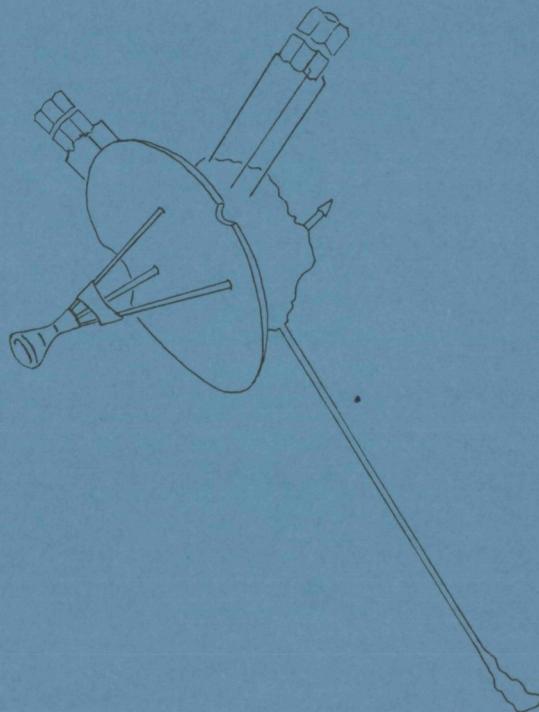


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# A GUIDE TO RESEARCH IN NASA HISTORY

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NASA History Office • NASA Headquarters • Washington, D.C. 20546

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A GUIDE TO RESEARCH  
IN NASA HISTORY

by

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Introduction

This booklet is a guide to resources available for research in NASA history. Its primary focus is on NASA Headquarters and the Washington area (see app. A for a guide to addresses and locations in DC), but some information is included on the NASA centers scattered across the country. For those new to research in contemporary federal records, a brief NASA-oriented introduction has been provided (app. B).

This guide is intended to serve as a research tool. Its purpose is twofold--to be both a finding aid and a screening aid. Research in contemporary federal records is increasingly plagued by a surfeit of documentation. This guide will help the researcher penetrate the mass of material and find the specific items he needs, while at the same time helping to ensure that he doesn't overlook important sources in the process.

Any suggestions on how this guide might be improved will be greatly appreciated. Submit ideas to NASA History Office, Code LBH, Washington, DC 20546.

The NASA History Program

The rationale for the NASA history program is threefold. First, the program answers in part the requirement in the National Aeronautics and Space Act of 1958 that NASA shall "provide for the widest practicable and appropriate dissemination of information concerning its activities and the results thereof." Second, through its own archives, research, and publications, the program seeks to preserve and disseminate the record of the agency so that policymakers both within and outside NASA may more fully understand the how and why of the agency's past actions as a guide to future activities. Finally, the program seeks to assist outside scholars and the general public in studying and learning about the agency's history, in the belief that the closest possible scrutiny will contribute to the advance of knowledge and will ultimately benefit NASA, the scholarly community, and the public at large.

In pursuit of these goals, the NASA History Office maintains an archives, publishes narrative histories and reference books by its staff and contractors, employs summer interns, assists and encourages outside researchers, advises NASA field installations on their historical activities, and advises managers throughout the agency on the identification and preservation of historically significant records and artifacts.

The NASA History Office welcomes visiting researchers and will make every reasonable effort to assist them in their investigations. The office requests that its assistance be acknowledged as a courtesy in publications and formal presentations which have been significantly furthered by its resources. The work of NASA authors, when used in resulting publications and formal presentations, should also be acknowledged.

### III

#### Headquarters Resources

##### A. History Office

The staff of the History Office consists of:

Davis, Marion A., indexer-illustrator  
Karegeannes, Carrie E., editor  
Ritchie, Eleanor H., writer-editor  
Saegesser, Lee D., archivist  
Fries, Sylvia D., director

Each can provide guidance and assistance. For general historical queries, it is usually best to start with the archivist.

The principal holdings of the History Office are the archives, approximately 500 cubic feet of primary and secondary materials. (Another 400 cu. ft. have been retired; see III B below). Included are periodical clippings, press releases, reports, correspondence, and oral-history interview transcripts. Like most NASA records, almost all of this material is unclassified. Appendix D is a brief description of the archives.

Unpublished histories prepared under the auspices of the NASA History Office are classified in three series: NASA Historical Monographs (HHM), Reports (HHR), and Notes (HHN). Some of these have subsequently appeared as published histories. All--now numbering approximately 200--are on file in the History Office.

Also on file are copies of most post-1958 congressional publications dealing with aeronautics, astronautics, and related fields. These are filed chronologically according to an assigned code number. The date of publication or the date on which hearings began is used as the basis of a six-digit code for the year, month, and day, in that order. A suffix denotes a House or Senate document. For example, 68-0312H identifies a House document of 12 March 1968. Congressional publications not available in the History Office may be obtained through the Office of Legislative Affairs.

Manuscript preparation follows the University of Chicago Manual of Style, supplemented by a History Office style guide, revised and distributed occasionally.

##### B. Retired Records

The records of NASA and its predecessor agency, the National Advisory Committee for Aeronautics (NACA), constitute Record Group 255 within the National Archives and Records Service (NARS). A selection of NACA records (60 cubic feet) is stored at the NARS Main Building, two blocks from NASA Headquarters. The remainder (some 4000 cubic feet) is stored at the Washington National Records Center, Suitland, Maryland--about 20 minutes' ride

by NARS shuttle bus from the Main Building. Also stored at Suitland are the retired records of NASA Headquarters, Goddard Space Flight Center, and Langley Research Center. These records now total over 150,000 cubic feet.

Each office in NASA Headquarters retires its own records to Suitland at its own pace, using Standard Form 135, "Records Transmittal and Receipt." (See app. I. A chronological file of copies for all Headquarters offices is maintained by the records management officer.) The accuracy and completeness with which these forms are prepared vary greatly over time, and from office to office. NASA Headquarters has no central files and no uniform filing system. Since the "Records Transmittal and Receipt" tends to reflect the filing system of the retiring office, these forms can be difficult to use as guides to research. The responsible office can usually be of considerable assistance in locating specific materials.

Approval for access to the records must always be obtained from the individual responsible for the records. NASA Management Instruction 1382.2C, Availability of Agency Records to Members of the Public, may apply. NMI 1382.2C is published in the Code of Federal Regulations, Title 14, Chapter V. Retired Headquarters records can be viewed at Suitland or recalled to Headquarters. To see the records at Suitland, prior arrangements must be made, including a letter to the Records Center from NASA. Often a security clearance is necessary. Records may be recalled to the retiring office or to the History Office with the approval of the retiring office. In either case an Optional Form 11 is submitted (app. J). Allow at least two weeks for delivery.

Retired records recalled to the History Office will remain in the custody of the archivist, who maintains a running file of all records on loan. Permission of the director of the History Office is required to retain recalled records for more than 60 days.

Because NASA administrators and deputy administrators are presidential appointees, their personal papers have traditionally been treated as belonging to them. Copies of most of these are available in the NASA History Office or in the retired records. The papers of three former administrators have been donated to public repositories: James E. Webb's (1961-1968) to the Harry S. Truman Library, Thomas O. Paine's (1968-1970) to the Library of Congress, and James C. Fletcher's (1971-1977) to the University of Utah. The papers of Dr. Hugh L. Dryden, NASA's first deputy administrator (1958-1965), have been donated to the Johns Hopkins University Library. Disposition of government officials' personal papers is governed by GSA Bulletin FPMR B-106, 30 Oct. 1980.

#### C. Scientific and Technical Information

The Scientific and Technical Information Branch (STIB) oversees the largest known system of aerospace information acquisition, indexing, announcing, and retrieval. At the heart of the system is a computer bank at NASA's Scientific and Technical Information Facility in Linthicum Heights, Maryland, near the Baltimore-Washington International Airport.

In the bank are stored more than 2 million citations to journal, report, and related aerospace literature from around the world. This bank is part of an online, time-shared system connected to more than 30 RECON (REmote CONsole) computer terminals around the United States--two at NASA Headquarters and at least one at each NASA center. Using one of these terminals a researcher can query the computer by date, subject, author, contract number, etc., to find specific citations or bibliographies for a whole field. Only a brief introduction to the system is required; the inexperienced user can neither disrupt the system nor interfere with users at other terminals.

For most citations in the computer, there is a printed abstract published in one of two semi-monthly NASA journals: STAR (Scientific and Technical Aerospace Reports) and IAA (International Aerospace Abstracts). STAR covers worldwide report literature on space and aeronautics, and IAA provides similar coverage of scientific and trade journals, books, and papers presented at conferences. Using the computer to search and locate, and the published abstracts to evaluate the potential usefulness of a document, a researcher can then select those items he wants to examine in full. Abstracts for 1971 and subsequent years are available through RECON, along with document citations. Approximately 15% of NASA-generated scientific and technical information is printed and may be ordered from the Government Printing Office or the National Technical Information Service. The remaining 85% is available on microfiche or as blow-back from fiche at NTIS, all NASA libraries, and selected public and special libraries. A listing of these libraries appears in STAR.

In addition to this major data base, maintained by NASA since 1961, several others can be accessed. Banks such as that of the Defense Documentation Center and the Machine Readable Catalogue (MARC) collection of scientific and technical books at the Library of Congress are available to RECON users. And on a trial or exchange basis, information from other agencies (e.g., NOAA and DOE) and numerous private organizations is available to users of the system.

Most of the literature in the Scientific and Technical Information System is just that: scientific and technical. However, there are occasional surveys, reports, and even histories that can be useful to historians. This is especially true, of course, of preliminary studies of scientific and technical projects, as well as summaries of results achieved. But even in such areas as management and international space law, much is available.

#### D. Libraries

Numerous specialized libraries exist in or near NASA Headquarters. Their aggregate resources are equal to almost any research need related to NASA.

1. The Headquarters Scientific and Technical Library, while primarily an arm of STIB, nonetheless carries a wide range of other material. It has a small sampling of newspapers and general magazines and

a much larger selection of specialized periodicals in the fields of science, technology, and management. Most periodical runs begin in the late 1950s or early 1960s, but some from the NACA's library stretch further back. The reference section is strongest on government publications and general guides to materials in aerospace and related fields. The shelved volumes are few and from restricted fields--but there are still many of interest to historians. Through interlibrary loan, access can be had to other NASA libraries, the Library of Congress, and the libraries of other federal agencies. NASA employees may check out books from the NASA library and keep them until someone else requests them. Books on loan from another library are subject to the lending policy of that institution.

2. The library at Goddard Space Flight Center, just outside Washington, is one of the best center libraries in NASA. A shuttle bus from Headquarters makes the half-hour trip seven times each working day; a schedule may be found in the current NASA Headquarters telephone directory.

3. The Law Library is part of the Office of the General Counsel, but it is available to all NASA employees. A simple checkout system facilitates use of the volumes outside the library. Most of the holdings are specialized and of interest principally to lawyers. However, many are of use to historians: Federal Register, Code of Federal Regulations, U.S. Code and U.S. Code Annotated, U.S. Statutes at Large, Congressional Record, U.S. Treaties and Other International Agreements, Papers of the Presidents, NASA budget submissions, various congressional documents, runs of selected law journals, etc.

4. The Library of Congress is of course open to all researchers. Its resources are unparalleled, but for outsiders often difficult to use. Delivery of volumes to the main reading room is slow (45 minutes or more after request is submitted); stack passes are hard to come by. In general the library is best for those items such as manuscripts or rare books that cannot be reached through other sources. For some specialized topics, the staff can be helpful. The Science and Technology Reading Room in the Jefferson Annex has its own card catalogue, reference section, and experienced staff.

5. The library of the National Air and Space Museum, across Independence Avenue from NASA Headquarters, is strong on the artifacts of aerospace--and their documentation. The NASA History Office cooperates closely with NASM and can direct researchers to the proper staff member there.

6. The library of the Department of Transportation is one block from the NASA History Office. With open stacks, it is in many respects the most useful general library in the area. It consists of the former libraries of the Coast Guard and the Bureau of Public Roads, but it has wider holdings than that heritage would suggest. It has been a national depository library since 1968.

7. The library of the Federal Aviation Administration is administratively an annex to the DOT library, but operates separately. The FAA

library has a much better collection of aviation literature than NASA. Also located one block from the NASA History Office, the FAA library has open shelves and a few unreserved desks for the use of researchers.

8. Two other national depository libraries are contiguous to NASA Headquarters. The library of the Department of Health and Human Services (1954) is in the HHS Main Building, just across 4th Street. The library of the Department of Housing and Urban Development (1969) is diagonally opposite the Reporters Building, in which the NASA History Office is located. And there are 23 other federal depository libraries within the District of Columbia.

#### E. Individual NASA Offices

1. The Office of Public Affairs regularly prepares press releases, press kits, and public information brochures. Of course, such documents must be used circumspectly by the historian; their purpose, after all, includes public relations as well as dissemination of information. But with this caveat in mind, they can be a useful source. The releases, for example, often serve as the official public announcement of a program, decision, or international agreement. The Audio Visual Section also maintains files of still photographs, motion pictures, and tape recordings.

2. Since the founding of NASA, the Office of the General Counsel has selected important documents for retention and indexing. These are coded by key word and placed in the Legal Information Retrieval System (LIRS), a computer bank at Ames Research Center with outlets at Headquarters and other NASA centers. Though primarily intended for legal research, the collection contains much useful historical documentation. The system is available to researchers with the permission of the assistant general counsel for patent matters. Copies of the documents are available in the General Counsel's Office and the Law Library.

3. The Graphics and Management Presentations Branch of the Headquarters Administration Division maintains a file of photographs, charts, drawings, and other visual aids used in Headquarters.

4. Research on specific topics often can best be pursued in the responsible Headquarters office. Each office maintains inventories of its retired records; often the person who initially retired the records is still on the job and can expand upon the information on the inventory forms. Moreover, many offices keep files on a project until it is completed. This means that active files may go back for years and contain material one would expect to find among the retired records. Policy varies from office to office and the only sure way is to check. Lastly, the researcher may want to interview participants--either formally or informally. Most NASA employees are cooperative; the normal courtesies and procedures for oral history of course apply. If the interviewee is not a government employee, a release form should be executed and signed when the transcript is reviewed and approved. See appendix K for a sample.

NASA CentersA. General

Records retirement at the NASA centers follows the same procedure as at Headquarters. The major difference is that the federal records centers are seldom as close to the NASA centers as Suitland is to Headquarters. While centers can recall their records from the records center, it is often better for the researcher to visit the records center himself, especially if he needs to examine a large volume of material. The records management officer at the NASA center can make the arrangements.

B. Individual Centers

The NASA field centers have historical monitors who supervise the administration of historical resources and assist researchers. The names, addresses, and phone numbers of contacts at the respective centers are in appendix L. Appendix M lists a selection of potential topics in NASA history.

The organization of historical resources varies from center to center. Some will require special comment.

1. Johnson Space Center, Houston, has extensive archives, strongest on the history of manned spaceflight. A significant portion is at the Woodson Research Center, Rice University Library (Houston). Working documents related to the more recent programs are in the JSC History Office. Appendix E briefly describes holdings at each location.

2. Jet Propulsion Laboratory, Pasadena, is a unique organization. It is staffed and operated under contract to NASA by the California Institute of Technology. The lab has an extensive historical archives (described in appendix F), which has been inventoried and coded. The index has been programmed on a laboratory computer and may be searched using a research guide available at the library. Since the departure of the JPL historian, the library has retained the archives, but new material is not being added.

3. The Kennedy Space Center, Florida, historical archives, described in appendix G, are maintained by an archivist in the center library.

4. The records of the Lewis Research Center in Cleveland are kept at the center's subsidiary Plum Brook Station, located on Lake Erie near Sandusky, Ohio. The only guide to this material is the set of shelf lists maintained by the Records Management Office at Lewis.

5. Langley Research Center in Hampton, Virginia, is the oldest in the history of the NACA and NASA, and has some unparalleled resources (described in appendix H) for historical research. Its library still maintains, for example, the same card index to aeronautical literature

that was begun by the NACA more than half a century ago. This is the only extant set.

6. Historical resources at other centers vary. Unless a researcher knows the specific office that controls the material he wants, he should begin by contacting the Headquarters History Office or the center monitor.

C. Visitor Information Centers (VIC), Museums

Most NASA installations have visitor information centers on the site. Holdings may vary from a few illustrative murals to a large artifact and document collection. These are usually administered by the local Public Affairs Office and are readily accessible to the public. Provision can sometimes be made to examine historical documents at these centers.

Working for NASAA. Summer Internships

NASA participates in the Office of Personnel Management's Summer Jobs Program, and from time to time the History Office has hired as temporary employees from one to four historians, mostly graduate students, but faculty members as well and occasionally an exceptional undergraduate. Details may be found in two publications of the American Historical Association, Guide to Departments of History and Grants and Fellowships of Interest to Historians, and in the Office of Personnel Management's announcement 414, revised annually.

Other things being equal, preference is given to applicants with a background in the history of science and technology who have a feasible research project already planned or under way. Prospective applicants are encouraged to contact the History Office for assistance and suggestions in preparing their applications.

B. Contracting

NASA also contracts with individuals and universities to research and write book-length manuscripts for publication by the Government Printing Office. About half the books listed in appendix C have been or are being written under contract. Because contracting with the government is unfamiliar to most historians, the following paragraphs will describe the procedure in some detail.

Because contracts are negotiated, each is unique; but some general information about the contracts NASA has used for writing history might be helpful. These contracts are for items, as opposed to services; the contractor undertakes to deliver a publishable manuscript. In negotiating the amount of compensation, several factors are considered, including the complexity of the subject, the work already done on it (if any), the location and condition of the records, the researcher's earnings history, and the salaries paid to academic historians of comparable experience and attainment. Contracts may include allowances for repaying the cost of specified expenses, such as travel, typing, and transcription of taped interviews. In contracts with individuals, monthly payments are customary. Contracts for book-length manuscripts have lasted from 2 to 3 1/2 years. A longer term would be considered when contracting with a university for a principal investigator to work part-time on a manuscript while teaching a reduced load. History contracts ordinarily provide office space at appropriate NASA installations because most topics require extended access to large volumes of records and to many participants. NASA also undertakes to assist the researcher in gaining access to sources.

During the course of a contract, the NASA History Office provides consultation as required. Ordinarily two formal reviews are held. When

most of the research has been completed and one or two chapters written, a panel of NASA historians and at least one academic historian meets with the author to review the plan for the book. When the manuscript is complete, copies are circulated to subject-matter specialists, as recommended by the author, and to at least one outside historian, selected by the director of the History Office. Readers are asked to point out errors and to provide supporting evidence. The outside critic is asked to recommend whether the manuscript should be published and, if so, what changes should be made.

### C. Preparation of Proposals

The expected audience for NASA histories includes informed laymen, government managers, students, teachers, and researchers, and of course NASA personnel. NASA history publications should be readable, literate, and reflect the highest scholarly standards in using, presenting, and interpreting evidence. Because much of the supporting evidence and data an author will use may be technical and quantitative, he or she should plan to handle such information in ways that will further the readability of the final text. Authors should consider how much information can be condensed into appendixes, tables, and notes. The more names and numbers that can be recorded in such ways, the easier will be the writing of readable narrative and analysis.

Unsolicited proposals will be carefully reviewed by NASA and may be reviewed by external referees as well. (A partial list of potential topics appears in appendix M.) In preparing a proposal, prospective authors should keep in mind that the presentation and content of their proposals will be the primary basis upon which NASA reviewers will attempt to predict the quality of the final manuscript. Proposals should, therefore, be clearly organized and neatly typed, double spaced. The narrative portion (not including "F" below) should not exceed 15 pages in length. It should include the following:

- A. A dated and signed cover sheet
- B. An abstract not more than 250 words in length
- C. A discussion of the topic's significance to the understanding of the work of NASA in the context of those scientific, engineering, or institutional developments most relevant to the topic itself. While the proposed research and writing must necessarily focus on NASA-specific topics, a manuscript that places its subject within wider contexts of modern aeronautical and space science, engineering, and management generally is more likely to enhance the reader's evaluation of NASA history.
- D. A discussion of the relationship of the proposed research and writing to relevant current scholarship. This discussion should incorporate specific citations. A brief, annotated bibliography would be useful, but is not required.

- E. A discussion of the questions to be answered by the proposed work. These questions should not be merely listed, but should be well integrated into a discussion of the proposed work as a whole in terms of its principal topical or thematic aspects.
- F. A cost sheet, showing the following:

Proposed starting time and duration;  
Personnel costs;  
Travel (include destinations and durations in sufficient detail to permit calculation of cost)  
Other expenses that NASA will be asked to meet;  
Overhead (if submitted by a university);  
A statement of other major duties the researcher will have during the period of the contract, if other than essentially full time is to be devoted to work under the proposal

A successful proposal will demonstrate a familiarity with the subject matter, the location of pertinent records, and secondary literature. Proposals should be submitted in duplicate.

It is also NASA's policy to use the technical data contained in proposals for evaluation purposes only. Where any of such technical data constitutes a trade secret under the law and the offeror desires to maintain trade secret rights in the technical data, the following "Notice" must be affixed to the cover page of the proposal. Thereafter, it is NASA policy to protect this technical data as a trade secret. NASA assumes no liability for use or disclosure of any technical data to which such notice has not been applied.

#### NOTICE

Data on pages \_\_\_\_\_ of this proposal constitute a trade secret. It is furnished to the Government in confidence with the understanding that it will not, without the permission of the offeror, be used or disclosed other than for evaluation purposes; provided, however, in the event a contract is awarded on this proposal, the Government may obtain in the contract additional rights to use and disclose this data.

Proposals that pass the initial evaluation may be submitted to History Office consultants for comment. Selection will be by the director of the History Office. The approving authority for obligation of funds is the director of the Management Support Office in the Office of External Relations. Finally, the Contracts Division will negotiate the detailed contract.

### Conducting Research

Research conducted through, or under the auspices of, the NASA History Office adheres to traditional professional standards, including free access to materials to the extent permitted by law, use of best evidence, free reign of independent judgement, and judicious pursuit of truth and objectivity. For its employees and contractors, NASA also requires that authors submit their draft work for independent review by participants and professional peers both within and outside NASA. The purpose of this review is to check for factual accuracy and soundness of argument, to give a fair hearing to conflicting interpretations, and to guarantee insofar as possible that the author has adhered to scholarly standards in gathering and presenting evidence. The NASA History Office endeavors to apply the same criteria of publication as those employed by scholarly journals and presses. Neither NASA nor the History Office necessarily endorses the views expressed in its history publications or derived from research in its records; those remain the responsibility of the author.

Three principal sources of historical evidence are available within NASA: published works, NASA records and files, and oral interviews.

Published works include standard secondary references, government (including NASA) publications, and more specialized technical literature. The standard secondary references are the traditional background literature that any scholar would normally consult in researching a historical topic. These are available at several local libraries and are identified through traditional bibliographic guides. A few specialized bibliographies, like NASA HHR-29 and -51, cited in full in appendix C, are available. Government publications are often useful for most topics related to the NACA or NASA. For those unfamiliar with these publications, a general introduction is provided in appendix B. The more specialized aerospace technical literature is best entered through the computerized retrieval system maintained by NASA's Scientific and Technical Information Branch, described in section III above.

The use of agency files and records will be less familiar to most outside researchers. The files consist of all active NASA documentation, maintained in NASA offices and currently in use. Subject to restrictions imposed by law, such as control of security classified information, proprietary information, and personnel data, materials in these files will usually be made available to bona fide researchers on request.

The most efficient way for a researcher to see such information is to examine the NASA or field installation organization chart for the period being investigated or otherwise determine which organizational unit administered the particular program or activity. Then the researcher should contact that office or its successor, either directly or through the History Office, identify the files or information sought, and make arrangements to examine the materials that are available and accessible.

Under the provisions of the Freedom of Information Act and Executive Order 12065, it is the responsibility of the government to make non-exempt documents available to all citizens expeditiously on request. Nevertheless, past experience suggests that the most successful researchers in NASA records and files are those who appreciate the added burden they are imposing on officials and their staffs and make reasonable arrangements as to time, place, and method of examining documents. After all, the personnel controlling the files are themselves invaluable research aids who harbor a wealth of information that never finds its way onto the printed page. Cooperating with them can produce rich rewards for the researcher. Where problems of scheduling or access do arise, the History Office can provide assistance.

The use of retired records is somewhat more complicated, though the general procedure is the same. Section III B above describes the mechanics. Retired records fall into two different categories, those that have been permanently accessioned by the National Archives and Records Service and those that are still controlled by NASA but stored at Federal Archives and Records Centers. The former are in the permanent custody of the NARS and, though NASA may assist the researcher in identifying which records he may want to see, arrangements for using the documents must be worked out between the researcher and NARS. The records still under NASA control but stored in FARC's may be recalled to NASA offices using the procedures outlined in section III B.

Some general caveats should be kept in mind when doing research in either category of retired records. The Records Transmittal and Receipt Form, still the best inventory of most retired records of the NACA and NASA, is an imperfect document that often masks or confuses as much as it reveals. Seldom can the researcher expect to go directly from the forms to the desired records box or file. More often one will find in these forms a number of references to boxes that might contain useful information. It is then often best to go to the FARC and examine in situ all the boxes that might prove useful. Many leads will turn out to be disappointing, but those boxes that do have material worthy of closer scrutiny may then be recalled to NASA--at least for the records still under NASA control. Not only does this procedure minimize the time and expense wasted in recalling a large number of boxes, it also helps to ensure that the researcher can have at least a brief look at all the possible sources of material.

Oral interviews can be a powerful source of historical evidence when studying recent events. Of course the testimony of participants must be weighed judiciously against other evidence, but in a time when the telephone is eliminating many written communications and concern about public disclosure through the Freedom of Information Act is preempting still others, scholars are coming to rely on participants' recollections more heavily than ever before. Thorough preparation before the interview and independent verification of the testimony of the interviewee can go a long way toward reducing the hazards traditionally associated with this research technique.

One particular caveat attaches to interviews conducted by researchers working for NASA, be they civil servants, contractors, summer interns, or visiting scholars. As government employees, their work, including interviews, is subject to the Freedom of Information Act. Therefore, they may not promise confidentiality when interviewing other government employees as part of their official duties. Nongovernment individuals who are interviewed are requested to execute the form reproduced in appendix K, "Conditions of Access to and Use of Transcribed Interview." To the extent permitted by law the History Office will then follow the wishes of the interviewee in allowing subsequent researchers access to the transcript.

APPENDIX A

Offices in the District of Columbia

I. NASA Headquarters offices are in three adjacent buildings in the southwest section of Washington:

<u>Building</u>	<u>Location</u>	<u>Symbol</u>
Federal Building (FB) 10B	600 Independence Ave., SW	B
Federal Building (FB) 6 (floors 5,6,7)	400 Maryland Ave., SW	F
Reporters Building (floors 7,8)	300 7th Street, SW	R

NOTE: Do not use street address for mail. Simply write office name and mail code, NASA, Washington, DC 20546.

Locations of pertinent offices are as follows:

<u>Office</u>	<u>Mail Code</u>	<u>Location</u>	<u>Telephone</u>
History Office	LBH	R-706	(202) 453-8300
Scientific & Technical Information Branch	NIT	R-824	453-2906
Scientific and Technical Library	NHS-4	B-A39	453-8545
Law Library	GL	F-7062	453-2458
Records Management Br. (agency-wide)	NIM	R-828	453-2920
Hq. Records Officer	NHS	B-A56	453-2918
Public Affairs News & Information Br.	LFD-2	F-6043	453-8398
Broadcast and Audio Visual Br.	LFD-1	F-6102	453-8375
Graphics	NHG	B-146	453-2682
General Counsel	G	F-7065	453-2450

II. Non-NASA offices:

FAA Library	FAA Building Room 930	800 Independence Ave., SW
DOT Library	DOT Building Room 2200	400 7th Street, SW
NASM Library	National Air and Space Museum	Independence Ave. at 6th St., SW
HHS Library	HHS Building Room 1436	300 Independence Avenue, SW
HUD Library	HUD Building Room 8141	451 7th St., SW
Library of Congress		1st St., between E. Capitol & Independence Ave., SE
Washington National Records Center		4205 Suitland Road Suitland, MD 20409
National Archives and Records Service	Main Building	Pennsylvania Ave. at 8th St., NW

## APPENDIX B

### Research in Contemporary Published Records of the Federal Government

#### Introduction

The United States Government Manual, published annually since 1935 by the National Archives and Records Service, is the best concise guide to government organization and the staffing of key positions. Before 1973 it was called the United States Government Organization Manual. The Congressional Directory, published for each session of Congress, provides more detailed information on the legislative branch and its staffs, but must be used with caution: the congressmen write their own biographies.

The best introduction to available government records and how to locate them is still A. M. Boyd and R. E. Rips, United States Government Publications (1949). L. F. Schmeckebier and R. B. Eastin, Government Publications and Their Use (2d ed., 1969), supplements Boyd and Rips. While both of these volumes contain sections on the legislative process, a more concise guide to contemporary procedures is U. S. Congress, House, How Our Laws Are Made, by Charles J. Zinn, revised and updated by Joseph Fisher, H. Doc. 92-323 (Washington, 1972).

#### General Guides

The basic finding aid for all twentieth-century U.S. Government publications is U.S. Superintendent of Documents, United States Government Publications Monthly Catalogue, collected in an indexed, annual volume since 1895. This may now be supplemented by the Cumulative Subject Index to the Monthly Catalogue of United States Government Publications, 1900-1971 (1972- ). This multivolume set is as yet incomplete, but it already covers NACA and NASA. The Monthly Catalogue contains numerous citations of congressional reports and documents. To find these in the serial file, use U.S. Superintendent of Documents, Numerical Lists and Schedules of Volumes, published annually since 1897 (title varies).

The Library of Congress, A Directory of Information Resources in the United States Federal Government (rev. ed., 1974), goes beyond official documents to include government-sponsored information resources, museums, historical societies, etc. J. L. Andriot's Guide to U.S. Government Serials and Periodicals (annual, 1959-1972) and Guide to U.S. Government Publications (annual, 1973-1976; irregularly thereafter) are indexed by agency and subject.

#### Legislative Records

The Congressional Record (1873- ) is the basic source on the activities of Congress. It is published daily and bound at the end of the session with a comprehensive index in the last volume. In addition to a subject index and a numerical list of bills and resolutions, this volume traces the history of bills--an indispensable guide to the legislative

process. Both houses of Congress also publish a Journal, which is the official record of their respective proceedings. Committee hearings can be located with F. M. Johnston, Cumulative Index of Congressional Committee Hearings (to 1959), with supplements (to 1966).

After each session of Congress, the U.S. Department of State publishes the United States Statutes at Large, in which the private and public laws and concurrent resolutions passed in that session are published in separate, indexed volumes. The Tables of Laws Affected are published as supplemental volumes to the Statutes.

The official publication containing the laws in effect at a given time is the United States Code (USC), published by Congress every six years since 1926 with an annual, cumulative supplement. More useful than this, though, is the United States Code Annotated (USCA), a privately printed annual publication. The USCA is indexed in the last volume of each year; its annotations provide judicial opinions bearing on sections of the Code. Since 1964 the USC has been indexed as well.

#### Executive Branch

The National Archives has published the Code of Federal Regulations (CFR) annually since 1938. This compilation of Executive Orders, Proclamations, and rules and regulations for departments and agencies does for administrative law what the USC does for statute law. The material for the CFR is drawn from the calendar year entries in the Federal Register, a daily publication of Executive Branch documents and notices of public applicability and legal effect.

Both the CFR and the USC are divided into 50 titles. Many, but not all, of the titles are identical in the two publications. For example, in the USC, the "National Space Program" is chapter 26, Title 42, "The Public Health and Welfare." In the CFR, "Aeronautics and Space" comprises all of Title 14, of which chapter V is devoted exclusively to NASA.

The Weekly Compilation of Presidential Documents publishes on each Monday all public presidential statements and materials released before 5:00 p.m. on the previous Friday. Since 1945 the National Archives has published in bound volumes the Public Papers of the Presidents of the United States, including all public statements and messages and verbatim transcripts of news conferences.

## APPENDIX C

### Publications and Works in Progress

Most publications of the NASA History Office appear in the "Special Publications" (SP) 4000 series and are classified in one of two categories: narrative "histories" or "reference works." Publications and works in progress are listed below. Books may be bought from the Superintendent of Documents, Government Printing Office, Washington, DC 20402, or, when out of print, from the National Technical Information Service, Springfield, VA 22161. The bookstore in the National Air and Space Museum stocks many of the titles, and recent publications are available from the Information Center (NHS-27), NASA, Washington, DC 20546. The Information Center makes no charge for postage.

Depository libraries may receive publications as they appear by asking the GPO for NAS 1.21: NASA SP-4000 830-I. Other libraries may receive them directly from NASA; write Director, NASA History Office (LBH-14), Washington, DC 20546.

The books are cataloged in publication by the Library of Congress, in the hope that libraries will catalog and shelve the books by subject, rather than relegating them to the government documents section.

#### Publications

##### Histories

Anderson, Frank W., Jr., Orders of Magnitude: A History of NACA and NASA, 1915-1980 (NASA SP-4403, 2d ed., 1981, ix + 106 pp.).

Benson, Charles D., and William Barnaby Faherty, Moonport: A History of Apollo Launch Facilities and Operations (NASA SP-4204, 1978, xx + 636 pp.).

Bilstein, Roger E., Stages to Saturn: A Technological History of the Apollo/Saturn Launch Vehicles (NASA SP-4206, 1980, xx + 511 pp.).

Boone, W. Fred, NASA Office of Defense Affairs: The First Five Years (NASA HHR-32, 1970, multilith, viii + 333 pp.).

Brooks, Courtney G., James M. Grimwood, and Loyd S. Swenson, Jr., Chariots for Apollo: A History of Manned Lunar Spacecraft (NASA SP-4205, 1979, xvii + 538 pp.).

Byers, Bruce K., Destination Moon: A History of the Lunar Orbiter Program (NASA TM X-3487, 1977, multilith, vi + 411 pp.).

Corliss, William R., Histories of the Space Tracking and Data Acquisition Network (STADAN), the Manned Space Flight Network (MSFN), and the NASA Communications Network (NASCOM) (NASA CR-140390, 1974, multilith, viii + 353 pp.).

\_\_\_\_\_, A History of the Deep Space Network (NASA CR-151915, 1976, multilith, ix + 229 pp.).

- \_\_\_\_\_, NASA Sounding Rockets, 1958-1968: A Historical Summary (NASA SP-4401, 1971, vii + 158 pp.).
- Ezell, Edward Clinton, and Linda Neuman Ezell, The Partnership: A History of the Apollo-Soyuz Test Project (NASA SP-4209, 1978, xx + 560 pp.).
- Green, Constance McL., and Milton Lomask, Vanguard: A History (NASA SP-4202, 1970, xvi + 308 pp.; also Washington: Smithsonian Institution Press, 1971).
- Hacker, Barton C., and James M. Grimwood, On the Shoulders of Titans: A History of Project Gemini (NASA SP-4203, 1977, xx + 625 pp.).
- Hall, R. Cargill, Lunar Impact: A History of Project Ranger (NASA SP-4210, 1977, xvii + 450 pp.).
- Hartman, Edwin P., Adventures in Research: A History of Ames Research Center, 1940-1965 (NASA SP-4302, 1970, xviii + 555 pp.).
- Kloman, Erasmus H., Unmanned Space Project Management: Surveyor and Lunar Orbiter (NASA SP-4901, 1972, ix + 41 pp.).
- Levine, Arnold, Managing NASA in the Apollo Era (NASA SP-4102, 1983, xix + 343 pp.).
- Link, Mae Mills, Space Medicine in Project Mercury (NASA SP-4003, 1965, x + 198 pp.).
- Newell, Homer E., Beyond the Atmosphere: Early Years of Space Science (NASA SP-4211, 1980, xviii + 497 pp.).
- Rosenthal, Alfred, Venture into Space: Early Years of Goddard Space Flight Center (NASA SP-4301, 1968, xv + 354 pp.).
- Rosholt, Robert L., An Administrative History of NASA, 1958-1963 (NASA SP-4101, 1966, xviii + 381 pp.).
- Sloop, John L., Liquid Hydrogen as a Propulsion Fuel, 1945-1959 (NASA SP-4404, 1978, xiv + 325 pp.).
- Swenson, Loyd S., Jr., James M. Grimwood, and Charles C. Alexander, This New Ocean: A History of Project Mercury (NASA SP-4201, 1966, xv + 681 pp.).

#### Reference Works

- Aeronautical and Astronautical Events of 1961, House Committee on Science and Astronautics, 87th Cong., 2d sess., 1962, vii + 113 pp.
- Aeronautics and Space Report of the President: 1975 Activities (NASA, 1976, vi + 112 pp.). Annually thereafter.

- Astronautical and Aeronautical Events of 1962, House Committee on Science and Astronautics, 88th Cong., 1st sess., 1963, vii + 370 pp.
- Astronautics and Aeronautics, 1963: A Chronology. (NASA SP-4004, 1964, vii + 610 pp.). Subtitle varies.  
1964 (SP-4005, 1965, vii + 527 pp.); 1965 (SP-4006, 1966, vii + 681 pp.); 1966 (SP-4007, 1967, vii + 479 pp.); 1967 (SP-4008, 1968, x + 487 pp.); 1968 (SP-4010, 1969, viii + 429 pp.); 1969 (SP-4014, 1970, vii + 534 pp.); 1970 (SP-4015, 1972, ix + 510 pp.); 1971 (SP-4016, 1972, ix + 474 pp.); 1972 (SP-4017, 1974, ix + 580 pp.); 1973 (SP-4018, 1975, vii + 481 pp.); 1974 (SP-4019, 1977, vii + 320 pp.); 1975 (SP-4020, 1979, v + 329 pp.).
- Dickson, Katherine M., ed., History of Aeronautics and Astronautics: A Preliminary Bibliography (NASA HHR-29, 1968, multilith, viii + 420 pp.).
- Emme, Eugene M., ed., Aeronautics and Astronautics: An American Chronology of Science and Technology in the Exploration of Space, 1915-1960 (Washington: NASA, 1961, xi + 240 pp.).
- \_\_\_\_\_, Statements by Presidents of the U.S. on International Cooperation in Space, October 1957-August 1971, Senate Committee on Aeronautical and Space Sciences, 92d Cong., 1st sess., 1971, S. Doc. 92-40, iv + 133 pp.
- Ertel, Ivan D., et al., The Apollo Spacecraft: A Chronology (NASA SP-4009, vol. 1, 1969, xiv + 269 pp.; vol. 2, 1973, xiv + 277 pp.; vol. 3, 1976, xiv + 286 pp.; vol. 4, 1978, xiv + 463 pp.).
- Grimwood, James M., Project Mercury: A Chronology (NASA SP-4001, 1963, xiv + 238 pp.).
- \_\_\_\_\_, and Barton C. Hacker, with Peter J. Vorzimmer, Project Gemini Technology and Operations: A Chronology (NASA SP-4002, 1969, xvi + 308 pp.).
- Hall, R. Cargill, ed., Essays on the History of Rocketry and Astronautics: Proceedings of the Third through the Sixth History Symposia of the International Academy of Astronautics, 2 vols. (NASA CP-2014, 1977, multilith, vii + 238 pp.; v + 476 pp.).
- Hall, R. Cargill, Project Ranger: A Chronology (JPL/HR-2, 1971, multilith, xiii + 581 pp.).
- Looney, John J., ed., Bibliography of Space Books and Articles from Non-Aerospace Journals, 1957-1977 (NASA HHR-51, 1979, multilith, xv + 243 pp.).
- Newkirk, Roland W., and Ivan D. Ertel, with Courtney G. Brooks, Skylab: A Chronology (NASA SP-4011, 1977, xvii + 458 pp.).

Phillips, Charles R., The Planetary Quarantine Program: Origins and Achievements, 1956-1973 (NASA SP-4902, 1974, viii + 56 pp.).

Van Nimmen, Jane, and Leonard C. Bruno, with Robert L. Rosholt, NASA Historical Data Book, 1958-1968, vol. 1, NASA Resources (NASA SP-4012, 1976, viii + 543 pp.).

Wells, Helen T., Susan H. Whiteley, and Carrie E. Karegeannes, Origins of NASA Names (NASA SP-4402, 1976, x + 227 pp.).

#### Works in Progress

##### Histories

Compton, W. David, and Charles D. Benson, Living and Working in Space: A History of Skylab (NASA SP-4208, in press).

Compton, W. David, History of the Apollo Lunar Exploration Missions.

Ezell, Edward Clinton, and Linda Neuman Ezell, On Mars: Exploration of the Red Planet, 1958-1978 (NASA SP-4212, in press).

Hallion, Richard P., On the Frontier: Flight Research at Dryden, 1946-1981 (NASA SP-4303, in press).

Hansen, James R., A History of Langley Laboratory.

Muenger, Elizabeth A., A History of Ames Research Center.

Pitts, John A., The Human Factor: Biomedicine in the Manned Space Program.

Roland, Alex, Model Research: The National Advisory Committee for Aeronautics, 1915-1958 (NASA SP-4103, in press).

Tomayko, James E., A History of NASA's Use of Computers in Spaceflight.

##### Reference Works

Astronautics and Aeronautics, 1976 (NASA SP-4021, in press).

Neuman, Linda, NASA Historical Data Book, 1958-1968, vol. 2, Programs and Major Projects (NASA SP-4012).

\_\_\_\_\_, NASA Historical Data Book, 1969-1978, vol. 2, Programs and Major Projects.

APPENDIX D

NASA Headquarters History Office Archives

by

Lee D. Saegesser  
NASA Archivist

General

The archives originated shortly after the creation of the NASA History Office. The various series described below were originally designed to facilitate research for the major serial publication, Astronautics and Aeronautics, but have since evolved into a functional system. The total volume of material amounts to over 532 cubic feet (not counting books), plus some 395 cubic feet stored in the Federal Archives and Records Center, Suitland.

White House and Presidential Papers 10 feet (1958 to date)

Includes documents pertaining to Presidents Hoover through Reagan, the Executive Offices, and various commissions and councils that serve the president; selected papers from the Weekly Compilation of Presidential Documents; newspaper and Congressional Record clippings; magazine articles; photographs; and NASA correspondence. Arranged by organization or president and thereunder chronologically. Listed below are the amounts of material under each president, with inclusive dates. A general grouping of non-White House material, 6 feet, includes such organizations as the President's Science Advisory Committee (PSAC) and the National Aeronautics and Space Council (NASC).

Hoover, negligible amount (1963 to date)  
Roosevelt, negligible amount (1942 to date)  
Truman, 2 inches (1952 to date)  
Eisenhower, 1 foot (1947 to date)  
Kennedy, 2 feet (1957 to date)  
Johnson, 3 feet (1957 to date)  
Nixon, 3 feet (1957 to date)  
Ford, 8 inches (1963 to date)  
Carter, 1 foot (1976 to date)  
Reagan, 1 foot (1971 to date)

Aeronautics and Space Report of the President (1958 to date). These yearly reports submitted by the president to the Congress are arranged chronologically. Beginning with 1976 the History Office has been responsible for preparing this report.

Congressional Documents 25 feet (1918 to date)

Arranged by committee and thereunder chronologically. The loose documents are newspaper clippings, magazine articles, Congressional

Record clippings, brochures, photographs, correspondence, and the NASA Legislative Activity Reports (1962 to date). The majority of the material is bound committee reports, hearings, special studies, etc., covering the period 1957 to date. These hearings and reports are shelved separately in chronological order.

NASA Semiannual Report to Congress (1958 to 1969). These reports and related materials are arranged chronologically. The requirement for this report was deleted from the original National Aeronautics and Space Act of 1958 by Public Law 92-68 (85 Stat. 174, 6 Aug. 1971).

Federal Agencies 24 feet (1950 to date)

Arranged alphabetically by name of federal agency, and thereunder chronologically. It consists of photographs, newspaper clippings, magazine articles, reports, correspondence, news releases, brochures, Congressional Record clippings, and agreements between NASA and other federal agencies.

National Academy of Sciences, Space Science Board, and National Academy of Engineering 3 feet (1957 to date)

Arranged chronologically. Consists of news releases, newspaper clippings, magazine articles, reports, brochures, pamphlets, correspondence, and the NAS Newsreport (a monthly newsletter).

Organizations, National and International 4 feet (1955 to date)

Arranged alphabetically by name of organization and thereunder chronologically. Consists of booklets, brochures, news releases, magazine articles, newspaper clippings, photographs, speeches, and monographs. Included under the international organizations are subseries pertaining to international law, agreements, treaties, and conventions.

Foreign Countries 24 feet (1800s to date)

Divided into two subseries: U.S. cooperation with other countries and the countries themselves. Alphabetical by name of country and thereunder chronological. The series consists of newspaper and magazine articles, speeches, news releases, translations, brochures, pamphlets, correspondence, photographs, and Congressional Record clippings.

One of the large groupings consists of material pertaining to the USSR and its space activities, with heavy emphasis on translations. This grouping includes a general subject file of 9 feet on Soviet manned and unmanned satellites, arranged alphabetically. Topics: Sputnik, Lunik, Venera, Molniya, Soyuz, Voskhod, space station, launching facilities, etc.

Industry 8 feet (1945 to date)

Alphabetically by name of company and thereunder chronologically. Consists of news releases, magazine articles, newspaper clippings, speeches, photographs, correspondence, brochures, annual reports, and Congressional Record clippings. Such classic industry reports as the RAND satellite and High Altitude Test Vehicle (HATV) studies are to be found in this series.

Organization and Management 75 feet (1910 to date)

Includes organization charts, briefing memorandums, correspondence, internal and external studies, photographs, NASA insignias, newspaper clippings, magazine articles, news releases, speeches, brochures, telephone books, congressional testimony, Congressional Record clippings, Program Reviews and General Management Reviews (1961 to date), Calendar of Appointments (1969 to date), and NASA Headquarters Weekly Bulletin (1965 to date).

A large subseries in this grouping consists of papers of the NASA administrators and deputy administrators. They are listed below chronologically with the dates of their service. In the parentheses are the inclusive dates of the papers on file. Also listed is the amount of material.

Administrators:

Glennan, Dr. T. Keith, 1958-1961 (1954 to date) 7 feet  
Webb, James E., 1961-1968 (1952 to date) 6 feet  
Paine, Dr. Thomas O., 1968-1970 (1966 to date) 3 feet  
Fletcher, Dr. James C., 1971-1977 (1969 to date) 3 feet  
Frosch, Dr. Robert A., 1977-1981 (1977 to date), 1 foot  
Beggs, James M., 1981- (1968 to date), 1 foot

Deputy Administrators:

Dryden, Dr. Hugh L., 1958-1965 (1910 to date) 6 feet  
Seamans, Dr. Robert C., 1965-1968 (1960 to date) 3 feet  
Low, Dr. George M., 1969-1976 (1958 to date) 10 feet  
Lovell, Dr. Alan M., 1976-1981 (1965 to date) 2 inches  
Mark, Dr. Hans M., 1981- (1970 to date) 1 inch

Budget Documentation 17 feet (1958 to date)

Arranged chronologically. Consists of budget briefings, newspaper clippings, magazine articles, correspondence, news releases, speeches, Congressional Record clippings, NASA Budget Estimates, chronologies of NASA budget submissions, and The Budget of the United States Government. A complementary source for budgetary materials will be found under Congressional Documents.

NASA Headquarters 65 feet (1958 to date)

Arranged by major office within NASA Headquarters and thereunder chronologically. Consists of office publications, brochures, news

releases, magazine articles, newspaper clippings, speeches, photographs, external and internal studies, correspondence, and organizational charts. Listed below are the organizations for which there is documentation. Some of these offices are no longer in existence.

Legislative Affairs	Procurement
International Affairs	Industry Affairs
General Counsel	Comptroller
Policy	University Affairs
Applications	Special Contracts Negotiation and Review
Public Affairs	DoD and Interagency Affairs
Administration	Program Plans and Analysis
Technology Utilization	Space Flight
Space Sciences	Tracking and Data Acquisition
External Affairs	Inspector General
Center Operations	Aeronautics and Space Technology Management
Space Transportation Operations	Chief Engineer
Space Transportation Systems	Chief Scientist
External Relations	

The bulk of the material is to be found under Public Affairs, which issues news releases and a newspaper clipping collection, "Current News."

#### NASA Centers 29 feet (1958 to date)

Arranged alphabetically by name and thereunder by subseries and chronologically. Consists of photographs, organization charts, newspaper clippings, magazine articles, correspondence, brochures, news releases, center newspapers, and telephone books.

Some installations have been renamed, disestablished, reorganized, or separated from NASA. Listed below are the installations for which there is documentation.

Ames Research Center	Lewis Research Center
Dryden Flight Research Facility	Marshall Space Flight Center
Electronics Research Center	Michoud Assembly Facility
Goddard Space Flight Center	National Space Technology Laboratories
Jet Propulsion Laboratory	Wallops Flight Center
Johnson Space Center	Western Operations Office
Kennedy Space Center	
Langley Research Center	

#### Unmanned Programs, Projects, and Satellites 46 feet (1945 to date)

Arranged in three major subseries, each of which is arranged alphabetically and thereunder chronologically. Consists of photographs, correspondence, news releases, newspaper and Congressional Record clippings, magazine articles, brochures, mission operation reports, and translations.

The first subseries consists of programs and activities such as communications, meteorology, lunar and interplanetary contamination, balloons, zeppelins, sounding rockets (arranged alphabetically by name), flight schedules, and the Goddard Space Flight Center Spacewarn Bulletin.

The second subseries pertains to lunar and interplanetary flight. Listed below are the spacecraft to be found in this grouping.

Galileo	Out of the Ecliptic	Surveyor
Grand Tour	Pioneer	Viking
Lunar Orbiter	Ranger	Voyager
Mariner	Sunblazer	

The third subseries is made up of earth-orbiting satellites.

Able	OGO
Aeronautical satellite	OSO
Aeros	Pageos
Alouette	Pegasus
Anik (Telsat-Canada)	RCA
ANS (Astronomical Netherlands Satellite)	Rebound
Ariel	Relay
ATS (Applications Technology Satellite)	San Marco
Azur	Satellite Power System
Beacon	Satellite Repair Satellite
Biosatellite	Search and Rescue Satellite
CAS-C (Cooperative Applications Satellite--Canada)	Seasat
Comstar	Skynet
Direct Broadcast	Small Observatory Satellite
Earth Resources Satellite	Snapshot
Echo	Solar Powered Satellite
Explorer	Solar Radiation Satellite
GEOS	Space Telescope
GOES	Sphinx
G Star	Sunflower
HEAO	Symphonie
Helios	Synchronous Meteorological Satellite
HEOS	
Injun	Syncom
IntaSat	TD-1A
Intelsat	Telstar
ISIS	Tethered Satellite
Landsat	Tiros
Marisat	Tracking and Data Relay Satellite
NATO	
Nimbus	United Kingdom
NOAA	Vanguard
OAQ	Westar

Manned Spaceflight 75 feet (1953 to date)

Arranged chronologically by project and thereunder topically and chronologically. Composed of news releases, speeches, newspaper and Congressional Record clippings, magazine articles, photographs, correspondence, reports, brochures, pamphlets, translations, and mission operation reports. (15 cubic feet, pertaining to Skylab, retired to the Federal Records Center, Suitland.) Other topics: Mercury, Gemini, Apollo, Apollo-Soyuz Test Project (ASTP), Shuttle, Lunar Stations, Planetary Flight, and Space Colonization.

Launch Vehicles 26 feet (1945 to date)

Arranged alphabetically by name of vehicle and thereunder chronologically. Consists of correspondence, reports, brochures, news releases, speeches, magazine articles, newspaper clippings, Congressional Record clippings, studies, and photographs. Such reports as the 1959 National Space Vehicle Program, 1960 Long Range Plan, and 1962 Golovin Report (Large Launch Vehicle Planning Group) are included. Files are to be found for the following launch vehicles:

Agena	Hermes	Scout
Atlas	Iris	Shuttle
Atlas-Able	Juno II	Thor
Atlas-Agena	Little Joe	Titan
Atlas-Centaur	Nova	V-1
Blue Scout	Saturn I	V-2
Centaur	Saturn IB	Vega
Delta	Saturn V	

Space Sciences 9 feet (1851 to date)

Arranged topically and thereunder chronologically, with such folders as astronomy, pulsars, radio astronomy, x-ray, radar, quasar, black holes, comets, meteors, Sun, the planets, planetary satellites, geodesy, oceanography, physics, aurora borealis, air pollution, and energy. Series consists of monographs, brochures, news releases, newspaper and Congressional Record clippings, magazine articles, translations, photographs, correspondence, and studies.

Life Sciences 3 feet (1958 to date)

Material pertaining to exobiology, space medicine, extra-terrestrial life, and various NASA studies on life sciences arranged topically and thereunder chronologically. Series consists of newspaper clippings, magazine articles, correspondence, photographs, studies, brochures, pamphlets, news releases, and NASA special publications.

General Space Research, Propulsion, and Reentry 8 feet (1956 to date)

Arranged topically and thereunder chronologically. Consists of news releases, correspondence, newspaper and Congressional Record

clippings, magazine articles, speeches, brochures, pamphlets, and special studies. Included are such topics as avionics; guidance; materials; space processing; chemical, liquid, solid, and nuclear propulsion; the various reentry projects; and orbital debris.

Tracking and Data Acquisition 3 feet (1957 to date)

Arranged topically and thereunder chronologically. Series consists of correspondence, photographs, newspaper and Congressional Record clippings, magazine articles, news releases, brochures, and pamphlets.

Biography File 83 feet (1800s to date)

Arranged alphabetically by name of person and thereunder chronologically. Series is composed of photographs, correspondence, news releases, magazine articles, newspaper clippings, and speeches. Included are U.S. and foreign space personalities, both living and dead. For related material see the subseries NASA Administrators and Deputy Administrators, under Organization and Management.

Aeronautics 18 feet (1945 to date)

Arranged by topic and thereunder chronologically. Composed of photographs, newspaper and Congressional Record clippings, magazine articles, news releases, reports, studies, correspondence, brochures, and pamphlets. Included are such topics as transportation, statistics, firsts, wind tunnels, B-70, helicopters, NASA aircraft, remotely piloted vehicles, fly-by-wire, supercritical wing, Agplane, vertical- and short-take-off-and-landing, supersonic transport, Concorde, X-1 through X-29, lifting bodies, hydroplaning, air cushion vehicles, and hydrofoils.

Miscellaneous material 70 feet (1825 to date)

Arranged topically and thereunder chronologically. Includes news releases, reports, newspaper clippings, cartoons, magazine articles, NASA issuances, photographs, correspondence, studies, reports, brochures, and pamphlets. Listed below are some of the topics together with the dates covered and the amount of material available.

NASA Management Issuances 2 feet (1958 to date)  
Space-related cartoons, more than 4800 3 feet (1825 to date)  
NACA correspondence collection 8 feet (1915 to 1958)  
Transition papers 1 foot (1958 to date)  
Other histories, arranged alphabetically by name of author  
7 feet (1958 to date)  
USAF, Navy, Army, FAA monographs, brochures 2 feet  
(1945 to date)  
Chronologies 2 feet (1945 to date)  
Bibliographies 3 feet (1958 to date)  
Awards, NASA and others 3 feet (1909 to date)  
Museums 2 feet (1958 to date)

Apollo documentation collected by Robert Sherrod 36 feet  
(1960-1978)  
Early history of NASA documentation collected by Gene Emme 7 feet  
(1950s - 1978)  
Newspaper clipping collection 4 feet (1948 - 1959). This series  
separate from Current News.  
Impact file, consisting of such topics as criticism of space  
activities and influence of the space program on economics,  
humor, military, movies, music, philately, public opinion, reli-  
gion, technology, television, toys, etc. 7 feet (1950 to date)  
Interviews, unarranged. The majority have been transcribed and  
will be found in the Biography File.  
Satellite Situation Report, prepared by Goddard Space Flight  
Center 3 feet (1959 to date)  
Conferences 1 foot (1961 to date)  
Incomplete collection of NASA Special Publications 6 feet  
(1961 to date)  
Naval Research Laboratory reports 1 foot (1947-1959)

Additional Headquarters History Office Archives documents have been  
retired to the Federal Records Center, Suitland, Maryland. This material  
can be recalled by the History Office for use by scholars and  
researchers. Listed below are some of the more important series.

Papers of Dr. Homer E. Newell, NASA associate administrator 43 feet  
(1942 to 1978)  
Papers of Dr. Alfred J. Eggers, assistant administrator for policy  
20 feet (1957 to 1967)  
Papers of Dr. George M. Low, deputy administrator 5 feet (1958 to  
1961). For additional material see Organization and Management.  
Selected chronological reading files of many NASA Headquarters offices  
Life sciences papers collected by Dr. Mae M. Link 6 feet  
(1958 to 1970)  
Electronics Research Center files 18 feet (1963 to 1969)  
Vanguard Division of the Naval Research Laboratory and subsequently of  
NASA 8 feet (1955-1959). This material comprises the only known  
records of this division, and therefore has been permanently acces-  
sioned by the National Archives and Records Service. To obtain  
access to these documents it will be necessary to contact NARS.  
Space Task Group (post Apollo) 1 foot (1969)  
Viking history collection (1960 to date) 26 feet

## APPENDIX E

### Lyndon B. Johnson Space Center History Office Archives

#### JSC History Office

Mail: History Office (BE), Johnson Space Center, Houston, TX 77058  
Location: Building 420, Room 105B  
Office Hours: By appointment only  
Telephone: 713/483-3545, or FTS access code plus 525-3545.  
Contact: Wanda M. Thrower

#### Woodson Research Center, Rice University Library

Mail: Woodson Research Center, Rice University Library, Houston, TX  
77251-1892  
Location: Fondren Library, 1st floor  
Office Hours: 9:00 a.m. to 5:00 p. m., Central Time Zone, M-F  
Telephone: 713/527-8101, x2586  
Contact: Nancy Parker

#### General

The JSC History Archives covers more than 20 years of documentation related to manned spaceflight and comprises approximately 2000 linear feet of material from government, industry, and other sources. This collection is predominantly arranged in chronological order by project--Mercury, Gemini, Apollo, Skylab, Apollo-Soyuz Test Project, and Shuttle. There are, however, some special subject files--the lunar receiving laboratory, Gemini and Apollo spacesuits, science and medicine, and parachutes, for example--that could serve as a foundation for monographs. In addition, there are files of presentations, speeches, and papers and other categories covering a range of topics related to manned spaceflight.

A Memorandum of Understanding between JSC and Rice University permits the transfer under indefinite loan of selected archival materials to the Woodson Research Center, Rice University Library. The Woodson Center administers some 500 linear feet of JSC archival material, including holdings related to Mercury, Gemini, Skylab, and Apollo-Soyuz, as well as some material related to Apollo. The Woodson staff has prepared finding aids for these materials and is prepared to assist researchers visiting Rice and to answer queries by phone or mail.

Remaining in the JSC History Office are working documents on the Apollo and Shuttle programs and certain JSC institutional records and special subject files. Inquiries regarding this material should be addressed to the JSC History Office.

#### Project Mercury (at Rice University) (46 linear feet)

1. Chronological files--correspondence, project reports, minutes, and publications from NACA and NASA offices, 1952-1966.

2. Working papers, numbered 100 through 234. For complete listing of authors and titles, see This New Ocean: A History of Project Mercury, NASA SP-4201, pp. 610-17.
3. Quarterly status reports, 1959-1963, filed sequentially.
4. Flight-related documents, including postlaunch memorandum reports, beginning with Mercury-Atlas 1.
5. Contractor reports and documents, including reports, flight plans and other documents produced by NASA contractors.
6. Familiarization manuals, compiled during 1959-1963, describing capsule systems and major components.
7. Reel-to-reel tapes and videotapes, covering such subjects as astronaut debriefings, air-to-ground communications, mission simulations, and interviews.
8. Photographs and drawings, including those used to illustrate This New Ocean.

Project Gemini (at Rice University; 104 linear feet)

1. Chronological files, 1958-1971. Includes Gemini Project Office outgoing correspondence regarding technical contractor activities, 1962-1966.
2. Gemini general subject files, including files on Department of Defense (DoD) support, extravehicular activity, food and waste management, POGO Problem, Titan II status summaries, tracking network, space docking, and rendezvous radar.
3. McDonnell Aircraft Corporation design notes, including: aerodynamics, crew compartment, electrical, electronic, guidance and control, mechanics, instrumentation, propulsion, reliability, spacecraft weight and balance, spacecraft strength design, structural loads, and thermodynamics, 1963-1966. Also NASA-McDonnell correspondence, technical reports, and press information, 1963-1967.
4. Gemini Management Panel meetings: discussions that set policy, reviewed progress, and resolved problems; filed chronologically, 1962-1965.
5. Gemini missions filed sequentially, 1 through 12: flight plans, directives, public affairs material, air-to-ground transcripts, mission evaluation reports, crew technical debriefings, 1964-1966.
6. Quarterly Status Reports, generated by Manned Spacecraft Center (MSC, now JSC), 1962-1966.
7. Launch vehicle documents produced by Martin Corporation (Titan launch), Lockheed Corporation (Agena launch), and other contractors, 1961-1967.

8. Spaceflight experiment documents; documentation on the development of the Gemini fuel cell and the paraglider landing system.
9. Tape recordings and transcripts of 261 oral history interviews, 1966-1970; audio tapes of Gemini postflight conferences and television interviews, 1963-1966.
10. Glass slides, organized by spacecraft number, largely concerning spacecraft assembly; photographs of the Gemini flights, organized by flight in binders.
11. Onboard, air-to-ground, and ground-to-air transcripts. Also technical debriefings at NASA at MSC and by McDonnell Aircraft Corporation, 1965-1966.
12. Gemini working papers, 1963-1967, covering data and mission analyses, system studies, operational methods and requirements, etc.

### Project Apollo

#### At Rice University (51 linear feet):

1. Contractor reports and feasibility studies for Project Apollo (1960-1961).
2. Quarterly status reports for the Manned Lunar Landing program, 1962-1968 (incomplete); Manned Spacecraft Center (MSC) reports, 1967-1970.
3. North American Rockwell reports on its responsibility for the command and service module; MIT guidance and navigation reports; Grumman reports on the lunar module; television contractor documents produced by Fairchild and other corporations; Northrup Ventura's parachute reports (1962-1970).
4. Apollo working papers (1000+ series): many aspects of Apollo planning and operations, 1960-1968.
5. Correspondence and reports on the Integrated Medical and Behavioral Measurement System (IMBLMS) program, 1959-1970 (largely 1968).
6. Apollo Applications Program chronological files, containing documents from various JSC offices and contractors, (largely 1968-1972).
7. Post-Apollo planning documents, including space station concepts. Information on the Manned Orbital Laboratory program, Boeing's Extended Apollo Laboratory Module Study, and Lockheed's Large Orbital Research Laboratory Study (largely 1962-1965).
8. Tape recordings of 341 oral history interviews, 1961-1976; miscellaneous tape recordings of interviews and speeches by astronauts, 1963-1973; five 16mm films, including the Apollo 16 water landing and astronaut recovery, 1963-1972.

In JSC History Office (600 linear feet):

This is the collection on which Chariots for Apollo (NASA SP-4205), a history of the development of manned lunar spacecraft, was based. It includes about 100 linear feet of photographs. Other principal components of this collection are:

1. Correspondence arranged in chronological order, 1957-1972, from the reading files of the Apollo spacecraft program office in Houston, to which past researchers have added selected documents from the Office of Manned Space Flight in Washington, files from system and subsystem offices in Houston, and materials from the Apollo prime contractors.

2. Apollo program office weekly and monthly status reports from 1963 until discontinued in 1966.

3. Reports and studies by committees, groups, and panels: Hornig Panel, Research Steering Committee (Goett committee), New Projects Panel, Manned Lunar Landing Working Group, Lunar Mission Planning Board, Large Launch Vehicle Planning Group (Golovin committee), Manned Space Flight Management Council, Apollo Technical Liaison Groups, Apollo Mission Planning Task Force, NASA Staff Conferences 1, 3, 4, and 5 (2 has never been located), and weekly reports of the NASA Office of Manned Space Flight.

4. Experience reports by program participants on such subjects as the docking system, LM ascent propulsion system, mission planning for lunar module descent and ascent, stress corrosion, simulations for crew training, aerothermodynamics evaluation, and others.

5. Apollo mission documents, filed sequentially beginning with AS-001 in December 1964 and ending with Apollo 17 in December 1972. This collection includes flight plans, mission requirements documents, public affairs materials, air-to-ground and onboard voice transcriptions, mission reports, crew technical debriefings, and flight directors' logs. (Not all documents are on file for every mission.)

6. Contractor reports from numerous firms on numerous topics: Bellcomm, Garrett AiResearch, Grumman, North American, AC Spark Plug, AVCO, Chance Vought, Kollsman, Martin, MIT, General Dynamics/Astronautics, Northrop, Rand, Raytheon, and others. Of particular interest are the feasibility studies that led to the final contract proposals for the Apollo spacecraft.

7. Special subject collections: lunar science, lunar receiving laboratory, lunar landing research and training vehicles, and spacesuits.

8. Oral history interviews: transcripts of some 200 interviews with program participants covering all aspects of the program. The interview tapes are housed at Rice. An index filed with the transcripts indicates which tapes have and which have not been transcribed.

Indexes. The Apollo collection is being indexed document by document, so that files may be systematically searched by computer. Indexing is

expected to be complete by mid-1984. A user's guide to the JSC archives and the indexing system is expected to be available by early 1986. As indexing progresses, hard-copy indexes are being produced for manual search; computer searches on sections indexed can be conducted as well. For more information, contact the JSC History Office.

Skylab (at Rice University) (104 linear feet)

1. Chronological files including correspondence, meeting minutes and agendas, and memoranda from JSC project managers, contractors, MSFC officials, and NASA Headquarters, 1970-1979.
2. Mission directives and management documents, from the Skylab Program Director's Office, 1966-1972, and other management documents, including annotated correspondence and notes from the Skylab Program Manager, flight directors' handover notes, documentation on reviews and presentations by system managers, program review and assessment documents, and statements on mission requirements, 1970-1974.
3. Flight-related documents, including flight plans, operations handbooks and manuals, debriefings, and mission reports, 1971-1974.
4. Minutes, reports, etc., regarding the Apollo Telescope Mount, the Earth Resources Experiments Package, and other experiment programs.
5. Contractors' documents and correspondence, including representative material issued by McDonnell Douglas, North American Rockwell, and Martin Marietta.
6. Configuration Control Board meeting minutes, 1970-1971.
7. Daily mission reports and transcripts from JSC Flight Operations Management Room, 1973-1974.
8. General subject files, on diverse topics ranging from the project budget to the Crew Health Stabilization Program, 1971-1974.
9. Oral history interviews (both tapes and transcripts), 1974-1977.
10. Videotapes of earth views, documenting tropical storms, volcanic landforms and processes, and other subjects; an extensive series of photograph albums, documenting Skylab systems, experiments, EVA activities, etc.

Apollo-Soyuz Test Project (at Rice University) (70 linear feet)

1. Chronological file (largely 1973-1975), including documents, letters, memoranda, etc., from numerous JSC offices. Files from the Apollo Spacecraft Program Office, largely containing correspondence with or concerning the USSR space program, are filed with this series.
2. General subject files, 1969-1975: experiment documents files; planning documents, assessment reports, scheduling documents, etc., in numbered

sequence; flight-related procedure handbooks, checklists; mission reports; North American Rockwell documents on the command and service module, the docking module, and mockups.

3. Working group documents, which contain considerable documentation on the activities of various U.S.-Soviet working groups as they discussed, negotiated, and agreed on technical specifications for the ASTP mission.
4. Public affairs press releases, reports, and correspondence generated at the JSC Public Affairs Office (and at NASA Headquarters); American and Russian newsclippings on ASTP; and flight transcripts, 1972-1976.
5. Oral history tapes, 1974-76; training and orientation tapes for Soviet and U.S. personnel; a photograph file, including photos from several meetings of U.S. and Soviet personnel in Houston and Moscow.

Shuttle (500 linear feet to date; documentation accumulation in process)

1. Correspondence, as above, 1959 to present. Most of this material came from the Office of the Shuttle Manager in Houston. Other key participants have contributed documentary holdings. Arranged chronologically through 1982.
2. Presentations and briefings, 1970-1981. A complete file of Shuttle presentations and briefings made by the Shuttle Program Manager and subordinate organizations at JSC.
3. Weekly reports, 1970 to present.
4. Contractor proposals for a Shuttle development program--Rockwell, McDonnell Douglas, Lockheed, Grumman, etc.
5. Selected engineering drawings, photographs, and other graphic materials.
6. Reports, press kits, flight plans, operating plans, etc. for each Shuttle mission. Filed chronologically by mission.
7. Apollo and Skylab chronological reading files also contain Shuttle information from 1969 to the close of these programs.

Earth Resources (50 linear feet)

1. Correspondence gathered from the program office and other organizations. Not yet organized.

MSC/JSC General Series (at Rice University) (44 linear feet)

Research material in this series is that which does not easily fall into the project-specific series previously listed. The documents contain general information about NASA and also on activities that are common to several projects (e.g., splashdown recoveries). Also included are oral

interviews regarding the development of JSC, and media information (news releases, clippings) about the NASA program.

JSC Institutional (30 linear feet)

1. Correspondence covering evolution and organizational changes from 1958 to present.
2. Logs of special assistant to the director of the Space Task Group (later Manned Spacecraft Center and then Johnson Space Center) --brief accounts of daily events, 1958-1961.
3. Activity reports on progress or events of Mercury, Gemini, Apollo (1962-1968).
4. Abstracted minutes of senior staff meetings, 1961-1967.
5. Announcements, 1962 to present, informing center employees of organizational changes, institutional rulings, etc.
6. Management instructions governing policy, procedures, and charters of individual elements of the center from 1961 to present.
7. Space News Roundup, official center house organ issued biweekly from 1961 to present (not complete).
8. JSC news releases including relevant Headquarters releases (1969 to present).
9. Special subject files: MSC Operations at Atlantic Missile Range Engineering and Development Directorate Facilities and Activity Reports, Environment and Energy, Reliability and Quality Assurance, Trainers and Simulators, Technology Utilization, Annual Procurement Report, etc. Collected in one area, but not chronologically arranged for the most part.

General Collection (15 linear feet)

1. Newsclipping service files, 1969 to present (not complete).
2. Congressional hearings, studies, reports relating to program of NASA, 1954-1979, 1981-present.
3. Small collection of NASA papers from the 1950s.
4. NASA Headquarters and field element telephone books, 1961 to present (not complete).
5. NASA Special Publications series on assorted subjects related to NASA space programs (not complete).
6. Space and aviation directories, 1962-1969.

7. Public affairs information on the NASA field centers. 23
8. Speeches and papers related to aerospace and kindred fields, filed by author.
9. Slides and photographs related to manned spaceflight and other programs (not organized).
10. Space Business Daily, 1963-1967 (not complete); Aviation Daily, 1962-1964 (not complete).

APPENDIX F

Jet Propulsion Laboratory  
California Institute of Technology  
History Office Documents Collection

Mail: Library (Mail Stop 111-113), Jet Propulsion Laboratory, 4800 Oak Grove Drive, Pasadena, CA 91109  
Location: Library, Building 111, Room 113  
Office Hours: 7:30 a.m. to 4:45 p.m., Pacific Time Zone, M-F  
Telephone: 213-354-4200 (after January 1984, 818-354-4200) or FTS access number plus 792-4200  
Contact: Reference Librarian

An extensive collection of historically important documents pertaining to the development of Jet Propulsion Laboratory and its programs was compiled by the JPL historian while the laboratory's History Office was in operation. The collection has been retained in the JPL Library. Its some 4500 documents include material on the V-2 rocket, Corporal missile, Army Ordnance, and other aspects of the early years of the space program, as well as such NASA programs as Ranger, Surveyor, Mariner, and Apollo. No additions have been made since 1975.

The collection has been inventoried and coded and an index has been programmed on a JPL computer. The documents may be searched using a research guide available in the library; a copy of the guide is also available for reference in the History Office at NASA Headquarters, Washington, D.C.

## APPENDIX G

### Kennedy Space Center Library Archives

by

Ken Nail, Archivist

Mail: Kennedy Space Center Library Archives, NWSI-E, Kennedy Space Center, Florida 32899

Location: Kennedy Space Center Headquarters Building, Room 1533

Office Hours: 7:30 a.m. to 4:00 p.m., Eastern Time Zone, M-F

Telephone: 305-867-2407 or FTS 8-823-2407

Contact: Ken Nail, Historian-Archivist

#### General

The KSC Library Archives, with holdings of nearly half a million pages of documents and more than 21,000 photographs, houses historical evidence of the center's growth and development. A large part of the archival holdings is organized in some 60 guides and several container lists that range in subject from construction of the Vehicle Assembly Building and Launch Complex 39 to the launch of each manned spaceflight. Materials document significant parts of the history of the Skylab, Apollo-Soyuz Test Project, and Space Transportation System programs. Notable among the holdings are Dr. Kurt H. Debus's personal photograph collection, 1945-1962; documents related to the V-2 rocket work at Peenemunde during World War II; and a large number of photographs of the visits to KSC by Presidents Kennedy, Johnson, Nixon, and Carter. Recently completed are container lists on missiles, the auto-ignition test, the Missile Firing Laboratory, and propellants. A collection of reference books is available for researchers; research and reference service is provided. KSC history is regularly illustrated in photograph displays created by Archives clerk, Elaine Liston. The KSC Library Archives is also responsible for compiling and publishing the illustrated Chronology of KSC and KSC-Related Events.

#### AOMC Reports, 1958-1960 (1 cubic foot)

The following report documents were published by the U.S. Army Ordnance Missile Command from May 15, 1960, through July 6, 1968, and reflect work done for the Advanced Research Projects Agency of the Department of Defense and for the National Aeronautics and Space Administration.

#### Apollo Era (3 1/2 cubic feet)

The guide to Apollo Era documents comprises ten series, an arrangement of 245 folders over 53 pages of description. The bulk of the collection is made up of Daily Status Reports dating from January 3, 1966, through November 30, 1972; these make up 83 folders. The remainder of the documents are test reports, summaries, letters, memoranda, operations

plans, portions of the Review Board findings concerning the AS-204 accident, and launch documents from the beginning of the Apollo program through Apollo 12 and for Apollo 17. The collection does not include documentary materials for Apollo 13-16.

Apollo 204 Accident (2 1/2 cubic feet)

The Apollo 204 Accident Guide is a description of documents relating to the accident which took place on January 27, 1967. The various evidentiary materials described in the 29 pages are arranged in eight series and contained in five acid-free folders.

The documents include Congressional Hearings, statements concerning the accident by the NASA Administrator James M. Webb, the "Phillips Reports," regular press releases, a special series of "AS-204 Releases" running from January 27 through February 2, 1967, NASA's official accident report, newspaper articles, wire service reports, chronologies, biographies of Roger B. Chaffee and Edward H. White, II, memoranda and letters, and the four volumes of the AS-204 Technical Information Handbook.

The documents described in the guide were accessioned by the Kennedy Space Center Library Archives in April 1976 and the description was completed on May 22, 1980.

Baron Report (1/4 cubic feet)

This guide identifies the two central documents in what might be termed the "Baron Report Controversy." Neither document is original.

Wernher von Braun (2/3 cubic feet)

This collection of documents relating to the career of Dr. Wernher von Braun covers the period 1945 through August 1970. Among other documents are included von Braun's rocketry predictions made in 1945, a selection of his speeches, and several documents concerning his tenure as Director of the Development Operations Division. The collection comprises twenty folders which are housed in two archives boxes.

Congressional Series, 1949-1975 (6 cubic feet)

The Congressional guide is arranged alphabetically by record type/agency, thereunder chronologically. Speeches are arranged alphabetically by speaker, thereunder chronologically. Miscellany is arranged alphabetically by record type, thereunder chronologically.

Crawler Transporter, 1962-1967 (1 1/2 cubic feet)

This guide consists of blueprints, drawings, technical reports, proposals, feasibility studies, modification reports, and design and production criteria. It is arranged chronologically. Two files, "Crawler Analysis from Design Analysis" and "Transporter Mode Comparison Evaluation Study," are arranged chronologically within each file. Undated material can be found at the end of the guide.

Dr. Kurt H. Debus (40 cubic feet)

This guide has been compiled for use as a general reference tool for researchers. The information found here is the result of a survey of 40 boxes of official records from the office of the Center Director, Dr. Kurt H. Debus. Temporarily housed in the Center's records staging area, the director's records discussed herein were retired into the records management system of the National Archives.

Deputy Director

This guide comprises the non-current official records of the office of Deputy Director of Kennedy Space Center. These records, dating from 1963 through 1972, are in the custody of the records management system of the National Archives and were in temporary storage at Kennedy Space Center at the time they were described.

The descriptions of the records were derived both from folder titles and from records transmittal forms. They will be found in the records storage facility at East Point, Georgia. Access to particular folders of documents is provided through the records management office of Kennedy Space Center.

DoD (U.S. Air Force, Army, and Navy)

The Air Force subseries consists of chronologies, handbooks, histories, and technical reports. They are arranged chronologically under the following headings: Air Force Eastern Test Range, Air Force Missile Test Center, Office of Aerospace Research, and Western Test Range.

The Army subseries consists of a circular, documents, histories, pamphlets, plans, proposals, regulations, reports, specifications, technical memoranda, technical reports, and a file of miscellany; it is arranged chronologically thereunder.

The Navy subseries consists of histories and reports, arranged chronologically.

Project Gemini, 1962-1966 (3 cubic feet)

This guide is arranged sequentially by the number of the mission. In addition to technical material, there are records from the Public Affairs Office. The records for each mission include the following: a launch facilities plan; contractor reports; fact sheets; test summaries; mission summaries; program review documents; a press handbook; project histories; and extravehicular activities; mission reports; a mission commentary transcript; data summaries; illustrated mission summaries; operations orders; mission recovery requirements; and files pertaining to the protocol for the invitees and attendees, their schedules, and accommodations involved with the launches.

GSFC, JPL, LERC, WFC, White Sands Chronologies/Histories/Reports, 1917-1977 (1 cubic foot)

The guide consists of illustrated chronologies, histories, anniversary pamphlets, and reports generated by these centers. It is arranged alphabetically by the name of the center, thereunder alphabetically by title.

Hovair (1/3 cubic foot)

This collection contains documents concerned with the Hovair transporters as a load-carrying device. Hovair's functions are described in Martin Company reports dated May 1965.

Jetstar/Executive Transportation, 1962-1965 (1 cubic foot)

This guide contains trip diaries, itineraries, manifests, operational data, and other information on the KSC Jetstar, a Lockheed executive aircraft used by the Center to transport visiting dignitaries and other personnel. The series is arranged chronologically, with undated documents at the end of the file. The undated file is arranged alphabetically by title of the document.

KSC Bulletin, 1974-1978 (1/2 cubic feet)

The KSC Bulletin is the official weekly publication for civil service and contractor employees at the Kennedy Space Center and is published in accordance with Kennedy Management Instruction 1590.2D.

KSC Design Engineering Project Status Reports, 1974-1976 (1 cubic foot)

These reports (TR-1033) are arranged chronologically.

Launch Umbilical Tower (LUT), 1960-1971 (1 cubic foot)

This guide consists of design proposals and configurations, drawings, review data, an engineering study, a technical report and test and analysis documents. It is arranged chronologically with undated material at the end, arranged alphabetically by title or topic.

MSFC Historical Monographs, 1960-1967 (1 cubic foot)

This guide contains historical monographs and chronologies of Marshall Space Flight Center (MSFC). It includes twenty volumes, eleven of which, Marshall Historical Monographs, MHM 1-11, contain supporting documents. Two chronologies appear as Marshall Historical Reports (MHR 6 & 7). This guide is arranged chronologically.

Marshall Star, 1960-1978 (1 cubic foot)

The Marshall Star is a weekly newspaper published each Wednesday for the employees of the Marshall Space Flight Center by the Public Information Office.

The series begins with the first issue, 1960, but has many gaps. Articles of interest concerning the Launch Operations Directorate and the Launch Operations Center may be found in its pages. Items dealing with the Kennedy Space Center and its programs are also included in the Marshall Star.

Special editions of the Marshall Star titled "Space Information Digest" were published from December 11, 1963, through March 25, 1964.

Mercury Program, 1959-1965 (3 cubic feet)

The guide is divided into suborbital and orbital missions and arranged chronologically thereunder. In addition to technical material, there are records from the Public Affairs Office. The records consist of the following: quarterly project status reports; a contractor siting team report; a report on range support; monthly reports on Department of Defense support; transcripts of press conferences; documents relating to flight results; news releases; illustrated commemorative brochures; fact sheets; illustrated brochures describing mission personnel and post-launch ceremonies; conference proceedings; transcripts of communications from spacecraft; transcript of a public address announcement from Mission Control Center; and a document giving test philosophy and proceedings as applied to Mercury spacecraft and planned application to future projects.

NASA Activities, 1973-1978 (1/2 cubic feet)

This guide is made up of an incomplete run of NASA Activities, the agency-wide magazine.

NASA Current News, 1963-1975 (3 cubic feet)

Current News is an internal NASA publication reproducing clippings of news stories related to NASA or the space program. This incomplete run is arranged chronologically.

NASA Pocket Statistics, 1962-1974 (1/2 cubic foot)

Intended as a handy reference for NASA Managers, Pocket Statistics presents facts and data on the agency's history and accomplishments. This incomplete run is arranged chronologically.

NASA-KSC Real Property Quarterly Inventory, 1965-1975 (1 cubic foot)

This guide is arranged chronologically. For the years 1974-1975, the title changes from Inventory to Report. The guide is incomplete for 1966, 1969, and 1970.

News Releases, 1959-1976, Manned Spacecraft Center Fact Sheets, 1962-1964  
(3 cubic feet)

This guide contains news releases from Marshall Space Flight Center (MSFC), Manned Spacecraft Center (Johnson Space Center, MSC/JSC), Kennedy Space Center (KSC), and NASA Headquarters. Fact Sheets from the Manned

Spacecraft Center are included. No series is complete; each has a table of contents. The series cover the times indicated:

Kennedy Space Center	1962-1975
Manned Spacecraft Center and Johnson Space Center	1963-1964
Marshall Space Flight Center	1961-1965
NASA Headquarters	1959-1976
Manned Spacecraft Center Fact Sheets	1963-1964

The subject matter varies from biographical announcements and photographs of those appointed or promoted to summaries of speeches, congressional hearings, announcements of contracts, mission activities, and visits by world leaders to the various centers. The releases and fact sheets are arranged chronologically. All but those from the Marshall Space Flight Center are numbered sequentially. Fact Sheets from the Kennedy Space Center are not included in this guide. KSC Fact Sheets are filed with guides to which they pertain, i.e., by topic or in the speech guide.

NOVA - 72 folders, 1961-1964 (1 1/2 cubic feet)

NOVA was a large launch vehicle, later cancelled in favor of the smaller Saturn Vehicle. The documents are arranged chronologically in 72 folders.

Photograph Collection

The 12 729 pictures which make up the photograph holdings of the KSC Library Archives are described by means of catalog cards. The period covered by the collection is approximately forty years.

Press Kits, 1963-1975 (3 cubic feet)

This guide is divided into manned and unmanned launches. It is arranged alphabetically by the name of the mission, thereunder chronologically within these sub-divisions: press kits created by NASA; those created by other government agencies; and those generated by industry.

Public Affairs (9 cubic feet)

This collection of documents is especially strong on visits by prominent public figures and on the worldwide interest in the American space program. Most of the documents are copies of the originals and some significant documents are missing.

Redstone Rocket, 1959-1961 (1 cubic foot)

The Redstone Rocket was a privately owned newspaper published each Wednesday by Jack W. Hoffhaus. Mr. Hoffhaus published the newspaper in agreement with the Public Information Office, Army Ordnance Missile Command, Redstone Arsenal, but it was not an official or semi-official Army publication. The guide begins with vol. 7, no. 43, March 4, 1959 and

has many gaps. Articles of interest concerning the Launch Operations Directorate and the Missile Firing Laboratory may be found in its pages.

Saturn/Apollo Launches, 1961-1972 (12 cubic feet)

Documents in this guide include: mission histories, launch operations schedules, daily status reports, mission reports and evaluations, public affairs records, and miscellaneous correspondence. The guide is divided into unmanned flights grouped according to launch vehicle, e.g., Saturn I tests; manned missions are listed chronologically.

Service Structure, 1958-1969 (1 cubic foot)

This chronologically arranged guide consists of technical memoranda, architectural and engineering studies, charts, contractors' reports, a design data manual, design criteria, siting and design recommendations, drawings and blueprints, and construction cost estimates. The Saturn Service Structure II Design Committee papers form a single file.

Space Shuttle (18 1/2 cubic feet)

The development of the Space Shuttle as a reusable orbital vehicle is currently the major ongoing program of NASA. Documentation concerning the Shuttle is continually being created and the Shuttle holdings of the Archives of the KSC Library are increasing correspondingly. For this reason, Shuttle documents of historical value are being handled as though they constituted a single, large record group.

The arrangement process has so far revealed ten subject areas, each of which have been described in distinctly separate guides.

Spacecraft Operations, 1967-1968 (1 cubic foot)

This series consists of spacecraft operations, a bi-weekly status report at KSC, prepared by the Support Branch and Boeing. It is arranged chronologically.

Spaceport News, 1962-1977 (1 cubic foot)

The Spaceport News is the official newspaper for civil service and contractor employees at the Kennedy Space Center and is published by the Public Affairs Office, Public Information Branch. The first issue appeared December 12, 1962, approximately six months after the formal establishment of the Launch Operations Center, July 1, 1962. For the period of December 13, 1962 to July 1966, Spaceport News was issued weekly. Thereafter, it has been published on alternate Fridays. The Spaceport News Index, prepared by the KSC Library, is included in this series.

Speeches, 1959-1973 (3 cubic feet)

The guide comprises 273 folders of speeches delivered by persons ranging from Ira Abbott and Aldo H. Bagnulo through James E. Webb and

Eugene M. Zukert. The guide is arranged alphabetically by speaker and chronologically thereunder.

Taylor Photograph Collection (8 cubic feet)

The collection of facility construction photographs described in the following pages is known as the Taylor Photograph Collection, having been sent to the Archives originally in four large boxes from the office of Ms. Annie E. Taylor, Administrative Operations Branch of Project Management. A second photographic collection of roughly equivalent size has not yet been described but does have a useable index.

The Taylor Photograph Collection consists of some 2461 photographs arranged in eleven series categories. The 116 folders are housed in nine archives boxes which are located on range G, shelves five and six. The description of the photographs derived from wording found on the back of each photograph. Original order was maintained throughout. Duplicate photographs were sent to K. P. Suthard of the Smithsonian Institution's National Air and Space Museum in Washington, D.C. In the relatively few instances where third copies of the photographs were discerned, the surplus pictures were sent to Dr. Walter Rathjen of the Deutsches Museum in Munich, West Germany.

Telephone Directories, 1961-1975 (4 cubic feet)

This guide is arranged alphabetically by NASA Center.

Unmanned Launches, 1948-1976 (9 1/2 cubic feet)

This guide consists of launch reports, field flight reports, operations summaries, flash flight analysis reports, post launch reports, illustrated fact sheets, technical reports, and blueprints. It is arranged alphabetically by mission, thereunder chronologically.

Vehicle Assembly Building, 1962-1973 (2 cubic feet)

This guide consists of engineering reports, technical studies, data manuals, design reviews, blueprints, and fact sheets pertaining to the VAB. It is arranged chronologically; miscellany consists of undated material, arranged alphabetically.

Vanguard-Martin Collection, 1949-1959 (3 cubic feet)

The records which make up the Vanguard-Martin Collection, 78-10, include reports, studies, and analyses of pre-launch and launch activities of the Vanguard Satellite Launch Vehicle Program. The documents are arranged chronologically and cover the period September 1949 through December 1959. The researcher may find particularly useful an organization manual for Project Vanguard dated September 1958, which is found in folder 88 of box 5, and a National Aeronautics and Space Administration review dated January 1959, which is found in folder 97 of box 6. The collection is in 105 folders and 6 boxes.

## View Graphs Index

The View Graphs Index is a descriptive list of materials designed for use in an opaque projector. They were created as a visual aid in public discussions of the American space program. Nearly all of the 972 view graphs are in color.

## APPENDIX H

### Langley Research Center Historical Archives

Mail: Historical Archives and Office, Mail Stop 123, Langley Research Center, Hampton, VA 23665  
Technical Library, Mail Stop 185  
Location: Building 1194, Room 200A, for Archives; Building 1194, third floor, for Technical library's aeronautical files  
Office Hours: 8:00 a.m. to 4:30 p.m., Eastern Time Zone, M-F  
Telephone, Archives: 804-875-3511 or FTS access number plus 928-3511  
Technical Library: 804-865-2634 or FTS access number plus 298-2634  
Contact: Richard T. Layman, historical program coordinator  
Sue K. Seward, reference librarian

Langley Research Center (LaRC) in Hampton, Virginia, the oldest laboratory of the NACA and NASA, holds records dating back to 1917. In its Historical Archives and Office on the second floor of the Floyd L. Thompson Technical Library, are collections of books, technical reports and other documents, office memoranda, flight and wind tunnel logs, personal papers, transcripts of interviews, photographs, and artifacts. The two most important collections in the archives are the NACA correspondence files and the NACA research authorization files. Guides to the inventories of all collections are maintained in the archives.

The Technical Library maintains the only extant NACA card index to aeronautical literature. Cards are filed by subject, author, title, and, for NACA reports and research authorizations, by number. This reference catalog is probably the most complete guide to public aeronautical information for the period 1915 through 1958.

APPENDIX I

Standard Form 135

All NASA records are inventoried and retired on Standard Form 135, "Records Transmittal and Receipt." (See NHB 1441.1A, the "NASA Records Disposition Handbook," for detailed information on completing this form.) The following blocks on the form are of particular interest to researchers:

- |                 |                                                                                                                                                              |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Item 1          | Federal Records Center where the materials are housed.                                                                                                       |
| Item 2          | Agency official responsible for retiring records to FRC.                                                                                                     |
| Item 3          | Recall of the records must be made through, or with the permission of, this office.                                                                          |
| Item 6          |                                                                                                                                                              |
| (a) (b) and (c) | The accession number is the principal identification of the records.                                                                                         |
| (d)             | Number of FRC boxes, one box equaling one cubic foot.                                                                                                        |
| (f)             | This is the inventory. Quality and completeness vary greatly from office to office. In some cases additional information will be found appended to the form. |
| (g)             | The highest security classification of any item in the accession. Not all the records are necessarily classified at that level.                              |
| (h) and (i)     | Tells if and when the records are to be destroyed.                                                                                                           |

**RECORDS TRANSMITTAL AND RECEIPT** Complete and send original and two copies of this form to the appropriate Federal Records Center for approval prior to shipment of records. See specific instructions on reverse.

PAGE **1** OF PAGES

5. FROM (Enter the name and complete mailing address of the office retaining the records. The signed receipt copy of this form will be sent to this address.)

(Complete the address for the appropriate records center serving your area)

**Federal Archives and Records Center**  
**General Services Administration**  
 4205 Suitland Road  
 Washington, D.C. 20409 Mail Stop 386

2. AGENCY TRANSFER AUTHORIZATION  
 TRANSFERRING AGENCY OFFICIAL (Signature and title)  
 Records Management Officer

3. AGENCY CONTACT  
 TRANSFERRING AGENCY LIAISON OFFICIAL (Name, office and telephone No.)

4. RECORDS CENTER RECEIPT  
 RECORDS RECEIVED BY (Signature and title) DATE

NHS-20/ Earl W. Dade  
 National Aeronautics and Space  
 Administration  
 Washington, D.C. 20546  
 Mail Stop 85

Fold line

**RECORDS DATA**

ACCESSION NUMBER		VOLUME (Cm. Ft.)	AGENCY BOX NUMBERS	SERIES DESCRIPTION (With inclusive dates of records)	RESTRICTION	DISPOSAL AUTHORITY (Schedule and item number)	DISPOSAL DATE	LOCATION	COMPLETED BY RECORDS CENTER			
RG	FY								NUMBER	NUMBER	SHELF	CONT
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)

## APPENDIX J

### Optional Form 11

NASA retired records are retrieved from the Federal Records Center using Optional Form 11. NHB 1441.1A, the "NASA Records Disposition Handbook," Part IV, provides detailed instructions on completing this form. Historical researchers will want to pay particular attention to the following:

1. Under "Description of Records . . . ," put "ALL" if an entire box is desired. Otherwise identify the particular file or folder completely.
2. Under "Remarks," enter: Access to records is approved by (appropriate person's name and phone number).
3. NASA's record group is 255.
4. The accession number is obtained from the SF 135 (see app. G).
5. FRC box number or location may be obtained in the Records Management Office. While not required, the number will facilitate the handling of your request.
6. Allow two weeks for delivery from Washington National Records Center to NASA Headquarters. Delivery time to centers varies.



APPENDIX K

Conditions of Access to and Use of Transcribed Interview

On \_\_\_\_\_ 19\_\_\_\_, I was interviewed by \_\_\_\_\_.  
The transcription of that interview I hereby give to the NASA archives,  
subject only to the condition checked below. I understand that NASA will  
enforce that condition, to the extent permitted by law.

(Check one.)

\_\_\_\_\_ Open. This transcription may be read by scholars upon presentation  
of identification to the NASA History Office. Scholars may quote  
or cite the memoir without further permission.

\_\_\_\_\_ Permission required to quote or cite. This transcription is open to  
examination by scholars, identified as above. The scholar  
pledges not to quote from or cite this material without written  
permission of the interviewee. Upon the death of the inter-  
viewee, the transcription becomes open.

\_\_\_\_\_ Permission required for access. Either the interviewee or the  
director of the History Office must give permission before the  
transcription can be examined. Also, permission of the inter-  
viewee is required to quote or cite. Upon death of the inter-  
viewee, the transcription becomes open.

\_\_\_\_\_ Closed until \_\_\_\_\_. The transcription will  
remain sealed until the time noted above, which may be a specific  
date, the death of the interviewee, or a period of time after  
death. Following the time specified, the transcription will  
become open. Note that this is an interim designation, because  
otherwise conducting the interview would be pointless.

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

NB. This form is not to be used when both interviewer and interviewee are  
government employees. In such cases, the transcript becomes an agency  
document, subject to the Freedom of Information Act.

APPENDIX L

NASA Centers, Federal Archives and Records  
Centers, and Contacts

Addresses and phone numbers of history monitors at NASA field centers and of Federal Archives and Records Centers are given below. FARC's are described in A Records Management Handbook: Federal Archives and Records Centers (Washington: Office of Federal Records Centers, National Archives and Records Service, General Services Administration, 1979). FTS is the Federal Telecommunications System. It may be used by NASA employees and contractors when making official long distance telephone calls. All other calls are to be made to the commercial numbers.

Ames Research Center (ARC)  
Moffett Field, CA 94035  
J. Paul Bennett (Code 241-12)  
Comm: 415/965-5824  
FTS: 8/448-5824

FARC, San Francisco  
1000 Commodore Dr.  
San Bruno, CA 94066  
(415) 876-9003

Dryden Flight Research Facility  
P.O. Box 273  
Edwards, CA 93523  
Ralph Jackson (Org. OD)  
Comm: 805/258-8311 x221  
FTS: 8/961-3448 x221

FARC, Los Angeles  
24000 Avila Road  
Laquna Niguel, CA 92677  
(714) 831-4421

Goddard Space Flight Center (GSFC)  
Greenbelt, MD 20771  
Gene Guerny (Code 202)  
Comm: 301/344-6255  
FTS: 8/344-6255

FARC, Washington  
4205 Suitland Rd.  
Suitland, MD 20409  
(301) 763-7000

Jet Propulsion Laboratory (JPL)  
4800 Oak Grove Drive  
Pasadena, CA 91109  
Leo R. Lunine (Code 502-209)  
Comm: 213/577-9086  
FTS: 8/961-9086

FARC, Los Angeles  
(See above)

Johnson Space Center (JSC)  
Houston, TX 77058  
Wanda M. Thrower  
Comm: 713/483-3545  
FTS: 8/525-3545

FARC, Forth Worth  
Box 6216  
Forth Worth, TX 76115  
(817) 334-5515

Kennedy Space Center (KSC)  
Florida 32899  
Mike Konjevich (Code SI-SAT-52)  
Comm: 305/867-4540  
FTS: 8/823-4540

FARC, Atlanta  
1557 St. Joseph Ave.  
East Point, GA 30334  
(404) 526-7474

Langley Research Center (LaRC)  
Hampton, VA 23665  
Richard Layman (Code 123)  
Comm: 804/827-3511  
FTS: 8/928-3511

FARC, Washington  
(See above)

Lewis Research Center (LeRC)  
21000 Brookpark Road  
Cleveland, OH 44135  
Lynn Bondurant (Code 6-3)  
Comm: 216/433-6444  
FTS: 8/294-6444

FARC, Chicago (through 1971)  
7358 S. Pulaski Rd.  
Chicago, IL 60629  
(312) 353-8541

FARC, Dayton (from 1972)  
3150 Beertwyn Dr.  
Dayton, OH 45439  
(513) 225-2852

JSC White Sands Test  
Facility (JSC/WS)  
P.O. Drawer MM  
Las Cruces, NM 88001  
Robert Munson  
Comm: 505/524-5771  
FTS: 8/572-5771

FARC, Denver  
Bldg. 48  
Denver Federal Center  
Denver, CO 80225  
(303) 234-5271

Marshall Space Flight Center (MSFC)  
Huntsville, AL 35812  
Robert G. Sheppard (Code AS01)  
Comm: 205/453-3042  
FTS: 8/872-3042

FARC, Atlanta  
(See above)

Wallops Flight Center (WFC)  
Wallops Island, VA 23337  
Joyce B. Milliner (Code 202.4)  
Comm: 804/824-3411, x 579  
FTS: 8/928-5579

FARC, Washington  
(See above)

## APPENDIX M

### Research Topics

The NASA history program encourages, facilitates, and supports research in all phases of the history of astronautics, aeronautics, and space science, with emphasis on American experience in these fields, especially that of the National Advisory Committee for Aeronautics and NASA. It is in these fields that NASA records and resources are strongest, and it is here that NASA has the greatest responsibility to open its records to the widest possible audience.

NASA's book-length narrative histories fall into three general categories. Institutional histories examine the administrative and organizational history of the entire agency or one of its components, such as a research center or test facility. Program or project histories deal with a discrete operational activity of the agency, such as the Apollo program or the development of the Saturn launch vehicles. Topical histories focus on a general field of operations or research and may cut across institutional or programmatic boundaries; a history of computer development in the space program, for example, would require examination of applications at many NASA centers within many different projects and programs.

Ordinarily, historical reference works are not as thematically focused as the narrative histories, but instead gather information and data on a wide range of agency activities within a specific time span. The annual chronologies, for example, summarize highlights of NASA and related activities; the historical data book collects information on the agency and its activities, in two volumes and in more tabulated form, for 10-year intervals. In the past, program and project chronologies were often prepared in advance of narrative histories.

Summer interns and other occasional researchers in the History Office may prepare shorter studies more limited in scope, as do staff members. Though NASA does not ordinarily publish these occasional papers, the History Office does keep them on file whenever possible and encourages the authors to seek publication in journals and other sources.

The topics listed here represent the kind of research that seems promising and that NACA and NASA records could prove helpful in pursuing. The list by no means covers all the topics that might be interesting or profitable, nor does it begin to exhaust the subjects to which the NASA History Office could contribute expertise and resources. The individual researcher is the key ingredient in identifying topics in aerospace history and exploiting the resources of NASA.

## Suggested Book and Dissertation Subjects

NASA's aeronautical research & development, 1960-1975  
NASA's space applications programs  
The development of space communications  
Origins and development of the space shuttle  
NASA's role in computer development  
NASA and technology transfer  
NASA and the growth of planetology  
International cooperation in space  
NASA relations with industry  
NASA aerodynamic research, 1960-1975  
NASA's aircraft noise research  
Space electric power research  
Space and airborne pollution research  
Development of the Atlas-Centaur launch vehicle  
Space Shuttle mission planning  
The role of microelectronics in spacecraft development  
NASA and radio astronomy  
The politics of the search for extraterrestrial life  
Development of spacelab  
NASA and vertical takeoff aircraft  
Biographies of key NACA and NASA personnel, including:  
    Hugh L. Dryden, Director of NACA (1947-1958),  
        Deputy Administrator of NASA (1958-1965)  
    Joseph S. Ames, Chairman of NACA (1927-1939)  
    George W. Lewis, NACA Director of Aeronautical Research  
        (1919-1947)  
    John Stack, aeronautical engineer

## Suggested Shorter Subjects

NASA's quiet aircraft engine research  
Solar power research  
NASA's advanced weather satellite research  
NASA's advanced space communications research  
Rationale for the Tracking and Data Relay Satellite  
The U.N. Moon Treaty  
Lessons from Seasat  
NASA-Smithsonian relations  
Public support for space program, 1970-1980

Marion Davis: cover illustration