 1,786 research requests from governmental, educational, and private organizations on a wide variety of topics. History Division personnel also provided research services to 168 on-site researchers using the Historical Reference Collection. Table 2 displays the total number of information requests NASA History Division archival personnel handled per month during calendar year 2009.

**TABLE 2**



The advance of e-mail technology has resulted in significant annual increases in the number of queries the History Division receives from across the world. Such queries represent a growing workload for NASA History Division personnel. 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 Division has been able to reduce the amount of time given to each information request through greater efficiency, the annual workload for information requests requires more than three full-time equivalent personnel. Additionally, we rely 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 NASA’s obligations to the public.

### **Visitors**

Although most reference requests arrive by e-mail or telephone, the History Division continues to host those who come in person to conduct research. In 2009, the History Division hosted many visitors from within the Headquarters building, of course, as well as from the following Field Centers: Johnson Space Center, Jet Propulsion Laboratory, and Dryden Flight Research Center.

Local visitors to the History Division included researchers from George Washington University, George Mason University, University of Maryland, National Air and Space Museum, Library of Congress, National Research Council, and Niebur Consulting.

Out-of-town researchers hailed from MIT, Florida Atlantic University, Walden University (an online institution), Colby College (ME), Rutgers University, Mississippi State University, University of Virginia, LeMoyne College (NY), Princeton University, University of Central

Florida, Georgia Tech, Syracuse University, Oklahoma Historical Society, the Stafford Museum (OK), and the Corp of Engineers (Baltimore, MD).

International visitors included a visiting scholar at George Washington University (Japan) and researchers from Jacobs University (Germany), University of Wales (UK), and Queensland University of Technology (Australia).

## **Acquisitions**

In 2009 the NASA History Division received approximately forty-five cubic feet of material from various offices at Headquarters and from our contract historians and retirees. A small collection came from a Center library collection. Below are highlights of the donations:

- Twelve cubic feet of source files for the most recent NASA Historical Data Books, Vol. 7 & 8, from the author.
- Eight cubic feet from the Boston Museum of Science, former assistant director of the planetarium, Walter Webb. Included subject files on Mercury through Space Station, ca. 1962-90, with dozens of topics ranging from human spaceflight to space science.
- Seven cubic feet of material, 1963-77, from former HQ employee Charles King, donated by a family member. King was a NASA propulsion, systems, and reliability engineer in the Office of Manned Space Flight.
- Five cubic feet of source files on Centennial of Flight activities, from a contributor to the Centennial web site.
- Five cubic feet of NASA SPs being weeded from the KSC Library collection.
- Two cubic feet of Shuttle Student Involvement Program Files, 1975-1992, donated by the former program manager.
- Four cubic feet of contract information, deliverables, and source files, 1985-2001, for 4 unfinished and 3 finished book projects, from the History Division administrative files. Topics included Galileo, Deep Space Network, European Relations in Space, Space Station, Exploring the Unknown, Voyager Grand Tour, and Collier Trophy.
- One cubic foot of International Space Station binders, 1992-2001, containing fact sheets, reports, speeches, and correspondence re. ISS funding and operations. Also included material on Crew Return Vehicle (CRV), Shuttle/Mir program, and Mir space station. Donated by a former ISS program staffer.
- One-half cubic foot of NASA Advisory Council, Task Force on International Relations files, 1986-87, from the former Executive Director of the task force.

- Several speeches given by an advisor to the Administrator; several commemorative items from a Soyuz landing; six Administrator Goldin trip booklets from 1994; and a handful of material on STS-125 and the follow-up trip by the Administrator to Capitol Hill in July; and several dozen CDs, DVDs floppies and zip drives containing Senior Management Council and other presentations. Donated by the Administrator's Office.
- Three DVDs containing video slide shows of still images taken by former NACA/NASA photographer Bill Taub. Images depict NACA wind tunnel testing, the Mercury program, astronaut visits to the White House, and the Apollo 11 post-flight world tour.
- Three oral history interviews conducted by the author of the forthcoming book on NASA's international relations history.
- Nineteen oral history interviews conducted by the author of the forthcoming book on the Discovery Program.
- Handful of material on the Triana spacecraft, 1998-99, from a former GSFC Employee.
- Handful of material on the lunar lenticular reentry vehicle design from an engineer who worked on that project.
- A handful of photos from two different HQ award ceremonies in 1989 & 1993, from an HQ retiree.

### **Processing Activities**

The History Division staff processed (i.e., appraised, arranged, described, and preserved) or partially processed a number of collections in 2009. Other materials were placed in the backlog for processing at a later date. History Division staff processed a total of fifty-eight cubic feet, retaining thirty-three cubic feet. Collections processed include:

- History Division History files documenting the early operations of the office.
- Unpublished historical reports, monographs, and notes within the NASA History book series.
- Space Flight Participant Program files, 1966-2004, including information on the teacher, journalist, and educator-astronaut in space programs.
- Charles King files on propulsion, systems, and reliability, 1963-75.
- Organized and moved hundreds of PDFs of NASA HQ news releases, 1962-1974, from a DVD into our database. These have been posted to our public Historical Reference Collection website.
- Shuttle Student Involvement Program (SSIP) collection, 1975-92.

- ISS briefing books, 1992-2001.
- A collection of CDs on the Shuttle Avionics Integration Laboratory (SAIL).
- A small collection of Jesse Phillips' material, consisting mainly of engineering drawings and a self-directed oral history. Phillips was a Langley/MSC engineer from 1947-79.
- A collection of sensitive aeronautics and other materials, ca. 1946-2001. Most materials were deaccessioned and offered to other more appropriate repositories while several items were determined to no longer be restricted and were kept in the HRC.
- Former Deputy Administrator Shana Dale's presentations to attendees at Future Forums and CEO Days, 2007-2008.
- Triana satellite files.
- Space Station Freedom/ISS files.
- NAC Task Force on International Relations files.
- Photographs from Bill Taub, former NACA and NASA photographer.
- Dozens of oral histories were added to the collection and descriptive data was added to the database as well as the HQ oral history inventory  
<http://history.nasa.gov/oralhistory/ohcatalog.htm>

Processing projects begun in 2009 and still ongoing - -

- Administrators' Chron Files. Copies are being made of historically significant items from this collection to add to existing subject files in the Historical Reference Collection.
- Source files used for the *Exploring the Unknown* series.
- Walter Webb collection. Subject files of Webb who was former deputy director of the Boston Museum of Science.

In 2009 the review of the collections on loan from the Federal Records Center continued unabated. Official files under the control of the History Division were called back on loan and copies were made of historically significant correspondence. The boxes included:

Eighty-four cubic feet of Apollo source files, 1963-70, for an unpublished history; correspondence of T.L.K Smull who was a Langley engineer and then HQ Research, Grants and Contracts official, ca. 1940-74; correspondence of life sciences historian Mae Mills Link, and chronological correspondence files from Office of Manned Space Flight,

Office of Advanced Research and Technology, and Office of Space Science and Applications.

And all three contract archivists continued their preservation work this year in the files on NACA activities, earth sciences, aeronautics, satellites and probes, and sounding rockets. They are photocopying and refolding acidic and deteriorating material and updating database descriptions of folders when the need arises.

### **NASA History Division Online Catalog (Database)**

The current database, which began operating in May 1998, alleviates space constraints in the NASA History Division by storing discreet parts of the NASA Historical Reference Collection. Thanks to the database's full-text searching capability, historical materials are more readily available to History Division staff and others. Ongoing efforts to scan and electronically store historically significant documents from paper collections maintained in the NASA Historical Reference Collection accomplish several tasks, including:

- Preserving Agency records that are critical to understanding the Agency and its historical development.
- Allowing 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.
- Freeing up space within the NASA History Division to allow for further collection of historically significant Agency documents.
- Making historical materials available to a wide body of researchers from NASA, other government agencies, the academic community, and the public.

A number of collections were digitized in 2009, including sixteen cubic feet of Office of Safety and Mission Assurance chronological correspondence files, 1986-2001; hundreds of speeches of key NASA officials; and a one cubic foot collection of Spacewarn Bulletins, 1970-90, containing satellite data. Each collection was scanned from hardcopy, and the resulting PDFs were checked into the database. Additionally, hundreds of PDFs of NASA HQ press releases, 1962-74, were copied from a DVD by one of our contract archivists, reformatted slightly, and checked into the database.

During the year, History Division staff scanned and checked into the Document Management System (DMS) over 49,000 items and created nearly 1,700 cataloging records describing these documents. Approximately 588 records describing our non-scanned or hardcopy holdings were updated, and 159 new cataloging records were created as hardcopy materials were subsequently added to the reference collection. Through these efforts, NASA historical materials have become more widely available to staff and visitors.

Work on a digitization project begun in 2008 to publish select series from the internal database (DMS) to a public web site continued into 2009. At <https://mira.hq.nasa.gov/history/> researchers and interested individuals can find Press Releases, Press Kits, Mission Transcripts, and Speeches of former Administrators and Deputy Administrators. In 2009, the Chief Archivist began adding



the speeches of key officials and also additional press releases to this site. The press releases were made available immediately while the key officials' speeches will not be available until mid-2010 when a new web page describing them is finished. All materials are full text searchable in our database and on the public web site.

### **Other Activities**

The Chief Archivist, Jane Odom, continued to direct the work of the three archival contractors, make appraisal decisions, and acquire new materials for the HRC. Additionally, she served as the records management liaison for OER and FOIA liaison for the History Division. General training for all HQ records liaisons was offered in 2009, and then each liaison was tasked with identifying electronic applications in their respective organization and forwarding scheduling information for each application to the RM staff. Jane and the HQ records management staff reviewed the last dozen boxes (of hundreds) recalled from the Federal Records Center, looking for responsive documents in a FOIA appeal and subsequent lawsuit against the Agency. She worked with attorneys in the Office of General Counsel on several other FOIA appeals as well and assisted Security Office personnel in reviewing several dozen pages of classified material for possible declassification.

Jane drafted several pages which became the text for Researching NASA History, a button added in the banner on the home page at <http://history.nasa.gov>. Included under Researching is general information about the HRC, reference request procedures, and useful links to digital historical information and other offices/agencies that offer assistance to researchers.

Colin Fries assisted the Historian in maintaining the History Division web pages by updating pages (e.g. Mars exploration, History series book list) and fixing bad links. Colin attended outreach meetings with the History Division publications staff to assist in developing new strategies to inform the public of the availability of the SP-4000 History Series. In the fall the KSC Library began eliminating its SP collection and contacted HQ; Colin assisted the Chief Archivist by working with the library to acquire selected titles for the HRC book collection.

John Hargenrader updated the GRIN photo database, describing the Plum Brook reactor images and creating metadata for them. In November he began a project to verify the dates of selected images in GRIN that may be incorrect; this project is ongoing.

The archival staff assisted the Historian in proofreading a number of historical pieces: *NASA Historical Databook, Vol. 7*, a draft congressional resolution commemorating the 40th anniversary of Apollo 11, the introduction for the Dover reprint of SP-350, *Apollo Expeditions to the Moon*, and appendices of the *Aeronautics and Space Report of the President, Fiscal Year 2008 Activities*. Liz Suckow assisted the Historian in compiling the second quarter 2009 History newsletter.

## **IV. 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 Division 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. The NASA Historical Reference Collection holds over 2,000 oral histories on a widely divergent set of individuals. They include oral histories focusing on all the major projects of the agency, 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 interviews with over 600 people. While the majority of the oral histories available from NASA have been conducted during the course of writing specific historical works, the agency increasingly 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 undertaken, and some are still in progress, 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 University'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. Since 2002, the JSC oral history collection, as well as the interviews conducted by the JSC oral historians for Headquarters, has been made available on the web at [www.jsc.nasa.gov/history](http://www.jsc.nasa.gov/history). From links at this site, researchers can find oral history projects sponsored by the Headquarters History Division, including: Administrators, Herstory, Aviatrix Pioneers, Ballistic Missile Development Pioneers, and NACA employees. A copy of the transcripts as well as the audio file for each interview is deposited at the University of Houston Clear Lake.

### **NASA Earth System Science at 20 Oral History Project**

This NASA Oral History Project features recollections from those who significantly contributed to the launch and evolution of Earth System Science. These interviews were gathered as part of the 20th anniversary of the Earth System Science Program. June 2009-Present:

**Mark Abbott**, Biological Oceanographer; Dean and Professor in the College of Oceanic and Atmospheric Sciences at Oregon State University

**Dixon M. Butler**, Congressional Staffer, Atmospheric Physicist, Chief Scientist for GLOBE program

**Jack Kaye**, NASA Earth Science Division Director

**Michael Luther**, Deputy Associate Administrator for the Science Mission Directorate

**Shelby Tilford**, Former NASA Acting Assistant for Mission to Planet Earth

### 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. The oral histories document organizational culture, program management, decision-making rationales, and details of events that occurred during that person's tenure. The following oral histories were completed in 2009:

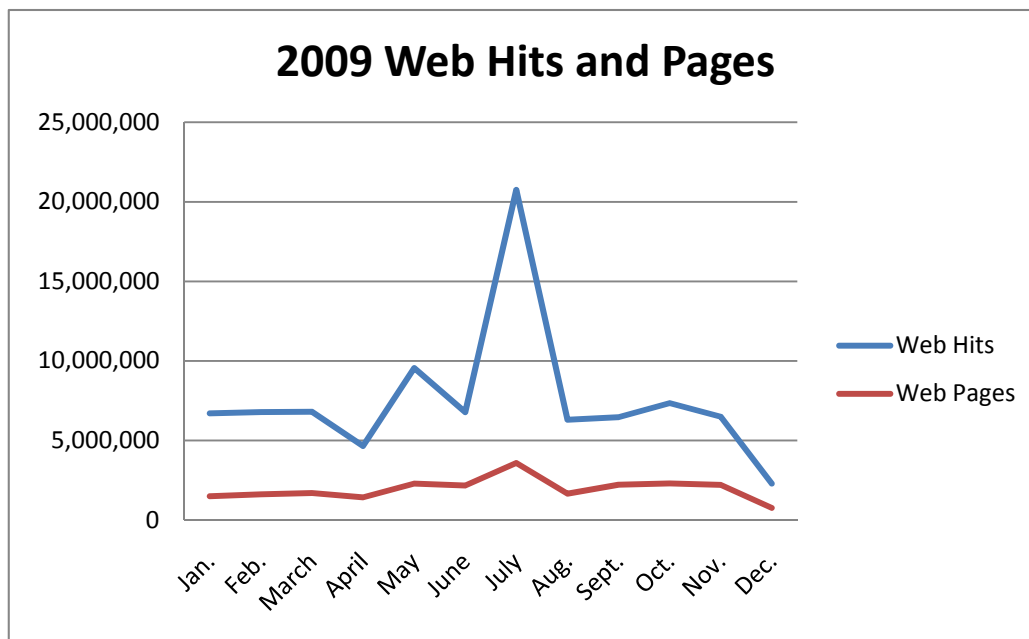
*Edward C. "Pete" Aldridge, Jr.*, Chair of the Commission on the Implementation of US Exploration Policy; served on the Augustine Panel in the Fall of 1990; as Under Secretary of the Air Force provided overall direction, guidance and supervision for USAF space programs, including work with NASA; crew member of STS 62-A (cancelled).

*Claire Parkinson* – Goddard Space Flight Center

### V. NASA History Web Site

For the last several years the NASA History Division has been working to place as much information as possible on the internet. During 2009, the NASA History Division substantially increased its electronic resources, especially on the World Wide Web. Our main page has continued to be <http://history.nasa.gov>. The generic History Division E-mail account for public information requests is [histinfo@hq.nasa.gov](mailto:histinfo@hq.nasa.gov). 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 3, which shows the number of hits to the History Website per month.

TABLE 3

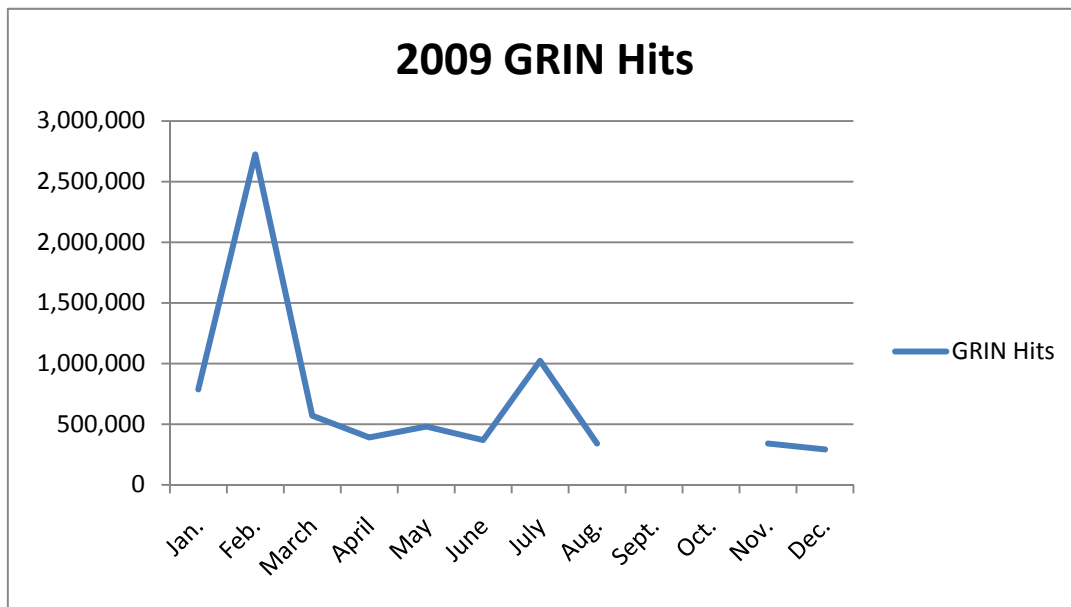


Throughout 2009 there were 90,973,735 hits and 23,495,020 page visits on the NASA History web site. (“Hits” refers to the total number of requests made to the server; “pages” are those URLs that would be considered the actual page being requested (not all the individual items that make it up such as graphics and audio files.)

During the last year, we added several 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. NASA History interns and the NASA Headquarters printing and design office also made significant contributions to our web presence.

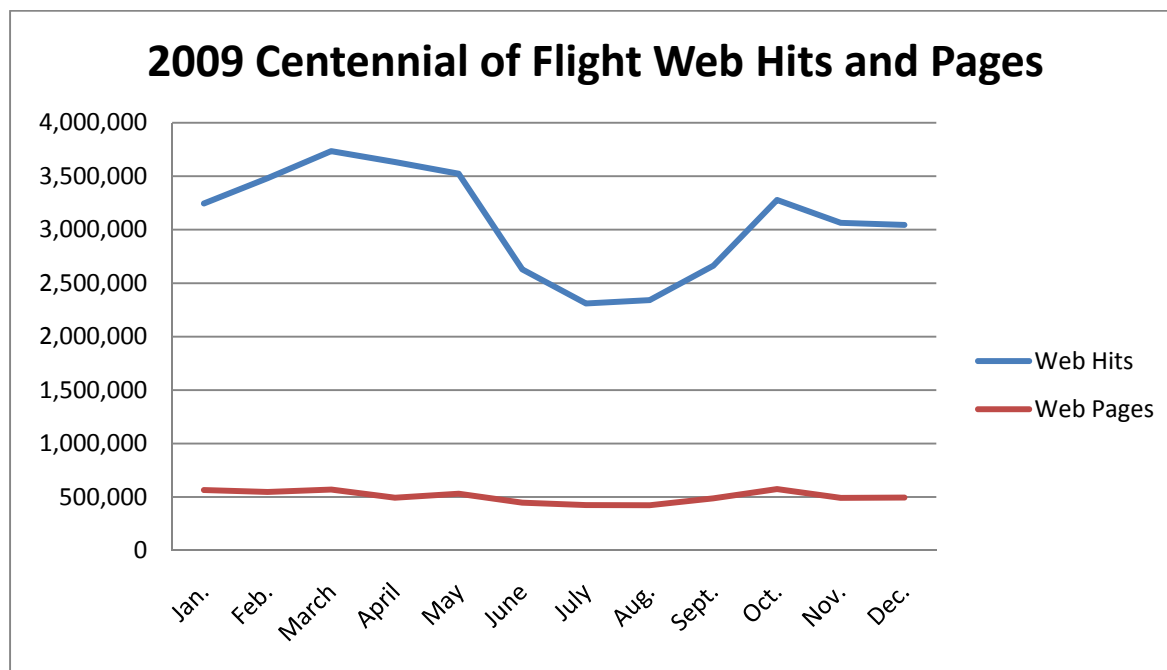
The NASA History Division continues to build its online resource for historical photos. GReat Images in NASA (GRIN) is online at <http://grin.hq.nasa.gov> and features over 1,000 historically significant black and white and color images in four resolutions ranging from thumbnail to a high resolution that is suitable for publishing. Public users may download any of these images without charge. While other somewhat similar photo databases are online, the specific format of this one is unique and attracts a steady flow of users. **GRIN received 7,319,730 recorded hits this year. Table 4 illustrates the monthly GRIN hit breakdown for 2009. Data were unavailable for September and October.**

TABLE 4



In addition to the main site and the GRIN site, NASA History oversees the Centennial of Flight website. In its official capacity, The Centennial of Flight celebrates and promotes the hundred year history of aviation. **The Centennial of Flight website received 36,948,018 hits and 6,044,071 page visits this year. Table 5 illustrates the monthly COF hit breakdown for 2009.**

TABLE 5



### New Web Materials

The Review of the U.S. Human Space Flight Plans Committee, headed by Norman Augustine [September 2009 Summary Report](http://history.nasa.gov/AugustineCommsummary.pdf) (<http://history.nasa.gov/AugustineCommsummary.pdf>) and [October 2009 Full Report](http://history.nasa.gov/AugustineCommfinal.pdf) (<http://history.nasa.gov/AugustineCommfinal.pdf>).

In time for the 40th anniversary of the Apollo 10 mission, the NASA History Division announced a major new Web resource: [The Apollo 10 Flight Journal](http://history.nasa.gov/ap10fj/) (<http://history.nasa.gov/ap10fj/>). David Woods, with the assistance of Ian Roberts and Robin Wheeler, developed this new Web site that richly documents the journey literally from the Earth to the Moon and back for this mission. It contains an extensively annotated mission transcript, supporting technical documents, photos, and more. It is a companion to the [Flight Journals](http://history.nasa.gov/afj/) (<http://history.nasa.gov/afj/>) for the Apollo 8, 9, 11, 12, 15, and 16 missions and to Eric Jones' [Apollo Lunar Surface Journal](http://history.nasa.gov/alsj/) (<http://history.nasa.gov/alsj/>).

Now available online is a significant collection of primary source documents from [NASA's Decadal Planning Team \(DPT\)](http://history.nasa.gov/DPT/DPT.htm#background) (<http://history.nasa.gov/DPT/DPT.htm#background>). The DPT began in 1999 as an effort to chart a new direction for NASA, prior to the announcement of the Vision for Space Exploration in January 2004. People interested in NASA long-range planning and policy may find this set of materials particularly interesting and timely. Thanks to DPT participant Harley Thronson for providing these documents and a background essay.

## **VI. Personnel**

### **Chief Historian**

In July, Chief Historian Steven Dick retired after a career of over 30 years of public service, having worked for 25 years for the U.S. Naval Observatory and 6 years at NASA. In honor of his years of public service and work as a historian as science, the International Astronomical Union's Minor Planet Center named minor planet 6554 Stevendick after the Chief Historian. Upon his retirement, Stephen Garber assumed the role of Acting Chief Historian.

### **Interns**

The NASA History Division was fortunate to have the assistance of three skilled interns in 2009. Henry Fingerhut, a Georgetown University physics major, made a great contribution during his spring and fall 2009 semesters. David Caldwell, a history major from Lynchburg College, and Clare Kim, a history major from Brown University, were great helps during summer 2009.

## **VII. Other Activities**

Members of the History Division staff were involved at many levels in professional activities germane to aerospace history during 2009.

Nadine Andreassen organized the Annual NASA History Program Review at NASA Ames and Steve Dick's retirement party. Nadine also provided administrative support to the other Divisions in the Office of External Relations. Nadine continues to work with personnel, contracts and budget. She assisted in the transition of contractors submitting their invoices to NSSC. Nadine is also working on our ongoing efforts to market our publications. We had several meetings with GPO and were successful in getting some of our publications on Amazon.com.

In mid-August Jane Odom attended the joint annual meeting of the Society of American Archivists (SAA) and the Council of State Archivists in Austin, Texas. She attended a roundtable describing the history of science collections at the Harry Ransom Center at the University of Texas and sessions stressing the importance of doing archival surveys, advocating transparency in government, and describing a variety of oral history programs. The plenary session featured speeches by the Presidents of the sponsoring organizations and an address by Acting Archivist of the U.S. Adrienne Thomas. And there were repository tours, vendor exhibits, and numerous opportunities for networking with colleagues.

Jane, along with archivists Colin Fries and John Hargenrader attended the Annual History Program Review at Ames Research Center in April 2009. Jane gave a presentation on management of the NASA HQ Historical Reference Collection. The archival team participated in the History Division retreat held in Alexandria in May. In February, Jane attended task monitor training for individuals who assist the COTR with management of the HQ Operational Support Services Contract.

In March Liz attended a two-day SAA-sponsored workshop in Philadelphia on the archival care and use of photographs. The same month she and Chris Jedrey, Executive Director of HQ Operations, gave a presentation on Headquarters facilities and services to the NASA HQ young employee group. Jedrey, in turn, used part of Liz's presentation in his HQ town hall meeting in the auditorium the next month.

## **VIII. NASA History Program Review, 2009**

By Glenn Bugos, Historian, Ames Research Center

The Ames Research Center (ARC) hosted the 2009 NASA History Program Review from 28 to 30 April. Thirty-five people, from the NASA Centers and Headquarters, as well as history aficionados from ARC and the Bay Area, gathered to discuss their progress over the past year and review what is state-of-the-art in NASA history programs. Yvonne Pendleton, Deputy Associate Center Director, welcomed the group to ARC, highlighting how the history of the Center is a vital part of its current institutional culture. She concluded by saying she hoped every Center had a Jack Boyd, someone who can lend a historical perspective to any discussion on Center goals. Jack then delighted us with his unique perspective on the history of the Center, filled with photographs and anecdotes about his long career.

Steve Dick reviewed the work of his office, organized according to how it satisfied NASA's strategic plan goals for history. He seemed especially proud of the success of his societal impact studies and his flagship series of books: the Chertok memoirs, the *Exploring the Unknown* compendiums, and the historical data books. The activities surrounding the 50th anniversary of NASA made for an especially busy year. Jane Odom reviewed their efforts in archives, which included a flurry of activity in acquisitions, processing, and research support. Steve Garber reviewed the status of the many books in progress, 46 in total. Historians and archivists from each of the Centers then gave an update of their progress over the past year, which reflected both the diversity of the issues they confront and their common concerns.

Wednesday morning was devoted to presentations about images and audio archives. Jon Hornstein introduced us to *NASAIMAGES.org*, an effort of the Internet Archives to eventually present every NASA image. Megan Prelinger gave a visually stunning presentation of her book-in-progress on aerospace advertising imagery in the 1950s. April Gage reviewed her progress in curating the art program at ARC, and Sandra Johnson at Johnson Space Center gave a compelling overview of the challenges of preserving audio history. Walter Vincenti, who in 1940 was the fourth engineer hired at ARC who eventually became an eminent professor and historian of technology at Stanford, presented a biography of William Durand and his role in making American engineering more mathematically driven.

Through various tours, ARC employees welcomed the group to see history being made. Within walking distance of the meeting rooms, we took tours of the ARC Aerospace Encounter, the Moffett Field Museum, and the Small Sats test facility (N45). On Wednesday afternoon, we loaded a bus for more extensive touring: the Aerospace Automation Laboratory, the Lunar Orbiter Image Recovery Project, the Arc Jet facility, the hyperwall of the NASA Advanced Supercomputing Facility, the 80-by-120-foot test section of the National Full Scale Aerodynamics Facility, and the Vertical Motion Simulator. The group dinner on Wednesday night featured toasts to Steven Dick, who announced that he would be retiring soon after the celebration of the 40th anniversary celebrations for Apollo 11.

Thursday morning was devoted to special topics. Douglas Vakoch of the Search for Extraterrestrial Intelligence (SETI) Institute spoke on historical analogues for SETI and astrobiology, Ken Souza of ARC presented a fascinating history of gravitational biology, and Carl Pilcher spoke on the history of the NASA Astrobiology Institute. Tiffany Montague of Google spoke on their various space initiatives, including a demonstration of the newest release of Google Earth. Michael Meltzer gave an overview of his work on the history of the Cassini project. For those with the energy to explore even more, on Thursday afternoon we were treated to tours of historic Hangar One, of the Computer History Museum, and of the Hoover Institution Archives at Stanford University.