



HISTORY NEWSLETTER

Historical Division (EH)
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For NASA historians the past six months have been characterized by increased burdens in an environment understandably perturbed by impending budgetary and personnel cuts. With reorganization (closing of the Electronics Research Center), retirements, and other changes, the preservation and screening of documents required qualitative and timely actions. Personal interest and moral support from topside were coupled with the rigorous administrative processes stemming from the diminishing resources. The Headquarters office was blessed by the acquisition of additional floor space, enabling the Archives to become accessible and providing desk space for visiting scholars. Problems of reorganization and briefing new managers also proved a normal demand at the Centers. Above all else, the historical needs of NASA have not diminished, nor has the intent in NASA to support sound historical effort. While the problems of Federally related historians may be different from those prompted by campus turmoil, this Newsletter attempts to highlight progress, information, and professional notes of interest for contemporary historians of science, technology, and public policy.

NASA Historical Advisory Committee:

Administrator Thomas O. Paine appointed the new Committee for 1970-71, to review annually the NASA program. Members are: Louis Morton (Dartmouth), Chairman; Daniel J. Boorstin (Smithsonian Institution); David Bushnell (University of Florida); A. Hunter Dupree (Brown University); Melvin Kranzberg (Case Western Reserve); Rodman W. Paul (California Institute of Technology); Robert L. Perry (RAND Corporation); and John B. Rae (Harvey Mudd College). Members rotating off the Committee: Professors James L. Cate, Joe B. Frantz, Earl DeLong, and Ray Bisplinghoff, who were thanked for their generous services. Fifth Report by the previous Advisory Committee, submitted in December, was acknowledged by management and its recommendations are yet under review. The recommendation for an annual NASA Historian Workshop and for the development of an Apollo History Plan resulted in the Apollo History Workshop, May 19-21 (see below). Plans are underway for a meeting of the new Committee early this fall.

NASA Program Notes:

. Steps to interview President Lyndon B. Johnson on his 12-year intimacy with the creation of NASA and the U.S. space program were initiated upon the advice of Professor Joe B. Frantz. Dr. Frantz has been spearheading the oral history program for the LBJ Library. The NASA Historian and Frantz are cleared for an official NASA interview sometime this summer, and vital questions on the entire space program which only President Johnson can clarify have been solicited from knowledgeable persons.

. Associate Administrator Homer E. Newell transmitted his files from 1946 to 1968 to the Historical Archives, invaluable for the rise of space science, the work of numerous committees, and the space science and applications program of NASA.

. History of NASA, 1958-61, Volume I, being undertaken by the NASA Historian (at least two days per week), has been slowed by administrative pressures. Sabbatical year or procurement of an associate author are feasible options to expedite completion of this overall agency volume.

. NASA Data Book, 1958-68, work continued under Deputy Historian Frank Anderson with Leonard Bruno (LC). Hopefully, the first volume of statistical data for NASA's first decade will get to press this year.

. The Library of Congress Science and Technology Division's drafting of the Astronautics and Aeronautics chronology proceeded apace, with 1970 monthly segments drafted for comment. Astronautics and Aeronautics 1969 (SP-4014), will go to press after considerable cleanup and validation by Carrie Karegeannes. Astronautics and Aeronautics 1968 (SP-4010) was received and distributed, the sixth annual chronology published as an SP.

. Publications in press included: Vanguard: A History (SP-4202), by Constance McLaughlin Green and Milton Lomask (also to be published by the Smithsonian Press); Adventures in Research: A History of Ames Research Center, 1940-1965, by Edwin P. Hartman (SP-4302).

. Publications in preparation for press were Apollo Spacecraft Chronology, Vol. II, November 8, 1962-September 30, 1964, by Mary Louise Morse and Jean Kernahan Bays (SP-4013); History of NASA Sounding Rockets, by William Corliss (SP-4011).

. Manuscripts in comment cycle were History of NASA Tracking Networks, by William Corliss; Monitoring the Sun, by Milton Lomask; History of Project Gemini, by James M. Grimwood and Barton C. Hacker; History of Manned Spacecraft Center, by Robert Merrifield; History of Wallops Station, Part II, 1950-1954, by Joseph Shortal; Ranger Chronology, by R. Cargill Hall; History of Langley Research Center, by Michael Keller.

. APOLLO HISTORY WORKSHOP: Held May 19-21 in Headquarters and College Park, Md., key NASA-related historians, editors, and archivists met to enhance a coordinated professional effort in the monograph phase of the Apollo Program History. Each author reported on the status and problems of his on-going monograph. With challenging remarks from Administrator T. O. Paine, Dr. Alfred J. Eggers (Office of Policy), Dr. Rocco Petrone (Director, Apollo Program), and Captain Robert Freitag (Office of Manned Space Flight), and participation of Professor David Bushnell (Advisory Committee), Gerald Cantwell (USAF Historical Office), and Ralph Oakley (NAR Historian), perspective and communication on mutual problems were served. On-going monographs to date are as follows:

APOLLO HISTORICAL MONOGRAPHS

I. HEADQUARTERS

A. Origins and Decisions (segments to be integrated):

1. "Perspective" (E. Emme) - ISR, 4/68
2. Decision to Go (J. Logsdon) - MIT Press, 7/70
3. Lunar Orbiter (B. Byers) (HHN-71)
4. DOD Relations (Admiral F. Boone)
5. LOR (SATURN V) (J. Logsdon) (HHN-81)
6. Segments from Center Monographs

B. Apollo Management (T. Ray) (HHM-11)

C. NASA Life Sciences (M. Link) (HHM-14)

II. CENTERS

A. Manned Spacecraft Center:

1. Mercury:

- a. Chronology (J. Grimwood) (SP-4001, 1963)
- b. This New Ocean: Mercury History (L. Swenson, J. Grimwood, and C. Alexander) (SP-4201, 1966)

2. Gemini:
 - a. Chronology (J. Grimwood and B. Hacker)
(SP-4002, 1969)
 - b. History (J. Grimwood and B. Hacker)
3. Apollo Spacecraft:
 - a. Chronology (vols) (SP-4009, 1969; SP-4013, 1970)
 - b. Mission (I. Ertel)
 - c. Command and Service Modules (L. Swenson)
 - d. LEM (C. Brooks)
 - e. Mission Mode (J. Grimwood and L. Swenson)
 - f. Manned Factors (I. Ertel and C. Brooks)
 - g. Mission Operations (J. Grimwood)
 - h. MSC Center History (R. Merrifield)

B. Marshall Space Flight Center:

1. Saturn V History (J. Beltz and M. Sharpe)
2. MSFC Center History (D. Akens)

C. Kennedy Space Center:

1. Launch Facilities (W. Covington, J. Frangle and W. Lockyer)
2. Launch Operations (G. Bittle and J. Marshall)
3. KSC Center History (F. Jarrett)

III. OTHER RELEVANT REPORTS:

- A. NASA Research Centers (requested by letter)
- B. Other Federal Agencies (requested by letter)
- C. Contractor and Universities

. The 1970 Summer Seminar on "History, Social Science, and Space" included the following: James Dewar (Kansas State University), Robert Gang (University of Virginia), Robert Nemeth (Ohio University), Robert Rudney (Dartmouth College), Barbara Wood (Smith College), and Mary Scalera (American University). All will be working on NASA Historical Notes as part of their seminar participation. Mr. Dewar is working on a doctoral dissertation at KSU on nuclear propulsion. Four members assisted Dr. Emme in validation of quotations by space age Presidents on international cooperation in space (HHN-102), being prepared for the Senate Committee on Aeronautical and Space Sciences. Bruce Byers (University of Maryland) continued this summer in OMSF to complete his History of Lunar Orbiter (HHN-71) initiated in the seminar several years ago.

. The Headquarters Historical staff with over three-years service and members of the NASA Historical Advisory Committee received the NASA Apollo Achievement Award, a recognition perhaps more deserving some years from now, when the Apollo history has become more visible. The labors of everyone were superbly supported, it must be mentioned, by Archivist Lee Saegesser, Secretary Gloria Toliaferro and Typist Rosemary Ferguson, without whom the workload would have been intolerable.

Professional Notes:

. Thomas W. Ray, Assistant Historian for Manned Space Flight, completed his doctoral qualifying exams at the University of Colorado, which has approved as a dissertation subject, "A History of Apollo Management." He will be preparing this from his Apollo monograph, in addition to ramrodding the overall Apollo history.

. NASA Historian Emme organized the Fourth History Symposium of the International Academy of Astronautics to be held in Constance, West Germany, October 5-9, 1970. Papers to be presented include: Dolores Turégano (Spain), "The History of Astronautics in Art"; M. I. Sharpe (U.S.A.), "Nonmilitary Applications of the Rocket Between the 17th and 20th Centuries"; Pedro M. Sancho (Spain), "Congreve-Type Rockets in Spain in 19th Century"; Friedrich Schmiedl (Austria), "Memoir: Early Postal Rockets"; Rudolf Nebel (W. Germany), "Memoir: Story of the Raketenflugplatz Berlin"; F. Sykora (Austria), "Guido von Pirquet: Pioneer of Astronautics"; L. S. Dushkin (U.S.S.R.), "Liquid-Fuel Rocket Engine Investigations and Developments by Successors of F. H. Tsander, 1934-1944"; Yu A. Pobedonostsev (U.S.S.R.), "Memoir: Development of Solid-Fuel Rockets in the U.S.S.R. Before 1945"; Irene Sanger-Bredt (W. Germany), "Memoir: History of the 'Silver Bird' Aerospace Transport"; Joseph Kaplan (U.S.A.), "Memoir: Origins of Ionospheric Research Before 1950"; O. T. Gazenko (U.S.S.R.), "From the History of Bioastronautics in the U.S.S.R. Before 1950"; George H. Osburn and Robert Gordon (U.S.A.), "Memoir: Liquid-Hydrogen Rocket Engine Development, 1944-50"; V. N. Sokol'skiy (U.S.S.R.), "Comparative Analysis of Individual Projects and Designs in the History of Rocket Flight"; and R. Cargill Hall (U.S.A.), "U.S. Navy Satellite Proposals in the 1940's." Proceedings of I.A.A. History Symposia are to be published by the Smithsonian Institution Press. R. Cargill Hall (JPL) and Loyd E. Swenson (U. of Houston) have become members of the I.A.A. History Committee by invitation of President C. Stark Draper.

. Loyd S. Swenson (University of Houston) organized the joint SHOT-AAAS history session for the annual meeting in Chicago in December. It includes papers by R. Cargill Hall (JPL) on Unmanned Programs, John Beltz (U. of Alabama Huntsville) on the Saturn, and L. S. Swenson on the Apollo spacecraft, with John M. Logsdon as commentator. The University of Texas Press has accepted Swenson's The Ethereal Aether: A History of the Michelson-Morley Aether Drift Experiments, 1880-1930, for publication.

. Royal D. Frey of the Air Force Museum organized the History Committee session for the annual meeting of the American Institute of Aeronautics and Astronautics at Houston (October 19-22). Memoir papers include Col. John A. Macready (high altitude flights in 1920's), Gen. William Kepner (Explorer I stratosphere balloon), Commander George Hoover (USN space origins), Col. Joseph Cotton (XB-70), and perhaps Astronaut Neil Armstrong.

. Goddard Historical Prize Essay co-winners for 1969 were Frank H. Winter (National Air and Space Museum) for "The Enigmatic Mr. Hale" and John M. Logsdon (Catholic University) for "On to the Moon." Sponsored by the National Space Club, the Goddard Historical Essay Competition for 1970 on contributions to the history of astronautics and rocketry closes November 1st (\$500 prize).

. AIAA History Award for book-length manuscripts closed on June 15, 1970, according to judging-committee Chairman I. B. Holley of Duke University. Manuscripts should be on the history of aeronautics and astronautics. Robert Perry of RAND continues as Chairman of the AIAA History Committee.

READINGS OF NOTE:

. Courtney G. Brooks, American Aeronautics as Spectacle and Sport, Doctoral Dissertation in History, Tulane University, July 1969, 241 pages.

Fascinating thesis on the evolution and idea of flight in the U.S. after the first manned flight of Edward Warren on June 24, 1784. Author at the University of Houston is presently working on the Apollo Spacecraft monographs at MSC.

. John Brooks, "When Business Sits for Its Portrait," New York Times Book Review (Business and Economics Supplement), January 18, 1970, pp. 7-8, 26-27.

Discussion of corporate histories commissioned and others; of methodological interest to Federally related historians.

- . Tom Buckley, "NASA's Tom Paine--Is This a Job for a Prudent Man?", New York Times Magazine (June 8, 1969), pp. 34f.
- . Hugh Burroughes, "A Short History of Glosters," The Royal Aeronautical Journal, Vol. 73 (December 1969), pp. 1029-1037.
- . Lord Ritchie-Calder, "Mortgaging the Old Homestead," Foreign Affairs, Vol. 48 (January 1970), pp. 207-220.
On the impact of technology upon society since Alamagordo, and the challenge to planetary civilization. Reflects impact of Apollo 8.
- . W. N. Christiansen and J. A. Høgbom, Radiotelescopes, New York, Cambridge Univ. Press, 1969, 232 pages.
Authors considered pioneers in radio telescope design.
- . A. V. Cleaver, "The Case for Space," The Aeronautical Journal, Vol. 73 (December 1969), pp. 1007-10018.
Current achievements in space are reviewed, and possible future ones are outlined on a basis of technical feasibility by this space pioneer.
- . Maurice Dumas (ed.), A History of Technology and Invention: Progress Through the Ages, New York: Crown, 1970.
Volumes I and II of four projected in this French work have appeared in English, with bibliography to appear prepared by Melvin Kranzberg.
- . René Dubos, "Life is an Endless Give-and-take with Earth and all Her Creatures," Smithsonian, Vol. I (April 1970), pp. 9-17.
Author's thesis: "It was worth the 21 billion dollars spent on the Apollo missions to make us perceive, through the eyes of the astronauts and with our own eyes, the color and inviting richness of the earth in contrast to the blackness of space."
- . R. Buckminster Fuller, "Vertical Is to Live--Horizontal Is To Die," The American Scholar (Winter 1969-70), pp. 27-47.
The impact of Apollo 8 upon the thoughts of an innovative engineer and humanist.
- . Esther C. Goddard and G. Edward Pendray (eds.), The Papers of Robert H. Goddard, 3 volumes, New York: McGraw Hill, 1970.
Outstanding addition to the historiography of space science and technology, worthy of all superlatives.

- . Barry Goldwater, "Time and Crisis for the National Air and Space Museum," Congressional Record, Volume 161, No. 80 (May 19, 1970), pp. S-7447-56.
Speech on floor of Senate with thrust for proceeding with authorized construction.
- . Miron Grindea (ed.), ADAM International Review, Nos. 334-36 (1969), pp. 3-64.
Complete issue devoted to the moon in art and literature, published by University of Rochester.
- . Clive Hart, "Mediaeval Kites and Windssocks," The Royal Aeronautical Journal, Vol. 73, pp. 1019-1026.
- . Richard G. Hewlett and Francis Duncan, Atomic Shield, 1947-1952 (Volume II, A History of the U. S. Atomic Energy Commission), University Park, Penn.: Pennsylvania State University Press, 1969, 718 pages.
Outstanding Federal history dealing with highly sensitive policy and technology.
- . Walter Hohmanns, The Attainability of Heavenly Bodies (Die erreichbarkeit der himmelskorper, 1925), (NASA Technical Translation F-44).
This work (originally published in 1925) contributes to recognition of the feasibility of space travel. Treated are problems associated with leaving the earth, return to earth, free-space flight, circumnavigation of celestial objects. Highly mathematical; refers to Goddard, Oberth, and Valier only.
- . Robert P. Hudock, "Aerospace Valhalla Seeks Support," Astronautics and Aeronautics, Vol. 8 (February 1970), pp. 16-17.
Reviews effort to construct the National Air and Space Museum of the Smithsonian Institution.
- . Thomas Hughes, "Technological Momentum in History: Hydrogenation in Germany, 1898-1933," Past and Present, No. 44 (August 1969), pp. 106-132.
Thesis of "technological momentum" documented to the I. G. Farben case.
- . H. G. Jones, The Records of a Nation: Their Management, Preservation, and Use, New York: Atheneum, 1969, 308 pages.
Study of National Archives and Records Service since founding in 1934, thrusting for restoration of its independent status (now under GSA).

- . John M. Logsdon, We Should Go To The Moon, Cambridge, Mass.: M.I.T. Press, 1970.
Documentation, interview data, and analysis concerning the decision by President Kennedy in 1961.
- . Norman Mailer, A Fire on the Moon, London: Weidenfeld and Nicolson, 1970, 455 pages.
English hardback of three Life articles on Apollo 11 by an observant reporter. American edition to be available soon.
- . Mauer Maurer (ed.), Combat Squadrons of the Air Force--World War II, Washington, D.C.: Air University, 1969, 841 p.
First hard-back in revived OSAF Historical Program.
- . National Archives, Into the New Realm: A Documentary History of America's Venture into Space, Washington, D.C.: 1970, 40 pages.
Illustrated pamphlet drawn from current space exhibit at the National Archives, from the letters of Ben Franklin and George Washington to John F. Kennedy's request of the Congress to send a man to the moon on May 25, 1961.
- . G. S. Narimonov (ed.), From Spaceships to Orbiting Stations, (Moscow, 1969), 80 pages (JPRS Translation 48426, July 1969).
- . Brian O'Leary, The Making of An Astronaut, Boston: Houghton Mifflin, 1970, 234 pages.
Pre-Apollo 13 memoirs of a science astronaut, with commentary on astronaut affairs not cited by any reviewers.
- . John Platt, "Humanity on the Launching Pad: Our Multi-Crisis World," Current, (February 1970), pp. 3f.
The impact of Apollo as reflected in mental health research view of world problems.
- . S. G. Prociuk, "Progress in Aerodynamics and Aircraft Design in the Ukraine, 1920-1930," Ukrainian Engineering News, No. 104 (December 1969), pp. 72-87.
Abstract only in English.
- . Eugene Rabinowitch and Richard S. Lewis (eds.), Man on the Moon, New York: Basic Books, 1970, 204 pages.
Collection of essays which appeared in the Bulletin of the Atomic Scientists.

- . Lee D. Saegesser, "The USS Macedonian and the Hurricane of 1818,"
U.S. Naval Institute Proceedings, Vol. 96 (January 1970), pp. 88-91.
NASA Headquarters archivist contributes a historical note on "the
Old Navy."
- . Mahlon R. Straszheim, The International Airline Industry, Washington, D.C.:
Brookings Institution, 1969, 297 pages.
- . Olaf Sundman, The Flight of the Eagle, New York: Pantheon, 1970.
Nordic prize novel on the unsuccessful Andree balloon flight attempt
to reach the North Pole in 1897.
- . R. E. Sorkin, Gas Dynamics and Thermo Dynamics of Solid-Propellant
Rockets, trans. by A. Barouch (Gazotermodinamika Roketynykh Dirgatelei
Na Tverdom Toplive, Moscow: 1967) Jerusalem: IPST Press, 1969, 260 pages.
Technical work based "on available unclassified Soviet and non-Soviet
literature."
- . Loyd S. Swenson, "The Michelson-Morley-Miller Experiments Before and
After 1905," Journal for the History of Astronomy, Vol. I (February 1970),
pp. 56-78.
- . W. H. Tantum and E. J. Hoffschmidt (eds.), The Rise and Fall of the German
Air Force, Greenwich Conn.: WE Inc., 1969, 442 pages.
First open publication of Royal Air Force intelligence staff account of
an operational history of the Luftwaffe based on German sources.
- . Franklin Thistle, Rocketdyne: The First 25 Years, Canoga Park, Calif.:
North American Rockwell Corp., 1970, Ca. 50 pages unnumbered.
- . U.S. Congress, House, Committee on Foreign Affairs, Science, Technology,
and American Diplomacy: A Selected, Annotated Bibliography. Washington:
GPO, March 1970, 67 pages.
Prepared by LC for Subcommittee on National Security Policy and
Scientific Developments.
- . U.S. Congress, Senate, Committee on Aeronautical and Space Sciences,
Congressional Recognition of Goddard Rocket and Space Museum, Roswell,
New Mexico, with Tributes to Dr. R. H. Goddard..., May 28, 1970,
Washington, D.C.: Senate Document No. 91-71, June 1970, 101 pages.
Statements at hearings by NASA Administrator T. O. Paine, Deputy
Associate Administrator Wernher von Braun, Dr. Charles Abbot, and others,
on the work of Dr. Goddard.

- . Frank L. Wattendorf (ed.), The AGARD History, 1952-1968, Paris: Advisory Group for Aeronautical Research and Development, 1969, 143 pages. Brief history of von Karman's NATO creation.
- . Robin W. Winks, The Historian as Detective: Essays on Evidence, New York: Harper & Row, 1969. Twenty-six essays by well-known historians.
- . Hugo Young, B. Silcock, and P. Dunn, Journey to Tranquility-The History of Man's Assault on the Moon, New York: Doubleday 1970, 352 pages. The B.B.C. "history" of Apollo, excerpts in Washington Quarterly (May 1970).
- . Fritz Zwicky, Discovery, Invention, Research Through the Morphological Approach, authorized translation, New York: Macmillan, 1969, 276 pages. Particularly recommended are chapters 6, 7, and 8, on the "Special Applications of the Morphological Methods to Propellants," "Astronomy," and "The March into the Universe," pp. 191-244.

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