



# HISTORY NEWSLETTER

Historical Division (EH)  
National Aeronautics and Space Administration  
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For information only; not to be interpreted as an official directive

Dr. James C. Fletcher, President of the University of Utah, was sworn in as the fourth NASA Administrator on April 27, 1971. His industry, academic, and governmental experience includes service on numerous governmental advisory committees. Deputy Administrator George M. Low had served as Acting Administrator since September 1970.

Administrator Fletcher has approved a five-man NASA Historical Advisory Committee, which includes Dr. Louis Morton of Dartmouth College as Chairman, Dr. A. Hunter Dupree of Brown University, Dr. Melvin Kranzberg of Case Western Reserve University, Dr. Rodman W. Paul of the California Institute of Technology, and Dr. John B. Rae of Harvey Mudd College. A meeting will be held early this fall. Mr. James Nolan of the Office of Management Development has been named Executive Secretary of the Committee.

Assistant Administrator for Policy Alfred J. Eggers became Deputy Director for RANN of the National Science Foundation in April. Subsequently the Historical Office has reported directly to NASA Associate Administrator Homer E. Newell. It was characteristic of historical operations the past months that normal problems coupled with a seeming increasing interest in all of NASA's history imposed a pressing workload on all hands.

## Apollo:

Beyond numerous related monographs, center histories, chronologies, and oral history interviews, the Apollo History Series has emerged as volumes which will document and narrate salient portions of the priority Apollo history. Three volumes appear well underway:

- . Apollo Program Management, by Thomas W. Ray of NASA Headquarters (to be preceded by a chronology)
- . History of the Saturn V, by John Beltz and Roger Bilstein of the University of Alabama (Huntsville), and Mitchell Sharpe of MSFC
- . Lunar Spacecraft, by Courtney Brooks and Loyd S. Swenson of the University of Houston.

A volume on the Apollo Missions by James Grimwood and Ivan Ertel (MSC) has also begun at the Manned Spacecraft Center, which must await completion of Apollo 17.

The volume on Apollo Launch Facilities and Operations at the Kennedy Space Center is being redefined. While these volumes and other monographs are coming to fruition, a full integrated history of Apollo must be evolved and undertaken in due course.

We are not citing in this newsletter the other Program and Center histories underway which have been previously reported.

The Eighth NASA Summer Seminar on History and Space convened in June. Participants and their individual projects are:

- . James Dewar (Kansas State) - History of NERVA
- . Dr. James Malloy (Catholic University) - NASA-Soviet Historical Notes
- . Jerry Van Voorhis (Johns Hopkins) - Aerospace Industries and Federal Practices
- . Robert Rudney (Oxford University) - OAO History
- . Charles Lamb (University of Alabama) - NASA Policy Studies
- . Suzanne Douglas (St. Lawrence) - typist.

#### Publications:

After more than eight years of gestation, Vanguard--A History, by Constance McL. Green and Milton Lomask, appeared in print as NASA SP-4202. It has a foreword by Charles A. Lindbergh and has also been published in hard cover by the Smithsonian Institution Press. It received the first History Manuscript Award of the American Institute of Aeronautics and Astronautics in April.

Admiral Fred Boone's Office of Defense Affairs: The First Five Years was completed and distributed as Historical Report No. 32.

Astronautics and Aeronautics, 1969 (SP-4014) will finally appear in August. Its tardiness owes to its full coverage of the Apollo 11 and 12 lunar landing missions, and their subsequent impact, and the abnormal delays of GPO. The drafting of the 1971 chronology by the Science and Technology Division of the Library of Congress as well as the readying for publication next year of Astronautics and Aeronautics, 1970 is underway. Other volumes on-going for publication this year are:

- . Mary Louise Morse and Jean Kernahan Bays, The Apollo Spacecraft Chronology Vol. II, November 8, 1962-September 30, 1964 (SP-4013)
- . William Corliss, A History of NASA Sounding Rockets (SP-4401), the first of a historical report series
- . William Corliss, "A History of Stadan and MSFN Tracking" (limited interim edition to be published by GSFC)
- . Eugene M. Emme (ed.), "Presidential Statements on International Cooperation in Space," being published by the Senate Committee on Aeronautical and Space Sciences

- . R. Cargill Hall, Project Ranger: A Chronology (JPL/HR-2)
- . Nicholas A. Renzetti, et al., "Historical Report on DSN," to be published as JPL tech report.

The Gemini history by James M. Grimwood and Barton Hacker should be ready for final processing by the end of the year.

#### New Projects:

- . Walter T. Bonney of Frederick, Maryland, is undertaking with NASA support the history of the National Advisory Committee for Aeronautics. He is the author of The Heritage of Kitty Hawk, began his career as a newspaper reporter, and worked for Bell Aircraft, NACA, NASA, and the Aerospace Corporation.
- . Richard Smith of the Johns Hopkins University Library is collecting and collating all the papers of Dr. Hugh L. Dryden, to augment the personal papers given Johns Hopkins by Mrs. Dryden.
- . Milton Ames has initiated a 50-year history of the NACA/NASA Langley Research Center.
- . James H. Wilson of JPL and the UCLA History Department is initiating a 25-year history of the Jet Propulsion Laboratory of CalTech.

Related projects supported by the Historical Office during the year were:

- . Robert Sherrod, who continues to wind up his Conquest of the Moon volume for Macmillan.
- . James Dewar's doctoral thesis at Kansas State University on the history of nuclear rocketry of which his NASA seminar project is a part.
- . Richard Hallion of the University of Maryland, who is preparing a thesis on history of the X-aircraft program.

We continue to welcome inquiries from graduate students and other scholars who desire to do historical research on NASA-related studies.

#### Professional Notes:

In August, the 13th International Congress for the History of Science meeting in Moscow will feature a new section on the history of "Aviation and Rocket-Space Technology." American participants include Loyd S. Swenson of the University of Houston, Frank H. Winter of the National Air and Space Museum, Barton Hacker of Iowa State University, and Stephen Brush of the University of Maryland. Proceedings will be published. Melvin Kranzberg, Editor of Technology and Culture and charter member of the NASA Historical Advisory Committee, will be Chief of the U.S. delegation.

The History Committee of the International Academy of Astronautics will hold its 5th Symposium on the History of Rocketry and Astronautics in Brussels, Belgium, September 20-23, 1971. Organized, and to be chaired by, JPL Historian Cargill Hall, program includes memoir and research papers; participants include C. Stark Draper, Frank Malina, Fritz Zwicky, and others. Mr. Hall also will be

completing the I.A.A. "International Chronology on Astronautics, 1970" which includes contributions from most major nations. Publication of the proceedings of previous I.A.A. History Symposia is proving a time-consuming task, although reports of each previous symposium are generally abstracted in Technology and Culture.

Bruce Byers has joined the State Department as a Foreign Service Officer, and is completing a final revision of his Lunar Orbiter history.

The National Space Club's Goddard Historical Essay Competition for 1970 had no winner. A \$500 prize awaits the winning essay for the 1971 competition; the principal consideration is that an entry be a contribution to the history of rocketry and astronautics. Manuscripts are due by November 1. Rules for the competition may be obtained from the National Space Club, 1629 K Street, N.W., Washington, D.C. 20006.

Several historical sessions are being planned for the annual meeting of the American Institute of Aeronautics and Astronautics, to be held in Washington, D.C., November 14-16, 1971. Details are not available other than memoir participants are apparently being lined up. Such programs always have well-attended sessions.

Former Astronaut Mike Collins assumed his new post in May as Director of the National Air and Space Museum of the Smithsonian Institution. On July 15, the Apollo Lunar Module 2 was dedicated in the rotunda of the Arts and Industries Building, a fitting addition to the nation's prime aerospace artifacts display.

Astronaut Tom Stafford represented U.S. astronauts at the funeral of the Soyuz 11 cosmonauts in Moscow.

Major General Robert N. Ginsberg, USAF, has recently become Director of the Office of Air Force History, replacing Major General Richard Grussendorf, who retired.

Two notables of historical interest recently passed away: Dr. Addison Rothrock (rocket propulsion and long-range planning) and Gen. Charles Cabell, USAF Ret. (consultant to the NASA Administrator).

Dr. Albert F. Simpson, who served as USAF Historian for more than twenty years, died recently after a long illness. Also Paul Satterfield died. He had retired after serving many years as the Curator of the Space Orientation Center at Marshall Space Flight Center, Huntsville, Alabama.

A Word on Museums and NASA Displays

It is NASA's policy to support the National Air and Space Museum of the Smithsonian Institution as the nation's museum. The NASM, in addition to its well-visited exhibits, inventories all prime NASA artifacts. Additionally, many prime NASA artifacts such as Apollo spacecraft, as is well known, go on worldwide tours.

Each NASA center usually retains representative artifacts which are open for public viewing. As most readers may appreciate, the Space Orientation Center at NASA Kennedy Space Center plus the Air Force rocket park on Cape Kennedy, offer unique displays of historical artifacts and exhibits. The two other manned space flight centers at Huntsville and Houston have excellent displays of considerable interest, as does also the Goddard Space Flight Center at Greenbelt, Maryland and the Jet Propulsion Laboratory at Pasadena, California. There is also a superb private space museum at Huntsville. The Langley Research Center at Hampton, Virginia, on June 3 opened a display exemplifying current and past activities of NASA. Visits to NASA Centers as well as to the National Air and Space Museum are highly recommended for those interested in the physical history of aerospace science and technology.

Readings of Note:

- . David Baker, Saturn V: Launch Vehicle Digest, Three Parts, Space Flight (BIS), Vol. 13 (January 1971), pp. 16-22; (February 1971), pp. 61-65; (March 1971), pp. 100-107. Excellent summary.
- . Marvin Barrett (ed.), Survey of Broadcast Journalism, 1969-1970, Year of Challenge, Year of Crisis, New York: Grosset & Dunlap, 1970, 156 p. "Once again the Apollo flights demonstrated that television is the foremost chronicler of the rituals and actions of our time. No future historian is likely to improve upon those images which, on certain great occasions, it brings into the world's living rooms." (pp. 3-4).
- . Richard H. Batten, "Apollo NGC in the Journals," Astronautics and Aeronautics (AIAA), Vol. 9 (January 1971), pp. 22-23. Excellent survey of AIAA journal articles on the techniques and devices used for Apollo navigation, guidance, and control.
- . Roger E. Bilstein, "Technology and Commerce: Aviation in the Conduct of American Business, 1918-29," Technology and Culture, Vol. 10 (July 1969), pp. 392-411. Dr. Bilstein, presently of the University of Alabama Huntsville and working on the history of the Saturn V, submits that the use of aircraft by business increased with technological advances but did not alter business planning significantly until after 1930.
- . James L. Cate, "AAAS-SHOT Program on Perspectives on Apollo," Technology and Culture, Vol. 12 (April 1971), pp. 250-254. Contains review of papers by NASA-related historians Loyd S. Swenson (UH/MSU), R. Cargill Hall (JPL) and John Beltz (UA/MSFC), with commentary by John Logsdon (GWU).

- . Samuel I. Doctors, The Role of Federal Agencies in Technology Transfer, Cambridge, Mass.: MIT Press, 1969, 230 p. A Harvard doctoral dissertation, which uses NASA's Technological Utilization Program as a case history.
- . Alfred J. Eggers, "Interactions of Technology and Society," Astronautics and Aeronautics, Vol. 8 (October 1970), pp. 38-50. Minta Martin Lecture for 1970, given at MIT.
- . I. Essers, Max Valier: Ein Vorkämpfer der Weltraumfahrt, 1895-1930, Duesselforf, W. Germany: Verein Deutscher Ingenieure Verlag, 1968, 314 p. Biography and papers of the German rocket enthusiast.
- . Arnold W. Frutkin, "International Cooperation in Space," Science, Vol. 169 (July 24, 1970), pp. 333-339. Summary by NASA Assistant Administrator for International Affairs.
- . Frederick B. Gustafson, History of NACA/NASA Rotating-Wing Aircraft Research, 1915-1970, Vertiflight (Magazine Reprint, VF-70), 1971, 28 p. Collected articles by Langley Research Center author, recipient of the Klemm Award of the American Helicopter Society, which appeared in Vertiflight during 1970.
- . International Academy of Astronautics: The First Decade, Paris: I.A.A., 1970, illus., 95 p. Summary handbook in five languages with preface by President C. Stark Draper, listing members, activities, committees, and programs held in conjunction with the International Astronautical Federation. History Committee, formed in 1961, has held four symposia.
- . John M. Logsdon, "Selecting the Way to the Moon: The Choice of Lunar Orbital Rendezvous Mode," Aerospace Historian, Vol. 18 (June 1971), pp. 63-70. Printing of essence of NASA HHN-81 and the National Space Club's Robert H. Goddard Prize Essay for 1969.
- . George M. Low, "What Made Apollo a Success?" Astronautics and Aeronautics (March 1970), pp. 36-45. Excellent overview by a key participant, and now Deputy Administrator of NASA.
- . Cary Hoge Mead, Wings Over the World: The Life of George Sackson Mead, Wauwatosa, Wisc.: Swassnet Press, 1971, 315 p. A biography of a member of the NACA, 1939-43, and designer of the Wasp engine, by his wife.
- . Ronald Miller, The Technical Development of Modern Aviation, New York: Praeger, 1970, 351 p. American edition of British book published in 1968, author attempts to focus on technological advances, economics of aircraft production, and the economics of air transport. See John Rae's generally favorable review in Technology and Culture, Vol. 12 (April 1971), pp. 358-60.

- . Louis Morton, "The Historian and the Federal Government: A Proposal for a Government-Wide Historical Office," Prologue, Vol. 3 (Spring 1971), pp. 3-11; with "Comments" by Hermann Kahn, Ibid. pp. 12-14. Chairman of the NASA Historical Advisory Committee reviews past and present Federal programs, and argues for a "single directing intelligence" with "a plan to produce an integrated history of the whole" and "to insure that essential matters are covered." Hermann Kahn replies that the academic prejudice against professional historical labor in the Federal vineyard is largely unfounded and that Morton does not cope with the difficulties of creating a high level coordinating historical office in Washington.
- . Louis Mumford, The Myth of the Machine: The Pentagon of Power, New York: Harcourt, Brace Jovanovich, 1970, 496 p. "Contemporary 'space age' prophets, who proclaim space exploration as the endless frontier and astronauts as the coming pioneers, throw an unrealistic glamour over both the past, and even more, the future of such efforts." (p. 7).
- . "NASA: Major Challenges for the Seventies," Aerospace Management, Vol. 5 (1970), 130 p. Seventeen views presented by top NASA officials concerning post-Apollo prospects.
- . Homer E. Newell, "Editorial: A Matter of Perspective," Science (AAAS), Vol. 172 (April 23, 1971), p. 331. NASA Associate Administrator pointed out that Federal funding for basic science (\$2.4 billion), or even that for the entire space exploration program (\$3 billion), "is a very small fraction of the funding that is proposed for efforts to ameliorate societal problems today (\$90 billion)" rather than additional dollars, what was needed was "ideas, new approaches, and new insights into the wise management and utilization of our human and natural resources."
- . Homer E. Newell, "The President's Page: Expanding Frontiers of Geophysics," EOS (American Geophysical Union Transactions), Vol. 52 (May 1971), pp. 395, 440. NASA Associate Administrator reviews progress since the IGY, pointing out the interrelationships between the advent of the space sciences, and in turn, its projection of the earth sciences into the interplanetary medium. "This frontiersmanship, whether it be in space, in oceans, or deep within the solid earth, is a most healthy process for our science."
- . Oran Nicks (ed.), This Island Earth, Washington, D.C.: NASA SP-250, 1970, \$6. Select color photographs from space of the earth considered spectacular by the specialists. May be purchased from Superintendent of Documents GPO.
- . Thomas O. Paine, "Space in the Seventies," Ordnance (January-February 1971), pp. 328-30. Thoughts of former NASA Administrator.
- . Thomas O. Paine, "What Lies Ahead in Space?" The Futurist (April 1971), pp. 61-64.

- . R. G. Perel'man, Goals and Means in the Conquest of Space (Moscow: 1967) (NASA TT F-595), Jerusalem, Israel Scientific Translations, 1970.
- . G. V. Petrovich (ed.), A-Z: The Soviet Encyclopedia of Space Flight, Moscow: Mir Publishers, 1969, 620 pp. Interesting English language edition published in Moscow, with addenda after Apollo 11, entitled "Latest Breakthroughs."
- . Rufus Porter, A Yankee Inventor's Flying Ship, St. Paul, Minn.: Minnesota Historical Society, 1969, 51 p. Reprint of two rare pamphlets by Porter, Aerial Navigation (1849) and An Aerial Steamer (1850), with an introduction by R. R. Gilman.
- . Jesco von Puttkamer, Apollo 8: Aufbruch ins All; der Report der ersten Mondumkreisung, Munich: Hegne (Sachbuch No. 130), 1969, 140 p. Apollo 8 provided man's first view of the earth from the vicinity of the moon.
- . Thomas Ray, "U.S. Naval Aviation--The Beginning," U.S. Naval Institute Proceedings, Vol. 97 (January 1971), pp. 32-42. One of his pre-NASA writings.
- . N. A. Rynin, Interplanetary Flight and Communication, Vol. I, Dreams, Legends, and Early Fantasies (Leningrad: 1928), trans. by Israel Program for Scientific Translations (Jerusalem: 1970) (NASA TT F-640). First of nine classic Russian volumes forthcoming.
- . Kurt R. Stehling, "Balloon Astronomy, A Case for More," Smithsonian, Vol. 2 (June 1971), pp. 28-33. Review comparing costs of balloon telescopes with satellite telescopes (two OAO's failed to become operational) in getting above the scintillation of atmosphere.
- . William Stevenson, Zanek: A Chronicle of the Israeli Air Force, New York: Viking Press, 1971.
- . Patricia Strickland, The Putt-Putt Air Force: The Story of the Civilian Pilot Training Program and the War Training Service, 1939-1944, Washington, D.C.: Department of Transportation/FAA (GA-20-84), 1971, 116 p. CPT trained over 400,000 aviators.
- . Yuan-li Wu and Robert B. Sheeks, The Organization and Support of Scientific Research and Development in Mainland China, New York: Praeger Publishers, 1970, no index, 593 p. Excellent general background of recent decades in this study sponsored by the National Science Foundation.